

CURRICULUM VITAE

MARYAM E. KARIMI, PhD, MPA, MS

Department of Environmental Health Science

School of Public Health

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EDUCATION

- 2017- 2018 Columbia University, Mailman School of Public Health, Postdoctoral Fellow
2012-2017 The Graduate Center of CUNY- Ph.D. in Earth and Environmental Science
2010-2012 The Graduate Center of CUNY, M.S. in Earth and Environmental Science
2006-2010 The Baruch College of CUNY, MPA in Public Administration and Policy
2002-2006 John Jay College of CUNY, BA in International Criminal Justice

ACADEMIC EXPERIENCE

- 2019- Assistant Professor, Department of Environmental Health Sciences, UAB School of Public Health and joint appointment with Department of Civil, Construction and Environmental Engineering, UAB
2019- Faculty, Sustainable Smart Cities Research Center, UAB
2015- 2019 Visiting Assistant Professor, Rowan University
2015-2016 Research Lead, Earth Institute of Columbia University
2011-2016 Adjunct Professor, City University of New York
2014-2016 Affiliated Faculty at CUNY, Geospatial Center of the Crest Institute
2011-2016 Research Assistant, NOAA Crest Institute of the City College of New York
2014-2015 NSF-REU Student Mentor, NOAA Crest Institute of the City College of New York

AWARDS AND FELLOWSHIPS

- 2021 Nominated for National Public Health Honor Society, Delta Omega, Upsilon Chapter of the University of Alabama at Birmingham School of Public Health-recognized for excellence in leadership, scholarship, research and service
2021 Exceptional Performance Award- UAB
2020 Established an award-winning student organization- Green Thumb
2020 Nominated for Early Career Investigator Award
2020 Sloan Research Fellowship, Alfred P. Sloan Foundation- (*not funded*)
2016- 2018 Awarded Postdoctoral scholarship from the National Institutes of Health (NIH), Mailman School of Public Health, Columbia University
2011-2015 Awarded full scholarship by NOAA-CREST of the City University of New York
2012-2014 Awarded two years scholarship by Alfred P. Sloan Foundation, PhD Program
2011 Awarded fellowship by The Earth Science and Environmental Sustainability Program, The City University of New York

GRANTS- FUNDED

- 2020- 2021 FGDP-UAB, Faculty Development Grant Program, Role: **PI**, Quantifying the coupled impact of urban heat island and air pollution on Birmingham.
2020- 2021 The Back of Envelop Award, UAB, Role: **Co-I**, Developing a framework for infectious disease transmission and Spread Using SARS, MERS and COVID19 Data.

- 2019-2021 UTC-USDOT, Role: **Co-I**, Resiliency and community Vulnerability study for Emergency Planning Evacuation.
- 2019- USDA, Role: **Co-I**, Development of Multi-Scale Non-Invasive in Situ and Remote Sensing Techniques for Proactive Waste Management: Demonstration and Training.
- 2015 NASA Develop, Applied Sciences Program, Role: **PI**, Modeling Near Surface Air Temperature Profile of Complex Urban Systems Based on Land Surface Properties and Correlating On-Site and Satellite Data to Better Understand Temperature Profiles in Urban Microclimates.
- 2013 NJDOT, Role: **Co-I**, Promoting Diversity and Multiculturalism with Emerging Technologies.
- 2013 City University of New York Summer Transportation Institute, NYDOT and, Federal Highway Administration (FHWA), Role: **Co-I**.

GRANTS- PENDING

- 2021 BIRCSWH- Building Interdisciplinary Research Career Women’s Health, Role: **Mentor**
- 2021 NASA- Earth Science Applications: Health and Air Quality, Role: **PI**, A Multimodal Decision Making Framework for Environmental Exposure and Respiratory Response Assessment through TEMPO and MODIS
- 2021 NSF- Partnership for Innovation (PFI), Role: **Co-I**, An Innovative Framework for High Resolution Quantitative Assessment of Flood Resiliency
- 2021- NSF- Smart and Connected Communities, Role: **Co-I**, SCC-PG: Bridging the Information and Technology Gap to Develop a Resiliency Framework for Smart Communities of Tomorrow
- 2021- NSF, Smart and Connected Health, Role: **PI**, Collaborative Research: SCH: An AI Guided Multimodal Decision Making Framework for Environmental Exposure and Respiratory Response Assessment Connecting People, Data, and Systems.
- 2021- The Lung Health Center Pilot Program for Lung Research (UAB), Role, **PI**, An Innovative Real Time Environmental Exposure Assessment, Connecting Patients and Health Care Providers
- 2021- USDA, Role: **Co-I**, Application of Satellite and Drone Based Remote Sensing Technologies in Proactive Waste Management: Demonstration and Training
- 2021- NSF, Major Research Instrumentation (MRI), Role: **Senior Personnel**, Acquisition of An Immersive Virtual Reality and Visualization System (VRVS) To Integrate Data and Simulation Intensive Research And Education: Bringing VR to Deep South Technologies for True Connected Communities of Tomorrow.
- 2021- NSF-IUSE, Role: **Co-I**, Engaging in STEM Education with Big Data, GS, AL and ML Analytics and Technologies - University of Alabama at Birmingham
- 2021- NSF- EPSCOR- L02615659, Role: **Co-I**, Facilitating Ubiquitous Technology Utilizing Resilient Eco-friendly Sensors: FUTURE Sensors
- 2021- NSF- SCC-IRG Track 1, Role: **Co-I**, Creating the Smart Human Rights City: Using Intelligent Information Infrastructure to Facilitate Citizen Engagement and Public Health

- 2021- National Science Foundation (NSF), Role: **Co-I**, CoPe-Coastlines and People Focused CoPe-Deep South Resilient Coast Research and Community Hub.
- 2020- National Science Foundation SCC-CIVIC-PG, Role: **Co-I**, Track B: Resilient Birmingham, Bridging of Information to Develop a Decision-Making Framework for Extreme Storm Events with an Interdisciplinary Perspective on Civic Engagement and Built Environment.

PhD THESIS

Karimi, Maryam E., "Impact of Urbanization on Temperature Variation in Big Cities: Measuring Health Risk While Targeting Vulnerable Population" (2017). CUNY Academic Works.

https://academicworks.cuny.edu/gc_etds/1728

PEER REVIEWED JOURNAL PUBLICATIONS

1. Sabrin, S., **Karimi, M.**, Rabbani Fahad, MN., Uddin, A., Nazari, R. The Impact of Stay-At-Home Orders on Air-Quality and COVID-19 Mortality Rate in the United States, Journal of Science and the Total Environment (*submitted for review*)
2. Rabbani Fahad, MD., Motamedi, H., Nazari, R., and **Karimi, M.**, A Decision-Making Framework Integrating Fluid and Solid Systems to Assess Resilience of Coastal Communities Experiencing Extreme Storm Events, Environment International, Elsevier (*Submitted*).
3. Nazari, R., Rabbani Fahad, MD., Karimi, M., and Sabrin, S., Developing Large Scale Outdoor Comfort Assessment Framework by Using High Resolution Gridded Meteorological and Station Based Observations, Sustainable Cities and Society, Elsevier (*submitted*)
4. Fifolt, M., Mooney, S., Nabavi, M., **Karimi, M.**, Nassel, A., and McCormick, L., Examining the built environment for healthy living via virtual street audits, Journal of Education and Urban Society (*submitted*).
5. Rabbani Fahad, MD., Nazari, R., **Karimi, M.**, Quantifying the micro and macro scale flood damage and structural resiliency for the coastal communities under extreme storm events (*Submitted for publication*).
6. Nazari, R., Vasiliadis, H., Rabbani Fahad. MD., **Karimi, M.**, Simon. S., Zhang, T., Sun, Q., and Peters, R., Hydrodynamic Study of Extreme Flooding Events Impact on Wastewater Treatment Plants Considering Total Water Level, Water Resources Management, Springer Journal (*submitted for review*).
7. Rabbani Fahad, MD., Sabrin, S., Ho, A., Nazari, R., and **Karimi, M.**, "COVID-19 Vulnerability Assessment Using Fuzzy Analytical Hierarchy Process and Multi Criteria Decision Making Approach at County Level for United States, Journal of Public Health, Elsevier (*under review*).
8. Rabbani Fahad, MD., Zech, W., Nazari, R., and **Karimi, M.**, Developing A Geospatial Framework for Severe Occupational Injuries Using Moran's I and Getis-Ord Gi* Statistics: A Case Study Over OSHA Region 4 of United States, International Archives of Occupational and Environmental Health (*under review*).
9. Vanderboegh, Z., and **Karimi, M.**, Health Effects of Air Pollution in Birmingham, Alabama: A Literature Review, International Journal of Environmental Research and Public Health (*under review*).
10. Sabrin, S., Nazari, R., **Karimi, M.**, Rabbani, MD., Understanding Occupational Heat Exposure in OSHA Region 4 and Proposing an Index as a Means of Quantifying Occupational Heat Stress, International Archives of Occupational and Environmental Health, Springers (*accepted for publication*)

11. Sabrin, S., Nazari, R., **Karimi, M.**, Rabbani, MD., Everett, J., and Peters, P. (2021) Development of a Conceptual Framework for Risk Assessment of Elevated Internal Temperature in Landfill, *Science of the Total Environment*, Elsevier, Science Direct, 782 (2021) 14683, doi: 10.1016, Volume 782, ISSN 0048-9697.
12. Sabrin, S., **Karimi, M.**, Nazari., Pratt, J., and Bryk, J., (2020), Assessing the Effects of Different Urban-Vegetation Morphology on the Canopy-level Thermal Comfort and the Cooling Benefits of Shade Trees: Case-study of Philadelphia, PA, *Journal of Sustainable Cities and Society*.
13. Sabrin, S., Nazari, R., **Karimi, M.**, Everett, J., and Peters, R. (2020) Investigating Effects of Landfill Soil Gases on Landfill Elevated Subsurface Temperature, MDPI, *Journal of Applied Sciences*, 0, 10, 6401; doi:10.3390/app10186401
14. Rouzbeh Nazari, Husam Alfergani, Francis Haas, **Maryam Karimi**, MD Golam Fahad, Samain Sabrin, Jess Everett, Nidhal Bouaynaya, Robert Peters, (2020), Application of Satellite Remote Sensing in Monitoring Elevated Internal Temperatures of Landfills, *Journal of Applied Sciences*.
15. Sabrin, S., **Karimi, M.**, Rabbani Fahad, Md G., and Nazari, R. (2020), “Quantifying Environmental and Social Vulnerability: Role of Urban Heat Island and Air-quality, A Case Study for Camden, NJ” *Urban Climate*, Elsevier.
16. Sabrin, S., **Karimi, M.**, and Nazari, R., (2020) “Developing Vulnerability Index to Quantify Urban Heat Islands Effect Coupled with Air Pollution: A Case Study of Camden, NJ”, *ISPRS International Journal of Geo-Information Manuscript*. 9, 349, <https://doi.org/10.3390/ijgi9060349>
17. Rabbani Fahad, MD., Nazari, R., Motamedi, H, and **Karimi, M.**, (2020), “Coupled Hydrodynamic and Geospatial Model for Assessing Resiliency of Coastal Structures under Extreme Storm Scenarios”, *Journal of Water Resources Management*, WARM-D-19-00556R1.
18. Rabbani Fahad, MD., Nazari, R., Bhavsar, P., Jalayer, M., and **Karimi, M.**, (2019), “A Decision-Support Framework for Emergency Evacuation Planning During Extreme Storm Events”, *Journal of Transport and Environment*, Elsevier.
19. **Karimi, M.**, Nazari, R., and Khanbilvardi, R., (2018) “A Conceptual Framework for Understanding Environmental Risk and Social Vulnerability in Complex Urban Setting”, *Journal of Urban Climate*, Vol. 26, pp. 161-173.
20. **Karimi, M.**, Vant-Hull, B., Nazari, R., Mittenzwei, M., & Khanbilvardi, R. (2017). Predicting surface temperature variation in urban settings using real-time weather forecasts. *Urban Climate*, 20, 192-201. <https://doi.org/10.1016/j.uclim.2017.04.008>
21. **Karimi, M.**, and Lessel, J., (2015), “ForecastHYPERLINK "C:\\Users\\karimi\\Desktop\\What"C:\\Users\\karimi\\Desktop\\Whatber 25, https://develop.larc.nasa.gov/2015/fall_term/NewJerseyHealthAQ.html
22. **Karimi, M.**, Nazari, R. Vant-Hull, B., and Khanbilvardi, R., (2015), “Urban Heat Island Assessment with Temperature Maps Using High Resolution Datasets Measured at Street Level”, *Journal of Constructed Environment*, Vol. 6, Issue 4, pp. 17-28.
23. Vant-Hull, B., **Karimi, M.**, Sossa, A., Wisanto, J., Nazari, R., and Khanbilvardi, R., (2014) “Fine Structure in Manhattan’s Daytime Urban Heat Island: a New Dataset”, *Journal of Urban and Environmental Engineering*, Vol. 8, No. 1, pp. 59-74.

BOOKS AND BOOK CHAPTERS

- 1) **Karimi, M.**, Nazari, R., and Sabrin, S., *Extreme Heat, Public Health Emergencies: Case Studies, Competencies, and Essential Services of Public Health*, Springer (*In Press*)

- 2) Nazari, R., **Karimi, M.**, and Mahani, S., (2013). “Environmental Contamination”, Encyclopedia of Crisis Management, SAGE Publications, Inc, Vol. 1, n 128, pp. 372-376.

PUBLIC OUTREACH

- WBHM, WBHM 90.3 | Public Radio for the Heart of Alabama, North Birmingham Air Quality, October 2020
- CGTNTV, The Climate Change Extinction Rebellion, September 2020, <https://www.youtube.com/watch?v=1FVVsjZ-c2Y>
- CGTN TV, The Climate Change and Extreme Weather Events in Latin America, July 2020 <https://www.youtube.com/watch?v=ewqPE10PbbI>
- School of Public Health Faculty Research Spotlight, January 2020
- BirminghamWatch, how rising temperatures and other aspects of climate change affect (or might affect) health of people living in rural Alabama, November 20, 2019
- Newsweek, Tech and Science, Climate Change is Going to Make Extreme Weather Events Worse: Here’s Why, September 20, 2019 <https://www.newsweek.com/climate-change-extreme-weather-events-worse-1460125>
- New Jersey Healthy Communities Network, A New Path Forward, May 2019, <http://www.njhcn.org/a-new-path-forward/>
- New Jersey Healthy Communities Network, Leveraging Partnership: Addressing the Quality of Air in Camden. March 2019, <http://www.njhcn.org/leveraging-partnership-addressing-the-quality-of-air-in-camden/>
- New Jersey Healthy Communities Network, Could Planting a Tree Help Manage Asthma? July 2019, <http://www.njhcn.org/could-planting-a-tree-help-manage-asthma/>
- New Research Shows Temperatures Vary Block by Block. Pix11 News, August 2014, <http://pix11.com/2014/08/27/think-it-was-a-mild-summer-new-research-shows-it-varies-block-by-block/>

PEER REVIEWED CONFERENCE PUBLICATIONS

- 1) Fifolt, M., McCormick, L., **Karimi, M.**, Mooney, S., and Nassel, A., APHA 2021 Annual Meeting and Expo, Examining the built environment for healthy living through virtual street audits, 2021
- 2) Gupta, S., Sack, C., Paulin, A., Gassett, A., Sung, C., Hess, J., Woodruff, P., Dransfield, M., Paine., R., Barjaktarevic, I., Comellas, A., **Karimi, M.**, Pirozzi, C., Ortega, V., Labaki, W., Hansel, N., and Kaufman, J., Effects of ambient temperature on COPD symptoms and exacerbations in the SubPopulations and InteRmediate Outcome Measures In COPD Study (SPIROMICS) cohort, European Respiratory Society Conference (<https://www.ersnet.org/>), 2021
- 3) Nazari, R., **Karimi, M.**, Assessing the Role of the Built Environment in Resiliency Planning of Vulnerable Coastal Cities, the 3rd International Conference on Sustainable Development of Water and Environment (ICSWE2020), South Korea, Jan 2020
- 4) Sabrin, S., **Karimi, M.**, A Technique to Design Sidewalks with Focus on Mitigating Trapped Canopy-Heat, The Environmental Design Research Association (EDRA) Conference, Tempe, Arizona, and April 2020.
- 5) Sabrin, S., **Karimi, M.**, and Nazari, R., (2020), Application of GIS in Public-health: Quantifying Vulnerability due to urban heat islands effect and air-pollution, GISTAM2020 Conference, Poland, May 2020

- 6) **Karimi, M.**, Sabrin., S, A Systematic Approach to Quantifying the Impacts of Built Environment and Surface Properties on Temperature Extremes and Health, 2020 Preparedness Summit, Dallas, TX 2020.
- 7) **Karimi, M.**, and Nazari, R., Application of an Innovative Method in Assessing the Role of Vegetation on Cooling Urban Built Environment, World Sustainable Built Environment Conference, Sweden , June 2020
- 8) Sabrin, S., **Karimi, M.**, and Nazari, R., Application of GIS in Public-health: Quantifying Vulnerability Due to Urban Heat Islands Effects and Air Pollution, 6th International Conference on Geographical Information Systems Theory, Application and Management, GISTAM2020, Czech Republic, May 2020.
- 9) **Karimi, M.**, Nazari, R., Sabrin, S., and Pratt, J., Understanding Urban Microclimate Using an Innovative Technology to Measure Temperature Felt by Pedestrians, World Congress Environmental Health 2020 (WCEH 2020), Malaysia, 2020.
- 10) **Karimi, M.**, and Nazari, R., Application of an Innovative Technology in Measuring the Impact of Urban Obstacles and Vegetation on Human Health, ICSDWE2020, 3rd International Conference on Sustainable Development of Water and Environment, South Korea, 2020.
- 11) **Karimi, M.**, and Nazari, R., Application of RayMan Model in Quantifying the Impacts of the Built Environment and Surface Properties on Surrounding Temperature, ICCCEH, 22th International Conference on Changing Climate and Environmental Health, Phuket, Thailand, 2020
- 12) Nazari, R., and **Karimi, M.**, Assessing the Role of the Built Environment in Resiliency Planning of Vulnerable Coastal Cities, World Sustainable Built Environment Conference, Sweden , June 2020
- 13) **Karimi, M.**, Sabrin, S., Pratt, J., Measuring the Impact of Urban Morphology and Green Infrastructure on Health, JIS Smart Cities, 1st Joint International Conference on Design and Construction of Smart City Components, Egypt, December 2019
- 14) Pratt, J., Bryke, J., Sabrin, S., and **Karimi, M.**, Determining the Impacts of Urban Morphology and Air Quality on Human Health in Megacities with the Application of an Innovative Method, ISUHI, International Conference on Urban Health, Xiamen, China, November 2019
- 15) Sabrin, S., Pratt, J., Bryk, J., and **Karimi, M.**, A Systematic Approach to Mitigate the Impact of Increased Temperature and Air Pollution in Urban Settings, ICUPPW 2019: International Conference on Urban Planning and Public Works, New York, NY, June 2019.
- 16) **Karimi, M.**, Pratt, J., Bryke, J., Sabrin, S., and Ferriola, V., Application of an Innovative Method in Determining the Impacts of urban Morphology and Air Quality on Human Health in Urban Settings, Ninth International Conference on The Constructed Environment, Portugal, May 2019.
- 17) Cangialosi, M., Kalogirato, A., Strauss, M., Sabrin, S., and **Karimi, M.**, Characterizing Temperature Variation Due to Air Quality for Climate Health Impacts in Camden, NJ, Rowan University Student Scholars (RUSSS) STEM Symposium, Rowan University, April 2019.
- 18) Pratt, J., Bryke, J., Sabrin, S., and **Karimi, M.**, Application of the RayMan Model in Determining the Effects of Urban Morphology and Vegetation on the Urban Heat Island,

- Rowan University Student Scholars (RUSSS) STEM Symposium, Rowan University, April 2019
- 19) Briguglio, M., Cangialosi, M., Kalogiratou, A., and **Karimi, M.**, Developing an Air Quality Impact Index for Camden, New Jersey Based on Physical and Social Indicators, 99th American Meteorological Society Annual Meeting (AMS), Phoenix, AZ, October 2018.
 - 20) **Karimi, M.**, Shaman, J., Nazari, R., Quantifying the Impacts of Built Environment and Surface Properties on Temperature Extremes, Environmental Pollution and Health Hazards, Osaka, Japan, October 2018.
 - 21) **Karimi, M.**, Shaman, J., Quantifying the Impacts of Built Environment and Surface Properties on Temperature Extremes, 4th International Conference on Pollution Control and Sustainable Environment, Rome, Italy, 2018.
 - 22) **Karimi, M.**, Vant-Hull, B., Nazari, R., and Khanbilvardi, R. Surface Temperature Variation Prediction Model Using Real-Time Weather Forecasts, American Meteorological Society (AMS) New Orleans, LA, 2016.
 - 23) Vant-Hull, B., **Karimi, M.**, Sossa, A., Waxman, L., Giterez, E., and Khanbilvardi, R. Some Validations Results of a Spatially Fine Scale Air Temperature Statistical Model in New York City, American Meteorological Society (AMS), New Orleans, LA, 2016
 - 24) Nazari, R., **Karimi, M.**, Goins, C., Musili, A., Ghandehari, M., and Khanbilvardi, R. A Framework to Conceptualize Environmental and Social Vulnerability to High Temperatures in Urban Landscapes, American Meteorological Society (AMS), New Orleans, LA, 2016
 - 25) **Karimi, M.**, Vant-Hull, B., Nazari, R., and Khanbilvardi, R. Impact of Environmental Factors in Variation of Temperature in Respect to Urban Heat Island, Manhattan, New York, American Meteorological Society (AMS), Phoenix, AZ, 2015.
 - 26) **Karimi, M.**, Vant-Hull, B., Nazari, R., Khanbilvardi, R. Land Surface and Climate Change Impacts on Temperature Variation in New York City. 9th International Conference on Urban Climate, France, 2015.
 - 27) Nazari, R., Ghandehari, M., **Karimi, M.**, Vant-Hull, B., and Khanbilvardi, R. New York City Thermal Cycle Assessment and Neighborhood Temperature Variations Due to the Urban Heat Island, American Meteorological Society (AMS), Phoenix, AZ, 2015.
 - 28) Vant-Hull, B., **Karimi, M.**, Sossa, A., Nazari, R., and Khanbilvardi, R., A Simple Statistical Model for Predicting Fine Scale Spatial Temperature Variability in Urban Settings, ICUC, 9th International Conference on Urban Climate, At Toulouse, France, 2015
 - 29) **Karimi, M.**, Vant-Hull, B., Nazari, R., and Khanbilvardi, R. Investigating Uneven Heating of Neighborhoods Due to Urban Heat Island for Climate Health Impacts in New York City, American Meteorological Society (AMS), Atlanta, GA, 2014.
 - 30) Sossa, A., **Karimi, M.**, Khanbilvardi, R., and Vant-Hull, B. Establishing a Correlation Between the Urban Heat Island Effect in New York City and The Land Cover, American Meteorological Society, GA 2014.
 - 31) Arend, M., Gutiérrez, E., Moshary, F., Bornstein, R., Khanbilvardi, R., **Karimi, M.**, Vant Hull, B., and Gonzalez, J. Monitoring and Modeling Urban Climates to Better Understand Climate Risks, AAG Annual Meeting, Los Angeles, California, 2013.

- 32) **Karimi, M.**, Vant-Hull, B., Khanbilvardi, R., and Nazari, R. Characterizing Temperature Variations Due to the Urban Heat Island for Climate Health Impacts in New York City, American Meteorological Society (AMS), Austin, TX. 2013.
- 33) **Karimi, M.**, Vant-Hull, B., Nazari, R., and Khanbilvardi, R. Thermal Neighborhood Observations and Effects on Human Health Neighborhood Variations in Urban Northeast Urban Heat Island, IEEE International Geoscience & Remote Sensing Symposium, Germany, 2012.
- 34) **Karimi, M.**, Vant-Hull, B., Nazari, R., and Khanbilvardi, R. Characterizing Environmental Factor for Climate Health Impacts and Asthma, The Sixth Education and Science Forum, NOAA Educational Partnership Program, Florida A&M University, 2012.
- 35) Nazari, R., Ghandehari, M., **Karimi, M.**, Vant-Hull, B., and Khanbilvardi, R. New York City Thermal Cycle Assessment and Neighborhood Temperature Variations Due to the Urban Heat Island, American Meteorological Society (AMS), GA, 2014.
- 36) Vant-Hull, B., **Karimi, M.**, and Khanbilvardi, R. Fine Scale Mapping of the Manhattan Heat Island for Health Impacts, American Meteorological Society, GA, 2014.

INVITED PRESENTATIONS

2019 NASA TEMPO Health Conference, New Application in the Use of Satellite Data Monitoring for Population Health, University of Alabama in Huntsville

Invited Talk- Keynote Speaker

2021 CUNY Conference on Climate Change Education

2021- UAB PHSA Coffee Hour- panelist speaker on Environmental Racism

2021- UAB MPA Alumni Luncheon- panelist speaker on equity and justice in public health

2021 International Conference on Environmental Science & Green Energy, September 13 – 15, 2021 at Paris, France

2021 International Conference on Recycling and Waste Management, Recycling 2021, April 19th-20th, 2021 at Warsaw, Poland.

2020 EnviroDay Research Forum and Symposium (2020), the University of Virginia (UVA)

2019 Environmental Chemical Design Engineering Conference- Key note speaker

Invited Partnership

2020 Lancet Countdown on Health and Climate Change Brief for the United States of America, Tracking the Connections between Public Health and Climate Change, 2020 Report

PUBLICATION REVIEWER

2020- Editorial Board of Urban Science, MDPI

2020- 2020 Lancet Countdown U.S. Policy Brief –Editor

2020- Editorial Board- International Journal of Environmental Monitoring and Analysis

2020- Open Health- Editorial Board

2020- NSF Review Panel- CIVIC COI

2020- NSF Review Panel- AI Institutes Theme 3: AI-Driven Innovation in Agriculture and the Food System

2020- NSF Review Panel- Infrastructure Resilience Including Water/Energy for the Smart & Connected Communities program

- 2020- UAB Center for Clinical and Translational Science CCTS Interdisciplinary Network Pilate Program Reviewer
- 2020- De Gruyter, Open Health Peer Reviewed Open Access Journal- Reviewer
- 2019- NSF Review Panel (GRFP)
- 2017- Urban Climate, Elsevier- Review
- 2016- PLOS ONE, A peer-reviewed, open access journal- Review

INTERNATIONAL WORKSHOP

- 2019 NSF 2nd Sustainable Smart Cities, “Sustainable Smart Cities in Arid Regions”, International Workshop- Cairo, Egypt

TEACHING EXPERIENCE

- 2019- Assistant Professor- University of Alabama at Birmingham
Fundamentals of Environmental Health Sciences
- 2015- 2019 Visiting Assistant Professor- Rowan University
Hydrometeorology and Advanced Hydrometeorology- Engineering Course
Sustainable Buildings- Engineering Course
Junior/Senior Engineering Clinic
Sustainable Technology for Built Environment- Engineering Course
Climatology
Geology- Geomorphology
World Regional Geography
Solid Waste Management
- 2011-2016 Adjunct Professor- CUNY
Environmental Science
Atmospheric Science
Earth Science
Geographic Information System (GIS)

PROFESSIONAL EXPERIENCE

- 2020- Green Thumb Student Organization- Advisor
- 2019- UAB Tree Campus USA Advisory Committee
- 2019- UAB EHS Curriculum Committee member
- 2018- Cooper’s Ferry and NY Tree Foundation Committee- Lead Adviser
- 2018- Partner with Camden Collaborative Initiative at Cooper’s Ferry
- 2018- 2019 Rowan’s Sustainability Masterplan Committee
- 2018- 2019 Co-Adviser of USGBS Student Club
- 2015-2016 Faculty and leading Member of Geospatial Center of the Crest Institute
- 2013-2015 Student Mentoring at NOAA CREST and SHIPP Program
- 2011-2015 Research Assistant at CCRUN Consortium for Climate Risk in the Urban Northeast
- 2010-2016 Research Assistant at NOAA-CREST Institute of City College of New York
- 2009-2010 Research Assistant at ActKnowledge- Center for Human Environments
- 2008-2009 New York City Council- Member Services Division – Intern

STUDENT POSTER/ PRESENTATION

- 2021- UAB-SOPH Public Health Virtual Research Poster session, Quantifying the Coupled Impact of the Urban Heat Island Effect and Air Pollution in the 35th Avenue Superfund Site, Albert, R., **Karimi, M.**, Sabrin, S- **Won 3rd place Bachelor's student**

- 2021- UAB-SOPH Public Health Virtual Research Poster session, Studying the Effects of Different Green Covers on the Canopy-Level Thermal Comfort by ENVI-Met Modelling in North-Birmingham, Alabama, Sabrin, S., **Karimi, M.**, and Nazari, N.
- 2021- UAB-SOPH Public Health Virtual Research Poster session, Flash Floods; Impact on the UAB Campus Area, Kaushal, A., Nazari, R., Karimi, M.
- 2021- UAB-SOPH Public Health Virtual Research Poster session, Developing Large Scale Outdoor Comfort Assessment Framework by Combining Thermal Bioclimate (UTCI) and Air Quality (AQI) Indices Using High Resolution Gridded Meteorological and Station Based Observations, Fahad, MD. R., Nazari, R., Karimi, M.

STUDENT AWARDS/ INTERNSHIPS

- 2021 NASA DEVELOP internship program, **Samain Sabrin**
- 2021 ISSS Scholarship Award- Caroline and Charles Ireland International Scholarship, \$2000, **Samain Sabrin**
- 2021 The Harry Truman Scholarship, **Rose Albert**
- 2020 ISSS Scholarship Award- The Caroline and Charles W. Ireland International Student Fund, \$2000, **Aishwarya Kaushal**
- 2020 UAB Presidential Award, **Rose Albert**
- 2020 UAB Blazer, **Fahad Rabbani**
- 2019 Joseph F. Volker scholarship, **Drashti Shah**

PROFESSIONAL SOCIETY MEMBERSHIP

- 2020- The Institute for Systems and Technologies of Information, Control and Communication, a scientific, (INSTICC)
- 2011- American Meteorological Society (AMS)
- 2011- Institute of Electrical and Electronics Engineers (IEEE)
- 2011- American Geophysical Union (AGU)

CERTIFICATION

Quality Matters (QM) Independent Applying the QM Rubric (APPQMR) certified, 2019

SYNERGISTIC ACTIVITIES

- CEPH Steering Committee
- De Gruyter, Open Health Editorial Advisory Board of Open Health- Member
- UAB Global Health Case Competition-Mentor
- UAB Sustainability Ambassador- Faculty
- EHS Sustainability Committee- Member
- Rowan's Sustainability Masterplan Committee- Member
- Rowan's Environmental Sustainability Subcommittee- Member
- Rowan's Energy Reduction Subcommittee- Member
- Camden Collaborative Initiative- Partner