

**ANTHONY FAIOLA**

*Full Professor*

DEPARTMENT OF POPULATION HEALTH  
COLLEGE OF NURSING



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CURRICULUM VITAE  
ANTHONY FAIOLA

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## ACADEMIC APPOINTMENTS

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### UNIVERSITY OF CINCINNATI, *College of Nursing*

- Full Professor, Department of Population Health [Link] 2024—  
*Affiliate Appointment / Member*
  - UC Cancer Center 2024—

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### UNIVERSITY OF KENTUCKY, *College of Health Sciences*

- Full Professor, Department of Health and Clinical Sciences [Link] 2020-24
- Associate Dean for Research and Scholarship, College of Health Sciences [Link] 2020-21
- Joint/Affiliate Appointments*
  - College of Medicine, Markey Cancer Center, *Prevention and Control Research Program* [Link] 2022-24
  - College of Engineering, *Department of Biomedical Engineering* 2020-24
  - College of Design, *Department of Product Design* 2022-24

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### UNIVERSITY OF ILLINOIS—CHICAGO, *College of Applied Health Sciences*

- Full Professor and Chair, Department of Biomedical and Health Information Sciences [Link] 2016-20
- Interim Director, PhD Program in Biomedical and Health Informatics 2019-20
- Joint Appointment*
  - Department of Computer Science, College of Engineering 2016-20

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### INDIANA UNIVERSITY—INDIANAPOLIS, *Luddy School of Informatics, Computing, & Engineering*<sup>1</sup>

- Associate Professor, Department of Human-Centered Computing [Link] 2001-16
- Executive Associate Dean (*Chief Administrative Officer, Indianapolis*) [Link] 2008-13
- Founding Director, Human-Computer Interaction Program 2002-14
- Director, Informatics Program 2011-13
- Director, Media Arts and Science Program 2007-09

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### PURDUE UNIVERSITY, *Polytechnic Institute*

- Assistant Professor, Department of Computer Graphics Technology 1998-01

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## OTHER ACADEMIC LEADERSHIP—UNIVERSITY OF KENTUCKY

- Leadership Board, College of Medicine Alliance Initiative: Mobile Health Technology Group 2023
- Steering Committee, Biomedical Informatics Institute 2020

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## EDUCATION

- Ph.D.** Purdue University, School of Communication, Communication Studies, W. Lafayette, IN.<sup>2</sup> 2005
- M.A.** The Ohio State University, College of Arts & Sciences, Industrial Design, Columbus, OH.<sup>3</sup> 1984
- M.F.A.** The Ohio State University, College of Arts & Sciences, Fine Arts, Columbus, OH. 1979
- M.A.** University at Albany (SUNY), N.Y., College of Arts & Sciences, Fine Arts, Albany, NY. 1977
- B.F.A.** SUNY New Paltz, NY, School of Fine and Performing Arts, Fine Arts, New Paltz, NY. 1975

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## Certificates<sup>4</sup> & Study Abroad

- Harvard University, Div. of Continuing Education, [Design Thinking Workshop](#), Cambridge, MA. 2017
- Institute of Design, Illinois Institute of Technology, [Design Thinking Workshop](#), Chicago, IL. 2017
- Assoc. for Advancement of Medical Instrumentation, [Human Factors of Med. Devices \(FDA\)](#), Minn., MN.<sup>5</sup> 2010
- University of Helsinki, Faculty of Theology, [Systematic Theology Program](#), Helsinki, Finland.<sup>6</sup> 1997
- Academy of Fine Arts ([Accademia di Belle Arti di Urbino](#)), Urbino, Italy.<sup>7</sup> 1976

## DIVERSITY FACULTY MENTORING

- 2023 **Research Sr. Scholars Mentor, College of Medicine**, Research Scholars Program [[Link](#)], *Junior Faculty Diversity Mentoring*, Mentee: [Juan Canedo, DHSc](#), Assistant Professor, Markey Cancer Center. [UNITE](#) Research Priority Area (Diversity, Equity, and Inclusion)
- 2022 **DREAM Sr. Scholar Mentor** [[Link](#)], *Disparities Researchers Equalizing Access for Minorities*, [DREAM](#), Mentee: [Firaz Peer, PhD](#), Asst. Prof., College of Communication and Information.

## ACADEMIC REVIEWER

- 2023—Present BMC Public Health
- 2017—Present American Medical Informatics Association
- 2016—Present Journal of Applied Clinical Informatics
- 2016—Present Journal of Biomedical Informatics
- 2015— Behavior Research Methods
- 2011— MIT Press
- 2009— Human-Computer Interaction Journal (*Taylor and Francis Publishing*)
- 2006— Interacting with Computers (*Elsevier Publishing*)
- 2003— Behavior and Information Technology (*Taylor and Francis Publishing*)
- 2003— Journal of Management Information Systems (*M.E. Sharpe Publishing*)

## ACADEMIC WORKING GROUPS / REVIEW BOARDS

- 2019 Agency for Healthcare Research & Quality, U.S. Dept. of Health & Human Services
- 2015-16 American Medical Informatics Association, Intensive Care Informatics
- 2014-16 Fulbright Scholarship Review Board
- 2009-16 Transportation Active Safety Institute, Exec. Board, Purdue University, School of Engineering

## PROFESSIONAL ORGANIZATIONS

### Active

- 2017— Center for Health Design [CHD](#)
- 2014— American Medical Informatics Association [AMIA](#)
- 2002— Industrial Designers Society of America (Professional Member) [IDSA](#)

### Past

- 2017—20 American Society for Healthcare Engineering ASHE
- 2017—20 Society for Participatory Medicine SPM
- 2016—20 American Congress of Rehabilitation Medicine ACRM
- 2006—10 American Educational Research Association AERA
- 2001—17 Association of Computing Machinery—Special Interest Group ACM
- 1999—10 Fulbright Association Fellow

## ACADEMIC HIGHLIGHTS

PUBLICATIONS & PRESENTATIONS		TEACHING EXPERIENCE	
88	Journals, Proceedings, & Abstracts— <i>Referred</i>	34	Graduate/PhD & UG Courses Taught
118	Keynotes, Present. & Posters— <i>Referred/Invited</i>	16	PhD Students Advised/Mentored
19	Book Chapters, Books, & Educ. Workbooks	39	MS Students Advised/Mentored
GOOGLE SCHOLAR METRICS		SERVICE WORK	
<b>2235 / 23 / 40</b>	<b>Citations / h-index / i10 index</b> (Google Scholar)	37	College/University Committees Served
GRANTS, SCHOLARSHIPS, & CONTRACTS		16	University Board & Councils Served
<b>\$4,400,000</b>	Active External Funding	PUBS DATA LINKS	
<b>\$9,933,124</b>	Total Current/Past Awarded External Grants	<a href="#">NIH Bib</a> / <a href="#">PubMed</a> / <a href="#">DBLP-CS-Bib</a>	
<b>\$4,915,000</b>	Pending/Forthcoming (NIH, ACS)	PRODUCT INNOVATION LINKS	
<b>\$18,000</b>	Recent Past Internal Pilot Funding	Press Releases: <a href="#">MIVA</a> / <a href="#">HYPOalert</a> / <a href="#">FamCare+</a>	
<b>\$192,620</b>	Past Internal Funding (Pilot Studies/Travel)	Patents: <a href="#">MIVA</a> / <a href="#">HYPOalert</a>	

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## RESEARCH SUMMARY

**My research falls within the broad domain of biomedical/health informatics, with two foci: (1) Digital Health Solutions (*clinical interventions*) and (2) Health Behavior (*population health*).**

In the first case, I study populations (patient and families) in the areas of oncology, critical care, cognitive impairment, and mental health. In this work, I apply an interdisciplinary approach from the fields of health informatics, neuropsychology, social science, and human factors, such as interaction design and design thinking for health. The innovation pipeline includes empirical assessment, product development (innovation), usability/feasibility pilot testing, clinical implementation, and commercialization (*if applicable*). Interventional applications include mobile health (mHealth), gaming health (virtual reality), and diagnostic nano-sensors.

Current clinical trials measure the efficacy of these digital health solutions, with the aim to improve the cognitive and mental health outcomes of patients and their families, especially those from underserved communities. Other research in smart and connected health includes developed and forthcoming technologies in biosensors for hypoglycemia, prostate cancer, and cystic fibrosis. These interventions are supported with past and active funding mechanisms. (See Grants section for details.)

### **Pilot Studies** (Recently Completed Internally Funded)

1. This research addresses the cognitive impairment of neuro-oncology and ICU (delirium/dementia) patients by investigating the efficacy of a novel interactive virtual reality gaming platform (**HomeTown Bound**). The aim is to mitigate cognitive dysfunction and improve synaptic plasticity by increasing sensory engagement through movement/embedded Selective Attention exercises, directing the player to focus and filter visual/auditory information in a three-level game system. **Pilot Funding:** UK Center for Clinical and Translational Science; **Collaborators:** Dr. D. Villano, MD (Neuro-Oncology, UK Markey Cancer Center); and Drs. B. Khan & S. Khan, Indiana U., School of Medicine, IU Health, and the Regenstrief Institute.
2. This research addresses the mental health disparities of families of cancer patients from rural Kentucky by investigating the efficacy of a newly developed mHealth intervention (**FamCarePlus**<sup>8</sup>). The aim of the digital health solution is to reduce mental trauma of families by connecting them from their remote/rural location to the bedside.<sup>9,10</sup> The service provides patient vitals/wellness updates and communication tools, without the need of MyChart proxy access. **Pilot Funding:** Markey Cancer Center, Community Grant; **Collaborators:** Drs. Z. Hao, MD; R. Munker, MD. (Neuro-Oncology, UK Markey Cancer Center).

### **External Funded Studies**

3. The portable chromatograph-mass spectrometer for prostate cancer identification/diagnostics (**PPCID**) project builds on our existing canine-inspired nanosensor technology (NSF 2015-19) that uses VOC biomarkers and smart sensors to detect hypoglycemia from human breath. The next phase of this technology uses VOC emanating from urine to screen for patients diagnosed with prostate cancer. This project, titled: Canine-inspired Identification and Analysis of Volatile Organic Compounds (VOC) Biomarkers of Prostate Cancer using Portable Chromatograph-Mass Spectrometer (GC-MS) and Development of a Hand-held Nanosensor System, will result in a portable GC-MS system to screen/detect prostate cancer in clinical settings and within a patient's home. **Funding:** American Cancer Society, Grant No. SPA-RFA-Team-1076327. **Collaborators:** Co-PIs: Drs. M. Woodlam, PhD, (Indiana U.), M. Agarwal, PhD, (Purdue U.), A. Faiola, PhD
4. The research aims to develop a hand-held smart sensor system integrated with machine learning algorithms that accurately and noninvasively detects pulmonary exacerbations (PEX) in cystic fibrosis (CF) patients at a point-of-care through rapid volatile organic compound (VOC) detection. This technological advancement can be considered a major breakthrough as it will revolutionize the way patients with CF are diagnosed with PEX. Title: Development of Canine-Inspired Nanosensor Systems to Detect Pulmonary Exacerbations in Patients with Cystic Fibrosis. **Funding:** NIH R01. **Collaborators:** Co-PIs: Drs. M. Woodlam, PhD, M. Agarwal, PhD, (Indiana U.), A. Faiola, PhD
5. The goal of our Comprehensive Connected Cancer Care (**C4/MyPath**) project is to advance health equity for underserved Kentucky populations by improving timely access to community-focused, patient/caregiver-centered, and high-quality cancer care, particularly targeting underserved populations such as rural, low-income uninsured communities. Building on the prior work of my collaborators,<sup>11</sup> this digital solution will provide coordinated care with supportive/ancillary providers / community services through use of a newly developed referral navigator system. **Funding:** Merck Foundation: *Alliance for Equity in Cancer Care*. **Collaborators:** PIs: Drs. Mullett, MD, P. Hull, M. Chih.; CoI: Dr. Faiola, PhD.

In the second case, my research in **Health Behavior** focuses on population health, i.e., the observation of underserved rural communities impacted by health disparities, including:

- 1) **Public Health**: Research focuses on mental health disparities in underserved and marginalized rural communities.<sup>12,13</sup> These populations experience extreme levels of disease, in part due to the lack of health literacy and disease management. mHealth/telehealth offer solutions for reducing such disparities in rural clinical and home care settings. Recent empirical studies include topics such as: mHealth adoption among people aging with chronic diseases in rural areas, mental health disparities of families of critical care patients from rural communities and how mobile health might reduce mental trauma, the impact of Internet/media sources exposure on self-care behavior, the prevalence of low health literacy, and the current state of family mental health of critical care patients hospitalized during the COVID pandemic.
- 2) **Health Informatics**: Research focuses on solutions to improve the quality and safety of health care services, building novel data science methods using patient-clinician verbal communication and patient self-reported messages.<sup>14,15</sup> This work also includes text mining algorithms and analysis of patient narrative data of psychiatric antidepressant medication. In this work we identify social media data about adverse drug events and drug effectiveness by linking the patients' expressions to medical standard vocabularies.<sup>16</sup>

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## PUBLICATIONS

### Refereed Journals (*Under Review and Development*)

1. Faiola, A., Soroya, S., (Under Review) A Correlational Study Examining the Need for Mobile Health as Interventional Support for Critical Care Patient Family Members. [\*American Journal of Critical Care\*](#).

### Refereed Papers (Journals, Extended Abstracts, & Referred Proceedings (*In Press/Published*))

1. Thompson, JR, Weber, SJ, Goggans, S, Brown, M. Mulvaney, SA, **Faiola, A.**, Maamari, L., & Hull, P. (In Press). Parental Perceptions of Priorities and Features for a Mobile Application to Promote Healthy Lifestyle Behaviors in Preschool Children: A Mixed Method Evaluation, [\*JMIR Pediatrics and Parent\*](#)
2. Naeem, S. B., Boulos, M. K., & Azam, M., **Faiola, A.** (In Press). Determinants of mHealth adoption among people aging with chronic diseases in rural areas: the unified theory of acceptance and use of technology model, [\*Future Internet\*](#).
3. Soroya SH, Sharif A, **Faiola A.** (2024) Role of Pakistani e-libraries in promoting health awareness for the attainment of Sustainable Development Goal-3. [\*Health Information and Libraries Journal\*](#). DOI:<https://doi.org/10.1111/hir.12554>
4. Naeem, S. B., **Faiola, A.**, Rehman, A. U., Boulos, M. K. (2024). Electronic Health (eHealth) Literacy and Self-Care Behaviors—Results from a Survey of University Students in a Developing Country, [\*Information\*, 15\(10\)](#), 636; <https://doi.org/10.3390/info15100636>.
5. Azam, M.; Bin Naeem, S.; Kamel Boulos, M.N.; **Faiola, A.** (2023) Modelling the Predictors of Mobile Health (mHealth) Adoption among Healthcare Professionals in Low-Resource Environments. [\*Int. J. Environ. Res. Public Health\*, 20](#), <https://doi.org/10.3390/ijerph20237112>
6. Weber, S., Mulvaney, S., **Faiola, A.**, Brown, M., Koyama, T., Sun, L., Goggans, S., Hull, P. (2023). Commercially Available Mobile Apps With Family Behavioral Goal Setting and Tracking for Parents: Review and Quality Evaluation, [\*JMIR Pediatr Parent\*; 6:e41779](#), URL: <https://pediatrics.jmir.org/2023/1/e41779>, DOI: 10.2196/41779
7. Soroya, S., Sharif, A., & **Faiola, A.** (2023). Investigating the Contribution of Pakistani e-Libraries in Promoting Health Awareness for the Attainment of Sustainable Development Goal-3. [\*Association for Information Science & Technology\*, 27-31 October 2023 at Novotel London West, London, UK](#).

8. Liu, H., Azam, M., Bin Naeem, S., & **Faiola, A.** (2023). An overview of the capabilities of ChatGPT for medical writing and its implications for academic integrity. *Health Information & Libraries Journal*, 1–7. <https://doi.org/10.1111/hir.12509>
9. Rehman, A., Bin Naeem, S., & **Faiola, A.** (2023). The prevalence of low health literacy in undergraduate students in Pakistan. *Health Information & Libraries Journal*, 40(1), 103–108. <https://doi.org/10.1111/hir.12475>
10. Zolnour A, Eldredge CE, **Faiola A**, Yaghoobzadeh Y, Khani M, Foy D, Topaz M, Kharrazi H, Fung KW, Fontelo P, Davoudi A, Tabaie A, Breitingner SA, Oesterle TS, Rouhizadeh M, Zonnor Z, Moen H, Patrick TB and Zolnoori M (2023). A Risk Identification Model for Detection of Patients at Risk of Antidepressant Discontinuation, *Frontiers in Artificial Intelligence (Medicine and Public Health)*, 6. <https://doi.org/10.3389/frai.2023.1229609>
11. Soroya, S. H., Rehman, A. U., and **Faiola, A.** (2023). Exploring the impact of Internet and media sources exposure on self-care behavior: Mediating the role of health anxiety, literacy, and information seeking behavior, *Kybernetes*, [DOI: 10.1108/K-06-2023-1003](https://doi.org/10.1108/K-06-2023-1003)
12. Soroya, S. H. and **Faiola, A.** (2023). Why did people avoid information during the COVID-19 Pandemic? Understanding information sources' dynamics among Pakistani Z generation. *Library Hi Tech*, 40(6):150. DOI [10.1108/LHT-02-2022-0113](https://doi.org/10.1108/LHT-02-2022-0113)
13. **Faiola A**, Kamel Boulos MN, Bin Naeem S, ur-Rehman A. Integrating Social and Family Support as a Measure of Health Outcomes: Validity Implications from the Integrated Model of Health Literacy. *International Journal of Environmental Research and Public Health*. 2023; 20(1):729. <https://doi.org/10.3390/ijerph20010729>
14. Soroya, S. H., Nazir, M., & **Faiola, A.** (2022). Impact of health-related internet use on disease management behavior of chronic patients: Mediating role of perceived credibility of online information. *Information Development*, 40(3). <https://doi.org/10.1177/02666669221144622>
15. Zolnoori, A., Eldredge, C., Topaz, M., **Faiola, A.**, Fontelo, P. & Zolnoori, M. (2020), Developing a risk identification algorithm for identifying patients at risk of medication non-adherence in patients with depression [Proceedings of American Medical Informatics Association Summit, Chicago, IL, March 21, 2022.](https://doi.org/10.1177/02666669221144622)
16. Belkacem I., Pecci I., **Faiola A.**, Martin B. (2020) Investigating a Design Space for Developing Design Thinking in Electronic Healthcare Records. In: Stephanidis C., Marcus A., Rosenzweig E., Rau PL.P., Moallem A., Rauterberg M. (eds) *HCI International 2020 - Late Breaking Papers: User Experience Design and Case Studies. HCII 2020. Lecture Notes in Computer Science, vol 12423*. Springer, Cham. [https://doi.org/10.1007/978-3-030-60114-0\\_2](https://doi.org/10.1007/978-3-030-60114-0_2)
17. **Faiola, A.**, & Papautsky, E.L. (2019). mHealth that supports the role of the MICU nurse in family mental healthcare, Session 4: Informatics Support for Practice-based Knowledge Generation and Nursing and Healthcare Practice Sponsored by Shadow Health, Extended Abstract, [Health Informatics Kobb Symposium, College of Nursing, University of Florida, Gainesville, FL.](https://doi.org/10.1108/K-06-2023-1003)
18. Zolnoori, M., Ngufor, C., **Faiola, A.**, Eldredge, C. E., Luo, J. Patrick, T., Sohn, S. Balls-Berry, J. Tafti, A. & Shah, N. (2019). Identifying factors affecting drug discontinuation in patients with depression: Text analysis of patient drug review posts (2019). [Extended Abstract. American Medical Informatics Association, Annual Symposium, Washington, DC.](https://doi.org/10.1108/K-06-2023-1003)
19. Hosseini, M, **Faiola, A**, Jones, J, Vreeman, D, Wu, H, & Dixon, B.E. (2019). Impact of document consolidation on healthcare providers' perceived workload and information reconciliation tasks: a mixed methods study, *Journal of the American Medical Informatics Association*, 26(2), 134–142. <https://doi.org/10.1093/jamia/ocy158> [Selected in category of

Best Papers for the Health Information Management Section of the 2020 IMIA Yearbook, (*International Medical Informatics Association*).

20. **Faiola, A.**, Belkacem I, Bergey D, Pecci I, Martin B. (2019) Towards the Design of a Smart Glasses Application for MICU Decision-Support: Assessing the Human Factors Impact of Data Portability & Accessibility. *Proceedings of the International Symposium on Human Factors and Ergonomics in Health Care*; 8(1):52-56. [doi:10.1177/2327857919081012](https://doi.org/10.1177/2327857919081012)
21. Belkacem I., Pecci I., Martin B., & **Faiola A.** (2019) TEXTile: Eyes-Free Text Input on Smart Glasses Using Touch Enabled Textile on the Forearm. *Proceedings of the 17<sup>th</sup> IFIP TC 13 International Conference, Paphos, Cyprus, September 2–6, 2019*. (Also in: Lamas D., Loizides F., Nacke L., Petrie H., Winckler M., Zaphiris P. (eds) *Human-Computer Interaction – INTERACT 2019*. INTERACT 2019. Lecture Notes in Computer Science, vol 11747. Springer, Cham. [https://doi.org/10.1007/978-3-030-29384-0\\_22](https://doi.org/10.1007/978-3-030-29384-0_22)
22. **Faiola, A.**, Papautsky, E., & Isola, M. (2019) Empowering the aging with mobile health: A mHealth framework for supporting sustainable lifestyle behavior, *Current Problems in Cardiology*, 44(8), 232-266. <https://doi.org/10.1016/j.cpcardiol.2018.06.003>
23. Zolnoori, M., Fung, K. W., Patrick, T. B., Fontelo, P., Kharrazi, H., **Faiola, A.**, Shah, N. D., Wu, Y. S., Eldredge, C. E., Luo, J., Conway, M., Zhu, J., Park S. K., Xu, K., Moayyed, H., & Goudarzvand, S. (2019). A systematic approach for developing a corpus of patient reported adverse drug events: A case study for SSRI and SNRI medications, *Journal of Biomedical Informatics*, 90. <https://doi.org/10.1016/j.jbi.2018.12.005> [NIH Site](#)
24. **Faiola, A.**, Vatani, H., & Agarwal, M. (2019). Hypoglycemic Detection by Human Breath: A Mobile Health Application that Alerts Diabetics of Low Blood Glucose, *EAI Transactions on Ambient Systems (Special Edition on Smart Coaching Solutions for Health and Well-Being*, 6(18), e4. <https://eudl.eu/pdf/10.4108/eai.23-3-2018.162220>
25. Zolnoori, M., Fung, K. W., Patrick, T. B., Fontelo, P., Kharrazi, H., **Faiola, A.**, Shah, N. D., Wu, Y. S., Eldredge, C. E., Luo, J., Conway, M., Zhu, J., Park S. K., Xu, K., & Moayyed, H. (2019). The PsyTAR dataset: From patients generated narratives to a corpus of adverse drug events and effectiveness of psychiatric medications. *Data in Brief*, 24. <https://doi.org/10.1016/j.dib.2019.103838>
26. **Faiola, A.** & Abraham, J. (2018). FAMcare: A MICU Room-to-Mobile System— Supporting the Communication Needs of Families, Extended Abstracts, *American Medical Informatics Association, Annual Symposium, Nov. 3-7, San Francisco, CA*.
27. Zolnoori, M., Fung, K., Patrick, T., Fontelo, P., Kharrazi, H., **Faiola, A.**, Wu, Y. W., Stoffel, V. & Patrick, T. B. (2018). Utilizing Consumer Health Posts to Identify Underlying Factors Associated with Patients’ Attitudes towards Antidepressants, Extended Abstracts, *American Medical Informatics Association, Annual Symposium, San Francisco, CA*.
28. **Faiola, A.**, Vatani, H., Greenhill, K., Bhuma, M., & Agarwal, M. (2018). HYPOalert: Designing Mobile Technology for Hypoglycemic Detection and Monitoring—Based on Human Breath, *Proceedings of the 12<sup>th</sup> EAI International Conference on Pervasive Computing Technologies for Healthcare*, May 2018, ACM, New York, New York, 402-406. <https://doi.org/10.1145/3240925.3240975>
29. Tunnell, H. D., **Faiola, A.** Bolchini, D., & Ellis, R. (2018). Simulated Clinical Encounters Using Patient-Operated mHealth: An Experimental Study to Investigate Patient-Provider Communication, *Journal of Medical Internet Research—mHealth and uHealth*, 6(11): e11131. <https://mhealth.jmir.org/2018/11/e11131/>
30. Zolnoori, M., Fung, K., Fontelo, P., Kharrazi, H., **Faiola, A.**, Wu, Y. S., Stoffel, V., & Patrick, T. (2018). Identifying the Underlying Factors Associated With Patients’ Attitudes Toward Antidepressants: Qualitative and Quantitative Analysis of Patient-Generated



Data, *Journal of Medical Internet Research— Journal of Mental Health*, 5(4):e10726.  
[doi:10.2196/10726](https://doi.org/10.2196/10726) [NIH Site](#)

31. Tunnell, H. D., **Faiola, A.** & Bolchini, D. (2017). Guidelines to Incorporate a Clinician User Experience (UX) into the Design of Patient-Operated mHealth. [Extended Abstract in Computing Systems, CHI 2017, ACM CHI Conference, Denver, CO](#), pp. 385-388.
32. Papautsky, E.L., Abdulbaseer, U., & **Faiola, A.** (2017). What is the role of patient families? An exploratory study in a medical intensive care unit. *Proceedings of Human Factors & Ergonomics Society 2017, International Annual Meeting*, Austin, TX, Oct 2017.  
<http://journals.sagepub.com/doi/pdf/10.1177/1541931213601621>
33. Hosseini, M, Jones, J, **Faiola, A**, Wu, H, Vreeman, D, & Dixon, B. E. (2017). Reconciling disparate information in continuity of care documents: Piloting a system to consolidate structured clinical documents. *Journal of the Biomedical Informatics*, 74, 123-129.  
<https://www.ncbi.nlm.nih.gov/pubmed/28903073>
34. **Faiola, A.** & Holden, R. (2017) Consumer Health Informatics: Empowering Healthy-Living-Seekers through mHealth, *Progress in Cardiovascular Diseases, Special Edition: Conceptualizing the Healthy Lifestyle Healthcare System*, 59(5), 479-486.  
<https://doi.org/10.1016/j.pcad.2016.12.006>
35. **Faiola, A.**, Khairat, S., & Kaufman, D. (2016). From coexistence to convergence: The pedagogical transpositioning of human-computer interaction within biomedical informatics. 2016 *InSpire, Education Symposium, American Medical Informatics Association*. Extended Abstract.
36. Zolnoori, M. Patrick, T. B., Conways, M., **Faiola, A.**, & Luos, J. (2016) Evaluating Acceptability and Efficacy of Antidepressant Medications using Patients Comments in Social Media. Extended Abstract, *American Medical Informatics Association, Annual Symposium, November, 2016*.
37. Srinivas, P., Reddy, M. C., & **Faiola, A.** (2016). Better managing technology-mediated interruptions in the ICU: Examining the role of patient information for improving text message notifications. *Proceedings of American Medical Informatics Association, Annual Symposium, November, 2017. (Distinguished Paper Nomination)* [PMID: 28269913](#); [PMCID: PMC5333214](#).
38. **Faiola, A.**, Papautsky, E. L., & Joo, M. (2016). Supporting Patient Healing through ICUsmartCARE: Technologies that Enable Increased Family Presence, Communication, and Information Flow, *Proceedings of the 2016 IEEE International Conference on Healthcare Informatics 2016 (ICHI) in Chicago, IEEE Computer Society*.  
[DOI: 10.1109/ICHI.2016.42](https://doi.org/10.1109/ICHI.2016.42).
39. Tunnell, H. D., Pfaff, M. & **Faiola, A.** (2016). Secondary Users and the Personal mHealth Record: Designing Tools to Improve Collaboration Between Patients and Providers, Extended Abstract, *Proceedings of the 2016 IEEE International Conference on Healthcare Informatics 2016 (ICHI), Chicago, IEEE Computer Society*, pp. 412-412. [DOI: 10.1109/ICHI.2016.76](https://doi.org/10.1109/ICHI.2016.76).
40. Srinivas, P., **Faiola, A.**, & Mark, G. (2016). Designing guidelines for mobile health technology: Tools for managing notification interruptions in the ICU, *Proceedings of ACM CHI Notes, San Jose, CA, USA, May 7-12*. New York, NY: Association for Computing Machinery Press, April 2016. <https://doi.org/10.1145/2858036.2858553>
41. **Faiola, A.**, Voiskounsky, A. E. & Bogachava, N.V. (2016). Human augmentation: the formation of cyberconsciousness (Человек дополненный: становление киберсознания), *Problems of Philosophy (Вопросы философии)*, 3, Russian Academy of Sciences, Moscow, Russia, 147-162. <https://istina.msu.ru/publications/article/21016626/>

42. **Faiola A**, Srinivas P, Duke J. Supporting Clinical Cognition: A Human-Centered Approach to a Novel ICU Information Visualization Dashboard. *AMIA Annu Symp Proc.* 2015 Nov 5;2015:560-9. [PMID: 26958190](#); [PMCID: PMC4765655](#).
43. **Faiola, A.**, Srinivas, P. & Doebbeling, B. (2015) A ubiquitous situation-aware data visualization dashboard to reduce ICU clinician cognitive load. *Proceedings of the IEEE HealthCom 2015, Boston, MA, April 15, 2015.* <https://ieeexplore.ieee.org/document/7454540/>
44. Srinivas, P., **Faiola, A.**, & Khan, B. (2015). Supporting information management in ICU rounding a novel mobile system for managing patient-centered notes and action-items, *Proceedings of the IEEE HealthCom 2015, Boston, MA, April 15, 2015.* <https://ieeexplore.ieee.org/document/7454571>
45. Tunnell, H., **Faiola, A.**, & Haggstrom, D. (2015). Clinicians as secondary users of patient-centered, mobile technology in complex healthcare settings, *Proceedings of the IEEE HealthCom 2015, Boston, MA, April 15, 2015.* <https://ieeexplore.ieee.org/document/7454586/>
46. **Faiola, A.**, Srinivas, P., & Hillier, S. (2015). Improving patient safety: Integrating data visualization and communication into ICU workflow to reduce cognitive load. *Proceedings of the International Symposium on Human Factors and Ergonomics in Health Care, Baltimore, MD, April 2015.* <https://doi.org/10.1177/232785791504101>
47. **Faiola, A.** & Srinivas, P. (2014). Extreme mediation: observing mental and physical health in everyday life. *Proceedings of the 2014 Association for Computing Machinery (ACM) International Joint Conference on Pervasive and Ubiquitous Computing (UbiComp 2014), Seattle, WA, 47-50.* <https://doi.org/10.1145/2638728.2638741>
48. **Faiola, A.** (2013). Distributed creative activity: expanding Tikhomirov's original notion of creative activity, *Psychology in Russia: State of the Art, Russian Psychological Society Press*, 6(4), 120-133. <http://psychologyinrussia.com/volumes/?article=2904>
49. **Faiola, A.**, Newlon, C., Pfaff, M., & Smysolva, O. (2013) Correlating the effects of flow and telepresence in virtual worlds: Enhancing our understanding of user behavior in game-based learning. *Computers in Human Behavior*, 29(3), 1113-1121. <https://doi.org/10.1016/j.chb.2012.10.003>
50. **Faiola, A.**, Ho, H., MacDorman, K. F. & Tarrant, M. (2011). The aesthetic dimensions of US and South Korean responses to Web homepages: A cross-cultural comparison. *International Journal of Human-Computer Interaction*, 27(2), 131-150. <https://www.tandfonline.com/doi/full/10.1080/10447318.2011.537173>
51. **Faiola, A.**, Davis, S. B., & Edwards, R. L. (2010). Extending knowledge domains for new media education: integrating interaction design theory and methods. *New Media and Society*, 12(5), 691-709. <http://journals.sagepub.com/doi/pdf/10.1177/1461444809353014>
52. Matei, S., **Faiola, A.**, Wheatley, D. J., & Altom, T. (2010). The role of physical affordances in multifunctional mobile device design. *International Journal of Information Technology and Web Engineering*, 5(4), 40-57. <https://doi.org/10.4018/jitwe.2010100103>
53. **Faiola, A.** & Matei, S. (2009). Enhancing human-computer interaction design education: Teaching affordance design for emerging mobile devices. *International Journal of Technology and Design Education*, 20(3), 130-155. <https://link.springer.com/article/10.1007/s10798-008-9082-4>
54. Bolchini, D., Pulido, D., & **Faiola, A.** (2009). Paper-in-screen prototyping: An agile technique to anticipate the mobile experience. *Interactions: New Visions of Human-Computer Interaction*, 16(3), 35-47. <https://doi.org/10.1145/1551986.1551992>
55. **Faiola, A.** & MacDorman, K. (2008). Exploring the influence of web designer cognitive style on information design: a cross-cultural comparison of a holistic and analytical

- perspective. *Information, Communication and Society*, 11(3), 348-374.  
<https://doi.org/10.1080/13691180802025418>
56. Faiola, A. (2007). The design enterprise: Rethinking the HCI education paradigm. *Design Issues*, 23(3), 30-45. <https://doi.org/10.1162/desi.2007.23.3.30>
  57. Faiola, A. (2006). Designing humane technologies: A potential framework for human-computer interaction design. *The International Journal of the Humanities*, 2(3), 1877-1886. [https://cgscholar.com/bookstore/works/designing-humane-technologies?category\\_id=cgrn](https://cgscholar.com/bookstore/works/designing-humane-technologies?category_id=cgrn)
  58. **Faiola, A.** & Matei, S. (2005). Cultural cognitive style and web design: Beyond a behavioral inquiry of computer-mediated communication. In C. Ess and F. Sudweeks (Eds.) *Culture and Computer-Mediated Communication: Toward New Understandings. Journal of Computer-Mediated Communication*, 11(1), 375-394. <https://doi.org/10.1111/j.1083-6101.2006.tb00318.x>
  59. Faiola, A. (2002). New media usability: HCI curriculum focus in the School of Informatics, *Interactions: Interface Design (40 Years of SIGGHI)*, 9(2), 25-27. <https://interactions.acm.org/archive/section/march-2002/interface-design-2002>
  60. **Faiola, A.** (2002). A visualization pilot study for hypermedia: Developing cross-cultural user profiles for new media interfaces. *Journal of Educational Multimedia and Hypermedia*. 11(1), 51-71. <https://www.learntechlib.org/primary/p/10775/>
  61. Faiola, A. (1999). Re-Designing graphic arts education: A closer look at strategies for a New Millennium of Digital Communication and Globalization. *The Journal of Technology Studies*. 25(2), 47-50. <https://scholar.lib.vt.edu/ejournals/JTS/Summer-Fall-1999/PDF/>
  62. Faiola, A. (1989). Improving courseware development efficiency: The effects of authoring systems on team roles and communication. *Educational Technology*. 29(8), 16-19. <https://www.jstor.org/stable/44426848>
  63. **Faiola, T.** & DeBloois, M. L. (1988). Designing a visual factors-based screen display interface: The new role of the graphic technologist. *Educational Technology*, 28(8), 12-21. <https://www.jstor.org/stable/44426897>

### Extended Abstracts – Local Conferences

1. **Faiola, A.,** Hao, Z., Soroya, S., Naeem, S., Lenox, S., Piekarski, S., & Tenuta, G. (2022). Addressing the Mental Health Disparities of Families of Cancer Patients from Rural Kentucky: Investigating the Efficacy of FamCare+ to Reduce Mental Trauma among Families (A Mobile Health Service that Connects Families at Home with Point-of-Care at the Bedside). *12th Annual Appalachian Translational Research Network Summit “Community-Academic Engagement: Building Resilience Together,”* November 14 and 15, 2022, University of Kentucky, Lexington, KY.
2. Ansah-Koi, K., Srinivas, P., Strzeszkowski, D., Gross, M., & **Faiola, A.** (2016) **Building Healthy Social Media for All: Investigating How Different Cultures Seek and Process Health Information, Extended Abstract.** [Indiana University Purdue University Indianapolis \(IUPUI\) Research Day, April 8, 2016.](https://www.indiana.edu/~iupui/researchday/2016/)
3. Srinivas, P., & **Faiola, A.** (2014). Smartphone dependency and consciousness: Observing flow in the everyday life. [Extended Abstract. Indiana University—Purdue University, Research Day, April 11, 2014.](https://www.indiana.edu/~iupui/researchday/2014/)

### Refereed and Non-Refereed Posters and Workshops

1. **Faiola, A.,** Hao, Z., Munker, R., Soroya, S., Schrader, S. & Burch, M. (2023). Addressing the Mental Health Disparities of Families of Cancer Patients from Rural Kentucky: Investigating the efficacy of FamCare+ to reduce mental trauma using a mobile health

- service that connects families at home with the bedside, *College of Medicine, Alliance Research Initiative Seminar, University of Kentucky, October 4, 2023.*
2. **Faiola, A.**, Villano, J., Mayer, K., Meulenbroek, P., Mayer, K., Soroya, S., Schrader, S. & Burch, M. (2023). Health Gaming Intervention as Neurostimulation Therapy for Brain Cancer Patients Suffering from Acute Cognitive Impairment: A Clinical Study to Improve Cognitive Function and Synaptic Plasticity, *College of Medicine, Alliance Research Initiative Seminar, October 4, 2023.*
  3. **Faiola, A.**, Hao, Z. Montgomery-Yates, A., Soroya, S., Lenox, S., Piekarski, S., Tenuta, G., & Schrader, S. (2023). Addressing the Mental Health Disparities of Families of Cancer Patients from Rural Kentucky: A clinical study on the efficacy to reduce mental trauma using the mobile app intervention FamCarePlus, *Markey Cancer Research Day, May 12, 2023.*
  4. **Faiola, A.**, Villano, J., Montgomery-Yates, A., Mayer, K., Soroya, S., Meulenbroek, P., Lenox, S., Piekarski, S., Tenuta, G., & Schrader, S. (2023). Health Gaming Intervention as Neurostimulation Therapy for Brain Cancer Patients Suffering from Acute Cognitive Impairment: A Clinical Study to Improve Cognitive Function & Synaptic Plasticity, *Markey Cancer Research Day, May 12, 2023.*
  5. **Faiola, A.**, Hao, Z., Soroya, S., Naeem, S., Lenox, S., Piekarski, S., & Tenuta, G. (2022). Addressing the Mental Health Disparities of Families of Cancer Patients from Rural Kentucky: Investigating the Efficacy of FamCare+ to Reduce Mental Trauma among Families (A Mobile Health Service that Connects Families at Home with Point-of-Care at the Bedside). [\*12th Annual Appalachian Translational Research Network Summit\*](#) “Community-Academic Engagement: Building Resilience Together,” November 14 and 15, 2022, University of Kentucky, Lexington, KY.
  6. **Faiola, A.**, Abraham, J. & Papautsky, E.L. (2019). Delivering Patient Information and Access to Mental Health Counseling for ICU Families: Towards a Human-Centered Mobile Health System for Room-to-Family Communication. Poster, Extended Abstract and Presentation, *Proceedings from Human Factors and Ergonomics in Health Care, Chicago, IL, March 2019.*
  7. **Faiola, A.**, Minh, H, & Bergey, D. (2019). Supporting the Mental Health of Families in the ICU: A Family-Centered Approach to Mobile Information Communication. Poster, University of Illinois at Chicago, Research Day, April 7, 2019.
  8. **Faiola, A.**, Belkacem, I., Bloodworth, M., Bergey, D., Pecci, I., & Martin, B. (2019). Towards the Design of a Smart Glasses Application for MICU Decision-Support: Assessing the Human Factors Impact of Data Portability and Accessibility, Poster, *Human Factors and Ergonomics in Health Care, Chicago, IL, March 2019.*
  9. Greenhill, K., **Faiola, A.** Lebowitz, L. & Bond, S. (2017). Creating Common Ground: A Medical Visualization Tool to Aid Physician / Family Communication in a Medical Intensive Care Unit Setting, Poster, *Applied Health Sciences Research Day, November 1, 2017, University of Illinois at Chicago.*
  10. Boyd AD, Abraham J, Kitsiou S, Papautsky E, & **Faiola A.** (2017). Health Informatics Research Projects, Medical Technology Enterprise Consortium (MTEC), Poster, 2<sup>nd</sup> Annual Conference, March 30<sup>th</sup>, 2017. San Antonio, TX.
  11. Tunnell, H. D., **Faiola, A.** & Bolchini, D. (2017). Guidelines to Incorporate a Clinician User Experience (UX) into the Design of Patient-Operated mHealth. Poster and Interactive Demo, *CHI 2017, ACM CHI Conference, Denver, CO, April. 2017.*
  12. Zolnoori, M. Patrick, T. B., Conways, M., **Faiola, A.**, & Luos, J. (2016) Evaluating Acceptability and Efficacy of Antidepressant Medications using Patients Comments in

Social Media. Poster, *American Medical Informatics Association, Annual Symposium, November, 2016.*

13. Tunnell, H. D., **Faiola, A.** & Pfaff, M. (2016). Secondary Users and the Personal mHealth Record: Designing Tools to Improve Collaboration Between Patients and Providers, Poster: 2016 IEEE International Conference on Healthcare Informatics 2016 (ICHI) in Chicago, IEEE Computer Society.
14. Putka, J., Cavalcanti, L., Ahgharian, N., & **Faiola, A.** (2016) Reducing Cognitive Load of Unmanned Aerial Vehicle Soldier-Operators: A Novel Weapon-UAV Control Design, *IUPUI Research Day Poster Session, April 8.*
15. Srinivas, P, Cavalcanti, L., & **Faiola, A.** (2016) The Impact of Excessive Smartphone Usage: A Study on Flow and the Psychosocial Wellness of Students, *IUPUI Research Day Poster Session, April 8.*
16. Ansah-Koi, K., Srinivas, P., Strzeszkowski, D., Gross, M., & **Faiola, A.** (2016) Building Healthy Social Media for All: Investigating How Different Cultures Seek and Process Health Information, *IUPUI Research Day Poster Session, April 8.*
17. Srinivas, P. & **Faiola, A.** (2015). Improving patient safety: Integrating data visualization and communication into ICU workflow to reduce cognitive load. Poster. *Human Factors and Ergonomics in Health Care (Improving the Outcomes)*, April 26, 2015, Baltimore, MD.
18. Srinivas, P., & **Faiola, A.** (2014). Modeling daily rounds to support efficient task management in ICU workflow. Poster, *Workshop on Interactive Systems in Healthcare (WISH 2014). In conjunction with the American Medical Informatics Association Annual Symposium, November 15, 2014.*
19. **Faiola, A.** & Srinivas, P. (2014). Extreme mediation: observing mental and physical health in everyday life. Poster. *Proceedings of the 2014 Association for Computing Machinery (ACM) International Joint Conference on Pervasive and Ubiquitous Computing (UbiComp 2014)*, September 2014.
20. Boston-Clay, C., Jones, J., **Faiola, A.**, Dixon, B. & Pfaff, M., (2014). AMIA 2014, Assessing Health Information Technology Acceptance: Developing a Human Computer Interaction Activity-Centered Acceptance Framework, *Dissertation Poster, American Medical Informatics Association (AMIA) Annual Symposium, Washington, DC, November 15-19, 2014.*
21. Finch, R. J., Srinivas, P., Karanam, Y., Koval, O., & **Faiola, A.** (2014). Augmenting consciousness through invasive technologies: How do cochlear implant patients engage activity in the world? *Indiana University—Purdue University, Research Day, April 11, 2014.* Poster and Extended Abstract.
22. **Faiola, A.**, Srinivas, P., Karanam, Y., & Koval, O. (2014). Reducing diagnostic error in the ICU: A novel approach to clinical workflow -- visualization-communication integration. *Indiana University—Purdue University, Research Day, April 11, 2014.* Poster and Extended Abstract.
23. Srinivas, P., Karaham, Y., Chartash, D., Doebbeling, B., & **Faiola, A.** (2014). VizCom: A Novel Workflow Model for ICU Clinical Decision Support. In ACM CHI '14, Poster Session, May 1, Toronto, Canada. New York, NY: Association for Computing Machinery Press.
24. **Faiola, A.**, Srinivas, P., Karanam, Y. & Kovel, O. (2014). Reducing Diagnostic Error in the ICU: A Novel Approach to Clinical Workflow—Visualization-Communication Integration, *IUPUI Research Day Poster Session, April 11.*

25. Finch, R.J., Srinivas, P., and Karanam, Y., Koval, O., & **Faiola, A.** (2014). Augmenting Consciousness through Invasive Technologies: How Do Cochlear Implant Patients Engage Activity in the World? *IUPUI Research Day Poster Session, April 11.*
26. Srinivas, P. & **Faiola, A.** (2014). Smartphone Dependency and Consciousness: Observing Flow in Everyday Life, Poster, *IUPUI Research Day, April 11.*
27. Karaham, Y., **Faiola, A.**, & Chartash (5/25/2013) MIVA: Decision Support, *Poster Session.* World Usability Day, IUPUI, Indianapolis, IN.
28. Stupiansky, N., Cummings, T., **Faiola, A.**, Defazio, J. & Orr, D. P. (2011). The Effects of a Computer-Based Driving Game on Hypoglycemia Education among Adolescents with Type-1 Diabetes, *Abstract/Poster for the Society for Adolescent Health and Medicine, Poster Session, 2011 Annual Conference, Seattle, Washington, March 29-April 1.*
29. **Faiola, A.** and Rosenbaum, H. (4/23/2002). *Challenges in teaching usability theory and testing for new media and novel interface technologies. Special Interest Group Forum for Educators of HCI, ACM CHI '02 Conference. Poster Session, Minneapolis, MN.*

### Invited Book Chapters

1. **Faiola A.**, Vatani H., & Srinivas P. (2018) The Impact of Smartphone Use on the Psychosocial Wellness of College Students. In: *Alexandrov D., Boukhanovsky A., Chugunov A., Kabanov Y., Koltsova O. (eds) Digital Transformation and Global Society. DTGS 2018. Communications in Computer and Information Science, vol 859.* Springer, Cham., 264-276. [https://doi.org/10.1007/978-3-030-02846-6\\_21](https://doi.org/10.1007/978-3-030-02846-6_21)
2. Bolchini, D., & **Faiola, A.** (2013). Usability assessment. In: *Dubitzky, W., Wolkenhauer, O., Yokota, H., and Cho, K.H. (Eds.). Encyclopedia of Systems Biology.* New York: Springer Science and Business Media, pp. 2328-2329. DOI: [https://doi.org/10.1007/978-1-4419-9863-7\\_217](https://doi.org/10.1007/978-1-4419-9863-7_217)
3. **Faiola, A.** & Newlon C. (2011) Advancing Critical Care in the ICU: A Human-Centered Biomedical Data Visualization Systems. In: *Robertson M.M. (eds) Ergonomics and Health Aspects of Work with Computers. Ergonomics and Health Aspects of Work with Computers. Lecture Notes in Computer Science, Vol 6779.* Springer, Berlin, Heidelberg, 119-128. [https://doi.org/10.1007/978-3-642-21716-6\\_13](https://doi.org/10.1007/978-3-642-21716-6_13)
4. Bolchini D. & **Faiola A.** (2011) The Fusing of “Paper-in-Screen”: Reducing Mobile Prototyping Artificiality to Increase Emotional Experience. In: *Marcus A. (eds) Design, User Experience, and Usability. Theory, Methods, Tools and Practice. DUXU 2011. Lecture Notes in Computer Science, vol 6770.* Springer, Berlin, Heidelberg, 548-556. [https://link.springer.com/chapter/10.1007/978-3-642-21708-1\\_61](https://link.springer.com/chapter/10.1007/978-3-642-21708-1_61)
5. **Faiola, A.** & Kharrazi, H. (2010). Diabetes education and serious gaming: Teaching adolescents to cope with diabetes. In: *B. M. Hayes and W. Aspray (Eds.), Health Informatics: A Patient-Centered Approach to Diabetes.* Cambridge, MA: MIT Press, pp. 151-178.
6. Duke J., **Faiola A.**, & Kharrazi H. (2009) A Novel Visualization Tool for Evaluating Medication Side-Effects in Multi-drug Regimens. In: *Jacko J.A. (eds) Human-Computer Interaction. Interacting in Various Application Domains. HCI 2009. Lecture Notes in Computer Science, vol 5613.* Springer, Berlin, Heidelberg, pp. 478-487. [https://doi.org/10.1007/978-3-642-02583-9\\_52](https://doi.org/10.1007/978-3-642-02583-9_52)
7. **Faiola A.** & Smyslova O. (2009) Flow Experience in Second Life: The Impact of Telepresence on Human-Computer Interaction. In: *Ozok A.A., Zaphiris P. (eds) Online Communities and Social Computing. OCSC 2009. Lecture Notes in Computer Science,*

vol 5621. Springer, Berlin, Heidelberg, 574-583. [https://doi.org/10.1007/978-3-642-02774-1\\_62](https://doi.org/10.1007/978-3-642-02774-1_62)

8. Kharrazi H., **Faiola A.**, & Defazio J. (2009) Healthcare Game Design: Behavioral Modeling of Serious Gaming Design for Children with Chronic Diseases. In: *Jacko J.A. (eds) Human-Computer Interaction. Interacting in Various Application Domains. HCI 2009. Lecture Notes in Computer Science, vol 5613.* Springer, Berlin, Heidelberg, 335-344. [https://doi.org/10.1007/978-3-642-02583-9\\_37](https://doi.org/10.1007/978-3-642-02583-9_37)
9. Luzcando E., Bolchini D., & Faiola A. (2009) Evaluating Usability-Supporting Architecture Patterns: Reactions from Usability Professionals. In: *Jacko J.A. (eds) Human-Computer Interaction. New Trends. HCI 2009. Lecture Notes in Computer Science, vol 5610.* Springer, Berlin, Heidelberg, 320-328. [https://doi.org/10.1007/978-3-642-02574-7\\_36](https://doi.org/10.1007/978-3-642-02574-7_36)
10. **Faiola, A.** & Matei, S. (2007). Cultural cognitive style and the Web: Toward a theory and practice of web design for international users. In: *K. St. Amant (Ed.), Linguistic and Cultural Online Communication Issues in the Global Age.* Hershey, PA: Idea Group Published, pp. 143-159. <https://www.igi-global.com/book/linguistic-cultural-online-communication>
11. **Faiola A.**, & Voiskounsky A.E. (2007) Flow Experience of MUD Players: Investigating Multi-User Dimension Gamers from the USA. In: *Schuler D. (eds) Online Communities and Social Computing. OCSC 2007. Lecture Notes in Computer Science, vol 4564.* Springer, Berlin, Heidelberg, 324-333. [https://doi.org/10.1007/978-3-540-73257-0\\_36](https://doi.org/10.1007/978-3-540-73257-0_36)
12. Faiola, A. (2005). Toward an HCI theory of cultural cognition. In: *C. Ghaoui (Ed.), Encyclopedia of Human-Computer Interaction.* Hershey, PA: Idea Group Published, pp. 609-614.

### Books and Educational Workbooks

1. **Faiola, A.** & Johnson, C. (Ed). (2004). *Psychology of human-computer interaction.* (Course Workbook) Indianapolis: IUPUI Publishing Services.
2. **Faiola, A.** & Larew, M. (Ed). (2004). *Human-computer interaction: Advanced concepts.* (Course Workbook) Indianapolis: IUPUI Publishing Services.
3. Faiola, A. (2003). [\*Typography for print and the Web: Web usability tools and methods.\*](#) (*Шрифты для печати и Web-дизайна*) Saint Petersburg, Russia: BHV Publishing GmbH.
4. Faiola, A. (Ed). (2003). *Human-computer interaction: Basic concepts for I300* (Course Workbook) Indianapolis: IUPUI Publishing Services.
5. Faiola, A. (Ed). (2002). *New media basics: Understanding message design theory in a post-information society.* New York: John Wiley and Sons, Inc., Custom Services.
6. Faiola, A. (2000). [\*Typography primer.\*](#) Sewickley, PA: Graphic Arts Technical Foundation Press.
7. Faiola, A. (Ed). (2001). *Human-computer interaction: An overview of theories for user interface design and usability.* New York: John Wiley and Sons, Inc., Custom Services.

### Non-Refereed Papers and Theses

1. Faiola, A. (2005). *Cross-cultural cognition and online information design: Identifying cognitive styles among web designers of diverse national origin.* Ann Arbor, MI: UMI. <http://docs.lib.purdue.edu/dissertations/AAI3191458/>
2. Faiola, A. (2004). Advancing the design of more useable technologies: Human-computer

- interaction at IUPUI, *Informatics*, 2(2), 14-15.
3. Faiola, A. (2004). *Information Visualization: The mountain-view project*. *Informatics*, 2(2), 16.
  4. Faiola, A. (2000). Culture and visual intelligence: A cross-cultural comparison of American and Russian students in visualization processes. *International Association for Cross-Cultural Psychology Bulletin*.
  5. Faiola, A. (1989). Enhancing the skills of the graphic specialist for CBT development. *Instruction Delivery Systems*.12(5), 12-14.
  6. Faiola, A. (1988). Principles and Guidelines for a Screen Display Interface. *VideoDisc Monitor*. 8(2), 27-29.
  7. Faiola, A. (1984). *A computer-assisted instruction overview and prototype*. Unpublished master's thesis, The Ohio State University, Columbus, OH.
  8. Faiola, A. (1979). *The transient object: A look at contemporary thinking and issues as applied to my recent artwork*. Master's Abstracts International, 65 1.

## PRESENTATIONS (First Name = Primary Presenter)

### Invited Talks, Keynotes, Panels [Total: 9]

1. Faiola, A. (Sept. 20, 2023). *Making Cancer Care Portable & Equitable for Patients and Their Families: Using mHealth and Health Gaming to Impact Health Outcomes*, [Markey Cancer Research Seminar Series](#), Seminar Speaker, College of Medicine, University of Kentucky.
2. Faiola, A. (Aug. 25, 2023). [Health disparities and information behavior: The Role of Mobile Health in Mitigating Mental Trauma in Families of Cancer Patients](#), Social Hour Special Event, Association for Information Science & Technology, Guest Speaker.
3. Faiola, A. (Nov. 22, 2022). *Addressing the mental health disparities of families of critically ill patients from rural populations: Investigating the efficacy to reduce mental trauma using mobile health technology that connects families at home with clinicians at the bedside*, [2<sup>nd</sup> International Conference on Interdisciplinary Approach in Social Sciences 2022 \(Mental Health for All\)](#), Keynote (Zoom): Punjab, Pakistan.
4. **Faiola, A.**, Mathews, S., & Woodbury, M. (Sept. 14, 2022). *Panel on Digital Health Education*, [Nexus Summit 2022, Minneapolis](#), Sept. 14, 2022, Virtual Panel, Sept. 13-14.
5. Faiola, A. (May 2018). *The Rise of the Digital Health Information Society? Empowering People by Connecting Mobile Health to Healthy Lifestyle Management*, Keynote, [3rd International Conference on Digital Transformations & Global Society](#), St. Petersburg State University of Information Technology and Optics, Russia.
6. Faiola, A. (Nov. 2017). *Consumer Health Informatics: Empowering Patients with Noncommunicable Diseases through mHealth*, Keynote, [International Conference on Informatics, Health, & Technology, King Saud bin Abdulaziz University for Health Science](#), Riyadh, Saudi Arabia. [[News Link](#)]
7. Faiola, A., (Oct. 2018). *The Rise of Consumer eHealth Informatics: Advancing Mobile Health for the Rheumatoid Patient*, [American College of Rheumatology](#), University Club of Chicago, Chicago, IL, Keynote (Zoom): Panel/Presentation.
8. Faiola, A., (Oct. 31, 2016). *Future Implications of Health Information Management Systems in Non-Communicable Disease Management*, Session: [Mobile Health Technology and Chronic](#)



[Disease Management: Applications in Rehabilitation, The American Congress of Rehabilitation Medicine](#), Chicago, IL Panel Presentation.

9. **Faiola, A.**, Khairat, S., & Kaufman, D. (June 29, 2016). *From coexistence to convergence: The pedagogical transpositioning of human-computer interaction within biomedical informatics*. 2016 InSpire, [Education Symposium, American Medical Informatics Association](#). Panel/Presentation (S12), Columbus, OH.

### Refereed Presentations / Talks

1. Zolnoori, M., Ngufor, C., **Faiola, A.**, Eldredge, C. E., Luo, J. Patrick, T., Sohn, S. BallsBerry, J. Tafti, A. & Shah, N. (Nov 6, 2019). *Identifying factors affecting drug discontinuation in patients with depression: Text analysis of patient drug review posts*. (S09: Oral Presentations – Mental Health) Presented at the American Medical Informatics Association, Annual Symposium, Washington, DC. <https://www.amia.org/amia2019/oral-presentations>
2. Faiola, A. (Feb 14-15, 2019). *mHealth that supports the role of the MICU nurse in family mental healthcare*, Presented at: Session 4: Informatics Support for Practice-based Knowledge Generation and Nursing and Healthcare Practice Sponsored by Shadow Health, Health Informatics Kobb Symposium, College of Nursing, University of Florida, Gainesville, FL. <https://kobbsymposium.nursing.ufl.edu/topics/>
3. **Faiola, A.** (Nov 11, 2018). *FAMcare: A MICU Room-to-Mobile System—Supporting the Communication Needs of Families*, Presented at the: American Medical Informatics Association, Annual Symposium, San Francisco, CA. <https://symposium2018.zerista.com/event/member/508059>
4. Zolnoori, M., **Faiola, A.**, & Patrick, T. B (Nov 11, 2018). *Utilizing Consumer Health Posts to Identify Underlying Factors Associated with Patients' Attitudes towards Antidepressants*, Presented at: American Medical Informatics Association, Annual Symposium, San Francisco, CA. <https://knowledge.amia.org/67852-amia-1.4259402/t006-1.4263223/t006-1.4263224/2976194-1.4263228/2973531-1.4263225>
5. **Faiola, A.**, Vatani, H., Greenhill, K., Bhuma, M., & Agarwal, M. (May 21, 2018). *HYPOalert: Designing Mobile Technology for Hypoglycemic Detection and Monitoring—Based on Human Breath*, Presented at the: 11<sup>th</sup> Pervasive Health Conference 2018, New York Academy of Medicine, New York, New York.
6. **Faiola, A.**, Vatani, H., & Srinivas, P. (June 1, 2018). *The impact of smartphone use on the psychosocial wellness of college students*, Presented at the: 3<sup>rd</sup> International Conference—Digital Transformation and Global Society 2018, St. Petersburg, Russia,.
7. **Faiola, A.**, Papautsky, E. L., & Greenhill, K. (Oct 5-7, 2017) eMental health for family members of ICU patients: Findings that support a mobile family-centered approach to wellness, 7<sup>th</sup> Annual European Conference on Mental Health, Berlin, Germany.
8. **Faiola, A.** & Srinivas, P. (Oct 8-12, 2017). Excessive smartphone use and mental health: The impact of extreme mediation on psychosocial wellness, 17<sup>th</sup> World Congress of Psychiatry (World Psychiatric Assoc.), Berlin, Germany.
9. Boyd AD, Abraham J, Kitsiou S, Papautsky E, & **Faiola A.** (March 30, 2017). Health Informatics Research Projects, Medical Technology Enterprise Consortium (MTEC), Presentation, 2<sup>nd</sup> Annual Conference, San Antonio, TX.
10. **Faiola, A.**, Papautsky, E. L. and Joo, M. Supporting Patient Healing through ICUsmartCARE: Technologies that Enable Family Collaboration, Presence, and Information Flow, 2016 IEEE International Conference on Healthcare Informatics (ICHI), 2016, pp. 297-300. [doi: 10.1109/ICHI.2016.42](https://doi.org/10.1109/ICHI.2016.42).

11. **Faiola, A.**, Srinivas, P. & Duke, J. (Nov 18, 2015). Supporting clinical cognition: a human-centered approach to a novel ICU information visualization dashboard, Presented at: *American Medical Informatics Association, Annual Symposium, 2015*, San Francisco, CA.  
<https://pubmed.ncbi.nlm.nih.gov/26958190/>
12. Srinivas, P., **Faiola, A.**, & Doebbeling, B. (Oct 15, 2015). A Ubiquitous Situation-Aware Data Visualization Dashboard to Reduce ICU Clinician Cognitive Load, Presented at: *IEEE HealthCom 2015 Conference, Boston, MA.*
13. Srinivas, P., **Faiola, A.**, & Khan, B. (Oct 15, 2015). Supporting Information Management in ICU Rounding: A Novel Mobile System for Managing Patient-Centered Notes and Action-Items, Presented at: *IEEE HealthCom 2015 Conference, Boston, MA.*
14. Srinivas, P., Tunnell, H., **Faiola, A.**, & Haggstrom, D. (Oct 11, 2015). Clinicians as Secondary Users of Patient-Centered, Mobile Technology in Complex Healthcare Settings, Presented at: *IEEE HealthCom 2015 Conference, Boston, MA.*
15. Srinivas, P. & **Faiola, A.** (April 26, 2015). Improving patient safety: Integrating data visualization and communication into ICU workflow to reduce cognitive load. Presented at: *Conference for Human Factors and Ergonomics in Health Care (Improving the Outcomes) April 26, 2015, Baltimore, MD.*
16. **Faiola, A.** & Srinivas, P. (Sept 15, 2014). Extreme mediation: observing mental and physical health in everyday life. Presentation. *Proceedings of the 2014 Association for Computing Machinery (ACM) International Joint Conference on Pervasive and Ubiquitous Computing (UbiComp 2014).*
17. **Faiola, A.**, Srinivas, P., & Karanam, Y. (Nov 15, 2014). A novel approach to ICU data visualization and communication integration. Presentation. WISH 2014, *Workshop on Interactive Systems in Healthcare (WISH)*, Washington, DC. In Conjunction with the *American Medical Informatics Association Annual Symposium.*  
<https://wish2014.wordpress.com/>
18. **Faiola, A.**, Srinivas, P., Karanam, Y., Chartash, D., & Doebbeling, B. (April 23-31, 2014). VizCom: a novel workflow model for ICU clinical decision support. Extended Abstract. *ACM CHI'14, Human Factors in Computing Systems, Association for Computing Machinery*, Toronto Ontario, Canada.  
<https://dl.acm.org/doi/10.1145/2559206.2581332>
19. Srinivas, P., & **Faiola, A.** (Nov 15, 2014). Modeling daily rounds to support efficient task management in ICU workflow. Presented at: *WISH: Workshop on Interactive Healthcare Systems, Washington, DC, in conjunction with the American Medical Informatics Association (AMIA) Annual Symposium.*
20. **Faiola, A.** & Srinivas, P. (Oct 22, 2014). Reducing error in the intensive care unit: A novel approach to workflow modeling and distributed clinical intelligence. Presented at: *eHealth Initiative's Data and Analytics Council Webinar: A System Approach to Healthcare.*
21. Boston-Clay, C., Jones, J., **Faiola, A.**, Dixon, B. & Pfaff, M., (Nov 15, 2014). Assessing Health Information Technology Acceptance: Developing a Human Computer Interaction Activity-Centered Acceptance Framework, Presented at: *Dissertation Review, Presented at the Conference for American Medical Informatics Association (AMIA) Annual Symposium, Washington, DC, November 15-19, 2014.*
22. Srinivas, P. & **Faiola, A.** (Sept 13, 2014). Extreme mediation: Observing mental and physical health in everyday life, Presented at: *2014 ACM International Joint Conference on Pervasive and Ubiquitous Computing, Presentation, Seattle, WA.*

23. Srinivas, P., & **Faiola, A.** (April 26, 2014). Modeling daily rounds to support efficient task management in ICU workflow. Presented at: WISH 2014: *Workshop on Interactive Healthcare Systems*, Presentation Nov. 15, 2014, Washington, DC.
24. **Faiola, A.**, & Srinivas, P. (Nov 15, 2014). A novel approach to ICU data visualization and communication integration. Presented at: *Workshop on Interactive Systems in Healthcare (WISH)*, AMIA, Washington, DC. (in conjunction with the American Medical Informatics Association (AMIA) Annual Symposium).
25. **Faiola, A.** (Nov 16, 2013). Sociocultural-Embodied Consciousness: An Integrated Theory, Presented at: *13<sup>th</sup> International Readings of L.S. Vygotsky: Psychology of Consciousness: Origins and Perspectives*, Russian State University for the Humanities, Vygotsky Institute of Psychology, Moscow, Russia, November 12-16, 2013.
26. **Faiola, A.** (May 31, 2013) Distributed Creative Activity: Augmenting Interpersonal Cognition in Clinical Activity through Health Information Technology. Presented at: *Scientific Conference on Fundamental Problems of Psychology, Extended Abstracts, Parallel Session on the Psychology of a Humans Immersed in Information Technology*, Moscow State University, Moscow, Russia.
27. **Faiola, A.**, Boston-Clay, C., Jones, J., Newlon, C., Downey, M., & Comer, S. (May 5, 2012). Managing patient health across diverse spaces: Using activity theory to model clinical decision-support for the home. Presentation, *Workshop Bridging Clinical and Non-Clinical Health Practice: Opportunities and Challenges*, ACM CHI '12, Austin, TX.
28. **Faiola, A.**, Boston-Clay, C., Jones, J., Newlon, C., & Downey, M. (May 2012). Managing Patient Health Across Diverse Spaces: Using Activity Theory to Model Clinical Decision-Support for the Home. Presented at: *ACM CHI '12 Extended Abstracts on Bridging Clinical and Non-Clinical Health Practices: Opportunities and Challenges*, Workshop, Austin, TX. New York, NY: Association for Computing Machinery Press.
29. Bolchini, D. & **Faiola, A.** (July 15, 2011). It's Mobile Before It's Real: Extreme Prototyping with "Paper-in-Screen, In G. Salvendy and J. Jacko (Ed.), Presented at: *14th International Conference on Human-Computer Interaction*. Orlando, FL, 2011 (Lawrence Erlbaum).
30. **Faiola, A.** & Newlon, C. (July 15, 2011). Advancing Critical Care in the ICU: A Human-Centered Biomedical Informatics Approach to Designing Data Visualization Systems, In G. Salvendy and J. Jacko (Ed.), Presented at: *14th International Conference on Human-Computer Interaction*. Orlando, FL, 2011 (Lawrence Erlbaum).
31. **Faiola, A.** & Downey, M. (Nov 15, 2011). Transforming Clinician Psychology via Health Information Technology as Tools of Mediation: Understanding Medical Information Visualization Systems Using Cultural-Historical Theory, Presented at: *12th International Readings of L.S. Vygotsky: Sign as a Psychological Tool*, Russian State University for the Humanities, Moscow, Russia, November 14-17.
32. Pulido, D., Bolchini, D. & **Faiola, A.** (Feb 4, 2010). Paper-in-screen prototyping: Rapid techniques to test and anticipate the mobile user experience. Presented at: *Interaction Design 2010, 10th Annual International Conference*. Savannah, GA.
33. Edgardo, L., Bolchini, D. & **Faiola, A.** (July 2, 2009). Evaluating usability-supporting architectural patterns: Towards bridging the communication gap between software engineers and usability professionals. Presented at: Presented at: *13th International Conference on Human-Computer Interaction*. San Diego, CA.
34. Duke, J. & **Faiola, A.** (July 23, 2009). Health Informatics and Drug Effect Ranking: A Novel Data Visualization of Medication Side-Effects in Multi-Drug Regimens. Presented at: Presented at: *13th International Conference on Human-Computer Interaction*. San Diego, CA.

35. **Faiola, A.** & Smyslova, O. (July 23, 2009). Flow experience and telepresence in second life: Correlating pleasure, immersion, and interaction in virtual communities. Presented at: Presented at: *13th International Conference on Human-Computer Interaction*. San Diego, CA.
36. Kharrazi, H. & **Faiola, A.** (July 24, 2009). Healthcare Game Design: Behavioral Modeling of Serious Gaming Design for Children with Chronic Diseases. Presented at: Presented at: *13th International Conference on Human-Computer Interaction*. San Diego, CA.
37. Newlon, C., **Faiola, A.**, & MacDorman, K. (July 9, 2008). Building the Mega-Collaboration Interface: Behavioral, Cultural, and Cognitive Factors in the Design, Presented at: *The HCI Symposium – Information Visualization Conference 2008, IEEE, London, England*.
38. **Faiola, A.** & Hillier, S. (Feb 17, 2007). Expediting Health Care Decision-Making Using Multivariate Relational Datasets: A Medical Data Visualization System for Complex Critical Care Patient Assessments. Presented at: *Workshop on HCI and Information Design to Communicate Complex Information*, University of Memphis, Memphis TN.
39. Voiskounsky, A. E. & **Faiola, A.** (July 23, 2007). Flow experience of MUD players: Investigating multi-user dimension gamers from the USA. Presented at: *12th International Conference on Human-Computer Interaction*. Beijing: China.
40. **Faiola, A.** & Matei, S. A. (March 15, 2007). *Online education and the cross-cultural learner: Toward a theory of cultural cognitive design for the web. Session: Research on Learning in Virtual Environments*. Presented at: American Educational Research Association 2007 Annual Meeting, Chicago, Illinois.
41. Matei, S. A., Wheatley, D. J., & **Faiola, A.** (June 19, 2006). *Multipurpose mobile devices, graphic user interfaces and physical affordances: a case study*. Presented at the: International Communication Association Conference, Dresden, German.
42. Beatty, K, Elliott, R. & **Faiola, A.** (June 28, 2006). Seeking news on the internet: an analysis of user behavior in selecting online media outlets. Presented at: *6th Biennial Conference on Cultural Attitudes Towards Technology and Communication*, University of Tartu, Estonia.
43. Newlon, C. & **Faiola, A.** (June 28, 2006). Support for mega-team collaboration. Presented at: *6th Biennial Conference on Cultural Attitudes Towards Technology and Communication*, University of Tartu, Estonia.
44. **Faiola, A.** & Hillier, S. (July 5, 2006). Multivariate relational visualization of complex clinical datasets in a critical care setting: a data visualization interactive prototype. Presented at: *Information Visualization Conference 2006*, London, England.
45. Faiola, A. (July 25, 2005). Integrating the Visualization of Personal Histories to Enhance File Search in 3D Landscapes: Applying File Search to 3PDPView. Presented at: *11th International Conference on Human-Computer Interaction.*, Las Vegas, NV.
46. **Faiola, A.** & Matei, S. (May 17, 2005). The cultural cognitive style of multimedia development: Identifying designer cognitive structures for the web. Presented at the: *International Communication Association Conference*. New York City, NY.
47. Faiola, A. (May 25, 2005). *The Design Enterprise: Rethinking the HCI Education Paradigm*. Presented at: Presented at: *11th International Conference on Human-Computer Interaction*. Las Vegas, NV.
48. Faiola, A. (May 25, 2005). *Cross-Cultural Computer-Mediated Communication and Online Learning: Assessing the Impact of Web Designer Cognitive Style on Information Design*. Presented at: *11th International Conference on Human-Computer Interaction*. Las Vegas, NV.
49. Faiola, A., (May 22, 2004). Living with computing: Thoughts on humanizing technology. (Colloquium Presentation.) Presented at the: *Second International Conference on New Directions in the Humanities, 2004*, Monash University Centre, Prato, Italy.

50. Buher, M. & **Faiola, A.** (May 24, 2004). Using 3D landscapes to navigate filespace: Extending the data mountain with mountainview. Presented at the: *HCI Symposium – Information Visualization Conference 2004, IEEE*, London, England.
51. Faiola, A. (July 10, 2003). *The Copernican shift: HCI education and the design enterprise*. Presented at: *10th International Conference on Human-Computer Interaction*. Crete, Greece.
52. Faiola, A. (June 27, 2003). *eBook Technologies in America and Russia*. Presented at the: Conference of the World Bank and Russian National Fund of Education and Training for Schoolbook Editors and Editorial Staff, Moscow, Russia.
53. Faiola, A. (June 24, 2003). *Children's Book Typography: An Overview of Practice and Empirical Study*. Presented at the: Conference of the World Bank and Russian National Fund of Education and Training for Schoolbook Editors and Editorial Staff, Moscow, Russia.
54. Faiola, A. (May 28, 2002). *eBook Market Potential in Russia: Trends, Copyrights, and Technologies*. Presented at the: Council on University Publishing in Russia, 10<sup>th</sup> Annual Conference, Moscow, Russia.
55. Faiola, A. and Sturm, C. (April 22, 2002). *Aspects of Remote Testing*. Presented at the: Computer-Human Interaction Conference, It's A Global Economy Out There: Usability Innovation for Global Market Places. Minneapolis, MN.
56. Faiola, A. (April 22, 2002). *Cross-cultural studies of hypermedia design and accessibility*. Presented at the Workshop of the 2002 Computer Human Interaction Conference, It's A Global Economy Out There: Usability Innovation for Global Market Places. Minneapolis, MN.
57. **Faiola, A.** & Rosenbaum, H. (April 23, 2002). *Challenges in teaching usability theory and testing for new media and novel interface technologies*. Presented at the Educational Forum of the 2002 Computer-Human Interaction Conference, Minneapolis, MN.
58. Faiola, A. (April 22, 2002). *Russian and American Mental Models and the World-Wide-Web: A Cross-Cultural Study of Hypermedia Design and Accessibility*. Presented at the: 2002 Computer Human Interaction (CHI'02), Usability Workshop: Usability Innovation for Global Market Places, Minneapolis, MN.
59. Faiola, A. (Nov 18, 2001). *Understanding Usability for New Media Products: Design and Testing Principles for Graphic User Interfaces, Information Architecture, and Navigation*. Presented at the: Graphica 2001, International Conference on Graphics Engineering for Arts and Design, San Paulo Brazil.
60. Faiola, A. (April 2000). *Cross-cultural landscapes of visual intelligence: An investigation across cultural boundaries*. Iowa State University, Presented at the: International Visual Literacy Association Annual Conference, Ames, Iowa.

#### **Invited Research Presentations (U.S. and Abroad) [Total: 39]**

1. Faiola, A. (2019). *mHealth Informatics: Integrating Interaction Design w/ Health Data Science*, Ramaiah University of the Health Sciences and College of Medicine, Bangalore, India.
2. Faiola, A. (April 26, 2018). *Enabling Human Systems: Biomedical and Health Informatics and Socio-Augmentation*, Presented to: Human Augmentics Group, University of Illinois at Chicago, Chicago, IL.
3. Faiola, A. (April 28, 2017). *mHealth Design for Patient and Family Care: Recent Studies Supporting Healthy Lifestyle Management*, Presented to: Department of Biomedical Informatics, College of Health Solutions / Mayo Clinic, Arizona State University, Scottsdale, AZ.
4. Faiola, A. (Dec 5, 2017). *Biomedical Interaction Science: Applying Informatics to the Design and Analysis of mHealth Information Technologies*, Presented to: Biomedical and Health Informatics Colloquium Series, University of Illinois at Chicago, Chicago, IL.

5. Faiola, A. (March 31, 2016). *Biomedical & Health Informatics: Empowering Patients and their Families through mHealth*, Presented to: Department of Informatics, Health Informatics Faculty, UC Irvine, CA.
6. Faiola, A. (Dec 6, 2016). *Biomedical Interaction Science: The Study of Healthcare Interactions that Impact the Design and Implementation of Health IT*, Presented to: Biomedical and Health Informatics Colloquium, The University of Illinois at Chicago.
7. Faiola, A. (Nov 11, 2016). *Biomedical Interaction Science: A Journey from the Fine Arts to Biomedical Informatics*, Presented to: Department of Computer Science, The University of Illinois at Chicago.
8. Faiola, A. (Nov 3, 2016). *A Double Helix: Parallel Journeys Separated by Time—From the Fine Arts to the Health Sciences*, Presented to: Frank Armitage Biannual Lecture Forum, The Department of Biomedical Visualization, The University of Illinois at Chicago.
9. Faiola, A. (May 15, 2014). *Technologies that Transform Health and Wellness: The Effects of Non/Invasive Systems on Human Consciousness*, Presented at: DeVault Otologic Research Laboratory, Indiana University School of Medicine, Colloquium Lecture Series.
10. Faiola, A. (Sept 18, 2014). *Technologies that Transform Health and Wellness: The Effects of Non/Invasive Systems on Human Consciousness*. Presented at: Moscow State University, Department of Psychology, Moscow, Russia.
11. Faiola, A. (May 31, 2013) *Distributed Clinical Intelligence: A Decision-Support VizCom System that Supports Intensivist Activity in the ICU, Work-in-Progress Speaker Series: Invited Talks*. Presented at: Regenstrief Institute, Indianapolis, IN.
12. Faiola, A. (Sept 24, 2012). *Managing Patient Health Across Diverse Spaces: Using Cultural Historical Activity Theory to Model Pervasive Decision-Support*, Presented at: Department of Informatics, Umeå University, Sweden.
13. Faiola, A. (Sept 11, 2012). *Managing Patient Health Across Diverse Spaces: Using Cultural Historical Activity Theory to Model Pervasive Decision-Support*, Presented at: Laboratory of Human-computer Interaction and Group Technology, Department of Information Processing Science, University of Oulu, Finland.
14. Faiola, A. (Nov 20, 2011). *The Effects of Flow in Virtual Worlds and Game-Based Learning Behavior*. Presented to: St. Petersburg State University, Department of Psychology, St. Petersburg, Russia.
15. Faiola, A. (Nov 20, 2011). *Data Visualization as Psychological Tools of Mediation and Clinical Learning*. Presented at: Beijing University, Department of Computer Science, HCI Lab, Beijing, China.
16. Faiola, A. (Dec 3, 2011). *Clinical Decision Support InfoViz Systems: Modeling Complex Medical Space Using Cultural-Historical Activity Psychology*. Presented at: Tallinn University, Informatics Institute, Tallinn, Estonia.
17. Faiola, A. (Nov 17, 2011). *Data Visualization as Psychological Tools of Mediation and Clinical Learning*. Presented at: Moscow State University, Department of Psychology, Moscow, Russia.
18. **Faiola, A.** & Hillier, S. (March 22, 2010). *Medical Data Visualization System for Complex Critical Care Patient Assessments*. Presented at: Research Day and Community Research Showcase, Indiana University Research and Technology Corporation, Indianapolis, IN.
19. Bakowski, D., **Faiola, A.** & Witt, G. J. (Oct 3, 2008). *Transportation Usability*, Presented to the: World Usability Day, Workshop and Seminar, Indiana Chapter Usability Professionals' Association (UPA), Indianapolis, IN.
20. **Faiola, A.,** Hillier, S., & Saleem, J. (Nov 8, 2007). *Usability of Health Information Technology: Biomedical Human-Computer Interaction for Improving Patient Care*. Presented to the: World Usability Day, Workshop and Seminar, Indiana Chapter Usability Professionals' Association (UPA), Indianapolis, IN.

21. Faiola, A. (Nov 14, 2006). *Return on investment and Usability. World Usability Day, Workshop and Seminar*, Presented to the: Indiana Chapter Usability Professionals' Association (UPA), Indianapolis, IN.
22. Faiola, A. (Dec 17, 2004). *Principles of Design and Usability for Web Publishing*. Presented at: Moscow State University of the Printing Arts, Moscow, Russia.
23. Faiola, A. (Dec 14, 2004). *Computer Graphics and Prototype Construction: Engineering Products that Work for Humans*. Presented to the: House of Scientists, St. Petersburg, Russia.
24. Faiola, A. (Dec 18, 2004). *HCI Pedagogy: A New Framework*. Moscow State University, Presented to the: Department of Psychology and ACM CHI Chapter in Moscow, Russia.
25. Faiola, A. (June 12, 2003). *New Media Usability: Theory and Best Practices*. Presented to the: St. Petersburg Institute of Information Technology and Optics, Russia, Department of Computer Graphics and Engineering, St. Petersburg, Russia.
26. Faiola, A. (Dec 17, 2003). *Multimedia Interface Design and Usability*. Presented to the: Moscow State University of the Printing Arts, Department of Information Technology, Moscow, Russia.
27. Faiola, A. (May 21, 2002). *eBook Technologies: An Overview*. Presented to the: Moscow State University of the Printing Arts, Department of New Media and Distance Education. Moscow, Russia.
28. Faiola, A. (May 16, 2002). *Designing a User-Centered Web Interface: Design, Architecture and Usability*. Presented to the: Art and Design Institute of Berlin, Industrial Design Department, Berlin, Germany.
29. Faiola, A. (May 14, 2002). *Web Usability and International User Interfaces: Theory, Tools, and Techniques*. Presented to the: University of Bremen, Computer Science Department, New Media Program, Bremen, Germany.
30. Faiola, A. (May 13, 2002). *Designing a User-Centered Web Interface: Design, Architecture and Usability*. Presented to the: Delft Technical University, Computer Science Department, Media Knowledge, Delft, Netherlands.
31. Faiola, A. (May 5, 2002). *New Media Interface Design and Usability: Design Theory and Testing for Web Products*. Presented to the: University of Amsterdam, New Media Department, Amsterdam, Netherlands.
32. Faiola, A. (June 6, 2002). *Web Usability Theory Models for Teaching and Application*. Presented to the: House of Scientists, St. Petersburg, Russia.
33. Faiola, A. (May 5, 2002). *Curricula and Cross-Cultural Issues in Interactive Media Usability*. Presented to the: Mediamatic Design, Consulting Group, Amsterdam, Netherlands.
34. Faiola, A. (June 3, 2002). *New Media Usability: Theory and Best Practices*. Presented to the: St. Petersburg Institute of Information Technology and Optics (Tech University), Department of Computer Graphics and Engineering, St. Petersburg, Russia.
35. Faiola, A. (June 2000). *The New Media Enterprise: The Emergence of ePublishing*. Presented to the: Moscow State University of the Printing Arts, Moscow, Russia.
36. Faiola, A. (May 8, 2000). *Preparing the Digital Designer for Future Trends and Strategies in an Info-Graphic Global Society—Part 2. (Human-Computer Interaction: User Interface Design for the Web)*, Presented to the: St. Petersburg Institute of Information Technology and Optics, Russia. Department of Computer Graphics and Engineering, St. Petersburg, Russia.
37. Faiola, A. (Dec 13, 1999). *Preparing the Digital Designer for Future Trends and Strategies in an Info-Graphic Global Society—Part 1. (Visual Communication Theory and Design)*. Presented to the: St. Petersburg Institute of Information Technology and Optics (Tech University), Russia. Department of Computer Graphics and Engineering, St. Petersburg, Russia.
38. Faiola, A. (May 20, 1999). *New Media Graphics Curricula: Pedagogy and Methodology*. Presented to the: House of Scientists, St. Petersburg, Russia.

39. Faiola, A. (May 11, 1999). *Digital Publishing in the New Millennium*. Presented at: St. Petersburg Institute of Information Technology and Optics, Department of Computer Graphics and Engineering. Midwest Universities Consortium International Association, St. Petersburg, Russia.

### **Invited Service Presentations [Total: 10]**

1. Faiola, A. (Feb 21, 2017). *Departmental Research Overview*. Presented at: Department of Health Informatics, King Saud bin Abdulaziz University for Health Science, Riyadh, Kingdom of Saudi Arabia.
2. Faiola, A., (Dec 21, 2011). *SoIC Recruitment Presentation: Research and Teaching and Overview of the Indiana University School of Informatics and Computing at IUPUI*, Presented to the: University of Public Relations, Beijing, China.
3. Faiola, A., (Dec 19, 2011). *SoIC Recruitment Presentation: Research and Teaching and Overview of the Indiana University School of Informatics and Computing at IUPUI*. Presented to the: School of Information Management, Sun Yat-Sen University, Guangzhou, China.
4. Faiola, A., (Dec 16, 2011). *SoIC Recruitment Presentation: Research and Teaching and Overview of the Indiana University School of Informatics and Computing at IUPUI*. Presented to the: School of Communication and Design, Sun Yat-Sen University, Guangzhou, China.
5. Faiola, A. (Oct 14, 2005). *Principles of web design and usability: Improving accessibility to law library online information*. Presented to the: Ohio Regional Association of Law Libraries (ORALL) and Chicago Area Law Librarians (CALL). Indiana University Purdue University Indianapolis, School of Law.
6. Faiola, A. (April 13, 2005). *Interaction design and system usability: Design an Effective strategy for Web and software development*. Presented to the: Indianapolis Quality Assurance Association Inc.
7. Faiola, A. (4/6/2005). *Web design and usability: Design an Effective strategy for academic Web development*. Presented to the: IUPUI Communications Division and Campus-Wide Web Deployment.
8. Faiola, A. (Nov 20, 2003). *Disciplinary Overview of Human-Computer Interaction: Bi-Annual Presentation to I502*. Presented to the: Indiana University – SoIC, IUPUI. Presented each semester to beginning graduate students.
9. Faiola, A. (March 14, 2001). *New Media Usability. TechConnect, Poster Session*, Presented to the: Indiana University Purdue University, Indianapolis, IN. (Invited presentation, initiated by the department.)
10. Faiola, A. (Feb 14, 2001). *Human Computer Interaction and Multimedia Usability Testing: Understanding the Key Components for Building Effective Interfaces*. Presented to the: Purdue University, Human Factors and Ergonomics Society, West Lafayette, IN.



## GRANTS, SCHOLARSHIPS, AND CONTRACTS

ACTIVE EXTERNAL & INTERNAL GRANTS				
GRANTING AGENCY & PROJECT TITLE	ROLE / EFFORT	AMOUNT	DATE	COLLABORATORS
<b>AGENCY:</b> NIH R01 <b>AREA:</b> National Heart, Lung, and Blood Institute <b>TITLE:</b> Hand-held Smart Sensor for Detecting Cystic Fibrosis Pulmonary Exacerbations <b>Award ID #:</b> 1R01HL177812-01	<b>Co-I, Site PI</b> <b>Yr. 1 - 7.79%</b> <b>Yr. 2 - 5.13%</b> <b>Yr. 3 - 4.87%</b>  <b>ACTIVE</b>	\$599,243 (3 Yrs.)	9/2024 – 8/2027	<b>Other PIs:</b> M. Agarwal, PhD (Contact PI), Indiana University; PIs: DB. Sanders, MD, S. Cao, MD, M. Woollam, PhD, Indiana U.
<b>AGENCY:</b> American Cancer Society <b>AREA:</b> Screening and Diagnosis <b>TITLE:</b> Canine-inspired Identification and Analysis of Volatile Organic Biomarkers of Prostate Cancer using Portable GC-MS & Develop, of a Hand-held Nanosensor System. <b>Award ID #:</b> PASD-Team-23-1076327-01-PASD	<b>Team Principle, Site PI</b> <b>15%<sup>1</sup></b>  <b>ACTIVE</b>	\$1.2M (5 Yrs.)	1/2024 - 12/2028	<b>Other PIs:</b> Drs. Mangilal Agarwal, PhD, Purdue U. & Mark Woollam, Indiana U.
<b>AGENCY:</b> Merck Foundation <b>AREA:</b> Alliance for Equity <b>TITLE:</b> Comprehensive Connected Cancer Care (C4) Center	<b>Co-I</b> <b>7%</b>  <b>ACTIVE</b>	\$2M (5 Yrs.)	7/2022 – 6/2027	<b>Other Co-Is:</b> P. Hull, T. Mullett, M. Chih, B. Shelton, UK
			<b>Total Active Funding: \$4,400,000</b>	

<sup>1</sup> **American Cancer Society (PI and Team Principle, similar to NSF Co-PI):** PI serves as the team leader and primary point of contact for the ACS Extramural Research Staff, ensures the team complies with the terms of the award, and oversees all organization assurances and certifications. (no multi- or co-PIs allowed); **Team Principal:** Leads a component of the research based on their area of expertise, together with Lead PI, shares authority for scientific leadership. ([ACS Link](#))

<sup>4</sup> **NIH and Team Science:** “Shifting the research culture from a primary investigator-initiated focus to one that embraces collaboration and efforts that cut across discipline-based departments.” See: [NIH/NCI](#) and [Collaboration and Team Science](#).

GRANTS PENDING & IN PROGRESS				
GRANTING AGENCY, FOA, & TITLE	ROLE / EFFORT	AMOUNT	DATE	COLLABORATORS
<b>NIH/National Institute of Aging, R21 (Trailblazer)</b> <b>TITLE:</b> Measuring the feasibility, acceptability, and fidelity of intervention delivery for virtual-reality cognitive gaming exercise among critically ill older adults at risk for ICU-acquired mild cognitive impairment (Alzheimer’s and dementias; including its effect on pain, anxiety, delirium). <a href="#">PA-24-022</a>	<b>Co-I<sup>2</sup></b> <b>Site PI</b> <b>PENDING</b>	\$400K	4/2025-3/2028	<b>Other PIs: Sikandar Khan, MD Babar Khan, MD,</b> Indiana University School of Medicine and the Regenstrief Institute.
<b>American Cancer Society, Discovery Boost Grant</b> <b>TITLE:</b> Measuring the feasibility, acceptability, and fidelity of intervention delivery for a virtual-reality game cognitive training platform for breast cancer patient survivors at risk for mild cognitive impairment	<b>PI—22%<sup>2</sup></b> <b>PENDING</b>	\$297K	7/2025-6/2027	<b>Other Co-Is: R. Shatz, M. Charif, E. Shaughnessy, S. Rai, C. Morrison</b>
<b>NIH/National Institute of Mental Health, R01</b> <b>TITLE:</b> Measuring efficacy intervention delivery for virtual-reality cognitive game system for critically ill older adults at risk for ICU-acquired mild cognitive impairment and delirium. <a href="#">PAR-21-210</a>	<b>CoPI<sup>3</sup></b> <b>IN PROGRESS</b>	\$2.5M (5 Yrs.)	2024-2029	<b>Other PIs: B. Khan, MD, &amp; S. Khan, MD,</b> Indiana University School of Medicine / Regenstrief Institute.
<b>Note:</b> See Research Statement for long-term plan.		Potential Forthcoming Funding: <b>\$4,915,000</b>		

- <sup>2</sup> **American Cancer Society (PI and Team Principle, similar to NSF Co-PI):** PI serves as the team leader and primary point of contact for the ACS Extramural Research Staff, ensures the team complies with the terms of the award, and oversees all organization assurances and certifications. (no multi- or co-PIs allowed); **Team Principal:** Leads a component of the research based on their area of expertise, together with Lead PI, shares authority for scientific leadership. ([ACS Link](#))
- <sup>4</sup> **NIH and Team Science:** “Shifting the research culture from a primary investigator-initiated focus to one that embraces collaboration and efforts that cut across discipline-based departments.” See: [NIH/NCI](#) and [Collaboration and Team Science](#).
- <sup>3</sup> **NIH (PI or Multiple PIs or CoPI):** All PD/PIs have equal responsibility and accountability for leading and directing the project. ...All PD/PIs must be qualified to serve as PD/PIs and will share responsibility for the project. Although the PD/PIs may identify a leader of the project or a coordinator of the overall team, that is not a role that NIH formally acknowledges. ([NIH Link](#))

## RECENTLY COMPLETED INTERNAL PILOT GRANTS

GRANTING AGENCY & PROJECT TITLE	ROLE / EFFORT	AMOUNT	DATE	COLLABORATORS
<b>AGENCY:</b> Markey Cancer Center Community-Engaged Partnership Grant (U of Kentucky) <b>TITLE:</b> Addressing the mental health disparities of families of cancer patients from rural Kentucky: Investigating the efficacy to reduce mental trauma using FamCare... <a href="#">Link</a>	<b>PI—20%</b> <b>Ended: 8/14/24</b> <i>Internal Funding (Clinical Pilot Study for Preliminary Data)</i>	\$10K (1 Yr.) <i>With 1 Yr. Extension</i>	2022-2024	<b>Co-Is:</b> Z. Hao, MD, PhD, Professor of Medicine and Cancer Biology, College of Medicine, Div. Oncology
<b>AGENCY:</b> Center for Computational and Translational Sciences – Pilot Grant (U of Kentucky) <b>TITLE:</b> A health game intervention for cancer patients suffering from acute cognitive impairment: A clinical study to assess a form of brain stimulation therapy with the potential to improve synaptic plasticity.	<b>PI—20%</b> <b>Ended: 8/14/24</b> <i>Internal Funding (Clinical Pilot Study for Preliminary Data)</i>	\$8K (1 Yr.) <i>With 1 Yr. Extension</i>	2022-2024	<b>Co-Is:</b> P. Meulenbroek, Com Sciences and Disorders; J. Villano, MD, PhD, College of Medicine, Div. Oncology
			<i>Total Active Funding: \$18K</i>	

## PAST EXTERNAL GRANTS & CONTRACTS

GRANTING AGENCY & PROJECT TITLE	ROLE / EFFORT	AMOUNT	DATE	COLLABORATORS
<b>AGENCY:</b> USDA /National Institute of Food & Agriculture <b>TITLE:</b> Children Eating Well (CHEW) Smartphone Application for WIC Families, V2. ID# 1000100537. <a href="#">Grant Site Link</a> .	<b>Co-PI—10%</b> <sup>1</sup>	\$2,524,922 (5 Yrs.)	2017-2024	<b>PI:</b> P. Hull, UK Medicine (Project Dir.); <b>Co-PI:</b> S. Mulvaney, Vanderbilt U.
<b>Agency:</b> NIDILRR-ARCP (Advanced Rehab. Research Training Program) Dept. of Health & Human Services, Admin for Community Living. <b>TITLE:</b> Advanced Training in Translational and Community-Engaged Scholarship to Improve Community Living & Participation for People with Disabilities ID# 311122. <a href="#">Grant Site Link</a> .	<b>CoPI—5%</b> Multiple PIs  <i>(Funding contract ended once CoPI left UIC)</i>	\$999,995 (5 Yrs.)	2020-2025	<b>CoPIs:</b> <b>Tamar Heller</b> , Dept. of Intellectual Disability & Human Develop.; <b>Yolanda Balcazar</b> , Dept. of Occupational Therapy, <b>Angela Young</b> , Dept of Kinesiol & Nutrition
<b>Agency for Healthcare Research &amp; Quality Award #: AHRQ-R21HS025443-01</b> <b>TITLE:</b> An Etiology for Medication Ordering Errors in CPOE Systems ID #: R21 HS25443-02 <a href="#">Program Link</a> <a href="#">Site Link</a>	<b>Site PI—10%</b>	\$297,108 (2 Yrs.)	2018-2020	<b>PI:</b> <b>Joanna Abraham, PhD</b> , Washington University (School of Medicine)
<b>Agency:</b> NSF Smart & Connected Health <b>TITLE:</b> Canine-Inspired Smart Sensor for Detecting Hypoglycemia from Human Breath <sup>17 18</sup> Award #: 1502310 <a href="#">Program Link</a>	<b>Site PI—30%</b>	\$738,311 (3 Yrs.+ 1 Yr. no-cost extension)	2015-2019	<b>PIs:</b> <b>Mangilal Agarwal</b> , PhD (Contact PI), <b>Peter Roach, MD</b> ; <b>Sudhir Shrestha, PhD</b> , Purdue U.
<b>Contract Agency:</b> King Saud Bin Abdulaziz University for Health Sciences (KSB), Office of the Dean	<b>Contract 100%</b>	\$450,000	2017-2018	<b>Contractors:</b> <b>Majid Al Salamah, Riyad Alshammari</b> , College

<b>TITLE:</b> Health Information Management Curriculum Licensing <a href="#">Program Link</a>				of Public Health & Health Informatics, Riyadh, Saudi Arabia
<b>Agency:</b> HASTAC: MacArthur Foundation Grant <b>TITLE:</b> Creatures Classified: An exploration of cataloging creatures across the galaxy <b>Grant #:</b> 08-91858-000-HCD <a href="#">Grant Site Link</a>	<b>Grant Director</b> (PI Admin. Oversight) 2%	\$40,000 1 Yr.	201020 12	<b>PIs:</b> Mathew Powers, MFA, Clint Koch, MA, Jennifer Stewart, MS, IU School of Informatics and Computing
<b>Agency:</b> U.S. Dept. of Veterans Affairs Project #: RRP 06-156 (HSR&D Study) <b>TITLE:</b> Pre-Implementation of a Decision Support Tool for Improving Patient Handoff <a href="#">Grant Site Link.</a>	<b>Contract</b> 5%	\$6,800 1 Yr.	2006	<b>PI:</b> Bradley Doebbeling, MD MSc & Mindy Flanagan PhD, Richard L. Roudebush VA Medical Center, Indianapolis, IN
<b>Agency:</b> Clarian (Health) Grants Admin. <b>Project #:</b> VFE-183 <b>TITLE:</b> Computerized Education to Prevent Hypoglycemia When Driving	<b>PI—15%</b> (Multiple PIs)	\$79,841 2 Yrs.	2007-09	<b>Co-PIs:</b> Donald Orr , MD, IU School of Medicine; Joseph DeFazio, PhD, IU School of Informatics & Computing
<b>Agency:</b> Walther Cancer Institute <b>Project #:</b> 601-3200-00-0002 <b>TITLE:</b> A Web-Based System to Support Family Caregiving for Cancer Patients	<b>Co-PI—8.3%</b>	\$396,147 2 Yrs.	2009- 2011	<b>PI:</b> Anna McDaniel, PhD, University of Florida (Previously IU School of Nursing)
				<i>Total Funding: \$5,533,124</i>

### PAST INTERNAL UNIVERSITY GRANTS

*Past Awards for Research, Teaching Excellence, & Research Travel*

GRANTING AGENCY & TITLE	ROLE / EFFORT	AMOUNT	DATE	COLLABORATORS
<b>Educational Funding</b>				
<b>Agency:</b> IU Solution Center Grant <b>TITLE:</b> Medical Information Visualization Assistant – System Design (Phase 1-4 Funding)	<b>PI</b> 100%	\$73,600	2008 - 2014	<b>Co-PI:</b> Simon Hillier, MD, IU School of Medicine
<b>Agency:</b> IU Research Support Funds Grant Application <b>TITLE:</b> Support for Purchase of BioPac Psycho-physiological Measuring Equipment	<b>PI</b> 25%	\$13,000	2010	<b>Co-PI:</b> Mark Pfaff, PhD, IU Schools of Informatics and Computing
<b>Agency:</b> IU Learning Environments Grant <b>TITLE:</b> Tablet PC Presentation for Diabetic Patients: Diabetes Prevention and Control	<b>Consultant</b> 100%	\$25,000	2010	<b>PI:</b> David G. Marrero, MD and Paris Roach, MD, IU School of Medicine,
<b>Agency:</b> IU Learning Environments Grant <b>TITLE:</b> Media Arts Research Learning Arcade (MARLA): A Research/Learning Game Community Lab - <a href="#">LINK</a>	<b>Co-PI</b> 15%	\$25,000	2009 -10	<b>PI:</b> Mathew Powers, MFA, Media Arts & Science Faculty
<b>Agency:</b> IUPUI Research Support Grant – Seed Funding	<b>Co-PI</b> 10%	\$29,000	2009	<b>PI:</b> Hadi Kharrazi, IU Schools of Informatics and

<b>TITLE:</b> Using Interactive Games to Improve Treatment Adherence in Children with Type 1 Diabetes				Computing
<b>Agency:</b> IUPUI Research Support Grant – Seed Funding <b>TITLE:</b> Using Interactive Frameworks to Enhance Treatment Adherence in Type 1 Diabetes	<b>Co-PI</b> 10%	\$15,000	2009	<b>PI: Hadi Kharrazi, IU Schools of Informatics and Computing</b>
<b>Agency:</b> Purdue Research Summer Grant <b>TITLE:</b> Qualifying Digital Color Targets for Skills and Knowledge Standard	<b>PI</b> 100%	\$5000	2000	Graphic Arts Tech. Found. Pitts., PA
<b>Travel Funding</b>				
<b>Agency: IU Research Grant, Part 1 and 2</b> <b>Title:</b> Russian and American Cross-Cultural Study of Hypermedia Design & Accessibility	<b>PI</b> 100%	\$3,070	2002-03	SoIC & Institute of Tech., Optical Design & Engineer., St. Petersburg, Russia.
<b>Agency:</b> IU Office of International Prog. Overseas Conf. Fund <b>TITLE:</b> 12 <sup>th</sup> International Conf on Information Visualization: HCI Symposium	<b>PI</b> 100%	\$600	2008	IU Schools of Informatics and Computing
<b>Agency:</b> IU International Travel Grant <b>TITLE:</b> CATac’06 Cultural Attitudes Towards Technology and Communication	<b>PI</b> 100%	\$600	2006	Estonia England
<b>Agency: IU International Travel Grant</b> <b>TITLE:</b> Study of Cross-cultural Behavior of International Online Gamers	<b>PI</b> 100%	\$2000	2006	Moscow State University, Russia
<b>Agency: IU International Travel Grant</b> <b>TITLE:</b> The Copernican shift: HCI education and the design enterprise	<b>PI</b> 100%	\$750	2003	Crete, Greece
				<i>Total Funding: \$192,620</i>

<b>FULBRIGHT SCHOLARSHIPS</b>				
GRANTING AGENCY & TITLE	ROLE / EFFORT	AMOUNT	DATE	COLLABORATORS
<b>Agency: Fulbright U.S. Scholar Program.</b> Bureau of Educational and Cultural Affairs (U.S. Dept. of State). <b>Senior Specialist Lectures.</b> <b>TITLE:</b> Communication & Online Publishing Tech.	<b>PI</b> 100%	\$6,000	2003	Moscow State University of the Printing Arts, Russia
<b>Agency: Fulbright U.S. Scholar Program.</b> Bureau of Educational and Cultural Affairs (U.S. Dept. of State). <b>Senior Specialist Lecture.</b> <b>TITLE:</b> Communication & eBook Technologies	<b>PI</b> 100%	\$6,000	2002	Moscow State University of the Printing Arts, Russia
<b>Agency: Fulbright U.S. Scholar Program.</b> Bureau of Educational and Cultural Affairs (U.S. Dept. of State). <b>Traditional/Core Award.</b> <b>TITLE:</b> Interactive Media, Usability, and Design Com.	<b>PI</b> 100%	\$30,000	1999-2000	St. Petersburg State University of Information Technology, Mechanics, and Optics, SP, Russia
				<i>Total Funding: \$42,000</i>

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## PRODUCTS, PATENTS, & COMPANIES

- Product:** MIVA: Medical Information Visualization Assistant, a data visualization clinical decision support system for use in the ICU or other clinical-data-intense environments.
  - **Patent #:** 8,645,164 B2 - **US Patent Link:** [[LINK](#)]
  - **Patent date filed:** 5/27/10 & 1/6/11 (**Patent date:** February 4, 2014; **Patent Expired:** 2018)
  - **Assignee:** Indiana University Research and Technology Corporation
  - **Inventors:** **Anthony Faiola**, Formally: Indiana University, Indianapolis; Currently: University of Kentucky, and **Simon C. Hillier**, Dartmouth College (EtnaNH) (Formally: Indiana University)
- Product:** Low Power Wireless Sensor System with Ring Oscillator and Sensors for Use in Monitoring of Physiological Data.
  - **Patent #:** 20150295562 (Provisional #) - **US Patent Link:** [[LINK](#)]
  - **Patent date filed:** April 13, 2015 (**Patent date published:** Oct. 15, 2015)
  - **Assignee:** Indiana University Research and Technology Corporation
  - **Inventors:** Mangilal Agarwal, Purdue University (IUPUI); Anthony Faiola, Indiana University (IUPUI); Hosseign Jafarian, Purdue University (IUPUI); Sudhir Shrestha, Purdue University; Khodadad Varahramyan, University of Maine; Ali Daneshkha, Purdue University.
- Product:** FamCarePlus
  - **Apple Store:** <https://apps.apple.com/us/app/famcare/id6446958621>
  - **Website:** <https://famcareplus.org/>
  - **Patent #:** No patent issued as of this date.
  - **Description:** **FamCarePlus supports access to patient health updates for family members, caregivers, and next-of-kin (NOK). FamCarePlus enhances communication and coordination between (remote) families and healthcare staff at point-of-care.** Apart from its direct impact on reducing psychological trauma, maintaining communication, and the flow of bedside health and wellness information, FamCarePlus proves invaluable for creating informed families, while lowering anxiety and depression and building trust and satisfaction with healthcare services.
- Product:** HomeTown Bound
  - **Patent #:** No patent issued as of this date.
  - **Description:** **Hometown Bound is an interactive gaming environment that includes cityscapes, persons and objects, through which cognitively impaired patients navigate. Moving through a 3D space as a (first-person) avatar, the game is designed to increase cognitive and sensory engagement through (embedded) selective attention (SA) exercises.** Our gaming environment manages SA stimuli by directing the patient to focus and filter visual and auditory information through dichotic listening and shadow tasking. Each SA exercise acts like a spotlight on a particular task within the patient's visual and auditory field. The game targets the strengthening of brain synapses, i.e., the connection at the end of neurons. As the patient-player learns and adapts to each new cityscape environment and SA exercise, electrical signals assist in the release of neurotransmitters into the synapse.
- Company:** Advanced Insight Medical (AIM), [LLC—Anthony Faiola, CEO](#)
  - Registered in [Indianapolis, Indiana](#), D&B DUNS [Number: 078682124](#), Nov. 2016.
  - Dedicated to biomedical and health information technology such as mobile health and telehealth for purposes of self-monitoring, clinical support, and patient and family centered care.

## TEACHING

Symbol Descriptions		
TYPE	NEW / REVISED	UNIVERSITY
[R] = Research Methods	† = New Course Development	UK = University of Kentucky
[P] = PhD Courses	†† = Completely Revision	UIC = University of Illinois at Chicago
[I] = Introductory Course	* = Approx. semester enrollment	IU-SoIC = Indiana U., Sch of Informatics & Computing
	** = Course Developed, not taught	PU-PI = Purdue University—Polytechnic Institute

**COURSES TAUGHT (1998 TO PRESENT)** Courses listed according to category of subject/discipline area.

### Health Sciences / Health Informatics / Design Thinking for Health—Courses Taught

COURSE#	COURSE TITLE	TYPE	SIZE	NEW/REV	UNIVERSITY
HHS 454	Research ( <i>Methods</i> ) in Human Health Sciences	[R]	17	n/a	UK (Spg. 2024)
CHS 150	Introduction to Interprofessional Healthcare	[I]	70	n/a	UK (Fall 2023)
HHS 454	Research in Human Health Sciences	[R]	18	n/a	UK (Spg. 2023)
HHS 455	Research Experience in the Health Sciences.	[R]	4	†	UK (Spg. 2023)
PRD 560	Healthcare: Design Thinking for Mobile Health	[R]	15	†	UK (Spg. 2023)
HHS 454	Research in Human Health Sciences	[R]	27	n/a	UK (Fall 2022)
HHS 455	Research Experience in the Health Sciences.	[R]	3	†	UK (Fall 2022)
CHS 150	Introduction to Interprofessional Healthcare	[I]	32	n/a	UK (Spg. 2022)
HHS 455	Research Experience in the Health Sciences	[R]	6	n/a	UK (Spg. 2022)
BHIS 501	Health Informatics Capstone Project	[R]	14	n/a	UIC (2017-20)
BHIS 593	Design Thinking for Health: Seminar 1	[R]	5	†	UIC (2019)
BHIS 500	Health Informatics Strategic Inquiry—Project	[R]	1	n/a	UIC (2017-20)
INFO 305	Introduction to Research ( <i>for Informatics</i> )	[R]	30	††	IU-SoIC (2014-16)
INFO 501	Introduction to Informatics for HCI	[P/R]	24	†	IU-SoIC (2014-16)

### Human-Computer Interaction / Human Factors (*Human-Centered Computing*)—Courses Taught

COURSE#	COURSE TITLE	TYPE	SIZE	NEW/REV	UNIVERSITY
INFO 300	Human-Computer Interaction	[I]	30	††	IU-SoIC
INFO 270	Intro. to HCI Principles and Practices	[I]	12	††	IU-SoIC
INFO 275	Intro. to Human-Computer Interaction Theory	[I]	25	††	IU-SoIC
INFO 480	Exper. Design & Eval. of Ubiquitous Computing	[I]	12**	††	IU-SoIC
INFO 563	Psychology of Human-Computer Interaction	[R]	15**	††	IU-SoIC
INFO 541	Human Computer Interaction 1	[I]	15*	†	IU-SoIC
INFO 542	Human-Computer Interaction II	[I]	15**	††	IU-SoIC
HCI 680	HCI Professional Practice 1 ( <i>Capstone</i> )	[R]	15	†	IU-SoIC
HCI 681	HCI Professional Practice 2 ( <i>Capstone</i> )	[R]	15	†	IU-SoIC
INFO 564	Prototyping for Interactive Systems		5	†	IU-SoIC
INFO 543	Usability and Evaluative Methods for HCI	[R]	8	†	IU-SoIC
INFO 694	Thesis in HCI	[R]	3	†	IU-SoIC
INFO 624	HCI Seminar I	[P]	8	†	IU-SoIC
INFO 634	HCI Seminar 2	[P]	3	†	IU-SoIC
INFO 694	Graduate Thesis / Research	[R]	7	†	IU-SoIC
INFO 790	Research Rotations	[P] [R]	8	n/a	IU-SoIC
HCI 890	Dissertation Research	[P] [R]	5	n/a	IU-SoIC
T 519	Human Factors of Interface Design		8	††	PU-PI

## Digital Media / Computer Graphics—*Courses Taught*

COURSE#	COURSE TITLE	SIZE	NEW/REV	UNIVERSITY
N499	New Media Capstone Research Project	4	n/a	IU-SoIC
N450	Usability Principles for New Media Interfaces	18	†	IU-SoIC
N420	Multimedia Project Development	16	††	IU-SoIC
N100	Introduction to Digital Media Principles	80	††	IU-SoIC
N500	Foundations of Digital Arts Production	18	††	IU-SoIC
I554	Special Study in Computer-Mediated Com	5	†	IU-SoIC
T115	Introduction to Illustration	37	††	PU-PI
T203	Technical Graphics	38	††	PU-PI
T203	Publishing I: Page Layout and Design	30	††	PU-PI
T103	Publishing II: Basic Techniques	35	††	PU-PI
T111	Design for Visualization and Communication	120	††	PU-PI
T256	Human Computer Interaction Theory and Design	15	††	PU-PI

## ADVISING & MENTORING

### Ph.D. Dissertation and/or Research Advising

STUDENTS	DATES	DEPT /SCHOOL / RESEARCH AREA OR DISSERTATION
Maryam Zolnoori	2015-17	Health Informatics: Exploring drug side-effects for depression in online healthcare communities: Examination of health & social media
Eric Vorm	2015-16	IU-SoIC / HCC Health Information Technology
Luiz Cavalcanti	2015-16	IU-SoIC / HCC Health Information Technology
Abdullah Almojaibel	2014-16	Health/Rehab Sci. TeleRespiratory healthcare for acceptance scale development
Masoud Hosseini	2014-16	Health Inform., SoIC Consolidating CCDs from multiple data: HL7 – Medical Record System sources
Yamini Karanam	2013-16	IU-SoIC / HCC Health Information Technology
Preethi Srinivas	2012-16	IU-SoIC / HCC Tools for Managing Notification Interruptions in the ICU
Harry Tunnel	2011-16	IU-SoIC / HCC Promoting common ground in a clinical setting: A study of secondary users
Crystal Boston-Clay	2011-16	IU-SoIC / HCC / HI Assessing health information tech. acceptance
Christine Newlon	2010-16	IU-SoIC / HCC Building the mega-collaboration interface
Afarin Pirzadeh	2010-12	HCC/HCI/SoIC Emotion Communication
Palilonis Jennifer	2010-12	HCC/HCI/SoIC Electronic Reading Systems
Rohani Romisa	2010-11	HCC/HCI/SoIC Aural Browsing
Robert Morse	2008-10	HCC/HCI/SoIC Visual Analytics



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## Thesis and/or Capstone Mentoring & Advising

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STUDENT	DATES	THESIS / PROJECT TITLE
<b>UIC Health Informatics Students</b>		
Kate Greenhill	2016-18	Visualizing Disease: An Aid to Physician-Family Communication
Titilola Akinyemi	2019-Fall	Opportunities & Challenges of Patient-Wearable Technology in In/Out-Patient Care
Amanda Bagus	2019-Fall	Mobile Health Applications for the Informal Caregiver: Impact on Elderly Treatment
Gregory Briddick	2019-Fall	Leveraging administrative data for identification of patients with possible Sepsis...
Ravin Ellis	2019-Fall	Improving Patient Care Using EMR systems in community pharmacies
Chris Hannon	2019-Fall	Alert Fatigue Related to Smart Infusion Pumps within the Inpatient Setting...
Haily Hopkins	2019-Fall	How telemedicine reduces hospitalizations in COPD patients
Annam Itteera	2019-Fall	The Impact of Mobile Health Monitoring on Diabetes Management
Lauren Krienert	2019-Fall	Consumer Health Informatics Tools to Improve Health Literacy
Vladana Nikolic	2019-Fall	Consumer Use of Mobile Healthcare Tech. for Cardiovascular Disease Mngnt...
Ambrish Sharma	2019-Fall	Using Quick Response Code Technology for Patient ID for Appointment Check-In...
Kirsten Staley	2019-Fall	Impacts of Anesthesia Biomedical Monitor. Devices on Patient Safety in an Integrated...
Jessica Watkin	2019-Fall	Telemedicine and Big Data Analytics for better Chronic Disease Mngnt in the US
Will Weider	2019-Fall	Patient Safety Event Management and Human Factors IT
Vicki Wortmann	2019-Fall	Efficacy of Smartphone Apps for Mental Health

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## Indiana University / HCI/Informatics Students

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Bhuma Manjula	2016-17	Design of a Hypoglycemic Data Visualization mHealth System
Juan Campos	2015-16	Business Management System: A Salesforce App
Asa Blevins	"	"
Kelly Chan	"	"
Lindsay Kaser	"	"
Abdulaziz Iderhami	2015-16	An Easter Seals System: An App for People w/ Disabilities
Dhanashree Bhat	"	"
Anwar Eaton	"	"
Alex Goutras	"	"
Lawrence Moore	2015-16	A Health-X App for Providers and Members
Soumya Dash	"	"
Natalie Hall	"	"
Dushyant Shrikhande	"	"
Gaurav Mallikarjuna	2015-16	An AV-Lab Adventure: A University Tour-Guide App
Shilpa Pachhapurkar	"	"
Erin Sheets	"	"
Manisha Yogan	"	"
Julie Elbin	2015-16	GiveHalvsies: A Crowd-Sourcing App
Deb Strzeszkowski	"	"
Kunal Bodke	"	"
Poorva Kulkarni	"	"
Xinxin He	2014-15	Notes Hub
Michael J. Frontz	2014-15	Art Fair Tracker-Application Management Sys. for Artists
Dennis Leonardo	2014-15	Patchwork: Collaborative Learning Hub
Daoyi Wang	2014-15	Food Solution-Food Justice

Ashleigh Young	2014-15	Better Days: Mental Health Application
Bunmi Akintomide	2014-15	Achat: Your Fashion Shopping Buddy
Yachung Cheng	2014-15	Help2Buy - A Sharing Economy Service
Meng Zhang	2014-15	Mappy - A collaborative navigation application
Ryan Ahmed	2014-15	HealthTrack – A Health Mobile App
Shivin Saxena	2014-15	CulAmi: Smart Kitchen UX using Touchless Interaction
Malvika Bansal	2014-15	Prox - Rapid Information Propagation using Beacons
Christopher Lee	2008-09	Mask Commun. of Afr.-Amer: Interpretive Interactions Online
Kevin Szerszen	2007-08	Testing the Validity of Skill Transference in Video Games
Diego Ramirez	2007-09	Paper-in-Screen Prototyping: An Agile Tech to Anticipate...
Amy Hu	2007-08	Prosodic Alignment in Human Computer Dialogues
Avery Nelson	2006-09	Info. Computerization: Investigating the Prod. Paradox
Keith Rodewald	2003-04	TrendVendor: An E-Commerce Web App Employing Data...
Tim Altom	2004-06	A Comparison of SPRT and Trad. Approaches for Determining...
Melynda Buher	2004-06	Toward a Theory for Online Instructional Design: Eval....
Maira Parveen	2004-06	Investigating Children's Online Learn. Environment
Chatree Campiranon	2004-05	Web-Based Management for Email Overload
Ming-Liang Liu	2004-05	Assessing User Performance of Online Digital Photography Library
Victor Tanner	2005-06	Enhancing Student Perform. for 3D Modeling Software Learners
Edgardo Luzcando	2005-08	Design of Software Develop. Environments for Software Designers
Stuart Ough	2005-06	Affect Index: Testing the Validity of Affective States in Music
Young-Joo Cha	2005-07	Identifying cross-cultural differences of emoticons in computer...
Christine Newlon	2005-07	Exploring Support for Mega-Team Computer-Mediated Collab.
Piyanaat Taksaphan	2005-06	Strains on Human Short-Term Memory and Info Orientation...
Kristina Ledford	2005-09	The Effect of Telepresence on Flow Exper. within Non-Gaming...
Dipankar Roychow	2005-06	Enhancing Web Browser Search Histories: Design & Analysis...
Heather Wiltse	2006-07	Everyday Use of Tech-Mediated Commun.: A Social Shaping Per...
Keith Beatty	2006-07	External cognition and problem solving: A comparison of desktop..
Mark Tarrant	2006-07	Perceived Visual Aesthetics of emotionally Evocative Homepages

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### MS Graduate Students — General HCI Program Mentoring / Advising

NAME	ROLE	PERIOD	GRAD. SEM.
Vinay Kashyap	Primary Advisor	2011-13	Spring
John Wheeler	Primary Advisor	2010-11	Spring
David Craske	Secondary Advisor	2010-12	Spring
Rupa Chatterji	Primary Advisor	2010-12	Spring
Christopher Lee	Primary Advisor	2009-10	Spring
Jon Duke	Secondary Advisor	2009-10	Spring
Joseph Coram	Secondary Advisor	2009-10	Fall
Dennis Mann	Secondary Advisor	2009-11	Spring
Diego F. Pulido	Secondary Advisor	2009-10	Spring
James Lyst	Secondary Advisor	2009-12	Spring
Kristen Ledford	Primary Advisor	2009-12	Sum.
Michael Downey	Primary Advisor	2009-12	Spring
Wade Mitchell	Secondary Advisor	2009-12	Spring
Edgardo Luzcando	Primary Advisor	2008-09	Spring
Howard Ho	Secondary Advisor	2008-11	Spring
Adam Burton	Secondary Advisor	2008-10	Spring

Avery Nelson	Primary Advisor	2008-10	Spring
Sandosh Vasudevan	Secondary Advisor	2008-10	Spring
Timothy Whalen	Secondary Advisor	2008-10	Fall
Kevin Szerszen	Secondary Advisor	2007-10	Fall
Christine Newlon	Secondary Advisor	2006-08	Spring
Heather Wiltse	Primary Advisor	2006-07	Spring
Keith Beatty	Primary Advisor	2006-08	Spring
Mark Tarrant	Primary Advisor	2006-07	Spring
Rob Elliott	Primary Advisor	2006-08	Spring
Stuart Ough	Secondary Advisor	2006-07	Spring
Dip Roychowdhury	Primary Advisor	2005-06	Spring
Maira Parveen	Primary Advisor	2005-06	Spring
Melynda Buher	Primary Advisor	2005-07	Spring
Mitchell Owen	Primary Advisor	2005-07	Spring
Piyanaat Taksaphan	Secondary Advisor	2005-06	Spring
Robert Green	Secondary Advisor	2005-06	Spring
Tim Altom	Primary Advisor	2005-06	Spring
Victor Tanner	Primary Advisor	2005-06	Spring
Young-Joo Cha	Primary Advisor	2005-07	Spring
Chatree Campiranon	Primary Advisor	2004-05	Spring
Ming-Liang Liu	Primary Advisor	2004-05	Spring
Tim Whalen	Secondary Advisor	2004-07	Spring
Keith Rodewald	Primary Advisor	2003-04	Spring

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### Master's and Ph.D. Students — Special Projects Advising, with Project/Thesis Titles

STUDENT	DATES	THESIS/PROJECT TITLE	STATUS
Tim Altom	2004-05	Using 3D Landscapes to Navigate Filespaces	MS
Melynda Buher	2004-05	Using 3D Landscapes to Navigate Filespaces	MS
Michael Downey	2004-05	Using 3D Landscapes to Navigate Filespaces	MS
Edgardo Luzcando	2004-05	Psychometric System Design for Online Data Capture	MS
Saima Zaidi	2005-06	MedPliance: Medication Compliance Device Design	Ph.D.
Gary Cravens	2005-06	MedPliance: Medication Compliance Device Design	Ph.D.

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### Curricula and Program Development (1998—Present)

#### Indiana University—Indianapolis, Luddy School of Informatics, Computing, and Engineering

##### Human-Computer Interaction Graduate Programs

As founding Director of the HCI Program (2003-13), programmatic work included curriculum development and a full plan of study for each of the HCI graduate and undergraduate programs, noted below:

- Master of Science (36-cr.) HCI Graduate Program (2002—Present)
- Graduate Certificate (15-cr.) HCI Graduate Program (2007—Present)
- Ph.D. (90-cr.) HCI Track: Informatics & Computing (2008—Present)
- Undergrad Certif. (15-cr.) HCI Undergraduate Program (2010—Present)

##### Media Arts and Science Programs, IUSoIC, IUPUI

As Director of MAS Programs (2007–2009), work included curriculum development:

- Bachelor of Science (120-cr.) Media Arts and Science (2001—2002)
- Graduate Certificate (15-cr.) MAS Graduate program (2008—2009)

**Research Team Mentoring: 2013—Present** (*Visiting Scholars, PhD, MS, and BS Students*)

Student Name	Level	Discipline	Core Contribution to Team	Citizenship
<b>2021-Present – at UK</b>				
Saira Soroya	Visiting Scholar	Health Information & Library Science	Health information/library science, Health literacy, research methods, statistical analysis	Pakistan
Salman Naeem	Visiting Scholar	Health Information & Library Science	Health information/library science, Health literacy, research methods, statistical analysis	Pakistan
Sarah Pava	PhD	Biomed. Engineer.	Game design, HCI, product development	Columbia
Sheridan Schrader	BS	Health Sciences	Health sciences, research methods	USA
Max Burch	BS	Health Sciences	Health sciences, research methods	USA
Sabrina Piekarski	BS	Health Sciences	Health sciences, research methods	USA
Gabriella Tenuta	BS	Health Sciences.	Health sciences, research methods	USA
Samantha Lenox	BS	Health Sciences.	Health sciences, research methods	USA
<b>2018-2020 – at UIC</b>				
Mary Bloodworth	PhD	Health Informatics	HCI, product design, data collection, pubs	USA
Hoang Minh	PhD	Computer Science	HCI, product development	Viet Nam
Ilyasse Belkacem	PhD	Computer Science	HCI, product develop./data collection, pubs	Algeria
Dani Bergrey	MS	Biomed. Visualiz.	HCI, prototype design	USA
Alexandria Dirico	BS	Psychology/Honors	Usability testing, paper editing	USA
<b>2017-18 – at UIC</b>				
Haleh Vatani	PhD	Health Informatics	Health informatics, product innovation & testing	Canada
Emma Chai	MS	Biomed. Visualiz.	HCI, product development	China
Kate Greenhill	MS	Biomed. Visualiz.	Interaction Design and Prototype Develop	USA
Manjula Bhuma	MS	Health Informatics	Product design, data collection and Analysis	India
Alexandria Dirico	BS	Psychology	Usability testing, paper editing	USA
<b>2016-17 – at UIC</b>				
Maryam Zolnoori	PhD	Health Informatics	Data collection, analysis, and pub creation	Iran
Kate Greenhill	MS	Biomed. Visualiz.	Interaction Design and Prototype Develop	USA
Manjula Bhuma	MS	Health Informatics	Product design, data collection and Analysis	India
<b>2015-16 – at IU</b>				
Yamini Karanam	PhD	HCI	HCI/prototyping, data collection/analysis, pubs	India
Preethi Srinavas	PhD	HCI	HCI/prototyping, data collection/analysis, pubs	India
Luiz Cavalcanti	PhD	HCI	HCI, data collection/analysis, pubs	Brazil
Deb Strzeszkowski	MS	HCI	HCI, usability testing, data collection/analysis	USA
Kate Ansah-Koi	MS	HCI	HCI, usability testing, data collection/analysis	Ghana
Thomas Andrew	MS	HCI	Usability testing, paper editing	USA
Nomaan Ahgharian	MS	HCI	HCI, product develop. usability, data collection	USA
Coltin Metzger	MS	Media Arts	Usability testing, paper editing	USA
Mikaylah Gross	BS	Business	Usability testing, data collection/analysis, pubs	USA
<b>2014-15 – at IU</b>				
Yamini Karanam	PhD	HCI	HCI/prototyping, data collection/analysis, pubs	India
Preethi Srinavas	PhD	HCI	HCI/prototyping, data collection/analysis, pubs	India
Luiz Cavalcanti	PhD	HCI	HCI, data collection/analysis, pubs	Brazil
Milka Trajkova	MS	HCI	HCI, usability testing, data collection/analysis	USA
Jamee Malan	MS	Nursing	Data collection/analysis	USA
Ryan Ahmed	MS	HCI	HCI, usability testing, data collection/analysis	India
Soumya Dash	MS	HCI	HCI, usability testing, data collection/analysis	India
<b>2013-14 – at IU</b>				
Yamini Karanam	PhD	HCI	HCI/prototyping, data collection/analysis, pubs	India
Preethi Srinavas	PhD	HCI	HCI/prototyping, data collection/analysis, pubs	India
Milka Trajkova	MS	HCI	HCI, usability testing, data collection/analysis	USA
Soumya Dash	MS	HCI	HCI, prototyping, usability testing	India
Olesia Koval	MS	HCI	HCI, usability testing, data collection/analysis	Russia
Rebecca Finch	MS	Media Arts	Usability testing, data collection/analysis	USA

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## SERVICE

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### University Service

#### Departmental and College/School Committee Work

YEARS	ROLE	COMMITTEE NAME / SCHOOL / UNIVERSITY
2021—23	Member	Departmental Faculty Search Committee, College of Health Sciences, UK
2020—21	Member	Dean’s Executive Committee, College of Health Sciences, UK
2020—	Member	Institute of Biomedical Informatics Steering Committee, UK
2016—19	Member	PhD Oversight Committee, UIC
2016—19	Member	Academic Affairs Committee, UIC
2015—19	Chair	Program Director’s Committee, UIC
2015—19	Member	Dean’s Department Head Committee, UIC
2015—16	Chair	Colloquia Committee, SoIC, IUPUI
2015—16	Chair	HCC Faculty Search and Screen Committee, SoIC, IUPUI
2014—16	Member	UG Informatics Curriculum committee, SoIC, IUPUI
2014—16	Member	HCC Faculty Search and Screen Committee, SoIC, IUPUI
2013—16	Member	HCC Faculty Search and Screen Committee, SoIC, IUPUI
2014—16	Member	Council of Undergraduate Committee–SoIC Curric. Develop.
2009—13	Chair	Council of Undergraduate Committee–SoIC Curric. Develop.
2009—13	Chair	Council of Undergraduate Committee – Exec Committee Chair
2008—09	Chair	Media Arts New Faculty Search and Screen Committee, SOIC, IUPUI
2008—09	Chair	HCI New Faculty Search and Screen Committee, SOIC, IUPUI
2008—09	Member	School Website Re—Design and Deploy Committee, SOIC, IUPUI
2008—09	Member	Graduate Programs Shaping Committee, SOIC, IUPUI
2008—09	Chair	Media Arts and Science Advisory Board, SOIC, IUPUI
2007—09	Chair	Graduate Curriculum Comm., Media Arts and Science, SoIC, IUPUI
2007—09	Chair	Graduate School Strategic Planning Comm., SOIC, IUPUI / IUB
2007—09	Chair	Undergrad. Curriculum Comm., Media Arts and Science, SoIC, IUPUI
2007—09	Chair	Media Arts and Science Advisory Board, SOIC, IUPUI
2007—08	Chair	Promotion and Tenure Committee, SOIC, IUPUI
2006—07	Member	New Media Curriculum Assessment Committee, IU SOIC, IUPUI
2003—04	Member	Faculty Search Committee, IU SOIC, IUPUI
2003—05	Member	Graduate Program Committee, IU SOIC, IUPUI
2002—03	Member	Curriculum Committee, Indiana University (IU) SOIC, IUPUI
2002—03	Member	Faculty Search Committee, IU SOIC, IUPUI
2002—03	Member	Library Review Committee, IU SOIC, IUPUI
2002—03	Member	Informatics Online Development Committee, IU SOIC, IUPUI
2002—03	Member	Graduate Program Committee, IU SOIC, IUPUI
2001—02	Member	Curriculum Committee, Chair, New Media, IU SOIC, IUPUI
2001—02	Member	Faculty Search Committee, New Media, IU SOIC, IUPUI
2001—02	Member	Technology Committee, New Media, IU SOIC, IUPUI
2001—02	Member	Undergraduate Program Committee, SOIC, IU
2000—01	Member	Science and Media Committee, School of Food Sciences, Purdue U.
1998—01	Member	Marketing and Com Comm, Dept. of Computer Graphics, Purdue U.
1998—01	Member	Faculty Search Committee, Dept. of Computer Graphics, Purdue U.
1998—01	Member	School of Technology International Programs Committee, Purdue U.

## University Committees and Boards

- 2015—16 University Budgetary Affairs, IUPUI
- 2015—16 University Faculty Affairs, IUPUI
- 2008—09 Plater Senior Advisory Board (Focus: RISE Initiative)
- 2008—13 Solution Center Executive Board – IUPUI – Indianapolis Bus. Connection
- 2007—09 Executive Board Member (founding member), TASI –Trans. Active Safety Institute  
School of Engineering
- 2007—08 Graduate Affairs Committee, IUPUI
- 2004—05 University-Wide Technology Committee, IUPUI
- 2004—05 Fulbright Representative, IUPUI Campus
- 2004— Grant Proposal Review Committee, IUPUI Office for Professional Dev.
- 2003—04 IUPUI Internal Grants Proposal Review Committee, Chair, IUPUI

## University Administrative / Leadership Councils and Committees

- 2012—14 Vice Chancellor’s Leadership Strategic Team for the American Council on Education’s (ACE); Internationalization Laboratory, Sub-Committee on Curriculum Internationalization
- 2008—13 Chancellor’s Academic Dean’s Council
- 2008—13 Vice Chancellor’s Academic Dean’s Council
- 2008—13 Informatics and Computing Dean’s Leadership Council
- 2008—13 Information Technology Governance and Service Committee

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## Professional Service

### Conference Administrative Service

- 2019-20 Human Factors in Health, 2020 HFES Symposium, Toronto, Canada, **Co-Chair**  
Track: Mobile Health  
Co-Chair: Plinio Morita, Ph.D., School of Public Health & Health Systems, U of Waterloo
- 2018 Digital Transformation & Global Society 2018 Conf., St. Petersburg, Russia, **Co-Chair**  
Session: Advances in Cyberpsychology  
Co-Chair: Alexander Voiskounsky, Moscow State University, College of Psychology
- 2011 HCI International Conference 2011, Orlando, FL, **Co-Chair**  
Session Title: Communication Issues and the User Experience: Branding, Content Design and Semiotics;  
Thematic Area: Design, User Experience, and Usability;  
Session Co-Chairs: Anthony Faiola, Indiana University SoIC, HCI Program; Davide Bolchini, Indiana University School of SoIC, HCI Program
- 2011 HCI International Conference 2011, Orlando, FL, **Co-Chair**  
Session Title: Biomedical and Health Visualization HCI Design;  
Thematic Area: Ergonomics and Health Aspects of Work with Computers;  
Session Co-Chairs: Anthony Faiola, Indiana University SoIC, HCI Program; Taowei David Wang, University of Maryland, Department of Computer Science, HCI Lab
- 2011 HCI International Conference 2011, Orlando, FL, **Co-Chair**  
Session Title: Social Spaces for Virtual Gameplay and Learning – New Inquiries;  
Thematic Area: Online Communities and Social Computing;  
Session Co-Chairs: Anthony Faiola, Indiana University SoIC, HCI Program; Alexander Voiskounsky, Moscow State University, Department of Psychology, M.IN.D. Lab

- 2009 HCI International Conference 2009, San Diego, CA, **Co-Chair**  
Session Title: Usability for Bio and Health Informatics;  
Thematic Area: Ergonomics and Health Aspects of Work with Computers;  
Session Co-Chairs: Anthony Faiola, Indiana University SoIC, HCI Program; Davide Bolchini, Indiana University SoIC, HCI Program
- 2009 HCI International Conference 2009, San Diego, CA, **Co-Chair**  
Session Title: Online Gaming and Social Computing;  
Thematic Area: Online Communities and Social Computing;  
Session Co-Chairs: Anthony Faiola, Indiana University SoIC, HCI Program; Alexander Voiskounsky, Moscow State University, Department of Psychology, M.IN.D. Lab
- 2009 13<sup>th</sup> Inter. Conf. on Information Visualization, Barcelona, Spain, **Symposium Chair**  
Symposium Title: Visualization and Interaction Design;  
Session Co-Chairs: Anthony Faiola, Indiana University SoIC, Indianapolis; Dennis Groth, Indiana University SoIC, Bloomington
- 2008 14<sup>th</sup> Inter. Conf. on Information Visualization, London, UK, **Symposium Chair**  
Symposium Title: Visualization and Interaction Design;  
Session Co-Chairs: Anthony Faiola, Indiana University SoIC, Indianapolis; Dennis Groth, Indiana University SoIC, Bloomington, IN
- 2007 13<sup>th</sup> Inter. Conf. on Information Visualization, London, UK, **Symposium Chair**  
 Human-Computer Interaction Symposium;  
Symposium Title: Visualization and Interaction Design;  
Session Co-Chairs: Anthony Faiola, Indiana University SoIC, Indianapolis; Dennis Groth, Indiana University SoIC, Bloomington
- 2006 CATac'06 Cultural Attitudes Towards Tech/Comm., Tartu, Estonia, **Session Chair**  
Session Title: Politics, Media, and Technologies;  
Session Chair: Anthony Faiola, Indiana University SoIC, Indianapolis
- 2006 12<sup>th</sup> Inter. Conf. on Information Visualization, London, UK, **Symposium Chair**  
 Human-Computer Interaction Symposium;  
Symposium Title: Visualization and Interaction Design;  
Session Co-Chairs: Anthony Faiola, Indiana University SoIC, Indianapolis; Dennis Groth, Indiana University SoIC, Bloomington
- 2005 11<sup>th</sup> Inter. Conf. on Information Visualization, London, UK, **Symposium Chair**  
Symposium Title: Visualization and Interaction Design;  
Session Co-Chairs: Anthony Faiola, Indiana University SoIC, Indianapolis; Dennis Groth, Indiana University SoIC, Bloomington
- 2005 HCI International Conference 2005, Las Vegas, Nevada, **Co-Chair**  
Session Title: HCI of Information Visualization: Research and Education in 2/3-Dimensional Domains;  
Thematic Area: Human-Computer Interaction;  
Session Chair: Anthony Faiola, Indiana University SoIC, HCI Program
- 2005 HCI International Conference 2005, Las Vegas, Nevada, **Co-Chair**  
Session Title: Interaction Design Education and Research: Current and Future Trends;  
Thematic Area: Human-Computer Interaction;  
Session Chair: Anthony Faiola, Indiana University SoIC, HCI Program
- 2004 Humanizing Technology Colloquium, New Directions in the Humanities,

Tuscany, Italy, **Session Chair**

Colloquium Title: Human-Computer Interaction,

Communication, and Co-Existence: A Blueprint for Humanizing Technology, Anthony Faiola, Indiana University SoIC, HCI Program

- 2003 Human-Computer Interaction International Conference 2003, Crete, Greece, **Session Chair**  
Session Title: HCI Education—New Challenges, Shifts, and Issues;  
Thematic Area: Human-Computer Interaction;  
Session Chair: Anthony Faiola, Indiana University SoIC, HCI Program

### **Conference Program Committee**

- 2011 SeGAH 2011: 1st International Conference on Serious Games and Applications for Health.  
2011 DUXU 2011: Design, User Experience, and Usability, HCI International Conference, Orlando, FL.  
2009 HCI Symposium, 13th Annual International Conference on Information Visualization, Barcelona, Spain.  
2009 Active Safety Symposium, Program Member (Sponsor: TASI - Transportation Active Safety Institute and Department of Electrical Engineering, School of Engineering and Technology, IUPUI), Designated IEEE Conference.  
2008 HCI Symposium, 12th Annual International Conference on Information Visualization, Zurich, Switzerland.  
2008 LCEA '09 Symposium - Lansdown Centre for Electronic Arts (Program Committee Member), Middlesex University, Middlesex, England.  
2008-9 IDC 2009 - The 8th International Conference on Interaction Design for Children - In cooperation with ACM-SIGCHI (Program Committee Member), Polytechnic Institute of Milano, Italy.  
2007 HCI Symposium, 11th Annual International Conference on Information Visualization, Zurich, Switzerland.  
2006 HCI Symposium, 10th Annual International Conference on Information Visualization, London, England.  
2005 HCI Symposium, 9th Annual International Conference on Information Visualization, London, England.  
2004 HCI Symposium, 8th Annual International Conference on Information Visualization, London, England.  
2004 ACM SIGCHI, Selection Committee, SIGCHI Distinguished Speakers List.

### **Conference Peer Reviewer (*Editor of some session papers*)**

- 2015 AMIA 2015: American Medical Informatics Association Symposium  
2013 ACM CHI 2013: Computer Human Interaction: International Conference: One of a CHIInd  
2011 SeGAH 2011: 1st International Conference on Serious Games and Applications for Health.  
2011 HCI International Conference 2011, Orlando, FL. Communication Issues and the User Experience: Branding, Content Design and Semiotics (Area: Design, User Exp., and Usability)  
2011 HCI International Conference 2011, Orlando, FL. Biomedical and Health Visualization HCI Design (Thematic Area: Ergonomics and Health Aspects of Work with Computers)  
2011 HCI International Conference 2011, Orlando, FL. Social Spaces for Virtual Gameplay and Learning – New Inquiries (Thematic Area: Online Communities and Social Computing)  
2010 4th International Conference on Pervasive Computing Technologies for Healthcare 2010, Munich, Germany, March 2010.  
2009 HCI International Conference 2009, San Diego, CA. Usability for Bio and Health Informatics (Thematic Area: Ergonomics and Health Aspects of Work with Computers)



- 2009 HCI International Conference 2009, San Diego, CA. Online Gaming and Social Computing (Thematic Area: Online Communities and Social Computing)
- 2009 HCI Symposium (Co-Editor and Reviewer), 13th Annual International Conference on Information Visualization, Barcelona, Spain.
- 2009 LCEA'09 Symposium (Lansdown Centre for Electronic Arts) (Reviewer), Middlesex University, Middlesex, England
- 2008 HCI Symposium (Co-Editor and Reviewer), 12th Annual International Conference on Information Visualization, Zurich, Switzerland.
- 2007 Sixth Annual (ACM SIGCHI) Pre-ICIS HCI/MIS Workshop, Association for Information Systems, Montreal, Canada, Program Committee Member and Paper reviewer.
- 2007 HCI International Conference 2007, Beijing, China. Conference HCI Research in Culture-Driven Mediated Communication, Cognition and Recreation.
- 2007 HCI Symposium (Co-Editor and Reviewer), 11th Annual International Conference on Information Visualization, Zurich, Switzerland.
- 2007 HCI International Conference 2007, Beijing, China. Conference HCI Design Educational Research: Teaching Theories, Models, and Learning Outcomes.
- 2007 Human-Computer Interaction International Conference 2007, Beijing, China. Conference Human-Information Interaction Theories, Models, and Design Strategies.
- 2006 HCI Track of the 14th European Conference on Information Systems (ECIS). (Reviewer), Göteborg, Sweden. Organized by the IT University of Göteborg.
- 2006 Fifth Annual (ACM SIGCHI) Pre-ICIS HCI/MIS Workshop, Association for Information Systems, Milwaukee, Wisconsin, Program Committee Member.
- 2006 HCI Symposium (Co-Editor and Reviewer), 10th Annual International Conference on Information Visualization, London, England. Symposium Title: Visualization and Interaction Design.
- 2005 Fourth Annual (ACM SIGCHI) Pre-ICIS HCI/MIS Workshop, Association for Information Systems, Las Vegas, Program Committee Member.
- 2005 HCI Symposium (Editor and Reviewer), 9th Annual International Conference on Information Visualization, London, England.
- 2004 Third Annual (ACM SIGCHI) Pre-ICIS HCI/MIS Workshop, Association for Information Systems, Washington, D.C., Program Committee Member and Paper reviewer.
- 2004 HCI International Conference 2005, Las Vegas, Nevada. The Human-Computer Interaction of Information Visualization.
- 2004 HCI International Conference 2005, Las Vegas, Nevada. Interaction Design Education and Research.
- 2004 HCI Symposium (Editor and Reviewer), 8th Annual International Conference on Information Visualization, London, England.
- 2004 Humanizing Technology Colloquium, Tuscany, Italy. 2PndP International Conference on New Directions in the Humanities, Colloquium Title: Human-Computer Interaction, Communication, and Co-Existence: A Blueprint for Humanizing Technology.
- 2003 Space, Spatiality, and Technology Conference, Edinburgh, Scotland, Napier University School of Computing.
- 2003 HCI International '03, Parallel Session, HCI Education. Chief reviewer / editor of session papers.
- 2003 Second Annual (ACM SIGCHI) Pre-ICIS HCI/MIS Workshop, Association for Information Systems, Program Committee Member and Paper reviewer.

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## AWARDS

- 2016 AMIA 2016: American Medical Informatics Association, *Distinguished Reviewer Award*
- 2013 Dedicated Service Award, *for outstanding service as* Executive Associate Dean, Indiana University
- 2004 Who's Who among America's Teachers, Nominated Honor
- 2003 IU Board of Trustees Excellence in Teaching Award, Indianapolis, IN

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## REFERENCES & NOTES

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- <sup>1</sup> This is the newly updated title of the school since 2023 based on the donor Fred Luddy.
- <sup>2</sup> (Specialization)—Social Science: Sociocultural / Behavioral Psychology, Cognitive Modeling of Information Technology.
- <sup>3</sup> (Specialization)—Communication Design: Human Factors and Interactive Media Learning Systems.
- <sup>4</sup> (Focus)—Certificate of Participation for all workshops and training programs.
- <sup>5</sup> (AAMI)—The Association for the Advancement of Medical Instrumentation® is a nonprofit organization founded in 1967. It is a diverse community of more than 9,000 professionals united by one important mission—the development, management, and use of safe and effective health technology. <https://www.aami.org/>
- <sup>6</sup> <https://www.helsinki.fi/en/faculty-theology>
- <sup>7</sup> <https://www.academiadiurbino.it/en/>
- <sup>8</sup> <https://www.uky.edu/chs/about/news/chs-professor-awarded-markey-cancer-center-community-partnership-research-grant>
- <sup>9</sup> Faiola, A., Abraham, J. & Papautsky, E.L. (2019). Delivering Patient Information and Access to Mental Health Counseling for ICU Families: Towards a Human-Centered Mobile Health System for Room-to-Family Communication. Poster, Extended Abstract and Presentation, *Proceedings from Human Factors and Ergonomics in Health Care, Chicago, IL, March 2019*.
- <sup>10</sup> Faiola, A. and Abraham, J. (2018). FAMcare: A MICU Room-to-Mobile System—Supporting the Communication Needs of Families, Extended Abstracts, American Medical Informatics Association, Annual Symposium, San Francisco, CA, November, 2018. <https://symposium2018.zerista.com/event/member/508059>
- <sup>11</sup> Aronoff-Spencer E, McComsey M, Chih MY, Hubenko A, Baker C, Kim J, Ahern DK, Gibbons MC, Cafazzo JA, Nyakairu P, Vanderpool RC, Mullett TW, Hesse BW. Designing a Framework for Remote Cancer Care Through Community Co-design: Participatory Development Study. *J Med Internet Res.* 2022 Apr 12;24(4):e29492. doi: 10.2196/29492. PMID: 35412457; PMCID: PMC9044168.
- <sup>12</sup> **Faiola, A.**, Soroya, S., Naeem, S., Lenox, S., Piekarski, S., & Tenuta, G. (Developing). Addressing the mental health disparities of families of critical care patients from rural communities: Investigating the efficacy to reduce mental trauma using mobile health services. *Journal of Environmental Research and Public Health*.
- <sup>13</sup> **Faiola, A.**, Kamel Boulos, M.N., Bin Naeem S., ur-Rehman, A. (2023). Integrating social and family support as a measure of health outcomes: validity implications from the integrated model of health literacy. *International Journal of Environmental Research and Public Health*, 20(1):729. <https://www.mdpi.com/1660-4601/20/1/729>, doi: 10.3390/ijerph20010729.
- <sup>14</sup> Hosseini, M, **Faiola, A.**, Jones, J, Vreeman, D, Wu, H, & Dixon, B.E. (2019). Impact of document consolidation on healthcare providers' perceived workload and information reconciliation tasks: a mixed methods study, *Journal of the American Medical Informatics Association*, 26(2), 134–142. <https://doi.org/10.1093/jamia/ocy158> [Selected in category of Best Papers for the Health Information Management Section of the 2020 IMIA Yearbook. (*International Medical Informatics Association*)]
- <sup>15</sup> Zolnour A, Eldredge CE, **Faiola A.**, Yaghoobzadeh Y, Khani M, Foy D, Topaz M, Kharrazi H, Fung KW, Fontelo P, Davoudi A, Tabaie A, Breiting SA, Oesterle TS, Rouhizadeh M, Zonnor Z, Moen H, Patrick TB and Zolnoori M (2023). A Risk Identification Model for Detection of Patients at Risk of Antidepressant Discontinuation, *Frontiers in Artificial Intelligence (Medicine and Public Health)*.
- <sup>16</sup> Zolnoori, M., Fung, K., Fontelo, P., Kharrazi, H., **Faiola, A.**, Wu, Y, S., Stoffel, V., & Patrick, T. (2018). Identifying the Underlying Factors Associated With Patients' Attitudes Toward Antidepressants: Qualitative and Quantitative Analysis of Patient-Generated Data, *Journal of Medical Internet Research—Journal of Mental Health*, 5(4):e10726. doi:10.2196/10726 (NIH Site: <https://pubmed.ncbi.nlm.nih.gov/30611893/https://pubmed.ncbi.nlm.nih.gov/30287417/>)
- <sup>17</sup> This NSF funded research addresses the global epidemic of diabetes mellitus types 1 and 2, as well as related physiological complications stemming from severe hypoglycemia (HYPO). HYPO detection relies on analyzing blood glucose levels through continuous monitoring, saliva, urine, and skin pricking—all of which have limited accuracy. Diabetes-alert dogs (DADs) are trained to detect HYPO by smelling volatile organic compounds (VOCs) in human breath. Patients with DADs have demonstrated more accurate and faster detection than those methods noted. In this research, we developed a HYPO warning and data delivery system, referred to as HYPOalert that uses a nanosensor that mimics a canine's ability to detect HYPO from VOCs in human breath. The sensor outputs data integers from 1 to 10 (via Bluetooth) to a smartphone app, which provides numeric and data visualizations along with HYPO alerts that warn patients when they are approaching or in HYPO. Three prototype iterations have been completed and tested.
- <sup>18</sup> **Faiola, A.**, Vatani, H., & Agarwal, M. (2019). Hypoglycemic Detection by Human Breath: A Mobile Health Application that Alerts Diabetics of Low Blood Glucose, Special Edition on Smart Coaching Solutions for Health and Wellbeing, *Journal of EAI Transactions on Ambient Systems*, Special Issue: Smart Coaching Solutions for Health and Well-Being. <https://eudl.eu/doi/10.4108/eai.23-3-2018.162220>