# Dalton Robert George

## **EDUCATION**

Doctor of Philosophy: Forestry and Environmental Resources

Forthcoming, May 2022

North Carolina State University, Raleigh, NC

Master of Science: Science, Technology, and Society

June 2017

Drexel University, Philadelphia, PA

Bachelor of Science: Biological Science

May 2015

Minor: History, Philosophy, and Sociology of Science Lyman Briggs College at Michigan State University Michigan State University, East Lansing, MI

#### RESEARCH EXPERIENCE

#### Graduate Research Assistant, NC State

January 2018 - Present

Department of Forestry and Environmental Resources, Dr. Jason Delborne

 Project support on "Restoring Biotechnology's Moral Fiber? Genetically Modified American Chestnut Trees, Responsible Innovation, and Environmental Justice" (USDA Project #NYZ1139944)

#### Graduate Research Assistant, NC State

January 2018 – Present

Genetic Engineering and Society Center, Dr. Todd Kuiken

• Project support on "Qualitative Evaluations of the DIY Biosafety and Biosecurity Landscape" and "DIY Biosafety and Biosecurity Pilot Program"

# Graduate Research Assistant, Drexel University

July 2016 – July 2017

Drexel University Department of Sociology, Dr. Robert Brulle

- Project support on "Role of Information and Influence Campaigns in Structuring Public Responses to U.S. Policy, 1988-2015" (NSF Award #1558264) project
- Assembled and managed database of internet-based archival research
- Recruited and managed undergraduate research team through data collection and analysis
- Curated data for network analyses with software such as NodeXL and UNICET
- Assisted in preparing manuscripts for publication

#### Graduate Research Assistant, Drexel University

August 2016 - August 2017

Department of Sociology, College of Computing and Informatics, Dr. Kelly Joyce and Dr. Kris Unsworth

- Project support on "Ethics of Algorithms" (NSF Award #1338205) producing classroom resources for teaching ethics to engineering and computer science majors
- Coded and analyzed semi-structured interview data
- Collaborated with interdisciplinary team to conceive, write, and publish ethical case studies for National Academy of Engineering's "Online Ethics Center"
- Ran teaching simulations in graduate level computer science/engineering classrooms with case studies as objects of classroom instruction
- Assisted in preparing manuscripts for publication

## Contract Research Associate, Rennselaer Polytechnic Institute

May 2016 – Present

Department of Science Technology and Society, Dr. Kim Fortun

- Project Support on "Environmental Health Governance in Six Cities" project (NSF Award #1535888)
- Conducted independent research assignments on various aspects of Philadelphia environmental health policy
- Produced content for online collaborative ethnography research platform, theasthmafiles.org
- Performed qualitative data collection including semi-structured interviews and participant observation
- Assisted in preparing manuscripts for publication

#### Graduate Research Associate, Drexel University

January 2016 – Present

Philadelphia Health and Environment Ethnography Laboratory, Dr. Allison Kenner

- Project support on "Environmental Health Perceptions" project
- Performed qualitative data analysis duties using SPSS software
- Produced literature reviews and research summaries in fields of environmental health and policy

## Research Assistant, Michigan State University

September 2010 – May 2015

Potato Breeding and Genetics Laboratory, Dr. David Douches

- Responsible for the maintenance and upkeep of tissue culture materials, as well as the integration of new genetic breeding lines into tissue bank
- Maintained lab cohesion and efficiency through supply management, solution prep, and execution of universal molecular protocols
- Assisted in transitioning tissue culture materials through greenhouse and field phases of line development

#### **PUBLICATIONS**

1. Dalton George, Todd Kuiken, and Jason Delborne. (2020). "Articulating Free, Prior, and Informed Consent for Engineered Gene Drives: Sharing Power and Respecting Indigenous and Local Communities." Royal Society Proceedings B (Forthcoming)

- 2. Katie Barnhill-Dilling, Dalton George, Adam Kokotovich, Andrew Binder, Louie Rivers, and Jason Delborne. (2020) "Engineering and Engagement: Decision Phases for the Genetically Engineered American Chestnut Tree." Science, Technology, and Human Values (Forthcoming)
- Jason Delborne, Julie Shapiro, Mahmud Farooque, Tyler Ford, Dalton George, and Sonia Dermer. (2019). "Exploring Stakeholder Perspectives on the Development of a Gene Drive Mouse for Biodiversity Protection on Islands: Summary Report of Stakeholder Interviews." Genetic Engineering and Society Center, North Carolina State University. http://go.ncsu.edu/ges-gene-drive-landscape
- 4. Jason A. Delborne, Andrew R. Binder, Louie Rivers, Jessica Cavin Barnes, Katie Barnhill-Dilling, Dalton George, Adam Kokotovich, Jayce Sudweeks. (2018). "Biotechnology, the American Chestnut Tree, and Public Engagement Workshop Report". *Genetic Engineering and Society Center, North Carolina State University*.
- 5. Kelly Joyce, Kendall Darfler, Dalton George, Jason Ludwig, and Kristene Unsworth. (2018). "Engaging STEM Ethics Education." *Engaging Science, Technology, and Society* 4.
- 6. Online Ethics Center Case Studies: "Dalton George" Online Ethics Center for Engineering 11/27/2017 OEC Accessed: Monday, February 26, 2018 <a href="https://www.onlineethics.org/28824/44261.aspx">www.onlineethics.org/28824/44261.aspx</a>

#### **AWARDS AND HONORS**

Excellence in Science, Technology, and Society Prize – Drexel University (2017)

 Nominated and voted on by STS-affiliated faculty, the prize is presented to a STS graduate student who has demonstrated exemplary performance in research, academics and service to the STS program.

## **GRANTS AND FELLOWSHIPS**

AgBioFEWS National Research Traineeship – North Carolina State University (2019-2021)

 AgBioFEWS is a National Science Foundation funded graduate research training program offering PhD candidates across multidisciplinary fields of study the opportunity to examine the science, policy, and public engagement aspects and impacts of Agricultural Biotechnology on Food, Energy, and Water

Wilkinson Graduate Fellowship for Research Ethics – North Carolina State University (2018-2019)

- The Wilkinson Graduate Ethics Fellowship is a prestigious one-year award offered to one top new or continuing graduate student at NC State University in any discipline. The Fellowship is funded through an endowment given to the University by Walter H. Wilkinson, Jr.
- To be eligible for this fellowship, nominees must be in a course of study and/or engaged in a research project that focuses on professional ethics or responsible conduct in research.

# **CONFERENCES & WORKSHOPS**

Social Studies of Science in Society (4S) – New Orleans LA, September 2019

- Panel Chair and Session Organizer: "Reflecting on Reflexivity in Practice: Responsible Innovation, Engagement, and Governance" (3 Sessions)
- Presenter, Session #206
- Presentation Title: "Mapping Engagement for Emerging Technology: Decision Phases,
  Stakeholders, and the Genetically Engineered American Chestnut Tree"

Governance of Emerging Technology in Society (GETS) – Phoenix AZ, May 2019

- Concurrent Session 5.1: "Stakeholder Engagement"
- Presentation Title: "The Gene Drive Mouse and Generative Deliberation: Using Stakeholder Engagement to Explore Governance Possibilities"

Engaged Scholarship for Ethics and Responsible Innovation in STEM Fields – Raleigh NC, March 2018

- Workshop hosted by NCSU's Genetic Engineering and Society Center for sharing methods, outcomes, and experiences with engaged scholarship and learning for Ethics and RI in STEM
- Poster Presentation: "Data Grounded Fiction: An Engaged Method for Case Study Design"

STGlobal Conference – Washington DC, April 2016

- Discussion Panel B: "Creating Risky Populations"
- Presentation Title: "Constructing Risks, Rewards, and Trajectories of Gene Editing Technologies"

STGlobal Conference – Washington DC, March 2017

- Session 3: "Politics of Design"
- Presentation Title: "Case Study Design for the Ethics of Algorithms"

STGlobal Conference – Washington DC, March 2018

- Session 1a: "Ethics of Artifacts and Innovation"
- Presentation Title: "Restoring the American Chestnut: An Experiment in Responsible Innovation"

University Undergraduate Research and Arts Forum - Michigan State University, April 2014

• Presentation Paper: "Predatory sting rates: comparing the sexes of the sexually dimorphic Arizona Bark Scorpion, Centruroides vittatus."

## **ADDITIONAL ACTIVITIES**

# Graduate Student Association (Multiple Roles)

August 2018 – Present

North Carolina State University

- 1. Treasurer Forestry, and Environmental Resources Chapter
  - a. Applied for and managed funds and accounts for departmental student organization
  - **b.** Planned and facilitated social and professional development events for departmental graduate students
  - **c.** Coordinated collaboration between student organization and university administration to provide personal and professional services to graduate students

#### 2. All-Council Representative – Forestry and Environmental Resources Chapter

- **a.** Represented departmental graduate student interests at university-wide student organization council meetings
- **b.** Disseminated new developments and information from meetings to the departmental chapter

# 3. Chair of Community and Social Engagement Committee

- **a.** Presided over university student organization committee responsible for planning and facilitating university-wide social and community service events for graduate students
- **b.** Coordinated collaboration with university administration and local institutions to provide service and social opportunities for graduate students
- c. Reported developments back to executive committee, and all-council body

## Drexel University Delegate to the United Nations

Marrakech, Morocco - November 2016

Twenty Second Session of the United Nations Conference of the Parties

- Represented Drexel University at United Nations Global Climate Change Conference
- Attended presentations, workshops, and negotiations centered around climate politics
- Reported conference proceedings back to Drexel University
- Facilitated educational workshops at Drexel University related to climate change and UN COP proceedings

#### **Student Coordinator**

January 2016 – August 2016

Center for Science, Technology, and Society – Drexel University

- Facilitated STS Center colloquium series "STS Works in Progress"
- Assisted in Coordinating STS Center Lecture Series
- Student ambassador to invited presenters

#### **Graduate Student President**

September 2016 – June 2017

The STS Collective – Drexel University Graduate Student Association

- Planned, Organized, and facilitated Graduate Student Group meetings/ social activities
- Budget management and renewal