University of Wisconsin–Madison • Department of History 5084 Mosse Humanities • 455 N. Park St. • Madison, WI 53706 bamcintosh@wisc.edu • orcid.org/0009-0001-2124-0164

July 31, 2025

# PhD Candidate • History of Science, Medicine, and Technology

University of Wisconsin-Madison, Madison, WI

Unevolved Sequence Space

Graduate Affiliate, Holtz Center for Science and Technology Studies

Dissertation: Genetic Associations: A Data-Centric History of the Social Genome, 1990-present

### **Education**

2022	M.A. • History of Science, Medicine, and Technology University of Wisconsin–Madison, Madison, WI Thesis: Abstraction, Data-Centric Biology, and Social Science after the Genome
2017	M.S. • Science Writing  Massachusetts Institute of Technology, Cambridge, MA  Thesis: SuperAgers: Do octogenarians with exceptional memory hold the key to healthy aging?
2016	B.A. • Chemistry • magna cum laude Princeton University, Princeton, NJ Thesis: Negative Selection with a de novo Library of Amphiphilic Peptides from

## **Professional Experience**

2022–2023	Editorial Assistant Social Studies of Science, Madison, WI
2016–2022	Freelance Science Reporter & Editor  Harvard Magazine; NOVAnext; Oceanus; Princeton Alumni Weekly; Science for the People Magazine; Tenderly
2018–2020	Science Communications Consultant Hertz Foundation; National High Magnetic Field Laboratory; Princeton University; University of Georgia
2017–2018	Communications Officer The Fannie & John Hertz Foundation, Livermore, CA

## **Publications**

## Peer-Reviewed

Al-Garawi, Z. S., <u>B. A. McIntosh</u>, D. Neill-Hall, A. A. Hatimy, S. M. Sweet, M. C. Bagley, and L. C. Serpell. **"The Amyloid Architecture Provides a Scaffold for Enzyme-like Catalysts."** *Nanoscale* 9, no. 30 (2017): 10773–83. doi.org/10.1039/C7NR02675G

#### Not Peer-Reviewed

2025 McIntosh, B. A. Review of Conley, D. The Social Genome: The New Science of

Nature and Nurture. June 2025, H-Sci-Med-Tech

2024 McIntosh, B. A. Review of Hoeyer, K. Data Paradoxes: The Politics of Intensified

Data Sourcing in Contemporary Healthcare. March 2024, H-Sci-Med-Tech.

## **Manuscripts**

In preparation McIntosh, B. A., K. Ichikawa, N. Nelson. "Adversarial reanalysis and the

challenge of open data in regulatory science." Preprint:

osf.io/preprints/metaarxiv/jfbr8\_v1

#### Conference Presentations and Invited Lectures

"Seeing like a meta-analysis: A data-driven history of GWAS consortia"

International Society for the History, Philosophy, and Social Studies of Biology meeting, Porto, PT.

Co-organizer with Kathryne Metcalf of panel "'Population' Revisited: Histories of an Idea in Human Genetics"

"Reducing or Reproducing: Precisely how are social categories geneticized?" European Social Science Genomics Network Conference, Bristol, UK

"Precisely how are social categories geneticized?"

The Advances in Social Genomics Conference, Madison, WI

"Managing Data, Managing Controversy: Data sharing in social genomics"

European Association for the Study of Science and Technology/Society for Social

Studies of Science, Amsterdam, NL

"Biobanks for Social Science? Data- and values-sharing between biobanks

and social genomics"

BIO-CONTEXT workshop: "Data flows? Making and Sharing Data in Biomedical

Research: Between Local and Cross-Border Practices," Athens, GR

2022 "Abstraction, Data-Based Biology, and Social Science after the Genome"

Midwest Junto for the History of Science, Ames, IA (Junto cancelled due to Covid)

2014 "Exploring the conformational space of a new domain in EcoR124I's

translocation-restriction subunit" (with P. Grinkevich, A.R. Li, R. Ettrich)

Summer School in Molecular Biophysics and Systems Biology, Nové Hrady, CZ

### **Teaching**

<u>Instructor of Record</u> • University of Wisconsin–Madison

2024 Bees, Trees, Germs, and Genes: A History of Biology†\*

<sup>†</sup> Online asynchronous \* Undergraduate introductory

## **Graduate Teaching Assistant** • University of Wisconsin–Madison

2024, 2021 **The Digital Age\*** (with Devin B. Kennedy)

2023 **Biology and Society, 1950-present**\* (with Nicole C. Nelson)

The Making of Modern Science\* (with Devin B. Kennedy)

#### **Grants & Awards**

2025 Doctoral Dissertation Research Improvement Grant, National Science Foundation

Summer Scholar Award, Holtz Center for Science & Technology Studies,

UW-Madison

John A. Neu Distinguished Graduate Fellowship, UW-Madison

2020 Top-up Award, Holtz Center for Science & Technology Studies, UW-Madison

2016 Fulbright Award (Host Institution: Lund University, Lund, SE); Declined

High Meadows Research and Communications Fellowship (Host Institution:

Climate Central, Princeton, NJ); Declined

### **Professional Service**

### **Peer Review**

Nature Human Behavior; Social Studies of Science

## **Other Service**

2024 Graduate Advisory Committee for faculty search, UW–Madison History Dept.

2020–2021 Publisher, Science for the People Magazine

### **Professional Affiliations**

International Society for the History, Philosophy, and Social Studies of Biology Society for the Social Studies of Science History of Science Society

# Professional Development & Non-Degree Coursework

The Discussion Project • Discussion-based pedagogy workshop, Wisconsin

Center for Education Research, UW-Madison

Qualitative Research Methods: Analyzing Data • Online course, MITx

Qualitative Research Methods: Conversational Interviewing • Online course,

MITx

2019 **Risk, Fortune, and Futurity •** Graduate seminar with William Deringer & Caley

Horan, MIT, Cambridge, MA

Societal and Political Implications of Technology • Graduate seminar with M. 2018 Roe Smith, MIT, Cambridge, MA

### Journalism & Public Writing

Princeton Alumni Weekly: "Blending Neuroscience and Psychiatry" 2022

Harvard Magazine: "Butterfly Wings in a New Light" • "Coastal Banks Shed Risky 2020 Mortgages—Putting the Financial System at Risk" • "Cornering COVID-19" • "Ghost Stories for the Apocalypse" • "An Interstellar Ribbon of Clouds in the Sun's Backyard"

> Princeton Alumni Weekly: "The Link Between Nature and Nurture in Teen Smoking" • "Physics Professor and Colleagues Develop New Respirator for COVID" • "Q&A: Laura Kahn on COVID's Spread and How We Defeat It" • "Scientists Consider Parallels in Climate, Conservation, and COVID-19" • "Small Ways to Keep COVID at Bay" • "Weather Cycles Boost Wind Farms"

Tenderly Magazine: "Don't let COVID-Induced Racism Protect American Animal Cruelty"

2019 Goodman, Daniel. Find Your Path: Unconventional Lessons from 36 Leading Scientists and Engineers, MIT Press (as contributing editor)

> Harvard Magazine: "Are Super Responders Special?" • "Cities Too Smart for Their Own Good?" • "A Crossroads in Biomedicine?" • "Gene Editing and Ethics" • "The Lost History of Iberia" • "The Science of Sex" (Profile of historian Sarah Richardson) • "Speciation is More Complicated than Darwin Could Have Imagined" • "There's (Still) No Gay Gene"

Princeton Alumni Weekly: "Bias, Quantified" • "Designs for an Uncertain Future" • "How Facts Are Distorted" • "Janet Vertesi on Fair Necessities" • "Troubling Online Shopping Habits? Vendors' Practices Might Be to Blame"

Science for the People Magazine: "Red Wine, a Fraying Order, and the Science Journalism We Need"

2018 Harvard Magazine: "Genetics and the Human Revolution"

> Princeton Alumni Weekly: "Looking at the Sun" • "Making Smart Machines Fair" (Profile of computer scientist Olga Russakovsky) • "A Species in the Making"

NOVA Next: "Common House Dust Could Contain Cancer-Causing Molecules"

Oceanus: "How do Fish Find Their Way?"

Princeton Alumni Weekly: "Domestic Dogs' Affability May Be Thanks to a Genetic Boost"

NOVA Next: "Ancient Cultural Exchanges May Have Driven Modern Human 2016 Behaviors" • "Emergency Response, Courtesy of Twitter" • "'Superaging': How Some 80-Year-Olds' Memories Are as Sharp as 20-Year-Olds'"

2017