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EDUCATION

- 2006 – Ph.D. in Computer Science& Engineering, The Ohio State University
  - *Honors: SBC Presidential Fellowship Dissertation Award*
- 2002 – M.S. in Computer and Information Science, The Ohio State University
- 1998 – B.Tech. in Computer Science & Engineering (with Honors), IIT Varanasi, India

EMPLOYMENT HISTORY

- July 2015 – Lillian & Morrie Moss Chair of Excellence in Computer Science, University of Memphis
- September 2015 – Professor with Tenure, Dept. of Computer Science, University of Memphis
- September 2014 – Director, NIH Center of Excellence for Mobile Sensor Data-to-Knowledge (MD2K)
- September 2011 – Associate Professor with Tenure, Dept. of Computer Science, University of Memphis
- August 2006 – August 2011: Assistant Professor, Dept. of Computer Science, University of Memphis
- January 2006 – August 2006: SBC Presidential Fellow, The Ohio State University
- September 2000 – December 2005: Graduate Research & Teaching Associate, The Ohio State University
- July 1998 – August 2000: Software Engineer, Siemens Communications Software, Bangalore, India

AWARDS & RECOGNITIONS

- 2015 – Moss Chair of Excellence in Computer Science, University of Memphis
- 2014 – "Eye of the Tiger", Alumni Association, University of Memphis
- 2013 – Alumni Association Distinguished Research Award, Univ. of Memphis
- 2012 – Distinguished Research Award, College of Arts & Sciences, Univ. of Memphis
- 2011 – Faudree Professorship, University of Memphis
- 2010 – America's Ten Most Brilliant Scientists under 38 ("**Brilliant Ten**"), Popular Science Magazine
- 2010 – First Tennessee Foundation Innovation & Entrepreneurship Fellowship
- 2008 – Early Career Research Award, College of Arts & Sciences, Univ. of Memphis
- 2006 – SBC Presidential Fellowship Dissertation Award, The Ohio State University

PUBLICATIONS (GOOGLE SCHOLAR CITATIONS: 5,200+)

1. S. M. Hossain, T. Hnat, N. J. Nasrin, J. Noor, B.-J. Ho, T. Condie, M. Srivastava, and S. Kumar. mCerebrum: A Mobile Sensing Software Platform for Development and Validation of Digital Biomarkers and Interventions. *ACM SenSys*, 2017. (14 pages)

2. J. M. Rehg, S. A. Murphy, and S. Kumar (eds.). Mobile Health: Sensors, Analytic Methods, and Applications. *Springer*, 2017.

3. W. Nilsen, E. Ertin, E. B. Heckler, S. Kumar, I. Lee, R. Mungaram, M. Pavel, J. M. Rehg, W. Riley, D. E. Rivera, and D. Spruijt-Metz. Modeling Opportunities in Cyber-Physical Systems. Book chapter in *Mobile Health: Sensors, Analytic Methods, and Applications* (eds. J. M. Rehg, S. A. Murphy, S. Kumar), Springer, pp. 443-453, 2017.

4. H. Sarker, K. Hovsepian, S. Chatterjee, I. Nahum-Shani, S. A. Murphy, B. Spring, E. Ertin, M. al'Absi, M. Nakajima, and S. Kumar. mDebugger: From Markers to Interventions: The Case of Just-in-time Stress Intervention. Book chapter in *Mobile Health: Sensors, Analytic Methods, and Applications* (eds. J. M. Rehg, S. A. Murphy, S. Kumar), Springer, pp. 411-433, 2017.

5. J. Gao, S. Baskar, D. Teng, M. al'Absi, S. Kumar, and E. Ertin. A New Direction for Biosensing: RF Sensors for Monitoring Cardio-Pulmonary Function. Book chapter in *Mobile Health: Sensors, Analytic Methods, and Applications* (eds. J. M. Rehg, S. A. Murphy, S. Kumar), Springer, pp. 289-312, 2017.

6. M. Rahman, N. Ali, R. Bari, N. Saleheen, M. al'Absi, E. Ertin, A. P. Kennedy, K. L. Preston, and S. Kumar. mDebugger: Assessing and Diagnosing the Fidelity and Yield of Mobile Sensor Data. Book chapter in *Mobile Health: Sensors, Analytic Methods, and Applications* (eds. J. M. Rehg, S. A. Murphy, S. Kumar), Springer, pp. 121-143, 2017.

7. B. Wagner, E. Liu, S. D. Shaw, G. Iakolev, L. Zhou, C. Harrington, G. Abowd, C. Yoon, S. Kumar, S. Murphy, B. Spring, and I. Nahum-Shani. eWrapper: Operationalizing Engagement Strategies in mHealth. *ACM UbiComp/IWSC Workshop on Mental Health and Wellbeing*, 2017.

8. M. Sharmin, T. Weber, H. Sarker, N. Saleheen, S. Kumar, S. Ahmed, and M. al'Absi. Opportunities and Challenges in Designing Participant-Centric Smoking Cessation Systems. *IEEE COMPSAC*, 2017.

9. S. Kumar, G. D. Abowd, W. T. Abraham, M. al'Absi, D. H. Chau, E. Ertin, D. Estrin, D. Ganesan, T. Hnat, S. M. Hossain, Z. Ives, J. Kerr, B. M. Marlin, S. A. Murphy, J. M. Rehg, I. Nahum-Shani, V. Shetty, I. Sim, B. Spring, M. Srivastava and D. W. Wetter. Center of Excellence for Mobile Sensor Data-to-Knowledge (MD2K), *IEEE Pervasive Computing*, 16(2), pp. 18-22, 2017. (invited)

10. N. Saleheen, S. Chakraborty, N. Ali, M. Rahman, S. M. Hossain, R. Bari, E. Buder, M. Srivastava, and S. Kumar. mSieve: Differential Behavioral Privacy in Time-series of Mobile Sensor Data. *ACM UbiComp*, pp. 706-717, 2016. **Honorable mention award**

11. S. Chatterjee, K. Hovsepian, H. Sarker, N. Saleheen, M. al'Absi, G. Atluri, E. Ertin, C. Lam, A. Lemieux, M. Nakajima, B. Spring, D. W. Wetter, and S. Kumar. mCrave: Continuous Estimation of Craving During Smoking Cessation, *ACM UbiComp*, pp. 863-874, 2016.

12. D. Kotz, C. A. Gunter, S. Kumar, J. P. Weiner. Privacy and Security in Mobile Health: A Research Agenda, *IEEE Computer*, vol. 49(6), pp. 22-30, 2016.

13. R. Adams, A. Parate, E. Thomaz, N. Saleheen, S. Kumar, and B. Marlin. Hierarchical Span-Based Conditional Random Fields for Labeling and Segmenting Events in Wearable Sensor Data Streams, *International Conference on Machine Learning (ICML),* pp.334-343, *2016.*

14. H. Sarker, M. Tyburski, M. Rahman, K. Hovsepian, M. Sharmin, D. Epstein, K. Preston, C. Debra Furr-Holden, A. Milam, I. Nahum-Shani, M. al'Absi, and S. Kumar. Finding Significant Stress Episodes in a Discontinuous Time Series of Rapidly Varying Mobile Sensor Data, *ACM CHI*, pp. 4489-4501. *2016.*

15. N. Saleheen, A. A. Ali, S. M. Hossain, H. Sarker, S. Chatterjee, B. Marlin, E. Ertin, M. al'Absi, and S. Kumar. puffMarker: A Multi-sensor Approach for Pinpointing the Timing of First Lapse in Smoking Cessation, *ACM UbiComp*, pp. 999-1010, 2015.

16. K. Hovsepian, M. al'Absi, E. Ertin, T. Kamarck, M. Nakajima, and S. Kumar. cStress: Towards a Gold Standard for Continuous Stress Assessment in the Mobile Environment, *ACM UbiComp*, pp. 493-504, 2015.

17. M. Sharmin, A. Raij, D. Epstein, I. Nahum-Shani, J. G. Beck, S. Vhaduri, K. Preston, and S. Kumar. Visualization of Time-Series Sensor Data to Inform the Design of Just-In-Time Adaptive Stress Interventions, *ACM UbiComp,* pp. 505-516, 2015.

18. S. Kumar, G. D. Abowd, W. T. Abraham, M. al'Absi, J. G. Beck, D. H. Chau, T. Condie, D. E. Conroy, E. Ertin, D. Estrin, D. Ganesan, C. Lam, B. Marlin, C. B. Marsh, S. A. Murphy, I. Nahum-Shani, K. Patrick, J. M. Rehg, M. Sharmin, V. Shetty, I. Sim, B. Spring, M. Srivastava and D. W. Wetter. *Center of excellence for mobile sensor Data-to-Knowledge (MD2K),* Journal of the American Medical Informatics Association (JAMIA), 22(6), pp. 1137-1142, 2015. (invited)

19. A. P. Kennedy, D. H. Epstein, M. L. Jobes, D. Agage, M. Tyburski, K. Phillips, A. Ali, R. Bari, S. M. Hossain, K. Hovsepian, M. Rahman, E. Ertin, S. Kumar, and K. Preston, "Continuous In-The-Field Measurement of Heart Rate: Correlates of Drug Use, Craving, Stress, and Mood in Polydrug Users," *Drug and Alcohol Dependence*, vol. 151, pp. 159-166, 2015.

20. Z. Zhang, Z. Lu, P. Sinha, and S. Kumar, "Ensuring Predictable Contact Opportunity for Scalable Vehicular Internet Access on the Go," *IEEE/ACM Transactions on Networking*, vol. 23(3), pp. 768-781, 2015.

21. H. Sarker, M. Sharmin, A. Ali, M. Rahman, R. Bari, M. Hossain, and S. Kumar, "Assessing the Availability of Users to Engage in Just-in-Time Intervention in the Natural Environment," *ACM UbiComp*, pp. 909-920, 2014.

22. M. Rahman, R. Bari, A. Ali, M. Sharmin, A. Raij, K. Hovsepian, M. Hossain, E. Ertin, A. Kennedy, D. Epstein, K. Preston, M. Jobes, S. Kedia, K. Ward, M. al'Absi, and S. Kumar, "Are We There Yet? Feasibility of Continuous Stress Assessment via Wireless Physiological Sensors," *ACM BCB*, pp. 479-488, 2014.

23. S. Vhaduri, A. Ali, M. Sharmin, K. Hovsepian, and S. Kumar, "Estimating Drivers' Stress from GPS Traces," *Automotive UI*, pp. 1-8, 2014.

24. M. Hossain, A. Ali, M. Rahman, E. Ertin, D. Epstein, A. Kennedy, K. Preston, A. Umbricht, Y. Chen, and S. Kumar, "Identifying Drug (Cocaine) Intake Events from Acute Physiological Response in the Presence of Free-living Physical Activity," *ACM/IEEE IPSN*, pp. 71-82, 2014.

25. S. Kumar, M. al'Absi, J.G. Beck, E. Ertin, M.S. Scott, "Behavioral Monitoring and Assessment via Mobile Sensing Technologies," *Leveraging Technology to Transform Behavioral Healthcare*, (eds. L. Marsch, S. Lord, J. Dallery), Oxford Press, pp. 27-39, 2014.

26. T. Kamarck, M. al'Absi, D. Epstein, E. Ertin, S. Intille, G. Kirk, S. Kumar, K. Preston, M. Rea, M. Scott, V. Shetty, S. Shiffman, D. Siewiorek, A. Smailagic, C. Stone, and M. Venugopal, "Ambulatory Monitoring and Ecological Momentary Assessment," to appear in *Handbook of Cardiovascular Medicine* (eds. S. Waldstein, L. Katzel, W.J. Kop).

27. S. Kumar, W. Nilsen, M. Pavel, and M. Srivastava, "Mobile Health – Revolutionizing Health via Transdisciplinary Research," *IEEE Computer Magazine*, Cover Feature, vol. 46(1), pp. 28-35, Jan 2013.

28. S. Kumar, W. Nilsen, A. Abernethy, A. Atienza, K. Patrick, M. Pavel, W. T. Riley, A. Shar, B. Spring, D. Spruijt-Metz, D. Hedeker, V. Honavar, R. L. Kravitz, R. C. Lefebvre, D. C. Mohr, S. A. Murphy, C. Quinn, V. Shusterman, and D. Swendeman, "Mobile Health Technology Evaluation – The mHealth Evidence Workshop," *American Journal of Preventive Medicine*, 45(2), pp. 228-236, Oct 2013.

29. M. Nakajima, M. al'Absi, S. Kumar, L. Wittmers, M. Scott, "Psychophysiological Responses to Stress Following Alcohol Intake in Social Drinkers Who Are at Risk of Hazardous Drinking," *Biological Psychology*, 93(1), pp. 9-16, 2013. **Highlighted in NIAAA Director's (Dr. Koob) address to the National Advisory Council**

30. J. Gao, E. Ertin, S. Kumar, and M. al'Absi, "Contactless Sensing of Physiological Signals Using Wideband RF Probes," Asilomar Conference on Signals, Systems, and Computers, pp. 86-90, Nov. 2013. (invited)

31. A. Ali, M. Hossain, K. Hovsepian, M. Rahman, and S. Kumar, "mPuff: Automated Detection of Cigarette Smoking Puffs from Respiration Measurements," *ACM IPSN*, pp. 269-280, 2012.

32. Bruce Schatz, Clay Marsh, Kevin Patrick, Santosh Kumar. David Gustafson, Jerry Krishnan, Noshir Contractor, "Research challenges in measuring data for population health to enable predictive modeling for improving healthcare," *ACM SIGHIT Record*, 2(2), pp. 36-41,Sep 2012.

33. W. Nilsen, S. Kumar, A. Shar, C. Varoquiers, T. Wiley, W. Riley, M. Pavel, A. Atienza, "Advancing the Science of mHealth," to *Journal of Health Communication*, 17, pp. 5-10, May 2012. (invited)

34. S. Guha, K. Plarre, D. Lissner, S. Mitra, B. Krishna, P. Dutta, and S. Kumar, "AutoWitness: Locating and Tracking Stolen Property while Tolerating GPS and Radio Outages," *ACM Trans. on Sensor Networks (ToSN)*, 8(4), Sep. 2012.(28 pages)

35. Z. Zheng, P. Sinha, and S. Kumar, "Sparse WiFi Deployment for Vehicular Internet Access with Bounded Interconnection Gap," *IEEE/ACM Trans. on Networking (ToN)*, 20(3), pp. 956-969, 2012.

36. E. Ertin, N. Stohs, S. Kumar, A. Raij, M. al'Absi, T. Kwon, S. Mitra, S. Shah, and J. W. Jeong, "AutoSense: Unobtrusively Wearable Sensor Suite for Inferencing of Onset, Causality, and Consequences of Stress in the Field," *ACM SenSys*, pp. 274-287, 2011.

37. M. Rahman, A. Ali, K. Plarre, M. al'Absi, E. Ertin, and S. Kumar, "mConverse: Inferring Conversation Episodes from Respiratory Measurements Collected in the Field," *ACM Wireless Health*, 2011. (10 pages) **Nominated for Best Paper Award**

38. M. Mustang, A. Raij, D. Ganesan, S. Kumar and S. Shiffman, "Exploring Micro-Incentive Strategies for Participant Compensation in High Burden Studies," *ACM UbiComp*, pp. 435-444, 2011.

39. K. Plarre, A. Raij, M. Hossain, A. Ahsan Ali, M. Nakajima, M. al'Absi, E. Ertin, T. Kamarck, S. Kumar, M. Scott, D. Siewiorek, A. Smailagic, and L. Wittmers, "Continuous Inference of Psychological Stress from Sensory Measurements Collected in the Natural Environment," *ACM IPSN*, pp. 97-108, 2011. **Nominated for Best Paper Award**

40. A. Raij, A. Ghosh, S. Kumar, and M. Srivastava, "Privacy Risks Emerging from the Adoption of Innocuous Wearable Sensors in the Mobile Environment," *ACM CHI*, pp. 11-20, 2011.

41. M. Rahman, A. Ali, A. Raij, E. Ertin, M. al'Absi, and S. Kumar, "Demo Abstract: Online Detection of Speaking from Respiratory Measurement Collected in the Natural Environment," *ACM IPSN*, pp. 137-138, 2011.

42. S. Guha, K. Plarre, D. Lissner, S. Mitra, B. Krishna, P. Dutta, and S. Kumar, "AutoWitness: Locating and Tracking Stolen Property while Tolerating GPS and Radio Outages," *ACM SenSys*, pp. 29-42, 2010. **Nominated for Best Paper Award**

43. N. Hua, A. Lall, M. al'Absi, E. Ertin, S. Kumar, J. Romberg, S. Suri, and J. Xu, "Just-in-time Sampling and Pre-filtering for Wearable Physiological Sensors: Going from Days to Weeks of Operation on a Single Charge," *ACM Wireless Health*, pp. 54-63, 2010.

44. Z. Zheng, Z. Lu, P. Sinha, and S. Kumar, "Maximizing the Contact Opportunity for Vehicular Internet Access," *IEEE INFOCOM*, 2010. (9 pages) [Accept. Rate: 17.5%]

45. Y. Shi, M.H. Nguyen, P. Blitz, B. French, S, Frisk, F. Torre, A. Smailagic, D. Siewiorek, M. al'Absi, T. Kamarck, S. Kumar, "Personalized Stress Detection from Physiological Measurements," International Symposium on Quality of Life Technology, 2010. (5 pages)

46. K. Plarre, A. Raij, S. Guha, and S. Kumar "Demo Abstract: Automated Detection of Sensor Detachments for Physiological Sensors in the Wild," *ACM Wireless Health*, pp. 216-217, 2010.

47. S. Kumar, T.H. Lai, M.E. Posner, and P. Sinha, "Maximizing the Lifetime of a Barrier of Wireless Sensors," *IEEE Trans. on Mobile Computing (TMC)*, 9(8), pp. 1161-1172, 2010.

48. A. Chen, S. Kumar, and T.H. Lai, "Local Barrier Coverage in Wireless Sensor Networks," *IEEE Trans. on Mobile Computing (TMC)*, 9(4), pp. 491-504, April 2010.

49. P. Balister, Z. Zheng, S. Kumar, and P. Sinha, "Trap Coverage: Allowing Coverage Holed of Bounded Diameter in Wireless Sensor Networks," *IEEE INFOCOM*, pp. 136-144, 2009.

50. P. Balister and S. Kumar, "Random vs. Deterministic Deployment of Sensors in the Presence of Failures and Placement Errors," *IEEE INFOCOM Miniconference*, pp. 2896-2900, 2009.

51. Z. Zheng, P. Sinha, and S. Kumar "Alpha Coverage: Bounding the Interconnection Gap for Vehicular Internet Access," *IEEE INFOCOM Miniconference*, pp. 2831-2835, 2009.

52. S. Mitra, Z. Zheng, S. Guha, A. Ghosh, P. Dutta, B. Krishna, K. Plarre, S. Kumar, and P. Sinha, "Demo Abstract: An Affordable, Long-lasting, and Autonomous Theft Detection and Tracking System," *ACM SenSys*, pp. 351-352, 2009.

53. S. Kumar and L. Wang, "Ad Hoc and Sensor Networks," Book Chapter in *Wiley Encyclopedia of Computer Science and Engineering* (ed. Benjamin Wah), Vol. 1, pp. 24-32, 2009.

54. H. W. Lee and S. Kumar, "Queuing Theory," Book Chapter in *Wiley Encyclopedia of Computer Science and Engineering* (ed. by Benjamin Wah), Vol. 4, pp. 2316-2328, 2009.

55. S. Kumar, T. H. Lai, and J. Balogh, "On k-Coverage in a Network of Mostly Sleeping Sensors," in *Wireless Networks (WINET)*, 14:277-294, 2008.

56. S. Kumar, A. Arora, and T. H. Lai, "Maximizing the Lifetime of an Always-On Wireless Sensor Network Application: A Case Study," in *Wireless Sensor Networks* (eds. Y. Li, M. Thai, and W. Wu), Chapter 11, pp 259-283, Springer, 2008.

57. P. Balister, B. Bollobas, A. Sarkar, and S. Kumar, "Reliable Density Estimates for Achieving Coverage and Connectivity in Thin Strips of Finite Length," *ACM MobiCom*, pp. 75-86, 2007.

58. A. Chen, S. Kumar, and T.H. Lai, "Designing Localized Algorithms for Barrier Coverage," *ACM MobiCom*, pp. 63-74, 2007.

59. S. Kumar, Ten H. Lai, M. E. Posner, and P. Sinha "Optimal Sleep Wakeup Algorithms for Barriers of Wireless Sensors," *IEEE BROADNETS*, pp. 327-336, 2007.

60. S. Kumar, T.H. Lai, and A. Arora, "Barrier Coverage with Wireless Sensors," *Wireless Networks (WINET)*, 13:817-834, 2007.

61. X. Bai, S. Kumar, Z. Yun, D. Xuan, and T.H. Lai, "Deploying Wireless Sensors to Achieve Both Coverage and Connectivity," *ACM MobiHoc*, pp. 131-142, 2006.

62. S. Kumar, A. Arora, and T. H. Lai, "Poster: On the Lifetime Analysis of Always-On Wireless Sensor Network Applications," *IEEE MASS*, 2005. (3 pages)

63. A. Arora, R. Ramnath, E. Ertin, P. Sinha, S. Bapat, V. Naik, V. Kulathumani, H. Zhang, H. Cao, M. Sridharan, S. Kumar, et. al., "ExScal: Elements of an Extreme Scale Wireless Sensor Network," *IEEE RTCSA*, pp. 102-108, 2005.

64. S. Kumar, T.H. Lai, and A. Arora, "Barrier Coverage with Wireless Sensors," *ACM MobiCom*, pp. 284-298, 2005. **Top Ten Papers of MobiCom'05**

65. S. Kumar, T.H. Lai, and J. Balogh, "On k-Coverage in a Mostly Sleeping Sensor Network," *ACM MobiCom*, pp.144-158, 2004

66. S. Kumar, B. W. Weide, P. A. G. Sivilloti, N. Sridhar, J. O. Hallstrom, and S. M. Pike, "Encapsulating Concurrency as an Approach to Unification," *SAVCBS Workshop at ACM SIGSOFT/FSE*, 2004. (8 pages)

PRESENTATIONS (CONFERENCES, UNIVERSITIES, FEDERAL AGENCIES)

1. "Dynamic Patient Re-stratification Using Mobile Sensors," **Keynote Speech** at Dagstuhl Seminar on Computational Challenges in Personalized Medicine, Dagstuhl, Germany, 11/20/2017.

2. "Mobile Sensor Big Data Challenges in Health, Wellness, and Productivity," University of Utah, 11/06/2017. (Host: Dr. Ross Whitaker)

3. "Mobile Sensor Big Data Challenges in Monitoring and Improving Health, Wellness, and Performance," **Keynote Speech** at Affective Computing and Intelligent Interaction Workshop on Mental Health and Wellbeing, Pain, and Distress, 10/23/2017. (Host: Drs. Rosalind Picard and Akane Sano, MIT)

4. "Mobile Sensor Big Data Challenges in Monitoring and Improving Health, Wellness, and Performance," University of Iowa, 09/28/2017. (Host: Dr. Guadalupe Canahuate)

5. "Collecting High-frequency Mobile Sensor Data for Long-lasting Research Utility," Science of Behavior Change Program (SOBC), NIH, 09/25/2017.

6. "Utility of Collecting High-frequency Mobile Sensor Data in Health Research," Steering Committee meeting of the Multi-ethnic Study of Atherosclerosis (MESA), NHLBI, NIH, 9/08/2017.

7. "Mobile Sensor Data-to-Knowledge (MD2K): Lessons Learned on Data Collection, Modeling, and Validation," Health Data Exploration Summer Institute (HDESI), UC San Diego, 7/19/2017.

8. "Using Mobile Sensors to Self-Monitor and Improve Health, Wellness, and Performance," **Keynote Speech** at ACM MobiSys Workshop on Wearable Systems and Applications (WearSys), 6/19/2017.

9. "Emerging Research Challenges – A Perspective from MD2K Center of Excellence," BDSouthHUB Workshop on Mobile Health, 5/15/2017.

10. "How Big Data on Your Body Can Improve Your Health, Wellness, and Performance," **Plenary Lecture** at the National Conference on Undergraduate Research, 4/7/2017.

11. "Mobile Sensor Data-to-Knowledge (MD2K) in Substance Use Research," Center for Drug Use and HIV Research (CDUHR), New York University, 4/4/2017.

12. "Individualized Mobile Health and Real-life Biosensor Technology within the CTN," Annual Meeting of the NIDA Clinical Trials Network, Rockville, MD, 3/24/2017.

13. "Biobank for mHealth: Collecting High-frequency Mobile Sensor Data for Long-lasting Research Utility," OBSSR Director's Seminar, 11/15/2016. (Host. Dr. William Riley)

14. "Promise and Potential of Mobile Sensor Data-to-Knowledge (MD2K)," BDSouthHUB Roundtable, 11/3/2016.

15. "Development and Validation of Biomarkers from Mobile Sensor Data," Health Data Exploration Institute, UC San Diego, 07/12/2016.

16. "Biomarkers of Health Behaviors from Wearable Wireless Sensors," mHealth Training Institute, UCLA, 08/09/2016.

17. "Center of Excellence for Mobile Sensor Data-to-Knowledge (MD2K)," Memphis Area Psychological Association, 12/10/2015.

18. "Perils and Promise of mHealth Big Data," Scripps Translational Science Institute Conference on Evidence Driven mHealth, 10/2/2015.

19. "Center of Excellence for Mobile Sensor Data-to-Knowledge (MD2K)," Mayo Clinic Individualized Medicine Conference, 9/23/2015.

20. "Mobile Sensor Big Data Challenges in Realizing Precision Medicine," Microsoft Corporation, 9/1/2015. (Host: Dr. Harry, Shum, Senior VP and CTO)

21. "Incorporating Mobile Exposure in mHealth Precision Medicine," NIEHS Exposome Webinar Series, 8/4/2015. (Host: Dr. David Balshaw)

22. "Mobile Health (mHealth) Platforms for the Era of Precision Medicine," Intel Corporation, 6/30/2015. (Host: Dr. Arindam Saha)

23. "A Computer Scientist's Journey in mHealth," **Keynote Speech**, Smart and Connected Health Aspiring PI Meeting, National Science Foundation (NSF), 6/29/2015. (Host: Dr. Thurmon Lockhart)

24. "Towards Sensor-triggered Mobile Health Interventions," **Keynote Speech**, Annual Meeting of the Society for Ambulatory Assessment, 6/26/2015. (Host: Dr. Joshua Smyth)

25. "Sensor-triggered Just-in-time (JIT) Mobile Health Interventions – A Transdisciplinary Research Opportunity," OBSSR 20th Anniversary Celebrations, NIH, 6/25/2015. (Host: Dr. William Riley)

26. "Detecting Cocaine Use from Wireless ECG Worn in Field Studies," NIDA Webinar, 5/21/2015. (Host; Dr. Betty Tai)

27. "Improving the Temporal Precision of Precision Medicine via Mobile Health," iDASH Webinar, UC San Diego, 5/15/2015. (Host: Dr. Lucila Ohno-Machado)

28. "Improving the Temporal Precision of Precision Medicine via Mobile Health," St. Jude's Children Research Hospital, 5/4/2015. (Host: Dr. Greg Armstrong)

29. "Is the User Ready to Receive A Sensor-triggered Just-in-time Mobile Health Intervention?," Annual Meeting of the Society for Behavioral Medicine (SBM), 4/24/2015.

30. "Continuous Measurement of Stress – What Makes Driving Stressful?," Annual Meeting of the Society for Behavioral Medicine (SBM), 4/23/2015.

31. "Designing Sensor-triggered Just-in-time Mobile Health Interventions," Wayne State University, 4/21/2015. (Host: Dr. Weisong Shi)

32. "Addressing Addictive Behaviors Using Sensor-Triggered Just-in-Time Mobile Health Interventions," **Keynote Speech**, NIDA Clinical Trials Network, Gaithersburg (MD), 4/16/2015

33. "Designing Sensor-Triggered Just-in-Time Interventions," **Keynote Speech**, 14th Annual UT/KBRIN Bioinformatics Summit, Buchanan (TN), 3/21/2015.

34. "Measuring Stress & Addictive Behaviors Using Mobile Physiological Sensors," ENAR Meeting, Miami, 3/16/2015

35. "Testing the Devices: Using the Cohort to Assess Efficacy," NIH Precision Medicine Workshop, NIH Campus, 2/12/2015

36. "Sensor Triggered Just-in-Time Mobile Health Interventions – Opportunities & Challenges," University of Michigan, January 2015. (Host: Dr. Susan Murphy)

37. "Sensor Triggered Just-in-Time Mobile Health Interventions – Opportunities & Challenges," Dartmouth College, January 2015. (Host: Dr. David Kotz)

38. "Computing Grand Challenges in Future Mobile Health Systems and Applications – Introduction & Chair's Address," NIH Campus, October 2014

39. "mHealth – Cardiovascular Health Scenarios," ACM SIGKDD Workshop on Big Data Opportunities & Challenges in Mobile Health, New York City, August 2014. (Hosts: Dr. Wendy Nilsen, Dr. Richard Conroy, Dr. Mary Rodgers, NIH)

40. "Cyber Physical Systems Models for Just-in-Time Care Delivery with Mobile Health Sensors," Mini-symposium #19, 36th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC), Chicago, August 2014. (Host: Dr. David Corman, NSF)

41. "Inferring Stress and Addictive Behaviors Using Mobile Sensors," Mini-symposium #41, 36th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC), Chicago, August 2014. (Host: Dr. Rich Fletcher, MIT)

42. "Continuous Measurement of Stress in the Mobile Environment via Wireless Physiological Sensors," NIH Annual Meeting of the Science of Behavior Change (SOBC), June 2014. (Host: Dr, Jonathan King, NIA, NIH)

43. "State-of-the-Science in Mobile Health," AAAS Workshop on mHealth and Law, June 2014. (Host: Dr. Mark Frankel, AAAS)

44. "Predicting Smoking Abstinence via Mobile Monitoring of Stress and Social Context," NIH OppNet Sleep & Stress Meeting, May 2014. (Hosts: Dr. Rosalind King & Dr. Catherine Stoney, NIH)

45. "Computational Modeling for Automated Detection of Cocaine Use from ECG Response," Annual Meeting of the Society for Behavioral Medicine (SBM), Panel#16, Philadelphia, PA, April 2014. (Host: Dr. Rich Fletcher, MIT)

46. "Identifying Drug (Cocaine) Intake Events from Acute Physiological Response in the Presence of Free-living Physical Activity," ACM IPSN, Berlin, Germany, April 2014.

47. "Computational Modeling of Human Behaviors from Mobile Sensors," Marquette University, April 2014 (Host: Dr. Sheikh Iqbal Ahamed)

48. "Realizing the Vision of P5 Medicine via Mobile Health – Application to Cardiac Care," UCLA mHealth Symposium, March 2014. (Host: Dr. Vivek Shetty)

49. "Computational Modeling of Behaviors from Mobile Sensors: A Case Study of Modeling Cocaine Use Response in ECG," NIDA Intramural Research Program, NIH, Feb 2014. (Host: Dr. Kenzie Preston)

50. "Cyber Physical System Models for Just-in-time Care Delivery with Mobile Health Sensors," NSF Workshop on Research Frontiers in Medical Cyber Physical Systems, Feb 2014.

51. "Computational Modeling of Behaviors from Mobile Measurement of Physiology," Duke Medical School, Dec 2013. (Host: Dr. Bernard Fuemmeler)

52. "Behavior Assessment with Mobile Sensors," NIH mHealth Training Institute, mHealth Summit, Dec 2013.

53. "Computational Modeling of Behaviors from Mobile Measurement of Physiology," **Distinguished Lecture Series**, Computer Science & Engineering, UC San Diego, Dec 2013. (Host: Prof. Rajesh Gupta)

54. "Understanding Data Yield in Mobile Health User Studies with Wearable Sensors," The Ohio State University, Oct 11, 2013. (Host: Prof. Ten H. Lai)

55. **"**Just-in-Time mHealth Intervention with Physiological Sensors,**"** First International Symposium on Computational Behavioral Science, Kanagawa, Japan. Sep 2013.

56. **"**Assessment of Behavioral Health with Physiological Sensors,**"** Mobile Data Repository and Analysis Platforms, iDASH Meeting, UC San Diego. Sep 2013.

57. **"**The Future of Health IT for Behavioral Health – Biosensors,**"** **White House Speech** at the Technology Innovations for Substance Abuse and Mental Health Treatment Conference. Sep2013.

58. **"**Realizing Just-in-time mHealth Intervention via Mobile Assessment of Health, Behavior and Context – Opportunities and Challenges,**"** **Keynote Speech** at the 6th Scientific Meeting of the International Society for Research on Internet Interventions (ISRII), May 2013.

59. "Revolutionizing Healthcare via Democratization of Mobile Health – An Agenda for Computing Research," University of Texas, Arlington, Feb 2013 (Host: Prof. Sajal Das)

60. "Revolutionizing Healthcare via Democratization of Mobile Health – An Agenda for Computing Research," Washington University in St. Louis, Feb 2013 (Host: Prof. Chenyang Lu)

61. "Mobile Measurement of Behavioral and Social Health at Population Scale – Implications for Computing Research," **Keynote Speech** at the 10th IEEE/IFIP International Conference on Embedded and Ubiquitous Computing and 15th IEEE International Conference on Computational Science and Engineering, Paphos, Cyprus, 12/5/2012

62. "Measurement of Behavioral and Social Health at Population Scale," Auburn University, 9/30/2012 (Host: Prof. Prathima Agrawal)

63. "Measurement of Behavioral and Social Health at Population Scale," University of Illinois at Urbana Champaign (UIUC), 9/13/2012 (Host: Prof. Bruce Schatz)

64. "Measurement of Behavioral and Social Health at Population Scale," Dartmouth College, 05/23/2012 (Host: Prof. David Kotz)

65. "Measurement of Behavioral and Social Health at Population Scale," mHealth Extravaganza Lecture Series, National Institutes of Health (NIH), 05/03/2012 (Host: Dr. Wendy Nilsen, OBSSR)

66. "mPuff: Automated Detection of Cigarette Smoking Puffs from Respiration Measurements," ACM/IEEE IPSN Conference, Beijing, China, 04/19/2012

67. "Mobile Measurement of Behavioral and Social Health at Population Scale – Implications for Computing Research," **Keynote Speech** at the 2nd Mobile Sensing Workshop, IEEE/ACM Information Processing in Sensor Networks (IPSN) Conference, Beijing, China, 04/16/2012

68. "Automated Assessment of Naturally Occurring Conversations," Symposium 17: Device-Enabled Measurement of Health Behaviors in Real-time (SY17), Annual Meeting of Society for Behavioral Medicine (SBM), New Orleans, 04/12/2012

69. "Measurement of Behavioral and Social Health at Population Scale," Electrical Engineering and Computer Engineering, 03/20/2012 (Host: Prof. Chrysanthe Preza)

70. "Measurement of Behavioral and Social Health at Population Scale," Georgia Institute of Technology, 03/07/2012 (Host: Prof. Jim Regh)

71. "Measurement of Behavioral and Social Health at Population Scale," Biomedical Engineering, 01/27/2012 (Host: Prof. Erno Lindner)

72. "Measurement of Behavioral and Social Health at Population Scale," NSF Workshop on Measuring Population Health, Washington, D.C., 01/12/2012

73. "mHealth Evidence Workshop: Evaluating the Efficacy and Safety of Mobile Health," mHealth Summit, Washington, D.C., 12/06/2011

74. "Addressing Stress and Addictive Behavior in the Natural Environment Using AutoSense," University of California, Los Angeles, 11/4/2011 (Host: Prof. Mani Srivastava)

75. "Addressing Stress and Addictive Behavior in the Natural Environment Using AutoSense," University of Washington, 10/31/2011 (Host: Prof. David McDonald)

76. "Addressing Stress and Addictive Behavior in the Natural Environment Using AutoSense," University of California, San Diego, 10/11/2011 (Host: Prof. Kevin Patrick)

77. "Addressing Stress and Addictive Behavior in the Natural Environment Using AutoSense," University of Pennsylvania, 10/19/2011 (Host: Prof. Insup Lee)

78. "Addressing Stress and Addictive Behavior in the Natural Environment Using AutoSense," Washington University in St. Louis, 09/30/2011 (Host: Prof. Chenyang Lu)

79. "mHealth Evidence Workshop - Exploring Innovative Methods to Evaluate Efficacy and Safety of Mobile Health," Chair's Address, mHealth Evidence Meeting, Washington D.C., 8/16/2011.

80. "Addressing Stress and Addictive Behavior in the Natural Environment Using AutoSense," Duke University, 04/13/2011 (Host: Prof. Romit Roy Choudhury)

81. "Scaling Personal Stress Assistance in Natural Environment," National Science Foundation Workshop on Pervasive Computing at Scale, Seattle, WA, 1/27/2011.

82. "Addressing Stress and Addictive Behavior in the Natural Environment Using AutoSense," The Ohio state University, 10/28/2010 (Host: Prof. Ten H. Lai)

83. Integration of novel methods to assess effects of stress and alcohol use," Annual Meeting of the Society for Prevention Research (SPR), Denver, CO, June 2010.

84. Integration of novel methods to assess effects of stress and alcohol use," Annual Convention of the American Psychosomatic Society Meeting, Portland, OR, March 2010.

85. "AutoSense: A Wireless Sensor System to Quantify Psychosocial Stress and Alcohol in Natural Environments," New Frontiers in Measurement: Phenotypes, Endophenotypes, and Envirotypes for Genetic and Behavioral Studies of Nicotine Dependence, at the Annual Conference of the Society for Research on Nicotine and Tobacco (SRNT), Feb 2010 (Host: Dr. Kay Wanke, OBSSR, NIH)

86. "Enabling Physical, Emotional, and Social Well-Being Through Personalized Sensing in Natural Environments," National Science Foundation Workshop on Future Directions in Networked Sensing: Fundamentals and Applications, Arlington, VA, 11/12/2009.

87. "AutoSense: A Wireless Sensor System to Quantify Personal Exposures to Psychosocial Stress and Alcohol in Natural Environments," International Society for Exposure Sciences (ISES), Minneapolis, MN, 11/05/2009.

88. "Stress and Addiction: Integration of Novel Assessment Methods," within the Symposium titled 'Gene-Environment Interplay in Stress and Health: Network on Exposure to Psychosocial Stress and Addictive Substances', Annual Convention of the Association for Psychological Sciences. San Francisco, CA, 05/22/2009.

89. "Wireless Sensor Networks: A New Revolution in Computing Coming Your Way," National Institute of Technology, Jamshedpur, India, 5/26/2009 (Host: Prof. R. K. Chaudhary)

90. "Trap Coverage: Allowing Coverage Holed of Bounded Diameter in Wireless Sensor Networks," IEEE INFOCOM, Rio De Janeiro, Brazil, 04/21/2009.

91. "Random vs. Deterministic Deployment of Sensors in the Presence of Failures and Placement Errors," IEEE INFOCOM, Rio De Janeiro, Brazil, 04/20/2009.

92. "AutoSense: A Wireless Sensor System to Quantify Psychosocial Stress and Alcohol in Natural Environments," National Institute on Alcohol Abuse and Alcoholosim (NIAAA), National Institutes of Health (NIH), 1/12/2009 (Host: Dr. Marcia Scott, NIAAA, NIH)

93. "Coverage and Connectivity in Wireless Networks: the Journey from Percolation to Reliable Density Estimates", Invited Talk, First Workshop on the Theory of Ad-Hoc and Sensor Networks (ThASN), IEEE MASS Conference, 9/29/2008.

94. "Optimal Sleep Wakeup Algorithms for Barriers of Wireless Sensors," Invited (live video) Lecture to a joint course of Ohio State University and University of Cincinnati, 10/15/2007 (Host: Prof. Prasun Sinha)

95. "Coverage and Connectivity in Wireless Networks: the Journey from Percolation to Reliable Density Estimates", Clemson University, 11/9/2007 (Host: Prof. Jason Hallstrom)

96. "Coverage and Connectivity in Wireless Networks: the Journey from Percolation to Reliable Density Estimates", Georgia Institute of Technology, 10/17/2007 (Host: Prof. Jun Xu)

97. "Optimal Sleep Wakeup Algorithms for Barriers of Wireless Sensors," IEEE BROADNETS, Raleigh, NC, 2007.

98. "Barrier Coverage with Wireless Sensors," University of Memphis, 2/24/2006.

99. "On k-Coverage in a Mostly Sleeping Sensor Network," ACM MobiCom, Philadelphia, PA, 2004.

AWARDED GRANTS & CONTRACTS ($40+ MILLION)

Title	Sponsor	Amount	Period	Institutions
mPerf: A Theory-driven Approach to Model and Predict Everyday Job Performance Using Mobile Sensors (**PI**)	IARPA	$13.8 million	2017-2020	Cornell, Minnesota, Ohio State, UCLA, UMass Amherst
SCH: INT: Collaborative Research: Enhancing Context-Awareness and Personalization for Intensively Adaptive Smoking Cessation Messaging Interventions (Co-PI)	NSF	$196k	2017-2020	UMass Amherst (lead)
Applying Novel Technologies and Methods to Inform the Ontology of Self-Regulation	NIH	$79k	2017-2018	Dartmouth (lead), Minnesota, Ohio State
CIF21 DIBBS: EI: mProv: Provenance-based Data Analytics Cyberinfrastructure for High-Frequency Mobile Sensor Data (**PI**)	NSF	$4 million	2016-2021	U Penn, UCLA, UCSF
R00**:** Applying mHealth to Tobacco-related Health Disparities: Enhancing aspects of Resiliency to aid Cessation Efforts (Co-I)	NIH	$107k	2017-2020	Moffitt Cancer Center (lead)

Administrative Supplement to MD2K: Combining Genomics and Mobile Data Around Physical Activity (**PI**)	NIH	$50k	2016-2018	UCSF
Administrative Supplement to MD2K: Count Everything (**PI**)	NIH	$97k	2016-2017	UCSF
CTN: Toward Detecting Cocaine Use using Smartwatches in the NIDA Clinical Trials Network (Co-PI)	NIH	$112k	2016-2018	Dartmouth (lead), Ohio State, Johns Hopkins
R01: ROBAS: A multimodal Sensor System for Remote Assessment of Oral Health Behavior (Co-I)	NIH	$498k	2015-2020	Ohio State, Memphis, UCLA (lead)
R01: Eliminating Tobacco-Related Disparities among African American Smokers (Co-I)	NIH	$847k	2015-2020	Georgia Tech, Ohio State, Memphis, Rice (lead)
R01: Socioeconomic Status, Stress, and Smoking Cessation (Co-I)	NIH	$806k	2015-2020	Georgia Tech, Ohio State, Memphis, Rice (lead)
U54: Center of Excellence for Mobile Sensor Data-to-Knowledge (MD2K) (**PI**) (*A National Big Data Centers of Excellence funded under NIH's BD2K initiative*)	NIH	$10.8M	2014-2018	Cornell Tech, Georgia Tech, Michigan, Memphis, Open mHealth, Northwestern, Rice, UCLA, UCSD, UCSF, UMass
NSF-NIH National Workshop on Computing Challenges in Future Mobile Health (mHealth) Systems and Applications (**PI**)	NSF	$50k	2014-2015	Memphis
R01: Predicting Smoking Abstinence via Mobile Monitoring of Stress and Social Context (**PI**)	NIH	$1.3M	2012-2015	OSU, Minnesota, Memphis
SHB: Type I (EXP): Collaborative Research: EasySense: Contact-less Physiological Sensing in the Mobile Environment Using Compressive Radio Frequency Probes (**PI**)	NSF	$600k	2012-2015	OSU, Minnesota, Memphis
CSR: Large: Collaborative Research: Enabling Privacy-UtilityTrade-offs in Pervasive Computing Systems (co-**PI**)	NSF	$95k for Memphis	2012-2014	UCLA, UC Irvine, Memphis
mHealth Evidence National Meeting (**PI**)	RWJF Found.	$25k	2011-2012	Memphis
mHealth Evidence National Meeting (**PI**)	McKesson Found.	$25k	2011-2012	Memphis

First TN Innovation and Entrepreneurship Fellowship (**PI**)	First TN Found.	$24k	2010-2011	Memphis
Alcohol Measurements in AutoSense: From Days to Weeks in the Field (**PI**)	NIH	$173k	2010-2011	OSU, Minnesota, Giner Inc., Memphis
Making AutoSense robust for Everyday Wearing: A Field Test in Illicit Drug Users (**Co-PI**)	NIH	$132k for Memphis	2010-2011	NIDA (NIH), Minnesota, OSU, Memphis
NetSE: Large: Collaborative Research: FieldStream: Network Data Services for Exposure Biology Studies in Natural Environments (**PI**)	NSF	$2.7M	2009 – 2013	CMU, UCLA, UMass, Georgia Tech, Memphis
Personalized Stress Inferencing in AutoSense (**PI**)	NIH	$238k	2009-2010	CMU, Pittsburgh, OSU, Minnesota, Memphis
Automated Wireless Measurement of Pulse Wave Velocity in AutoSense (**PI**)	NIH	$68k	2008 – 2009	OSU, Memphis
AutoWitness: Detecting and Tracking Burglars Using a Sparse Sensor Network (**PI**)	FIT	$386k	2008-2011	Memphis
U01: AutoSense: Quantifying Personal Exposures to Addictive Substances and Psychosocial Stress (**PI**)	NIH	$1.66M	2007 – 2012	OSU, Minnesota, Guided Therapeutics, Memphis
NeTS-NOSS: Collaborative Research: Doing More with Less: Tracking Movements Using a Sparse Sensor Network (**PI**)	NSF	$500k	2007-2010	OSU, Memphis
Foundations of Coverage and Connectivity for Wireless Sensor Networks Deployed in Thin Strips (**PI**)	NSF	$350k	2007-2010	Memphis

MENTORING (*STUDENTS' WORK NOMINATED FOR BEST PAPER AWARDS AT SENSYS'10, IPSN'11, WH'11*)

- Five Postdocs:
    - Dr. Choudhury Nasir Ali (2016 – current)
    - Dr. Moushumi Sharman (2013 – 2015) – Joined Western Washington University as tenure-track assistant professor
    - Dr. Vijay Mago (2012 – 2013) – Joined Troy University as tenure-track assistant professor
    - Dr. Karen Hovsepian (2011 – 2012) – Joined Troy University as tenure-track assistant professor
    - Dr. Andrew Raij (2009-2010) – Ph.D. (University of Florida); joined University of South Florida (USF) as tenure-track assistant professor

- ▪ Dr. Kurt Plarre (2008 – 2011) – Ph.D. (UIUC); joined as Data Analyst at ALMA observatory in Chile
  - Four graduated Ph.D. students –Amin Ahsan Ali (Asst. Prof. at Univ. of Dhaka) and Mahbubur Rahman (Researcher, Samsung Research), Hillol Sarker (joined IMB Research), Syed Monowar Hossain (joined MD2K Center of Excellence as Lead Mobile Software Engineer)
- Nine current Ph.D. students –, Rummana Bari, Nazir Saleheen, Soujanya Chatterjee, Md. Azim Ullah, Mithun Saha, Rabin Banjade, Md. Shiplu Hawlader, Alina Zaman, Anik Nagato
- Seven Masters students (7 graduated and working in industry and research labs)

TEACHING EXPERIENCE

- COMP 4270/6270: Introduction to Operating Systems (UG, 10 semesters, Spring 2007 to Spring 2014); UofM
- COMP 7/8313: Network Design and Performance Analysis (G, Fall 2006 to Fall 2011); UofM
- COMP 3825: Networking and Information Assurance (UG, 1 semester); UofM
- CSE 222: Development of Software Components (UG, 6 quarters); Ohio State
- CSE 221: Software Development Using Components (UG, 4 quarters); Ohio State
- CSE 100: Introduction to Computing Technology (UG, 1 quarter); Ohio State

PROFESSIONAL MEMBERSHIPS

- Senior Member, ACM; ACM SIGMOBILE, ACM SIGBED; ACM SIGCHI
- Senior Member, IEEE; IEEE Computer Society, IEEE Communications Society

SERVICE (EXTERNAL)

- Associate Editor, Nature Digital Medicine, 2017-.
- Associate Editor, Proceedings of ACM Interactive, Mobile, Wearable and Ubiquitous Technologies (IMWUT), 2016-.
- TPC member for ACM MobiSys, ACM UbiComp, ACM SenSys, ACM IPSN, IEEE PerCom, IEEE INFOCOM, ACM Wireless Health, IEEE BSN, BodyNets, IEEE ICDCS, IEEE MASS, IEEE SECON, IEEE ICPP, ICDCN, IEEE ICCCN, etc.
- Independent Experts Committee, PRISMS Initiative ($28 million), NIBIB/NIH, 2017-2019
- GAO Panel on Experts in Internet of Things, National Academies, 5/2016.
- Core Faculty Mentor for NIH/UCLA/MD2K mHealth Summer Institutes (2012-present).
- Advisory Committee for BDSouthHUB mHealth Workshop, May 2017.
- Steering Committee for NSF Smart and Connected Health Visioning Workshop, March 2017.
- Steering Committee for CCC Workshop on Discover and Innovation in Smart and Pervasive Health, Dec 2016.
- Advisor, Center for Technology and Behavioral Health (PI: Lisa Marsch), Dartmouth University, 2016.
- Member of the mHealth Planning Committee for the United States' Precision Medicine Initiative, Jan/Feb 2015.
- Co-chair and co-organizer for NSF-NIH National Workshop on Computing Challenges in Future Mobile Health (mHealth) Systems and Applications, 10/2014.

- Advisor, AAAS National Study on mHealth and Law, 2014-15.

- Advisory Board Member, Otsuka America Pharmaceutical Inc., 2014-19.

- Health Informatics Track Co-Chair of the ACM BCB Conference, 2014.

- Invited to speak at the White House on the future of biosensors (9/2013).

- Invited to the NIH Director's mTHINK meeting as an mHealth thought leader (2/2013).

- Expert panel to judge "My Air, My Health Challenge", $160k in prizes from US Department of Health and Human Services (HHS) and Environmental Protection Agency (EPA), 2012.

- Chair for the "mHealth Evidence" meeting – jointly hosted by NIH, NSF, Robert Wood Johnson Foundation, and McKesson Foundation.

- Founding TPC Co-chair & Steering Committee member for ACM mHealthSys 2011 workshop (held at ACM SenSys'11).

- Organizing Committee, ACM SenSys'11.

- TPC Co-chair for NetHealth Workshop 2012 (held at ACM COMSNETS'12).

- TPC Co-chair for IEEE International Conference on Mobile Ad-Hoc and Sensor Networks (MSN) 2011.

- TPC Co-chair for Wireless Networks and Emerging Technologies (WNET) track of IEEE ICCCN 2010.

- Steering committee co-chair for the NEPSAS subgroup of the Genes Environment & Health Initiative (GEI) at NIH (2010-12).

- Reviewer for IEEE/ACM Transactions on Networking, IEEE/ACM Transactions on Mobile Computing, IEEE/ACM Transactions on Sensor Networks, IEEE Transactions on Parallel and Distributed Systems, IEEE Transactions on Wireless Communications, IEEE Transactions on Computers, IEEE Transactions on Information Theory, IEEE Communications Letters, ACM Journal of Wireless Networks, ACM Transactions on Autonomous and Adaptive Systems, Elsevier Ad Hoc Networks Journal, Journal of Parallel and Distributed Systems, Elsevier Journal of Parallel and Distributed Computing, Elsevier Journal of Computer Networks, and several others.

- Served on Proposal Review Panels for NSF (2008-present) and NIH (2009-present).

PROFESSIONAL SERVICE (INTERNAL)

- Faculty Search Committee (Chair), Computer Science, 2015-

- Provost Search Committee, University of Memphis, 2014

- Vice Provost' Research Capacity Analysis Implementation, 2013-14

- Vice Provost's Advisory Committee for Research, 2012-13

- Chair for the department self-assessment committee, 2006-2012

- University-wide STEM committee, 2008-2010

- Graduate Curriculum Committee, 2010-

- Graduate Admission Committee, 2011-

- Colloquium Committee, 2006-2008