# ATTACHMENT A



CAROL L. FOLT
Chancellor

103 SOUTH BUILDING CAMPUS BOX 9100 CHAPEL HILL, NC 27599

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TO: Members of the Board of Trustees

FROM: Carol L. Folt

RE: Personnel Mail Ballot

DATE: April 7, 2016

You have authorized me to poll you by mail ballot concerning personnel matters which require the immediate attention of the Board.

I am seeking approval to appoint Dr. Fouad Abd-El-Khalick as Dean of the School of Education. The appointment is effective July 1, 2016. Attached is the formal offer letter and a copy of Dr. Khalick's CV.

Please complete the attached mail ballot and return to TJ Scott at your earliest convenience.

# Vita

# Fouad Abd-El-Khalick Department of Curriculum and Instruction College of Education University of Illinois at Urbana-Champaign

38E Education Building, MC–708	E-mail: fouad@illinois.edu
1310 South Sixth Street	Work phone: (217) 244-1221
Champaign, IL 61820–6990	Home phone: (217) 359-5737

# **Education**

19	98	Ph.D.	Oregon State University, Corvallis, OR, USA Science Education Dissertation title: "The influence of history of science courses on students' conceptions of the nature of science" Minor: History and Philosophy of Science
19	95	M.A.	American University of Beirut, Beirut, Lebanon Science Education Thesis title: "A study of the pedagogical content knowledge of science teachers"
19	93	T.D.	American University of Beirut, Beirut, Lebanon Teaching Secondary Science
19	91	B.Sc.	American University of Beirut, Beirut, Lebanon Biology

# **Professional Work Experience**

2014-present	<b>Grayce Wicall Gauthier Professor of Education,</b> College of Education, University of Illinois at Urbana-Champaign, IL.
2014-present	<b>Associate Dean for Research &amp; Research Education,</b> College of Education, University of Illinois at Urbana-Champaign, IL.
2014–2017	<b>Distinguished Research Associate,</b> Faculty of Education, University of Johannesburg, South Africa.
2011–2015	<b>Head,</b> Department of Curriculum and Instruction, College of Education, University of Illinois at Urbana-Champaign, IL.
2010-present	<b>Professor of Science Education (with Tenure),</b> Department of Curriculum and Instruction, College of Education, University of Illinois at Urbana-Champaign, IL.

<sup>\*</sup>Awarded the *Outstanding Dissertation Award* by the National Association for Research in Science Teaching, March 29, 1999, Boston, MA.

Fouad Abd-El-Khalick/ vita/ page: 1/57

2004-present	<b>Faculty Member,</b> Center for South Asian & Middle Eastern Studies, University of Illinois at Urbana-Champaign, IL.
2009–2011	<b>Director, STEM Education Collaborative,</b> College of Education, University of Illinois at Urbana-Champaign, IL.
2004–2009	<b>Associate Professor of Science Education (with Tenure),</b> Department of Curriculum and Instruction, College of Education, University of Illinois at Urbana-Champaign, IL.
2004–2006	<b>Division Chair, MST (Mathematics, Science, and Technology),</b> Department of Curriculum and Instruction, College of Education, University of Illinois at Urbana-Champaign, IL.
2000–2004	<b>Assistant Professor of Science Education,</b> Department of Curriculum and Instruction, College of Education, University of Illinois at Urbana-Champaign, IL.
1998–2000	<b>Assistant Professor of Science Education,</b> American University of Beirut, Beirut, Lebanon.
1997–1998	<b>Teaching Assistant, General Chemistry, Chemistry Department,</b> Oregon State University, Corvallis, OR.
1996–1998	Supervisor, Master of Arts in Teaching (MAT) Program, Department of Science & Mathematics Education, Oregon State University, Corvallis, OR.
1995–1996	Research Assistant, Department of Science & Mathematics Education, Oregon State University, Corvallis, OR.
1994–1995	Research Assistant, Science & Mathematics Education Center (SMEC), American University of Beirut, Beirut, Lebanon.
1994–1995	Science Teacher, International College, Beirut, Lebanon.
Grants	
2015–2019	National Science Foundation; Directorate for Engineering; Division for Engineering Education and Centers; Engineering Research Centers. "Power Optimization of Electro-Thermal Systems" (P.O.E.T.S). Fouad Abd-El-Khalick, Co-Director, Education and Workforce Development. (\$18,500,000)
2012–2013	INSPIRE: Illinois-Sweden Program for Educational and Research Exchange, Illinois Strategic International Partnerships (ISIP), International Programs and Studies, University of Illinois at Urbana-Champaign. "Inquiry and Nature of Science in Precollege Classrooms: Epistemology, Language, and Practice Within and Across American and Swedish Contexts." Fouad Abd-El-Khalick: Principal Investigator. (\$5,000)

2010–2013	Qatar Foundation; Qatar National Research Fund; National Priorities Research Program. "Qatari students' Interest in, and Attitudes toward Science" (QIAS). Fouad Abd-El-Khalick: Co-Principal Investigator. (\$1,031,878)
2009–2014	National Science Foundation; Division of Undergraduate Education; MSP-Teacher Institutes. "Entrepreneurial Leadership in STEM Teaching & learning" (EnLiST). Fouad Abd-El-Khalick: Co-Principal Investigator. (\$5,000,000) [Fouad Abd-El-Khalick: Principal Investigator; Curriculum & Instruction EnLiST sub-ledger; \$3,630,923]
2009–2012	Qatar Foundation; Qatar National Research Fund; National Priorities Research Program. "Qatar Science Teachers Energy Project" (QSTEP). Fouad Abd-El-Khalick: Co-Principal Investigator. (\$578,998)
2002–2008	National Science Foundation; Division of Undergraduate Education; Science, Technology, Engineering and Mathematics Teacher Preparation (STEMTP). "An Alternative Program for Recruiting, Educating, Certifying, and Retaining Underrepresented Populations in Teaching Science and Mathematics" (RECRUIT). Fouad Abd-El-Khalick: Principal Investigator. (\$866,015)
2004–2006	<b>The McCarthey Dressman Education Foundation.</b> "Egyptian Teacher Opportunities for Professional Growth (Egyptian TOP G-rants)." Fouad Abd-El-Khalick: Principal Investigator. (\$35,000)
2004–2005	Campus Research Board, University of Illinois at Urbana-Champaign. Research project titled, "The development of global and science epistemologies during the school years." Fouad Abd-El-Khalick: Principal Investigator. (\$12,780)
2002–2003	Hewlett Packard Mobile Computing K-12 Classroom Grant. Fouad Abd-El-Khalick: Co-Principal Investigator (Mark Dressman: Principal Investigator). "Using technology to enhance achievement in math, science and literacy: A middle school-university partnership." (\$128,934)
2001–2002	Faculty Fellows Program, Bureau of Educational Research, College of Education, UIUC. Research project titled, "The development of global and science epistemologies during the school years." Fouad Abd-El-Khalick: Principal Investigator. (\$15,000)
2000–2001	Campus Research Board, University of Illinois at Urbana-Champaign. Research project titled, "The development of views about the nature of scientific knowledge and knowing in the middle and high school years." Fouad Abd-El-Khalick: Principal Investigator. (\$12,517)
1999–2000	University Research Board Grant, American University of Beirut (DCU 1799 6077 401). Research project titled, "Do students' views of nature of science influence their conceptual understandings of science content?" Fouad Abd-El-Khalick: Principal Investigator. (\$3.000)

1998-1999

University Research Board Grant, American University of Beirut (DCU 1799 6077 302). Research project titled, "The development of Lebanese students' conceptions of science in the middle and high school years." Fouad Abd-El-Khalick: Principal Investigator. (\$3,000)

#### **Awards and Professional Honors**

- Entrepreneurial Excellence: Social Venture Award ("Recognizes those who serve as change agents by creating and implementing sustainable solutions to reshape society, benefit humanity, address social concerns."), Innovation Celebration, Champaign County Economic Development Corporation, Champaign, Illinois, February, 2014.
- Fellow, Committee on Institutional Cooperation, Academic Leadership Program, 2013-2014.
- Fellow, American Association for the Advancement of Science (elected, 2011).
- Special recognition for the scope, quality, and impact of scholarship, teaching, and engagement. One of four faculty members selected for special recognition from nearly 100 cases of promotion and/or tenure (2009-2010). Awarded by the Vice Chancellor for Academic Affairs, University of Illinois at Urbana-Champaign; July, 2010. (\$3,000)

#### Research

- The 2014 Robert Ferber Dissertation Award, Survey Research Laboratory, University of Illinois at Urbana-Champaign. Awarded to Ryan Summers on June 23, 2014, Champaign, IL. Fouad Abd-El-Khalick: Advisor and Dissertation Director. (\$2,000)
- College of Education Distinguished Senior Scholar Award, College of Education, University of Illinois at Urbana-Champaign (2011-2012). Awarded April 13, 2011. (\$2,500)
- The National Association for Research in Science Teaching (NARST) *Outstanding Doctoral Dissertation Award: Second Place and Honorable Mention*. Awarded to Ava Zeineddin on April 19, 2009. Garden Grove, CA. Fouad Abd-El-Khalick: Advisor and Dissertation Director.
- *University Scholar*, University Scholars Program, University of Illinois at Urbana-Champaign (2006-2009). Awarded February 20, 2006. (\$ 30,000)
- College of Education Distinguished Scholar Award, College of Education, University of Illinois at Urbana-Champaign (2005-2006). Awarded June 28, 2005. (\$1,500)
- The National Association for Research in Science Teaching (NARST) *The NARST Early Research Career Award*. Awarded March 25, 2003, Philadelphia, PA.
- Faculty Fellow, Bureau of Educational Research, College of Education, University of Illinois at Urbana-Champaign (2001-2002).
- The National Association for Research in Science Teaching (NARST) *Journal of Research in Science Teaching Award*. Awarded March 27, 2001, St. Louis, MO.
- The National Association for Research in Science Teaching (NARST) *Outstanding Master's Thesis Award*. Awarded to Rola Khishfe on April 30, 2000, New Orleans, LA. Fouad Abd-El-Khalick: Advisor and Thesis Director.

The National Association for Research in Science Teaching (NARST) *Outstanding Doctoral Dissertation Award*. Awarded March 29, 1999, Boston, MA.

# **Teaching**

Listed in the "List of Teachers Ranked Excellent by Their Students," University of Illinois at Urbana-Champaign:

Fall 2010: C&I 542 Fall 2009: C&I 507–PF Spring 2008: C&I 590–PS

Fall 2007: C&I 542

Listed in the "Incomplete List of Teachers Ranked Excellent by Their Students," University of Illinois at Urbana-Champaign:

Fall 2006: C&I 542 Spring 2005: C&I 402 Fall 2004: C&I 542

Spring 2004: C&I 302–S and C&I 490-RTS

Fall 2003: C&I 301–S and C&I 442

Spring 2003: C&I 302–S

Spring 2002: C&I 302–S and C&I 490–PFS

Fall 2001: C&I 301-S

Spring 2001: C&I 302–S and C&I 490–PFS

Outstanding Undergraduate Teaching Award for Faculty, College of Education, University of Illinois at Urbana-Champaign. Awarded May 6, 2004.

*Teacher of the Year Award.* Awarded by the Education Students Society, Department of Education, American University of Beirut, Beirut, Lebanon, June, 2000.

The Chemistry Department Laboratory TA Award, Chemistry Department, Oregon State University, Corvallis, OR, Winter 1998.

### **Editorships**

2015–2019	Co-Editor, Journal of Research in Science Teaching.
2013–2017	Associate Editor, Journal of Science Teacher Education.
2004–2009	Associate Editor, Journal of Research in Science Teaching.
2001–2006	Associate Editor, School Science and Mathematics.

#### **Publications**

#### Refereed Journal Articles

Abd-El-Khalick, F., Summers, R., Said, Z., Wang, S., & Culbertson, M. (2015). Development and large-scale validation of an instrument to assess Arabic-speaking students' attitudes toward science. *International Journal of Science Education*, *37*(16), 2637-2663.

- Abed, O. H., & Abd-El-Khalick, F. (2015). Jordanian pre-service primary teachers' perceptions of mentoring in science teaching. *International Journal of Science Education*, *37*(4), 703-726.
- Wahbeh, N., & Abd-El-Khalick, F. (2014). Revisiting the translation of nature of science understandings into instructional practice: Teachers' nature of science pedagogical context knowledge. *International Journal of Science Education*, 36(3), 425-466.
- Houseal, A., Abd-El-Khalick, F., & DeStefano, L. (2014). Impact of a student-teacher-scientist partnership on students' and teachers' content knowledge, attitudes toward science, and pedagogical practices. *Journal of Research in Science Teaching*, 51(1), 84-115.
- Abd-El-Khalick, F. (2013). Teaching *with* and *about* nature of science, and science teacher knowledge domains. *Science & Education*, 22(9), 2087-2107.
- Cope, W., Kalantzis, M., Abd-El-Khalick, F., & Bagley, E. (2013). Science in writing: Learning scientific argument in principle and practice. *E-Learning and Digital Media*, 10(4), 420-441.
- Waight, N., & Abd-El-Khalick, F. (2012). Nature of technology: Implications for design, development, and enactment of technological tools in school science classrooms. *International Journal of Science Education*, *34*(18), 2875-2905.
- Schwartz, R., Lederman, N., & Abd-El-Khalick, F. (2012). A series of misrepresentations: A response to Allchin's whole approach to assessing nature of science understandings. *Science Education*, *96*(4), 685-692.
- Abd-El-Khalick, F. (2012). Examining the sources for our understandings about science: Enduring conflations and critical issues in research on nature of science in science education. *International Journal of Science Education*, 34(3), 353-374.
- Abi-El-Mona, I., & Abd-El-Khalick, F. (2011). Perceptions of the nature and "goodness" of argument among college students, science teachers, and scientists. *International Journal of Science Education*, 33(4), 573-605.
- Waight, N., & Abd-El-Khalick, F. (2011). From scientific practice to high school science classrooms: Transfer of scientific technologies and the realization of authentic inquiry. *Journal of Research in Science Teaching*, 48(1), 37-70.
- Zeineddin, A., & Abd-El-Khalick, F. (2010). Scientific reasoning and epistemological commitments: Coordination of theory and evidence among college science students. *Journal of Research in Science Teaching*, 47(9), 1064-1093.
- Salloum, S., & Abd-El-Khalick, F. (2010). A study of practical-moral knowledge in science teaching: Case studies in physical science classrooms. *Journal of Research in Science Teaching*, 47(8), 929-951.
- Abd-El-Khalick, F., & Akerson, V. L. (2009). The influence of metacognitive training on preservice elementary teachers' conceptions of nature of science. *International Journal of Science Education*, 31(16), 2161-2184.

- Abi-El-Mona, I., & Abd-El-Khalick, F. (2008). The influence of mind mapping on eighth graders' science achievement. *School Science and Mathematics*, 108(7), 298-312.
- Dogan, N., & Abd-El-Khalick, F. (2008). Turkish grade 10 students' and science teachers' conceptions of nature of science: A national study. *Journal of Research in Science Teaching*, 45(10), 1083-1112.
- Abd-El-Khalick, F., Waters, M., & Le, A. (2008). Representations of nature of science in high school chemistry textbooks over the past four decades. *Journal of Research in Science Teaching*, 45(7), 835-855.
- Zeineddin, A., & Abd-El-Khalick, F. (2008). On coordinating theory with evidence: The role of epistemic commitments in scientific reasoning among college students. *Eurasia Journal of Mathematics, Science & Technology Education*, 4(2), 159-174.
- Abd-El-Khalick, F., & Akerson, V. L. (2007). On the role and use of "theory" in science education research: A response to Johnston, Southerland, and Sowell. *Science Education*, 91(1), 187-194.
- Waight, N., & Abd-El-Khalick, F. (2007). The impact of technology on the enactment of "inquiry" in a technology enthusiast's sixth grade science classroom. *Journal of Research in Science Teaching*, 44(1), 154-182.
- Abi-El-Mona, I., & Abd-El-Khalick, F. (2006). Argumentative discourse in a high school chemistry classroom. *School Science and Mathematics*, *106*(8), 349-361.
- Abd-El-Khalick, F. (2006). Preservice and experienced biology teachers' global and specific subject matter structures: Implications for conceptions of pedagogical content knowledge. *Eurasia Journal of Mathematics, Science & Technology Education, 2*(1), 1-29.
- Lee, H., Abd-El-Khalick, F., & Choi, K. (2006). Korean science teachers' perceptions of the introduction of socioscientific issues into the science curriculum. *Canadian Journal of Science, Mathematics and Technology Education*, 6(2), 97-117.
- Abd-El-Khalick, F. (2005). Developing deeper understandings of nature of science: The impact of a philosophy of science course on preservice science teachers' views and instructional planning. *International Journal of Science Education*, 27(1), 15-42.
- Akerson, V. L., & Abd-El-Khalick, F. (2005). "How should I know what scientists do—I am just a kid": Fourth-grade students' conceptions of nature of science! *Journal of Elementary Science Education*, 17(1), 1-11.
- Abd-El-Khalick, F., & Akerson, V. L. (2004). Learning as conceptual change: Factors that mediate the development of preservice elementary teachers' views of nature of science. *Science Education*, 88(5), 785-810.
- Abd-El-Khalick, F., BouJaoude, S., Duschl, R. A., Hofstein, A., Lederman, N. G., Mamlok, R., Niaz, M., Treagust, D., & Tuan, H. (2004). Inquiry in science education: International perspectives. *Science Education*, 88(3), 397-419.

- BouJaoude, S., Salloum, S., & Abd-El-Khalick, F. (2004). Relationships between selective cognitive variables and students' ability to solve chemistry problems. *International Journal of Science Education*, 26(1), 63-84.
- Akerson, V. L., & Abd-El-Khalick, F. (2003). Teaching elements of nature of science: A yearlong case study of a fourth grade teacher. *Journal of Research in Science Teaching*, 40(10), 1025-1049.
- Niaz, M., Abd-El-Khalick, F., Benarroch, A., Cardellini, L., Laburú, C. E., Marín, N., Montes, L. A., Nola, R., Orlik, Y., Scharmann, L. C., Tsai, C., & Tsaparlis, G. (2003).
  Constructivism: Defense or a continual critical appraisal: A response to Gil-Pérez, et al. *Science & Education*, 12(8), 787-797.
- Abd-El-Khalick, F., & BouJaoude, S. (2003). Lebanese middle school students' views of nature of science. *Mediterranean Journal of Educational Studies*, 8(1), 61-79.
- Haidar-Makki, M., Abd-El-Khalick, F., & BouJaoude, S. (2003). Lebanese secondary school students' environmental knowledge and attitudes. *Environmental Education Research*, *9*(1), 21-33.
- Khishfe, R., & Abd-El-Khalick, F. (2002). Influence of explicit reflective versus implicit inquiry-oriented instruction on sixth graders' views of nature of science. *Journal of Research in Science Teaching*, 39(7), 551-578.
- Abd-El-Khalick, F. (2002). Images of nature of science in middle grade science trade books. *The New Advocate*, 15(2), 121-127.
- Lederman, N. G., Abd-El-Khalick, F., Bell, R. L., & Schwartz, R. (2002). Views of nature of science questionnaire (VNOS): Toward valid and meaningful assessment of learners' conceptions of nature of science. *Journal of Research in Science Teaching*, 39(6), 497-521.
- Abd-El-Khalick, F. (2002). Rutherford's enlarged: A content-embedded activity to teach about nature of science. *Physics Education*, *37*(1), 64-68.
- Zeineddin, A., & Abd-El-Khalick, F. (2001). Doing the right thing versus doing the right thing right: Concept mapping in a freshmen physics laboratory. *European Journal of Physics*, 22(5), 501-511.
- Abd-El-Khalick, F. (2001). Embedding nature of science instruction in preservice elementary science courses: Abandoning scientism, but . . . *Journal of Science Teacher Education*, 12(3), 215-233.
- Lederman, N. G., Schwartz, R., Abd-El-Khalick, F., & Bell, R. L. (2001). Preservice teachers' understanding and teaching of nature of science: An intervention study. *Canadian Journal of Science, Mathematics and Technology Education, 1*(2), 135-160.
- Bell, R. L., Abd-El-Khalick, F., Lederman, N. G., McComas, W. F., & Matthews, M. R. (2001). The nature of science and science education: A bibliography. *Science & Education*, 10(1/2), 187-204.

- Abd-El-Khalick, F., & Lederman, N. G. (2000). The influence of history of science courses on students' views of nature of science. *Journal of Research in Science Teaching*, 37(10), 1057-1095.\*
- Bell, R. L., Lederman, N. G., & Abd-El-Khalick, F. (2000). Developing and acting upon one's conceptions of the nature of science: A follow-up study. *Journal of Research in Science Teaching*, *37*(6), 563-581.
- Abd-El-Khalick, F., & Lederman, N. G. (2000). Improving science teachers' conceptions of the nature of science: A critical review of the literature. *International Journal of Science Education*, 22(7), 665-701.
- Schwartz, R., Abd-El-Khalick, F., & Lederman, N. G. (2000). Achieving the reforms vision: The effectiveness of a specialists-led elementary science program. *School Science and Mathematics*, 100(4), 181-193.
- Akerson, V. L., Abd-El-Khalick, F., & Lederman, N. G. (2000). Influence of a reflective explicit activity-based approach on elementary teachers' conceptions of nature of science. *Journal of Research in Science Teaching*, *37*(4), 295-317.
- Abd-El-Khalick, F. (1999). Teaching science with history: Using Mars and Saturn to teach about the relationship between theory and observation. *The Science Teacher*, 66(9), 18-22.
- Abd-El-Khalick, F., Bell, R. L., & Lederman, N. G. (1998). The nature of science and instructional practice: Making the unnatural natural. *Science Education*, 82(4), 417-436.
- Bell, R. L., Lederman, N. G., & Abd-El-Khalick, F. (1998). Implicit and explicit approaches to teaching the nature of science: An explicit response to Palmquist and Finley. *Journal of Research in Science Teaching*, 35(9), 1057-1061.
- Abd-El-Khalick, F., & BouJaoude, S. (1997). An exploratory study of the knowledge base for science teaching. *Journal of Research in Science Teaching*, *34*(7), 673-699.

#### **Book Chapters**

- Waight, N., & Abd-El-Khalick, F. (in press). Technology, culture, and values: Implications for enactment of technological tools in precollege science classrooms. In Y. J. Dori, Z. Mevareach, & D. Baker (Eds.), *Cognition, metacognition and culture in STEM education*. New York: Springer.
- Abd-El-Khalick, F., Lederman, N. G., & Schwartz, R. (2015). Inquiry, as a curriculum strand. In R. Gunstone (Ed.), *Encyclopedia of science education* (510-514). Dordrecht, The Netherlands: Springer.
- Lederman, N. G., Schwartz, R., & Abd-El-Khalick, F. (2015). Nature of science, assessing of. In R. Gunstone (Ed.), *Encyclopedia of science education* (pp. 694-698). Dordrecht, The Netherlands: Springer.

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<sup>\*</sup> Awarded the *Journal of Research in Science Teaching Award* by the National Association for Research in Science Teaching, March 27, 2001, St. Louis, MO.

- Lederman, N., Abd-El-Khalick, F., & Schwartz, R., (2015). Nature of science, measurement of. In R. Gunstone (Ed.), *Encyclopedia of science education* (pp. 704-708). Dordrecht, The Netherlands: Springer.
- Lederman, N. G., Schwartz, R., & Abd-El-Khalick (2015). History of science, assessing knowledge of. In R. Gunstone (Ed.), *Encyclopedia of science education* (pp. 462-465). Dordrecht, The Netherlands: Springer.
- Abd-El-Khalick, F. (2014). The evolving landscape related to assessment of nature of science. In N. G. Lederman & S. K. Abell (Eds.), *Handbook of research on science education (2<sup>nd</sup> ed.)* (pp. 621-650). Mahwah, NJ: Lawrence Erlbaum.
- Abd-El-Khalick, F. (2012). Nature of science in science education: Toward a coherent framework for synergistic research and development. In B. J. Fraser, K. Tobin, & McRobbie, C. (Eds.), *Second international handbook of science education (Vol. 2)* (pp. 1041-1060). The Netherlands: Springer.
- Abd-El-Khalick, F. (2009). Professional development through applied engagement: Egyptian Teacher Opportunities for Professional Growth Grants. In S. BouJaoude & Z. Dagher (Eds.), *The world of science education: Arab States* (pp. 83-106). Rotterdam, The Netherlands: Sense.
- BouJaoude, S., Abd-El-Khalick, F., & El-Hage, F. (2009). Science education research in Lebanon (2003–2008): Trends and issues. In S. BouJaoude & Z. Dagher (Eds.), *The world of science education: Arab States* (pp. 221-256). Rotterdam, The Netherlands: Sense.
- Abd-El-Khalick, F. (2008). Modeling science classrooms after scientific laboratories. In R. A. Duschl & R. E. Grandy (Eds.), *Teaching scientific inquiry: Recommendations for research and application* (pp. 80-85). Rotterdam, The Netherlands: Sense.
- Abd-El-Khalick, F. (2007). The impact of a systemic reform initiative on primary Nigerian teachers' instructional practices: A longitudinal study. In C. Szymanski-Sunal & K. Mutua (Eds.), *Research on education in Africa, the Caribbean, and the Middle East: Book IV: The enterprise of education* (pp. 165-191). Greenwich, CT: Information Age Press.
- Lederman, N. G., Lederman, J., & Abd-El-Khalick, F. (2006). Alternative certification: Aspirations and realities. In J. Rhoton & P. Shane (Eds.), *Teaching science in the 21<sup>st</sup> century* (pp. 257-272). Arlington, VA: National Science Teachers Association.
- Abd-El-Khalick, F. (2005). Instructional technology in secondary science teaching. In I. Osta (Ed.), *Education and information technology in the Arab countries: Issues and trends* (pp. 329-355). Beirut, Lebanon: Lebanese Association for Educational Sciences. (In Arabic)
- Abd-El-Khalick, F., & Lederman, N. G. (2005). Improving science teachers' conceptions of nature of science: A critical review of the literature. In J. K. Gilbert (Ed.), *Science education: Major themes in education* (pp. 339-384). New York: Routledge. (Reprinted from *International Journal of Science Education*, 22, pp. 665-701, 2000)

- BouJaoude, S., Sawwan, S., & Abd-El-Khalick, F. (2005). The effect of using drama in science teaching on students' conceptions of nature of science. In K. Boersma, H., Goedhart, M., de Jong, O., & Eijkelhof, H. (Eds.), *Research and the quality of science education* (pp. 259-267). Dordrecht, The Netherlands: Kluwer.
- Abd-El-Khalick, F. (2005). History and nature of science: Active transport might work but osmosis does not! In N. Sanitt (Ed.), *Motivating science: Science communication from a philosophical, educational, and cultural perspective* (pp. 123-130). Luton, UK: Pantaneto.
- BouJaoude, S., & Abd-El-Khalick, F. (2004). A decade of science education research in Lebanon (1992-2002): Trends and issues. In K. Mutua & C. Szymanski-Sunal (Eds.), *Research on education in Africa, the Caribbean, and the Middle East: An historic overview* (pp. 203-241). Greenwich, CT: Information Age Press.
- Abd-El-Khalick, F. (2004). Over and over again: College students' views of nature of science. In L. B. Flick & N. G. Lederman (Eds.), *Scientific inquiry and nature of science: Implications for teaching, learning, and teacher education* (pp. 389-425). Dordrecht, The Netherlands: Kluwer.
- Abd-El-Khalick, F. (2003). Socioscientific issues in pre-college science classrooms: The primacy of learners' epistemological orientations and views of nature of science. In D. L. Zeidler (Ed.), *The role of moral reasoning in socioscientific issues and discourse in science education* (pp. 41-61). Dordrecht, The Netherlands: Kluwer.
- Lederman, N. G., Abd-El-Khalick, F., & Bell, R. L. (2001). If we want to talk the talk we must also walk the walk: The nature of science, professional development and educational reform. In J. Rhoton & P. S. Bowers (Eds.), *Professional development: Planning and design* (pp. 25-42). Arlington, VA: National Science Teachers Association Press.
- Abd-El-Khalick, F. (1999). Nature of science: What is it? Why is it important? And what attention is it accorded in the new Lebanese science curriculum? In F. Ayoub (Ed.), *The new school curricula in Lebanon: An evaluative perspective* (pp. 117-136). Beirut, Lebanon: Lebanese Association for Educational Sciences. (In Arabic)
- Lederman, N. G., & Abd-El-Khalick, F. (1998). Avoiding de-natured science: Activities that promote understandings of the nature of science. In W. McComas (Ed.), *The nature of science in science education: Rationales and strategies* (pp. 83-126). Dordrecht, The Netherlands: Kluwer.

#### **Editorials**

- Abd-El-Khalick, F., & Zeidler, D. L. (2016). On the 'fabric' of our global science education research community: The art and science of writing for the *Journal of Research in Science Teaching*. *Journal of Research in Science Teaching*, 53(1).
- Abd-El-Khalick, F., & Zeidler, D. L. (2015). New horizons for the Journal of Research in Science Teaching. *Journal of Research in Science Teaching*, *52*(3), 263-267.

Fouad Abd-El-Khalick/ vita/ page: 11/57

#### **Invited / Non-Refereed Articles**

- Abd-El-Khalick, F. (2013). Commentary: The role of inquiry in science teaching [Rutherford, F. J. (1964)]. *Journal of Research in Science Teaching*, 50<sup>th</sup> Anniversary Virtual Issue. Available <a href="http://onlinelibrary.wiley.com/journal/10.1002/%28ISSN%291098-2736/homepage/50th">http://onlinelibrary.wiley.com/journal/10.1002/%28ISSN%291098-2736/homepage/50th</a> anniversary virtual issue.htm
- Abd-El-Khalick, F. (2013). Commentary: Students' and teachers' understandings of the nature of science: A review of the research [Lederman, N. G. (1992)]. *Journal of Research in Science Teaching*, 50<sup>th</sup> Anniversary Virtual Issue. Available <a href="http://onlinelibrary.wiley.com/journal/10.1002/%28ISSN%291098-2736/homepage/50th">http://onlinelibrary.wiley.com/journal/10.1002/%28ISSN%291098-2736/homepage/50th</a> anniversary virtual issue.htm
- Lederman, N. G., Lederman, J. S., & Abd-El-Khalick, F. (2007). Alternative certification: An alternative perspective. *NSTA Reports*, *18*(8), 6-7.
- Lederman, N. G., Lederman, J. S., & Abd-El-Khalick, F. (2006). Alternative certification: Aspirations and realities. *NSTA Reports*, *18*(2), 6-8.
- Abd-El-Khalick, F. (2001). History and nature of science: Active transport might work but osmosis does not! *The Pantaneto Forum* [On-line], *3*. Available: http://www.pantaneto.co.uk/issue3/Fouad.htm
- Abd-El-Khalick, F. (2001). History of science, science education, and nature of science: Conceptual change, discourse, collaboration, and other oversights! *History of Science Society Newsletter*, 30(1), 8-9.
- Lederman, N. G., Farber, P. L., Abd-El-Khalick, F., & Bell, R. L (1998). The myth of the scientific method and slippery debates in the classroom: A response to McCreary. *The Oregon Science Teacher*, *39*(4), 24-27.
- Abd-El-Khalick, F. (1996). Traditional and contemporary views of the nature of science. *Sci-Quest*, 6(1), 29-30, 33.

#### **Book Reviews**

- Abd-El-Khalick, F. (2006). Choose a career in science. Science Books & Films, 42(5), 209.
- Abd-El-Khalick, F. (2004). Inquiring safely: A guide for middle school teachers. *Science Books & Films*, 40(2), 66.
- Abd-El-Khalick, F. (2003). Isaac Newton and Albert Einstein (from the Scientists Who Made History Series). *Science Books & Films*, 39(2), 69-70.
- Abd-El-Khalick, F. (2001). Transforming middle school science education. *Journal of Curriculum Studies*, 33(3), 382-386.

#### **Manuscripts Under Review**

Brunner, J. L., & Abd-El-Khalick, F. (submitted). Representations of nature of science in U.S. elementary trade books. In C. McDonald & F. Abd-El-Khalick (Eds.), *Representations of nature of science in school science textbooks: Global perspectives.* New York: Routledge.

- Said, Z., Summers, R., Abd-El-Khalick, F., & Wang, S. (under review). Attitudes toward science among grades 3 through 12 Arab students in Qatar: Findings from a cross-sectional national study. *International Journal of Science Education*.
- Abd-El-Khalick, F., Myers, J., Summers, R., Waight, N., Belarmino, J., Brunner, J., Wahbeh, N., & Zeineddin, A. (under review). A longitudinal analysis of the prominence and representations of nature of science in U.S. high school biology and physics textbooks. *Journal of Research in Science Teaching*.
- Myers, J., & Abd-El-Khalick, F. (under review). "A ton of faith in science!": Ideas about science and epistemology generated upon watching a sci-fi film. *Journal of Research in Science Teaching*.
- Said, Z., Summers, R., Abd-El-Khalick, F., & Wang, S. (under review). Attitudes toward science among Grade 3 through 12 Arab students in Qatar: Findings from a cross-sectional national study. *International Journal of Science Education*.

#### **Manuscripts in Preparation**

- McDonald, C., & Abd-El-Khalick, F. (Eds.) (under contract). *Representations of nature of science in school science textbooks: Global perspectives.* New York: Routledge.
- Abd-El-Khalick, F. (in preparation). The development of students' science and global epistemologies in the middle and high school years: Results from a cross-sectional study. *Journal of Research in Science Teaching*.
- Abd-El-Khalick, F., & Schroyer, M. (in preparation). Examining transformations in district-wide teacher learning networks through social network analysis. *International Journal of Science Education*.

# **Reports / Commissioned Papers**

- Abd-El-Khalick, F. (2011). Consolidated Classroom Observation Tool for Public Education in Lebanon. Report prepared for the Developing Rehabilitation Assistance to Schools And Teacher Improvement (D-RASATI) Project, Beirut, Lebanon.
- Abd-El-Khalick, F. (2011). An analysis of the Lebanese Ministry of Education and Higher Education instructional practice classroom observation tools. Report prepared for the Developing Rehabilitation Assistance to Schools And Teacher Improvement (D-RASATI) Project, Beirut, Lebanon.
- Abd-El-Khalick, F. (2010). SCOPE baseline report: Education Quality and Access for Learning and Livelihood Skills (EQuALLS). Report prepared for the EQuALLS Project, Manila, the Philippines.
- Abd-El-Khalick, F., & Summers, R. (2010). *Science curriculum framework mapping for grades 1–10: Nile Egyptian Schools versus the Finnish National Science Curriculum.* Report prepared for the Nile Egyptian Schools, A Project with the Education Development Fund of Egypt, Cairo, Egypt.
- Abd-El-Khalick, F. (2010). Major themes in the Nile Egyptian Schools (NES) curriculum framework in comparison to international curricular trends and alignment of the specific

- *NES learning outcomes for grades 1–10 with these major themes.* Report prepared for the Nile Egyptian Schools, A Project with the Education Development Fund of Egypt, Cairo, Egypt.
- Abd-El-Khalick, F. (2009). Using the Extended Standards-based Classroom Observation Protocol for Egypt (SCOPE) in Support of the Professional Academy for Teachers (PAT). Report prepared for the American Institutes for Research Education Reform Project, Cairo, Egypt.
- Abd-El-Khalick, F. (2007). Egypt Education Reform Project (ERP): Education quality study: SCOPE III data analysis report. Report prepared for the American Institutes for Research Education Reform Project, Cairo, Egypt.
- Abd-El-Khalick, F. (2006). Egypt Education Reform Project (ERP): Education quality study: SCOPE II data analysis report. Report prepared for the American Institutes for Research Education Reform Project, Cairo, Egypt.
- Abd-El-Khalick, F. (2005). *Education Reform Project: Education quality baseline study*. Report prepared for the American Institutes for Research Education Reform Project, Cairo, Egypt.
- Abd-El-Khalick, F. (2005). The differential effects of the Literacy Enhancement Assistance Program (LEAP) on teachers' instructional practices in Islamic vs. non-Islamic schools in Nigeria. A report prepared for the Education Development Center LEAP Project, Abuja, Nigeria.
- Abd-El-Khalick, F. (2004). The impact of the Literacy Enhancement Assistance Program (LEAP) in Nigeria on teacher training, effectiveness, and instructional practices, community involvement, and the education management information system. A set of four reports prepared for the Education Development Center LEAP Project, Abuja, Nigeria.
- Abd-El-Khalick, F. (2003). New Schools Project school clusters: Assessment of the first round of implementing the Education Quality Supervisory Support Teams (EQSS Teams). Report prepared for the Education Development Center New Schools Project, Cairo, Egypt.
- Abd-El-Khalick, F. (2001). *Integrating technology in teaching secondary science and mathematics: Effectiveness, models of integration, and illustrative examples.* Paper prepared for the United Nations Educational, Scientific and Cultural Organization, Cairo Office, Egypt.

#### Non-Refereed

- Haythornthwaite, C., Gao, W., & Abd-El-Khalick, F. (2014). Networks of change: learning from peers about science teaching. In R. H. Sprague (Ed.), *Proceedings of the 47<sup>th</sup> Hawaii International Conference on System Sciences (HICSS-47)* (pp. 100-109). Los Alamitos, CA: IEEE Computer Society.
- Abi-El-Mona, I., & Abd-El-Khalick, F. (2008). The nature of argument among freshmen college students, science teachers, and practicing scientists. In P. Lari (Ed.), *Proceedings of the Second International Conference of the American Institute of Higher Education (Vol. 1)* (pp. 193-198). Atlantic City, NJ: American Institute of Higher Education.

- Abd-El-Khalick, F., Boyle, H., & Pier, D. (2006). *Educational quality in Islamic schools in Nigeria*. Washington, DC: American Institutes for Research.
- Abd-El-Khalick, F. (2004). Alternative pathways to teaching: Quality teachers versus warm bodies in classrooms. *Proceedings of the Teacher Preparation Principal Investigator Conference*. Washington, DC: The Science, Technology, Engineering, and Mathematics Teacher Education Collaborative (STEMTEC). Available: <a href="http://www.stemtec.org/piconf/Proceedings/Papers/Abd.doc">http://www.stemtec.org/piconf/Proceedings/Papers/Abd.doc</a>
- Abd-El-Khalick, F. (2003/2004). An alternative program for recruiting, educating, certifying, and retaining underrepresented populations in teaching science and mathematics (RECRUIT). In S. Walter (Ed.), *Proceedings of the 2003 and 2004 Annual International Conferences of the Association for the Education of Teachers in Science*. Pensacola, FL: Association for the Education of Teachers in Science.
- Abd-El-Khalick, F. (2002). The influence of a philosophy of science course on preservice secondary science teachers' views of nature of science. In B. Crawford, J. Rye, W. DiBiase, & P. Rubba (Eds.), *Proceedings of the 2002 Annual International Conference of the Association for the Education of Teachers in Science* (pp. 856-890). Pensacola, FL: Association for the Education of Teachers in Science. (ERIC Document Reproduction Service No. ED 465 602)
- Abd-El-Khalick, F. (2001). Do history of science courses influence college students' views of nature of science? In W. F. McComas (Ed.), *Proceedings of the Sixth International History, Philosophy, and Science Teaching Conference* (pp. 1-43). Denver, CO: International History, Philosophy, and Science Teaching Group.
- Abd-El-Khalick, F., Lederman, N. G., Bell, R. L., & Schwartz, R. S. (2001). Views of nature of science questionnaire (VNOS): Toward valid and meaningful assessment of learners' conceptions of nature of science. In P. Rubba, J. Rye, W. DiBiase, & B. Crawford (Eds.), *Proceedings of the 2001 Annual International Conference of the Association for the Education of Teachers in Science* (pp. 212-277). Pensacola, FL: Association for the Education of Teachers in Science. (ERIC Document Reproduction Service No. ED 453 083)
- Abd-El-Khalick, F. (2000). Improving elementary teachers' conceptions of nature of science in the context of a science content course. In P. Rubba, J. Rye, P. Keig, & W. DiBiase (Eds.), *Proceedings of the 2000 Annual International Conference of the Association for the Education of Teachers in Science* (pp. 337-365). Pensacola, FL: Association for the Education of Teachers in Science. (ERIC Document Reproduction Service No. ED 438 191)
- Akerson, V., & Abd-El-Khalick, F. (2000). Improving preservice elementary teachers' conceptions of nature of science using a conceptual change teaching approach. In P. Rubba, J. Rye, P. Keig, & W. DiBiase (Eds.), *Proceedings of the 2000 Annual International Conference of the Association for the Education of Teachers in Science* (pp. 366-398). Pensacola, FL: Association for the Education of Teachers in Science. (ERIC Document Reproduction Service No. ED 438 191)

- Dickinson, V., Abd-El-Khalick, F., & Lederman, N. G. (1999). Changing elementary teachers' views of the nature of science: Effective strategies for science methods courses. In P. Rubba, J. Rye, & P. Keig (Eds.), *Proceedings of the 1999 Annual International Conference of the Association for the Education of Teachers in Science* (pp. 673-703). Pensacola, FL: Association for the Education of Teachers in Science. (ERIC Document Reproduction Service No. ED 431 626)
- Schwartz, R., Abd-El-Khalick, F., & Lederman, N. G. (1999). An exploratory study of the "effectiveness" of elementary science specialists. In P. Rubba, J. Rye, & P. Keig (Eds.), Proceedings of the 1999 Annual International Conference of the Association for the Education of Teachers in Science (pp. 888-921). Pensacola, FL: Association for the Education of Teachers in Science. (ERIC Document Reproduction Service No. ED 431 626)
- Abd-El-Khalick, F. (1999). The new Lebanese science and math curricula: Revolution, evolution, and other dangerous ideas. *SMEC Newsletter*, *5*(1), 2-4. (*SMEC Newsletter* is a publication of the Science and Mathematics Education Center, Division of Education Programs, American University of Beirut, Beirut, Lebanon.)
- Abd-El-Khalick, F., Lederman, N. G., & Bell, R. L. (1998). Developing and acting upon ones' conception of the nature of science: A follow-up study. In P. Rubba & J. Rye (Eds.), Proceedings of the 1998 Annual International Conference of the Association for the Education of Teachers in Science (pp. 317-356). Pensacola, FL: Association for the Education of Teachers in Science. (ERIC Document Reproduction Service No. ED 421 363)
- Abd-El-Khalick, F., & BouJaoude, S. (1997). An exploratory study of the disciplinary knowledge of science teachers. In P. Rubba, P. Keig, & J. Rye (Eds.), *Proceedings of the 1997 Annual International Conference of the Association for the Education of Teachers in Science* (pp. 89-133). Pensacola, FL: Association for the Education of Teachers in Science. (ERIC Document Reproduction Service No. ED 405 220)
- Bell, R., Lederman, N. G., & Abd-El-Khalick, F. (1997). Developing and acting upon one's conception of science: The reality of teacher preparation. In P. Rubba, P. Keig, & J. Rye (Eds.), *Proceedings of the 1997 Annual International Conference of the Association for the Education of Teachers in Science* (pp. 429-448). Pensacola, FL: Association for the Education of Teachers in Science. (ERIC Document Reproduction Service No. ED 405 220)
- Abd-El-Khalick, F. (1997). Preservice and expert biology teachers' global and specific subject matter structures: Implications for conceptions of pedagogical content knowledge. *Proceedings of the Oregon Academy of Science, 33,* 62.
- Abd-El-Khalick, F., & BouJaoude, S. (1996). An exploratory study of the pedagogical content knowledge of science teachers. *Proceedings of the Oregon Academy of Science*, 32, 57-58.
- BouJaoude, S., & Abd-El-Khalick, F. (1995). *Lebanese middle school students' definitions of science and perceptions of its purpose and usage.* (ERIC Document Reproduction Service No. ED 387 328)

## **Research Papers and Presentations**

- Abd-El-Khalick, F., & Zeidler, D. L. (2016, April, accepted). The "Guest Doctoral Student Reviewers" initiative: Realizing the professional development potential of the Journal of Research in Science Teaching. Symposium conducted at the annual meeting of the National Association for Research in Science Teaching, Baltimore, MD.
- Akyol, G., Oztekin, C., Sungur, S., & Abd-El-Khalick, F. (2016, April). *Development and validation of the intention to integrate nature of science questionnaire*. Paper presented at the annual meeting of the National Association for Research in Science Teaching, Baltimore, MD.
- Brunner, J., Summers, R., Myers, J., & Abd-El-Khalick, F. (2016, April, accepted). *Toward quantifying responses to the views of nature of science questionnaire: Empirically investigating qualitative coding.* Paper presented at the annual meeting of the National Association for Research in Science Teaching, Baltimore, MD.
- Alameh, S., Abd-El-Khalick, F., & Waskan, J. (2016, April, accepted). *Constructing scientific explanations: How philosophically informed models can guide instruction, learning, and assessment in NGSS.* Paper presented at the annual meeting of the National Association for Research in Science Teaching, Baltimore, MD.
- Myers, J., & Abd-El-Khalick, F. (2016, April, accepted). *A wiser goal for K-12 science education*. Paper presented at the annual meeting of the National Association for Research in Science Teaching, Baltimore, MD.
- Summers, R., Maddux, J., Wallon, R., Alameh, S., Akyol, G., Aybuke, P., Brunner, J., Myers, J., Silliman, C., & Abd-El-Khalick, F. (2016, April, accepted). *The history of nature of science representation in state science standards: A Systematic Assessment*. Paper presented at the annual meeting of the National Association for Research in Science Teaching, Baltimore, MD.
- McDonald, C., Abd-El-Khalick, F., BouJaoude, S., Dagher, Z., Brunner, J., Ramnarain, U., & DiGiuseppe, M. (2016, April, accepted). *Global perspectives on nature of science in school science textbooks: Representations, methodologies, contexts, and implications.* Symposium conducted at the annual meeting of the National Association for Research in Science Teaching, Baltimore, MD.
- Myers, J., & Abd-El-Khalick, F. (2016, April, accepted). *Should K-12 science education adopt a wiser goal?* Paper presented at the annual meeting of the American Educational Research Association, Washington, DC.
- Alberts, B., Labov, J., Abd-El-Khalick, F., & Gaffney, J. (2016, March, accepted). *Expanding opportunities for STEM teacher leadership*. Session presented at the Carnegie Summit on Improvement in Education, San Francisco, CA.
- Abd-El-Khalick, F., & Zeidler, D. L. (2015, April). *New horizons for the Journal of Research in Science Teaching*. Symposium conducted at the annual meeting of the National Association for Research in Science Teaching, Chicago, IL.

- Summers, R., & Abd-El-Khalick, F. (2015, April). *Cross-sectional study of Illinois students' attitudes toward science*. Paper presented at the annual meeting of the National Association for Research in Science Teaching, Chicago, IL.
- Matthews, M., Osborne, J., Lederman, N., Abd-El-Khalick, F., Clough, M. P., Kampourakis, K., Smith, M. U., Kelly, G. J., Peters-Burton, E., & Sherman-Heckler, W. (2015, April). *The past, present and possible future of HPS-informed science education research*. Symposium conducted at the annual meeting of the National Association for Research in Science Teaching, Chicago, IL.
- Schroyer, M., Abd-El-Khalick, F., Martin, A., & Haythornthwaite, C. (2015, April). *Tracking emergence and development of entrepreneurial teacher leaders in science teaching and learning networks*. Paper presented at the annual meeting of the National Association for Research in Science Teaching, Chicago, IL.
- Myers, J. Y., & Abd-El-Khalick, F. (2015, April). Faith as integral to science! *What graduate students "saw" while watching a sci-fi film*. Paper presented at the annual meeting of the National Association for Research in Science Teaching, Chicago, IL.
- Martin, A., Mustari, E., Abd-El-Khalick, F., & Israel, M. (2015, April). *Middle school students made substantially greater gains in the nature of engineering (NOE) knowledge domain after teacher shifts in practice and NOE*. Paper presented at the annual meeting of the American Educational Research Association, Chicago, IL.
- Martin, A., Abd-El-Khalick, F., Mustari, E., & Price, R. (2015, April). *Entrepreneurial teachers, effectual reasoning, and risk in science reform*. Paper presented at the annual meeting of the American Educational Research Association, Chicago, IL.
- Schroyer, M., Martin, A., Abd-El-Khalick, F., Haythornthewaite, C. (2015, April). *Tracking entrepreneurial leaders in science learning networks: Longitudinal social network analysis of a partner district.* Paper presented at the annual meeting of the American Educational Research Association, Chicago, IL.
- Abd-El-Khalick, F. (2014, March-April). Assessment of understandings of nature of science in science education: past, present, and future. Paper presented at the annual meeting of the National Association for Research in Science Teaching, Pittsburgh, PA.
- Martin, A., Israel, M., & Abd-El-Khalick, F. (2014, March-April). *Middle school students'* conceptions of nature of engineering (NoE). Paper presented at the annual meeting of the National Association for Research in Science Teaching, Pittsburgh, PA.
- Schroyer, M., Abd-El-Khalick, F., Martin, A., & Haythornthwaite, C. (2014, March-April). *A longitudinal, district-wide social network analysis of the impact of science teacher leaders.* Paper presented at the annual meeting of the National Association for Research in Science Teaching, Pittsburgh, PA.
- Abd-El-Khalick, F., & Dogan, N. (2014, March-April) *A national study of Turkish grade 10 students' and science teachers' conceptions of scientists and the interactions between science, technology, and society.* Paper presented at the annual meeting of the National Association for Research in Science Teaching, Pittsburgh, PA.

- Summers, R., Abd-El-Khalick, F., Said, Z., & Culbertson, M. (2014, March-April). *Assessment of precollege Qatari students' attitudes toward science*. Paper presented at the annual meeting of the National Association for Research in Science Teaching, Pittsburgh, PA.
- Myers, J., & Abd-El-Khalick, F. (2014, March-April). *Graduate students' ideas about science and the nature of knowing generated by a Sci-Fi film*. Paper presented at the annual meeting of the National Association for Research in Science Teaching, Pittsburgh, PA.
- Savage, E. L., Burgon, H., Gaffney, J., Price, R., Bagley, E., Martin, A., & Abd-El-Khalick, F. (2014, April). *Innovation at the frontline: A theoretical model of entrepreneurial teacher leadership.* Poster presented at the annual meeting of the American Educational Research Association, Philadelphia, PA.
- Haythornthwaite, C., Gao, W., & Abd-El-Khalick, F. (2014, January, accepted). *Networks of change: learning from peers about science teaching.* Paper presented at the annual meeting of Hawaii International Conference on System Sciences (HICSS-47), University of Hawai'i at Manoa, Honolulu, HI.
- Martin, A., Abd-El-Khalick, F., & Price, R. (2014, January, accepted). *Entrepreneurial teachers in STEM education: A theoretical model*. Paper presented at the annual international meeting of the Association of Science Teacher Education, San Antonio, TX.
- Martin, A., Israel, M., & Abd-El-Khalick, F. (2014, January, accepted). *The nature of engineering (NOE) among middle school students and K-8 teachers: Phase I.* Paper presented at the annual international meeting of the Association of Science Teacher Education, San Antonio, TX.
- Wahbeh, N., & Abd-El-Khalick, F. (2013, April). The effect of an explicit-reflective instructional approach on inservice science teachers' understandings and practices related to nature of science. Paper presented at the annual meeting of the National Association for Research in Science Teaching, Rio Grande, Puerto Rico.
- Abd-El-Khalick, F. (2013, April). *Teaching with and about nature of science: Coupling inquiry and nature of science teaching and learning goals.* Paper presented at the annual meeting of the National Association for Research in Science Teaching, Rio Grande, Puerto Rico.
- Akerson, V. L., Lederman, N. G., Matthews, M., Binns, I., McDonald, C., & Abd-El-Khalick, F. (2013, April). Nature of science: We know the past, but what about the future? Symposium presented at the annual meeting of the National Association for Research in Science Teaching, Rio Grande, Puerto Rico.
- Martin, A., Abd-El-Khalick, F., & Price, R. (2013, April). *Year 2 longitudinal study of effectual reasoning scores of high and low innovators*. Paper presented at the annual meeting of the National Association for Research in Science Teaching, Rio Grande, Puerto Rico.
- Bagley, E., Martin, A., Gaffney, J., Price, R., & Abd-El-Khalick, F. (2013, April). *Epistemic network analysis of high and low innovators in high school science classrooms*. Paper presented at the annual meeting of the National Association for Research in Science Teaching, Rio Grande, Puerto Rico.

- McDonald, C., Abd-El-Khalick, F., Wahbeh, N., Akerson, V., & Schwartz, R. (2013, April). *Explicit-reflective nature of science instruction across contexts and learner outcomes.*Related paper set presented at the annual meeting of the National Association for Research in Science Teaching, Rio Grande, Puerto Rico.
- Said, Z., Abd-El-Khalick, F., Summers, R., Culbertson, M., & Friesen, H. (2013, April). *Large-scale validation of an instrument to assess precollege students' attitudes toward science*. Paper presented at the annual meeting of the National Association for Research in Science Teaching, Rio Grande, Puerto Rico.
- Schroyer, M., Abd-El-Khalick, F., Martin, A., & Haythornthwaite, C. (2013, April). *Effecting 'reform' through transformations in district-wide science teacher learning networks*. Paper presented at the annual meeting of the National Association for Research in Science Teaching, Rio Grande, Puerto Rico.
- Machluf, Y., Yarden, A., Waight, N., Abd-El-Khalick, F., Nisselle, A., Pineda-Catalan, O., Micklos, D., Schneider-Gricar, V. M., Fernandes, P., & Jungck, J. R. (2013, April). *Authentic bioinformatics tools and database in the biology classroom: Affordances, challenges, and implications for learning.* Related paper set presented at the annual meeting of the National Association for Research in Science Teaching, Rio Grande, Puerto Rico.
- Waight, N., & Abd-El-Khalick, F. (2013, April). *Implications of nature of technology for tool enactment in precollege science classrooms*. Paper presented at the annual meeting of the National Association for Research in Science Teaching, Rio Grande, Puerto Rico.
- Abd-El-Khalick, F., Belarmino, J., Myers, J., Summers, R., & Brunner, J. (2013, April-May). *Views of nature of science (VNOS) questionnaire: development and validation of a scoring rubric.* Paper presented at the annual meeting of the American Educational Research Association, San Francisco, CA.
- Martin, A., Price, R., & Abd-El-Khalick, F. (2013, April-May). *Correlation between high, medium, and low innovators' effectual reasoning scores in science teaching and learning: Year 2 in a longitudinal study.* Paper presented at the annual meeting of the American Educational Research Association, San Francisco, CA.
- Said, Z., Abd-El-Khalick, F., Summers, R., & Culbertson, M. (2013, April-May). *Development and validation of an instrument to assess grade 3 through 12 Arab students' attitudes toward science*. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, CA.
- Abd-El-Khalick, F., & Schroyer, M. (2013, February). *Monitoring transformations in district-wide teacher learning networks through social network analysis*. Paper presented at the National Science Foundation MSP Learning Network Conference, Washington, DC.
- Abd-El-Khalick, F., Said, Z., Summers, R., Culbertson, M., Friesen, H., & Zemmahi, H. (2012, October). Development and large-scale validation of an instrument to assess precollege Arabic speaking students' attitudes toward science. Paper presented at the Joint Qatar Foundation Annual Research Forum and Arab Expatriate Scientists Network Symposium, Doha, Qatar.

- Abd-El-Khalick, F., Said, Z., & Summers, R. (2012, March). *Developing and validating an instrument to assess Arabic speaking students' attitudes toward science*. Paper presented at the Fourteenth Annual Science and Math Teachers Conference (SMEC XIV), American University of Beirut, Beirut, Lebanon.
- Martin, A., Abd-El-Khalick, F., & Price, R. (2012, March). *The relationship between science teachers' effectual reasoning and teaching innovation*. Paper presented at the annual meeting of the National Association for Research in Science Teaching, Indianapolis, IN.
- Abd-El-Khalick, F., Haythornthwaite, C., Phelps, K., & Martin, A. (2012, March). Characterizing district-wide teachers' science learning networks: silos and barriers to change and innovation. Paper presented at the annual meeting of the National Association for Research in Science Teaching, Indianapolis, IN.
- Greenberg, S., & Abd-El-Khalick, F. (2012, March). *Impact of social media as an instructional component on content knowledge, attitudes, and public engagement related to global climate change.* Paper presented at the annual meeting of the National Association for Research in Science Teaching, Indianapolis, IN.
- Abd-El-Khalick, F., Belarmino, J., & Summers, R. (2012, March). *Development and validation of a rubric to score the views of nature of science questionnaire*. Paper presented at the annual meeting of the National Association for Research in Science Teaching, Indianapolis, IN.
- Summers, R., Abd-El-Khalick, F., Said, Z., Friesen, H., & Culbertson, M. (2012, March). Development and validation of an instrument to assess Arabic speaking students' attitudes toward science. Paper presented at the annual meeting of the National Association for Research in Science Teaching, Indianapolis, IN.
- Abd-El-Khalick, F. (2011, September). *The development of conceptions of the nature of scientific knowledge and knowing in secondary school.* Paper presented at the biannual conference of the European Science Education Research Association, Lyon, France.
- Wahbeh, N., & Abd-El-Khalick, F. (2011, September). *The primacy of content-embedded teacher understandings of nature of science in impacting instruction*. Paper presented at the biannual conference of the European Science Education Research Association, Lyon, France.
- Abd-El-Khalick, F. (2011, September). A longitudinal study of the representations of nature of science in US high school science textbooks. Paper presented at the biannual conference of the European Science Education Research Association, Lyon, France.
- Banerjee, A., Abd-El-Khalick, F., Houseal, A., Lederman, N. G., Lederman, J. S., & Schwartz, R. (2011, April). *Professional development models to support teachers to teach nature of science and inquiry*. Symposium conducted at the annual meeting of the National Association for Research in Science Teaching, Orlando, FL.
- Abd-El-Khalick, F., & Martin, A. (2011, April). *Entrepreneurial Leadership in STEM Teaching & learning (EnLiST): The partnership's conceptual framework and approach.* Paper presented at the annual meeting of the National Association for Research in Science Teaching, Orlando, FL.

- Gao, W., Abd-El-Khalick, F., & Haythornthwaite, C. (2011, April). *Learning, leadership, and innovation in science teaching as manifested in teachers' social networks.* Paper presented at the annual meeting of the National Association for Research in Science Teaching, Orlando, FL.
- Koehler, J., Bresler, L., & Abd-El-Khalick, F. (2011, April). From procedural change to substantive innovation: Science teachers and the entrepreneurial mindset. Paper presented at the annual meeting of the National Association for Research in Science Teaching, Orlando, FL.
- Houseal, A., Destefano, L., & Abd-El-Khalick, F. (2011, April). *STaRRS in Yellowstone: Student outcomes from a student-teacher-scientist partnership*. Paper presented at the annual meeting of the American Educational Research Association, New Orleans, LA.
- Gao, W., Haythornthwaite, C., & Abd-El-Khalick, F. (2011, April). *Social networks, learning, and innovation in science teaching*. Paper presented at the annual meeting of the American Educational Research Association, New Orleans, LA.
- Abd-El-Khalick, F., & Martin, A. (2011, April). *Entrepreneurial Leadership in STEM Teaching and learning (EnLiST)*. Paper presented at the annual meeting of the American Educational Research Association, New Orleans, LA.
- Halbig, P., & Abd-El-Khalick, F. (2011, April). *Representations of evolutionary theory in high school biology textbooks through the 20<sup>th</sup> century*. Paper presented at the annual meeting of the American Educational Research Association, New Orleans, LA.
- Abd-El-Khalick, F., Bresler, L., Erickson, F., Gaffney, J. S., Gao, W., Haythornthwaite, C., Koehler, J., Lederman, N. G., Martin, A., & Price, R. L. (2011, April). *Toward a framework for conceptualizing and effecting teacher entrepreneurial leadership for transforming STEM teaching and learning*. Symposium conducted at the annual meeting of the American Educational Research Association, New Orleans, LA.
- Wahbeh, N., & Abd-El-Khalick, F. (2011, April). *The translation of teachers' understandings of nature of science into their instructional practice*. Paper presented at the annual meeting of the American Educational Research Association, New Orleans, LA.
- Abd-El-Khalick, F., Gaffney, J. S., Price, R. L., Koehler, J., & Martin, A. M. (2011, January). Student success as a function of entrepreneurial teacher leadership in STEM. Paper presented at the National Science Foundation MSP Learning Network Conference, Washington, DC.
- Halbig, P., & Abd-El-Khalick, F. (2010, March). Degrees of concordance between scientific representations of evolutionary theory and contemporaneous high school biology textbooks through the 20<sup>th</sup> century. Paper presented at the annual meeting of the National association for Research in Science Teaching, Philadelphia, PA.
- Martin, A., & Abd-El-Khalick, F. (2010, March). *Entrepreneurial Leadership in STEM Teaching and learning (EnLiST): A longitudinal case study*. Poster presented at the annual meeting of the National association for Research in Science Teaching, Philadelphia, PA.

- Abd-El-Khalick, F., Mittelsten Scheid, N., Schwartz, R. S., Kremer, K., Mayer, J., Cetin, P., Erduran, S., & Kaya, E. (2010, March). *Nature of science between subject-specific and subject-comprehensive science education approaches*. Symposium conducted at the annual meeting of the National association for Research in Science Teaching, Philadelphia, PA.
- Abd-El-Khalick, F. (2010, March). *Nature of science in science education: Toward a coherent framework for synergistic research and development.* Paper presented at the annual meeting of the National association for Research in Science Teaching, Philadelphia, PA.
- Zeineddin, A., & Abd-El-Khalick, F. (2010, March). The impact of epistemological beliefs on scientific reasoning among college science students: Comparing two epistemology assessments. Paper presented at the annual meeting of the National association for Research in Science Teaching, Philadelphia, PA.
- Abd-El-Khalick, F., Rudolph, J. L., & Ruggeri, N. (2010, March). *The NARST digital archives project: A repository and resource for the history of science education research.*Symposium conducted at the annual meeting of the National Association for Research in Science Teaching, Philadelphia, PA.
- Wahbeh, N., & Abd-El-Khalick, F. (2010, March). The effect of a content-embedded explicit-reflective instructional approach on inservice teachers' views and practices related to nature of science. Paper presented at the annual meeting of the National association for Research in Science Teaching, Philadelphia, PA.
- Waight, N., & Abd-El-Khalick, F. (2010, March). *The life cycles of technological tools: Implications for the science classroom.* Paper presented at the annual meeting of the National association for Research in Science Teaching, Philadelphia, PA.
- Abd-El-Khalick, F., Rachel, C., & Boyle, H. (2010, March). From planned systemic reform to actualized system-wide transformation: Development of a performance-based teacher professional promotion system in Egypt. Paper presented at the 54<sup>th</sup> annual meeting of the Comparative and International Education Society, Chicago, IL.
- Abd-El-Khalick, F., Martin, A., Price, R., Shapley, P., & Selen, M. (2010, January). *Entrepreneurial Leadership in STEM Teaching & learning (EnLiST)*. Poster presented at the 2010 Math-Science-Partnerships Learning Network Conference, Washington, DC.
- Koehler, J. L., Price, R., Gaffney, J., Bresler, L., Abd-El-Khalick, F., & Martin, A. (2010, January). *EnLiST: Developing entrepreneurial teacher leaders*. Paper presented at the 2010 Math-Science-Partnerships Learning Network Conference, Washington, DC.
- Abd-El-Khalick, F. (2009, September). *Scientists' views of nature of science: Their trouble or ours?* Paper presented at the 2009 meeting of the European Science Education Research Association, Istanbul, Turkey.
- Abd-El-Khalick, F. (2009, September). *Representations of nature of science in high school biology and physics textbooks in the United States: A longitudinal study.* Paper presented at the 2009 meeting of the European Science Education Research Association, Istanbul, Turkey.

- Abd-El-Khalick, F. (2009, June). A longitudinal study of the representation of nature of science in high school biology and physics textbooks. Paper presented at the biennial meeting of the International History and Philosophy of Science Teaching Group, Notre Dame, IN.
- Waight, N., & Abd-El-Khalick, F. (2009, April). Factors that compromise the potential of technological tools in fostering authentic inquiry in science classrooms. Paper presented at the annual meeting of the National Association for Research in Science Teaching, Garden Grove, CA.
- Abd-El-Khalick, F., & Jadallah, M. (2009, April). *The trouble with scientists' views of nature of science!* Paper presented at the annual meeting of the National Association for Research in Science Teaching, Garden Grove, CA.
- Abd-El-Khalick, F., Joslin, P., Holliday, W., Markle, G., Staver, J., Tillotson, J., & Kyle, B. (2009, April). *Increasing our influence with today's researchers, practitioners, and policymakers: Perspectives from past and present NARST executive secretaries and directors*. Symposium conducted at the annual meeting of the National Association for Research in Science Teaching, Garden Grove, CA.
- Zeineddin, A., & Abd-El-Khalick, F. (2009, April). Scientific reasoning and epistemological commitments: Coordination of theory and evidence among college science students. Paper presented at the annual meeting of the National Association for Research in Science Teaching, Garden Grove, CA.
- Abd-El-Khalick, F., Wahbeh, N., Waight, N., & Zeineddin, A. (2009, April). *A longitudinal analysis of the representations of nature of science in high school biology and physics textbooks*. Paper presented at the annual meeting of the National Association for Research in Science Teaching, Garden Grove, CA.
- Dagher, Z., BouJaoude, S., Abd-El-Khalick, F., Dillon, J., Mansour, N., & Gholam, G. (2009, April). *Challenges and opportunities for science education in Arab states*. Symposium conducted at the annual meeting of the National Association for Research in Science Teaching, Garden Grove, CA.
- Abd-El-Khalick, F. (2009, April). Representations of nature of science in high school biology and physics textbooks: A "longitudinal" study. Paper presented at the annual meeting of the American Educational Research Association, San Diego, CA.
- Waight, N., & Abd-El-Khalick, F. (2009, April). From scientific practice to science classrooms: "Realizations" of technological tools in high school science classrooms. Paper presented at the annual meeting of the American Educational Research Association, San Diego, CA.
- Abd-El-Khalick, F., Jadallah, M., & Prillaman, J. (2009, April). *Should we be troubled about scientists' views of nature of science?* Paper presented at the annual meeting of the American Educational Research Association, San Diego, CA.
- Abd-El-Khalick, F., Boyle, H., & Rachel, C. (2009, March). *Impact of a systemic reform initiative on Egyptian teachers' instructional practice: A longitudinal study.* Paper presented at the 53<sup>rd</sup> annual meeting of the Comparative and International Education Society, Charleston, SC.

- Abd-El-Khalick, F., & Boyle, H. (2009, March). *Egyptian teacher opportunities for professional growth grants (TOP G-rants): A bottom-up approach to professional development.* Paper presented at the 53<sup>rd</sup> annual meeting of the Comparative and Education Society, Charleston, SC.
- Zafeirakou, A., Abd-El-Khalick, F., Boyle, H., Massialas, B., & Jarrar, S. (2009, March). *Pedagogical reforms in MENA countries: What is changing in classrooms? Historical perspective, influences, progress and challenges.* Symposium conducted at the 53<sup>rd</sup> annual meeting of the Comparative and Education Society, Charleston, SC.
- Abi-El-Mona, I., & Abd-El-Khalick, F. (2008, September). *Perceptions and assessment of arguments among freshmen college students, science teachers, and practicing scientists.*Paper presented at the meeting of the American Institute for Higher Education, Atlantic City, NJ.
- Abd-El-Khalick, F., BouJaoude, S., Duit, R., Tiberghien, A., Jiménez-Aleixandre, M. P., & Dillon, J. (2008, April). *Science education research traditions in Europe: Shedding light on didactics*. Symposium conducted at the annual meeting of the National Association for Research in Science Teaching, Baltimore, MD.
- Abd-El-Khalick, F., Abdulkadir, D., BouJaoude, S., Czerniak, C. M., Lawrenz, F., & Moin, L. (2008, April). *Recruitment of science and mathematics teachers: National and international perspectives on issues and policies.* Symposium conducted at the annual meeting of the National Association for Research in Science Teaching, Baltimore, MD.
- Abd-El-Khalick, F. (2008, April). Factors underling decisions to pursue alternative routes to secondary science certification. Paper presented at the annual meeting of the National Association for Research in Science Teaching, Baltimore, MD.
- Abi-El-Mona, I., & Abd-El-Khalick, F. (2008, March). *Perceptions and assessment of arguments among freshmen college students, science teachers, and practicing scientists.* Paper presented at the annual meeting of the American Educational Research Association, New York, NY.
- Harrison, A., Venville, G., Abd-El-Khalick, F., & Blakely, A. (2007, April). *Graduate student and junior faculty early career discussion*. Symposium conducted at the annual meeting of the National Association for Research in Science Teaching, New Orleans, LA.
- Abi-El-Mona, I., & Abd-El-Khalick, F. (2007, April). *Perceptions of argumentative discourse among freshmen college students, science teachers, and practicing scientists.* Paper presented at the annual meeting of the National Association for Research in Science Teaching, New Orleans, LA.
- BouJaoude, S., Abd-El-Khalick, F., Dillon, J., Fraser-Abder, P., Hofstein, A., Lederman, N., & Mamlok-Naaman, R. (2007, April). *Professional development of science teachers worldwide*. Symposium conducted at the annual meeting of the National Association for Research in Science Teaching, New Orleans, LA.
- Rose, S. J., & Abd-El-Khalick, F. (2007, April). The effect of discussion-intensive and on-line problem solving on freshmen students' understanding of force. Paper presented at the

- annual meeting of the National Association for Research in Science Teaching, New Orleans, LA.
- Wahbeh, N., & Abd-El-Khalick, F. (2007, April). *Modes of discourse in science classrooms: The failure of static models in capturing complex classroom dynamics*. Paper presented at the annual meeting of the National Association for Research in Science Teaching, New Orleans, LA.
- Duschl, R., Brickhouse, N., Abd-El-Khalick, F., Bell, P., & Edelson, D. (2007, April). *Inquiry and the learning of science: Theories and practices*. Symposium conducted at the annual meeting of the National Association for Research in Science Teaching, New Orleans, LA.
- Abd-El-Khalick, F., Champagne, A., Duit, R., Kahle, J., Lawson, A., & Lederman, N. (2007, April). *Research in science education: How well does our research build upon, and is guided by, existing research?* Symposium conducted at the annual meeting of the National Association for Research in Science Teaching, New Orleans, LA.
- Salloum, S., & Abd-El-Khalick, F. (2007, April). *Practical knowledge in teaching: Case studies from physical science classrooms.* Paper presented at the annual meeting of the American Educational Research Association, Chicago, IL.
- Abd-El-Khalick, F., Waters, M., & Le, A. (2007, April). *Images of nature of science in high school chemistry textbooks: A "longitudinal" study.* Paper presented at the annual meeting of the American Educational Research Association, Chicago, IL.
- Abd-El-Khalick, F., Rachel, C., El-Dib, M., Assaf, S., & Boyle, H. (2007, February). *Professional development for educational quality in Egypt: The ERP experience.* Symposium conducted at the 51<sup>st</sup> annual meeting of the Comparative and International Education Society, Baltimore, MD.
- Abell, S., Abd-El-Khalick, F., Aikenhead, G., Fensham, P., Butler Kahle, J., Lazarowitz, R., & Yager, R. (2006, April). *Issues and trends in science education: An historical perspective*. Symposium conducted at the annual meeting of the National Association for Research in Science Teaching, San Francisco, CA.
- Abd-El-Khalick, F., & Akerson, V. L. (2006, April). *The influence of training in metacognitive strategies on preservice elementary teachers' conceptions of nature of science*. Paper presented at the annual meeting of the National Association for Research in Science Teaching, San Francisco, CA.
- Waters, M., Le, A., & Abd-El-Khalick, F. (2006, April). *Representation of nature of science in high school chemistry textbooks over the past four decades*. Paper presented at the annual meeting of the National Association for Research in Science Teaching, San Francisco, CA.
- Abd-El-Khalick, F., Akerson, V. L., Rudge, D., Howe, E., Khishfe, R., Lederman, N., Lederman, J., & Schwartz, R. (2006, April). *Setting an empirically supported and synergistic agenda for research on nature of science*. A symposium conducted at the annual meeting of the National Association for Research in Science Teaching, San Francisco, CA.

- Abd-El-Khalick, F. (2006, April). *Developmental patterns in secondary school students' epistemological views.* Paper presented at the annual meeting of the National Association for Research in Science Teaching, San Francisco, CA.
- Abi-El-Mona, I., & Abd-El-Khalick, F. (2006, April). *Argumentative discourse in a high-school chemistry classroom: An exploratory study*. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, CA.
- Chinn, C., Abd-El-Khalick, F., Hofer, B., Leach, J., & Samarapungavan, A. (2006, April). Research on epistemology: Bridging disciplinary boundaries and theoretical perspectives. Symposium conducted at the annual meeting of the American Educational Research Association, San Francisco, CA.
- Akerson, V. L., & Abd-El-Khalick, F. (2006, April). Enhancing preservice elementary teachers' conceptions of nature of science through training in metacognitive strategies. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, CA.
- Abi-El-Mona, I., & Abd-El-Khalick, F. (2006, January). *An exploratory study of argumentative discourse in a high school chemistry classroom*. Paper presented at the 4<sup>th</sup> Annual Hawaii International Conference on Education, Honolulu, HI.
- BouJaoude, S., & Abd-El-Khalick, F. (2005, August). *A decade of science education research in Lebanon (1992-2002): Trends and issues.* Paper presented at the meeting of the European Science Education Research Association, Barcelona, Spain.
- Abd-El-Khalick, F. (2005, July). *Developing deeper understandings of nature of science: The impact of a philosophy of science course on preservice science teachers' views and instructional planning.* Paper presented at the 8<sup>th</sup> International History, Philosophy, and Science Teaching Conference, Leeds, England.
- Abd-El-Khalick, F., Abi-El-Mona, I., Gonzalez, E., Leuszler, H., Salloum, S., Waight, N., Weon, J., Wright, S., & Zeineddin, A. (2005, April). *A roadmap for trends and issues in research in science education (1991–2003): An empirical study.* Paper presented at the annual meeting of the National Association for Research in Science Teaching, Dallas, TX.
- Feldman, A., Abd-El-Khalick, F., Berger, J., Kemp, A., & Zhao, Y. (2005, April). *Alternative certification for science teachers: Policy, practice, and research.* Symposium conducted at the annual meeting of the National Association for Research in Science Teaching, Dallas, TX.
- Salloum, S., & Abd-El-Khalick, F. (2005, April). Blending the intellectual and the moral in pursuit of deeper understandings: The teaching and learning of physical sciences in Lebanese middle school classrooms. Paper presented at the annual meeting of the National Association for Research in Science Teaching, Dallas, TX.
- Zeineddin, A., & Abd-El-Khalick, F. (2005, April). On coordinating theory with evidence: The role of epistemic commitments in scientific reasoning among college students. Paper presented at the annual meeting of the National Association for Research in Science Teaching, Dallas, TX.

- Abd-El-Khalick, F., & BouJaoude, S. (2005, April). *A decade of science education research in Lebanon (1992–2002): Issues and trends.* Paper presented at the annual meeting of the American Educational Research Association, Montreal, Canada.
- Feldman, A., Dani, D. E., Abd-El-Khalick, F., Zhao, Y., Mitchener, C. P., Herbert, B., & Prival, J. (2005, April). *Alternative certification/licensure for science teachers*. Symposium conducted at the annual meeting of the American Educational Research Association, Montreal, Canada.
- Ho, H. H., He, M. F., Stacki, S. L., Swadener, E. B., Sunal, D. W., Sunal, C. S., Mutua, K., Stevens, D. D., Guven, I., Eilam, B., Dancy-Benjamin, G. V., Green, S. A., Kanga, A. W., Koutsoulis, M., Ganser, T., Abd-El-Khalick, F. S., BouJaoude, S. B., & Shen, Y. J. (2005, April). *International Studies Business Meeting invited panel: Research on education in Africa, the Caribbean, the Middle East, and the United States.* Interactive symposium conducted at the annual meeting of the American Educational Research Association, Montreal, Canada.
- Sunal, C. S., Mutua, K., Ganser, T., Abd-El-Khalick, F. S., BouJaoude, S. B., Guven, I. B., Koutsoulis, M., Stevens, D. D., & Swadener, E. B. (2005, April). *Through the eyes of the insider: Topics in research in Africa, the Caribbean and the Middle East.* Interactive symposium conducted at the annual meeting of the American Educational Research Association, Montreal, Canada.
- Abd-El-Khalick, F. (2005, February). Modeling science classrooms after scientific laboratories: Sketching some affordances and constraints drawn from examining underlying assumptions. Paper presented at the Inquiry Conference on Developing a Consensus Research Agenda, Rutgers University, New Brunswick, NJ.
- Abd-El-Khalick, F. (2004, April). *Gendered knowledge: Understanding the nature of science as a pathway to reflective practice.* Panel conducted at the University of Illinois Conference on Gender in the Pre-College Science, Mathematics, and Technology (SMT) Classroom, Champaign, IL.
- Sandoval, W., Abd-El-Khalick, F., Duschl, R., Hammer, D., Kelly, G., Leach, J., Millwood, K., Ryder, J. Scherr, R. (2004, April). *Advancing epistemological studies in science education*. Symposium conducted at the annual meeting of the American Educational Research Association, San Diego, CA.
- Abd-El-Khalick, F. (2004, April). Assessing and influencing epistemological views: The moderate fallacies of inference to beliefs from action and influence of action on beliefs. Paper presented at the annual meeting of the American Educational Research Association, San Diego, CA.
- Abd-El-Khalick, F. (2004, April). The relationship between students' views of nature of science and their conceptual understanding of stoichiometry: An empirical assessment. Paper presented at the annual meeting of the American Educational Research Association, San Diego, CA.
- Abd-El-Khalick, F., & Akerson, V. L. (2004, April). Enhancing preservice teachers' conceptions of nature of science: The impact of training in metacognitive strategies.

- Paper presented at the annual meeting of the American Educational Research Association, San Diego, CA.
- Waight, N., & Abd-El-Khalick, F. (2004, April). *The impact of technology on the enactment of inquiry in a sixth grade science classroom.* Paper presented at the annual meeting of the American Educational Research Association, San Diego, CA.
- Akerson, V. L., & Abd-El-Khalick, F. (2004, April). The influence of instruction in metacognitive strategies on preservice early childhood teachers' conceptions of nature of science. Paper presented at the annual meeting of the National Association for Research in Science Teaching, Vancouver, Canada.
- Abd-El-Khalick, F., & BouJaoude, S. (2004, April). Do student views of nature of science influence their conceptual understandings of science content? Paper presented at the annual meeting of the National Association for Research in Science Teaching, Vancouver, Canada.
- Abi-El-Mona, I., & Abd-El-Khalick, F. (2004, April). *Argumentative discourse in science:*Context and structure. Paper presented at the annual meeting of the National Association for Research in Science Teaching, Vancouver, Canada.
- Waight, N., & Abd-El-Khalick, F. (2004, April). *Technology in a sixth grade science classroom: Promoting or impeding inquiry?* Paper presented at the annual meeting of the National Association for Research in Science Teaching, Vancouver, Canada.
- Abd-El-Khalick, F. (2004, March). Alternative pathways to teaching: Quality teachers versus warm bodies in classrooms. Paper presented at the Teacher Preparation Principal Investigator Meeting, Washington, DC.
- BouJaoude, S., Sawwan, S., & Abd-El-Khalick, F. (2003, August). *The effect of using drama in science teaching on students' conceptions of nature of science*. Paper presented at the meeting of the European Science Education Research Association, Noordwijkerhout, The Netherlands.
- Abd-El-Khalick, F. (2003, April). *The development of students' scientific epistemologies during the middle and high school years.* Paper presented at the annual meeting of the American Educational Research Association, Chicago, IL.
- Hyunju, L., Choi, K., & Abd-El-Khalick, F. (2003, March). *Korean science teachers'* perceptions of the introduction of ethical issues into the science curriculum. Paper presented at the annual meeting of the National Association for Research in Science Teaching, Philadelphia, PA.
- Abd-El-Khalick, F. (2003, March). Socioscientific issues in pre-college science classrooms: The primacy of learners' epistemological orientations and views of nature of science. Paper presented at the annual meeting of the National Association for Research in Science Teaching, Philadelphia, PA.
- Abd-El-Khalick, F. (2003, January). *RECRUIT: Recruiting, educating, certifying, and retaining underrepresented populations in teaching science and mathematics.* Paper presented at

- the annual meeting of the Association for the Education of Teachers in Science, St. Louis, MO.
- Abd-El-Khalick, F., & BouJaoude, S. (2002, September). Lebanese middle school students' views of nature of science: Definitions of science and perceptions of its purpose and usage. Paper presented at the Seminar on Learning in Science in the Mediterranean Region, Nicosia, Cyprus.
- Zeidler, D., Loving, C., McGinnis, R., Abd-El-Khalick, F., Bell, R. L., & Sadler, T. (2002). Moral and ethical issues in science education: Is there a voice for research, policy, and practice? Symposium conducted at the annual meeting of the National Association for Research in Science Teaching, New Orleans, LA.
- Abi-El-Mona, I., & Abd-El-Khalick, F. (2002, April). *The Influence of mindmapping on the science achievement of grade 8 students*. Paper presented at the annual meeting of the National Association for Research in Science Teaching, New Orleans, LA.
- Waight, N., Abd-El-Khalick, F., & Brown, D. (2002, April). *Technology in preservice science methods courses: Promises and hurdles*. Paper presented at the annual meeting of the National Association for Research in Science Teaching, New Orleans, LA.
- Abd-El-Khalick, F. (2002, April). The development of conceptions of the nature of scientific knowledge and knowing in the middle and high school years: A cross-sectional study. Paper presented at the annual meeting of the National Association for Research in Science Teaching, New Orleans, LA.
- Schwartz, R., Lederman, N. G., Dekkers, P., Shiang-Yao, L., Khishfe, R., Bell, R. L., & Abd-El-Khalick, F. (2002, April). *International perspectives on research in nature of science: Finding common ground?* Symposium conducted at the annual meeting of the National Association for Research in Science Teaching, New Orleans, LA.
- BouJaoude, S., Salloum, S., & Abd-El-Khalick, F. (2002, April). *Relationships between selective cognitive variables and students' ability to solve chemistry problems*. Paper presented at the annual meeting of the National Association for Research in Science Teaching, New Orleans, LA.
- Akerson, V. L., Abd-El-Khalick, F., & Banning, T. (2002, April). *A fourth grade teacher's endeavors to teach nature of science: A year-long study*. Paper presented at the annual meeting of the National Association for Research in Science Teaching, New Orleans, LA.
- Abd-El-Khalick, F. (2002, April). *Examining college students' views of nature of science*. Paper presented at the annual meeting of the American Educational Research Association, New Orleans, LA.
- Abd-El-Khalick, F. (2002, April). Developing deeper understandings of nature of science: The impact of a philosophy of science course on preservice secondary science teachers' views. Paper presented at the annual meeting of the American Educational Research Association, New Orleans, LA.

- Akerson, V. L., Abd-El-Khalick, F., & Banning, T. (2002, April). *Teaching elements of nature of science: A yearlong case study of a fourth grade teacher*. Paper presented at the annual meeting of the American Educational Research Association, New Orleans, LA.
- Abd-El-Khalick, F., & Khishfe, R. (2002, March). *How to teach nature of science? An explicit inquiry-oriented approach*. Paper presented at the annual meeting of the National Science Teachers Association, San Diego, CA.
- Abd-El-Khalick, F. (2002, January). *The influence of a philosophy of science course on preservice secondary science teachers' views of nature of science*. Paper presented at the annual meeting of the Association for the Education of Teachers in Science, Charlotte, NC.
- Khishfe, R., & Abd-El-Khalick, F. (2002, January). *Teaching nature of science: A success story*. Paper presented at the annual meeting of the Association for the Education of Teachers in Science, Charlotte, NC.
- Khishfe, R., & Abd-El-Khalick, F. (2001, November). *How to teach nature of science to elementary students? An explicit inquiry-oriented approach.* Paper presented at the 6<sup>th</sup> International History, Philosophy, and Science Teaching Conference, Denver, CO.
- Abd-El-Khalick, F. (2001, November). *Do history of science courses influence college students'* views of nature of science? Paper presented at the 6<sup>th</sup> International History, Philosophy, and Science Teaching Conference, Denver, CO.
- Lederman, N. G., Bell, R. L., Schwartz, R., Abd-El-Khalick, F., & Akerson, V. (2001, November). Assessing understandings of the nature of science: Development and use of the views of nature of science questionnaire. Paper presented at the 6<sup>th</sup> International History, Philosophy, and Science Teaching Conference, Denver, CO.
- Abd-El-Khalick, F., Haidar-Makki, M., & BouJaoude, S. (2001, April). *Lebanese secondary school students' environmental knowledge and attitudes*. Paper presented at the annual meeting of the American Educational Research Association, Seattle, WA.
- Abd-El-Khalick, F., & Zeineddin, A. (2001, April). *Doing the right thing versus doing the right thing right: Concept mapping in a Freshmen physics laboratory*. Paper presented at the annual meeting of the American Educational Research Association, Seattle, WA.
- Abd-El-Khalick, F., BouJaoude, S., Duschl, R., Lederman, N. G., Mamlok, R., Niaz, M., Treagust, D., & Tuan, H. (2001, March). *Inquiry in science education: International perspectives*. Symposium conducted at the annual meeting of the National Association for Research in Science Teaching, St. Louis, MO.
- Lederman, N. G., Abd-El-Khalick, F., Bell, R. L., & Schwartz, R., Akerson, V. L. (2001, March). *Assessing the un-assessable: Views of Nature of Science Questionnaire (VNOS)*. Symposium conducted at the annual meeting of the National Association for Research in Science Teaching, St. Louis, MO.
- Abd-El-Khalick, F. (2001, March). *Over and over and over again: College students' views of nature of science*. Paper presented at the annual meeting of the National Association for Research in Science Teaching, St. Louis, MO.

- Abd-El-Khalick, F., Lederman, N. G., Bell, R. L., & Schwartz, R. (2001, January). *Views of nature of science questionnaire (VNOS): Toward valid and meaningful assessment of learners' conceptions of nature of science.* Paper presented at the annual meeting of the Association for the Education of Teachers in Science, Costa Mesa, CA.
- Abd-El-Khalick, F. (2000, November). *Action research in school-based reform: A viable paradigm for informed site-based decision-making*. Paper presented at the Conference on School-based Educational Reform in Arab Countries, American University of Beirut, Beirut, Lebanon.
- Karam, E., & Abd-El-Khalick, F. (2000, May). *Students' private science: Examining their misconceptions*... *and ours!* Paper and workshop presented at the Fourth Annual Science and Math Teachers Conference (SMEC IV), American University of Beirut, Beirut, Lebanon.
- Khishfe, R., & Abd-El-Khalick, F. (2000, May). *Teaching about nature of science: An explicit inquiry-oriented approach*. Paper presented at the Fourth Annual Science and Math Teachers Conference (SMEC IV), American University of Beirut, Beirut, Lebanon.
- Abd-El-Khalick, F. (2000, April). *Explicit reflective content-embedded nature of science instruction: Abandoning scientism, but* . . . Paper presented at the annual meeting of the National Association for Research in Science Teaching, New Orleans, LA.
- Akerson, V., & Abd-El-Khalick, F. (2000, April). *The influence of conceptual change teaching in improving preservice teachers' conceptions of nature of science*. Paper presented at the annual meeting of the National Association for Research in Science Teaching, New Orleans, LA.
- Khishfe, R., & Abd-El-Khalick, F. (2000, April). The influence of explicit reflective versus implicit inquiry-oriented instruction on sixth graders' views of nature of science. Paper presented at the annual meeting of the National Association for Research in Science Teaching, New Orleans, LA.
- Akerson, V., & Abd-El-Khalick, F. (2000, April). *Improving preservice elementary teachers'* conceptions of nature of science with a conceptual change teaching strategy. Paper presented at the annual meeting of the American Educational Research Association, New Orleans, LA.
- Schwartz, R., Lederman, N. G., Abd-El-Khalick, F., & Bell, R. L. (2000, April). *Teaching the nature of science: Another case of knowledge is essential, but not sufficient.* Paper presented at the annual meeting of the American Educational Research Association, New Orleans, LA.
- Abd-El-Khalick, F. (2000, April). *Using an explicit reflective content-embedded approach to improve elementary teachers' conceptions of nature of science.* Paper presented at the annual meeting of the American Educational Research Association, New Orleans, LA.
- Abd-El-Khalick, F. (2000, April). *Inquiry instruction and learning about nature of science: The need for an explicit reflective component.* Paper presented at the annual meeting of the American Educational Research Association, New Orleans, LA.

- Abd-El-Khalick, F. (2000, January). *Improving elementary teachers' conceptions of nature of science in the context of a science content course*. Paper presented at the annual meeting of the Association for the Education of Teachers in Science, Akron, OH.
- Akerson, V., & Abd-El-Khalick, F. (2000, January). *Improving preservice elementary teachers' conceptions of nature of science using a conceptual change teaching approach*. Paper presented at the annual meeting of the Association for the Education of Teachers in Science, Akron, OH.
- Abd-El-Khalick, F., & Lederman, N. (1999, September). *Success of the attempts to improve science teachers' conceptions of nature of science: A review of the literature.* Paper presented at the 5<sup>th</sup> International History, Philosophy, and Science Teaching Conference, Lake Como, Italy.
- Lederman, N., Bell, R., & Abd-El-Khalick, F. (1999, September). *Developing and acting upon one's conceptions of the nature of science*. Paper presented at the 5<sup>th</sup> International History, Philosophy, and Science Teaching Conference, Lake Como, Italy.
- Abd-El-Khalick, F. (1999, May). *Nature of science: What is it? Why is it important? And what attention is it accorded in the new Lebanese science curriculum?* Paper presented at the meeting of the Lebanese Association for Educational Sciences, Beirut, Lebanon.
- Abd-El-Khalick, F., & BouJaoude, S. (1999, May). *Don't just throw those kids in groups:*Cooperative learning activities in science. Paper presented at the Third Annual Science and Math Teachers Conference (SMEC III), American University of Beirut, Beirut, Lebanon.
- Dickinson, V., Abd-El-Khalick, F., & Lederman, N. G. (1999, March). *The influence of a reflective activity-based approach on elementary teachers' conceptions of the nature of science*. Paper presented at the annual meeting of the National Association for Research in Science Teaching, Boston, MA.
- Abd-El-Khalick, F., & Lederman, N. G. (1999, March). *The influence of history of science courses on students' nature of science views.* Paper presented at the annual meeting of the National Association for Research in Science Teaching, Boston, MA.
- Lederman, N. G., Schwartz, R., Abd-El-Khalick, F., & Bell, R. L. (1999, March). *Preservice teachers and their nature of science instruction: Factors that facilitate success.* Paper presented at the annual meeting of the National Association for Research in Science Teaching, Boston, MA.
- Dickinson, V., Abd-El-Khalick, F., & Lederman, N. G. (1999, January). *Changing elementary teachers' views of the nature of science: Effective strategies for science methods courses.*Paper presented at the annual meeting of the Association for the Education of Teachers in Science, Austin, TX.
- Schwartz, R., Abd-El-Khalick, F., & Lederman, N. G. (1999, January). *An exploratory study of the "effectiveness" of elementary science specialists*. Paper presented at the annual meeting of the Association for the Education of Teachers in Science, Austin, TX.

- Abd-El-Khalick, F., & Lederman, N. G. (1998, April). *Improving science teachers' conceptions of the nature of science: A critical review of the literature.* Paper presented at the annual meeting of the National Association for Research in Science Teaching, San Diego, CA.
- Bell, R. L., Lederman, N. G., & Abd-El-Khalick, F. (1998, April). *Preservice teachers' beliefs* and practices regarding the teaching of the nature of science. Paper presented at the annual meeting of the National Association for Research in Science Teaching, San Diego, CA.
- Abd-El-Khalick, F., Lederman, N. G., & Bell, R. L. (1998, January). *Developing and acting upon ones' conception of the nature of science: A follow-up study.* Paper presented at the annual meeting of the Association for the Education of Teachers in Science, Minneapolis, MN.
- Abd-El-Khalick, F., & Lederman, N. G. (1998, January). *Avoiding de-natured science: Activities that promote understandings of the nature of science.* Paper presented at the annual meeting of the Association for the Education of Teachers in Science, Minneapolis, MN.
- Lederman, N. G., Abd-El-Khalick, F., & Bell, R. (1997, March). *Knowing and doing: The flight of the nature of science from the classrooms*. Paper presented at the annual meeting of the American Educational Research Association, Chicago, IL.
- Abd-El-Khalick, F., Lederman, N. G., & Bell, R. (1997, March). *The nature of science and instructional practice: Making the unnatural natural.* Paper presented at the annual meeting of the National Association for Research in Science Teaching, Oak Brook, IL.
- Abd-El-Khalick, F. (1997, January). *An exploratory study of the disciplinary knowledge of science teachers*. Paper presented at the annual meeting of the Association for the Education of Teachers in Science, Cincinnati, OH.
- Bell, R., Lederman, N. G., & Abd-El-Khalick, F. (1997, January). *Developing and acting upon one's conception of science: The reality of teacher preparation.* Paper presented at the annual meeting of the Association for the Education of Teachers in Science, Cincinnati, OH.
- Lederman, N. G., Abd-El-Khalick, F., & Bell, R. (1996, October). *Integrating national standards into your curriculum*. Paper and workshop presented at the annual meeting of the Oregon Science Teachers Association, Hillsboro, OR.
- BouJaoude, S., & Abd-El-Khalick, F. (1995, April). Lebanese middle school students' definitions of science and perceptions of its purpose and usage. Paper presented at the annual meeting of the National Association for Research in Science Teaching, San Francisco, CA.

# Invited Sessions: Keynote addresses / Plenary sessions / Seminars / Lectures International

Abd-El-Khalick, F. (2015, October). *Integration, intersection, disjunction: Toward an empirical research programme on the question(s) of Islam and science*. Invited talk presented at the Workshop on Science Teaching in Contemporary Islamic Societies. Center for Islam and Science, McGill University, Montreal, Canada.

- Abd-El-Khalick, F. (2014, September). *Testing to teach and teaching to the test: Student learning and 21<sup>st</sup> century priorities for school science education.* Invited public lecture delivered at the University of Johannesburg, South Africa.
- Abd-El-Khalick, F. (2014, September). The 'next generation' science standards: Implications of authentic scientific practices for precollege science teaching and learning. Invited seminar conducted at the Department of Science and Technology Education, the University of Johannesburg, South Africa.
- Abd-El-Khalick, F. (2104, May). Assessing understandings of nature of science in science education: Past, present, and future. Invited colloquium, German Chemical Society, University of Cologne, Cologne, Germany.
- Abd-El-Khalick, F. (2013, June). On context and teaching about NOS: What history and inquiry tell us about using history of science and inquiry instruction to teach about NOS. Invited keynote presented at the International Workshop on Sociocultural Approaches to Socioscientific Issues and Nature of Science, Ewha Women University, Seoul, South Korea.
- Abd-El-Khalick, F., & Myers, J. (2013, February). The evolving landscape related to assessment of nature of science understandings: The development and validation of a scoring rubric for the Views of Nature of Science (VNOS) Questionnaire. Invited seminar conducted at the Department of Mathematics and Science Education, Stockholm University, Sweden.
- Abd-El-Khalick, F. (2012, November). *Nature of science in science education: The why, the what, and the how.* Invited presentation to the Unit of Teacher Education, Department of Chemistry, Faculty of Science, University of Helsinki, Finland.
- Abd-El-Khalick, F. (2012, September). What History and inquiry tell us about using history of science and inquiry-oriented instruction to teach about nature of science. Invited keynote address presented at the Conference on Learning to Teach Nature of Science: A Question of Context? University of Cologne, Cologne, Germany.
- Abd-El-Khalick, F. (2012, June). Framing research and development on nature of science in science education: Enduring conflations, critical issues, and fruitful pathways. Invited keynote address presented at the Nature of Science Conference, Pamukkale University, Denizli, Turkey.
- Abd-El-Khalick, F. (2012, May). *Nature of science in precollege science classrooms: Preparing the 'next generation' science students*. Invited keynote address presented at the Nature of Science Conference, Pamukkale University, Denizli, Turkey.
- Abd-El-Khalick, F. (2012, May). *Nature of science and citizenship: Why do understandings of nature of science matter in everyday life?* Invited keynote address to the Kids Participation in Educational Research (KiP<sup>2</sup>) Project, University of Vienna, Vienna, Austria.
- Abd-El-Khalick, F. (2012, May). *Teaching with and about nature of science: Inquiry, nature of science, and science teachers' pedagogical content knowledge.* Invited seminar presented at the Austrian Educational Competence Center—Biology, University of Vienna, Vienna, Austria.

- Abd-El-Khalick, F. (2012, March). Preparing the 'next generation' science students: Implications of authentic scientific practices for precollege science teaching and learning. Invited plenary session presented at the Fourteenth Annual Science and Math Teachers Conference (SMEC XIV), American University of Beirut, Beirut, Lebanon.
- Abd-El-Khalick, F. (2011, June). *Teaching with and about nature of science: Teacher knowledge domains and explicit-reflective nature of science instruction.* Invited keynote address to the International Workshop on Science Teaching and History and Philosophy of Science: "Science Studies and Science Education: How Science Works and How to Teach about It," organized by the European Society for the History of Science, Aarhus University, Arhus, Denmark.
- Abd-El-Khalick, F. (2010, October). *Nature of science in science education: Enduring conflations and critical issues*. Invited seminar conducted at the Department of Mathematics and Science Education, Stockholm University, Sweden.
- Abd-El-Khalick, F. (2010, August). Assessment and evaluation in teacher professional development. Invited plenary session presented at the policy institute on "Embedding Excellence: Transforming Professional Development for Educators" organized by the Technology Tools for Teaching & Training Project, Bangalore, India.
- Abd-El-Khalick, F. (2010, August). *Key elements of a high quality professional development system*. Invited session presented at the policy institute on "Embedding Excellence: Transforming Professional Development for Educators" organized by the Technology Tools for Teaching & Training Project, Bangalore, India.
- Abd-El-Khalick, F. (2009, November). *Nature of science in science teaching and learning: The what, the why, and the how.* Invited keynote address delivered at the international conference on "Science Education: Shared Issues, Common Future" organized by the National Institute of Education, Singapore.
- Abd-El-Khalick, F. (2007, March). *Teaching and learning science with information and communication technologies*. Invited plenary session presented at the "Looking Forward Summit: Harnessing Information and Communication Technologies to Build the Future of Yemeni Education," Tai'z, Yemen.
- Abd-El-Khalick, F. (2005, June). *Wonderland*. Invited keynote speech delivered at the Department of Education Commencement Ceremony, American University of Beirut, Beirut, Lebanon.
- Abd-El-Khalick, F. (2001, May). *Teaching about nature of science: Truth, objectivity, the scientific method, and other lies my teacher told me.* Invited plenary session presented at the Fifth Annual Science and Math Teachers Conference (SMEC V), American University of Beirut, Beirut, Lebanon.

#### National

Abd-El-Khalick, F. (2016, February, forthcoming). How I learned to stop worrying about producing little scientists, and/or little historians and philosophers of science and love persuasion: Toward more modest and realizable goals for scientific literacy in K-12 science education. Invited talk presented at the Colloquium on How Can History and

- Philosophy of Science Contribute to Citizen Science Literacy and Policy. Center for Philosophy and History of Science, Boston University, MA.
- Abd-El-Khalick, F. (2012, December). What history teaches us about using history of science to teach about nature of science. Invited talk presented at the Conference on Teaching Science through History and Philosophy of Science: How can the HPS Contribute to Contemporary U.S. Science Teaching. Center for Philosophy and History of Science, Boston University, MA.
- Abd-El-Khalick, F. (2009, October). A 'longitudinal' study of the representations of nature of science in high school science textbooks. Invited seminar presented at the Center for Excellence in Science, Mathematics, and Engineering Education, Iowa State University, Ames, IA.
- Abd-El-Khalick, F. (2009, October). *Science literacy: What are we trying to teaching with online courses?* Invited seminar presented at the Conference on Designing Effective Online Science Courses, Parkland College, Champaign, IL.
- Abd-El-Khalick, F. (2007, April). Setting an empirically supported and synergistic agenda for research on nature of science. Invited seminar presented at the Center for Science and Mathematics Education, College of Education, University of Texas at Austin, TX.
- Abd-El-Khalick, F. (2003, November). *The development of students' science epistemologies in the middle and high school years: A cross-sectional study.* Invited seminar presented to the Department of Curriculum & Instruction, Purdue University, West Lafayette, IN.
- Abd-El-Khalick, F. (2003, September). *The development and schooling of views of nature of science in secondary school: An exploratory study.* Invited seminar presented at the Institute for Science Education, Western Michigan University, Kalamazoo, MI.
- Abd-El-Khalick, F. (2002, January). *The development of students' science epistemologies in the middle and high school years*. Invited seminar presented at the Department of Curriculum & Instruction, School of Education, Indiana University Bloomington, Bloomington, IN.
- McComas, W., Abd-El-Khalick, F., Chiapetta, G., Lawson, A. E., Good, R. (2001, November). What research says about nature of science and science teaching: An instant update. Invited plenary session conducted at the 6th International History, Philosophy, and Science Teaching Conference, Denver, CO.
- Abd-El-Khalick, F., Brown, D., & Gutiérrez, R. (2001, September). *Involving faculty and their research in the preparation of teacher educators*. Talk given at the "Invitational Forum on Exemplary Practices and Challenges in Teacher Preparation" organized by the American Association of Universities and the American Academy of Arts and Sciences, Cambridge, MA.

## University

Abd-El-Khalick, F. (2015, September). *Education in the Middle East*. Invited lecture presented at the "New Middle East" course (SAME/ PS/ SOC 512). Center for South Asian and Middle Eastern Studies, University of Illinois at Urbana-Champaign, Champaign, IL.

- Abd-El-Khalick, F., Anderson, J., & Rounds, J. (2014, May). *Panel on the promotion and tenure process*. Bureau of Educational Research, College of Education, University of Illinois at Urbana-Champaign, Champaign, IL.
- Abd-El-Khalick, F., & Summers, R. (2013, November). *The assessment of precollege Qatari students' attitudes toward science*. Invited brown bag lecture, Center for South Asian and Middle Eastern Studies, University of Illinois at Urbana-Champaign, Champaign, IL.
- Wiegand, J. (Superintendent), Fuller, A., & Abd-El-Khalick, F. (2013, November). *Community conversation with the Superintendent of the Champaign Unit 4 School District*. EnterpriseWorks Incubator, Research Park, University of Illinois at Urbana-Champaign, Champaign, IL.
- Abd-El-Khalick. F. (2012, October). *Entrepreneurial leadership in STEM education: It takes the whole pipeline to nurture STEM people!* Invited keynote remarks presented at the North Central Region Conference of the American Association of Agricultural Education, University of Illinois at Urbana-Champaign, Champaign, IL.
- Abd-El-Khalick, F., Gaffney, J. S., & Price, R. L. (2012, June). *Teachers as entrepreneurial leaders for students' engagement and learning in STEM*. Interactive session presented at the University of Illinois Chancellor's Academy 2012, Champaign, IL.
- Abd-El-Khalick, F. (2012, March). *Nature of science in science teaching and learning*. Invited seminar presented as part of the Illinois Researchers in partnership with K-12 Science Educators (iRiSE) Project, Department of Physics, University of Illinois at Urbana-Champaign, Champaign, IL.
- Gaffney, J. S., Abd-El-Khalick, F., & Price, R. (2012, February). *An evolving model of entrepreneurial leadership in science teaching and learning*. Seminar presented as part of the Cognitive Science of Teaching and Learning (CSTL) Brown Bag Series, Department of Educational Psychology, College of Education, University f Illinois at Urbana-Champaign, Champaign, IL.
- Abd-El-Khalick, F., & McFarquhar, G. M. (2011, March). *Nuts and bolts of a successful mid-career*. Panel conducted as part of the symposium on "Mid-Career Faculty Development" organized by the Provost Office, University of Illinois at Urbana-Champaign, Champaign, IL.
- Abd-El-Khalick, F. (2011, February). *Nature of science in science teaching and learning*. Invited seminar presented as part of the Illinois Researchers in partnership with K-12 Science Educators (iRiSE) Project, Department of Physics, University of Illinois at Urbana-Champaign, Champaign, IL.
- DeStefano, L., Goggin, N., Mortensen, P., & Abd-El-Khalick, F. (2010, August). *Beyond survival: Thriving in your career*. Panel conducted as part of the symposium on "Mid-Career Faculty Development" organized by the Provost Office, University of Illinois at Urbana-Champaign, Champaign, IL.
- Chancellor Herman, R., Senator Frerichs, M., Governor Edgar, J., DeStefano, L., & Abd-El-Khalick, F. (2009, April). *Financial and structural issues in elementary and secondary education: A human development perspective.* Roundtable discussion and public forum

- conducted at the 2009 Cline Symposium on "Higher education and human capital development: A Morrill Act for the 21<sup>st</sup> century," Cline Center for Democracy, University of Illinois at Urbana-Champaign, Champaign, IL.
- Abd-El-Khalick, F. (2009, March). *The nature of science and high school chemistry textbooks*. Invited session presented at the 24<sup>th</sup> Annual Conference for Enhancing Chemistry Teaching sponsored by the Chemistry Department, University of Illinois at Urbana-Champaign, Champaign, IL.
- Abd-El-Khalick, F. (2007, October). *Conceptualizing, executing, and seeing your research through publication*. Invited seminar presented as part of the Math, Science, and Technology (MST) Division Pro-seminar, Department of Curriculum and Instruction, College of Education, University of Illinois at Urbana-Champaign, Champaign, IL.
- Abd-El-Khalick, F. (2007, October). Students' and science teachers' conceptions of nature of science: A national study of grade 10 in Turkey. Invited seminar presented as part of the Cognitive Science of Teaching and Learning (CSTL) Division seminar series, Department of Educational Psychology, College of Education, University of Illinois at Urbana-Champaign, Champaign, IL.
- Abd-El-Khalick, F. (2005, December). The influence of training in metacognitive strategies on preservice elementary teachers conceptions of nature of science. Invited seminar presented as part of the College Scholars Program, College of Education, University of Illinois at Urbana-Champaign, Champaign, IL.
- Abd-El-Khalick, F. (2005, November). *Impacting preservice elementary teachers' views of nature of science: A continuing journey.* Invited seminar presented as part of the seminar series at the Department of Curriculum and Instruction, University of Illinois at Urbana-Champaign, Champaign, IL.
- Abd-El-Khalick, F. (2004, November). *Philosophy of science and college students' views of nature of science*. Invited seminar presented at the department of Natural Sciences seminar series, Parkland College, Champaign, IL.
- Abd-El-Khalick, F. (2004, September). *The development of students' science epistemologies in the middle and high school years*. Invited seminar presented at the Physics Education Group seminar series, Physics Department, University of Illinois at Urbana-Champaign, Champaign, IL.
- Abd-El-Khalick, F. (2004, May). Learning about the nature of science as conceptual change: Factors that mediate the development of pre-service elementary teachers' views of nature of science. Invited seminar presented as part of the CATE (Curriculum and Teacher Education) seminar series, Department of Curriculum and Instruction, College of Education, University of Illinois at Urbana-Champaign, Champaign, IL.
- McCarthey, S., Bresler, L., & Abd-El-Khalick, F. (2004, April). *Preparing your work for publication*. Panel conducted at the Curriculum and Instruction Graduate Student Symposium, College of Education, University of Illinois at Urbana-Champaign, Champaign, IL.

- DeStefano, L., Abd-El-Khalick, F., Greene, J., Anderson, C., Baroody, A., & Grosshandler, E. (2004, March). *NSF proposal strategies*. Seminar organized by the Bureau of Educational Research, College of Education, University of Illinois at Urbana-Champaign, Champaign, IL.
- Abd-El-Khalick, F. (2003, November). *The development and schooling of views of nature of science in secondary school: Some preliminary findings.* Invited seminar presented at the Developmental Division Brown Bag, Department of Psychology, University of Illinois at Urbana-Champaign, Champaign, IL.
- Abd-El-Khalick, F. (2002, April). *Publishing in refereed journals for graduate students and beyond*. Colloquium conducted as part of the Mathematics, Science, and Technology Division Colloquium Series, Department of Curriculum and Instruction, University of Illinois at Urbana-Champaign, Champaign, IL.
- Abd-El-Khalick, F. (2002, January). *The development of conceptions of nature of scientific knowledge and knowing in the middle and high school years: A cross-sectional study.* Seminar presented as part of the Faculty Fellows program, Bureau of Educational Research, College of Education, University of Illinois at Urbana-Champaign, Champaign, IL.
- Abd-El-Khalick, F. (2001, October). *Dissertation research as a "hoop" versus "springboard": My story!* Colloquium conducted as part of the Mathematics, Science, and Technology Division Colloquium Series, Department of Curriculum and Instruction, University of Illinois at Urbana-Champaign, Champaign, IL.
- Abd-El-Khalick, F. (2001, October). *History and nature of science: Active transport might work but osmosis does not!* Invited talk given at the Department of Educational Psychology, University of Illinois at Urbana-Champaign, Champaign, IL.
- Abd-El-Khalick, F. (1998, November). *History of science and views of the nature of science: Assumed connection and gloomy reality.* Seminar presented as part of the Science and Mathematics Education Center seminar series in science education for 1998/99, American University of Beirut, Beirut, Lebanon.

# **Editorial Responsibilities**

#### **Editorial Review Boards**

2014–present	Editorial Board, <i>Science: Philosophy, History and Education</i> (book series). Dordrecht, The Netherlands: Springer.
2008-present	Editorial Board, International Journal of Science Education.
2007-present	Editorial Review Board, Educational Sciences: Theory & Practice.
2006-present	Editorial Review Board, Journal of Science Education and Technology.
2006-present	Editorial Board, <i>Science and Technology Education Library</i> (book series). Dordrecht, The Netherlands: Springer.

2005-present	Editorial Board, Euroasia Journal of Mathematics, Science, and Technology Education.
2004-present	Editorial Committee, Science & Education.
2002-present	Board of Reviewers, Science Education.
2000–2004	Editorial Board, Journal of Research in Science Teaching.
1999–2004	Editorial Review Board, Journal of Science Teacher Education.

# **Invited / Occasional Reviewer**

Invited Reviewer, <i>Research in Science &amp; Technological Education</i> (May, 2010; March, 2014).
Invited Reviewer, <i>American Educational Research Journal</i> (February, 2011).
Invited Reviewer, Research in the Teaching of English (November, 2008).
Invited Reviewer, Educational Researcher (February, 2004).
Reviewer, International Journal of Science and Mathematics Education.
Reviewer, Review of Educational Research.
Reviewer, <i>Science Books &amp; Films</i> , Directorate for Education and Human Resource Programs, American Association for the Advancement of Science.
Reviewer, Science & Education.
Reviewer, Journal of Elementary Science Education.
Invited Reviewer, Social Studies of Science (April, 2001).
Invited Reviewer: Journal of Curriculum Studies (February, 2001).
Senior Reviewer, Journal of Research in Science Teaching.
Reviewer, Science and Children.
Reviewer, School Science and Mathematics.

#### **Consultations**

- March 2014: Texas Higher Education Coordinating Board, The State of Texas, Austin, TX. Worked in a three-member team to review a proposed Doctor of Education (EdD) in Curriculum and Instruction program at the University of Houston–Clear Lake.
- July 2012: United States Agency for International Development (USAID)-funded *Developing Rehabilitation Assistance to Schools And Teacher Improvement (D-RASATI)* Project, Lebanon. Led a seven-member team of university professors train 90 civil servants from across public education agencies in Lebanon responsible for preservice teacher education, inservice teacher professional development, and teacher monitoring and evaluation on

- using the ProGReSS SCaLe. Initiated the development of National Professional Teaching Standards to be adopted by the Lebanese Ministry of Education and Higher Education.
- December 2011: United States Agency for International Development (USAID)-funded Developing Rehabilitation Assistance to Schools And Teacher Improvement (D-RASATI) Project, Lebanon. Led a seven-member team of university professors to train 75 civil servants from across public education agencies in Lebanon responsible for preservice teacher education, inservice teacher professional development, and teacher monitoring and evaluation on using the ProGReSS SCaLe.
- July 2011: United States Agency for International Development (USAID)-funded *Developing Rehabilitation Assistance to Schools And Teacher Improvement (D-RASATI)* Project, Lebanon. Coordinated among various stakeholders in Lebanon engaged with delivering, monitoring, and evaluating the education of public school teachers to develop a plan for a national pilot study to assess public school teachers' instructional practice.
- May 2011: United States Agency for International Development (USAID)-funded *Developing Rehabilitation Assistance to Schools And Teacher Improvement (D-RASATI)* Project, Lebanon. Analyzed extant Lebanese Ministry of Education and Higher Education instructional practice classroom observation tools and developed a consolidated tool for use across public education agencies responsible for preservice teacher education, inservice teacher professional development, and teacher monitoring and evaluation. The tool is the **Pro**fessional **G**rowth and **Re**forms **S**upport **S**ystem: **S**tandards-based **C**lassroom observation for **Lebanon** (ProGReSS SCaLe).
- June, 2010: United States Agency for International Development (USAID)-funded *Education Quality and Access for Learning and Livelihood Skills (EQuALLS)* Project, Philippines. Analyzed data and reported on findings from the baseline *Standards-based Classroom Observation Protocol for Educators* (SCOPE) study.
- March–April, 2010: Nile Egyptian Schools (NES), A Project with the Education Development Fund of Egypt, Cairo, Egypt. Analyzed the NES science curriculum framework (grades 1–10) for alignment with international curricular standards and trends.
- September, 2009: United States Agency for International Development (USAID)-funded *Education Reform Project*, Egypt. Modified the *Standards-based Classroom Observation Protocol for Egypt* (SCOPE), developed an associated scoring system, and advised on institutionalizing the tool and scoring system to assess K-12 teachers' progress toward professional promotion under the new Ministry of Education Professional Academy for Teachers (PAT).
- August–October, 2008: United States Agency for International Development (USAID)-funded *Education Reform Project*, Egypt. Analyzed data and reported on findings from the Year IV SCOPE educational quality study.
- December, 2007–January, 2008: United States Agency for International Development (USAID)-funded *Education Reform Project*, Egypt. Developed a week-long Training for Trainers (TOT) professional development workshop focused on: "Teaching for Problem Solving and Critical Thinking in Preparatory Science Grades."

- August–October, 2007: United States Agency for International Development (USAID)-funded *Education Reform Project*, Egypt. Analyzed data and reported on findings from the Year III SCOPE educational quality study.
- March, 2007: Middle East Partnership Initiative (MEPI)-funded, "Looking Forward Summit: Harnessing Instructional and Communication Technologies to Build the Future of Yemeni Education," Yemen. Helped conceptualize, plan, and conduct the summit.
- September–December, 2006: United States Agency for International Development (USAID)-funded *Education Reform Project*, Egypt. Analyzed data and reported on findings from the Year II SCOPE educational quality study.
- July, 2006: Middle East Partnership Initiative (MEPI)-funded, *Instructional Leadership and Supervision Initiative Project*, Yemen. Conducted a review of the quality of teacher training materials and monitoring and evaluation plans.
- June–July, 2005: United States Agency for International Development (USAID)-funded *Education Reform Project*, Egypt. Analyzed data and reported on findings from the Year I SCOPE educational quality study.
- March, 2005: United States Agency for International Development (USAID)-funded *Education Reform Project*, Egypt. Designed a 6-day workshop and led a team to train 160 Egyptian school supervisors to use the *Standards-based Classroom Observation Protocol for Egypt* (SCOPE) to collect data for a continuing 5-year educational quality study.
- December, 2004: USAID-funded *Education Reform Project*, Egypt. Developed an instrument, the *Standards-based Classroom Observation Protocol for Egypt* (SCOPE), and associated plans for a continuing 5-year educational quality study of instructional practices as part of the overall Monitoring and Evaluation program for the project.
- July, 2003: USAID-funded *New Schools Program*, Egypt. Contributed to developing an interactive video training tool for use by the Education Development Center (Washington, DC) in training Egyptian supervisors develop concrete understandings of the enactment of active, student-centered teaching in Egyptian classrooms.
- January–February, 2003: USAID-funded *New Schools Program*, Egypt. Conducted a four-day training titled "Instructional Leadership Clusters: Education Quality Supervisory Support Teams" for senior staff of the Cairo-based Education Development Center (Washington, DC), Cairo, Egypt.
- January, 2003: USAID-funded *New Schools Program*, Egypt. Participated in coordinating and delivering a teacher-training module on "Student Centered Teaching" developed by the Education Development Center (Washington, DC).
- November, 2002: USAID-funded *New Schools Program*, Egypt. Developed a strategic plan ("Instructional Leadership Clusters: Education Quality Supervisory Support Teams") and associated training materials to ensure the effective implementation and sustainability of the central trainings offered by the Education Development Center (Washington, DC) through building local educational leaders, supervisors, and teachers' capacity for ongoing school-based training, support, and supervision of classroom teachers.

- June, 2001: USAID-funded *New Schools Program*, Cairo, Egypt. Developed and delivered a six-day training titled "Collecting and interpreting qualitative data: Interviews and focus groups," for the Cairo-based staff of the Education Development Center (Washington, DC).
- April–May, 2001: United Nations Educational, Scientific and Cultural Organization (UNESCO), Cairo Office. Conducted a comprehensive literature review and prepared a report on: "Integrating Technology in Teaching Secondary Science and Mathematics: Effectiveness, Models of Integration, and Illustrative Examples."
- 1996–1998: North Bend School District, North Bend, OR. Evaluated the district's K-5 science program with a focus on assessing elementary teachers' classroom practices in relation to the achievement of the program goals.
- 1997–1998: American Association for the Advancement of Science Project 2061. Conducted a critical evaluation of selected published curricula for their content match with Project 2061 Benchmarks for teaching nature of science at the elementary and secondary school levels.
- 1995–1996: Lawrence Livermore National Laboratory, Livermore, CA. Evaluated a 9-12 curriculum spiral titled "Biotechnology Education Program." Evaluation activities included designing instruments, and collecting and analyzing data to assess student achievement and teacher performance in relation to the program objectives.

#### **Professional Activities**

#### **Professional Organizations**

- Executive Board Member, National Association for Research in Science Teaching, 2015–2019. (Ex-officio position)
- Executive Board Member, National Association for Research in Science Teaching, 2004–2007. (Elected position)
- Member, Advisory Council, International History, Philosophy, and Science Teaching Group, 2001–2005.

# Occasional Reviewer (National and International)

- Invited Reviewer, Springer, Dordrecht, The Netherlands. Book proposal title: "Science Teacher Education for Responsible Citizenship: Towards a Pedagogy for Relevance through Socio-Scientific Issues," November, 2015.
- Senior Reviewer, 11<sup>th</sup> International Conference of the Learning Sciences, Boulder, CO, 2014.
- Invited Reviewer, National Science Teachers Association (NSTA) Press. Book proposal title: "Strengthening the foundation: Correcting misconceptions about the nature of science," July, 2013.
- Invited Reviewer, Springer, Dordrecht, The Netherlands. Book proposal title: "Science journalism: Theory and practice," August, 2012.

- Invited Reviewer, Routledge, New York. Book proposal title: "Teaching the Nature of Science: Perspectives & Resources," June, 2011.
- Reviewer, Strand 5: Nature of science, History, Philosophy, Sociology of Science. Biannual conference of the European Science Education Research Association, Lyon, France, September, 2011.
- Section Chair, Section 4: Science, Division C: Learning and Instruction. Annual meeting of the American Educational Research Association, New Orleans, LA, 2011.
- Invited Reviewer: Springer, Dordrecht, The Netherlands. Book proposal title: "Advances in the nature of science research: Concepts and methodologies," February, 2011.
- Panel Reviewer, *Review Panel for the Research on Evaluation on Education in Science and Engineering (REESE) Program*, Directorate for Education and Human Resources, Division of Research on Learning in Formal and Informal Settings, the National Science Foundation, Washington, DC, January, 2010.
- Reviewer, Strand 13: History, Philosophy, and Epistemology. Annual meeting of the National Association for Research in Science Teaching:

Chicago, IL, 2015 Pittsburgh, PA, 2014 Indianapolis, IN, 2012 Garden Grove, CA, 2009 Baltimore, MD, 2008 New Orleans, LA, 2007

Reviewer, Strand 8: History, Philosophy, and Epistemology. Annual meeting of the National Association for Research in Science Teaching:

San Diego, CA, 2006 Dallas, TX, 2005 Vancouver, Canada, 2004 Philadelphia, PA, 2003 New Orleans, LA, 2000 Boston, MA, 1999 San Diego, CA, 1998

Reviewer, Division C: Learning and Instruction; Section 4: Science. Annual meeting of the American Educational Research Association:

San Diego, 2009 New York, NY, 2008 Chicago, IL, 2007 San Francisco, CA, 2006 Montreal, Canada, 2005 San Diego, CA, 2004.

Invited Reviewer, Routledge, New York. Book proposal title: "Making sense of science teaching," September, 2008.

- Invited Reviewer, Springer, Dordrecht, The Netherlands. Book proposal title: "Critical appraisal of science as a human enterprise: Dynamics of scientific progress," May, 2008.
- Proposal Reviewer, the Tenth Annual Science and Mathematics Teachers Conference (SMEC X), American University of Beirut, November 11–12, 2007.
- Reviewer, proposal title, "Science teachers' beliefs and practice, and their impact on students' perceptions of science teaching." Programming Council for Educational Research (PROO), Social Sciences Research Council, Netherlands Organization for Scientific Research (NOW), November, 2005.
- Chair, *Review Panel for the Noyce Scholarship Program*, Directorate for Education and Human Resources, Division of Undergraduate Education, the National Science Foundation, Washington, DC, May, 2005.
- Panel Reviewer, *Review Panel for the Noyce Scholarship Program*, Directorate for Education and Human Resources, Division of Undergraduate Education, the National Science Foundation, Washington, DC, May, 2004.
- Invited Reviewer: Abell, S., & Lederman, N. G. (Eds.). *The handbook of research on science education*. Mahwah, NJ: Erlbaum. Chapter title: "Perspectives on science learning," February, 2004.
- Invited Reviewer, Sage Publications, Thousand Oaks, CA. Book proposal title: "History of science for teachers: The construction and reconstruction of scientific concepts," April, 2003
- Reviewer, annual international meeting of the Association for the Education of Teachers in Science, St. Louis, MO, 2003.
- Reviewer, Division C: Learning and Instruction; Section 3: Science. Annual meeting of the American Educational Research Association:

Chicago, IL, 2003 New Orleans, LA, 2002 Seattle, WA, 2001 New Orleans, LA, 2000

- Invited Reviewer: Appleton, K. (Ed.). *Elementary science teacher education: Contemporary issues and practices*. Mahwah, NJ: Erlbaum. Chapter title: "The elementary science teacher as researcher," February, 2002.
- Invited Reviewer: Special issue of *School Science and Mathematics*. Manuscript title: "Collaborative efforts designed to immerse future teachers in learner-centered environments," February, 2002.
- Reviewer, Division K: Teaching and Teacher Education; Section 1a: Teaching, Teacher Education, and Teacher Learning in Math and Science. Annual meeting of the American Educational Research Association:

New Orleans, LA, 2002 Seattle, WA, 2001 New Orleans, LA, 2000

- Invited Reviewer: Science & Technology Education Library, Kluwer Academic Publishers, Dordrecht, The Netherlands. Book proposal title: "Science education in philosophical and cultural perspective," March, 2001.
- Panel Reviewer, *Review Panel for Teacher Enhancement*, Directorate for Education and Human Resources, Division of Elementary, Secondary, and Informal Education, the National Science Foundation, Washington, DC, November, 2001.
- Reviewer, SIG-Subject Matter Knowledge & Conceptual Change. Annual meeting of the American Educational Research Association, Seattle, WA, 2001.
- Reviewer, Strand 4: Teacher Education. Annual meeting of the National Association for Research in Science Teaching, New Orleans, LA, 2000.

#### National

- Program Chair, "Toward an Illinois Learning Sciences Design Laboratory: A Lightning Symposium," February 27, 2015. University of Illinois at Urbana-Champaign, Champaign, IL.
- Presider, Session on *Epistemic Aspects of Science Teaching and Learning*. Strand 1: Science Learning, Understanding and Conceptual Change. Annual meeting of the National Association for Research in Science Teaching, Rio Grande, Puerto Rico, 2013.
- Chair, Division C: Learning and Instruction; Section 4: Science. Roundtable session on *Perceptions in Science*. Annual meeting of the American Educational Research Association, San Francisco, CA, 2013.
- Reviewer, second draft of the "Next Generation Science Standards" developed by Achieve in partnership with the National Academies of Science's National Research Council (NRC), National Science Teachers Association (NSTA), and the American Association for the Advancement of Science (AAAS). Champaign, IL; September, 2012.
- Member, Group to review the first draft of the "Next Generation Science Standards" developed by Achieve in partnership with the National Academies of Science's National Research Council (NRC), National Science Teachers Association (NSTA), and the American Association for the Advancement of Science (AAAS). NSTA, Chicago, IL; February, 3, 2012.
- Presider, Session on *Nature of Science*. Strand 8: In-service Science Teacher Education. Annual meeting of the National Association for Research in Science Teaching, Orlando, FL, 2011.
- Presider, Session on *Preservice Teachers' Understandings and Perceptions of the Nature of Science*. Strand 7: Pre-service Science Teacher Education. Annual meeting of the National Association for Research in Science Teaching, Orlando, FL, 2011.

- Presider, Session on *History and the Science Curriculum*. Strand 13: History, Philosophy, and Sociology of Science. Annual meeting of the National Association for Research in Science Teaching, Orlando, FL, 2011.
- Presider, Session on *Argumentation and Knowledge Construction*. Strand 1: Science Learning, Understanding and Conceptual Change. Annual meeting of the National Association for Research in Science Teaching, Orlando, FL, 2011.
- Member, The Early Career Research Award Committee, National Association for Research in Science Teaching, 2011–2014.
- Member, Group to review the draft of the "Conceptual Framework for Science Education" by the National Research Council intended to guide the development of the Next Generation Science Standards. National Science Teachers Association, Chicago, IL; June, 26, 2010.
- Presider, Paper set on *Curricula and Nature of Science*. Strand 13: History, Philosophy, and Sociology of Science. Annual meeting of the National Association for Research in Science Teaching, Philadelphia, PA, 2010.
- Chair, Session on *Developing Teachers: Cross-National Studies in Effective Teacher Practice, Training, and Development.* The 53<sup>rd</sup> annual conference of the Comparative and International Education Society, Charleston, SC, 2009.
- Member, The Early Career Research Award Committee, National Association for Research in Science Teaching, 2008–2010.
- Discussant, Division C: Learning and Instruction; Section 4: Science. Session on *Argumentation in K-16 Science Education*. Annual meeting of the American Educational Research Association, New York, NY, 2008.
- Member, Advisory Board for the Course, Curriculum, and Laboratory Improvement (CCLI)

  Phase I grant, "Integrated Pedagogy to Promote Understanding of Nature of Science and Scientific Inquiry in a College Biology Laboratory," funded by the National Science Foundation Division of Undergraduate Education, 2008–2010.
- External Reviewer, "Research on the teaching and learning of the scientific enterprise" developed by the Research Agenda in Science Education (RAISE) Project. (RAISE is sponsored through the National Science Teachers Association and funded by the National Science Foundation.) May, 2007.
- Member, Advisory Board for the Conference on "Science, Technology, Engineering and Mathematics—Alternative Certification for Teachers" (STEM-ACT) funded by the National Science Foundation Directorate for Education and Human Resources, Washington, DC: May 5–7, 2006.
- Member, Advisory Board for the Chicago Public Schools "Transitions into Teaching" grant funded by the United States Department of Education, 2005–2009.
- Discussant, Division C: Learning and Instruction; Section 4: Science. Session on *Understanding Cognitive Processes in Science Learning*. Annual meeting of the American Educational Research Association, Montreal, Canada, 2005.

- Presider/Discussant, Strand 8: History, Philosophy, and Epistemology. Session on *Teaching Nature of Science*. Annual meeting of the National Association for Research in Science Teaching, Dallas, TX, 2005.
- Chair, the NARST Awards Committee, National Association for Research in Science Teaching, 2004–2007.
- Chair, Ad hoc Committee on the History of Science Education, National Association for Research in Science Teaching, 2004–2010.
- Discussant, Symposium on *Socioscientific Issues in Science Education: Research to Inform Practice and Policy*. Annual meeting of the National Association for Research in Science Teaching, Vancouver, Canada, 2004.
- Member, Campus Advisory Team for the National Science Foundation Grant, "Advancing the State-of-the-Art in Evaluation: Developing a Comprehensive, Value-Engaged Approach to Evaluating STEM Educational Programs," 2004–2005.
- Coordinator, Strand 1: Learning: Students' Conceptions. Annual meeting of the National Association for Research in Science Teaching, Vancouver, Canada, 2004.
- Member, Advisory Board for the National Science Foundation Grant, "Induction and Mentoring in a Middle Grades Science and Mathematics Accelerated Teacher Preparation Program," 2003–2006. (Part of the University of Illinois-Chicago and Chicago Public Schools Advisory Board for the Middle Grades Science and Mathematics Programs.)
- Coordinator, Strand 1: Learning: Students' Conceptions. Annual meeting of the National Association for Research in Science Teaching, Philadelphia, PA, 2003.
- Member, Ad hoc Committee to Examine Issues in the History of Science Education, National Association for Research in Science Teaching, 2002–2004.
- Member, The Distinguished Contributions to Science Education through Research Award committee, National Association for Research in Science Teaching, 2002–2004.
- Coordinator, Strand 8: History, Philosophy, and Epistemology. Annual meeting of the National Association for Research in Science Teaching, New Orleans, LA, 2002.
- Chair, ICASE symposium on *Inquiry in Science Education: International Perspectives*. Annual meeting of the National Association for Research in Science Teaching, St. Louis, MO, 2001.
- Coordinator, Strand 8: History, Philosophy, and Epistemology. Annual meeting of the National Association for Research in Science Teaching, St. Louis, MO, 2001.
- Presider, Symposium on *Teachers Learning about Nature of Science in Authentic Science Contexts: Models of Inquiry and Reflection.* Annual meeting of the National Association for Research in Science Teaching, St. Louis, MO, 2001.
- Chair, Division C: Learning and Instruction; Section 3: Science. Session on *Students' Scientific Reasoning in Learning Science*. Annual meeting of the American Educational Research Association, Seattle, WA, 2001.

- Discussant, Division K: Teaching and Teacher Education; Section 1a: Teaching, Teacher Education, and Teacher Learning in Math and Science. Session on *Analysis of Teacher Support and Resistance in a Multi-District Elementary Science Reform Project.* Annual meeting of the American Educational Research Association, New Orleans, LA, 2000.
- Presider/Discussant, Strand 8: History, Philosophy, and Epistemology. Session on *Science Education Research: Relevance to Practice*. Annual meeting of the National Association for Research in Science Teaching, Boston, MA, 1999.
- Presider/Discussant, Strand 8: History, Philosophy, and Epistemology. Session on *Science Studies and Sociological Perspectives*. Annual meeting of the National Association for Research in Science Teaching, San Diego, CA, 1998.
- Presider/Discussant, Strand 8: History, Philosophy, and Epistemology. Session on *Thinking and Learning in Science*. Annual meeting of the National Association for Research in Science Teaching, Oak Brook, IL, 1997.
- Presider, Session on Socialization Influences on Elementary Teachers Prepared in an Innovative Teacher Education Program: A Longitudinal Study. Annual meeting of the Association for the Education of Teachers in Science, Cincinnati, OH, 1997.

#### International

- External Dissertation Examiner, University of Cologne, Germany. Dissertation title, "Paving the way towards 'authentic chemistry teaching'—A contribution to teachers' professional development," September, 2014.
- Evaluator of Faculty Research Output (Department of Science and Technology Education, University of Johannesburg), National Research Foundation, South Africa, June, 2014.
- External Dissertation Examiner, Mara University of Technology, Malaysia. Dissertation title, "The views of the nature of science across different educational levels," April, 2014.
- Member, International Scientific Committee, The 2014 Conference of The International Society of Educational Research, Cappadocia, Turkey, October 30–November 2, 2014.
- Proposal reviewer, National Priorities Research Program (NPRP), Qatar National Research Fund, Qatar Foundation, 2009, 2011, 2014.
- Proposal reviewer, Undergraduate Research Experience Program, Qatar National Research Fund, Qatar Foundation, 2007, 2008, 2012, 2013.
- Proposal reviewer, Vice Provost Office for Research & Graduate Studies, United Arab Emirates University, Al-Ain, United Arab Emirates, November, 2012.
- Member, International Advisory Committee, Walid and Helen Kattan Science Education Center (WHKSE), Qatan Center for Educational Research and Development, Ramallah, Palestine, 2012–present.
- Opponent, Dissertation Public Examination, Department of Chemistry, Faculty of Science, University of Helsinki, Finland. Dissertation title, "Nature of science chemistry education: Design of chemistry teacher education course," November, 2012.

- Proposal reviewer, National Priorities Research Program—Exceptional Proposals (NPRP-EP), Qatar National Research Fund, Qatar Foundation, 2012.
- Proposal reviewer, The ARISTEIA Research Programme, National Council for Science and Technology of Greece, General Secretariat for Research and Technology of Greece, January, 2012.
- External Dissertation Examiner, The University of Cape Town, South Africa. Dissertation title, "Exploring the coherence of grade six students' views of the nature of science (NOS) and of the natural world: A South African study," August, 2011.
- Opponent, Dissertation Disputation, Department of Mathematics and Science Education, Stockholm University, Sweden. Dissertation title, "Teachers' language of inquiry: The conflation between methods and teaching and scientific inquiry in science education," October, 2010.
- Proposal reviewer, Indo-US Science and Technology Forum, New Delhi, India. Proposal title, "A collaborative workshop in the use of specialized scientific visual media for teachers and university instructors," August, 2010.
- External Dissertation Examiner, Queensland University of Technology, Brisbane, Australia. Dissertation title, "Exploring the influence of an argumentation-based science content course on preservice primary teachers' views of nature of science," May, 2008.
- Evaluator of Faculty Research Output (School of Science and Mathematics Education, University of the Western Cape), National Research Foundation, South Africa, June, 2007.
- Member, Advisory Committee of the Kuwait Foundation for the Advancement of Science (KFAS), 2002–2006.
- Program Co-Chair, the Sixth International History, Philosophy, and Science Teaching Conference, Denver, CO, 2002.
- Executive Secretary, Conference on School-Based Educational Reform in Arab Countries, American University of Beirut, Beirut, Lebanon, November 10–12, 2000. Organized by the Department of Education, Division of Education Programs, American University of Beirut, Beirut, Lebanon.
- Co-chair, the Fourth Annual Science and Mathematics Teachers Conference (SMEC IV), May 12–13, 2000. SMEC is a regional conference organized by the Science and Mathematics Education Center, Division of Education Programs, American University of Beirut, Beirut, Lebanon.
- Principal Organizer, the Seventh Annual National Science Fair, April 7–9, 2000. Organized by the Education Student Society and Science and Mathematics Education Center, Division of Education Programs, American University of Beirut, Beirut, Lebanon.
- Co-chair, the Third Annual Science and Mathematics Teachers Conference (SMEC III), May 15, 1999. SMEC is a regional conference organized by the Science and Mathematics Education Center, Division of Education Programs, American University of Beirut, Beirut, Lebanon.

Principal Organizer, the Sixth Annual National Science Fair, May 28–30, 1999. Organized by the Education Student Society and Science and Mathematics Education Center, Division of Education Programs, American University of Beirut, Beirut, Lebanon.

# **University Service**

# Department of Curriculum and Instruction, College of Education, University of Illinois at Urbana-Champaign, Champaign, IL

Member, Faculty Advisory Committee, 2009–2011.

Member, Supplementary Promotion and Tenure Committee, 2008–2009.

Member, Promotion and Tenure Committee, Dr. Sharon Tettegah, 2008–2009.

Chair, Clinical Assistant Professor in Science Education Search Committee, 2008–2009.

Member, Promotion and Tenure Committee, Dr. Sharon Tettegah, 2007–2008.

Member, Faculty Advisory Committee, 2006–2008.

Member, Ad hoc Committee on Faculty Loads, 2006–2007.

Member, Department Leadership Team, 2006–2007.

Member, Mathematics Education Faculty Member Search Committee, 2005–2006.

Member, Ad hoc Committee on Evaluating Graduate Student Progress, 2004–2005.

Member, Faculty Advisory Committee, 2001–2004.

Member, Science Education Faculty Member Search Committee, 2001–2002.

Member, Illinois State Board of Education Science Area Review Committee, 2001–2002.

Member, NCATE Science Area Review Committee, 2001–2002.

Member, Department Team on *Exemplary Practices and Challenges in Teacher Preparation*, forum organized by the American Association of Universities and the American Academy of Arts and Sciences, 2000–2001.

Member, Educational Technology Faculty Member Search Committee, 2000–2001.

Member, Office of Clinical Experiences Assistant and Associate Directors Search Committee, 2001–2002.

# College of Education, University of Illinois at Urbana-Champaign, Champaign, IL

Chair, O'Leary Learning Center Design Committee, 2015–present.

Conflict of Interest Contact, 2014–present.

Member, Governmental Relations Ad hoc Task Force, 2014–present.

Ex-officio, College Research Committee, 2014–present.

Ex-officio, Academic Programs Committee, 2014–present.

Fouad Abd-El-Khalick/ vita/ page: 52/57

Co-Chair, Science Education Faculty Member Search Committee, 2014–2015.

Chair, Taskforce on Teacher Education Redesign: Final Phase, 2013–2014.

Member, Ad-hoc Task Force on Undergraduate Recruitment, Enrollment, and Admission, 2013.

Chair, Ad-hoc Committee on Faculty Recruitment, 2013–2015.

Member, Taskforce on Re-envisioning Teacher Education: Stage II, 2010–2013.

Member, Council of Department Executives, 2011–present.

Member, Human Resource Development Faculty Member Search Committee, 2011–2012.

Chair, Taskforce on the College of Education Rankings with the *US News & World Report*, 2010.

Member, College Executive Committee, 2009–2011.

Chair, "Entrepreneurial Leadership in STEM Teaching & learning" (EnLiST) Project Coordinator Search Committee, 2008–2009.

Member, STEM (Science, Technology, Engineering, and Mathematics) and Ubiquitous Learning Faculty Excellence Nomination Committee, 2008–2009.

Member, Research and Policy Analyst Search Committee, Illinois New Teachers Collaborative, 2007–2008.

Member, Intercollegiate Transfer Application Review Committee (Secondary Science), 2007–2008.

Presenter, "Technology, Engineering, and Mathematics Education Initiative," Board of Visitors Meeting, September, 2007.

Member, Human Subjects Committee, 2006–2008.

Member, Graduate Awards Committee, 2006–2008.

Chair, STEM (Science, Technology, Engineering, and Mathematics) Education Task Force, Fall 2006.

Member, Intercollegiate Transfer Application Review Committee (Secondary Science), 2006–2007

Co-Chair, Strengths-Weaknesses-Opportunities-and-Threats (SWOT) Subcommittee of the College of Education Process Planning Committee, 2005–2006.

Member, Combined Leadership Committee for Strategic Planning, 2005–2006.

Member, Committee on Evaluating the Dean of the College of Education, 2005.

Member, College Executive Committee, 2004–2006.

Member, Hach Foundation Ad hoc Scholarship Committee, 2004–2005.

Member, Curriculum and Instruction Department Head Search Committee, 2004–2005.

Member, College of Education Website Redesign Extended Team, 2003–2005.

Member, College of Education Internationalization Committee, 2003–2004.

Member, Science Area of Specialization Committee, 2001–2005.

Advisor, Student Education Association (SEA), 2001–2004.

#### University of Illinois at Urbana-Champaign, Champaign, IL

Member, Design Center Executive Committee, Office of the Provost and Vice Chancellor for Academic Affairs, 2015–present.

Member, Research Policy Committee, Office of the Vice Chancellor for Research, 2015–2017.

Member, Campus Budget Advisory Task Force, Office of the Provost and Vice Chancellor for Academic Affairs, 2015–2016.

Member, Institutional Review Board – Social & Behavioral Sciences, Office of the Vice Chancellor for Research, 2015–2016.

Member, Design Center Program Working Group, Office of the Vice Chancellor for Academic Affairs and Provost, 2015-2016.

Member, Review Committee for Equipment Funding Proposals, Special Programs, Office of the Vice Chancellor for Research, 2014-2015.

Member, Sesquicentennial Design Building Planning Committee, Office of the Vice Chancellor for Academic Affairs and Provost, 2014-2015.

Reviewer, Campus Research Board:

2014-2015: One review 2012-2013: One review 2005-2006: Four reviews 2004-2005: Two reviews 2002-2003: Five reviews

Member, Planning Committee for Joint Area Centers Symposium, Center for South Asian and Middle Eastern Studies, 2013.

Member, University of Illinois Fulbright Interview Committee, 2010-2011.

Member, Faculty Senate, 2009–2011.

Member, Academic Freedom and Tenure Committee, Faculty Senate, 2009-2011.

Member, Annual Review Committee for the Director of the Illinois STEM Education Initiative, 2009–2010.

Advisor, Lebanese Cultural Club, 2008–2011.

College of Education Liaison, National Science Olympiad Planning Committee, 2003–2005.

Fouad Abd-El-Khalick/ vita/ page: 54/57

# Department of Education, Division of Education Programs, American University of Beirut, Beirut, Lebanon

Member, Curriculum and Examination Committee, 1998–2000.

Member, Practice Teaching Committee, 1998–2000.

Member, Sub-Committee on Revising Graduate Programs, 1998–1999.

# Division of Education Programs, American University of Beirut, Beirut, Lebanon

Acting Chairperson, Academic Affairs Committee, 1999–2000.

Member, Committee for Revising Promotion Criteria, 1998–2000.

Member, Admissions and Student Affairs Committee, 1998–1999.

Advisor, Education Students Society, 1998–1999.

# **Leadership Development Activities**

- Fellow, CIC Academic Leadership Program, Committee on Institutional Cooperation (CIC), 2013-2014.
- Department Executive Officers Seminar, Committee on Institutional Cooperation (CIC), Chicago, IL, October 11–13, 2012.
- Senior Leadership Retreat, University of Illinois at Urbana-Champaign, Champaign, IL, August 16–17, 2012.

# **Supervision of Postdoctoral Fellows**

- Aybuke Pabuccu, Department of Science Education, Abant Izzet Baysal University, Bolu, Turkey; The Scientific and Technological Research Council of Turkey (TUBITAK); August, 2014–March, 2015.
- Gülsüm Akyol, Department of Technical University, Middle East Technical University, Ankara, Turkey; August, 2014 July, 2015.
- Nihal Dogan, Department of Science Education, Abant Izzet Baysal University, Bolu, Turkey; The Scientific and Technological Research Council of Turkey (TUBITAK); July—September, 2013.
- Suat Celik, Department of Science and Mathematics Education, Atatürk University, Erzurum, Turkey; The Scientific and Technological Research Council of Turkey (TUBITAK); August, 2007–May, 2008.
- Nihal Dogan Bora, Gazi University, Ankara, Turkey; The Scientific and Technological Research Council of Turkey (TUBITAK); September, 2005–June, 2006.

Fouad Abd-El-Khalick/ vita/ page: 55/57

#### PhD Advisees

#### Graduates

- Sara Rose, Discussion Director, College Physics, Department of Physics, University of Illinois at Urbana-Champaign, Champaign, IL. Dissertation title, "The effectiveness of pre-course and concurrent course interventions on at-risk college students' performance in an introductory mechanics course." (Graduated: December, 2013).
- Sallie Greenberg, Assistant Director, Advanced Energy Technology Initiative, Illinois State Geological Survey, Prairie Research Institute, University of Illinois at Urbana-Champaign, Champaign, IL. Dissertation title, "Impact of social media as an instructional component on content knowledge, attitudes, and public engagement related to global climate change." (Graduated: May, 2013)
- Ana Houseal, Outreach Science Educator, Science and Math Teaching Center, and Assistant Professor, College of Education, University of Wyoming, Laramie, Wyoming. Dissertation title, "The impact of a student-teacher-scientist partnership (STSP) on students' and teachers' content knowledge and attitudes toward science." (Graduated: May, 2010)
- Nader Wahbeh, Director, Scientific Literacy Program, Al-Qatan Center for Educational Research and Development/Al-Qatan Foundation, Ramallah, West Bank, Palestine. Dissertation title, "The effect of a content-embedded explicit-reflective approach on inservice teachers' views and practices related to nature of science." (Graduated: August, 2009)
- Noemi Waight, Associate Professor, Department of Learning and Instruction, Graduate School of Education, State University of New York, Buffalo, New York. Dissertation title, "From scientific practice to science classrooms: Impact of technological tools on the enactment of 'authentic' inquiry in high school science classrooms." (Graduated: August, 2008)
- Ava Zeineddin, Assistant Professor, Department of Teacher Education, College of Education, Wayne State University, Detroit, Michigan. (2009–2013). Dissertation title, "Scientific reasoning and epistemological commitments: Coordination of theory and evidence among college science students." (Graduated: June, 2008)
- Issam Abi-El-Mona, Associate Professor and Chairperson, Department of Teacher Education, Rowan University, Glassboro, New Jersey. Dissertation title, "Perceptions of argumentative discourse among freshmen college students, science teachers and practicing scientists." (Graduated: June, 2007)
- Sara Salloum, Assistant Professor, Department of Teaching and Learning, Long Island University, New York. (2006–2014). Dissertation title, "*Teaching as 'practice': Blending the intellectual and the moral in pursuit of science teachers' practical knowledge.*" (Graduated: March, 2006)

#### Current

Ryan Summers
Darin Henigman

John Myers Saadeddine Shehab Sahar Alameh Christina Silliman

# **Professional Organizations**

Association for the Education of Teachers in Science (AETS)
American Association for the Advancement of Science (AAAS)
American Educational Research Association (AERA)
Lebanese Association for Educational Sciences (LAES)
National Association for Research in Science Teaching (NARST)
National Science Teachers Association (NSTA)
School Science and Mathematics Association (SSMA)
The Philosophy of Science Association (PSS)

Fouad Abd-El-Khalick/ vita/ page: 57/57



CAROL L. FOLT
Chancellor

103 SOUTH BUILDING CAMPUS BOX 9100 CHAPEL HILL, NC 27599

T 919.962.1365 F 919.962.1647 carol.folt@unc.edu

#### Mail Ballot

#### **Board of Trustees**

April 7, 2016

Attached for your review and approval is a memo concerning the terms of appointment and compensation for Fouad Abd-El-Khalick as Dean of the School of Education. This mail ballot will be approved as part of the consent agenda at the full board meeting on Thursday, May 19, 2016.

The undersigned votes as follows with respect to the recommendation proposed in Chancellor Folt's memorandum dated April 7, 2016

	Approve	Disapprove
Appointment and compensation for Fouad Abd-El-Khalick as Dean of the School of Education		
Signature		-
Printed Name		_
Date		

Please fax to TJ Scott at (919) 962-1647 or email at tj\_scott@unc.edu

This ballot was approved by majority vote on April 8, 2016 by the following: Dwight Stone, Haywood Cochrane, Chuck Duckett, Lowry Caudill, Jeff Brown, Julia Grumbles, Kelly Hopkins, Ed McMahan, Hari Nath and Houston Summers. Trustee Allie Ray McCullen voted in disapproval.

# **ATTACHMENT B**



CAROL L. FOLT
Chancellor

103 SOUTH BUILDING CAMPUS BOX 9100 CHAPEL HILL, NC 27599

T 919.962.1365 F 919.962.1647 carol.folt@unc.edu

# **MEMORANDUM**

**TO:** Members of the Board of Trustees

**FROM:** Carol L. Folt

**RE:** Mail Ballot

**DATE:** April 19, 2016

You have authorized my office to poll you by mail concerning personnel matters which require attention by the Board. Accordingly, we are transmitting to you herewith personnel actions as follows:

EHRA Faculty Compensation & Tenure Actions

Attachment A

EHRA Non-Faculty Compensation Actions

Attachment B

Please mark and return the enclosed mail ballot indicating whether or not you agree with the actions proposed. Thank you.

# The University of North Carolina at Chapel Hill EXECUTIVE SUMMARY Board of Trustees April 21, 2016

No	College/Division	Name	Dept./School	Current Rank	New Rank	Tenure Request Reason	Effective Date	Salary
		Ivaille	Берт./Зспоот	Current Kank	INCW INTER	Tenure Request Reason	Lifective Date	Salary
	onnel Actions	_						
New	Appointments wit							
1	Health Affairs	Janelle Arthur(Torchio)	Microbiology & Immunology	Research Assistant Professor	Assistant Professor		5/1/2016	\$90,000.00
	Academic Affairs	Lucinda Austin	School of Media & Journalism	N/A	Assistant Professor		7/1/2016	\$75,500.00
	Academic Anali 3	Lauren Brinkley-	School of Wedia & Southalism	TV/Y	//33/3(drit 1 10/0330)		77172010	\$75,500.00
3	Health Affairs	Rubenstein	Social Medicine	N/A	Assistant Professor		820/2016	\$95,000.00
	Health Affairs	Helen Lazear	Microbiology & Immunology	Nominated Assistant Professor	Assistant Professor		5/1/2016	\$110,000.00
5	Health Affairs	Zoe McElligott	Psychiatry	Research Assistant Professor	Assistant Professor		4/22/2016	\$63,600.00
6	Health Affairs	Christine Shenvi	Emergency Medicine	Clinical Assistant Professor	Assistant Professor		5/1/2016	\$171,000.00
7	Academic Affairs	Claudia Yaghoobi	Asian Studies	N/A	Assistant Professor		7/1/2016	\$70,000.00
Add	ition of Joint Appo	ointment without Ter	nure					
0								
Pror	notion to Full Prof	essor						
	Health Affairs	Ethan Basch	Medicine/Health Policy & Management	Associate Professor	Professor		5/1/2016	\$235,000.00
2	Academic Affairs	Claudio Battaglini	Exercise & Sport Science	Associate Professor	Professor		7/1/2016	\$97,375.00
2	Acadomia Affaira	Janathan Dlaakhurn	Exercise & Sport Science	Associate Drefessor	Professor		7/1/201/	¢00 021 00
	Academic Affairs  Academic Affairs	Jonathan Blackburn Christina Burch	Biology	Associate Professor Associate Professor	Professor		7/1/2016 7/1/2016	\$90,021.00 \$91,311.00
	Academic Affairs	Mimi Chapman	School of Social Work	Associate Professor	Professor		7/1/2016	\$91,311.00
	Academic Affairs	Anusha Chari	Economics	Associate Professor	Professor		7/1/2016	\$166,100.00
_	/ touder me / mail 3	7 masha onan	Economics	7.530ciate i Toressor	110103301		77 112010	\$100,100.00
7	Academic Affairs	Gregory Copenhaver	Biology	Associate Professor	Professor		7/1/2016	\$115,444.00
8	Academic Affairs	Jennifer Ho	English & Comparative Literature	Associate Professor	Professor		7/1/2016	\$85,300.00
9	Academic Affairs	Corbin Jones	Biology	Associate Professor	Professor		7/1/2016	\$115,062.00
10	Academic Affairs	Morgan Pitelka	Asian Studies	Associate Professor	Professor		7/1/2016	\$96,243.00
11	Academic Affairs	Zlatko Plese	Religious Studies	Associate Professor	Professor		7/1/2016	\$83,508.00
12	Academic Affairs	Andrew Reynolds	Political Science	Associate Professor	Professor		7/1/2016	\$119,300.00
13	Academic Affairs	Graeme Robertson	Political Science/Global Studies	Associate Professor	Professor		7/1/2016	\$127,500.00
	Health Affairs	Mark Zylka	Cell Biology & Physiology	Associate Professor	Professor		5/1/2016	\$171,736.00
Rea	opointments to the							
1	Academic Affairs	Curtis Allen III	School of Government	Assistant Professor	Assistant Professor		6/1/2017	\$120,510.00
2	Academic Affairs	Claire Baker	School of Education	Assistant Professor	Assistant Professor		7/1/2017	\$72,420.00
3	Academic Affairs	Brandon Bayne	Religious Studies	Assistant Professor	Assistant Professor		7/1/2017	\$69,885.00
4	Academic Affairs	Andrea Bohlman	Music	Assistant Professor	Assistant Professor		7/1/2017	\$69,000.00
5	Academic Affairs	Gabrielle Calvocoressi	English & Comparative Literature	Assistant Professor	Assistant Professor		7/1/2017	\$76,150.00
_	Academic Affairs	Laura Castro-Schilo	Psychology & Neuroscience	Assistant Professor	Assistant Professor		7/1/2017	\$83,534.00
7	Health Affairs	Robert Coward	Urology	Assistant Professor	Assistant Professor		7/15/2017	\$235,000.00
8	Academic Affairs	Sara DePasquale	School of Government	Assistant Professor	Assistant Professor		6/1/2017	\$121,283.00
9	Academic Affairs	Adrienne Erickcek	Physics & Astronomy	Assistant Professor	Assistant Professor		7/1/2017	\$78,005.00
10	Academic Affairs	Mary Flaherty	School of Information & Library Science	Assistant Professor	Assistant Professor		7/1/2017	\$79,702.80

# The University of North Carolina at Chapel Hill EXECUTIVE SUMMARY Board of Trustees April 21, 2016

No.	College/Division	Name	Dept./School	Current Rank	New Rank	Tenure Request Reason	Effective Date	Salary
11	Academic Affairs	Kathleen Gates	Psychology & Neuroscience	Assistant Professor	Assistant Professor		7/1/2017	\$83,446.00
12	Academic Affairs	Jennifer Gates-Foster	Classics	Assistant Professor	Assistant Professor		7/1/2017	\$78,280.00
13	Academic Affairs	Julia Gibson	Dramatic Art	Assistant Professor	Assistant Professor		7/1/2017	\$75,500.00
14	Academic Affairs	Stephanie Griest	English & Comparative Literature	Assistant Professor	Assistant Professor		7/1/2017	\$73,450.00
15	Academic Affairs	Steven Hemelt	Public Policy	Assistant Professor	Assistant Professor		7/1/2017	\$91,500.00
16	Academic Affairs	Leslie Hicks	Chemistry	Assistant Professor	Assistant Professor		7/1/2017	\$84,000.00
		Mohammad Hosein						
17	Academic Affairs	Jarrahi	School of Information & Library Science	Assistant Professor	Assistant Professor		7/1/2017	\$80,738.00
18	Academic Affairs	Kristen Kucera	Exercise & Sports Medicine	Assistant Professor	Assistant Professor		7/1/2017	\$78,780.00
	Academic Affairs	Bo Li	Chemistry	Assistant Professor	Assistant Professor		7/1/2017	\$84,000.00
	Academic Affairs	Fei Li	Economics	Assistant Professor	Assistant Professor		7/1/2017	\$126,500.00
21	Academic Affairs	Matthew Lockett	Chemistry	Assistant Professor	Assistant Professor		7/1/2017	\$79,000.00
								l
	Academic Affairs	Laura Lopez-Sanders	Sociology	Assistant Professor	Assistant Professor		7/1/2017	\$84,000.00
	Academic Affairs	Amy Maddox	Biology	Assistant Professor	Assistant Professor		7/1/2017	\$77,500.00
	Academic Affairs	Paul Maddox	Biology	Assistant Professor	Assistant Professor		7/1/2017	\$77,500.00
25	Academic Affairs	Chérie Ndaliko	Music	Assistant Professor	Assistant Professor		7/1/2017	\$77,000.00
26	Academic Affairs	Brian Pietrosimone	Exercise & Sports Medicine	Assistant Professor	Assistant Professor		7/1/2017	\$81,380.00
27	Academic Affairs	Tiago Pires	Economics	Assistant Professor	Assistant Professor		7/1/2017	\$118,500.00
28	Academic Affairs	LaToya Powell	School of Government	Assistant Professor	Assistant Professor		6/1/2017	\$104,030.00
29	Academic Affairs	Kathryn Reissner	Psychology & Neuroscience	Assistant Professor	Assistant Professor		7/1/2017	\$83,486.00
30	Academic Affairs	Diego Riveros-Iregui	Geography	Assistant Professor	Assistant Professor		7/1/2017	\$86,600.00
31	Academic Affairs	Stanislav Shvabrin	Germanic & Slavic Languages & Literature	Assistant Professor	Assistant Professor		7/1/2017	\$72,900.00
32	Academic Affairs	Meredith Smith	School of Government	Assistant Professor	Assistant Professor		6/1/2017	\$97,335.00
33	Academic Affairs	Eren Tasar	History	Assistant Professor	Assistant Professor		7/1/2017	\$75,000.00
34	Academic Affairs	Brendan Thornton	Religious Studies	Assistant Professor	Assistant Professor		7/1/2017	\$70,110.00
35	Academic Affairs	Scott Warren	Chemistry	Assistant Professor	Assistant Professor		7/1/2017	\$79,000.00
36	Academic Affairs	Ronald Williams II	African, African American & Diaspora Studies	Assistant Professor	Assistant Professor		7/1/2017	\$74,070.00
37	Academic Affairs	Yin Xia	Statistics & Operations Research	Assistant Professor	Assistant Professor		7/1/2017	\$91,656.00
Desi	gnation/Reappoin	tments to Department	ntal Chair					
0	3 2						1	
Desi	gnation/Reappoin	tments to Distinguis	hed Professorship					
	Health Affairs	Leigh Callahan	Medicine	Distinguished Term Professor	Mary Ling Briggs Distinguished Term Professor		4/22/2016	\$201,239.00
2	Health Affairs	Cheryl Giscombe	Nursing	Associate Professor	Melissa & Harry Levine Family Distinguished Term Professor		1/1/2016	\$125,609.00
Act	ions Conferri	na Tenure						
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1	Academic Affairs	Janice Anderson	School of Education	Assistant Professor	Associate Professor	Promotion based on research, teaching and service	7/1/2016	\$72,345.00
2	Academic Affairs	Benjamin Arbuckle	Anthropology	Assistant Professor	Associate Professor	Promotion based on research and scholarship; teaching and service	7/1/2016	\$76,900.00
.3	Health Affairs	Silvana Barros	Periodontology	Associate Professor w/o Tenure	Associate Professor	Promotion based on excellence in research	6/1/2016	\$136,568.00
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# The University of North Carolina at Chapel Hill EXECUTIVE SUMMARY Board of Trustees April 21, 2016

No	College/Division	Name	Dept./School	Current Rank	New Rank	Tenure Request Reason	Effective Date	Salary
	Academic Affairs	Sabine Gruffat	Art	Assistant Professor	Associate Professor	Promotion based on research, teaching and service	7/1/2016	\$80,812.00
	Academic Affairs	nic Affairs Laura Halperin English & Comparative Literature Assistant Professor Associate Professor Promotion based on sc		Promotion based on scholarship, teaching and service	7/1/2016	\$70,700.00		
-	Academic Affairs	Daniel Kreiss	School of Media & Journalism	Assistant Professor	Associate Professor	Promotion based on scholarship and teaching	7/1/2016	\$85,258.13
	Academic Affairs	Shayne Legassie	English & Comparative Literature	Assistant Professor	Associate Professor	Promotion based on research and scholarship	7/1/2016	\$70,700.00
	Health Affairs	Millie Long	Medicine	Assistant Professor	Associate Professor	Promotion based on excellence in clinical scholarship	7/1/2016	\$184,981.00
,	Health Affairs	Raul Necochea	Social Medicine	Assistant Professor	Associate Professor	Promotion based on excellence in research	8/1/2016	\$90,000.00
	Academic Affairs  Academic Affairs	Zeynep Tufekcioglu Ariana Vigil	SILS Women's & Gender Studies	Assistant Professor Assistant Professor	Associate Professor Associate Professor	Promotion based on research, teaching and service Promotion based on research and scholarship; teaching and service	7/1/2016 7/1/2016	\$85,500.00 \$77,116.00
Ne	w Appointments Co	onferring Tenure						
	)							
Ad	dition of Joint App	ointment Conferring	Tenure					
	Academic Affairs	Emily Burrill	History	Associate Professor	Associate Professor		7/1/2016	\$81,639.00
	Health Affairs	Amanda Thompson	Nutrition	Associate Professor	Associate Professor		5/1/2016	\$80,862.00
Co	rections							
	)							

## The University of North Carolina at Chapel Hill **EXECUTIVE SUMMARY Board of Trustees** July 14, 2014

No.	College/Division	Name	School	Department	Rank	Reason ason management (* bais to support for proposed salan processe	Requested Amount of Increase **	Percent of Increase **	June 30 Salary	Current Salary	New Salary	Effective Date	
С	ompens	ation Actio	Henry involvement	ation, specific funding sources are revie		s well as by the applicable University Central financial offices,	** Based on o increase(s) to						
	1					Increase due to preemptive retention offer, as Dr.					1		
1	Academic Affairs	Carol Arnosti	Arts & Sciences	Marine Sciences	Professor	Arnosti was invited to participate in a recruiting event for a chaired position at Rutgers University	\$17,701	17.01%	\$104,085	\$104,085	\$121,786	7/1/2016	
2	Health Affairs	Antonio Bush	Pharmacy	PACE	Post Doc	Increase due to new faculty rank as Assistant Professor via Targeted Hire candidate	\$72,000	167.44%	\$43,000	\$43,000	\$115,000	7/1/2016	
3	Health Affairs	Lori Carter-Edwards	Public Health	PHLP	Evaluator	Increase due to new faculty rank as Research Associate Professor via external competitive event	\$19,376	18.59%	\$104,224	\$104,224	\$123,600	5/1/2016	
4	Academic Affairs	Christian Iliadis	Arts & Sciences	Physics & Astronomy	Professor	Increase due to new secondary administrative appointment as department Chair	\$32,430	25.82%	\$125,578	\$125,578	\$158,008	7/1/2016	
5	Academic Affairs	Noreen McDonald	Arts & Sciences	City & Regional Planning	Associate Professor	Increase due to new secondary administrative appointment as department Chair Increase due to promotion to Research Associate	\$28,500	29.53%	\$125,000	\$96,500	\$96,500	7/1/2016	
6	Health Affairs	Xin Ming	Pharmacy	Molecular Pharmaceutics	Research Assistant Professor	Professor	\$59,803	99.35%	\$60,197	\$60,197	\$120,000	5/1/2016	
7	Health Affairs	Betty Nance-Floyd	Nursing		Clinical Assistant Professor	Increase due to service period change from 9 to 12 months (\$21,764 or 33.8%), and due to new secondary administrative appointment as Director of the Center of Lifelong Learning (\$12,945 or 20.1%)	\$34,709	53.16%	\$64,388	\$65,291	\$100,000	6/1/2016	
8	Academic Affairs	Wayne Lee	Arts & Sciences	History	Distinguished Term Professor	Increase based on pre-empting an offer from US Army War College	\$15,000	13.08%	\$114,650	\$114,650	\$129,650	7/1/2016	
9	Academic Affairs	Mary-Rose Papandrea	Law		Professor	Increase due to new secondary administrative appointment as Associate Dean	\$40.000	22.86%	\$175,000	\$175,000	\$215,000	7/1/2016	
10	Health Affairs	Hae Won Shin	Medicine	Neurology	Clinical Assistant Professor	Increase due to retention counteroffer, as Dr. Shin has had an offer from the University of Illinois at Chicago's School of Medicine	\$35,568	24.63%	\$144,432	\$158,181	\$180,000	5/1/2016	
						Increase based on making existing temporary secondary administrative appointment as Director of							
	Academic Affairs	Jeff Welty	Government		Associate Professor	Judicial College a long-term appointment Increase based on new faculty appointment as Research Assistant Professor, via internal competitive	\$18,678	15.25%	\$122,498	\$126,173	\$141,173	5/1/2016	
13		Xiaopeng Zong	Medicine	Radiology	Research Associate	event	\$18,468	30.01%	\$61,532	\$61,532	\$80,000	5/1/2016	
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Total Monetary Duration of Value of Non- Non-Salary Salary Compensatio

Effective End Date

No	College/Division	Name	Department/School		Rank	Reason	Compensation	n		Date	End Date	
Non-Salary Compensation Actions												
0	N/A	N/A	N/A		N/A	N/A	N/A	N/A		N/A	N/A	NA

# The University of North Carolina at Chapel Hill **EXECUTIVE SUMMARY Board of Trustees** July 14, 2014

No	College/Division	Name	Department/School	Rank	Description		
For Information		ion					
0	N/A	N/A	N/A	N/A	N/A		

# Appendix D

						Increase	Percent of	Current		Effective
No.	College/Division	Name	Department/Scho	ol Rank	Reason	Amount	Increase	Salary	<b>New Salary</b>	Date
Co	ompensa	tion Acti	ons		d by the appropriate Department and School/Divisio wewed and approved at the Department level, as w of Sponsored Research for grant-funded salaries					

Total

Requested

Monetary Duration Value of Nonof Non-Salary Salary

Compensatio Compensa **Effective** tion

Date

**End Date** 

NA

**Non-Salary Compensation Actions** N/A N/A N/A N/A N/A N/A N/A N/A N/A

Reason

Rank

Department/School

College/Division

Name

# **Compensation Actions**

No	Last Name	First Name	College/Division	Department/School	Rank/Title		June 30 Salary	Proposed Salary	Requested	Increase \$\$	Recquested Increase %	Effective Date	Justification
1	Kendrick	Anneglenn	Communications and Public Affairs		Assistant Director for Individual Giving	\$	67,500	\$ 76,900	\$	9,400	13.93		12 - Other (must explain in comments) - This request is based on labor market to bring the employee to the market rate of \$76,900. A \$6,716 increase was granted in August 2015 for retention. There are no comparable positions within the work unit. The requested salary results in a market index of 100%.
2	Lebold	Daniel	University Development	University Development	Director of Development for Global Education	\$	109,460	\$ 125,865	<b>\$</b>	16,405	14.99		12 - Other (must explain in comments) - This request is based on labor market to bring the employee closer to the market rate of \$144,400. A \$10,946 increase was granted effective July 2015 during the Annual Raise Process. There are no comparable positions within the work unit. The requested salary results in a market index of 87%.
3	Morgan	Laura	University Development	University Development	Senior Director of University Events	\$	125,851	\$ 144,400	\$	18,549	14.74		12 - Other (must explain in comments) - This request is based on labor market to bring the employee to the market rate of \$144,400. A \$12,585 increase was granted effective July 2015 during the Annual Raise Process. There are no comparable positions within the work unit. The requested salary results in a market index of 100%.
4	Wilkie	Deana	School of Public Health	Advancement	Director of Annual Giving and Alumni Affairs	\$	71,435	\$ 82,114	\$	10,679	14.95		2a - Increase in job duties or responsibilities; includes reclassification of branch/role - This is a salary adjustment related to a permanent increase in job duties or responsibilities. The current duties include generating a large volume of renewable gifts in the \$25-\$25,000 range from the School's 17,000 alumni and other donors; planning, designing, organizing, and implementing all aspects of Annual Giving, including personal solicitations, direct mail, social media, and special events; and overseeing volunteer recruitments, training, and management. The new, additional duties will include managing all aspects of alumni affairs, serving as the primary Advancement Office liaison with the School of Public Health Alumni Association, developing key messages and communications vehicles for alumni engagement, and maintaining contact with individual department-specific alumni committees and boards. A \$7,072 increase was granted effective July 2015 during the Annual Raise Process. There are no comparable positions within the work unit. The employee meets the education and experience requirements for this classification with a Bachelor's degree in Journalism and 11 years of related experience.
5						$\vdash$			\$	-	#DIV/0!	2/1/2016	
6									\$	-	#DIV/0!	2/1/2016	
7									\$	-	#DIV/0!	2/1/2016	

Non-Compensation Actions											
N	Last Name	First Name	College/Division	Department/School	Rank/Title	June 30 Salary	Proposed Salary	Requested Increase \$\$	Recquested Increase %	Effective Date	Justification
1	N/A	N/A	N/A	N/A	N/A						

Information Only - Competitive Recruitment Actions approved by President											
No	Last Name	First Name	College/Division	Department/School	Rank/Title	June 30 Salary	Proposed Salary	Requested Increase \$\$	Recquested Increase %	Effective Date	Justification
1								\$ -	#DIV/0!		
2											
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CAROL L. FOLT
Chancellor

103 SOUTH BUILDING CAMPUS BOX 9100 CHAPEL HILL, NC 27599

T 919.962.1365 F 919.962.1647 carol.folt@unc.edu

#### **Mail Ballot**

#### **Board of Trustees**

# **April 19, 2016**

Chancellor Carol Folt submits for your review and approval the EHRA Faculty and EHRA Non-Faculty salary and compensation actions as recommended for April 2016. This mail ballot will be approved as part of the consent agenda at the Full Board meeting on Thursday, May 19, 2016.

The undersigned votes as follows with recommendation to these proposed actions as presented by the Chancellor.

	Approve	Disapprove
EHRA Faculty Salary Increases and Tenure Promotions (Attachment A)		
	Approve	Disapprove
EHRA Non-Faculty Compensation Actions (Attachment B)		
Signature		
Printed Name		
Date		

Please fax to TJ Scott at (919) 962-1647 or email at tj\_scott@unc.edu

This mail ballot was approved by majority vote on April 20, 2016 by the following: Dwight Stone, Haywood Cochrane, Chuck Duckett, Lowry Caudill, Julia Grumbles, Allie Ray McCullen, Ed McMahan, Hari Nath, and Houston Summers.

# ATTACHMENT C



CAROL L. FOLT Chancellor

103 SOUTH BUILDING CAMPUS BOX 9100 CHAPEL HILL, NC 27599

T 919.962.1365 F 919.962.1647 carol.folt@unc.edu

TO: Members of the Board of Trustees

FROM: Carol L. Folt

RE: Personnel Mail Ballot

DATE: May 10, 2016

You have authorized me to poll you by mail ballot concerning personnel matters which require the immediate attention of the Board.

I am seeking approval to appoint Mr. Mark W. Merritt as the University's next Vice Chancellor and General Counsel. The appointment is effective September 6, 2016.

Mr. Merritt was chosen after an extensive nationwide search chaired by Felicia Washington, Vice Chancellor for Workforce Strategy, Equity and Engagement. He comes to us from Robinson, Bradshaw & Hinson in Charlotte, NC where he is a partner. Mr. Merritt received his Bachelor's degree from UNC Chapel Hill where he was a Morehead-Cain Scholar in 1979, and his J.D. from the University of Virginia in 1982.

The Board is asked to approve Mr. Merritt's appointment and compensation. Attached is the formal offer letter and a copy of Mr. Merritt's CV. Please complete the attached mail ballot and return to TJ Scott at your earliest convenience.



CAROL L. FOLT Chancellor

103 SOUTH BUILDING CAMPUS BOX 9100 CHAPEL HILL, NC 27599

T 919 962 1365 F 919,962,1647 carol foli/a unc.edu

May 6, 2016

Mr. Mark Merritt 3201 Valencia Terrace Charlotte, NC 28211

Dear Mark:

I am pleased to confirm your appointment as Vice Chancellor and General Counsel at the University of North Carolina at Chapel Hill, subject to approval of The University's Board of Trustees. As a Vice Chancellor, you will be classified as a Tier I Senior Academic and Administrative Officer and subject to all of the relevant human resources policies for employees in this category. The following outlines the specific details of your appointment:

Employment effective date:

September 6, 2016

Employment status:

At-will; subject to continuation or discontinuation at

any time at the discretion of the Chancellor.

Compensation:

\$437,349 per year based on a full-time (1.0 FTE) work schedule and subject to annual review. The Office of the Chancellor is responsible for initiating any changes in salary, subject to compensation policies adopted by the Board of Governors and/or

Board of Trustees.

Leave Accrual:

26 days (208 hours) per year of annual (vacation) leave and 12 days (96 hours) per year of sick leave for full-time service. Up to 30 days (240 hours) of annual leave may be carried forward each calendar year with any excess balance converted to sick leave at year end. Sick leave does not have a maximum accrual rate.

Leave Payout at Appointment End:

Up to 30 days (240 hours) of annual leave; unused

sick leave is not eligible for payout.

University Vehicle:

A sensible leased vehicle that meets reasonable cost parameters will be provided, at your selection, including customary insurance, maintenance, and operating costs, to be paid for by the University of North Carolina at Chapel Hill Foundation, Inc. At appointment end, the provided vehicle must be returned promptly to the appropriate University official. Please know that you can decline the

vehicle.

Moving Allowance:

Customary and reasonable expenses related to moving household goods to a maximum amount of \$15,000. Reimbursement must be requested no later than 180 days of the date of hire and is subject to University procurement rules which are summarized in the following document located at <a href="http://finance.unc.edu/files/2012/11/moving.pdf">http://finance.unc.edu/files/2012/11/moving.pdf</a>.

House Hunting Trips:

\$3,000 of reasonable travel and lodging expenses for up to two (2) house hunting trips to Chapel Hill, North Carolina.

Temporary Housing Allowance:

\$3,000 per month for a period of up to twelve (12) months in reimbursement of rent, utilities, and other expenses related to temporary housing in conjunction with relocation. All reimbursements require documentation of actual expenses. (This is the max that can be approved by Chancellor. Greater amounts require BOT approval)

Athletic Event Tickets:

You will be provided two tickets to UNC Men's basketball and football games. Please note that you may decline the tickets, pay for them entirely, or receive them at no cost. If you receive the tickets at no cost, the value of the tickets will be reported as taxable income.

Background Check:

Your appointment is conditional on satisfactory completion of the University's required criminal conviction and credentials checking processes. In the event these processes have not been fully completed at the time your appointment begins, this appointment may be rescinded if any remaining checks disclose information that in the University's judgement are sufficient to bar continued appointment. Before a final decision is made to rescind any appointment, the appointee will receive a copy of the information used in reaching this decision and will have an opportunity to provide any exculpatory or explanatory information.

Employment Policies:

Your appointment will be subject to the Employment Policies for Tier I Senior Academic and Administrative Officers of the University of North Carolina at Chapel Hill as presently defined and as they may be periodically revised. A copy of the policies currently in effect is enclosed with this letter and is also available at any time by consulting the University's Office of Human Resources web site at http://hr.unc.edu.

Your appointment is conditional on your acceptance of the terms and conditions stated in this letter and as set out in the "EHRA Non-Faculty Appointee Certifications and Conditions of Employment" (Form AP-2a), which is attached. Please signify your acceptance of these terms and conditions by signing and dating the enclosed copy of this letter, the Form AP-2a and the Recommendation for Personnel Action (Form AP-2) and returning to my office as soon as possible, and no later than one week from the date of your signature. A failure to return these signed documents within the indicated timeline may result in cancellation of your offer of appointment.

Accompanying this letter of appointment are "Equal Opportunity Employment Data Forms" which request information regarding gender and race/ethnicity information, Protected Veteran status and Individuals with Disability information. The University of North Carolina at Chapel Hill is an Equal Opportunity Employer. Collection of this information is in compliance with Federal laws and regulations, executive orders, and applicable State laws and regulations. The information that you submit will remain confidential and will be used by the UNC Chapel Hill Equal Opportunity and Compliance Office only for statistical and required reporting purposes. Completion of this data is voluntary; failure to provide this information will not adversely affect your candidacy or employment.

I look forward with great enthusiasm to our working together and in your leadership as the University's new Vice Chancellor and General Counsel. Welcome to The University of North Carolina at Chapel Hill.

Sincerely.

Carol L. Folt Chancellor

Enclosure: Employment Policies for EHRA Non-Faculty Employees

EHRA Non-Faculty Appointee Certifications and Conditions of Employment"

(Form AP-2a)

Equal Opportunity Employment Data Forms

Acknowledgment and Acceptance by Appointee:

(Signature)

: Departmental Personnel File

EPA Non-Faculty Human Resources



## Mark W. Merritt

101 North Tryon Street Suite 1900 Charlotte, NC 28246

t: 704.377.8337 f: 704.373.3937

mmerritt@robinsonbradshaw.com

Mark Merritt's practice covers a broad range of business-related litigation including antitrust, complex and class action, and shareholder litigation. He regularly represents clients in governmental investigations, including civil and criminal investigations conducted by federal antitrust agencies and investigations by the Securities and Exchange Commission.

Mark counsels clients on antitrust issues and assists them in obtaining regulatory approvals from the Federal Trade Commission and the Department of Justice for corporate transactions. Additionally, he has assisted corporate clients in conducting internal investigations into accounting and financial irregularities.

Mark also represents clients who are faced with the condemnation of their property by a governmental authority. He has handled condemnation cases for golf courses, large outdoor amphitheaters, shopping centers, office buildings, industrial buildings and undeveloped land.

## Experience

- Represents the Southeastern Conference in *In re NCAA Athletic Grant-in-Aid Cap Antitrust Litigation* in the Northern District of California.
- Represents Charlotte Pipe & Foundry in *In re Cast Iron Soil Pipe and Fittings Antitrust Litigation*.
- Represented BB&T and its directors and officers in obtaining the dismissal of a shareholder derivative action relating to the auction rate securities market.

#### **Practice Areas**

Antitrust and Trade Regulation

Appellate

Class Actions

**Complex Commercial Litigation** 

Condemnation and Real Estate Disputes

Corporate, Partnership and Shareholder Rights Litigation

Governmental and Internal Investigations

Health Care

Intellectual Property and Technology

International

Land Use and Zoning

Securities

Sports and Entertainment

#### **Bar Admissions**

North Carolina

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- Defended Wachovia Corporation's board of directors in litigation arising out of its merger with Wells Fargo.
- Represented opt-out plaintiffs Fruit of the Loom, Russell Athletics and Springs Industries in obtaining a multimillion dollar settlement of *In re Polyester Staples Fiber Antitrust Litigation*.
- Obtained summary judgment for client declaring North Carolina Installment Paper Dealer Tax unconstitutional. Client was awarded a tax refund in the amount of \$35,885,976.
- Obtained \$4.8 million jury verdict in condemnation action arising out of construction of an interstate highway on client's property. The award with interest was more than twice the Department of Transportation's estimate of just compensation.
- Represented investment banking client in several arbitrations involving fee disputes. Obtained award for the client and successfully defended against counterclaims.
- Represented public company in insider trading investigation brought by the SEC.
   The SEC decided not to file any enforcement action against the company or any of its directors, officers or employees.
- Represented manufacturing client in industry-wide, price-fixing investigation by the Department of Justice. No charges were brought by the Department of Justice arising out of the investigation.

#### **Professional Affiliations**

- North Carolina State Bar, President-Elect, 2015-16; Vice President, 2014-15;
   Councilor, 2006-present; Ethics Committee, Vice Chair, 2009, Chair 2010, 2011,
   2013; Lawyers Assistance Program, Chair, 2008-12
- North Carolina Commission on the Administration of Law and Justice, Legal Professionalism Committee, Member
- North Carolina Bar Association, Antitrust and Trade Regulation Law Section, 1996-present; Chair, 2005
- Mecklenburg County Bar, President, 2000-01; Executive Committee; Treasurer, 1996-98
- Mecklenburg County Bar Leadership Institute
- American College of Trial Lawyers, Fellow
- · International Society of Barristers, Fellow

#### **Education**

University of Virginia, J.D., 1982, Order of the Coif; Editorin-Chief, *Virginia Law Review*, 1981-82

University of North Carolina at Chapel Hill, B.A., 1979, Phi Beta Kappa; John Motley Morehead Scholar; Phi Eta Sigma

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• Law Clerk, The Honorable John M. Wisdom, U.S. Court of Appeals, Fifth Circuit

#### **Community Affiliations**

- Senior Warden, Christ Episcopal Church, 2007
- The Family Center, Board of Directors, 1994-99; President, 1997
- Legal Services of the Southern Piedmont, Board of Directors, 2013-14; 1989-98; President, 1992-94
- Morehead-Cain Scholarship Central Selection Committee, 2010-13

#### **Honors & Awards**

- North Carolina Bar Association, H. Brent McKnight Renaissance Lawyer Award, 2012
- Woodward/White, Inc., The Best Lawyers in America, bet-the-company litigation, commercial litigation, eminent domain and condemnation, litigation - antitrust, litigation - securities, 1999-2016; Charlotte Bet-the-Company Litigation Lawyer of the Year, 2012, 2014, 2016; Charlotte Litigation - Securities Lawyer of the Year, 2012; Charlotte Eminent Domain and Condemnation Law Lawyer of the Year, 2013, 2015
- Business North Carolina, Legal Elite Hall of Fame, antitrust and litigation
- North Carolina Super Lawyers, Top 10 North Carolina Super Lawyer, business litigation, 2007-16; top recipient of votes, 2009; Top 25 Charlotte, 2013-16
- Chambers USA: America's Leading Business Lawyers, litigation and antitrust, 2003-15
- Benchmark Litigation, North Carolina leading litigation attorney, antitrust, class actions, general commercial, securities, 2007-16
- Martindale-Hubbell, AV® Preeminent<sup>™</sup> Peer Review Rated

#### **Insights**

- Supreme Court Rules Against NFL, Allows Antitrust Case to Proceed June 10, 2010
   Robinson Bradshaw Publication
- Ethical Implications of Outsourcing Winter 2008
   North Carolina State Bar Journal
- "Scheme Liability" Case
   Nov. 1, 2007
   Robinson Bradshaw Publication

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CAROL L. FOLT
Chancellor

103 SOUTH BUILDING CAMPUS BOX 9100 CHAPEL HILL, NC 27599

T 919.962.1365 F 919.962.1647 carol.folt@unc.edu

#### Mail Ballot

#### **Board of Trustees**

May 10, 2016

Attached for your review and approval is a memo concerning the terms of appointment and compensation for Mark Merritt as Vice Chancellor and General Counsel. This mail ballot will be approved as part of the Consent Agenda at the Full Board meeting on Thursday, May 19, 2016.

The undersigned votes as follows with respect to the recommendation proposed in Chancellor Folt's memorandum dated May 10, 2016.

	Approve	Disapprove
Appointment and compensation for Mark Merritt as Vice Chancellor and General Counsel		
Signature		-
Printed Name		_
Date		

Please fax to TJ Scott at (919) 962-1647 or email at tj\_scott@unc.edu

This mail ballot was approved by majority vote on May 10, 2016 by the following: Dwight Stone, Haywood Cochrane, Chuck Duckett, Lowry Caudill, Jeff Brown, Julia Grumbles, Bill Keyes, Allie Ray McCullen, Ed McMahan, Hari Nath and Houston Summers.

#### ATTACHMENT D

## <u>DESIGNER SELECTION – MOREHEAD PLANETARIUM BUILDING</u> RENOVATION

This project will improve the existing Planetarium by increasing accessibility, improving visitor flow and enlarging the public educational space. Approximately 8,000 square feet of staff offices, classrooms and exhibit halls will be renovated and new educational exhibits will be installed.

The project budget is \$1.5M and will be funded by University Foundation and Repairs and Renovations funds.

This project was advertised on March 15, 2016. Seven (7) proposals were received. Four (4) firms were interviewed on April 28, 2016. Members of the Board of Trustees did not participate in the interviews.

The committee recommended the selection of the three firms in the following priority order:

1	Watson Tate Savory	Charlotte, NC
1.	viatson rate bayory	Charlotte, Ive

2. RND Architects Durham, NC

3. DTW Architects and Planners Raleigh, NC

The firms were selected for their past performance on similar projects, strength of their consultant team and experience with museum projects.

## RECOMMENDED ACTION

A motion to approve the three firms in the following priority order:

1.	Watson Tate Savory	Charlotte, NC

2. RND Architects Durham, NC

3. DTW Architects and Planners Raleigh, NC



University of North Carolina at Chapel Hill Joe Fenton, RA Giles F. Horney Building | Suite 202 Facilities Planning Department 103 Airport Drive | Campus Box 1090 Chapel Hill, NC 27599-1090

RE: UNC Chapel Hill

MOREHEAD BUILDING, CLASSROOM, OFFICE & EXHIBIT RENOVATION

Dear Mr. Fenton and members of the Selection Committee:

Watson Tate Savory is pleased to present our qualifications for the Morehead Building Renovation at UNC Chapel Hill. While our primary focus for more than twenty five years in the Carolinas has been public higher education, we believe two of our recent museum projects uniquely qualify our team for your project: South Carolina State Museum's "Windows To New Worlds" and The Florence County Museum.

Several of the issues and opportunities addressed in these projects directly relate to discussions you have already had regarding your project, as follows:

- **The Front Door:** Previously, entering the SC State Museum was circuitous and confusing. Redesign significantly simplified circulation and relocated ticketing for high visibility.
- Collaboration with Exhibit Designers: WTS worked closely with exhibit designers Cincinnati-based Jack Rouse Associates at the SC State Museum, and London-based Haley Sharpe for the Florence County Museum to ensure that Visitor Experience, as envisioned by them, was well executed and successful.
- Fully Operational during Renovation: In order to remain occupied and operational during extensive renovations, WTS developed detailed temporary circulation plans and construction phasing for the SC State Museum.
- **National Register Status:** The SC State Museum building is both on the National Register and protected under a local historic easement. Constant communication and approvals at each phase of design with federal, state and local entities was required for all interior and exterior renovations.
- **ADA Compliance:** Restrooms and elevator access were upgraded for compliance in the existing, historic structure of the SC State Museum.
- HVAC Replacement: All areas of renovation at the SC State Museum required replacement of air handling units and ductwork.
- **Multi-discipline Programming:** Both museums represent a variety of disciplines, from cultural heritage, to science, natural history and technology, and have robust programming for public education.

Other projects in the attached submittal package include recent work at UNC Charlotte, an award-winning National Register renovation at SC State University, and a renovation/addition currently under construction at Western Carolina University. We believe our experience with all of these projects has prepared our team to provide exceptional service for UNC Chapel Hill. In addition, we have included consultants with whom we have worked repeatedly, with great success. We appreciate your consideration of our qualifications and would look forward to an opportunity to further discuss this exciting project in an interview.

Sincerely,

# DESIGNER SELECTION – WILSON LIBRARY ROOF REPLACEMENT AND OTHER BUILDING ENVELOPE REPAIRS

This project will address numerous building envelope maintenance issues and ongoing moisture intrusion at Wilson Library. The project will repair and replace the highest priority roof sectors and other envelopes areas.

The project budget is \$2,495,000 and will be funded by Repairs and Renovations funds.

This project was advertised on March 18, 2016. Eight (8) proposals were received. Three (3) firms were interviewed on May 2, 2016. Members of the Board of Trustees did not participate in the interviews.

The committee recommended the selection of the three firms in the following priority order:

1.	Atlas Engineering	Raleigh, NC
2.	Terracon Consultants, Inc.	Raleigh, NC
3.	Rooftop Systems Engineers, A Raymond Engineering Company	Raleigh, NC

The firms were selected for their past performance on similar projects, strength of their consultant team and experience with campus projects.

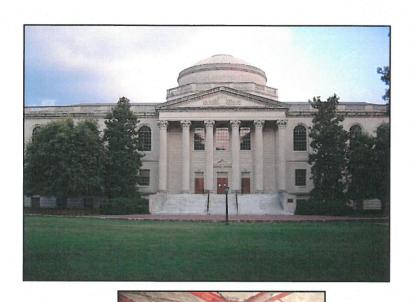
#### **Recommended action:**

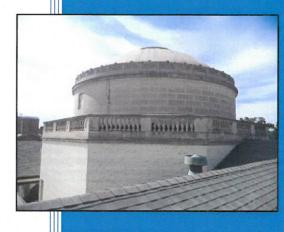
A motion to approve the three firms in the following priority order:

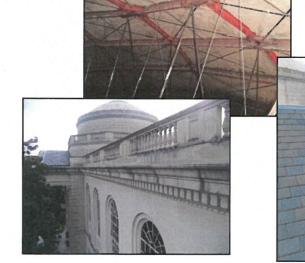
1.	Atlas Engineering	Raleigh, NC
2.	Terracon Consultants, Inc.	Raleigh, NC
3.	Rooftop Systems Engineers, A Raymond Engineering Company	Raleigh, NC

# <u>Qualifications Package - Designer Services</u> Wilson Library Partial Roof Replacement and Building Envelope Repairs

The University of North Carolina at Chapel Hill











Submitted by:
Atlas Engineering, Inc.
April 11, 2016



April 11, 2016

The University of North Carolina at Chapel Hill Department of Facilities Planning 103 Airport Drive, Campus Box #1090, Suite 202 Chapel Hill, North Carolina 27599-1090

Attention: Mr. Thomas Loter, AIA

Subject: Qualification Package - Roof Consulting Services

Wilson Library - Slate and Dome Roof Replacement

and Building Envelope Repairs

#### Dear Mr. Loter:

Atlas Engineering is very interested in providing roofing and building envelope consulting services to The University of North Carolina at Chapel Hill for the Wilson Library Roof Replacement and Building Envelope Repair project.

Atlas Engineering is a licensed engineering firm specializing in the evaluation and design of building exterior, roofing, waterproofing, and structural systems. We have been performing these services for federal, state, and local agencies across the State of North Carolina since 1996. Our office is located in Raleigh, North Carolina and we regularly service clients throughout the state.

#### Why Select Atlas?

<u>Experienced, Professional Personnel:</u> Our staff of nine includes professional engineers, Registered Roof Consultants, and Registered Roof Observers with more than 80 years of combined experience evaluating and designing roofing, waterproofing, and building exterior repair and replacement projects.

<u>Familiarity with UNC-CH and Wilson Library:</u> Atlas Engineering regularly provides professional engineering services to UNC-CH for a wide variety of informal and formal projects, many of which have involved roofing, waterproofing, and building exterior consulting services. We are familiar with and accept the technical and administrative requirements of performing work for UNC-CH. Atlas Engineering also recently completed an Building Envelope Condition Study at Wilson Library and are very familiar with the facility.

<u>Successful Track Record:</u> Atlas has completed many successful roof replacement projects for Universities throughout the UNC System without legal or technical problems. We would be honored to continue our successful working relationship with UNC-CH.

Our Qualification Package is enclosed. Additional information describing our firm and the capabilities of our personnel are provided within the attached SF330. Please do not hesitate to contact us if additional information is required.

Kindest Regards,

Atlas Engineering, Inc.

Kelli Wilcox, PE, RRC Principal Engineer

#### ATTACHMENT F

## DESIGNER SELECTION – MCCOLL BUILDING ROOF REPLACEMENT

This project will replace the McColl Building's original, 20,620 SF of ethylene propylene diene monomer rubber (EPDM) roof system installed in 1997, add a permanent fall protection system, repair the skylights and replace the roof flashing system. The permanent fall protection system will be installed for the life safety of maintenance and service personnel.

The project budget is estimated at \$610,000 and will be funded by Repairs and Renovations funds.

This project was advertised on April 8, 2016. Three (3) proposals were received. Three (3) firms were interviewed on May 12, 2016. Members of the Board of Trustees did not participate in the interviews.

The committee recommended the selection of the three firms in the following priority order:

1.	REI Engineers	Raleigh, NC
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2. Atlas Engineering Raleigh, NC

3. Rooftop Systems Engineers Raleigh, NC

The firms were selected for their past performance on similar projects, strength of their consultant team and experience with campus projects.

#### **Recommended action:**

A motion to approve the three firms in the following priority order:

1.	REI Engineers	Raleigh, NC

2. Atlas Engineering Raleigh, NC

3. Rooftop Systems Engineers Raleigh, NC



## LETTER of INTEREST for UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL

MCCOLL BUILDING ROOF REPLACEMENT

APRIL 29, 2016

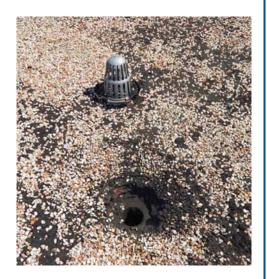














#### PRIMARY POINT OF CONTACT

#### Mr. Robert (Bob) Tomlinson, RRC

Raleigh Branch Manager Senior Project Manager btomlinson@reiengineers.com (919) 845-1450 x229 (office) (919) 841-2098 (mobile)

REI Engineers Corporate Headquarters 9121 Anson Way, Suite 100 Raleigh, NC 27615

#### **EXECUTIVE SUMMARY**

REI Engineers specializes in assessments, design, and construction administration services for roofing, waterproofing, and building envelope systems. The scope of work for the Roof Replacement and Skylight Repairs on the McColl Building mirrors the core strengths of our firm as we have the technical expertise and local experience to work with your team to evaluate roofing system and water intrusion problems, provide cost estimates, specify waterproofing systems, and administer construction contracts.

REI has the largest complement of RCI, Inc. (Association of Building Envelope Consultants) professional registrations in the United States.

With more than a 90% returning client rate, REI's personnel bring extensive experience from various backgrounds in the roofing and waterproofing industry to provide keen insight into all aspects of building envelope projects.

An engineering consulting firm that focuses solely on roofing and building envelope projects, REI is an excellent administrator of our clients' budgets and schedules.

## **Building Envelope Services**

UNC Chapel Hill has trusted REI Engineers to provide skilled roof replacement design and construction administration services since 1997. Our team has provided roofing and building envelope consulting services on the following UNC-CH facilities:

- General Storeroom
- McGavran Greenburg Hall
- Cogeneration Plant
- Chancellor's Residence
- Graham Hall
- Aycock Hall
- Everett Hall
- Energy Services Office/Warehouse

- Lewis Hall
- Alderman Hall
- McIver Hall
- Howell Hall
- Thurston Hall
- Lenoir Hall
- Taylor Hall
  - Wilson Hall

We recently completed a roof replacement of the McGavran Greenberg Hall which similarly incorporated the tear-off of EPDM roof and the incorporation of a fall protection system. The replacement system designed by REI Engineers is a 2-ply modified bitumen system with a 20 year warranty. Our proposed approach for this project incorporates alternate replacement designs to provide options to the UNC Chapel Hill team.

Our team has current capacity to initiate new design work and is confident in our ability to deliver successful roof replacement and skylight repair project by April 2017.



#### Why Select REI Engineers

- 19+ year relationship between UNC-CH and REI Engineers
  - First project completed for the University in 1997 on the Frank Porter Graham building
- Close proximity & familiarity with UNC-CH campus
- Understanding of University design guidelines and preferences
- Unique firm focus on roofing system design
- In-house capacity to complete projects on-time
  - 10 Technical Roofing Professionals in Raleigh office
- Specialized Licenses, Registrations and Certifications:
  - 10 Professional Engineers (Civil, Structural, Mechanical)
  - 13 Registered Roof Consultants (RRC)
  - 28 Registered Roof Observers (RRO)
  - 5 Registered Waterproofing Consultants (RWC)
  - 4 Registered Building Envelope Consultant (RBEC)
  - 1 LEED AP
  - 1 Certified Construction Contract Administrator
  - 6 Construction Document Technologists
  - 4 Licensed Asbestos Inspectors
  - 1 Past President and Fellow of Roof Consultants Institute (RCI)
  - 4 RCI Document Competition Awards

Our REI Engineers team in Raleigh is eager to begin work on this project. We are working significantly below capacity and are sincerely interested in personally ensuring the success of this roof replacement / envelope repair project.

If you have any questions or require additional information, please do not hesitate to contact me directly. We are eager to earn the award of this project and sincerely appreciate your consideration.

Respectfully Submitted,

Kenneth (Ken) Tyner, PE, RRC

Executive Vice President of REI Engineers, Inc.

(919) 845-1450 x222 (office)

(919) 219-3296 (mobile)

ktyner@reiengineers.com

9121 Anson Way, Suite 100 Raleigh, NC 7615 REI Engineers employs the largest number of RCI registered professionals of any firm in the region. These registrations indicate a higher level of understanding and expertise than unregistered individuals, and is a sign of continuing education and growth in roofing, waterproofing, exterior wall and window system design and construction practices.



Image Source: www.rci-online.org



# DESIGNER SELECTION – HANES ART CENTER ROOF REPLACEMENT AND BUILDING ENVELOPE REPAIRS

This project will replace the existing 26,000 square feet of built-up roof at Hanes Art Center. The project includes envelope repairs to clean and re-seal the control and expansion joints in the exterior brick walls. Additional repairs include recaulking stone coping and metal counter-flashing and the addition of permanent fall protection. The roof material tested positive for asbestos and will require abatement as a part of the project.

The project budget is estimated at \$1,160,000 and will be funded by Repairs and Renovations funds.

This project was advertised on March 17, 2016. Seven (7) proposals were received. Four (4) firms were interviewed on May 3, 2016. Members of the Board of Trustees did not participate in the interviews.

The committee recommended the selection of the three firms in the following priority order:

1.	Terracon Consultants	Raleigh, NC
2.	REI Engineers	Raleigh, NC
3.	Atlas Engineers	Raleigh, NC

The firms were selected for their past performance on similar projects, strength of their consultant team and experience with campus projects.

#### **Recommended action:**

A motion to approve the three firms in the following priority order:

1. Terracon Consultants	Raleigh, NC
2. REI Engineers	Raleigh, NC
3. Atlas Engineers	Raleigh, NC



Mr. Robert M. Cwikla, AIA, LEED AP
Facilities Architect
Department of Facilities Planning
103 Airport Drive
Campus Box #1090
The University of North Carolina at Chapel Hill
Chapel Hill, North Carolina 27599-1090

Subject: The University of North Carolina at Chapel Hill

**Hanes Art Center Roof Replacement & Envelope Repairs** 

**Chapel Hill, North Carolina** 

Dear Mr. Cwikla:

Terracon Consultants, Inc. is pleased to submit our Letter of Interest and supporting information to provide consultant and design services for Hanes Art Center – Roof Replacement and Envelope Repairs. We have had the pleasure of working on the University of North Carolina at Chapel Hill campus in the past and hope to continue this working relationship. Our firm's Facilities Group specializes in roofing design, waterproofing and building envelope consulting services.

**Terracon Consultants,** was founded in 1965 and specializes in providing innovative engineering services directed toward obtaining effective, economical and low maintenance roofing, waterproofing and building envelope systems on our client's facilities. Such long term and unique experience allows us to be regarded as one of the most qualified and respected firms in the country.

#### Why select Terracon?

- **Experience:** Our experienced staff has a proven track record of providing innovative, cost effective solutions for long term performance for our clients. We have been providing these services to the State of North Carolina institutional clients for over 50 years.
- Commitment: At Terracon, we have committed to providing all of our work in the safest work environment for our
  employees and our clients. At Terracon, safety is a core value and an operational priority.
- Responsiveness: Acting quickly to meet your deadlines, our employee owners are always available to you.
- **Resourcefulness:** Applying new processes, methodologies, and techniques allows us to take a proactive approach to solving project challenges and deliver your projects better and faster.
- Reliability: With vast experience working in local conditions, Terracon is a dependable partner throughout the life of your project.

Terracon is positioned and ready to meet the needs of the University of North Carolina at Chapel Hill and are confident that we will provide you with the high level of service you require. We would love the opportunity to work with you again!

Christine M. aniglen

Respectfully,

**Terracon Consultants, Inc.** 

Jóseph Ánetrella, AIA, FCSI, LEED AP BD+C

Senior Project Manager

Christine M. Quigley, PE, RRC, BECxP, LEED AP BD+C

Principal

Enclosure: Submittal: (5 Hard Copies and 1 Electronic PDF)

Terracon Consultants, Inc. 2401 Brentwood Road, Suite 107, Raleigh, NC 27604 P 919.873.2211 F 919.873.9555 terracon.com

Environmental - Facilities - Geotechnical - Materials

### <u>DESIGNER SELECTION – ADDRESSABLE FIRE ALARM PANEL INSTALLATION IN</u> FOUR BUILDINGS

This project will address existing and outdated analog fire alarm control panels and analog initiating devices requiring replacement. New addressable fire alarm control panels and devices will increase the reliability and effective coverage of the fire detection systems. This project scope includes systems in four buildings: Hamilton Hall, Hill Alumni Center, Student Recreation Center, and Ackland Art Museum.

The Project budget is \$541,000 and will be funded by Repairs and Renovations funds.

This project was advertised on March 3, 2016. Six (6) proposals were received. Four (4) firms were interviewed on April 19, 2016. Members of the Board of Trustees did not participate in the interviews.

The committee recommended the selection of three firms in the following priority order:

1. Dewberry Raleigh, NC

2. Sigma Engineered Solutions Morrisville, NC

3. Stanford White Raleigh, NC

The firms were selected for their strength of the project team, specific project approach on recent electrical renovation projects and previous University and State Construction Office experience.

#### **RECOMMENDED ACTION**

A motion to approve the three firms in the following priority order:

1. Dewberry Raleigh, NC

2. Sigma Engineered Solutions Morrisville, NC

3. Stanford White Raleigh, NC



March 24, 2016

Ms. Sarah M. Towles, PE **Project Manager Facilities Services 103 Airport Drive** Campus Box #1821 The University of North Carolina at Chapel Hill Chapel Hill, NC 27599-1821

Reference: Request for Letters of Interest and Current SF-330

**Install Addressable Fire Alarm Panels** 

Dear Ms. Towles:

Dewberry Engineers Inc. (Dewberry) is pleased to present our letter of interest and SF330 for the Install Addressable Fire Alarm Panels project encompassing the following buildings: Hamilton Hall, George Watts Hill Alumni Center, Student Recreation Center and Ackland Art Museum. This statement of qualifications has been prepared to present our experienced and qualified team for consideration by the University. Although Dewberry is not classified as a HUB firm in the State of North Carolina, we fully comply with all HUB requirements and strive to exceed the HUB participation goals of our clients.

Dewberry has a long history of completing successful projects within the UNC System, as well as countless other higher education clients throughout the nation. Dewberry is fully committed to our higher education clients and is proud to showcase this commitment by disclosing that we had over \$13M in revenue associated with our education clients in 2014. Our vast experience with the North Carolina State Construction Office, and the ability to share "best practices" for similar services at other Colleges and Universities, makes the Dewberry Team an outstanding partner for engineering work at the University of North Carolina at Chapel Hill.

We are confident that the following differentiators uniquely qualify the Dewberry Team for this contract:

- 1. **Experienced Project Team:** The Dewberry project team offered for the Install Addressable Fire Alarm Panels project provides the University with four distinct advantages: (1) Strong Contract Manager with significant higher education experience, (2) the commitment of our staff to provide "on the ground" support at the University and face to face interaction with the State Construction Office, (3) the experience of our engineering staff in working with higher education institutions, and (4) the knowledge base of our engineering staff specific to Fire Alarm system replacements, retrofit, and renovations.
- 2. **Responsiveness:** Dewberry understands that a large part of the success for any project is responsiveness. Our Raleigh office is approximately 30 minutes from the UNC-Chapel Hill campus. Project personnel can be available in person within an hour of the University staff request. This level of responsiveness will allow for better decision making in regards to design and construction issues as well as fosters strong professional relationships between our staff through personal interaction.

Ms. Sarah Towles, PE Install Addressable Fire Alarm Panels March 24, 2016 Page 2 of 9

3. <u>State Construction Office Coordination:</u> With a strategic office in Raleigh, Dewberry offers a strong local presence at the State Construction Office that allows for expedited responses to state questions or comments. In addition, our long standing relationship with the State Construction Office personnel, guidelines, and regulations helps us to prepare our design documents with a goal of minimizing review periods, while ensuring conformance for project approval requirements.

The following information requested in the RFP summarizes Dewberry's qualifications for this project, with more information to follow in the SF330 form:

#### 1. SPECIALIZED OR APPROPRIATE EXPERIENCE IN THIS TYPE OF PROJECT.

Dewberry's successful approach to projects results in impressive cost and schedule performance, no matter what the project type. This is due to Dewberry's total quality approach, clear definition of the scope, definition of the client's goals and objectives, and assignment of individual team responsibilities. Similar projects that demonstrate the desired consultant criteria above and are referenced in Section F of the submittal include:

- Washington Duke Inn & Golf Club Fire Alarm System Upgrade Dewberry completed design services for the upgrade of the existing fire alarm system supporting the facility. The existing system was an EST2 networked system which had been declared obsolete by the manufacturer. The system was upgraded to replace the existing EST2 control panels with the latest EST3 Series control panels. All existing signaling line circuit devices, such as smoke detectors, pull stations, and control relay, and notification horn and strobe appliances remained and was reconnected to the new control panels. By upgrading to the latest EST3 Series control panels and installing the newest technology for the system controls, we were able to utilize existing infrastructure and devices thus reducing required downtimes and system cost.
- **City of Richmond City Hall Fire Alarm Upgrades** Dewberry provided engineering design services for the replacement of the existing fire alarm and sprinkler systems serving the 18 story high-rise administrative facility. The new addressable, voice evacuation fire alarm system features distributed audio amplifiers and strobe notification circuit power supplies located in a networked cabinet on each floor to facilitate future renovation. The system also features a primary control panel located in the fire command center on the first floor and secondary control located in the penthouse. Each floor is supported by a separate Class A SLC device circuit fed from one of the two control panels. The entire system operates on a Class X network.
- Virginia Tech Lane Hall Fire Alarm Upgrade The historic Lane Hall building, the oldest building on campus originally constructed in 1888, currently houses offices and conference rooms. The new fire alarm featured full public area smoke detection and voice evacuation notification systems. Full sound level calculations were performed during design. Extensive conduit routing was shown on the design drawings to prevent exposed conduit in the entry ways and stairwells. System was designed around the Simplex 4100ES and interfaced with the existing campus wide Simplex network.
- **ECU Messick Theatre Fire Alarm Upgrade** Dewberry provided design for the existing fire alarm system with an addressable fire alarm system in the four buildings. Dewberry reviewed device, FACP, and FAAP locations and loop arrangements with the University. The existing fire alarm system was an old, 3-zone Simplex 4001 located in building A, pull stations were located at most exits in the building, and some horns, smoke detectors and duct smoke detectors were also



Ms. Sarah Towles, PE Install Addressable Fire Alarm Panels March 24, 2016 Page 3 of 9

located throughout the buildings. The new, fully addressable system includes devices located as required by NFPA 72

#### 2. PAST PERFORMANCE ON SIMILAR PROJECTS.

Dewberry feels that the best testament to our expertise in Fire Alarm Upgrade work is to showcase our completed projects. To keep the list a reasonable length, the list below has been limited to the work recently performed. Dewberry feels that the best testament to our **success** in Fire Alarm Upgrade work is the complement of repeat work with the same client as indicated in this list.

- Duke University Sands Building
- Duke University Telecom Building
- Duke University Washington Duke Inn & Golf Club
- Duke University Medical Sands Building
- ECU Clement Hall
- ECU Messick Theatre
- ECU Scott Hall
- ECU Tyler Hall
- Richmond City Hall
- Richmond Main Library
- Richmond John Marshall Courts
- Richmond John Marshall Plaza

- UNC Health Sciences Library
- UNC Carrington Hall Addition
- Virginia Tech Holden Hall
- Virginia Tech Lane Hall
- Virginia Tech Litton-Reaves
- Virginia Tech Norris Hall
- Virginia Tech Patton Hall
- RTI International ATB Building
- RTI International Cox Building
- RTI International Herbert Building
- Fort Bragg Training Support Center
- Fort Bragg Catering & Conference Center

## 3. ADEQUATE STAFF AND PROPOSED DESIGN OR CONSULTANT TEAM FOR THE PROJECT.

Dewberry has chosen an experienced team of engineers to work on this project. When we are presented with an opportunity to work on a project, the Project Manager carefully reviews the scope and anticipated requirements to determine whether we have staff members who are equipped to deliver optimal services. The specialized team members are:

- **Gregory Mills, PE, CEM®, LEED™ AP BD+C Contract Manager**: Greg will be responsible for the contract execution and serves as the client manager for our office.
- **Jeff Roney, PE, LEED™ AP Project Manager**: Jeff will be the primary point of contact for the project team. He will work closely with UNC at Chapel Hill Facilities personnel and will be responsible for the overall execution of the project. He will also serve as the engineer of record for the project.
- Peter Andersen, PE Electrical Department Manager: Peter will be responsible for the
  development of the electrical contract documents associated with the electrical systems design. He
  will coordinate closely with the project manager and staff to ensure the client's needs and
  expectations are fulfilled.
- **William Kemp, PE Electrical Engineer**: William will be responsible for the electrical design documents associated with the electrical design. He will work closely with the Project Manager to ensure the client's needs and expectations are captured in the design documents.



- **Stephen Webb, PE QA/QC** / **Senior Electrical Engineer**: Steve will focus on the quality control/quality assurance for the project. He will also provide technical assistance in the design process.
- **John Hawkins, AIA Architect**: John will be the architectural consultant to Dewberry for the project. John has worked with Dewberry on a number of projects at UNC at Chapel Hill.
- Christopher Shaw, EPA/AHERA/North Carolina Industrial Hygienist: Christopher will be the environmental consultant to Dewberry for the project. He will coordinate with UNC Environmental, Health, and Safety to review existing asbestos surveys and prepare a specification to address the removal and disposal of asbestos-containing materials (ACM).

#### 4. CURRENT WORKLOAD AND STATE PROJECTS AWARDED

Based on our understanding of the scope of work, we can dedicate ample capacity to complete this project within your timeframe. We have worked on large and small scale project within in the UNC System and routinely work with user representatives from Utilities & Engineering, Building

Project Curren		Percent Complete	I Completion Date	
WCPSS - Northridge	Pre-Design	25	PD complete December 2015	
WCPSS - Fuquay Varina	Pre-Design	25	PD complete January 2016	
Kernersville Library - AE1 Documents	Pre-Design	25	PD complete January 2016	
Duke Chesterfield Office/Lab Renovation	Schematic Design	25	SD Complete December 2015	
WCPSS - Stough ES	Schematic Design	20	SD Complete December 2015	
UNC Chapel Hill - Davie Hall, Gardner Hall & Lineberger Cancer Center (w/John Hawkins)*	Schematic Design	30	SD Complete November 2015	
CORPUD EM Johnson Drinking Water Lab	Schematic Design	30	SD Complete November 2015	
Alamance CC - Major HVAC & Controls	Design Development	50	DD Complete November 2015	
WCPSS Jefferys Grove ES HVAC Replacement	Design Development	50	DD Complete November 2015	
Duke Alumni Center	Design Development	50	DD Complete November 2015	
LabCorp RTI Lab Expansion	Design Development	35	DD Complete December 2015	
WCPSS - M11 Middle School	Construction Documents	50	CD Complete March 2016	
COR - Simmons Branch	Construction Documents	50	CD Complete January 2016	
City of Richmond WWTP Admin HVAC	Construction Documents	60	CD Complete February 2016	
Danville Social Services Building Elevator	Construction Documents	25	CD Complete January 2016	
Schmalz Assembly Plant w/ Ola Ferm	Construction Administration	70	Construction Complete March 2016	
Wake County SE Regional Library - Renovation	Construction Administration	70	Construction Complete March 2016	
Duke Energy Buck Steam Station - Raw Water	Construction Administration	75	Construction Complete April 2016	
DU Chapel AHU Replacement	Construction Administration	65	Construction Complete May 2016	
Danville - DRRB (99276083)	Construction Administration	65	Construction Complete June 2016	
WTCC Skilled Trades and RP3	Construction Administration	70	Construction Complete July 2016	
Buncombe Co Enka IS	Construction Administration	70	Construction Complete July 2016	
Richmond - 1801 Commerce Road Renovation	Construction Administration	60	Construction Complete August 2016	
Fed Ex Marietta - Addition and Renovation	Construction Administration	80	Construction Complete October 2016	
DOP Samarcand Public Safety Training Academy*	Construction Administration	60	Construction Complete December 2016	
WCPSS - M-13 MS w/P+W	Construction Administration	60	Construction Complete July 2017	
VT - Linton Reeves Fire Alarm	Construction Administration	80	On Hold	
VT - Patton Fire Alarm	Construction Administration	80	On Hold	
VT - Lane Hall Fire Alarm	Construction Administration	80	On Hold	
Duke Univ - PARCS Power/Communication	Construction Administration	75	Construction Complete July 2016	
GMA Atlantic Beach New Well	Construction Administration	75	Construction Complete July 2016	
Duke FEL Lab HX	Construction Administration	80	Construction Complete May 2016	
DUMC North Pavilion Annunciator	Construction Administration	80	Construction Complete May 2016	
WCPSS - Morrisville ES HVAC Renovations	Construction Administration	75	Construction Complete May 2016	
NCNG Readiness Centers - Salisbury Site/Building*	Construction Administration	80	On Hold	
NCNG Readiness Centers - Parkton Site/Building*	Construction Administration	80	On Hold	



Ms. Sarah Towles, PE Install Addressable Fire Alarm Panels March 24, 2016 Page 5 of 9

Maintenance & Operations, Environmental Health & Safety, and Energy Management. Because of our experience working with the State Construction Office, we also know and have worked under their guidelines. Dewberry Engineers Inc. has access to the full resources of the Dewberry Enterprise with a total staff of over 2,000 strong. Following, we have listed major projects under contract for Dewberry's Raleigh MEPS team during the next twelve months.

# 5. PROPOSED DESIGN APPROACH FOR THE PROJECT INCLUDING DESIGN TEAM AND CONSULTANTS.

Our project approach would begin with a thorough survey of the existing facility to identify the existing fire alarm system and its coverage. The survey would also include review of the existing raceway, particularly for manual pull stations and wall mounted devices, to determine items that could be reused. We would also take significant measurements of ceiling heights, room obstructions, and special construction elements to ensure proper audible coverage patterns. Existing ceiling types will be identified to assist in determining conduit routing requirements. Door and wall types will also be verified to ensure the new design will provide adequate audio transmission for each space. Record drawings would be collected from Plan Room for review of each building. During this phase, our team consultants will engage with building stakeholders to determine existing conditions for each facility. Our architectural consultant will assist in evaluating the existing architectural components to identify architectural work that may be required for a successful system upgrade. Our environmental consultant will work closely with UNC Environment, Health, and Safety (EHS) to determine if further remediation will be required for each facility to allow for design implementation.

During the design of the new system, specific attention would be placed on the installation schedule and phasing. Fire alarm system replacement while a building is continuously occupied can be difficult. Often the construction schedule will require both systems to be operational at the same time. During the design, Dewberry will work with the University and key building stakeholders to determine the best method for scheduling construction. It may be as simple as completely installing the new system before removing the existing. A different option could require phasing where both systems are operation and system components, such as pull stations, or annunciation/evacuation zones are switched over from the existing system to the new system one at a time. The switchover of any such phasing work must be accomplished during unoccupied hours or a fire watch may be required by the local fire marshal. In addition to the schedule and phasing, the design will also consider the environments where new fire alarm system components are being placed. Existing device locations will be evaluated for re-use consideration. Information gathered during each facility survey will allow us to determine potential new device locations and help identify critical areas where further discussion and planning with facility stakeholders may be needed to confirm a mutual solution for the design.

Also important to the design approach is identifying locations for fire alarm system equipment and determining if specialized equipment rooms are necessary. It is our experience that the fire command center description in NFPA 72 is referring to the fire alarm system equipment and not necessarily the specialized command room required by the North Carolina Statewide Building Code and the State Construction Office. Preliminary discussions with Permitting and Inspections are important for early approval of equipment locations. The voice command console should be located for convenient access by responding fire fighters, but also protected from inappropriate use. The fire alarm control unit itself could be located with the command console or it could be located centrally to the facility. Additionally the power supplies and batteries supporting the notification appliance circuits and voice amplifiers could be located centrally with the control unit or they could be distributed throughout the facility.



#### 6. RECENT EXPERIENCE WITH PROJECT COSTS AND SCHEDULES

Dewberry has completed numerous projects that demonstrate we are very familiar with the principles, personnel, and procedures expected. Staff members regularly attend national conferences to stay current with national trends. We take schedule compliance and designing within the agreed construction budget seriously. We fully understand that in the facilities management business, delivering a project on schedule and within the budget are the two critical success factors. In the event a project costs exceed the budget, we assist in the value engineering process to allow construction to continue.

The majority of Dewberry's projects require some level of cost estimating. Whether it is a rough funding-level estimate or a detailed independent estimate for bidding, the Dewberry team will provide a wealth of experience in this area. A cost estimate will be generated and updated at each design phase submittal. This allows the cost to be projected and contained during the design process. As designers, we prepare construction documents with a keen eye for project costs.

	SCHEDULE		CONSTRUCTION BUDGET	
PROJECTS	Design Time Contract	Actual Design Time	Budget	Actual Cost
NC State Data Center II – Utility Redundancy	6 months	6 months	\$945,000	\$887,000
East Carolina University Belk Residence Hall	10 months	10 months	\$846,000	\$769,500
NC State University Fountain Dining Hall Chilled Water Extension	3 Months	3 Months	\$150,750	\$101,232
WCPSS Pleasant Union Elementary School HVAC Upgrades	3.5 Months	3.5 Months	\$1,300,000	\$1,021,000
WCPSS Morrisville Elementary School HVAC Upgrades	4 Months	4 Months	\$1,300,000	\$988,466
WCPSS West Cary Middle School Upgrades	10 Months	10 Months	\$2,521,915	\$2,057,000

#### 7. CONSTRUCTION ADMINISTRATION CAPABILITIES

The Project Manager has primary responsibility and is the point of contact for the client and the contractor. For small to medium sized projects, these are advantages to the approach. With the Project Manager being responsible for construction administration services, he has full knowledge of the project and design, ready access to the design team, and an understanding of the client's processes and procedures for construction activity documentation and management. Dewberry routinely provides complete construction administration services. We anticipate the construction administration services will include:

- Review and approval of construction documents
- Site visits to verify adherence to contract documents
- Monitor construction activities to confirm overall construction schedule is maintained
- Prepare and distribute field reports as outlined in the scoping document
- Review pay applications
- Respond to requests for information (RFI's) and proposal requests



Ms. Sarah Towles, PE Install Addressable Fire Alarm Panels March 24, 2016 Page 7 of 9

## 8. PROXIMITY TO AND FAMILIARITY WITH THE AREA WHERE THE PROJECT IS LOCATED

Our Dewberry team is located in Raleigh, NC, only miles away from the project site. Our location allows us to serve the University particularly well as we are in close proximity to state regulatory agencies and maintain good working relationships through frequent personal contact. We feel this is a distinct advantage as we have established a good rapport and reputation with the agencies through frequent positive personal contacts.

# 9. RECORD OF SUCCESSFULLY COMPLETED PROJECTS WITHOUT ANY MAJOR LEGAL OR TECHNICAL PROBLEMS

Dewberry has a successful history of completing projects to meet our clients' expectations. Quality design, commissioning, and an established QA process reiterate our statement of having a record of successfully completing projects. Dewberry is currently (and has been over the past 10 years) involved in a limited number of legal claims. We are confident in our ability to successfully defend, or settle on favorable terms, all such outstanding claims. Furthermore, for the protection of Dewberry and its clients, Dewberry always maintains a comprehensive insurance program which includes professional liability, workers' compensation, comprehensive general liability, automobile and umbrella policies, with limits sufficient to cover the defense and payment of all outstanding claims against Dewberry. In the opinion of Dewberry's management, no claim or lawsuit currently pending against Dewberry will materially affect Dewberry's ability to perform this project.

Dewberry has completed 100+ projects subject to NC Office of State Construction review which demonstrates we are very familiar with the principles, personnel, and procedures expected. Dewberry also had significant experience working with the Department of Insurance on Code related issues prior to State Construction Office taking over Code review of state owned projects.

As we have demonstrated to the University, we stand behind our services. When there have been problems or issues, including errors and omissions, Dewberry has proactively dealt with and resolved the problem through fair and reasonable negotiations.

# 10. HUB PARTICIPATION IN PROPOSED TEAM STRUCTURE; AND WHO AND HOW HUB DESIGNERS WERE UTILIZED ON PREVIOUS PROJECTS

Dewberry supports UNC at Chapel Hill's program to provide equal access to information and opportunities for minority and women owned construction contractors, designers, and businesses. In addition, we embrace the requirements of Senate Bill 914 to require the good faith efforts of all state universities and public entities in the recruitment and selection of minority firms to reach a 10% minimum participation level on public sector projects. We will include minority/woman owned businesses on our project teams when possible and appropriate for the project. Dewberry is committed to meet or exceed our clients' goals, including the University's HUB goals and welcome your suggestions for utilizing the services of your preferred disadvantaged businesses.

Dewberry is an Equal Opportunity Employer that participates in an approved Affirmative Action Program that is currently on file with EOTC. Dewberry has and will continue to recruit, hire, transfer, promote, demote, compensate, train, and make any other employment decisions without discrimination because of race, religion, color, national origin, gender, age, disability, veteran status, marital status, sexual orientation, citizenship status or any other artificial barrier.



Ms. Sarah Towles, PE Install Addressable Fire Alarm Panels March 24, 2016 Page 8 of 9

In addition, the selection of subcontractors, consultants, material suppliers and equipment leasers shall be done without regard to their race, color, creed, religion, sex, age, national origin, mental or physical disability, marital status, citizenship status, sexual orientation, veteran status, affection preference, or any other artificial barrier. We will also enforce a code of conduct that is intended to keep our workplace free of any form of sexual harassment.

#### 11. INCLUDE CURRENT 330 FORM OF LEAD FIRM AND EACH PROPOSED CONSULTANT

Current Dewberry 330 Form is included with this document.

#### 12. THE TEAM'S RECENT EXPERIENCE WITH THE NC STATE CONSTRUCTION OFFICE

Some of our recent State Construction projects, in addition to those listed in Section F, are listed below:

- NC State University Data Center II- Utility Redundancy Dewberry is providing engineering and construction administration services for the project consisting of the installation of a new onsite, 160-ton air cooled, redundant chiller (connected to the central chilled water loop to run at designated times), replacement of building chilled water pumps, and the replacement of four existing DX CRAC units in the existing Data Center with new chilled water CRAC units. The design was completed, including installation of a temporary chiller, to allow the building operation to continue uninterrupted. The HVAC system serving the data center will provide approximately 160 tons of cooling.
- UNC at Chapel Hill, Gardner Hall, Davie Hall, & Lineberger Cancer Center Elevator Modernizations Dewberry is providing professional engineering services for the modernization of three elevators at UNC at Chapel Hill. The project at Gardner Hall includes an elevator modernization of one elevator through an expansion on the existing shaft, adjacent area renovations to create housekeeping closets and restrooms on each floor, and an electrical service upgrade for the building. Elevator modernizations at Davie Hall and Lineberger Cancer Center include one elevator in each building. Design services include mechanical, fire protection, and electrical construction documents, permitting, construction administration assistance, and record drawings for the elevators.
- UNC at Chapel Hill, Ehringhaus, Hinton James & Carmichael Residence Hall Elevator
  Modernizations Dewberry is providing professional engineering services for the modernization
  of seven elevators at UNC at Chapel Hill. Modernizations include two elevators sharing a common
  shaft in Ehringhaus Residence Hall and in Carmichael Residence Hall. Elevator modernizations at
  Hinton James Residence Hall include three elevators with two sharing a common shaft. Design
  services include mechanical, fire protection, and electrical construction documents, permitting,
  construction administration assistance, and record drawings for the elevators.
- **UNC at Chapel Hill, School of Dentistry Vacuum System Replacement** Dewberry is providing professional engineering services for the replacement of the existing dental vacuum system that served Old Dental Building, Tarrson and Brauer Hall, with two separate dental vacuum systems. New vacuum piping is PVD and will replace existing copper piping in problem areas.



Ms. Sarah Towles, PE Install Addressable Fire Alarm Panels March 24, 2016 Page 9 of 9

Dewberry is grateful for the opportunity to submit this Statement of Qualifications and looks forward to the possibility of working with UNC Chapel Hill on this project. If you have any questions or wish to discuss our qualifications in greater detail, please do not hesitate to contact me at 919.425.7631.

Sincerely,

**Dewberry Engineers Inc.** 

Gregory A. Mils, PE, CEM®, LEED™ AP BD+C

Senior Associate

**Manager Building Services Group** 

Jeffrey A. Roney, PE, LEED™ AP

**Project Manager** 



#### **ATTACHMENT I**

## **DESIGNER SELECTION – MACNIDER HALL AIR HANDLING UNIT REPLACEMNT**

The project will replace the four air handling units (AHU's) located on and serving the entire 4th floor of MacNider Hall. These AHU's were originally installed in 1981 and are located within the mechanical rooms. The new AHU's will be connected to the existing duct system and will be equipped with digital controls. The building will be occupied during construction.

The project budget is \$850,000 and will be funded by Repairs and Renovations funds.

This project was advertised on March, 2, 2016. Ten (10) proposals were received. Three (3) firms were interviewed on April 20, 2016. Members of the Board of Trustees did not participate in the interviews.

The committee recommended the selection of three firms in the following priority order:

1. Engineered Designs, Inc. Raleigh, NC

2. McKim & Creed, Inc. Cary, NC

3. Sigma Engineered Solutions Morrisville, NC

The firms were selected for their strength of the project team, proposed design approach, previous University and State Construction Office experience, and current workload.

#### **RECOMMENDED ACTION**

A motion to approve the three firms in the following priority order:

1. Engineered Designs, Inc. Raleigh, NC

2. McKim & Creed, Inc. Cary, NC

3. Sigma Engineered Solutions Morrisville, NC



March 23, 2016

Joseph R. Magura, PE, PEM University of North Carolina at Chapel Hill Giles F. Horney Building, Facilities Services 103 Airport Drive, Campus Box 1090 Chapel Hill, NC 27599-1090

RE: Response to Designer Solicitation for Air Handling Units Replacement (4th Floor) - MacNider Hall

We are pleased to respond to the RFQ for Air Handling Units Replacement (4th Floor) in MacNider Hall. Engineered Designs, Inc. (EDi) is a consulting firm providing full-service engineering services as well as commissioning and energy consulting. EDi employs eighteen people and is structured into four distinct design teams, a commissioning team, plus a construction administration team. We have enjoyed working with the University of North Carolina at Chapel Hill (UNC-Chapel Hill) over the years, and would appreciate the opportunity to continue by providing consulting engineering services for this project.

We understand this project is the replacement of the four AHUs located on and serving the 4th floor of the MacNider Hall building. These AHUs were originally installed in 1981. The mechanical rooms are very cramped with the AHUs and ducting. This floor contains offices, a few labs, and the School of Medicine planning office. New AHUs will be connected to the existing duct system and will be equipped with digital controls. Scheduling, phasing, and potential temporary equipment much be considered as required by the occupants.

Projects such as this require careful planning in design and construction. We at EDi understand this challenge simply due to the fact that we work with similar projects on a daily basis. Many of our projects require detailed thought processes during the design phase to plan the sequence of events such that the building remains safe and functional during systems renovations and upgrades.

We appreciate the opportunity to offer our engineering services and look forward to being able to be a part of your design team. Our sf330 Statement of Qualifications is enclosed. Please contact me by phone or email – gscoggins@engineereddesigns.com or contact our office if additional information is required.

Sincerely,

M. Ginger Scoggins, PE, CEM, CxA, LEED AP

President

Enclosures – Executive Summary and sf330 Statement of Qualifications MGS-mgl

#### **ATTACHMENT J**

# <u>DESIGNER SELECTION – REPLACEMENT OF ELECTRICAL SERVICE PANELS IN FIVE CAMPUS BUILDINGS</u>

This project will replace electrical switchgear and electrical distribution equipment that are considered at end of expected life and are obsolete, such that spare parts are no longer available and power service to the buildings is unreliable. Buildings included in this project are Battle Hall, Vance Hall, Pettigrew Hall, Swain Hall and Fetzer Gym.

The project budget is \$680,000 and will be funded by Repairs and Renovations funds.

This project was advertised on March 3, 2016. Eight (8) proposals were received. Three (3) firms were interviewed on April 18, 2016. Members of the Board of Trustees did not participate in the interviews.

The committee recommended the selection of three firms in the following priority order:

1. Sigma Engineered Solutions Morrisville, NC

2. Stanford White Raleigh, NC

3. Engineered Designs, Inc. Cary, NC

The firms were selected for their strength of the project team, specific project approach on recent electrical renovation projects and previous University and State Construction Office experience.

#### **RECOMMENDED ACTION**

A motion to approve the three firms in the following priority order:

1. Sigma Engineered Solutions Morrisville, NC

2. Stanford White Raleigh, NC

3. Engineered Designs, Inc. Cary, NC



March 24, 2016

MAR24 16 1:51PM

Jeannie Smith, PE University of North Carolina at Chapel Hill **UNC Chapel Hill Facilities Services Department** Giles F. Horney Building Campus Box # 1821 103 Airport Drive Chapel Hill, North Carolina 27599-1821

Re: **Proposal for Engineering Services** 

**Project: Replacement of Electrical Service Panels in Five Campus Buildings** 

#### Dear Jeannie:

We at Sigma Engineered Solutions, PC (Sigma) are pleased to offer this Letter of Interest and Statement of Qualifications for Engineering Services for UNC-Chapel Hill for the above referenced project. Sigma is a Professional Engineering Corporation based in Morrisville, NC; and has been in business since 2003. The three owner/principals have been working in the Triangle area design and construction market for over 25 years.

We provide mechanical, plumbing, fire protection and electrical/telecommunications/fire alarm system design services as our core business. In addition, we provide all of the ancillary services related to building systems design including Due Diligence Investigations, Whole Building Energy Modeling and services related to LEED Certification.

We currently have twelve employees, including four registered Professional Engineers, one of which holds dual registration as a licensed architect and three LEED Accredited Professionals. Our team members are active members in ASHRAE, USGBC and NFPA.

We hope the selection committee looks favorably on our credentials, and we look forward to continuing our relationship with The University of North Carolina Chapel Hill.

Singere

Reginald D. Adams, PE, LEED AP

phone: 919.840.9300 - fax: 919.840.9600 - www.sigmaes.com

# <u>SITE APPROVAL – PRACTICE FIELD RENOVATION AND EXPANSION AT FINLEY</u> FIELDS

This project will add a new NCAA running track, 1 new artificial grass field and associated throwing areas and replace 2 existing grass fields with 2 artificial fields to be used as practice fields by multiple men's and women's varsity sports programs. Additionally, the project will add 2 new grass fields south of the Finley Field complex that would serve as practice fields for multiple men's and women's varsity sports programs.

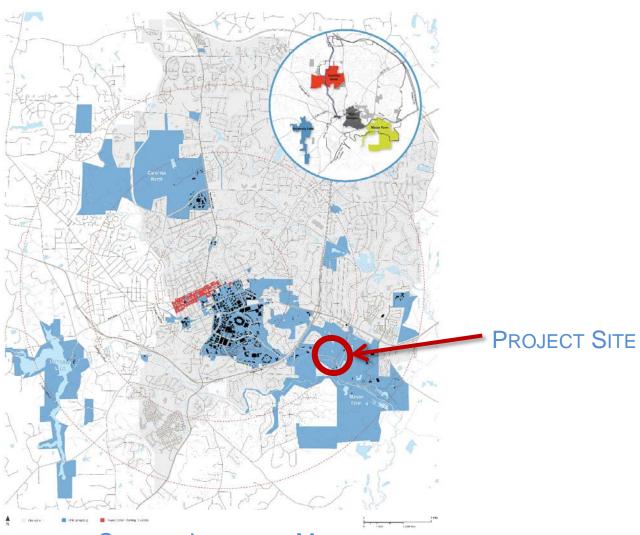
The project budget is \$12,083,062 and will be funded by Educational Foundation.

The Chancellor's Buildings and Grounds Committee approved the site at its May 5, 2016 meeting.

#### **RECOMMENDED ACTION**

A motion to approve the expanded site.

# PRACTICE FIELD RENOVATION AND EXPANSION AT FINLEY FIELDS

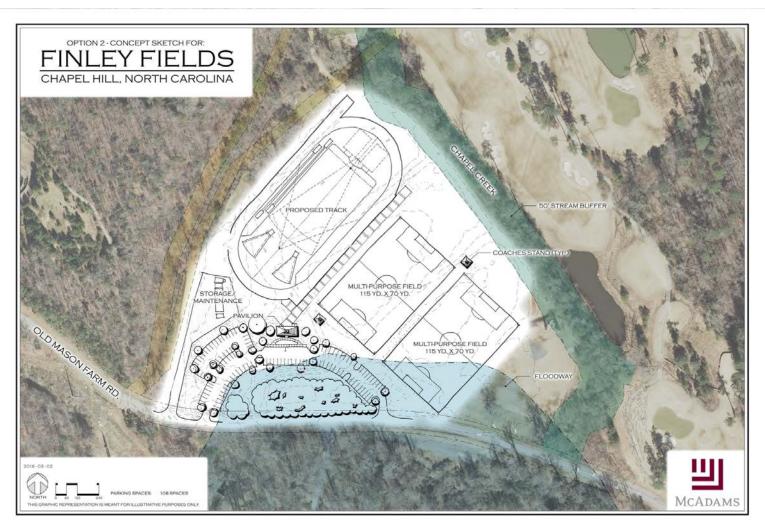






CAMPUS LOCATION MAP

# PRACTICE FIELD RENOVATION AND EXPANSION AT FINLEY FIELDS



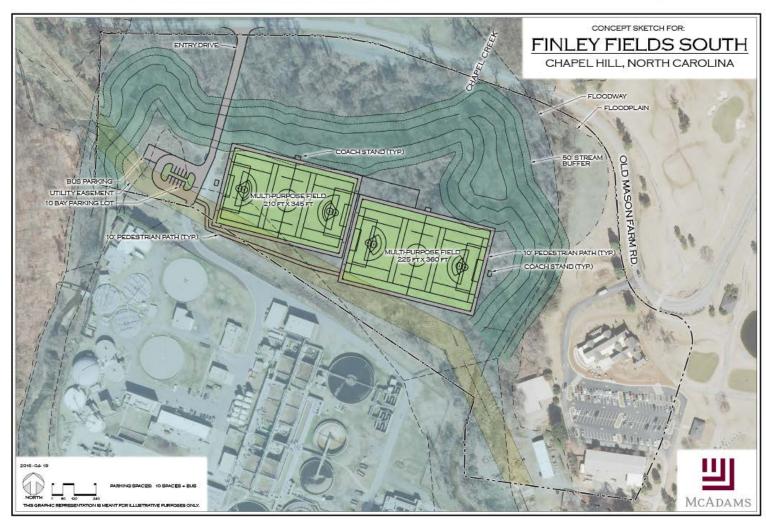


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SITE PLAN

# PRACTICE FIELD RENOVATION AND EXPANSION AT FINLEY FIELDS





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### SITE APPROVAL – SECU FAMILY HOUSE EXPANSION

This project will expand the current SECU Family House by adding 36 guest rooms which will provide the facility with 75 total guest rooms. In addition, the expanded site will provide walking and exercise area, a meditation garden and a common outdoor area within easy access of the Family House for the guests.

The expanded site is approximately 3.6 acres in area which will bring the total site to 9.36 acres.

The construction budget is \$7.0M and will be funded by the SECU Family House.

The Chancellor's Buildings and Grounds Committee approved the site at its May 5, 2016 meeting.

#### RECOMMENDED ACTION

A motion to approve the expanded site.

#### **ATTACHMENT M**

## FOR INFORMATION – UNC HOSPITALS SURGICAL TOWER

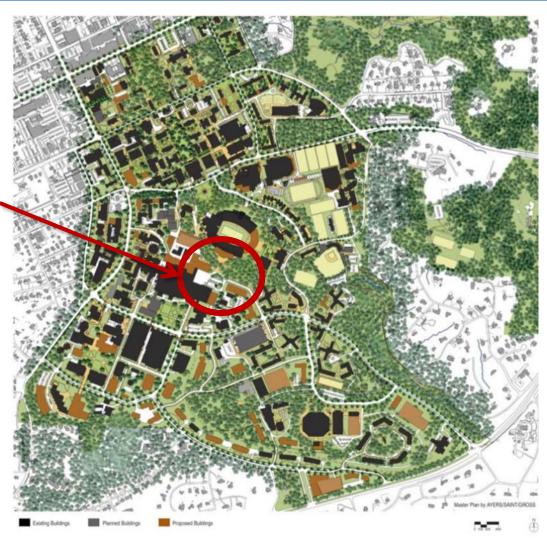
This project will add new operating rooms, central sterile processing, administrative support space and infrastructure. The site was approved by the Board of Trustees at the September 2014 meeting.

The project budget is \$177 million and will be funded by the UNC Health Care System.

This information is presented to the Board of Trustees for review and comment.

No formal action is requested at this time.

# **UNCH SURGICAL PAVILION**



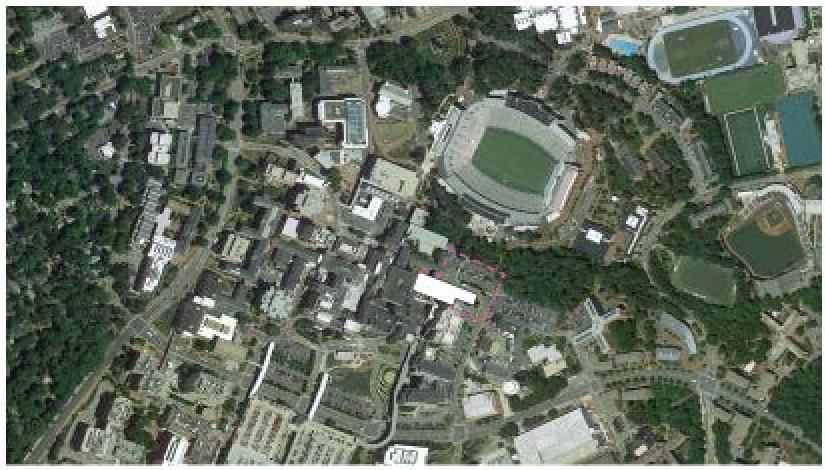


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PROJECT SITE



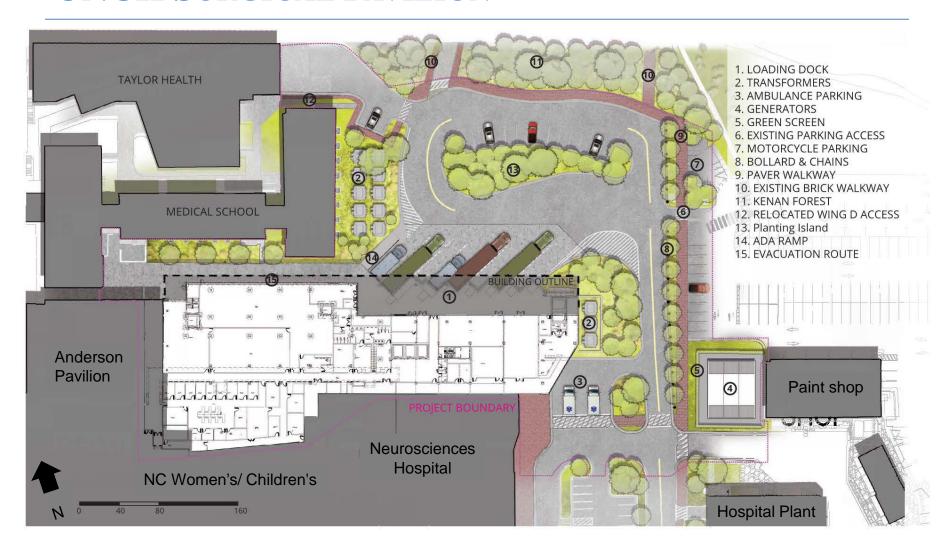


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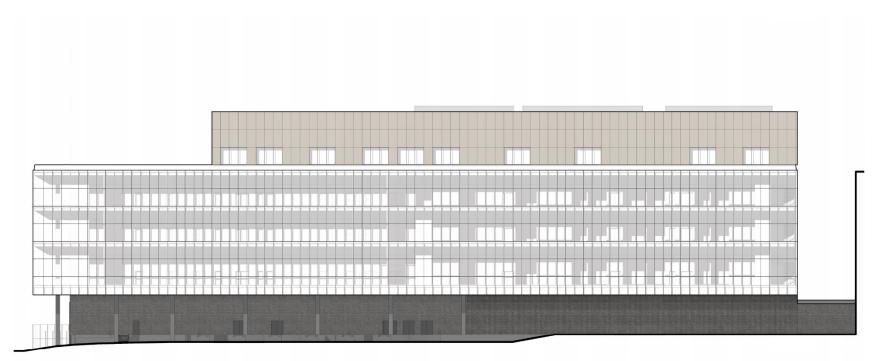
CAMPUS SITE PLAN

BOARD OF TRUSTEES





#### PROJECT SITE PLAN

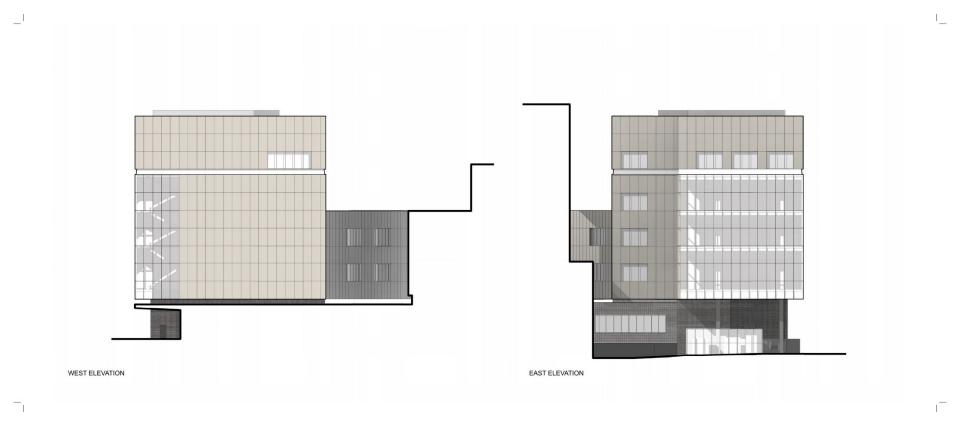


NORTH ELEVATION



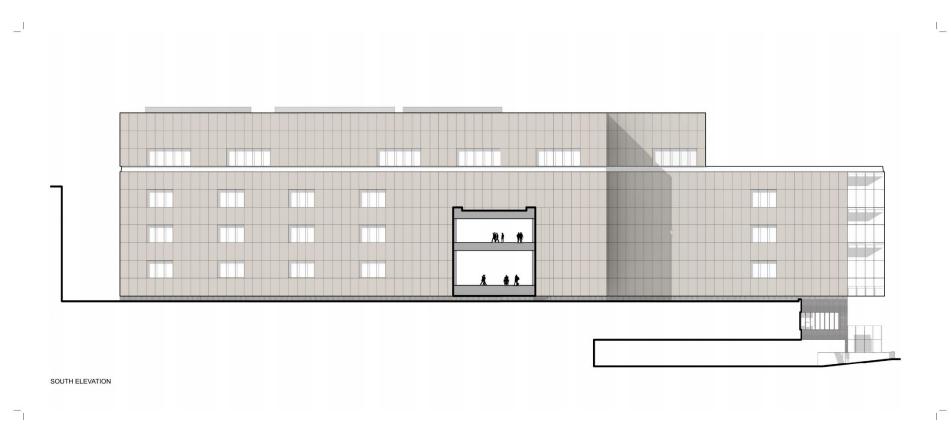
NORTH ELEVATION

**BOARD OF TRUSTEES** 





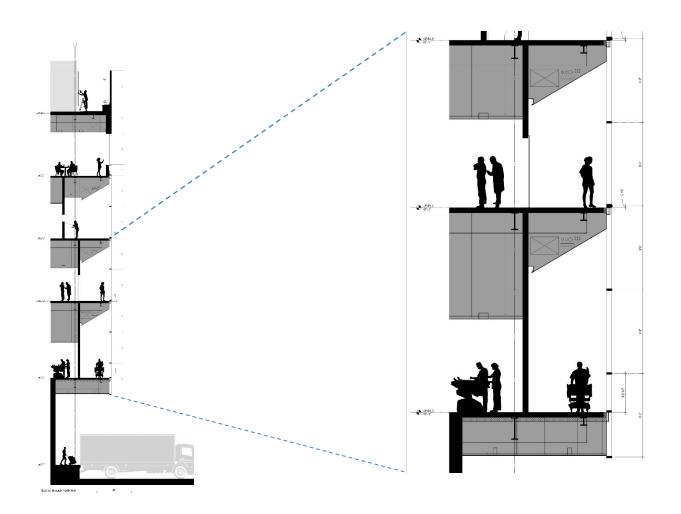
#### **EAST & WEST ELEVATIONS**





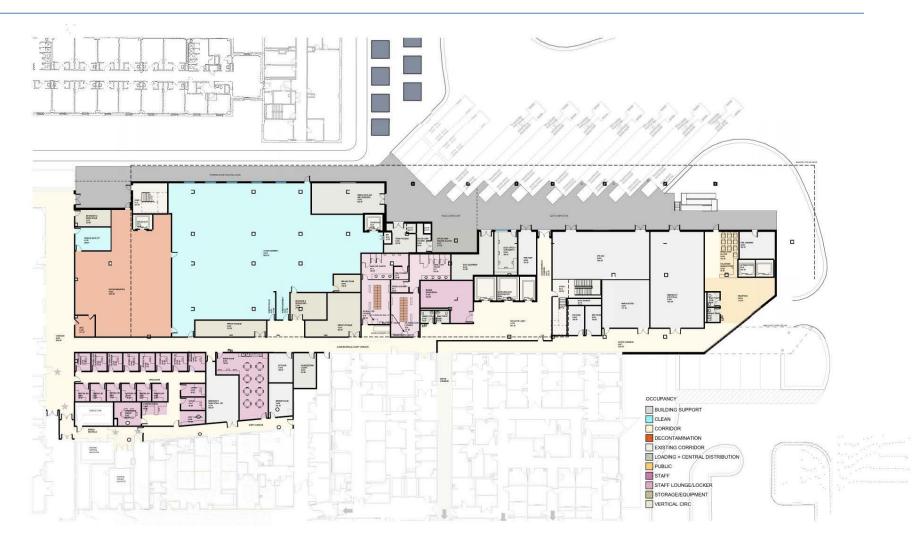
**SOUTH ELEVATION** 

**BOARD OF TRUSTEES** 



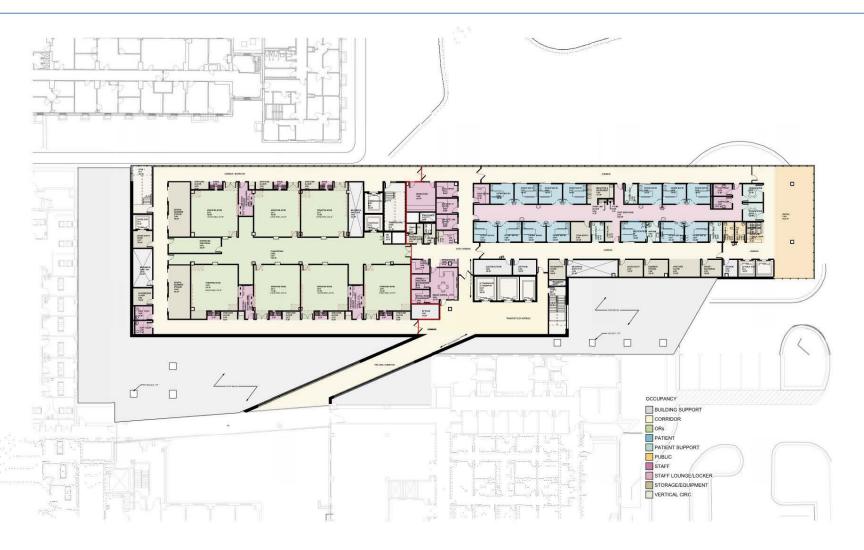














LEVEL 2 PLAN



STADIUM PERSPECTIVE



**BOARD OF TRUSTEES** 

# REPORT TO THE FINANCE, INFRASTRUCTURE, AND AUDIT COMMITTEE OF THE BOARD OF TRUSTEES

Internal Audit Department

University of North Carolina at Chapel Hill

May 18, 2016



May is Internal Audit Awareness Month

#### UNC - CHAPEL HILL

#### INTERNAL AUDIT DEPARTMENT

# SUMMARY OF AUDIT ACTIVITIES AND PROJECTS COMPLETED AND IN PROCESS DECEMBER 14, 2015 TO APRIL 17, 2016

#### **COMPLETED**

<u>Center for Health Promotion and Disease Prevention</u> – a financial, compliance, and operational review of fiscal processes in the Center particularly those related to retro-active salary changes and other grant management activities. We found issues related to posting salary reallocations promptly and worked with center management to identify ways to resolve these issues.

<u>Learn NC</u> – limited review of activity in sponsored awards managed by the School of Education (School). The review focused on allocablity of contract costs and the nature of financial information provided to faculty members who are performing contract work for outside entities. We determined that costs charged to the contracts we reviewed were allocable but the informal reports obtained by a former faculty member were not what he needed to manage his contact budget. The issues identified are no longer relevant. The School no longer does contract work for outside entities and does not plan to do so in the futures. Sponsored projects awarded to School faculty members are managed through other units, such as the Frank Porter Graham Child Care Development Center, rather than the School.

<u>Coal Sorbent Contract</u> – review of procurement process related to purchase of limestone and similar sorbents used to reduce sulfur-dioxide emissions from the University's coal-fired boilers. Also, reviewing monitoring processes related to sorbent quality and performance. We determined that procurement and award of the sorbent contract were handled correctly. We also found that management properly monitored coal to sorbent ratios and took appropriate action in response to performance variances

<u>Anesthesiology</u> – review of an anonymous report related to fringe benefits – specifically health care coverage - for fellows in Anesthesiology. We found that the fellows were temporary employees and, therefore, were not eligible for healthcare coverage. The grant that supports the fellowship funds only the employer's share if Social Security for fellows. No report.

#### IN PROCESS

<u>Orthodontics</u> – assistance to management with a review of processes and transactions related to acquisition of dental molds and implants for patient care and instructional purposes. We found that two cases of conflict of interest involving labs used to produce dental molds for Orthodontics and the need for better processes related to how dental labs are selected to provide services. The University no longer does business with the labs involved and one of the employees who had the conflict of interest is no longer with the University.

<u>Auxiliary Services Equipment</u> – referral from the Office of the State Auditor – review of equipment acquisition and management related to Dining Services. Field work is complete and we found no problems with these activities.

<u>Lineberger Cancer Center Grants</u> - referral from the Office of the State Auditor – review of cost management related for sponsored funds.

<u>Clery Act Reporting</u> – a review of processes used to manage notifications and reporting required by the "Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act". Internal Control review in process.

#### UNC - CHAPEL HILL

#### INTERNAL AUDIT DEPARTMENT

# SUMMARY OF AUDIT ACTIVITIES AND PROJECTS COMPLETED AND IN PROCESS DECEMBER 14, 2015 TO APRIL 17, 2016

<u>Historically Under-utilized Business Program</u> – a review of processes used to promote and encourage full and open competition, promote equal access to contracting opportunities among the various contractors and vendors that do business with the University, and ensure compliance with policy a reporting requirements related to this program. Planning and preliminary survey in process

<u>Green Cart</u> – referral from the Office of the State Auditor – a review to determine if participant payments were being made in keeping with terms of a program working on sustainable food systems, food access, and health disparities in North Carolina. We determined that payments were initially delayed due to issues with obtaining the advances used to make the payments. Those issues were resolved and participant payments are up-to-date. Field work is complete.

<u>Follow-up to 2015 Financial Statement Audit Findings</u> – follow-up to assess adequacy of steps taken to correct findings involving matters related to financial reporting. This project must be complete within 90 days of the date the Office of the State Auditor released its audit report.

The University has made satisfactory progress toward correcting findings from the financial statement audit. Some project tasks will not be completed and most financial statement preparation and year-end tasks will not occur until after the end of the 90-day follow-up period. Therefore, we will need to perform an additional assessment of corrective action after the end of the fiscal year to take place concurrently with development of the fiscal year 2016 financial statements and preparation for the FY2016 state audit.

<u>Follow-up to 2015 Federal Compliance Audit Finding</u> – follow-up to assess adequacy of steps taken to correct lack of certification of time and effort charged to sponsored awards.

The most recent time and effort certification cycle was not complete as of the date this Summary of Audit Activities was written. However, in our opinion, this finding has been corrected. As of April 28, 2016 approximately 99.5% of time and effort reports were certified. A new policy requires that any payroll charge that have not been certified by the end of the certification period will be removed from the project.

#### ON-GOING ADVISORY PROJECTS AND COMMITTEE WORK

- PeopleSoft conversion
- HIPAA Security Liaisons;
- University-wide Committee on the Protection of Personal Data;
- CERTIFI committee working to manage compliance with Payment Card Industry Standards;
- IT Governance Committee;
- Multiple short-term projects done to assist management with identifying and managing risks.

#### UNC - CHAPEL HILL

#### INTERNAL AUDIT DEPARTMENT

# SUMMARY OF AUDIT ACTIVITIES AND PROJECTS COMPLETED AND IN PROCESS DECEMBER 14, 2015 TO APRIL 17, 2016

#### **OTHER ACTIVITIES**

- A staff member presented at the International Conference of the Information System Audit and Control Association.
- Policies and Procedures Audit Working Group;
- Ethics and Integrity Working Group
- Served as member of a committee developing recommendations for developing data mining and analysis processes and other techniques for managing risks of a decentralized operating environment
- Served as member of search committee for new Chief Privacy Officer
- Served as member of search committee for the new Executive Director of Enterprise Financial Accounting and University Controller.
- Served as member of committee developing recommendations for implementing new policy and procedure management ecosystem.
- Assisted the Office of the State Auditor staff with data retrieval for two investigations.
- Assisting the Schools of Medicine and Public Health with data retrieval and analysis for two projects.
- Assisted with interviews for new Director of Tax Policy and Analysis.
- Continued to expand use of ACL software to develop more powerful analytics.

#### Audit Schedule - 2015/16 Revised as of April 14, 2016

(Some projects will be in process at June 30, 2016)

Planned Audits	Original <u>Budget</u>	Revised <u>Budget</u>	
Large Equipment Repair Contract - in process	20	20	
Historically Underutilized Business Program	400	400	
Clery Act Reporting	350	350	
Deferred due to increase in budget for follow-up of prior internal aud	it findings -1-		
Department Audit - TBN	350	0	-2-
Cost Transfers - Sponsored Awards	400	0	-3-
Deferred due to delays in filling vacancies			
Athletics Facilities	400	0	
Title IX Monitoring	400	0	
Select Agents and Hazardous Materials	450	0	
Academic Performance Monitoring	450	0	
<b>Total for Routine Audits</b>	3,220	<u>770</u>	
Annual Projects			
Follow-up for 2014 OSA Audit - in process	100	100	
Enterprise Resource Planning	500	150	-4-
Risk Assessment and Audit Plan	200	200	
Follow-up for Prior Internal Audit Findings	300	900	-1-
Follow-up for 2015 OSA Audit	150	150	
UNC Business Compliance Program 2016	100	100	_
<b>Total for Annual Projects</b>	1,250	<u>1,500</u>	
Audit Related	1,300	1,600	-5-
Requested Reviews, Consulting, and Other Unplanned Projects	<u>2,700</u>	<u>3,000</u>	-5-
Total Hours Scheduled	8,470	6,870	
Total Hours Available	8,373	6,771	
Under/ <over>Scheduled_</over>	(97)	(99)	_

<sup>-2- =</sup> lowest risk project scheduled

<sup>-3- =</sup> project would have needed to be rescheduled due to status of conversion of sponsored research data in ConnectCarolina

<sup>-4- =</sup> Internal Audit will not need to be as heavily involved in the ConnectCarolina conversion in the post-implementation phase

<sup>-5- =</sup> additional hours allocated based on trends for thee types of projects

# UNC Internal Audit Use of Audit Resources Summary of Audit Hours Used - FY 2016 as of 04/17/16

	<b>Budgeted</b>	Pro-Rated Budget -1-	Hours <u>Charged</u>	Variance (Over)/Under
Total Hours Available -2-	12,133			
Less: Training & Professional Development	(460)	(372)	533	(161)
Less: Leave	(2,000)	(1,615)	2,155	(540) -4-
Less: Other Administrative Time -3-	(1,300)	(1,050)	887	163
Total for Leave & Administrative	(3,760)		3,575	(538)
Hours Available for Projects	8,373			
Routine Audits	3,220	2,601	190	2,411
Annual Projects	1,250	1,010	541	468
Audit Related	1,300	1,050	1,442	(392)
Unplanned Projects	2,700	2,181	2,553	(372)
Total Scheduled/Charged	8,470		4,726	2,115
Under/ <over> Scheduled</over>	(97)			

- -1- = budget hours pro-rated for 42 weeks
- -2- = seven staff members at 2080 hours/year adjusted for vacancies and medical leave
- -3- = meetings, professional reading, and other office activities
- -4- = variance due to parental leave and summer vacations in 1st half of fiscal year
- -5- = budgeted hours based on being fully staffed in 2nd half of fiscal year but fewer hours available in 1st half due to two vacancies

#### Re: Variances

Routine audits - 600 hours re-allocated to follow-up of prior internal audit findings; 1,430 hours lost from not having vacancies filled by January 1, 2016

Annual Projects - most work related to follow-up or prior internal audit findings will be done in May and June Audit Related - more time that budgeted spent on developing data analysis tools and on short-term consulting Unplanned Projects - more time needed to complete projects than initially projected; in some cases projects were reopened due to related events that happened after the report was issued.

# UNC Internal Audit 2015/16 Audit Schedule as of 04/17/16

#### **Planned Audits**

#### Complete

Large Equipment Repair Contract

#### In Process

Historically Underutilized Business Program Clery Act Reporting

#### Deferred - due to increase in budget for university-wide follow-up

Cost Transfers - Sponsored Awards Department Audit - TBN

#### Deferred - due to delay in filling vacancies

Title IX Monitoring
Select Agents and Hazardous Materials
Academic Performance Monitoring
Athletics Facilities

#### **Annual Projects**

#### **Complete**

2014 Office of the State Auditor A-133 Follow-up (added) Risk Assessment and Audit Plan

#### On-Going

Enterprise Resource Planning

#### In Process

Follow-up for Prior Internal Audit Findings Follow-up for 2015 OSA Audit

#### **Scheduled**

**UNC Business Compliance Program 2016** 

#### **Audit Related**

#### Complete

Ethics and Integrity Task Force Policies and Procedures Committee Chief Privacy Officer Search Committee Exec. Director for Enterprise Financial Reporting Search

#### On Going

Continuous Auditing
Office Systems
HIPAA Security Liaison
University Committee on the Protection of Personal Data
IT Governance Committee & Data Custodian Work
CERTIF (PCI Standards)
Audit Committee
Audit Planning
Audit Process Improvement
HIPAA Risk Assessment

KPI Reporting UNCAA Conference Planning Director of Tax Policy Search Multiple Short-term Advisory Projects

new

#### **Special Projects & Management Requests**

#### **Complete**

Energy Services 2015 Environmental Sciences & Engineering #2 Learn NC Health Promotion and Disease Prevention Coal Sorbent Contract

#### In Process

Women's Studies Neurology - NIH (reopened) Orthodontics Auxiliary Equipment -1-Lineberger Cancer Center Grants -1-HPDP - Green Cart Anesthesiology

new

# The University of North Carolina at Chapel Hill EXECUTIVE SUMMARY

# Board of Trustees May 2016

#### ATTACHMENT O

Appendix A

					<u> </u>		1	1
No.	College/Division	Name	Dept./School	Current Rank	New Rank	Tenure Request Reason	Effective Date	Salary
Pers	sonnel Actions							
Nev	Appointments wit	hout Tenure						
	Health Affairs	Scott Magness	Biomedical Engineering	Research Associate Professor	Associate Professor		5/20/2016	\$131,018.00
2	Health Affairs	Jose Zevallos	Otolaryngology/Head Neck Surgery	Clinical Assistant Professor	Associate Professor		5/20/2016	\$253,809.00
3	Academic Affairs	Sayan Banerjee	Statistics and Operations Research	N/A	Assistant Professor		7/1/2016	\$88,000.00
			African, African American & Diaspora					
4	Academic Affairs	Maya Berry	Studies	N/A	Assistant Professor		7/1/2016	\$77,000.00
	Academic Affairs	Tracy Bersley	Dramatic Art	N/A	Assistant Professor		7/1/2016	\$68,000.00
	Academic Affairs	Marc Callahan	Music	N/A	Assistant Professor		7/1/2016	\$70,000.00
	Academic Affairs	Danielle Christmas	English & Comparative Literature	N/A	Assistant Professor		7/1/2016	\$72,000.00
	Academic Affairs	Taylor Cowdery	English & Comparative Literature	N/A	Assistant Professor		7/1/2016	\$68,000.00
9	Academic Affairs	Nicolas Fraiman	Statistics and Operations Research	N/A	Assistant Professor		7/1/2016	\$82,000.00
							7/4/004/	440.000.00
	Academic Affairs	Maggie Fritz-Morkin	Romance Studies	N/A	Assistant Professor		7/1/2016	\$68,000.00
	Academic Affairs Academic Affairs	Lamar Graham Eisha Jain	Romance Studies School of Law	N/A N/A	Assistant Professor Assistant Professor		7/1/2016 7/1/2016	\$65,000.00 \$130,000.00
	Academic Affairs	Jonathan Jensen	Exercise & Sport Medicine	N/A	Assistant Professor		7/1/2016	\$130,000.00
	Academic Affairs	Zachary Kerr	Exercise & Sport Medicine	Adjunct Assistant Professor	Assistant Professor		7/1/2016	\$80,000.00
	Academic Affairs	Jonas Monast	School of Law	N/A	Assistant Professor		7/1/2016	\$129,000.00
	Health Affairs	Janelle Moulder	OB-GYN	Clinical Instructor	Assistant Professor		6/30/2016	\$200,000.00
	Academic Affairs	Keely Muscatell	Psychology & Neuroscience	N/A	Assistant Professor		7/1/2016	\$82,000.00
	Academic Affairs	Celia Shiau	Biology	N/A	Assistant Professor		7/1/2016	\$85,000.00
19		Lee Stoner	Exercise & Sport Medicine	N/A	Assistant Professor		7/1/2016	\$79,500.00
	Academic Affairs	Angela Stuesse	Anthropology	N/A	Assistant Professor		7/1/2016	\$80,000.00
21		Eva Telzer	Psychology & Neuroscience	N/A	Assistant Professor		7/1/2016	\$90,000.00
			, 3,	Nominated Clinical Assistant				
22	Health Affairs	Benjamin Vincent	Medicine	Professor	Assistant Professor		6/1/2016	\$170,000.00
Add	ition of Joint App	ointment without Te	nure					
0	''							
Pro	notion to Full Prof	essor						
1	Academic Affairs	Tamar Birckhead	School of Law	Associate Professor	Professor		7/1/2026	\$139,445.00
2	Health Affairs	Noel Brewer	Health Behavior	Associate Professor	Professor		6/1/2016	\$120,710.00
3	Health Affairs	Joel Farley	Eshelman School of Pharmacy	Associate Professor	Professor		5/19/2016	\$158,000.00
4	Academic Affairs	Christopher Lee	School of Information and Library Science	Associate Professor	Professor		7/1/2016	\$92,938.00
_		II	Germanic & Slavic Languages &		D (		7/4/00:	40.4.40
	Academic Affairs	Hana Pichova	Literatures	Associate Professor	Professor		7/1/2016	\$84,410.00
	Health Affairs	Anthony Viera	Family Medicine	Associate Professor	Professor		6/1/2016	\$158,622.00
	ppointments to the		Echolman School of Pharmany	Ai-tt Do-f	Assistant Drofessor		7/4/0047	¢110.004.00
	Health Affairs Academic Affairs	Delesha Carpenter Steven King	Eshelman School of Pharmacy School of Media and Journalism	Assistant Professor Assistant Professor	Assistant Professor Assistant Professor		7/1/2017 7/1/2017	\$118,004.00 \$82,236.00
	Academic Affairs	Paul Lanier, III	School of Social Work	Assistant Professor	Assistant Professor		7/1/2017	\$79,490.00
1	Academic Affairs	Melissa Lippold	School of Social Work	Assistant Professor	Assistant Professor		7/1/2017	\$79,490.00
-4	Academic Andra		OGNOSI OI SOCIAI WOLK	Madiatel Linicazni	ASSISTANT FORCESON		//1/201/	ψ17, <del>4</del> 70.00
5	Health Affairs	Jacqueline McLaughlin	Eshelman School of Pharmacy	Assistant Professor	Assistant Professor		6/27/2017	\$117,545.00
6	Health Affairs	Kathryn Muessig	Health Behavior	Assistant Professor	Assistant Professor		6/15/2017	\$97,180.00
0	oa.ti / tildii 5	jii wacoong	Todat Solidvioi	100000111110100001	, 155.5td 11 1 10105501		0/10/2017	ψ77,100.00

# The University of North Carolina at Chapel Hill EXECUTIVE SUMMARY Board of Trustees May 2016

Appendix A

No. College/Division	Name	Dept./School	Current Rank	New Rank	Tenure Request Reason	Effective Date	Salary
Designation/Reappoi	ntments to Departme	ental Chair					
1 Health Affairs	Kevin Kelly	Pediatrics	Professor	Interim Chair		3/18/2016	\$262,500.00
2 Health Affairs	Cristen Page	Family Medicine	Clinical Associate Professor	Interim Chair		4/1/2016	\$172,330.00
Designation/Reappoi	ntments to Distingui	shed Professorship					
				Bowman & Gordon Gray			
1 Academic Affairs	Samuel Amago	Romance Studies	Professor	Distinguished Term Professor		7/1/2016	\$102,580.00
2 Academic Affairs	James Clemens	Physics & Astronomy	Professor	Distinguished Professor		7/1/2016	\$147,903.00
				Bowman & Gordon Gray			1
3 Academic Affairs	Kathleen Duval	History	Professor	Distinguished Professor		7/1/2016	\$101,275.00
4 Academic Affairs	Robert Goldstein	Biology	Professor	Distinguished Professor		7/1/2016	\$108,702.00
				Charles Addison & Elizabeth Ann			1
				Sanders Distinguished Professor of			1
5 Health Affairs	Mac Greganti	Medicine	Professor	Medicine		6/1/2016	\$343,468.00
6 Academic Affairs	Sudhanshu Handa	Public Policy	Professor	Distinguished Professor		7/1/2016	\$129,835.00
				Distinguished Term Professor in			1
7 Academic Affairs	Beth Kurtz-Costes	Psychology & Neuroscience	Professor	Undergraduate Education		7/1/2016	\$112,213.00
8 Academic Affairs	Wayne Lee	History	Professor	Dowd Distinguished Professor		7/1/2016	\$104,650.00
9 Academic Affairs	Paul Leslie	Anthropology	Professor	Distinguished Professor		7/1/2016	\$128,350.00
				John W. & Anna H. Hanes			1
10 Academic Affairs	John McGowan	English & Comparative Literature	Professor	Distinguished Professor		7/1/2016	\$153,577.00
				Distinguished Term Professor in			
11 Academic Affairs	Benjamin Meier	Public Policy	Associate Professor	Undergraduate Education		7/1/2016	\$92,933.00
				Marion Stedman Covington			
12 Health Affairs	Patrick Nachman	Medicine	Professor	Distinguished Professor		6/1/2016	\$210,002.00
				Eugene G. Falk Distinguished			
13 Academic Affairs	Laurie Paul	Philosophy	Professor	Professor		7/1/2016	\$150,464.00
				Yeargan Distinguished Professor of			
14 Health Affairs	Patrick Sullivan	Psychiatry	Professor	Psychiatry		5/20/2016	\$194,963.00
15 Academic Affairs	Antoinette Toppin	Music	Professor	Distinguished Professor		7/1/2016	\$134,687.00
16 Academic Affairs	Marcey Waters	Chemistry	Professor	Distinguished Professor		7/1/2016	\$135,079.00
<b>Actions Conferr</b>	ing Tenure						
Promotion Conferring							
Tromotion comenting	Tonaro						
1 Health Affairs	Jennifer Leeman	School of Nursing	Assistant Professor	Associate Professor	Promotion based on excellence in research, and high quality teaching and service	7/1/2016	\$81,486.00
	Jennier Econium	The state of the s			Promotion based on excellence in research, in addition to his significant	77112010	
2 Health Affairs	Edward Miao	Microbiology & Immunology	Assistant Professor	Associate Professor	contributions to teaching	7/1/2016	\$115,000.00
New Appointments C						77 172010	\$113,000.00
TOW Appointments C	Januaring Tenure	T					
1 Academic Affairs	Fouad Abd-El-Khalick	School of Education	N/A	Professor	Appointment based on research, teaching and service	7/1/2016	\$292,000.00
					, , , , , , , , , , , , , , , , , , ,		,
				Drofoccor/Appo Chao Danadall			I
				Professor/Anne Shea Ransdell and William Garland "Buck" Ransdell, Jr.			1
2 Academic Affairs	Carissa Hessick	School of Law	N/A	Distinguished Professor of Law	Appointment based on scholarly record, teaching and service	7/1/2016	\$148,000.00
3 Academic Affairs	F. Andrew Hessick	School of Law	N/A	Professor	Appointment based on scholarly record, teaching and service	7/1/2016	\$148,000.00
57.154451111671114113		- 5501 O. Edit			1. Tr	77 172010	Ţ. 10,000.00

# The University of North Carolina at Chapel Hill EXECUTIVE SUMMARY Board of Trustees May 2016

#### Appendix A

N	o. C	College/Division	Name	Dept./School	Current Rank	New Rank	Tenure Request Reason	Effective Date	Salary
П						C. Richard Morris Distinguished			
	4 H	lealth Affairs	Thomas O'Shea, Jr.	Pediatrics	Nominated Clinical Professor	Professor	Appointment based on excellence in clinical scholarship, teaching and service	6/1/2016	\$350,427.00
	5 A	Academic Affairs	Andrew Chignell	Philosophy	N/A	Associate Professor	Appointment based on research, teaching and service	7/1/2016	negotiating
	6 A	Academic Affairs	Amy Gladfelter	Biology	N/A	Associate Professor	Appointment based on research, teaching and service	7/1/2016	\$140,000.00
	7 H	lealth Affairs	Zibo Li		Nominated Research Associate Professor	Associate Professor	Appointment based on excellence in research	6/1/2016	\$130,000.00
A	dditi	ion of Joint Appo	ointment Conferring	Tenure					
	0								
C	orre	ctions							
L	0								

#### The University of North Carolina at Chapel Hill EXECUTIVE SUMMARY Board of Trustees July 14, 2014

#### Appendix B

No.	College/Division	Name	School	Department	Rank	Reason	Requested Amount of Increase **	Percent of Increase **	June 30 Salary	Current Salary	New Salary	Effective Date
	V	ation Actio	Union involved and a section	each action has been confirmed by the a	ppropriate Department and School/Division manageme d approved at the Department level, as well as by the a red Research for grant-funded salaries		** Based on cumula 6/30 s		,		,	
	<u>'</u>											
						Increase due to promotion to Associate Professor with						
1	Academic Affairs	Janice Anderson	Education		Assistant Professor	tenure	\$14,395	19.90%	\$72,345	\$72,345	\$86,740	7/1/2016
						Increase due to appointment as Margaret & Paul A						
,	Academic Affairs	James Clemens	Arts and Sciences	Physics and Astronomy	Professor/Associate Dean	Johnston Professorship and named Jaroslav Folda Professorship	\$22,000	12.03%	\$182,903	\$182,903	\$204,903	7/1/2016
	Academic Analis	James Ciemens	ALIS ALIA SCIENCES	PHYSICS and ASHOROTHY	Professor/Associate Deari	Increase due to new secondary appointment as	\$22,000	12.03%	\$182,903	\$182,903	\$204,903	// 1/2016
						Associate Dean of Global Engagement (was Interim						
						Associate Dean, requesting temporary become long						
3	Health Affairs	Stephen Eckel	Pharmacy	Practice Advancement	Clinical Associate Professor/Vice Chair	term)	\$19,429	12.73%	\$147.640	\$172.069	\$172.069	6/30/2016
						Increase due to new secondary appointment as	. ,			. ,		
4	Health Affairs	Rebecca Fry	Public Health	Environmental Sciences	Associate Professor	Director of Superfund Research Program	\$15,900	14.47%	\$109,900	\$120,800	\$125,800	5/1/2016
						Increase due to appointment as Margaret & Paul A						
						Johnston Professorship and named James Peacock III						
5	Academic Affairs	Bob Goldstein	Arts and Sciences	Biology	Professor	Professorship	\$15,000	13.80%	\$123,702	\$108,702	\$108,702	7/1/2016
						Increase due to appointment as Margaret & Paul A						
١,				D 1 11 D 11	5 (	Johnston Professorship and named Larry Gilbert	445 000	44.550/	*400.005	4400.005	4444.005	7/4/004/
6	Academic Affairs	Sudhanshu Handa	Arts and Sciences	Public Policy	Professor	Professorship Increase due to retention counteroffer, as Professor	\$15,000	11.55%	\$129,835	\$129,835	\$144,835	7/1/2016
						Hooghe has received an offer from European						
٦,	Academic Affairs	Liesbet Hooghe	Arts and Sciences	Political Science	Distinguished Professor	University Institute	\$22,750	12.98%	\$175,250	\$175,250	\$198,000	7/1/2016
<del>-</del>	Academic Analis	Liesbet Hoogne	Arts drid Sciences	1 Ollical Science	Distinguished Frolessor	Increase due to appointment as Pardue Distinguished	\$22,730	12.7070	\$175,250	\$173 <sub>1</sub> 230	\$170,000	7/1/2010
8	Academic Affairs	Paul Leslie	Arts and Sciences	Anthropology	Professor	Professor	\$15.000	11.69%	\$128.350	\$128,350	\$143.350	7/1/2016
Ť	7100001111071110110	T dai Eoolio			1 10/05501	Increase due to retention counteroffer, as Dr Li has	\$10,000	1110770	<b>\$120,000</b>	ψ120 <sub>1</sub> 000	4110,000	77 172010
9	Academic Affairs	Fei Li	Arts and Sciences	Economics	Assistant Professor	received an offer from the University of Miami	\$13,500	10.67%	\$126,500	\$126,500	\$140,000	7/1/2016
						Increase due to promotion to Research Associate						
10	Health Affairs	Kavita Ongechi	Public Health	Maternal and Child Health	Research Assistant Professor	Professor	\$13,217	14.90%	\$88,709	\$92,257	\$101,926	5/1/2016
						Increase due to new secondary appointment as						
	Academic Affairs	Mary-Rose Papandrea	Law		Professor	Associate Dean for Academic Affairs	\$26,250	15.00%	\$175,000	\$175,000	\$201,250	7/1/2016
12	Academic Affairs	Eileen Parsons	Education		Associate Professor	Increase due to promotion to Professor	\$11,007	11.97%	\$91,993	\$91,993	\$103,000	7/1/2016
12	Academic Affairs	Clara Scarry	Arts and Sciences	Anthronology	Professor	Increase due to new secondary appointment as Director of the Research Labs of Archeology	\$11,650	11.16%	\$104,350	\$104,350	\$116,000	7/1/2016
13	Academic Analis	Cidia Scally	ALIS ALIA SCIENCES	Anthropology	Floressor	Director of the Research Labs of Archeology	\$11,030	11.10%	\$104,330	\$104,330	\$110,000	7/1/2010
				Health Policy and		Increase due to pre-emptive retention as Dr. Wheeler						
14	Health Affairs	Stephanie Wheeler	Public Health	Management	Associate Professor	is being actively recruited by UCLA and Havard	\$18,212	14.90%	\$122,230	\$135,897	\$140.442	5/1/2016
15		E.Sp. Mario Fillodioi				and grant system and an arrangement	\$10,212	7070	ψ.LL/L30	\$100 <sub>1</sub> 071	ψ.10j.112	3, 1, 2 3 10
16												
17												
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25												

**Total Monetary** 

Compensation

Value of Non-Salary Salary

Compensation

Effective

Date

**End Date** 

1	Ion-Sala	ry Compen	sation Actio	ons							
0	N/A	N/A	N/A		N/A	N/A	N/A	N/A	N/A	N/A	NA

Reason

Rank

No. College/Division

Name

Department/School

#### The University of North Carolina at Chapel Hill EXECUTIVE SUMMARY Board of Trustees July 14, 2014

Appendix C

No. College/Division Name		Department/School	Rank	Description		
For Information						
0		N/A	N/A	N/A	N/A	N/A

Requested

						Increase	Percent of	Current		Effective
No.	College/Division	Name	Department/School	Rank	Reason	Amount	Increase	Salary	New Salary	Date
Co	mpensati	on Acti	ONS Upon imple	mentation, specific funding sources are revi	l by the appropriate Department and School/Division iewed and approved at the Department level, as we i Sponsored Research for grant-funded salaries					

Total

Monetary Duration Value of Nonof Non-Salary Salary

Compensatio Compensa Effective

**Effective** 

College/Division Name Department/School Rank Reason tion Date **End Date** 

# **Non-Salary Compensation Actions**

| 1 | N/A | NA |
|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|

#### **MEMORANDUM**

TO: Board of Trustees

From: Carol L. Folt

RE: Board of Visitors: Class of 2020 Nominations

DATE: May 10, 2016

The following individuals have agreed to serve on the UNC Board of Visitors, with your final approval at the May meeting.

	Name	City	State
1	Eric Becker	Baltimore	MD
2	Carl Belk	Charlotte	NC
3	J. Daniel (Dan) Bishop	Charlotte	NC
4	Louise Brady	Greensboro	NC
5	Richard (Rick) Brajer	Raleigh	NC
6	Philip Charles-Pierre	Brooklyn	NY
7	Allene Fuller Cooley	Charlotte	NC
8	Brian Craver	Charlotte	NC
9	Tom Cunningham	Gaithersburg	MD
10	Jesse Cureton	Waxhaw	NC
11	Linda Dahlgren	Greenville	SC
12	Adrian Douglas	Duluth	GA
13	Phillip N. Edwards	Jupiter	FL
14	Pamela Ferguson	New York	NY
15	Fredrick (Rick) Finger	Rye	NY
16	Veronica Mora Flaspoehler	Lincolnton	NC
17	John Fraley	Mooresville	NC
18	Jeremy Fry	Olathe	KA
19	Kara Henderson-Jeffries	Warrenton	NC
20	Arthur (A.B.) Henley, III	High Point	NC
21	John Hood	Raleigh	NC
22	Bobby Jenkins	Charlottesville	VA
23	Perrin Jones	Greenville	NC
24	Erik Lensch	Chapel Hill	NC
25	Shea Grisham Linden	Raleigh	NC
26	William Long	Newton	NC
27	Matthew (Tommy) Malone	Raleigh	NC
28	Dan McLamb	Raleigh	NC

29	Bruce McNair	Bethesda	MD
30	Mary (Scottie) Neill	Winston-Salem	NC
31	Tom Reddin	Charlotte	NC
32	Franklin Roberts	Raleigh	NC
33	Freddy Robinson	Greensboro	NC
34	Tanner G. Robinson	Winston-Salem	NC
35	Alicia Rodriguez	Asheville	NC
36	Elliott Stephenson	Cedar Hill	TX
37	Kathleen Watson Van Saun	Ridgewood	NJ
38	Talbert (Tab) Waldrop	Kernersville	NC
39	Reyna Walters	Washington	DC
40	Mitchell (Mickey) Watts	Concord	NC
41	John (Will) Whitley	Charlotte	NC
42	Charlotte Wickham	Charlotte	NC
43	Margaret Williams	Charlotte	NC
44	Thomas Wong	Durham	NC
45	Leonard Wood, Jr.	Atlanta	GA
46	Robert Zaytoun	Raleigh	NC

Last year, you approved Jennifer Halsey of Atherton, CA as the Board of Visitors chair. Doug Rothwell of Ann Arbor, MI has agreed to serve as vice chair, if elected.