CURRICULUM VITAE

F. DuBois Bowman, Ph.D.

Business Address
Office of the President
Morehouse College
830 Westview Dr. SW
Atlanta, GA 30314

Academic Appointments/Work Experience

2025-Present — Morehouse College
13th President

2018-2025 — University of Michigan
Dean, School of Public Health
Roderick J. Little Collegiate Professor of Biostatistics

2014-2018 — Columbia University, Mailman School of Public Health
Chairman, Department of Biostatistics
Cynthia and Robert Citrone–Roslyn and Leslie Goldstein Professor

2013 — Emory University
Professor (with tenure), Department of Biostatistics and Bioinformatics
The Rollins School of Public Health

2007-2013 — Emory University
Founding Director, Center for Biomedical Imaging Statistics (CBIS)
The Rollins School of Public Health
Research areas: *Functional neuroimaging, cardiac imaging, digital mammography, analysis of correlated data.*

2008-2013 — Emory University
Neuroscience Program Faculty Member
Graduate Division of Biological and Biomedical Sciences

2006-2013 — Emory University
Associate Professor (with tenure)
Department of Biostatistics and Bioinformatics
The Rollins School of Public Health

2000-2006 — Emory University
Assistant Professor
Department of Biostatistics
The Rollins School of Public Health

2005 — Johns Hopkins University
Visiting Assistant Professor
Department of Biostatistics
Bloomberg School of Public Health

2001	Carnegie Mellon University Visiting Scholar Department of Statistics
1997-2000	Rho, Inc., Chapel Hill, North Carolina Statistician *Statistician for clinical trials targeting drug development in multiple therapeutic areas. Developed statistical analysis plans and study designs, performed statistical analyses, wrote analysis reports, and presented results to clients.*
1993-1995	University of Michigan Statistician/Research Assistant Program for Research on Black Americans *Conducted statistical research and analyzed data for a study dealing with reliability of psychiatric diagnoses between groups of observers.*
1994-1995	University of Michigan Statistician/Research Assistant Department of Biostatistics *Responsible for statistical analyses and report writing for a variety of projects.*

Education

2000	University of North Carolina, Chapel Hill, NC Ph.D. in Biostatistics (Co-advisors: P. K. Sen and Paul Stewart)
1995	University of Michigan, Ann Arbor, MI M.S. in Biostatistics
1992	Morehouse College, Atlanta, GA B.S. in Mathematics, Magna Cum Laude, **Phi Beta Kappa**

Honors and Awards

- University of North Carolina Distinguished Alumna and Alumnus Award, 2022
- National Academy of Medicine, elected 2020
- Fellow of the American Association for the Advancement of Science (AAAS), 2019
- Thomas J Blocker Society Health Professionals Trailblazer Award, Morehouse College, 2019
- Benjamin Elijah Mays (Bennie) Trailblazer Award, A Candle in the Dark, Morehouse College, 2019
- President, Eastern North American Region (ENAR) of the International Biometric Society *2013 President-elect, 2014 President, 2015 Past-President.
- Fellow of the American Statistical Association, 2012
- Phi Beta Kappa
- Atlanta Hawks Black History Month Trailblazer, 2009
- Graduate Student Advisee Special Honors:

1. Dissertation advisor for 2012 David P. Byar Young Investigator Award winner, Shuo Chen, Biometrics Section of ASA
2. Dissertation advisor for JSM 2011 Student Paper Competition winner, Shuo Chen, Section on Statistical Learning and Data Mining of the American Statistical Association (ASA)
3. Dissertation advisor for ENAR 2009 John Van Ryzin Award winner, Gordana Derado, for best research paper.

- James E. Grizzle Distinguished Alumni Award, 2008, Department of Biostatistics, University of North Carolina at Chapel Hill
- National Ford Foundation Pre-doctoral Fellow
- National Heart, Lung, and Blood Institute Trainee, University of North Carolina
- Rackham Merit Fellow, University of Michigan
- Minority Presence Fellow, University of North Carolina
- Pi Mu Epsilon Honorary Mathematics Society
- Beta Kappa Chi Science Honors Society
- Golden Key Honors Society
- Who's Who
- Academic Scholarship and Dean's List, Morehouse College

Professional Organizations, Societies and Service

Invited or Elected Leadership Positions, Activities, and Programs

Leadership Positions and Activities:

Association of Schools and Programs of Public Health (ASPPH) Task Force on Gun Violence Prevention, 2022-2023

ASPPH Framing the Future 2030 Expert Panel: Transformative Educational Models and Pedagogy [Content Delivery and Pathways lead], 2021 - 2023

President 2014, ENAR, International Biometric Society [President-elect 2013, Past-President 2015]

Committee of Presidents of Statistical Societies.

Chair, American Statistical Association (ASA) Committee on Award of an Outstanding Statistical Application, appointed by ASA President-elect (Marie Davidian), 2013-2016.

Statistical and Applied Mathematical Sciences Institute (SAMSI), Neuroimaging Data Analysis Program Committee, 2013.

Treasurer for Section on Statistics in Imaging (and founding member), ASA, 2012-2013.

Organizing Committee, ENAR Workshop for Junior Researchers, (i) 2013-2014, (ii) 2009-2011, and (iii) 2003-2004.

Organizing Committee, Statistical Analysis and Applied Mathematics Institute (SAMSI) Neuroimaging Data Analysis Workshop, 2013, Research Triangle Park, NC.

Leadership Programs:

- Big Ten Academic Alliance, Dean's Leadership Program Panelist, 2023
- Academic Public Health Leadership Institute, 2022-2023

- Academic Leadership Institute, 2022
- Big Ten Academic Alliance, Dean's Leadership Program, 2022
- Columbia University Medical Center Leadership and Management Program (2016)
- Woodruff Leadership Academy 2007 Fellow, Woodruff Health Sciences Center, Emory University

Member

Member, American Association for the Advancement of Science (AAAS), 2016-present
Member, ASA Committee on Award of an Outstanding Statistical Application, appointed by ASA President-elect (Nancy L. Geller), 2011-2013.
ASA Byar Young Investigator Award Committee, 2007, Biometrics Section of ASA.
ENAR Diversity Committee (founding member), 2001-2009.
Member, ASA Committee on Minorities in Statistics, 2005-2014.
Member of American Statistical Association, 1993-present.
Member of International Biometric Society, 2000-present.
Member of the Organization for Human Brain Mapping, 2004-present.

Editorial, Review, and Advisory Activities

Editorial:
Editorial committee, *Annual Review of Statistics and Its Application*, 2022-present.

Associate editor, *Journal of the American Statistical Association, Applications and Case Studies*, 2007-2012

Associate editor, *Biometrics*, 2007-2009

Advisory:
National Academies of Sciences, Engineering, and Medicine (NASEM) Committee on Applied and Theoretical Statistics (CATS). CATS advises stakeholders in government, academia, industry, and nonprofit organizations on statistics and data science, and their many applications (2020-2023).

Harvard T. H. Chan School of Public Health, Dr. Alonzo Smythe Yerby Fellowship Program Advisory Committee, Office of Faculty Affairs (OFA) and the Office of Diversity and Inclusion (ODI). (2021-)

Centers for Disease Control and Prevention (CDC), **Expert Panel** on "Alternative Methods for Grouping Race and Ethnicity to Monitor COVID-19 Outcomes and Vaccination Coverage," 2021-2022.

External Advisory Board (EAB), T32 Psychiatric Epidemiology Training (PET) program at Columbia University.

Advisory Board, NIDDK R25DK09900, short course "Mathematical Sciences in Obesity Research," (PI: David B. Allison), (pending).

Internal Advisory Board, Michigan Alzheimer's Disease Center (P30AG053760), 2020-present (PI: Henry Paulson)

National Institutes of Health (NIH), NINDS, Parkinson's Disease Biomarker Program, **Steering Committee**, 2012-present.

NIH, NINDS Data Management Resource Liaison Committee, 2014-2016.

Columbia University Data Science Institute, Executive Committee, 2017-2019

Columbia University, Evaluation of the Tenure Review Advisory Committee (TRAC), 2018, invited by Vice Provost for Faculty Affairs, Dr. Christopher Brown, 2017-2018

Committee of Presidents of Statistical Societies, 2012-2014.

ENAR Executive Committee, 2013-2015.

External Advisory Committee member, Multimodal Neuroimaging Training Program, Carnegie Mellon University and the University of Pittsburgh, 2012.

Atlanta University Center (AUC) National Institute of Mental Health (NIMH) Career Opportunities in Research (COR) **Advisory Board**, 2009-2013.

ENAR Regional Advisory Board (**RAB**), 2003-2005, appointed by President Dr. Tim Gregoire.

Review:

National Institute of Neurological Disorders and Stroke (NINDS), **Special Emphasis Panel**, ZNS1 SRB-T 16, Request to Access Parkinson's Disease Related-Biospecimens (X01); with the Michael J. Fox Foundation, Parkinson's Disease Biospecimen Review Access Committee (BRAC), 2014-present.

Institute of Medicine, **External reviewer** for "Gulf War and Health, Volume 10: Update of Health Effects of Serving in the Gulf War, 2016."

NIH Director's Early Independence Award (DP5), **Reviewer** 2017.

Johns Hopkins University Bloomberg School of Public Health, **External Review Committee** for the Department of Biostatistics, 2014.

NIH, **Invited grant reviewer**, Biostatistical Methods and Research Design (BMRD) Study Section, **Invited Grant Reviewer**, 2012.

NIH, **Invited special emphasis panel grant reviewer**, National Institute for Child Health and Human Development (NICHD), ZHD1 DRG-H 52, Learning Disabilities Innovation Hubs, 2012.

Emory University Alzheimer's Disease Research Center, **Grant reviewer**, 2012.

National Academies (National Academy of Sciences, National Academy of Engineering, Institute of Medicine, and the National Research Council) Keck Futures Initiative Conference on Imaging Science, **Selected workshop participant**, Irvine, CA, 2010.

NIH, **Invited special emphasis grant review panelist** for health services, clinical, and population health research, 2009.

NIH, BMRD Study Section, **Invited Grant Reviewer**, 2008.

ENAR Regional Committee (**RECOM**) Member, 2007-2009, elected position. RECOM is the governing body of ENAR.

NIH, NIMH, **Invited grant review panelist for K99 Pathway to Independence Grants**, telephone meeting, 2007.

NIH, NIMH, **Invited grant review panelist for K99 Pathway to Independence Grants**, Bethesda, MD, 2007.

NIH, BMRD Study Section, **Invited Grant Reviewer**, Bethesda, MD, 2006.

NIH, Reward Neurocircuitry in Adolescent Development and Decision Making Workshop, Sponsored by National Institute on Drug Abuse (NIDA), NIMH, National Institute of Child Health and Human Development (NICHD), and National Institute of Neurological Disorders and Stroke (NINDS), **Invited workshop participant**, Bethesda, MD, 2006.

NIH, National Institute of Biomedical Imaging and Bioengineering (NIBIB), **Invited special emphasis grant review panelist**, Bethesda, MD, 2003.

ENAR By-laws Review Committee, 2005-2006, appointed by President Dr. Peter Imrey.

Data and Safety Monitoring Board, 2001-2005, "Advance Provision of Emergency Contraceptive Pills," Family Health International (FHI), Indiana University, and University of California at San Francisco. Raymond, E., FHI principal investigator. Sponsored by NIH.

Referee:

Annals of Applied Statistics
Biological Psychiatry
Biometrics
Biostatistics
Brain Imaging and Behavior
Frontiers in Computational Neuroscience
Human Brain Mapping
IEEE Transactions on Biomedical Engineering
IEEE Transactions on Medical Imaging
Journal of the American Statistical Association

- *Theory and Methods*
- *Case Studies and Applications*

Journal of Clinical Oncology
Journal of Computational Neuroscience
Medical Physics
NeuroImage
PLOS ONE
Public Health Reports
Statistics and Its Interface
Statistics in Medicine
Statistical Methods in Medical Research
Statistica Sinica

Professional and Academic Service

Departmental and University Committees

National (not listed above):

External Reviewer, Johns Hopkins Bloomberg School of Public Health, Department of Biostatistics, 2015
External Reviewer, International Honors:
Australian Academy of Science, 2016
External Tenure, Appointments, and Promotions reviewer (*multiple cases):
Georgia Institute of Technology
*Johns Hopkins University
New York University
Emory University
University of Michigan
Wake Forest University
*University of Pennsylvania
University of California at Davis
University of New South Wales, Australia
Drexel University
Indiana University

University of Michigan:

Presidential Advisory Committee on Sustainability Initiatives, 2023
UM Research Review Committee, 2023-
Provost's Capital Projects Review Committee, 2022-present.
President's COVID-19 Public Health and Medical Advisory Group, Chair, 2020-2022
President's COVID-19 Advisory Committee on Public Health, Chair, April-May 2020
University of Michigan Campaign Planning Group (select deans, directors, and chancellors), 2020-2022
President's Initiative on Firearm Injury Prevention Research, Steering Committee, 2019-2021
President's Initiative on Poverty Solutions, Dean's Advisory Board, 2019-present
President's Initiative on Precision Health, Executive Committee, 2018-present
UM Center for Global Health Equity, Executive Committee, 2020-present
Michigan Institute for Data Science Executive Committee, 2019-present
Graham Sustainability Institute, Board of Deans, 2022-present
Institute for Social Research, Executive Committee, 2019-present
Academic Program Group (council of university deans and executive officers), 2018-present
Academic Program Group, University Budget Subcommittee, 2018-2019
Academic Program Group, University Enrollment Management, 2020-2022
Academic Program Group, University Blended Futures, 2022-present
Academic Program Group, Establishing Positive Climates/Professional Standards, 2020-present
Health Sciences Council, Chair, 2020-2022
Health Sciences Council, 2018-present
College of Pharmacy, Dean Search Committee, 2021-2022.

UM Center for Interprofessional Education (CIPE), Reporting Executive for CIPE Director search advisory committee, 2020-2021.
Michigan-Israeli Partnership, Executive Committee, 2018-2019

Columbia University:
Columbia University Data Science Institute, Executive Committee, 2017-2018.
Columbia University Precision Medicine Initiative (CPMI) Task Force, 2014-2016, convened by Columbia President Lee Bollinger, to set Columbia's strategy for precision medicine and big data science.
Columbia University Data and Society Taskforce, 2015-2018, appointed by Provost Coatsworth, to outline steps to position Columbia as the global hub for data science research, scholarship, education and outreach.
Data Science Institute, 2014-2018, Committee for Health Analytics Center.
Core faculty, 2016-2017, Columbia University Seminar on "The Future of Aging Research."

Columbia University Mailman School of Public Health:
Lead for Mailman School of Public Health Initiative to Foster Interdisciplinary Research, Columbia University, 2017-2018
Search Committee, Chair of the Department of Epidemiology, 2015-2016.
Search Committee, Chair of the Department of Environmental Health Sciences, 2015.
Search Committee, Director of the Columbia Population Health Partnership, 2015-2016.
Policy Advisory Committee, 2014-2018, Mailman School of Public Health.
Dean's Advisory Group, 2014-2018, Mailman School of Public Health.

Emory University:
Emory University Honorary Degrees Committee, 2012-2013.
Culture Transformation Group member, Woodruff Health Sciences Center of Emory University. Chair: Dennis Choi, Executive Director of Emory University's Comprehensive Neuroscience Initiative, 2009-2010.
Computational and Life Sciences Initiative, Faculty Search Committee, 2009-2010.
Chief Information Technologist for Emory University Libraries, Search Committee, 2007-2008.
Woodruff Leadership Academy, 2007 Fellow, Woodruff Health Sciences Center.
Computational and Life Sciences Initiative, Education Committee, 2007-2009.
Vice-President for Information Technology and Chief Information Officer, Search Advisory Committee, 2005.
Opportunity Committee Meeting for Emory University strategic planning, 2004, Woodruff Health Sciences Center of Emory University. Coordinator: Dr. James Wagner, Emory University President. Session Chair: Dr. James Curran, Dean of the Rollins School of Public Health.
Invited Scientists Meeting with NIH Director Dr. Elias Zerhouni, 2003. Coordinator: Dr. Michael Johns, Executive Vice President for Health Affairs.
Clinical and Population-Based Research Focus Group, 2001, Woodruff Health Sciences Center of Emory University. Coordinators: Dr. Michael Johns, Executive Vice President for Health Affairs, and Dr. William Bornstein, Medical Director of Information Systems for Emory Healthcare.

Emory University Rollins School of Public Health (RSPH):
RSPH Research Advisory Committee, 2010-2013.

Search Committee for the Rollins Professor and Chair of the Department of Epidemiology at the RSPH, 2008-2009.
Search Committee for the Rollins Professor and Chair of the Department of Biostatistics and Bioinformatics at the RSPH, 2008-2009.
Search Advisory Committee for the RSPH Director of Information Services, 2007.
RSPH Research Advisory Committee, 2004-2006.
Dr. Martin Luther King Junior Community Service Awards Program Planning Committee (2000-2007), Rollins School of Public Health, Goizueta Business School, and Nell Hodgson Woodruff School of Nursing.
RSPH Honor Code Hearing Committee, 2005.
Chair of the James Alley Award Committee, 2004-2005. The committee grants an award to a graduating RSPH student who has provided exemplary service to disadvantaged populations during his or her career.
Search Committee for the Rollins Professor and Chair of the Department of Biostatistics, 2002-2004.

Emory University Department of Biostatistics and Bioinformatics:
Search Committee Chair culminating in 3 tenure-track faculty hires in the Department of Biostatistics and Bioinformatics at the RSPH, 2010-2011.
Tenured and Tenure Track Faculty Search Committee, 2009-2010.
Student Recruitment, Chair 2009-2013
Bioinformatics Working Group, Departmental Strategic Plan, 2007-2008
Curriculum Committee, *Chair*, 2005-2007
Computer Advisory Committee, *Co-chair*, 2007-2008
Space Committee, 2006-2013
Masters Curriculum Revision Committee, 2006
Diversity Committee, *Chair* 2002-2006, *Chair* 2009-2013, member 2000-2002
Curriculum Committee, 2000-2005
Computing Committee, 2006
Strategic Planning Committee, 2004
Ph.D. Theory Curriculum Review Committee, 2002

Emory University School of Medicine:
Radiology, Quantitative Imaging Task Force, 2011-2012
PET Center Operations Committee, 2000-2001
PET Center Research Committee, 2000-2001

Conference Activities (Excluding Activities Previously Listed)

Joint Statistical Meetings (JSM) 2009, Organizing committee for the Pre-JSM Diversity in Statistics Workshop, Washington, D. C.

Organization for Human Brain Mapping (OHBM) 2008, 14th Annual Meeting of the OHBM, Chair of the Invited Modeling and Analysis Session entitled "Advances in Bayesian & Classical Statistics," Melbourne, Australia.

The 14th Annual Meeting of the OHBM, Conference Delegate, Melbourne, Australia.

ENAR 2008 Spring Meeting, Co-organizer for the ENAR Fostering Diversity in Biostatistics

workshop (co-organizer: Scarlett Bellamy), Crystal City, VA.

ENAR 2007 Spring Meeting, Organizer for an invited session (co-organizer: Thomas Nichols) entitled "Functional and Structural Neuro-imaging Data: Modeling and Inference;" session sponsored by the Institute of Mathematical Statistics (IMS), Atlanta, GA.

ENAR 2007 Spring Meeting, Co-organizer for the ENAR Fostering Diversity in Biostatistics workshop (co-organizer: Scarlett Bellamy), Atlanta, GA.

ENAR 2003 Spring Meeting, Chair of the Contributed Papers Session entitled "Semi- and Nonparametric Methods for Longitudinal Data." Tampa, FL.

ENAR 2004 Spring Meeting, Chair of the Contributed Papers Session entitled "Analysis of Imaging Data." Pittsburgh, PA.

Grants and Funding

External Funding for Research

* See also: Teaching Activities: Training/Educational Grants

PI: Bowman, F. D., National Institutes of Health (NIH) R01 (R01NS115812), "Multimodal Imaging Biomarkers of Parkinson's Disease," National Institute of Neurological Disorders and Stroke (NINDS), National Institute on Aging (NIA), 2023-2028. (20%) (under revision)

PI: Bowman, F. D., (**Multiple PI: Cheng, B.)**, National Institutes of Health (NIH) R01 (R01NS110954), "Dynamic Functional Brain Networks," 2023-2028. (20%) (under revision).

PI: Bowman, F. D., (**Multiple PI: Qian, M.)**, National Institutes of Health (NIH) R01 (R01MH119352), "Large-scale Neuroimaging Mediation Analysis," 2023-2028. (20%) (under revision).

PI: Bowman, F. D. (Subcontract from New York State Psychiatric Institute; PI: Lee, S.), NIH R01 (R01 AG062578), "Statistical method for neural mechanism mediating and moderating cognitive system in Alzheimer's disease and aging research," 2019-2024. (10%)

PI: Bowman, F. D., (**Multiple PI: Rauh, V.)**, National Institutes of Health (NIH / NIEHS) R01 (R01ES030039), "Brain and Behavioral Indicators of Risk for Parkinsonism among Adolescents with Early Pesticide Exposure," 2018-2023. (10%).

PI: Bowman, F. D., (statistics core), Michael J. Fox Foundation, "Alpha-Synuclein Assay Standardization LEAPS 2 Project"," 2018-2020. ($94,000).

PI: Bowman, F. D., (Multiple PI: Rauh, V.), Columbia University Mailman School of Public Health Pilot Award for Interdisciplinary Research, "Brain-based Indicators of Risk for Parkinsonism among Adolescents with Early Pesticide Exposure," 2018-2019, $60,000.

PI: Bowman, F. D., National Institutes of Health (NIH) R56 (R56NS099239), "Multimodal

Imaging Biomarkers of Parkinson's Disease," National Institute of Neurological Disorders and Stroke (NINDS), Parkinson's Disease Biomarker Program, 2017-2018. (30%)

PI: Bowman, F. D. (Subcontract from Emory University: Buetefisch, C.), NIH R01 (R01 NS090677), "Customized Cortical Stimulation Therapy in the Rehabilitation of Stroke Patients," 2015-2019. (10%)

PI: Bowman, F. D., (statistics core), Michael J. Fox Foundation, "Alpha-Synuclein Assay Standardization LEAPS Project"," 2016-2018. ($91,000).

PI: Bowman, F. D., National Institutes of Health (NIH) U18 (U18NS082143), "Analytic Methods for Determining Multimodal Biomarkers for Parkinson's Disease," National Institute of Neurological Disorders and Stroke (NINDS), Parkinson's Disease Biomarker Program, 2012-2016, $908,659 (35%).

PI: Bowman, F. D., National Institutes of Health (NIH) R01 (R01MH079251), "Analytic Methods for Functional Neuroimaging Data," National Institute of Mental Health (NIMH), 2007-2012, $1,063,580 (50%).

PI: Bowman, F. D., NIH K25 (K25MH065473), "Statistical Methods for Neuroimaging Data," NIMH, 2002-2007, $535,982 (75%).

PI's: Bowman, F. D. and Vidakovic, B., "Wavelet Image Interpolation (WII): A Wavelet-based Approach to Enhancement of Digital Mammography Images," Georgia Cancer Coalition, 2005-2006, $39,557 (10%).

Co-investigator: Bowman, F. D. (PI: Albin, R.), NIH #P50, "Cholinergic mechanisms of attentional-motor integration and gait dysfunction in Parkinson Disease," 2021-2026 (pending).

Co-investigator: Bowman, F. D. (PI: Baccarelli, A.), NIH #R01ES027845, "Effects of Flame Retardants on Brain Function and Attentional Deficits in School-age Children - Brain Imaging, Neurobehavioral, and Gut Microbiome Studies in a Longitudinal Birth Cohort," 2017-2021 (10%).

Co-investigator: Bowman, F. D. (PI: Li, G.), "Predictive Modeling in Electronic Health Records," AIG Investments, 2017-2019 $150,000 (5%).

Co-investigator: Bowman, F. D. (PIs: Perera, F. and Herbstman, J.), NIH #UG3OD023290, "Identifying newborns at risk of adverse neurodevelopmental outcomes and obesity from prenatal exposures," as a part of the NIH initiative on Environmental influences on Child Health Outcomes (ECHO). 2016-2019 (15%).

Co-investigator: Bowman, F. D. (PI: Goldstein, D.), NIH (3UG3OD023183-01S1), "Columbia/Cornell/Harlem Hospital Precision Medicine Initiative HPO," 2016-2019.

Co-investigator: Bowman, F. D. (PIs: Perera, F./Peterson, R.), NIH P50 (2 P50ES009600-16), "The Columbia Center for Children's Environmental Health," 2015-2019. (10%)

Co-investigator: Bowman, F. D. (PI: Kissileff, H.), NIH R01 (1 R01DK108643-01), "Mechanisms Underlying Predictors of Success from Obesity Surgery," 2015-2019. (10%)

Co-investigator: Bowman, F. D. (PI: Bathon J.), NIH TARGET U01 (NIAMS), "Treatments against RA and Effect on FDG PET/CT: The Target Trial," 2015-2016. (10%)

Co-investigator: Bowman, F. D. (PI: Jovanovic, T.), NIH R21, "Neuroimaging correlates of impaired fear inhibition in PTSD," NIMH, 2012-2015. (10%)

Co-investigator: Bowman, F. D. (PI: Dalmida, S.), NSF, "Neuro-Biocultural Substrates of Sexual Risk Behavior of Mid-Adolescent Girls," 2012-2015. (10%)

Co-investigator: Bowman, F. D. (PI: Schuster, D.), NIH R01, "18F-FACBC PET-CT for the Detection and Staging of Recurrent Prostate Carcinoma," National Cancer Institute (NCI), 2007-2012. (5%)

Co-investigator: Bowman, F. D. (PI: Kilts, C.), NIH R01, "Cocaine Dependence and Cognitive Control of Behavior," National Institute on Drug Abuse, 2003-2007. (10%)

Co-investigator: Bowman, F. D. (PI: Faber, T.), NIH R01, "Detecting Changes in Myocardial Perfusion and Function," National Heart, Lung, and Blood Institute, 2002-2005. (15%)

Training/Educational Grants

PI (multiple PIs): Abraido-Lanza, A. and **Bowman, F. D.**, NIH R25, NIGMS, (R25GM062454), "Initiative for Maximizing Student Development (IMSD) at Columbia's Mailman School of Public Health," 2017-2019, $1,514,082.

PI (multiple PIs): Begg, M., **Bowman, F. D.**, and March, D. NIH R25, NHLBI, (R25 HL096260), "Biostatistics and Epidemiology Summer Training (BEST) Diversity Program," 2017-2019.

Mentor (0%), NIH K01, "Intra-individual differences in age-related brain changes among distinct cognitive abilities," NIA, 2016-2021. (PI: Yunglin Gazes, Columbia University).

Co-Mentor (0%), NIH K23, "Neural Mechanisms of Cognitive Control in Posttraumatic Stress Disorder," NIMH, 2014-2015. (PI: Negar Fani, Emory University).

Co-Mentor (0%), NIH K25 (K25 EB012236-01), "Whole-Brain Analyses via linear and exponential graph modeling methods," National Institute of Biomedical Imaging and Bioengineering (NIBIB), 2012-2017. (PI: Simpson, S., Wake Forest University).

Co-investigator, **Neuroimaging Track Director,** and member of training faculty (5%), NIH T32, "Biostatistics in Genetics, Immunology, and Neuroimaging," 2009-2012. (PI: Waller, L., Emory University).

Co-investigator, **Neuroimaging Track Director,** and member of training faculty (5%), NIH T32, "Biostatistics in Genetics, Immunology, and Neuroimaging," 2005-2009. (PI: Waller, L.,

Emory University).

Co-PI and member of training faculty, NIH T32 (MH067547), "Training Program in Neuroimaging Sciences," 2005-2010. (PIs: Bremner, J. and Hu, X., Emory University and Georgia Institute of Technology).

Co-investigator, NIH R13, "Workshop for Junior Biostatisticians in Health Research," NCI, 2009-2011, $100,000, (PI: Amy Herring, University of North Carolina)

Executive Committee Member, NIH Postbaccalaureate Research Education Program (PREP) for underrepresented minority students at Emory University (PI's: Gordon Churchward (Microbiology and Immunology) and Cathy Quinones (Center for Science Education)), 2011-2013.

Co-PI: Emory University Teaching Fund. Funding for the development of a new course entitled "Introduction to Computational and Life Sciences," 2006-2007 (Primary Co-PIs: Kim Gernert, BimCore Director, and James Lu, Associate Professor of Computer Science).

Emory University Funding

Center for Positron Emission Tomography, 2000-2003 (25%).

Teaching Experience and Responsibilities

Courses

P8190, Tutorials in Biostatistics (Neuroimaging)	Columbia University	Fall 2014
BIOS 707, Advanced Linear Models	Emory University	Fall 2012 Spring 2012 Spring 2011 Spring 2010 Spring 2009 Spring 2008 Spring 2007 Spring 2006 Spring 2004
BIOS 760R(560R), Adv. Topics in Neuroimaging Statistics	Emory University	Spring 2010 Spring 2005
BIOS 797R, Directed Study	Emory University	Spring 2009 Spring 2009 Spring 2007

BIOS 707, Theory of Linear Models	Emory University	Fall 2002 Fall 2001 Fall 2000
BIOS 790R(590R), Advanced Seminar in Biostatistics	Emory University	Fall 2000

Guest Lectures

PUBHLTH 516: Leadership Skills for Interprofessional Practice	University of Michigan	Spring 2023 Spring 2022 Spring 2021
P8157, Analysis of Longitudinal Data	Columbia University	Fall 2015
IBS 538, Design and Analysis of Experiments	Emory University	Spring 2007 Spring 2008
BIOS 780, Advanced PhD Seminar	Emory University	Spring 2000- Spring 2010

Other Teaching Activities

Invited Lecturer for an ENAR Webinar, broadcast nationally, "Analytic Methods for Functional Neuroimaging Data," Bowman, F.D., Cassidy, B., Drake, D., April 2016.

Invited speaker at 19th annual OHBM Meeting, "Beyond Univariate Analyses: Multivariate Modeling of Functional Neuroimaging Data," in educational course entitled *How Not to Analyze Your Data: A Skeptical Introduction to Modeling Methods*, Seattle, WA, June 2013.

Invited Instructor, Statistical Analysis and Applied Mathematics Institute (SAMSI) Neuroimaging Data Analysis Workshop, 2013, Research Triangle Park, NC. Topic: Statistical Methods for fMRI Analysis.

Invited Instructor, Neuroimaging Research Australia, National Imaging Facility, Functional Magnetic Resonance Imaging Workshop, 2013, Sydney, Australia. Topic: fMRI Experiments, Models, and Inferences.

Invited Instructor, Neuroimaging Research Australia, National Imaging Facility, Functional Magnetic Resonance Imaging Workshop, 2013, Sydney, Australia. Topic: fMRI Connectivity.

Invited speaker at 15th annual OHBM Meeting, "Bayesian vs. Frequentist Statistical Methods in Neuroimaging Applications," symposium entitled *To Be Bayesian or Frequentist or Not: A Debate on Functional Imaging Analyses*, San Francisco, CA, June 2009. Published *NeuroImage*, v. 47, pp. S7.

ENAR 2009 Short Course Instructor. Statistical Modeling and Analysis of Brain Imaging Data, by F. D. Bowman and Y. Guo. San Antonio, TX.

Invited Speaker at the Institute for Pure and Applied Mathematics (IPAM) Program entitled "Mathematics in Brain Imaging," University of California at Los Angeles (UCLA), July 2008.

Invited Speaker at the 14th annual OHBM Meeting, "Bayesian Analysis for fMRI Data," Advanced fMRI Course, Melbourne, Australia, June 2008.

Developed the Neuroimaging Biostatistical Research Group (NBRG) as a central unit to conduct research on statistical methodology for functional neuroimaging data and to engage in collaborative functional neuroimaging research projects, Department of Biostatistics, Emory University, 2005-2007.

Organized a neuroimaging statistics reading group to discuss current research articles and related topics in bi-weekly meetings, Department of Biostatistics, Emory University, 2004.

Co-organizer of a summer workshop in Biostatistics for students interested in biomedical sciences, Department of Biostatistics, Emory University, 2003.

Developed a biostatistics short-course, directed research activities for an undergraduate student in the Ronald E. McNair Scholars Undergraduate Research Program (in conjunction with Morehouse College), 2002.

Research Advising/Mentoring

Junior Faculty:

Sean Simpson, PhD,
2009-2015, Assistant Professor, Department of Biostatistical Sciences, Wake Forest University School of Medicine. Mentor for an NIH-K01 grant and a Wake Forest intramural career development award in imaging.
2015- present, Associate Professor, Biostatistical Sciences, Wake Forest University SOM.

Michelle Odlum, PhD, 2015-2018, Assistant Professor, School of Nursing, Columbia University Medical Center.

Yunglin Gazes, PhD, 2015-2018, Assistant Professor of Neuropsychology (in Neurology and in the Taub Institute), Cognitive Neuroscience Division, Columbia University Medical Center. Academic mentor (Department of Neurology).

Jaehee Kim, PhD, 2014-2015, Department of Biostatistics, Mailman School of Public Health, Columbia University, Visiting Faculty from the Department of Statistics, Duksung Women's University, Seoul, S.Korea.

Negar Fani, PhD, Instructor, Psychiatry and Behavioral Sciences, Emory University, Member of mentoring team for an NIH-K23 grant, 2012-2014.

Jian Kang, PhD, 2011-2014, Assistant Professor, Biostatistics and Bioinformatics, Emory University.

Ying Guo, PhD,
2004-2013, Assistant Professor, Biostatistics and Bioinformatics, Emory University.
2013-2014, Associate Professor with tenure, Biostatistics and Bioinformatics, Emory University.

Loni Philip Tabb, PhD, 2013-2014, Assistant Professor, Department of Epidemiology and Biostatistics, School of Public Health, Drexel University. Mentor for Drexel University intramural career development award.

Postdoctoral Fellows:

Ben Cassidy, PhD, 2015-2018, Department of Biostatistics, Columbia University, Post-doctoral Fellow, from University of New South Wales, Sydney, Australia.

Jiook Cha, PhD, 2015-2018, Columbia University Medical Center, Post-doctoral Fellow, Neuropsychiatry.

Otis Smart, PhD, Postdoctoral Fellow, Department of Neurosurgery, Emory University School of Medicine Minority Postdoctoral Council (MPC), Minority Mentoring Program (MMP), 2012-2014.

Daniel Drake (2012-2013), PhD in Electrical Engineering, Georgia Institute of Technology (Georgia Tech). CBIS applications developer and data analyst at Emory University (continued in research position with Dr. Bowman at Columbia University).

Lijun Zhang (2009-2013), PhD in Computer Science, University of Louisville. CBIS applications developer and data analyst at Emory University.

Alexandre Franco (2009-2011), PhD in Electrical Engineering, University of New Mexico. Neuroscience Initiative Postdoctoral Fellowship, Psychiatry (Mayberg), Biostatistics and Bioinformatics (Bowman), and Biomedical Engineering (Hu) at Emory University.

Doctoral Students:

Raphiel Murden, PhD student, Emory University, 2016-2018. Mentor through JSM Diversity Workshop and Mentoring Program (DWMP).

Anthony Pileggi (2010-2014), Topic: Statistical methods for determining brain connectivity. **Dissertation co-advisor** (with Brent Johnson), Emory University [discontinued with my move from Emory to Columbia University].

Phebe Brenne (2011-2016), Topic: Methods for Brain Network Analyses Using fMRI and DTI Data. **Dissertation co-advisor** (with Ying Guo), Emory University.

Callie McGrath (2010-2015), Graduate Student in the Neuroscience Program, Graduate Division of Biological and Biomedical Sciences, Emory University. Dissertation committee member.

Wenqiong Xue (2013), Topic: "Statistical Methods for Multi-modal Neuroimaging Data: Techniques for the Combined Analysis of Brain Function and Structure." **Dissertation advisor**, Emory University.

Shuo Chen (2012), Topic: "New Statistical Techniques for High-dimensional Neuroimaging Data," **Dissertation advisor**, Emory University.

- *David P. Byar Young Investigator Award winner, 2012, Biometrics Section of ASA
- *Student Paper Competition Winner, 2011, Section on Statistical Learning and Data Mining (SLDM) of the American Statistical Association and Statistical Analysis and Data Mining (SAM), Joint Statistical Meetings (Miami, Florida)

Anna Jolly Blackstock (2011). "Techniques for Pattern Recognition in High-Throughput Metabolomic Data," Dissertation committee member.

Ashley Kennedy (2011), Ph.D. in Molecular & Systems Pharmacology, Graduate Division of Biological and Biomedical Sciences, Emory University. Dissertation committee member.

Gordana Derado (2010), "Methods for Addressing Spatial Correlations in Functional Neuroimaging Data," **Dissertation advisor**, Emory University.

- *John Van Ryzin Award for the **best paper** in the 2009 ENAR Distinguished Student Paper Award Competition, "Modeling the spatial and temporal dependence in fMRI data," San Antonio, TX.

Yuemei Wang (2007), "Statistical Performance of Spatial System," Dissertation committee member, Emory University.

Sara Crawford (2007), "Detecting Multiple Sources of Informative Dropout in Clustered Longitudinal Data," Dissertation committee member, Emory University.

Rajan Patel (2006), "Assessing group changes in functional connectivity of the human brain," **Dissertation advisor**, Emory University.

Renee H. Moore (2006), "Improving Point Estimation for Subjects at High Risk," Dissertation committee member, Emory University.

Eric Tassone (2006), "Small Area Estimation of Local Health Disparity via Hierarchical Models," Dissertation committee member, Emory University.

DeMarc Hickson (2005), "Assessing the Improvement of Model Fit and Interpretation in a Multilevel (Hierarchical) Analysis of the Human Immunodeficiency Virus and High Risk Sexual Behavior," Dissertation committee member, Emory University.

Feng Gao (2002), "Tree-structured methods for multivariate survival data," Dissertation committee member, Emory University.

Master's Degree Students:

Denise Bradford (2011-2014), Mentor, 2011 Cavell Brownie JSM Mentoring Program, M. S. Program in Applied Statistics, Purdue University, West Lafayette, IN.

Julia Cleveland (2008), Thesis advisor, "The effect of repeated measures covariance structures on the analysis of a pilot gendered racism scale," Emory University.

Tahera Darensburg (2008), Thesis committee member, "PRISE STUDY: A missing data problem," Emory University.

Rahimah Muhammad (2004), Thesis advisor, "A comparison of missing data methods for evaluating a drug treatment for depression," Emory University; Charles Shepard Award finalist for the best thesis in the Rollins School of Public Health.

Research Assistants (unrelated to dissertation or thesis):
Shuo Chen (2008), Topic: Statistical methods for fMRI analyses, Emory University.

Tahera Darensburg (2006), Topic: A comparative analysis of stage-II fMRI analysis approaches with a focus on the correlation between stage-II effects, Emory University.

Gordana Derado (2005-2012), Topic: Improving evaluations of digital mammography micro-calcifications using wavelet interpolation, Emory University.

Chenxing Lu (2003), Topic: Task-related functional classifications of neuroimaging data, Emory University.

Post-baccalaureate Students:
Caprichia Jeffers (2011-2012), Emory University Post-baccalaureate Research Education Program (PREP).

Undergraduate Students:
Candace Shaw (2010-2012), Spelman College, NIMH-COR Program, Topic: Functional connectivity in schizophrenia patients.

Asya Jones (2009-2011), Spelman College, NIMH-COR Program, Topic: fMRI-based neural markers of major depression.

Latoya Clay (2006-2008), Clark Atlanta University, NIMH-COR Program, Topic: Examining the effects of ethanol administration on distributed patterns of brain activity.

Roderick Stewart (2002), Morehouse College, Ronald E. McNair Scholars Undergraduate Research Program.

Publications

Articles and Essays

Galea, S., Anestis, M. D., **Bowman, F. D.**, Crifasi, C., Formica, M. K., Hemenway, D., Hyder, A. A., Lushniak, B. D., Peek-Asa, C., Rich, J., Liller, K. D., Ying, J., Rasouli, B., Leshan, T. (2023). Gun Violence Prevention: An Academic Public Health Framework. *ASPPH Gun Violence Prevention*.

Bowman, F. D. and Runge, M. (2020). Health Sciences Must Acknowledge Racism as a Public Health Crisis. *Real Clear Health*.

Bowman, F. D. and Kardia, S. (2020). Stacking best practices to help Michiganders safely return to work. *Bridge Michigan*.

Sullivan, G., Geller, N., **Bowman, F. D.**, Rodriguez, B., Lindborg, S. (2018). The Leadership Journey for Statisticians. *American Statistician*.

Bowman, D. (2007). A Perspective on Seeking Tenure at Emory. Year of the Faculty Report, Office of the Provost, Emory University.

Bowman, D., Bush, A., Cowart, D., Price, D., Redmond, C., Ryan, L., Stone-Chestnut, J., and Young, B. (2001). Some Advice for Advisors. *Stats* #30: 8-10.

Peer Reviewed Publications

* Indicates publications for which one of Bowman's Ph.D. students or post-doctoral students is the first author.

Chapters in Books and Edited Volumes:
†peer reviewed

†**Bowman, F. D.**, Drake, D., Huddleston, D. (2017). Multimodal Imaging Signatures of Parkinson's Disease. Recent Advances and Challenges on Big Data Analysis in Neuroimaging, edited by Jian Kang, Brian Caffo, Han Liu, Frontiers in Neuroscience: 185-195. [Original article was selected for inclusion in this eBook and is also listed below].

Bowman, F.D., Simpson, S., and Drake, D. (2016). Joint fMRI and DTI Models for Brain Connectivity. Handbook of Statistical Methods for Brain Signals and Images, edited by Ombao, H., Lindquist, M., Thompson, W., and Aston, J. Chapman and Hall - CRC Press.

†Caffo, B., **Bowman, F. D.**, Eberly, L., and Bassett, S. S. (2011). A Markov Chain Monte Carlo Based Analysis of a Multilevel Model for Functional MRI Data, Handbook of Markov Chain Monte Carlo: Methods and Applications, edited by Steve Brooks, Andrew Gelman, Galin Jones, and Xiao-Li Meng, Chapman & Hall.

*†Derado, G., Lee, K., Nicolis, O., **Bowman, F. D.**, Newell, M., Rugger, F. F., and Vidakovic, B. (2008). Wavelet-based 3-D Multifractal Spectrum with Applications in Breast MRI Images. Bioinformatics Research and Applications. Lecture Notes in Bioinformatics, volume 4983, Springer-Verlag: 281-292.

*†Derado, G., **Bowman, F. D.**, Patel, R., Newell, M., and Vidakovic, B. (2007). Wavelet Image Interpolation (WII): A Wavelet-based Approach to the Enhancement of Digital Mammography Images. Mandoiu and A. Zelikovsky (Eds.) Bioinformatics Research and Applications. Lecture Notes in Bioinformatics, volume 4463, Springer-Verlag: 203–214.

Bowman, F. D., Guo, Y., and Derado, G. (2007). Statistical Approaches to Neuroimaging Data. *Neuroimaging Clinics of North America: Imaging of the Mind* 17(4): Nov. 2007, 441-458.

Methodology Papers:

Lee, S., Choi, J., Fang, Z., **Bowman, F.D.** (2023). Longitudinal Canonical Correlation Analysis. *Journal of the Royal Statistical Society - Series C* (*Applied Statistics*). (Accepted)

Drake, D. F., Derado, G., Zhang, L., **Bowman, F. D.** (2023). Neuroimaging Statistical Approaches for Determining Neural Correlates of Alzheimer's Disease via PET Imaging. *Wiley Interdisciplinary Reviews (WIREs): Computational Statistics*. (Accepted).

Chen, S., **Bowman, F. D.**, Xing, Y. (2020). Detecting and Testing Altered Brain Connectivity Networks with K-partite Network Topology. *Computational Statistics and Data Analysis* 141: 109–122

Kemmer, P. B., Wang, Y., **Bowman, F. D.**, Mayberg, H., and Guo, Y. (2018). Quantifying the strength of structural connectivity underlying functional brain networks. *Brain Connectivity* 8 (10).

Solo, V., Poline, J. B., Lindquist, M. A., Simpson, S. L., **Bowman, F. D.**, Chung, M. K., Cassidy, B. (2018). Connectivity in fMRI: Blind Spots and Breakthroughs. *IEEE Transactions on Medical Imaging*. doi: 10.1109/TMI.2018.2831261.

*Xue, W., **Bowman, F. D.**, Kang, J. (2018). Predicting Disease Status Using Imaging Data from Various Modalities. *Frontiers in Neuroscience*, 12:184. doi: 10.3389/fnins.2018.00184.

Cassidy, B., Bowman, F. D., Rae, C., and Solo, V. (2018). On the Reliability of Individual Resting-state Functional Networks. *IEEE Transactions on Medical Imaging* 37(2): 649-662.

Kang, J., **Bowman, F. D.**, Mayberg, H., and Liu, H. (2016). A Depression Network of Functionally Connectivity Regions Discovered via Multi-Attribute Canonical Correlation Graphs, *NeuroImage* 141 (2016) 431–441.

Bowman, F. D., Drake, D., Huddleston, D. (2016). Multimodal Imaging Signatures of Parkinson's Disease. *Frontiers in Neuroscience*, 10:131. doi:10.3389/fnins.2016.00131.

*Chen, S., **Bowman, F.D.**, and Mayberg, H.S. (2016). A Bayesian Hierarchical Framework for Modeling Brain Connectivity for Neuroimaging Data. *Biometrics* 72(2): 596-605 (DOI: 10.1111/biom.12433).

*Xue, W., **Bowman, F.D.**, Pileggi, A.V., and Mayer, A.R. (2015). A Multimodal Approach for Determining Brain Networks by Jointly Modeling Functional and Structural Connectivity. *Frontiers in Computational Neuroscience*. 9(22): 1-11. doi:10.3389/fncom.2015.00022.

*Xue, W., Kang, J., **Bowman, F.D.**, Wager, T.D., and Guo, J. (2014). Identifying Functional Co-activation Patterns in Neuroimaging Studies via Poisson Graphical Models. *Biometrics* (DOI: 10.1111/biom.12216).

Bowman, F. D. (2014). Brain Imaging Analysis. *Annual Review of Statistics and Its Application*, vol. 1: 61-85. (http://arjournals.annualreviews.org/eprint/)

*Chen, S., Grant, E., Wu, T., Bowman, F.D. (2014). Some Recent Statistical Learning Methods for Longitudinal High-dimensional Data. *Wiley Interdisciplinary Reviews (WIREs): Computational Statistics*, 6:10–18. doi: 10.1002/wics.1282.

Simpson, S., **Bowman, F. D.**, and Laurienti, P. (2013). Analyzing Complex Functional Brain Networks: Fusing Statistics and Network Science to Understand the Brain. *Statistics Surveys*, 7: 1-36.

*Derado, G., **Bowman, F. D.**, and Zhang, L. (2013). Predicting Brain Activity using a Bayesian Spatial Model. *Statistical Methods in Medical Research*, 22:382-97.

Bowman, F. D., Zhang, L., Derado, G., and Chen, S. (2012). Determining Functional Connectivity using fMRI Data with Diffusion-Based Anatomical Weighting. *NeuroImage*, 62: 1769-1779.

*Zhang, L., Agravat, S., Derado, G., Chen, S., and **Bowman, F. D.** (2012). BSMac: A MATLAB toolbox Implementing a Bayesian Spatial Model for Brain Activation and Connectivity. *Journal of Neuroscience Methods*, 204: 133-143.

*Chen, S. and **Bowman, F. D.** (2011). A Novel Support Vector Classifier for Longitudinal High-dimensional Data and Its Application to Neuroimaging Data. *Statistical Analysis and Data Mining*, 4(6): 604-611. [Winning paper for JSM 2011 Student Paper Competition, ASA Section on Statistical Learning and Data Mining]

*Derado, G., **Bowman, F. D.**, Ely, T., and Kilts, C. (2010). Evaluating Functional Autocorrelation within Spatially Distributed Neural Processing Networks. *Statistics and Its Interface*, 3: 45-57.

*Derado, G., **Bowman, F. D.**, and Kilts, C. (2010). Modeling the spatial and temporal dependence in fMRI data. *Biometrics*, 66: 949-957. [Based on ENAR 2009 John Van Ryzin Award for best research paper]

Guo, Y. and **Bowman, F. D.** (2008). Modeling Dose-Dependent Neural Processing Responses Using Mixed Effects Spline Models. *NeuroImage*, 40: 698–711.

Guo, Y., **Bowman, F. D**., and Kilts, C. D. (2008). Predicting the Brain Response to Treatment using a Bayesian Hierarchical Model with Application to a Study of Schizophrenia. *Human Brain Mapping*, 29(9): 1092-1109.

Bowman, F. D., Caffo, B. A, Bassett, S., and Kilts, C. (2008). Bayesian Hierarchical Framework for Spatial Modeling of fMRI Data. *NeuroImage* 39: 146–156.

Bowman, F. D. (2007). Spatio-Temporal Models for Region of Interest Analyses of Functional Neuroimaging Data, *Journal of the American Statistical Association* 102(478): 442-453.

Lyles, R., Manatunga, A., Moore, R., and **Bowman F. D.** (2007). Improving point predictions of random effects for subjects at high-risk, *Statistics in Medicine* 26: 1285–1300.

*Patel, R., **Bowman, F. D.**, and Rilling, J. K. (2006a). A Bayesian Approach to Determining

Connectivity of the Human Brain. *Human Brain Mapping* 27: 267–276.

*Patel, R., **Bowman, F. D.**, and Rilling, J. K. (2006b). Determining Hierarchical Functional Networks from Auditory Stimuli fMRI. *Human Brain Mapping* 27: 462– 470.

*Patel, R., Van De Ville, D., and **Bowman, F. D.** (2006). Determining Significant Connectivity by 4D Spatiotemporal Wavelet Packet Resampling of Functional Neuroimaging Data. *NeuroImage* 31: 1142 – 1155.

Bowman, F. D. Spatiotemporal Modeling of Localized Brain Activity (2005). *Biostatistics* 6(4): 558–575.

Bowman, F. D. and Manatunga, A. (2005). A Joint Model for Longitudinal Data Profiles and Associated Event Risks With Application to a Depression Study. *Journal of the Royal Statistical Society, Series C, Applied Statistics* 54(2): 301-316.

Bowman, F. D. and Waller, L. A. (2004). Modeling of Cardiac Imaging Data with Spatial Correlation. *Statistics in Medicine* 23(6): 965-985.

Bowman, F. D. (2004). Predicting Power for Longitudinal Studies with Attrition, *Biometrical Journal* 46(4): 453-459.

Bowman, F. D. and Patel, R. (2004) Identifying Spatial Relationships in Neural Processing Using a Multiple Classification Approach. *NeuroImage* 23: 260-268.

Bowman, F. D., Patel, R., and Lu, C. (2004) Methods for Detecting Functional Classifications in Neuroimaging Data. *Human Brain Mapping* 23(2): 109-119.
***Special Recognition:** Featured on the cover of the October issue of *Human Brain Mapping*.

Bowman, F. D., Stewart, P. W., Sen, P. K., and Helms, R. W. (2004) Making Inferences about Projected Completors in Longitudinal Studies. *Journal of Biopharmaceutical Statistics* 14(4): 947-967.

Bowman, F. D. and Kilts, C. (2003). Modeling Intra-subject Correlation Among Repeated Scans in Positron Emission Tomography (PET) Neuroimaging Data. *Human Brain Mapping* 20(2): 59-70.

Applications Papers:

Solazzo, G., Wu, H., Knox, J. M., Brennan, K., Laue, H., Gillet, V., Bovin, A., Abdelouahab, N., Posner, J., Raffanello, E., Pieper, S., Bowman, F. D., Drake, D., Baccarelli, A. A., Takser, L. (2021). The association between prenatal concentrations of polybrominated diphenyl ether (PBDEs) and child cognitive and psychomotor development. *Environmental Epidemiology* (accepted).

Bowman, F. D., Drake, D. (2018). Multimodal Imaging Markers of Parkinson's Disease in the Basal Ganglia. (submitted).

Agha, G., Kezios, K., Baccarelli, A., **Bowman, F. D.**, Rauh, V., Susser, E.S., Cohn, Cirillo, P., Link,

B. G., Factor-Litvak, P., Staudinger, U., (2019). Cognition Level and Change in Cognition During Adolescence are Associated with Cognition in Midlife. *Annals of Epidemiology* 35, 48-52.

Mollenhauer, B., **Bowman, F. D.**, Drake, D., Duong, J., Blennow, K., El-Agnaf, O., Shaw, L. M., Masucci, J., Taylor, P., Umek, R. M., Dunty, J. M., Smith, C. L., Stoops, E., Vanderstichele, H., Schmid, A. W., Moniatte, M., Zhang, J., Kruse, N., Lashuel, H. A., Teunissen, C., Schubert, T., Dave, K. D., Hutten, S. J., Zetterberg, H. (2018). Antibody-based methods for the measurement of α-synuclein concentration in human cerebrospinal fluid - method comparisons and round robin studies. *Journal of Neurochemistry* (doi: 10.1111/jnc.14569).

Alice S. Chen-Plotkin, Roger Albin, Roy Alcalay, Debra Babcock, Vikram Bajaj, **F. DuBois Bowman**, Alex Buko, Jesse Cedarbaum, Daniel Chelsky, Graham Cooks, Mark Cookson, Ted Dawson, Richard Dewey, Tatiana Foroud, Mark Frasier, Dwight German, Katrina Gwinn, Xuemei Huang, Katherine Kopil, Thomas Kremer, Shirley Lasch, Ken Marek, Jarrod Marto, Kalpana Merchant, Brit Mollenhauer, Anna Naito, Judith Potashkin, Alyssa Reimer, Liana Rosenthal, Rachel Saunders-Pullman, Clemens Scherzer, Todd Sherer, Beth-Anne Sieber, Andrew Singleton, Margaret Sutherland, Ines Thiele, David Vaillancourt, Marcel van der Brug, Kendall van Keuren Jensen, David Walt, Andrew West, Jing Zhang, Parkinson's Disease Biomarker Program, and Parkinson's Progression Marker Initiative (2018). Finding Useful Biomarkers for Parkinson's Disease, *Science Translational Medicine* 10(454): DOI: 10.1126/scitranslmed.aam6003.

Katrina Gwinn, Karen David, Christine Swanson-Fischer, Roger Albin, Coryse St Hillaire-Clarke, Beth-Anne Sieber, Codrin Lungu, **F. DuBois Bowman**, Roy N. Alcalay, Debra Babcock, Ted M. Dawson, Richard B. Dewey, Jr., Tatiana Foroud, Dwight German, Xuemei Huang, Vlad Petyuk, Judith A. Potashkin, Rachel Saunders-Pullman, Margaret Sutherland, David Walt, Andrew B. West, Jing Zhang, Alice Chen-Plotkin, Clemens R, Scherzer, David Vaillancourt, and Liana S. Rosenthal (2017). Parkinson's Disease Biomarkers: Perspective from the NINDS Parkinson's Disease Biomarkers Program. *Biomarkers in Medicine* 11(6):451-473.

Ganqiang Liu, Joseph J Locascio, Jean-Christophe Corvol, Brendon Boot, Zhixiang Liao, Kara Page, Daly Franco, Kyle Burke, Iris E Jansen, Ana Trisini-Lipsanopoulos, Sophie Winder-Rhodes, Caroline M Tanner, Anthony E Lang, Shirley Eberly, Alexis Elbaz, Alexis Brice, Graziella Mangone, Bernard Ravina, Ira Shoulson, Florence Cormier-Dequaire, Peter Heutink, Jacobus J van Hilten, Roger A Barker, Caroline H Williams-Gray, Johan Marinus, Clemens R Scherzer, Clemens R Scherzer, Bradley T Hyman, Adrian J Ivinson, Lewis R Sudarsky, Michael T Hayes, Chizoba C Umeh, Reisa Sperling, John H Growdon, Michael A Schwarzschild, Albert Y Hung, Alice W Flaherty, Deborah Blacker, Anne-Marie Wills, U Shivraj Sohur, Nicte I Mejia, Anand Viswanathan, Stephen N Gomperts, Vikram Khurana, Mark W Albers, Maria Alora-Palli, Scott McGinnis, Nutan Sharma, Bradford Dickerson, Matthew Frosch, Teresa Gomez-Isla, Steven Greenberg, James Gusella, Trey Hedden, E Tessa Hedley-Whyte, Aaron Koenig, Marta Marquis-Sayagues, Gad Marshall, Olivia Okereke, Anat Stemmer-Rachaminov, Jessica Kloppenburg, Michael G Schlossmacher, Dennis J Selkoe, Thomas Yi, Joseph J Locascio, Haining Li, Gabriel Stalberg, Roger Barker, Tom Foltynie, Caroline Williams-Gray, Trevor Robbins, Carol Brayne, Sarah Mason, David P Breen, Gemma Cummins, Jonathan Evans, Jacobus J van Hilten, Alain Mallet, Marie

Vidailhet, Anne-Marie Bonnet, Cecilia Bonnet, David Grabli, Andreas Hartmann, Stephan Klebe, Lucette Lacomblez, Frédéric Bourdain, Jean-Philippe Brandel, Pascal Derkinderen, Franck Durif, Valérie Mesnage, Fernando Pico, Olivier Rascol, Christine Brefel-Courbon, Fabienne Ory-Magne, Sylvie Forlani, Suzanne Lesage, Khadija Tahiri, Roger Albin, Roy Alcalay, Alberto Ascherio, **F. DuBois Bowman**, Alice Chen-Plotkin, Ted Dawson, Richard Dewey, Dwight German, Rachel Saunders-Pullman, Clemens Scherzer, David Vaillancourt, Vladislav Petyuk, Andy West, Jing Zhang (2017). Prediction of cognition in Parkinson's disease with a clinical–genetic score: a longitudinal analysis of nine cohorts. *The Lancet Neurology*, 16(8): 620-629.

Cohn, E., Henderson, G., Appelbaum, P.S. and the Working Group on Representation and Inclusion in Precision Medicine Studies [Baccarelli, A., Barth-Jones, D., **Bowman, D.**, Butts, P., Chen, Q., Chung, W., Fried, L., Fullerton, S., Geller, G., Soo-Jin Lee, S., Knerr, S., Lappe, M., Liburd, L., Lewis-Fernandez, R., Maniatis, T., McEwen, J., Ottman, R., Penman-Aguilar, A., Pincus, H., Sabatello, M., Wilkins, C., Yang, L., Yu, J.] (2016). Distributive Justice, Diversity and Inclusion in Precision Medicine: What Will Success Look Like? *Genetics in Medicine*, 18, 1166 doi:10.1038/gim.2016.148.

Cha, J., Ide, J.S., **Bowman, F.D.**, Simpson, H., Posner, J., Steinglass, J. (2016). Abnormal Reward Circuitry in Anorexia Nervosa: A Longitudinal, Multimodal MRI Study. *Human Brain Mapping* 37:3835–3846.

Gazes, Y., **Bowman, F.D.**, Razlighi, Q.R., Deirdre, O., Stern, Y., Habeck, C.G. (2016). White matter tract covariance patterns predict age-declining cognitive abilities. *NeuroImage* 125: 53-60.

Rosenthal, L. S., Drake, D., Alcalay, R., **Bowman, F. D.**, Chen-Plotkin, A., Dawson, T. M., Dewey, R. B. Jr., German, D., Huang, X., Landin, B., McAuliffe, M., Petyuk, V., Scherzer, C. R., St. Hillaire-Clarke, C., Sutherland, M., Tarn, C., West, A., Vaillancourt, D., Zhang, J., Gwinn, K., on behalf of the PDBP consortium (2016). The NINDS Parkinson's Disease Biomarkers Program, *Movement Disorders*, 31(6):915-923, http://dx.doi.org/10.1002/mds.26438).

*Zhang, L., Sterling, N. W., Wang, M., Lee, E.-Y., Eslinger, P. J., Wagner, D., Du, G., Lewis, M. M., Truong, Y., **Bowman, F. D.**, Huang, X. (2015). Cortical Thinning and Cognitive Impairment in Parkinson's Disease Without Dementia. *IEEE/ACM Transactions on Computational Biology and Bioinformatics* (DOI 10.1109/TCBB.2015.2465951).

Schuster D. M., Nieh P. T., Jani A. B., Amzat R., **Bowman F. D.**, Halkar R. K., Master V. A., Nye J. A., Odewole O. A., Osunkoya A. O., Savir-Baruch B., Alaei-Taleghani P. Goodman M. M. (2014). *Anti*-3-[^{18}F]FACBC PET-CT and ^{111}In-capromab-pendetide SPECT-CT in Recurrent Prostate Carcinoma: Results of a Prospective Clinical Trial. *The Journal of Urology*. 191: 1446-1453.

Kennedy, A. P., Binder, E. B., **Bowman, F. D.**, Harenski, K., Ely, T., VanNess, S., Kilts, C. D. (2012). A common *TPH2* haplotype regulates the neural processing of a cognitive control demand. *American Journal of Medical Genetics Part B: Neuropsychiatric Genetics* 159B(7): 829–840.

Schuster D. M., Savir-Baruch B., Nieh P. T., Master V. A., Halkar R. K., Rossi P. J., Lewis M. M., Nye J. A., Yu W., **Bowman F. D.**, Goodman M. M. (2011). Detection of recurrent prostate carcinoma with *anti*-1-amino-3 [^{18}F]fluorocyclobutane-1-carboxylic acid (*anti*-3-[^{18}F]FACBC) PET-CT and ^{111}Indium-capromab-pendetide (ProstaScint) SPECT-CT. *Radiology,* 259(3): 852-861.

Schuster, D. M., Halkar, R. K., Esteves, F. P., Garcia, E. V., Cooke, C. D., Syed, M. A., **Bowman, F. D.**, and Votaw, J. R. (2008). Investigation of Emission Transmission Misalignment Artifacts on Rubidium-82 Cardiac PET with Adenosine Pharmacologic Stress. *Molecular Imaging and Biology*, 10:201-208.

Robertson, D., Snarey, J., Ousley, O., Harenski, K., **Bowman, F. D.**, Gilkey, R., Kilts, C. (2007) The neural basis of moral sensitivity to issues of justice and care: an fMRI study. *Neuropsychologia* 45(4): 755-766.
***Special Recognition:** Earned the Albert E. Levy Scientific Research Award, Emory University.

Schuster D. M., Votaw J., Nieh P. T., Yu W., Nye J. A., Master V., **Bowman F. D.**, Issa M. M., Goodman M. M. (2007). Initial experience with the radiotracer anti 1-amino-3-[^{18}F]fluorocyclobutane-1-carboxylic acid with PET/CT in prostate carcinoma. *The Journal of Nuclear Medicine* 48: 56-63.

Kilts, C. D., Kelsey, J. E., Knight, B., Ely, T. D., **Bowman, F. D.**, Gross, R. E., Selvig, A., Gordon, A., Newport, D. J., Nemeroff, C. B. (2006) The Neural Correlates of Social Anxiety Disorder and Response to Pharmacotherapy. *Neuropsychopharmacology* 31: 2243–2253.

Page, S. T., Amory J. K., **Bowman, F. D.**, Anawalt, B. D., Matsumoto, A. M., Bremner, W. J., Tenover, J. L. (2005). Exogenous Testosterone (T) Alone or T with Finasteride Increases Physical Performance, Grip Strength, and Lean Body Mass in Older Men with Low Serum T. *The Journal of Clinical Endocrinology and Metabolism* 90(3): 1502–1510.

Votaw, J., Byas-Smith, M., Hua, J., Voll, R., Martarello, L., Levey, A. I., Bowman, F. D., Goodman, M. (2003). Interaction of Isoflurane with the Dopamine Transporter. *Anesthesiology* 98: 404-411.

Papers in Progress:

*Cassidy, B., Solo, V., Marjanovic, G., and **Bowman, F. D.** (2023). Constructing Sparse Brain Activity Networks (submitted).

Kim, J. and **Bowman, F. D.** (2023). Change-point Estimation for Multivariate Functional Connectivity Brain Networks (submitted).

Chen, S., Kang, J., **Bowman, F. D.**, Kim, E., Hong, E. (2023). A new whole-brain parcellation strategy for spatially smoothed fMRI data. (submitted)

Abstracts:

Savir-Baruch, B., Odewole, O., Master, V., Nieh, P., Halkar, R., Jani, A., Goodman, M., Bowman, D., Yu, W., Schuster, D. (2014). Diagnostic performance of synthetic amino acid anti-3-[18F] FACBC PET in recurrent prostate carcinoma utilizing single-time versus dual-time point criteria. J NUCL MED 55: 21.

Amzat, R., Taleghani, P., Savir-Baruch, B., Nieh, P., Master, V., Rossi, P., Halkar, R., Goodman, M., Bowman, F.D., Schuster, D. (2012). Extraprostatic recurrent prostate carcinoma detection with synthetic amino acid PET/CT surpasses imaging with 111Indium-capromab-pendetide plus diagnostic CT. J NUCL MED 53: 181.

Schuster, D., Savir-Baruch, B., Nieh, P., Master, V., Halkar, R., Rossi, P., Lewis, M., Yu, W., Bowman, F., Goodman, M.(2010). Report of a clinical trial of anti-1 amino 3 [18F]fluorocyclobutane-1-carboxylic acid (anti-[18F]FACBC) PET-CT in recurrent prostate carcinoma. J NUCL MED 51: 456.

Bowman, F. D. (2009), "Bayesian vs. Frequentist Statistical Methods in Neuroimaging Applications," *NeuroImage*, v. 47, pp. S7.

Bowman, D., Derado, G., and Chen, S. (2009). "Evaluating Functional Connectivity using fMRI Data with Diffusion-Based Anatomical Weighting," *NeuroImage*, v. 47, pp. S147.

Chen, S., Derado, G., Guo, Y., Mayberg, H., and Bowman, D. (2009). "Classification Methods for Identifying the Neural Characteristics of Antidepressant Treatment," *NeuroImage*, v. 47, p. S71.

Schuster, D., Savir-Baruch, B., Nieh, P., Votaw, J., Nye, J., Master, V., Halkar, R., Bowman, F. D., Goodman, M. (2009). Initial report of a clinical trial of anti-1 amino 3 [18F]fluorocyclobutane-1-carboxylic acid (anti-[18F]FACBC) PET-CT in recurrent prostate cancer. J NUCL MED 50: 521

Bowman, F. D. and Derado, G. (2008). "Modeling the spatial and temporal dependence in fMRI data: An application to a study of inhibitory control in cocaine addiction," *NeuroImage*, v. 41, p. S30.

Caffo, B., Bowman, F. D., Bassett, S., and Kilts, C. (2008). "A Bayesian Hierarchical Framework for Spatial Modeling of fMRI Data," *NeuroImage*, v. 41, p. S17.

Guo, Y., Pagnoni, G., Bowman, F. D. (2007). "Comparison of Methods of Group Independent Component Analysis for Multisubject fMRI Data," *NeuroImage* v. 36, p. 124.

Derado, G., Nair, H. P., Bowman, F. D., Drexler, K., Kilts, K. (2007). "Functional Activity Differences in Brain Regions Related to Emotional Regulation in Recovered Cocaine Addicts," *NeuroImage* v. 36, p. 99.

Nye, J., Tudorascu, D., Bowman, F. D., Santana, C., Faber, T., Votaw, J. (2007). A post-imaging method for correcting heart drift in PET/CT cardiac imaging. J NUCL MED 48: 50P-c.

Page, S. T., Amory J. K., Bowman, F. D., Anawalt, B. D., Matsumoto, A. M., Bremner, W. J., Tenover, J. L. (2004). "Exogenous Testosterone or Testosterone with Finasteride Increases Physical Performance, Grip Strength, and Lean Body Mass in Older Men with Low Serum Testosterone." *Journal of Investigative Medicine* 53(1), S97, Jan. 2005.

Other Manuscripts

Bowman, F. D., Caffo, B. A, Bassett, S., and Kilts, C. (2007). Bayesian Hierarchical Framework for Spatial Modeling of fMRI Data. Johns Hopkins University, Dept. of Biostatistics Working Papers, Number 139. http://www.bepress.com/jhubiostat/paper139

Patel, R. S., **Bowman, F. D.,** Guo, Y., and Derado, G. (2006). Integrating Support Vector Machines, Supervised Principal Components, and Boosting to Interpret Brain Activity. Pittsburgh Brain Activity Interpretation Competition. Held at the Organization for Human Brain Mapping, 12th Annual Meeting, Florence, Italy.

Bowman, F. D. (2004). Spatio-Temporal Models for Volume of Interest Analyses of Neuroimaging Data, Technical Report Number: 04-10, Department of Biostatistics, Emory University.

Helms, R. W., **Bowman, F. D.**, Kesler, K. K., Marquis, C. (1999). Learning to Fly with Longitudinal Logistic Regression Models and Generalized Estimating Equations. Copyrighted unpublished manuscript, Rho, Incorporated, Chapel Hill, NC.

Presentations

Moderator/Interviewer for Invited Speakers

The following events were moderated by F. DuBois Bowman, Dean of the University of Michigan School of Public Health:

"Pressing Issues in Global Public Health, a panel at the University of Michigan School of Public Health," Panelists: Moise Desvarieux: Associate Professor of Epidemiology, Columbia University Mailman School of Public Health; Maureen Lichtveld: Dean, University of Pittsburgh School of Public Health; Bhramar Mukherjee: Professor and Chair of Biostatistics, University of Michigan School of Public Health; K. Venkat Narayan: Ruth and O.C. Hubert Professor of Global Health and Epidemiology, Emory University Rollins School of Public Health, 2023. [Hosted to accompany Dr. Tedros Adhanom Ghebreyesus's (Director-General of the World Health Organization) receipt of the Thomas Francis Jr. Medal in Global Public Health from the University of Michigan.]

Dr. Sanjay Gupta, Chief Medical Correspondent, CNN, "Ahead of the Curve featuring Dr. Sanjay Gupta," *Ahead of the Curve*, University of Michigan School of Public Health Leadership Speaker Series, 2023.

Dr. Larry Brilliant, CEO of Pandefense Advisory, Epidemiologist, Philanthropist, "Ahead of the

Curve featuring Dr. Larry Brilliant," *Ahead of the Curve*, University of Michigan School of Public Health Leadership Speaker Series, 2023.

Dr. Jerome Adams, 20th Surgeon General of the United States, Distinguished Professor, Presidential Fellow & Executive Director of Health Equity Initiatives at Purdue University, "Perspectives on Leadership from the Nation's Doctor," *Ahead of the Curve*, University of Michigan School of Public Health Leadership Speaker Series, 2021.

Dr. Helene Gayle, President and CEO of the Chicago Community Trust, "The Pursuit of Health Equity: Leading for Long-term Change," *Ahead of the Curve*, University of Michigan School of Public Health Leadership Speaker Series, 2022.

Dr. Tedros Adhanom Ghebreyesus, Director-General of the World Health Organization, "Global Perspectives on Public Health," *Ahead of the Curve*, University of Michigan School of Public Health Leadership Speaker Series, 2021.

Dr. Joneigh Khaldun, Chief Medical Executive and Chief Deputy Director for Health and Human Services, "Lessons from a Pandemic: Leading with Science," *Ahead of the Curve*, University of Michigan School of Public Health Leadership Speaker Series, 2021.

Dr. Julio Frenk, MPH '81 and PhD '83, President of the University of Miami, "Leadership to Inspire Global Change," *Ahead of the Curve*, University of Michigan School of Public Health Leadership Speaker Series, 2021.

Tonya Allen, MPH and MSW '96, President and CEO of The Skillman Foundation, "Resilient Leadership in a Dynamic World," *Ahead of the Curve*, University of Michigan School of Public Health Leadership Speaker Series, 2020

Global Panel for University of Michigan Africa Week: Leveraging Food Security to Improve Population Health in Sub Saharan Africa (2021). Moderator for discussion among panelists: Dr. Andy Jones, Associate Professor, UM SPH; Adwoa Coleman, Africa Sustainability & Advocacy Manager, Dow Chemical; Dr. Christine Chege: Agri-Nutrition & Food Systems Specialist, The Alliance of Bioversity International and CIAT, The Africa Hub; Dr. Ferew Lemma, Senior Advisor, Office of the State Minister, Ethiopia.

Keynote Presentations, Grand Rounds, and Invited Panelist

Bowman, F. D. (2023). Invited panelist at the Association of Schools and Programs of Public Health (ASPPH) Annual Meeting. "Gun Violence Prevention: An Academic Public Health Approach," Annual Meeting, Arlington, VA.

Bowman, F. D. (2022). Invited panelist at the ASPPH Annual Meeting. "Advancing the Journey to Achieve Health Equity and Eliminate Discrimination in Academic Public Health."

Bowman, F. D. (2021). Invited panelist at the 2021 Gates Foundation Grand Challenges Annual Meeting (session in collaboration with the Harvard T. H. Chan School of Public Health), Supporting African R&D and Innovation: A Partnership with Academic Global Public Health Institutions.

Bowman, F. D. (2021). "Public Health Leadership in Trying Times," keynote address, The Dr. William 'Bill' Jenkins Health Equity Lecture, Centers for Disease Control and Prevention (CDC), National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention (NCHHSTP).

Bowman, F. D. (2021). "Statistical Leadership: A Pathway to Innovative Interdisciplinary Problem-Solving," ENAR Presidential Invited Address, ENAR 2021 Spring Meeting.

Bowman, F. D. (2020). "The vital role of public health leadership and decision-making: Addressing COVID-19 and Firearm Safety," Harvard T.H. Chan School of Public Health Yerby Lecture.

Bowman, F. D. (2020). "Data Science and Academic Leadership," Dana-Farber Cancer Institute Data Science Zoominar.

Bowman, F. D. (2020). "The Public Health Perspective on Disparities and Firearms Among Children and Teens," Annual FACTS Symposium 2020, The Science of Firearm Injury Prevention: Charting the Path Forward with Data and Innovation, University of Michigan, Ann Arbor, MI.

Bowman, F. D. (2019). "Biostatistics: A Look Back and Future Directions," 70th Anniversary of the Department of Biostatistics at University of North Carolina, Chapel Hill, NC.

Bowman, F. D., Drake, D. (2019). "Parkinson's Disease: Precision Discovery of Neuroimaging Biomarkers," Emory University Rollins School of Public Health, Donna J. Brogan Lecture in Biostatistics, Atlanta, GA.

Bowman, F. D., Drake, D. (2019). "Parkinson's Disease: Precision Discovery of Neuroimaging Biomarkers," University of Michigan, Florida Seminars, West Palm Beach, FL.

Bowman, F. D. and Wing, J. (2018). "Data Science," Columbia University Mailman School of Public Health Ground Rounds: Disruptive Thinking on the Future of Public Health, New York, NY.

Bowman, F. D. (2017). "Statistical Methods for Linking Big Data with Precision Health," Columbia University Distinguished Lecture in Precision Medicine, New York, NY.

Bowman, F. D. (2016). "Using Mathematics to Map the Human Brain," Claude B. Dansby Lecture, Morehouse College, Mathematics Department, Atlanta, GA.

Bowman, F. D. (2016). "Statistics: Paving the Way in the Big Data Era," Keynote speaker at JSM Diversity Workshop and Mentoring Program, Chicago, IL.

Bowman, F. D. (2016). "Biostatistics: Paving the Way in the Big Data Era," Keynote speaker at Harvard Pipelines into Biostatistics: Training in Quantitative Public Health Program, Boston, MA.

Bowman, F. D. (2014). "Statistics: Paving the Way in the Big Data Era," Keynote speaker at StatFest 2014, sponsored by the American Statistical Association. North Carolina State University, Raleigh, NC.

Bowman, F. D. (2014). "Using Big Data to Drive Discovery for Alzheimer's Disease," Big Data Strategy Session: Applying Big Data to One of the World's Biggest Problems: Alzheimer's Disease. Sponsored by Global CEOInitiative, Knowledgent, and Sage Bionetworks. Columbia University, New York, NY.

Bowman, F. D. (2014). "Academic Research Careers," Grand Rounds on the Future of Public Health, addressing the topic Taking Action to Address the U.S. Health Gap: What Is To Be Done? Columbia University Mailman School of Public Health, New York, NY.

Bowman, F. D. (2014). "The International Health Gap," keynote address for the 17th Annual Atlanta University Center Research Day and the NIMH-COR Reunion, Atlanta, GA.

Bowman, F. D. (2013). "Analysis of Large-scale Neuroimaging Data: Detecting Brain Networks, Localized Changes in Neural Activity, and Biomarkers." invited speaker in the Clinical and Translational Informatics Rounds, Emory University, Atlanta, GA.

Bowman, F. D. (2013). "Statistical Methods for Determining Biomarkers from Brain Imaging Data: Applications to Parkinson's Disease and Major Depression," invited speaker in the Public Health Sciences Grand Rounds, Rollins School of Public Health, Emory University, Atlanta, GA.

Bowman, F. D. (2008). "Exploring the Human Brain through Statistical Methods for Neuroimaging Data," invited speaker in the Center for Rehabilitation Medicine Grand Rounds, Emory Healthcare, Atlanta, GA.

Bowman, F. D. (2008). "Modeling Brain Imaging Data to Find Neural Representations of Behavior and Disease", Keynote address at the 10th Annual Symposium on Statistics in Psychiatry, New York University, University of Pennsylvania, Columbia University, and Yale University, New York, NY.

Bowman, F. D. (2008), "Statistics: A Pathway to a Promising Future." StatFest: A Conference for Undergraduates, sponsored by the American Statistical Association, October 2008, Beaumont, TX.

Bowman, F. D. (2007), "Staying the Course: Pursuing Research Careers in Mental Health." The 2007 NIMH Career Opportunities in Research (COR) Annual Colloquium, November 2007, Albuquerque, New Mexico.

Bowman, F. D. (2005). "Characterizing Experimentally Induced Neural Processing: A Spatial Model for Neuroimaging Data," invited seminar for Biostatistics Grand Rounds, Johns Hopkins Bloomberg School of Public Health.

Invited Research Paper Presentations

Bowman, F. D., Drake, D., and Cassidy, B. (2019). "Precision Discovery of Neuroimaging Biomarkers," invited talk at University of Michigan NII-Methods@RUB.

Bowman, D., Kim, J., Cheng, B., Drake, D. (2017). "Time-varying brain functional connectivity: Detecting change-points," invited presentation at the CM Statistics conference, University of London, U.K.

Bowman, F. D., Drake, D., and Cassidy, B. (2017). "Integrative Methods for Functional and Structural Connectivity," invited talk at ENAR Spring Meeting, Washington, D. C.

Bowman, F. D. (2016). "Functional Connectivity for Prediction and Classification," Invited presentation in Statistical Challenges and Power in Integrating Big and Complex Imaging Data session, Joint Statistical Meetings, Chicago, IL.

Bowman, F. D. (2016). "Skeptical Connectivity: Time for Something Completely Different," Organizer (with Victor Solo, University of New South Wales, Australia) for the 22nd annual OHBM Meeting, Geneva, Switzerland, June 2016.

Bowman, F. D. (2016). "Analysis of Multimodal Neuroimaging Data." Invited presentation at the Novel Statistical Methods in Neuroscience workshop, Otto-von-Guericke University Magdeburg, Germany.

Bowman, F. D. (2016). "Integrative Methods for Functional and Structural Connectivity." The Statistical and Applied Mathematical Sciences Institute (SAMSI), invited presentation in the Challenges in Functional Connectivity Modeling and Analysis Workshop, Research Triangle Park, NC.

Bowman, F. D. (2016). "Determining Multimodal Imaging Biomarkers for Parkinson's Disease." Simons Foundation Frontiers of Data Science Lecture, New York, NY.

Bowman, F.D., Chen, Q., Wang, Y. (2016). Inclusivity and Representation in Precision Medicine: Biostatistical Issues. Center of Excellence in Ethical, Legal and Social Implications (ELSI) Research (CEER), invited presentation in national workshop entitled Inclusivity and Representation in the Precision Medicine Initiative: What Will Success Look Like? Columbia University, New York, NY 10027.

Bowman, F. D. (2015). "Determining Multimodal Imaging Biomarkers for Parkinson's Disease." University of Michigan, Department of Biostatistics Seminar Series, Ann Arbor, MI.

Bowman, F. D., Drake, D., Huddleston, D. (2015). "Determining Multimodal Imaging Biomarkers for Parkinson's Disease." Invited speaker at Brainhack Americas, cast in Ann Arbor, MI, Atlanta, GA, Berkeley, CA, Los Angeles, CA, Miami, FL, New York, NY, Quertaro, Mexico, Rio de Janeiro, Brazil.

Bowman, Drake, D., Huddleston, D. (2015). "Analytic Methods for Determining PD Biomarkers: Multimodal Neuroimaging and Electronic Medical Records." Invited speaker at the National Institute of Neurological Disorders and Stroke, Parkinson's Disease Biomarker Program consortium meeting, Bethesda, MD.

Bowman, F.D., Wei, Y., Drake, D. (2015). "Determining Risk Profiles for Parkinson's Disease Using Electronic Medical Records." Invited speaker at the Joint Statistical Meetings, Seattle, WA.

Bowman, F.D. (2015). Invited discussant in the session "Bayesian Models for Neuroimaging Data." Joint Statistical Meetings, Seattle, WA.

Bowman, F. D. (2015). "Determining Multimodal Imaging Biomarkers for Parkinson's Disease," invited speaker at Albert Einstein College of Medicine of Yeshiva University, Department of Epidemiology and Population Health Bronx, NY.

Bowman, F. D. (2015). "Determining Multimodal Imaging Biomarkers for Parkinson's Disease," invited speaker at New York University, Department of Child and Adolescent Psychiatry New York, NY.

Bowman, Drake, D., Huddleston, D. (2014). "Analytic Methods for Determining Multimodal Biomarkers for Parkinson's Disease." Invited speaker at the National Institute of Neurological Disorders and Stroke, Parkinson's Disease Biomarker Program consortium meeting, Bethesda, MD.

Bowman, F. D. (2014). "Determining Multimodal Imaging Biomarkers for Parkinson's Disease," invited speaker at the Blackwell-Tapia Conference, sponsored by the Institute for Pure and Applied Mathematics (IPAM). Los Angeles, CA.

Bowman, F. D. (2014). "Statistical Modeling of Multimodal Imaging Data," invited speaker at Memorial Sloan-Kettering Cancer Center, New York, NY.

Bowman, F. D. (2014). "Determining Multimodal Imaging Biomarkers for Parkinson's Disease," invited speaker at the 50th Anniversary of the Department of Biostatistics and Bioinformatics, Emory University, Atlanta, GA.

Bowman, F. D. (2014). "Spatial Modeling of Brain Imaging Data: Task-related Activation, Functional Connectivity, and Prediction," invited speaker in the Biostatistics Colloquium/Levin Lecture Series, Columbia University, Mailman School of Public Health, New York, NY.

Bowman, F. D. (2014). "Analysis of large-scale data: Opportunities and Challenges," invited speaker on a panel "Capitalizing on non-traditional databases: Taking advantage of big data" at a symposium entitled: "Health outcomes research in an era of cost containment: Improving efficiency of observational/interventional research: decreasing costs, increasing quality." Co-sponsored by the Department of Epidemiology at Columbia University and the Centre de Recherche INSERM Epidemiologies et Biostatistique, PRES Sorbonne Paris Cite. New York, NY.

Bowman, Drake, D., Huddleston, D. (2013). "Analytic Methods for Determining Multimodal Biomarkers for Parkinson's Disease." Invited speaker at the National Institute of

Neurological Disorders and Stroke, Parkinson's Disease Biomarker Program consortium meeting, Bethesda, MD.

Bowman, F. D. (2013). "Using Big Neuroimaging Datasets for Prediction and Classification," Invited speaker at 19th annual OHBM Meeting, in morning workshop entitled *Big Data in Neuroimaging: Big Opportunities or Just a Big Hassle: The Skeptical Neuroimagers View*, Seattle, WA, June 2013.

Bowman, F. D. (2013). "A Spatial Modeling Framework for Functional Neuroimaging Data," Invited speaker at the University of New South Wales, Department of Statistics Seminar Series, Sydney, Australia.

Bowman, F. D. (2013). "Analysis of Large-scale Neuroimaging Data: Detecting Brain Networks, Localized Changes in Neural Activity, and Biomarkers," Invited speaker at the University of New South Wales, Department of Neuroscience Seminar Series, Sydney, Australia.

Bowman, F. D. (2013). "Analysis of Large-scale Neuroimaging Data: Methods for Determining Functional Connectivity and Task-Related Changes in Neural Processing," Invited speaker at Drexel University School of Public Health, Philadelphia, PA.

Bowman, F. D. (2012). "A Multimodal Technique for Determining Connectivity within the Human Brain," Invited speaker at the Multimodal Neuroimaging Training Program, Carnegie Mellon University and the University of Pittsburgh, Pittsburgh, PA.

Bowman, F. D. (2012). "Analysis of Large-scale Neuroimaging Data: Methods for Determining Functional Connectivity and Task-Related Changes in Neural Processing," Invited speaker in the Division of Biostatistics, Washington University School of Medicine, St. Louis, MO..

Bowman, F. D. and Chen, S. (2012). "A Novel Support Vector Classifier for Longitudinal High-dimensional Data," invited talk at ENAR Spring Meeting, Washington, D. C.

Bowman, F. D. (2012). "A Bayesian Spatial Model for the Analysis of Large-scale Neuroimaging Data," Invited speaker at the 5th Annual Bayesian Biostatistics Conference, The University of Texas MD Anderson Cancer Center, Houston, TX.

Bowman, F. D. (2011). "Characterizing Behavior-Related Neural Processing Changes and Functional Connectivity in the Human Brain," Invited speaker at the John and Mary Franklin Foundation Paul D. Coverdell Neuroimaging Program, University of Georgia, Athens, GA.

Bowman, F. D. (2011). "A Bayesian Spatial Model for the Analysis of Large-scale Neuroimaging Data," Invited speaker at The Brad Efron Honorary Symposium on Large-Scale Inference, Social and Scientific Systems, Inc., Silver Spring, MD.

Bowman, F. D. (2011). "Statistical Analysis of Neuroimaging Data: A look at current methods and challenges," Invited speaker at the National Science Foundation Workshop on Statistical Analysis of Neuroimaging Data for Social and Behavioral Science Research, Arlington, VA.

Bowman, F. D. (2011). "Predicting Brain Activity using a Bayesian Spatial Model," Invited speaker in the Bernoulli Society sponsored session "Statistics in Neuroscience", International Statistical Institute, Dublin, Ireland.

Bowman, F. D. (2011). "A Bayesian Spatial Model for Predicting Brain Activity," Invited speaker JSM, Miami, FL.

Bowman, F. D. (2011). "Predicting Brain Activity using a Bayesian Spatial Model," Invited speaker at the Statistical Methods for Very Large Data Sets Conference, Baltimore, MD.

Bowman, F. D. (2011). "A Spatial Modeling Framework for Functional Neuroimaging Data," Invited speaker at the University of Florida Workshop on High Dimensional Inference, Gainesville, FL.

Bowman, F. D. (2010). "Statistical Modeling of Brain Imaging Data: An Overview, Challenges, and Future Directions," Invited speaker at the Statistical and Applied Mathematical Sciences (SAMSI) 2010-11 Analysis of Object Data Opening Workshop and Tutorials, Research Triangle Park, NC.

Bowman, F. D., Derado, G., and Chen, S. (2010). "Determining Resting-State Neural Processing Networks: A Combined fMRI-DTI Approach," invited talk at ENAR Spring Meeting, New Orleans, LA.

Bowman, F. D. (2009). "Determining Resting-State Neural Processing Networks: A Combined fMRI-DTI Approach," invited talk in a session entitled "Emerging Applications in High-Dimensional Data Analysis" at the 60th Anniversary of the Department of Biostatistics, University of North Carolina, Chapel Hill, NC.

Bowman, F. D. (2009). "Determining Resting-State Neural Processing Networks: A Combined fMRI-DTI Approach," speaker in the Statistica Sinica Invited Paper Session "Analysis of complex and high-dimensional data" at the Joint Statistical Meetings, Washington, D. C.

Bowman, F. D. (2009), "Characterizing Neural Processing and Mechanisms of treatment using Neuroimaging Statistics," invited talk in the NIMH Mentored Training Program to Increase Diversity in HIV, Substance Use and Mental Health (R25MH080669-01A1), Morehouse School of Medicine, Atlanta, GA.

Bowman, F. D. (2009), "Bayesian vs. Frequentist Statistical Methods in Neuroimaging Applications," invited speaker in symposium entitled "To Be Bayesian or Frequentist or Not: A Debate on Functional Imaging Analyses," 15th annual meeting of the Organization for Human Brain Mapping (OHBM), San Francisco, CA. Published *NeuroImage*, v. 47, pp. S7.

Bowman, F. D. (2009). "Identifying Behavior-Related Neural Processing Alterations and Functional Connections in the Human Brain: A Spatial Modeling Approach for fMRI Data," invited speaker at Brown University, Center for Statistical Sciences, Providence, RI.

Bowman, F. D. (2009). "A Unified Approach for Identifying Behavior-Related Neural Processing Alterations and Functional Connections in the Human Brain: A Spatial Modeling Approach for fMRI Data," invited speaker at Columbia University, Department of Statistics Seminar Series, New York, NY.

Bowman, F. D. (2008). "Bayesian spatial hierarchical modeling," invited speaker at the Institute for Pure and Applied Mathematics (IPAM) Program entitled "Mathematics in Brain Imaging," University of California at Los Angeles (UCLA), Los Angeles, CA.

Bowman, F. D. (2008). "Discovering Patterns of Connectivity within the Human Brain," invited talk at the Joint Statistical Meetings, Denver, CO.

Bowman, F. D. (2008). "A Look into the Human Brain: Neural Processing Representations of Behavior and Disease," James Grizzle Distinguished Alumni Award Lecture, University of North Carolina at Chapel Hill, Department of Biostatistics, Chapel Hill, NC.

Bowman, F. D. (2008). "Bayesian Analysis for fMRI Data," invited speaker at the 14th annual meeting of the Organization for Human Brain Mapping (OHBM), Advanced fMRI Course, Melbourne, Australia.

Bowman, F. D. (2008). "A Unified Approach for Identifying Behavior-Related Neural Processing Alterations and Functional Connections in the Human Brain: A Spatial Modeling Approach for fMRI Data," Special invited lecture at Statistical Analysis of Neuronal Data Workshop (SAND4), Carnegie Mellon University, Pittsburgh, PA.

Bowman, F. D. (2008). Statistical Modeling Approaches to Characterize Experimentally-Induced Alterations in Human Brain Function, invited talk at the University of Georgia, Department of Statistics, Athens, GA.

Bowman, F. D. (2007). "Bayesian Hierarchical Modeling of Functional Neuroimaging Data," invited talk at the International Chinese Statistical Association, Applied Statistics Symposium, Raleigh, NC.

Bowman, F. D. (2007). "Detecting Differential Patterns of Activation in the Human Brain," invited talk at the 11th Biennial CDC & ATSDR Symposium on Statistical Methods: Analyzing and Mapping Health Inequities to Impact Policies for Eliminating Disparities, Atlanta, GA.

Bowman, F. D. (2007). "Statistical Modeling Approaches to Characterize Experimentally-Induced Alterations in Human Brain Function," invited talk at Massachusetts Institute of Technology, Massachusetts General Hospital, Athinoula A. Martinos Center for Biomedical Imaging, Harvard-Massachusetts Institute of Technology Division of Health Sciences & Technology and the Massachusetts General Hospital, Boston, MA.

Bowman, F. D. (2007). "Bayesian Hierarchical Modeling of Functional Neuroimaging Data," invited talk at ENAR Spring Meeting, Atlanta, GA.

Bowman, F. D. (2007). "Spatial Modeling Approaches to Characterize Experimentally-Induced

Alterations in Human Brain Function", invited talk at Vanderbilt University School of Medicine, Department of Biostatistics, Nashville, TN.

Bowman, F. D. (2007). "Statistical Modeling Approaches to Characterize Experimentally-Induced Alterations in Human Brain Function", invited talk at the University of Michigan, Department of Biostatistics, Ann Arbor, MI.

Bowman, F. D. and Patel, R. (2006). "A Bayesian Hierarchical Model for Determining Connectivity of the Human Brain," Functional Connectivity Working Group, Biomedical Imaging Technology Center, Emory University.

Bowman, F. D. (2006). "Prediction of post-treatment brain activity using a Bayesian Hierarchical Model," invited talk at Joint Statistical Meetings, Seattle, WA.

Bowman, F. D. (2006). "Prediction of post-treatment brain activity using a Bayesian Hierarchical Model," invited talk at WNAR Summer Meeting, Flagstaff, AZ.

Bowman, F. D. (2005). "Modeling Spatial Correlations in Functional Neuroimaging Data," invited seminar at North Carolina State University, Department of Statistics, Raleigh, NC.

Bowman, F. D. (2005). "Modeling Spatial Correlations in Functional Neuroimaging Data," invited seminar at Centers for Disease Control and Prevention.

Bowman, F. D. (2005). "Covariance Modeling for High-Dimensional Data Problems: Issues and Strategies," Department of Biostatistics, Johns Hopkins Bloomberg School of Public Health, invited seminar for Neuroimaging and Expressionist Working Groups.

Bowman, F. D. (2004). "Biostatistical Methods in Imaging Research," invited presentation for the 40th Anniversary Celebration of the Department of Biostatistics, Emory University.

Bowman, F. D. and Patel, R. (2004). "Exploring Spatial Relationships in PET Neuroimaging Data," invited seminar at Carnegie Mellon University, Department of Statistics.

Bowman, F. D. (2003). "Estimating Localized Brain Activity in Positron Emission Tomography (PET) Neuroimaging Data Using Linear Models with Structured Covariance Matrices," invited seminar at Johns Hopkins University, Department of Biostatistics.

Bowman, F. D. (2003). "Borrowing Strength to Detect Changes in Localized Brain Activity in Positron Emission Tomography (PET) Neuroimaging Data," invited seminar at Georgia State University, Image Analysis Seminar Series, Department of Mathematics and Statistics.

Bowman, F. D. (2003). "Detecting Localized Brain Activity Changes in Positron Emission Tomography (PET) Neuroimaging Data," invited seminar at Emory University, Department of Biostatistics.

Bowman, F.D. and Manatunga, A. (2002). "Jointly Modeling Longitudinal Data Profiles and Response-Altering Event Risks," invited talk in Dedicated Session (A Mixed View of Current Longitudinal Data Methods) at International Biometrics Conference, Freiberg,

Germany.

Contributed Research Paper and Poster Presentations

Cassidy, B., Solo, V., and Bowman, D. (2017). "Persistent Homology of Time Varying Conditional Independence Networks," Applied Algebraic Topology 2017, Sapporo, Japan.

Cassidy, B., Solo, V., Marjanovic, G., Daniel, D., and Bowman, D. (2017). "Sparse Functional Connectivity," 23rd Annual Meeting of the Organization for Human Brain Mapping (OHBM), Vancouver, British Columbia, Canada.

Drake, D. and Bowman, D. (2017). "Multimodal Imaging Signatures of Parkinson's Disease in the Basal Ganglia," 23rd Annual Meeting of the Organization for Human Brain Mapping (OHBM), Vancouver, British Columbia, Canada.

Kim, J. and Bowman, D. (2017). "Dynamic Brain Functional Connectivity: Change-Point Estimation based on Random Matrix Theory," 23rd Annual Meeting of the Organization for Human Brain Mapping (OHBM), Vancouver, British Columbia, Canada.

Kemmer, P., Guo, Y., Bowman, F.D. (2015). "Statistical Approaches for Exploring Brain Connectivity with Multi-Modal Neuroimaging Data." Joint Statistical Meetings, Seattle, WA.

Xue, W., Bowman, F.D., Kang, J., Drake, D. (2015). "Predicting Disease Status Using Imaging Data from Various Modalities." Joint Statistical Meetings, Seattle, WA.

Derado, G., Drake, D., Zhang, L., Bowman, D. (2015). "Application of a Bayesian Model to Asses Localized Brain Activity and Connectivity in a study of AD." 21st Annual Meeting of the Organization for Human Brain Mapping, Honolulu, Hawaii.

Bowman, D., Xue, W., Kang, J. Drake, D. (2015). "A Bayesian Spatial Model to Predict Disease Status Using Multimodal Imaging Data." 21st Annual Meeting of the Organization for Human Brain Mapping, Honolulu, Hawaii.

Drake, D., Bowman, D., Huddleston, D. (2015). "Detection of Parkinson's Disease using Elastic Net on functional and structural MRI." 21st Annual Meeting of the Organization for Human Brain Mapping, Honolulu, Hawaii.

Chen, S., Bowman, D. (2015). "Differential Brain Connectivity Network Biomarkers for Parkinson's Disease." 21st Annual Meeting of the Organization for Human Brain Mapping, Honolulu, Hawaii.

Kang, J., Bowman, D., Mayberg, H., Liu, H. (2015). "A Depression Network of Functional Connectivity Regions Discovered via Multi-Attribute Graphs." 21st Annual Meeting of the Organization for Human Brain Mapping, Honolulu, Hawaii.

Kim, J., Bowman, D., Ogden, T. (2015). "Dynamic Brain Functional Connectivity with Change-Point Estimation." 21st Annual Meeting of the Organization for Human Brain Mapping, Honolulu, Hawaii.

Cassidy, B., Rae, C., Solo, V., Bowman, D. (2015). "Is AR(1) noise sufficient for modelling fMRI data?" 21st Annual Meeting of the Organization for Human Brain Mapping, Honolulu, Hawaii.

Savir-Baruch, Bital; Odewole, Oluwaseun; Master, Viraj; Nieh, Peter T.; Halkar, Raghuveer K.; Jani, Ashesh B.; Goodman, Mark M.; Bowman, DuBois F.; Yu, Weiping; Schuster, David M. (2014). "Diagnostic Performance of Synthetic Amino Acid anti-3-[18F] FACBC PET in Recurrent Prostate Carcinoma Utilizing Single-time versus Dual-time Point Criteria." Society for Nuclear Medicine 2014, St. Louis, MO.

Zhang, L., Derado, G., and Bowman, F. D. (2013). "Application of a Bayesian Model to Assess Localized Brain Activity and Connectivity in a Study of Alzheimer's Disease," 19th Annual Meeting of the Organization for Human Brain Mapping, Seattle, WA.

Zhang, L., Kang, J., Bowman, F. D., and Johnson, T. D. (2013). "A Bayesian Random Shape model for fMRI and MRI Brain Activity Analysis," 19th Annual Meeting of the Organization for Human Brain Mapping, Seattle, WA.

Bowman, D. and Derado, G. (2011). "Predicting Brain Activity Using a Bayesian Spatial Hierarchical Model," 17th annual meeting of the Organization for Human Brain Mapping (OHBM), Quebec City, Canada.

Bowman, F.D. (2010). "A Bayesian Spatial Model for Identifying Localized Brain Activity Changes and Functional Connectivity,"International Biometrics Conference, Florianopolis, Santa Catarina, Brazil.

Bowman, F. D., Derado, G., and Chen, S. (2010). "Determining Differences in Functional Connectivity using a Combined fMRI/DTI Analysis," Topic Contributed Paper Session at the Joint Statistical Meetings, Vancouver, British Columbia, Canada.

Bowman, D., Derado, G., and Chen, S. (2009). "Evaluating Functional Connectivity using fMRI Data with Diffusion-Based Anatomical Weighting," 15th annual meeting of the Organization for Human Brain Mapping (OHBM), San Francisco, CA. Published *NeuroImage*, v. 47, pp. S147.

Bowman, F. D. and Derado, G. (2008). "Modeling the spatial and temporal dependence in fMRI data: An application to a study of inhibitory control in cocaine addiction," 14th annual meeting of the Organization for Human Brain Mapping (OHBM), Melbourne, Australia. Published *NeuroImage*, v. 41, p. S30.

Bowman, F. D. (2005). "Modeling Spatial Correlations in Functional Neuroimaging Data," invited talk in Topic Contributed Session (Modeling for Brain Imaging Data), Joint Statistical Meetings, Minneapolis, MN.

Bowman, F. D. (2005). "Spatial Modeling of Localized Brain Activity in PET Neuroimaging Data," invited talk in Topic Contributed Session, ENAR Spring Meeting, Austin, TX.

Bowman, F.D. and Manatunga, A. (2002). "Jointly Modeling Longitudinal Data Profiles and

Response-Altering Event Risks," invited talk in Topic Contributed Session (Analyzing Response Profiles from Longitudinal Data Using Mixed Models) at Joint Statistical Meetings, New York, NY.

Bowman, F. D. and L. A. Waller (2001). "Exploring Statistical Models for Cardiac Imaging Data." Joint Statistical Meetings, Atlanta, GA.

Bowman, F. D. (2000). "The First Steps to Analyzing Neuroimaging Data from PET Studies: An Introduction to the General Linear Model." Center for Positron Emission Tomography, Emory University.

Bowman, F. D., Sen, P. K., Stewart, P. W. (1999). "Making Inferences about Projected Completors in a Disability Study with Nonignorable Dropout." Joint Statistical Meetings, Baltimore, MD.

Bowman, F. D., Sen, P. K., Stewart, P. W. (1999). "Strategies for Making Inferences about Projected Completors in Longitudinal Studies with Nonignorable Dropout." Duke University, Emory University, Harvard University, and the University of Pennsylvania.

Bowman, F. D. (1999). "Designing Hypertension Trials to Mitigate the Effects of Bias Caused by Dropouts." The University of North Carolina at Chapel Hill, Collaborative Studies Coordinating Center, Cardiovascular Disease Clinical Trials Group.

Bowman, F. D. (1994). "Statistical Methods for Analyzing Time to Event Data with Censored Observations." National Ford Foundation Conference, Irvine, CA.

Bowman, F. D., Aubert, R. (1992). "Association between Psychosocial Factors and Hypertension among African-Americans." Centers for Disease Control and Prevention, Atlanta, GA.

Presentations (Paper and Poster) as Non-presenting Co-Author

Kemmer, P.B., Guo, Y., and Bowman, D., (2013). "Investigation of Structural Connectivity underlying Functional Connectivity Using fMRI Data," ENAR Spring Meeting, Orlando, FL.

Xue, W. and Bowman, D. (2013). "Modeling Functional Connectivity in the Human Brain with Incorporation of Structural Connectivity," ENAR 2013 Spring Meeting, Orlando, FL.

Chen, S. and Bowman, F. D. (2012). "A Bayesian Hierarchical Framework for Modeling Brain Connectivity of Neuroimaging Data," Topic Contributed talk at the Joint Statistical Meetings, San Diego, CA.

Xue, W. and Bowman, F. D. (2012). "Modeling Functional Connectivity In The Human Brain With Incorporation Of Structural Connectivity," Joint Statistical Meetings, San Diego, CA.

Zhang, L., Bowman, F. D., and Wang, M. (2012). "An Extended Gee Model With Latent Variables For Brain fMRI Connectivity," poster presentation at Joint Statistical Meetings, San Diego, CA.

Chen, S., Bowman, F. D., and Zhang, L. (2012). "A Bayesian Hierarchical Framework for

Modeling Brain Connectivity of Neuroimaging Data," ENAR Spring Meeting, Washington, D. C.

Xue, W. and Bowman, F. D. (2012). "A Bayesian Approach to Determining Functional Connectivity in the Human Brain with Incorporation of Structural Connectivity," ENAR Spring Meeting, Washington, D. C.

Zhang, L., Kang, J., and Bowman, F. D. (2012) "A Bayesian Random Shape Model for fMRI and MRI Data," poster at the ENAR Spring Meeting, Washington, D. C.

Amzat R, Taleghani P, Savir-Baruch B, Nieh PT, Master VA, Rossi P, Halkar RK, Goodman MM, Bowman FD, Schuster DM (2012). "Extraprostatic recurrent prostate carcinoma detection with synthetic amino acid PET/CT surpasses imaging with ^{111}Indium-capromab-pendetide plus diagnostic CT," Society for Nuclear Medicine Annual Meeting, Miami, Florida.

L. Zhang, F. D. Bowman (2012). "A Bayesian Hierarchical Model for Brain Activation and Connectivity". Southern Regional Council on Statistics (SRCOS) Summer Research Conference in Jekyll Island, GA.

Chen, S. and Bowman, D. (2011). "A Novel Support Vector Classier for Longitudinal Functional Neuroimaging Data," 17th annual meeting of the Organization for Human Brain Mapping (OHBM), Quebec City, Canada.

Zhang, L., Agravat, S., Derado, G., Chen, S., and Bowman, D. (2011). "BSMac: A MATLAB toolbox Implementing a Bayesian Spatial Model for Brain Activation and Connectivity," 17th annual meeting of the Organization for Human Brain Mapping (OHBM), Quebec City, Canada.

Chen, S. and **Bowman, D.** (2010). "A Bayesian Hierarchical Framework for Modeling of Resting-state fMRI Data," ENAR Spring Meeting, New Orleans, LA.

Derado, G., **Bowman, D.**, Guo, Y., and Kilts, C. (2010). "Predicting Post-baseline Brain Activity using a Bayesian Spatial Hierarchical Model," ENAR Spring Meeting, New Orleans, LA.

Schuster DM, Savir-Baruch B, Nieh PT, Master V, Halkar RK, Rossi P, Lewis M, **Bowman FD**, Yu W, Goodman MM (2010). Report of a clinical trial of anti-1-amino-3-[18F]fluorocyclobutane-1-carboxylic acid (anti-[18F]FACBC) PET-CT in recurrent prostate cancer. 2010 Society for Nuclear Medicine Annual Meeting, Salt Lake City, Utah.

Chen, S., Derado, G., Guo, Y., Mayberg, H., and **Bowman, D.** (2009). "Classification Methods for Identifying the Neural Characteristics of Antidepressant Treatment," Invited oral presentation at the Organization for Human Brain Mapping, 15th Annual Meeting, San Francisco, CA. Published *NeuroImage*, v. 47, p. S71.

Chen, S., Derado, G., Guo, Y., Mayberg, H., and **Bowman, D.** (2009). "Classification Methods for Identifying the Neural Characteristics of Antidepressant Treatment," Poster presentation at the Organization for Human Brain Mapping, 15th Annual Meeting, San Francisco, CA.

Chen, S., **Bowman, D.**, and Derado, G. (2009). "Connectivity Analysis Based on fMRI and DTI Brain Imaging Data," ENAR Spring Meeting, San Antonio, TX.

Derado, G. and **Bowman, D.** (2009). "Modeling the Spatial and Temporal Dependence in fMRI Data," ENAR Spring Meeting, San Antonio, TX.

Schuster, D. M., Savir-Baruch, B., Nieh, P. T., Votaw, J. R., Nye, J. A., Master, V., Halkar, R. K., **Bowman, F. D.**, Goodman, M. M. (2009). Initial report of a clinical trial of anti-1 amino 3 [18F]fluorocyclobutane-1-carboxylic acid (anti-[18F]FACBC) PET-CT in recurrent prostate cancer. 2009 Society for Nuclear Medicine Annual Meeting, Toronto, Canada.

Caffo, B., **Bowman, F. D.**, Bassett, S., and Kilts, C. (2008). "A Bayesian Hierarchical Framework for Spatial Modeling of fMRI Data," Organization for Human Brain Mapping, 14th Annual Meeting, Melbourne, Australia. Published *NeuroImage*, v. 41, p. S17.

Derado, G., Lee, K., Nicolis, O., **Bowman, F. D.**, Newell, M., Rugger, F. F., Vidakovic, B. (2008). "Wavelet-based 3-D Multifractal Spectrum with Applications in Breast MRI Images," 4-th International Symposium on Bioinformatics Research and Applications, Atlanta, GA.

Nye, J., Tudorascu, D., **Bowman, F. D.**, Santana, C., Faber, T., Votaw, J. (2007). A post-imaging method for correcting heart drift in PET/CT cardiac imaging**.** *Journal of Nuclear Medicine* 48(S2):50P-c.

Guo, Y., Pagnoni, G., **Bowman, F. D.** (2007). "Comparison of Methods of Group Independent Component Analysis for Multisubject fMRI Data," Organization for Human Brain Mapping, 13th Annual Meeting, Chicago, IL. Published *NeuroImage* v. 36, p. 124.

Derado, G., Nair, H. P., **Bowman, F. D.**, Drexler, K., Kilts, K. (2007). "Functional Activity Differences in Brain Regions Related to Emotional Regulation in Recovered Cocaine Addicts," Organization for Human Brain Mapping, 13th Annual Meeting, Chicago, IL. Published *NeuroImage* v. 36, p. 99.

Derado, G., **Bowman,D.**, Patel, R., Newell, M., and Vidakovic, B. (2007). Wavelet Image Interpolation (WII): A Wavelet-based Approach to Enhancement of Digital Mammography Images. International Symposium on Bioinformatics Research and Applications, Atlanta, GA.

Derado, G. and **Bowman, D.** (2007). "Modeling the spatial and temporal dependence in fMRI data: An application to an inhibitory control study of cocaine addicts," ENAR Spring Meeting, Atlanta, GA.

Clay, L. and **Bowman, D.** (2007). Examining the Effects of Ethanol on Neural Processing in the Human Brain. The NIMH Career Opportunities in Research (COR) Annual Colloquium, Albuquerque, New Mexico.

Patel, R., **Bowman, D.**, Guo, Y., and Derado, G. (2006). "Interpreting Experience-Based Cognition from fMRI: The Brain Activity Interpretation Competition," Joint Statistical Meetings, Seattle, WA.

Harenski, K., Alford, A., Gross, R., Ely, T., Drexler, K. , **Bowman, D.**, Kilts, C. (2006). "Effects of cocaine addiction and treatment-related cocaine abstinence on the neural representation of the inhibitory control of behavior," Organization for Human Brain Mapping, 12th Annual Meeting, Florence, Italy.

Patel, R. S., Van DeVille, D., **Bowman, F. D.** (2006). "Determining Significant Connectivity by 4D Spatiotemporal Wavelet Packet Resampling of Functional Neuroimaging Data." Organization for Human Brain Mapping, 12th Annual Meeting, Florence, Italy.

Guo, Y. and **Bowman, D.** (2006). "Prediction of post-treatment brain activity using a Bayesian Hierarchical Model," ENAR Spring Meeting, Tampa, FL.

Ely, T., **Bowman, D.**, Gross, R., Kilts, C. (2005). "The nonlinear neural representation of executive cognition in schizophrenia and dissociation of the effects of antipsychotic medications," Organization for Human Brain Mapping, 11th Annual Meeting, Toronto, Ontario.

Anawalt, B.D., Tenover, J.L., **Bowman, F.D.**, Bremner, W.J., Matsumoto, A.M., Page, S.T., Amory, J.K. (2005). "Exogenous testosterone (T) alone or with finasteride increases physical performance, grip strength, and lean body mass in older men with low serum T," Endocrine Society Meeting, San Diego, CA.

Patel, R. and **Bowman, D.** (2005). "A Bayesian Approach to Determining Connectivity of the Human Brain," invited talk in Topic Contributed Session, Joint Statistical Meetings, Minneapolis, MN.

Patel, R. and **Bowman, D.** (2005). "A Bayesian Approach to Determining Connectivity of the Human Brain," ENAR Spring Meeting, Austin, TX.

Patel, R., **Bowman, D.**, and Rilling, J. K. (2005). "A Bayesian Approach to Determining Connectivity of the Human Brain," Functional Imaging Analysis Contest (FIAC), Organization for Human Brain Mapping, 11th Annual Meeting, Toronto, Ontario.

Kilts, C., Ely, T., Gross, R., **Bowman, D.**, Nemeroff, C., Jarboe, K., Temple, L., Lewine, R. (2004). "The Neural Representations of Cognitive Deficits Associated with Schizophrenia." Janssen Pharmaceutica.

Robertson, D., Snarey, J., Ousley, O., Harenski, K., **Bowman, D.**, Gilkey, R., Kilts, C. (2004). "The Neural Basis of Moral Sensitivity." Paper presented to the Third Transatlantic Business Ethics Conference, Barcelona, Spain.

Page, S. T., Amory J. K., **Bowman, F. D.**, Anawalt, B. D., Matsumoto, A. M., Bremner, W. J., Tenover, J. L. (2004). "Exogenous Testosterone or Testosterone with Finasteride Increases Physical Performance, Grip Strength, and Lean Body Mass in Older Men with Low Serum Testosterone." International Congress of Endocrinology, Lisbon, Portugal.

Patel, R. and **Bowman, F. D.** (2004). "Exploring Spatial Relationships in PET Neuroimaging

Data," ENAR Spring Meeting, Pittsburgh, PA.

Ely, T. D., Gross, R. E., Temple, L., **Bowman, D.**, Kilts, C. (2003). "Comparative effects of risperidone and olanzapine pharmacotherapy on prefrontal cortical activations related to the cognitive mediation of behavior," American College of Neuropsychopharmacology Annual Meeting, San Juan, Puerto Rico.

Lyles, R.H., Manatunga, A.K., Moore, R.H., **Bowman, F.D.** (2003). "Improving Point Predictions of Random Effects for Subjects at High Risk: A Case Study", Joint Statistical Meetings of ASA and Biometric Society, San Francisco, CA.

Harenski, K., Robertson, D., **Bowman, D**., Snarey, J., Ousley, O., Gilkey, R., and Kilts, C. (2003). "The Neural Basis of Moral Intuition and Moral Reasoning." Organization for Human Brain Mapping, 9th Annual Meeting, New York, NY.

Robertson, D., Snarey, J., Ousley, O., Harenski, K., **Bowman, D**., Gilkey, R., Kilts, C. (2003). "The Neural Basis of Thinking Morally." Cognitive Neuroscience Society Annual Meeting, New York, NY.

Ely, T., Gross, R., **Bowman, D.**, Kilts, C. (2002). "Neural correlates of the effects of schizophrenia and atypical antipsychotic drug administration on working memory." Organization for Human Brain Mapping, 8th Annual Meeting, Sendai, Japan.

Educational and Outreach Presentations

Bowman, F. D. (2021). Featured speaker for the National Association of Medical Minority Educators (NAMME), "Diversity and Inclusion in Public Health."

Bowman, F. D. (2021). Featured panelist for CDC Undergraduate Public Health Scholars (CUPS) Program, Project Imhotep 40th Anniversary Sankofa (Looking Back, Moving Forward), (CUPS programs: Columbia University, Kennedy Keiger at John Hopkins, University of Michigan, University of California at Los Angeles (UCLA), and Morehouse College), July 26 – 28, 2021.

Bowman, F. D. (2020). "Data Science and Academic Leadership," Moderated by Rafael Irizarry, Dana Farber Cancer Institute Data Science.

Gary R Sullivan, Eli Lilly and Company, Nancy Geller, National Institutes of Health, Stacy Lindborg, Biogen, F. DuBois Bowman, Columbia University, Robert N. Rodriguez, SAS Institute. (2017). "The Leadership Journey for Statisticians," invited panel at the Joint Statistical Meetings, Baltimore, MD.

Bowman, F. D. (2016), "Opportunities in Biostatistics," Spelman College, Department of Mathematics, Atlanta, GA.

Bowman, F. D. (2016), "Precision Medicine Research," Men's Health: Abyssinian Baptist Church, New York, NY.

Bowman, F. D. (2016). Roundtable discussion leader at the Joint Statistical Meetings, "The Key

Role of Statistics in Neuroimaging: Challenges and Opportunities," Chicago, IL.

Bowman, F. D. (2016), "On the National Precision Medicine Initiative and Inclusive Participation," Abyssinian Baptist Church, New York, NY.

Bowman, F. D. (2015) "Statistical Methods for Analyzing Massive Neuroimaging Data Sets," invited speaker in Pre-conference Biostatistics Short Course at the Infinite Possibilities Conference, Oregon State University, Corvallis, OR.

Bowman, F. D. (2014). Roundtable discussion leader at the Joint Statistical Meetings, "Statistical Analysis of Neuroimaging Data: Past Methods, Current Challenges, and Opportunities".

Bowman, F. D. (2013), Invited *Grant Writing Panelist* at the ENAR Workshop for Junior Researchers, Orlando, FL.

Bowman, F. D. (2012), "Biostatistics and Brain Imaging," Atlanta University Center NIMH-COR, Emory University, Atlanta, GA.

Bowman, F. D. (2011), "Biostatistics and Brain Imaging," Atlanta University Center NIMH-COR, Emory University, Atlanta, GA.

Bowman, F. D. (2010), "Biostatistics and Brain Imaging," Summer Institute for Training in Biostatistics (SIBS), Emory University, Atlanta, GA.

Bowman, F. D. (2010), "Biostatistics and Brain Imaging," Atlanta University Center NIMH-COR, Emory University, Atlanta, GA.

Bowman, F. D. (2009), Invited *Grant Writing Panelist* at the ENAR Workshop for Junior Researchers, San Antonio, TX.

Bowman, F. D. (2008), Invited panelist at *Shared Success and Struggle Conference* of mathematicians from Morehouse College, sponsored by the National Security Agency (NSA) and Morehouse College, Atlanta, GA.

Bowman, F. D. (2007), "Academic Careers in Biostatistics," Project Imhotep, Morehouse College and Centers for Disease Control and Prevention, Atlanta, GA.

Bowman, F. D. (2007), "Graduate Programs in Statistics," STATFest: A Conference for Undergraduates, sponsored by Eli Lilly and the American Statistical Association, April 2007, Indianapolis, IN.

Bowman, F. D. (2007). "Academic Careers in Biostatistics," Public Health Sciences Institute, Morehouse College, Atlanta, GA.

Bowman, F. D. and Patel, R. (2006). "Methods for Determining Connectivity of the Human Brain," Biostatistics in Genetics, Immunology, and Neuroimaging (BGIN) Training Grant Research Workshop, Department of Biostatistics, Emory University.

Bowman, F. D., "Neuroimaging Statistics," NIMH-COR, Atlanta University Center, May 2006, Atlanta, GA.

Bowman, F. D., "Careers in Biostatistics," invited panelist at Eastern North American Region (ENAR) Spring Meeting, Fostering Diversity in Biostatistics Workshop, March 2006, Tampa, FL.

Bowman, F. D., Colloquium at the National meeting for Career Opportunities in Research (COR) program (sponsored by NIMH), Life After COR session, November 2005, Atlanta, GA.

Bowman, F. D., "Careers in Biostatistics," invited panelist at Infinite Possibilities Conference, Spelman College, April 2005, Atlanta, GA.

Bowman, F. D., "Neuroimaging Statistics," NIMH-COR, Atlanta University Center, Morehouse College, January 2004, Atlanta, GA.

Bowman, F. D., "Overview of Biostatistics and Biometry," invited speaker at Eastern North American Region (ENAR) Spring Meeting, Fostering Diversity in Biostatistics Workshop, March 2002, Washington, D.C.

Bowman, F. D., "Preparing Yourself for Meaningful Contributions in Public Health," invited speaker at The 129th Annual Meeting of American Public Health Association, October 2001, Atlanta, GA.

Bowman, F. D., "Using Statistics to Examine Human Brain Function," *Statistics in Academia* section of Mini STATFest: A Conference for Undergraduates, Hosted by Department of Mathematics, Spelman College, sponsored by American Statistical Association, Centers for Disease Control and Prevention, and Spelman College, November 2001, Atlanta, GA. Coordinators: Drs. Gladys Reynolds and Nagambal Shah.