Benjamin Rush

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EDUCATION

Ph.D.	Nutritional Sciences University of Wisconsin- Madison	2022
M.P.H	Epidemiology Indiana University- Bloomington	2015
B.S., B.S.	Biology, Neuroscience Indiana University- Bloomington	2013

APPOINTMENTS

Postdoctoral Research Assistant, Lab of John Garrett   2024-Present

University of Wisconsin-Madison

Postdoctoral Research Associate, Labs of Claudia Solis-Lemus & John Garrett   2023- 2024

University of Wisconsin-Madison

Scientist, Lab of Adam Kuchnia   2022- 2022

University of Wisconsin-Madison

Statistical Consulting, Lab of Alfonso Morales   2019-2021
University of Wisconsin- Madison

Graduate Research Assistant, Lab of Adam Kuchnia   2019-2022
University of Wisconsin- Madison

Personal Chef, Chefs for Seniors   2017-2018
Madison, Wisconsin

Health and Wellness Coordinator, Boys and Girls Club Oshkosh, Wisconsin	2016-2017
Farm to School AmeriCorps Member, AmeriCorps & Winnebago County Health Dept. Oshkosh, Wisconsin	2016-2017
Alternative Classroom Experience Counselor, AmeriCorps & Pfeifer Kiwanis Camp Little Rock, Arkansas	2015-2016
Statistical Consulting, Lab of Lucia Guerra-Reyes Indiana University-Bloomington	2015
Research, Education, and Policy Intern, Department of Epidemiology and Biostatistics Indiana University-Bloomington	2015
Graduate Research Assistant, Lab of M. Aaron Sayegh Indiana University-Bloomington	2014-2015

MENTORSHIP

Graduate Students Mentored

Lauren Clark Current Nutritional Sciences Doctoral Student, University of Wisconsin-Madison	2021- 2023
Israel Rodriguez Current Healthcare Data Analyst at IEHP	2014-2015
Emily Abruzzi Current Senior Research and Evaluation Associate at Ripple Effect	2014-2015

Undergraduate Students Mentored

Yunju Ha Current Statistics Major, University of Wisconsin-Madison	2023-Present

Lakes Tang   2023-2024
Current Computer Sciences Major, University of Wisconsin-Madison

Sujay Garlapati   2021-2022
Current Biology Major, University of Wisconsin-Madison

Arden He   2020-2021
Current Fellow at MIT Blueprint Labs

Olivia Rossman   2020-2021
Current Food Science Major, University of Wisconsin-Madison

Hunter Weber   2019-2020
Current Biology and Environmental Sciences Major, University of Wisconsin-Madison

COMMUNITY ENGAGEMENT

Machine Learning + X Leadership Committee   2023-Present

Wisconsin Institute of Discovery, University of Wisconsin-Madison

Founding Member, Justice, Equity, Diversity, and Inclusion Committee   2020-2022
Department of Nutritional Sciences, University of Wisconsin- Madison

Council Member, Madison Food Policy Council   2019-2021
Madison, Wisconsin

Vice President, Rotaract of Oshkosh   2016-2017

TEACHING EXPERIENCE

Instructor, Improv for STEMM (graduate and professional level)	2023
Department of Medicine, University of Wisconsin- Madison	
Co-instructor, Improv for Scientists with Amy Zelenski (graduate level)	2022
Department of Medicine, University of Wisconsin- Madison	
Co-instructor, Improv for Health Professionals with Amy Zelenski (professional level)	2021
Department of Medicine, University of Wisconsin- Madison	
Food Policy Instructor, Food and Culture Special Topics Course (undergraduate level)	2019
Department of Medicine, University of Wisconsin- Madison	
Statistics and Coding Instructor, Lab of M. Aaron Sayegh (graduate level)	2014-2015
Department of Epidemiology and Biostatistics, Indiana University- Bloomington	
Teaching Assistant, Integrative Human Physiology (undergraduate level)	2012-2013
Department of Human Biology, Indiana University- Bloomington	

SCIENCE COMMUNICATION & MEDIA EXPERIENCE

Science and Art AI Morphs Exhibit	2024
Founder and CEO of Deeper Than Data Media	2020-Present
Host and Producer, Deeper Than Data Podcast (link)	2020-2023
Host and Producer, Badger Talks Podcast (link)	2021-2023
President, Neuroscience Club at Indiana University-Bloomington	2011-2013

HONORS AND AWARDS

Open Science Grid selected scholar, Open Science Grid User School	2023
Madison, Wisconsin	

Honorary associate in the Department of Surgery School of Medicine and Public Health, University of Wisconsin- Madison	2021-2024
Graduate Engaged Scholar Nomination by Graduate Program Coordinator Department of Nutritional Sciences, University of Wisconsin- Madison	2021
Undergraduate Mentorship Award Nomination by Prof. Adam Kuchnia Department of Nutritional Sciences, University of Wisconsin- Madison	2020
Hattie B. Goessling Nutritional Science Scholarship Department of Nutritional Sciences, University of Wisconsin- Madison	2020
Hattie B. Goessling Nutritional Science Scholarship Department of Nutritional Sciences, University of Wisconsin- Madison	2019
Ruth and Carl Miller Academic Merit Award Department of Nutritional Sciences, University of Wisconsin- Madison	2019

PROFESSIONAL SOCIETIES

American Physiological Society

American Society for Bone and Mineral Research

American Association for the Advancement of Science

American Public Health Association

National Science Policy Network

PUBLICATIONS

Lortie, J., **Rush, B.**, Gage, Gr., Dhingra, R., Hetzel, S., Pickhardt, P., Szczykutowicz, T., Kuchnia, A. Correcting Posterior Paraspinal Muscle Computed Tomography Density for Intravenous Contrast Material Independent of Sex and Vascular Phase, *Journal of Thoracic Imaging*, 2023.

Lortie, J., Gage, G., **Rush, B.**, Heymsfield, S., Szczykutowicz, T., and Kuchnia, A. The effect of computed tomography parameters on sarcopenia and myosteatosis assessment: a scoping review. *Journal of Cachexia, Sarcopenia and Muscle*, 2022.

Lortie, J.*, **Rush, B.***, Osterbauer, K., et al. Myosteatosis as a Shared Biomarker for Sarcopenia and Cachexia Using MRI and Ultrasound. *Frontiers in Rehabilitation Sciences*, 2022.
* Co-first authorship

Rush, B., Binkley, N., Kruger, D., et al. Combination of DXA and BIS predicts jump power better than traditional measures of sarcopenia. *Journal of Bone Mineral Research Plus,* 2021.

Guerra-Reyes, L., **Rush, B**., Herbenick, D. et al. Sexual Health and Language Dominance Among Hispanic/Latino Women and Men: Analysis of a Nationally Representative Sample. *Journal of Immigrant Minority Health*, 2016.

PEER REVIEW

NPJ Oncology
International Society for Computational Biology
Osteoporosis International
Journal of Food Science
Gerontology

PRESENTATIONS

Invited Presentations

"Something's funny: humor for better communication and teamwork in science"   2023

Plant Pathology JEDI seminar, University of Wisconsin, Madison

Moderator for closing panel   2024

Research Bazaar, University of Wisconsin, Madison

"AI for Scientists" Workshop   2024

Research Bazaar, University of Wisconsin, Madison

"The SciComm Generator" from Deeper Than Data Media   2024

1 Million Cups invited presenter, Starting Block, Madison

"Science communication + GPT: Strategies for open and empathetic science   2023
communication"

Machine Leaning + X Forum, University of Wisconsin- Madison

"An introduction to strategic science communication"   2023

Illinois Institute of Technology

"Something's funny: humor for better communication, teamwork and ideas in science"   2023

Illinois Institute of Technology

"An introduction to strategic science communication"   2023

Asa Gray Biological Society, Utica University

Emcee and facilitator   2023

Wisconsin Institute of Discovery Annual Symposium

"That was funny: humor for building trust, creativity, and fun"   2023

International Conference for Association for Experiential Education

Mastering Science Communication: Insider Trips and Best Practices for Success 2023

Midwest Big Data Hub's Data Science Student Groups Webinar Series

Humor and Science Workshop Wisconsin Institute for Discovery	2023

Exercising Interpersonal Agility to Foster Belonging and Empathy Workshop Teaching and Learning Symposium	2023

The Deeper than Data Media Story University of Wisconsin-Madison Podcasters Group	2023

"Podcasting in the classroom" Workshop	2022

American Physiological Association- Institute on Teaching and Learning

"Improv for Wild-lifers" The Wildlife Society Annual Conference	2021

"Do financial incentives increase fruit and vegetable consumption and diet quality?" Catalyst for Science Policy, University of Wisconsin-Madison	2019

"Understanding multi-level linear modeling", Infectious Disease Epidemiology Department of Epidemiology and Biostatistics, Indiana University- Bloomington	2015

"An introduction to meta-analyses", Integrative Human Physiology, Department of Human Biology, Indiana University- Bloomington	2014

Peer Reviewed Conference Presentations

"Predicting muscle function from body composition using machine learning"	2024

Research Bazaar, University of Wisconsin, Madison

"Utilizing Large Volume CT Data to Uncover Trends In Radiology Resource Utilization 2024
and Survival in Socioeconomically Disadvantaged Patients"
American Roentgen Ray Society, Boston, Massachusetts

"Predicting muscle function from body composition using machine learning" 2023

Skeletal Muscle Symposium, University of Wisconsin, Madison

"Fat segmentation by deep learning-based model faster and preferred without reducing 2023
predictive capabilities"
Midwest Machine Learning Symposium, Chicago, Illinois

"Determining Biomarkers of Myosteatosis for Sarcopenia and Cachexia Using MRI and 2022
Ultrasound"
Experimental Biology Conference, Philadelphia, Pennsylvania

"Establishing imaging biomarkers of myosteatosis" 2021
Skeletal Muscle Network Symposium, University of Wisconsin-Madison

"Correcting for subcutaneous adipose tissue marginally improves the association between 2021
ultrasound echo intensity and magnetic resonance proton density fat fraction"
International Conference for Frailty and Sarcopenia Research

"The combination of DXA and BIS to predict jump power" 2020
Annual Nutritional Sciences Poster Presentation, University of Wisconsin-Madison

"Novel muscle measurement methods to improve muscle health assessment throughout 2019
the aging process"
Colloquium on Aging, University of Wisconsin-Madison

"Validating the association between the DXA and BIS combination and physical function 2019
to improve the diagnosis of sarcopenia"
Annual Nutritional Sciences Poster Presentation, University of Wisconsin-Madison

"Orgasm as a function of sexual repertoire complexity and consistency" 2014
Society for the Scientific Study of Sex Annual Conference, Omaha, Nebraska