REBECCA A. HARRISON

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EDUCATION

Cornell University — Ithaca, NY — Aug. 2016 – May 2024 (Expected)
Ph.D. Candidate, Science & Technology Studies; M.A. 2019
Dissertation title: *"Safe sex for insects" and other scientist stories: Land-grants, responsibilities, and agricultural (bio)technologies*

Rensselaer Polytechnic Institute — Troy, NY — Aug. 2014 – May 2016
Graduate-level coursework, Science & Technology Studies
Rensselaer Graduate Fellowship

Cornell University — Ithaca, NY — Fall 2010 – May 2014
B.S., Animal Science (Minors: Science & Technology Studies; English)

TEACHING

Science & Society Topics: Food-Flix & Chill — Spring 2019 *and* Fall 2021
First-year Writing Seminar – Cornell University
Instructor of Record

- Independently designed first-year writing seminar, which was taught to 16 students in the Spring of 2019 and 17 students in Fall 2021. Taught remotely on Zoom in 2021.
- Led students through extensive reading and writing on issues in the mutual shaping of science and society in agriculture, drawing extensively on campus resources and film analysis.

Ethics & The Environment — Spring 2018 *and* Spring 2020
Biology & Society lecture course — Cornell University
Teaching Assistant

- Assisted lead faculty instructor in lecture design, writing assignment prompts, and grading.
- Independently drafted lesson plans for leading small-group discussion sections weekly
- Brought face-to-face course into an online learning environment in response to mid-semester pandemic conditions in Spring 2020. Built a more reflective, empathetic pedagogy, experimented with teaching technologies, and became a better advocate for students.
- Worked with select students to prepare their final projects on climate change, coronavirus, and environmental justice as a Special Issue in the Fall 2020 *Minding Nature* journal.

Science & Society Topics: Stories of (Agri)Culture — Fall 2017 *and* Fall 2019
First-year Writing Seminar – Cornell University
Instructor of Record

- Independently designed first-year writing seminar, which was taught to 17 students in the Fall of 2017 and Fall 2019.

- Lead students through extensive reading and writing on issues in the mutual shaping of science and society in agriculture, drawing extensively on campus resources and archives.

Science & Politics of the GMO Fall 2015 *through* Spring 2017
edX Massive Open Online Course — Cornell University
Teaching Assistant

- Designed course curriculum for Cornell University's (Sept. 2016) EdX MOOC on the science and politics of genetically modified organisms.
- Developed written, information graphic, video, and interview content on topics ranging from fundamentals of plant breeding to biopiracy, ethics, and the limitations of science.
- Center for Teaching Excellence, Scholarship of Teaching and Learning Practitioner Program

West Africa Centre for Crop Improvement, University of Ghana, Legon January 2016
Lecturer, Advanced training module on "Scientific Communication"

- Developed weeklong scientific writing training curriculum for plant biology Ph.D. students as part of communication specialist role in International Programs, Cornell University.
- Delivered in collaboration with library resources module in January 2016 workshop.

Arizona State University Consortium for Science, Policy & Outcomes Summer 2015
Teaching Assistant, Science Outside the Lab

- Served as teaching assistant for the Policy, Science, Technology, and Society Scholars summer (POSTSS) Program, held in Washington, D.C. and led by Arizona State University.
- Assisted faculty by creating an informal learning environment to increase the participation of underrepresented minority undergraduate students in STS and Policy Studies.

Guest Lectures

PLSCI 3940: Skills for Public Engagement — Cornell University, Springs 2016-2020
Social media use in public engagement in controversial science communication environments

BSOC 2061: Ethics & the Environment — Cornell University, Spring 2018
Ecological restoration in 2018

PLBIO 3430: Molecular Bio & Genetic Engineering of Plants — Cornell University, Spring 2016
Social Implications: Why is there a GMO debate?

PUBLICATIONS

Anthony, R., Bauchspies, W., Blue, G., Das, A., **Harrison, R.,** Henke, C., Kendig, C., Kuzma, J., Lipschitz, F., Jin, S., Richter, K., Ruelle, M., Selfa, T., Silberg, T., Takahashi, B. Thompson, P. (2022). "The need for more inclusive deliberation on ethics and governance in food biotechnology," [Under review] *Journal of Responsible Innovation.*

Pritchard, S., **Harrison, R.,** Domingues, A. (2020). Introduction: Climate change, coronavirus, and environmental justice. *Minding Nature, 13*(3), 13-17.

Pritchard, S., **Harrison, R.,** Domingues, A. Eds. (2020). Climate Change, coronavirus, and environmental justice: A collection of undergraduate creative projects. *Minding Nature*, *13*(3), 18-53.

Harrison, R., Kinchy, A., Rabinow, L. (2017). "GE Food: A changing political economy," in *The Routledge Handbook of the Political Economy of Science.* Routledge.

PRESENTATIONS

Harrison, R., "Synthesizing visions of the internet of living things and its applications." Cornell University College of Engineering Diversity Programs, CATALYST Academy. Cornell University. (21 July 2023).

Harrison, R. [moderator], "Fireside Chat: A conversation with science communicators." Boyce Thompson Institute. (5 July 2023).

Harrison, R. and O. Okpala, "Engaging with social and ethical issues throughout the scientific method." A workshop with Boyce Thompson Institute-NSF Research Experience for Undergraduates in plant genomics. (14 June 2023).

O'Donnell, E., **R. Harrison,** A. Johnson, M. Frank, B.V. Lewenstein, "Identifying and deconstructing barriers to social and ethical engagement in scientific spaces." Annual Meeting, National Science Foundation Science & Technology Center for Research on Programmable Plant Systems (CROPPS). Cornell University. (10 Oct. 2022).

O'Donnell, E., **R. Harrison,** A. Johnson, M. Frank, B.V. Lewenstein, A. Widmier, "Deconstructing and visualizing barriers: comparing social engagement in science to intercellular communication in tomato plants." NSF Research Experience for Undergraduates George and Helen Kohut Symposium, Boyce Thompson Institute. (4 Aug. 2022).

Harrison, R. and E. O'Donnell**,** "Synthesizing visions of the internet of living things and its applications." Cornell University College of Engineering Diversity Programs, CURIE Academy. Cornell University. (22 July 2022).

Harrison, R. and E. O'Donnell, "Engaging with social and ethical issues throughout the scientific method." A workshop with Boyce Thompson Institute-NSF Research Experience for Undergraduates in plant genomics. (20 July 2022).

Harrison, R. and B.V. Lewenstein, "Visions of digital biology." NSF Science & Technology Center for Research on Programmable Plant Systems, Visions Seminar. Cornell University. (21 Feb. 2022).

Harrison, R., "Improving the social impact of digital agriculture by understanding and aiding the land-grant scientist." Cornell Institute for Digital Agriculture Workshop. Ithaca, NY. (12 Oct. 2021).

Harrison, R., "Cultivating space and propagating questions: Reimagining the interview as a site of science studies intervention." Society for the Social Studies of Science Conference. Toronto, Canada. (7 Oct. 2021).

Harrison, R. "When teaching the 'Science & Politics of the GMO' MOOC is itself political" Poster presentation at the Teaching as Research National Conference hosted at Cornell University. Ithaca, NY. (June 2017).

Harrison, R. "Standing up for science: Making & erasing boundaries between research, science communication, and advocacy." Presented in satisfaction of part of Second Year Project during the Cornell Science & Technology Studies Science Studies Reading Group. Ithaca, NY (April 2017).

Harrison, R. "'Standing up for science': The blurring lines between biotechnology research, science communication, and advocacy." Presented at the annual meeting of The Association for Education in Journalism and Mass Communication (AEJMC). Minneapolis, Minnesota (Aug. 2016).

Delborne, J. and **Harrison, R.** "Boasting chestnuts: GM trees, responsible Innovation, & anticipatory governance." Presented by Delborne at the meeting of the Society for the Social Studies of Science. Denver, Colorado (Nov. 2015).

Harrison, R. "The American Chestnut: Engineering a new conceptualization of biotechnology governance." Presented at the Atlanta Conference on Science and Innovation Policy. Atlanta, Georgia (Sept. 2015).

Harrison, R. "The American Chestnut: A case study." Presented at the National Academy of Sciences Public Interfaces of the Life Sciences Roundtable workshop, "When Science and Citizens Connect: Public Engagement on GMOs," Washington, D.C. (Jan. 2015).

GRANTS

Cornell Institute for Digital Agriculture, Research Innovation Summer Grant, 2021 — $9,750

National Science Foundation Doctoral Dissertation Research Improvement Grant: "'Safe sex for insects' and other stories: How land-grant scientists configure and enact their roles in working with controversial agricultural biotechnologies" (Award # 2043572), 2021 — $10,000

Qualitative & Interpretive Research Institute, Cornell Center for Social Sciences, 2020 — $600.00

Timothy Murray Graduate Travel Grant, Cornell Society for the Humanities, 2020 — $1,000

National Science Foundation Science & Technology Studies Program Collaborative Grant, "Restoring biotechnology's moral fiber? GM chestnut trees, responsible innovation, and environmental justice," with PI Jason Delborne (North Carolina State University). August 2016-July 2019. NSF Award # 1632570 — $320,000

AWARDS

The Teaching Portfolio Award for Graduate Student Instructors of First-Year Writing Seminars, Cornell University Knight Institute for Writing in the Disciplines (2021)

Cornell Department of Science & Technology Studies' Abraham Zito Boczkowski Award for Outstanding Teaching by a Graduate Student (2021)

Cornell Graduate Diversity and Inclusion Award, Special Recognition for COVID-19 Reopening Committee Advocacy (2020)

Knight Institute Information Literacy Assignment Sequence Prize, Knight Institute for Writing in the Disciplines. "Science, Society, and Special Collections: Stories of agriculture and archives." Awarded in January 2020 for work completed in Fall 2019 First-year writing seminar.

National Science Foundation, Graduate Research Fellowship Program — Honorable Mention (2016)

National FFA Organization — State Star in Agricultural Placement (2009); American Degree (2011)

PROFESSIONAL EXPERIENCE (selected)

NSF Center for Research on Programmable Plant Systems (CROPPS) May 2021-present
Research Assistant — Cornell University

- Assist in preliminary work for the "Social and Ethical Engagement with Digital Biology" (SEED) group.
- Use social science tools such as participant observation, focus groups and interviews to identify opinions about digital biology held by different groups and track changes over time.
- Assess the effect of public engagement on CROPPS visions to test the hypothesis that public engagement (and reflexive engagement of scientists, in particular) leads to more productive development of research projects and outcomes.
- Hosted and mentored Boyce Thompson Institute-CROPPS NSF Research Experiences for Undergraduates (REU) students in 2022 and 2023.
    - 2022: "*Deconstructing and visualizing barriers: Comparing social engagement in science to intercellular communication in tomato plants*." Recipient of "Best Poster Award."
    - 2023: "*Grafting: Affixing rootstock to scion and joining local expertise with scientific knowledge to enhance plant performance and public engagement."*
    - These projects served as a pilot study for Harrison's post-doctoral research project.

International Programs, Cornell College of Agriculture & Life Sciences 2014-2016
Communications Specialist — Cornell Alliance for Science

- Engaged with actors in the global agricultural biotechnology development community (scientists, journalists, policymakers, farmers) and the "public" via daily social media updates; use social media analytics tools to quantitatively track engagement and impact.

- Generated original content for promoting website and communications training initiatives.
- Led training workshops on use of digital communications tools in science communication.
- Represented organization at professional meetings, including the International Conference on Global food Security and the annual meetings of the American Society of Plant Biologists, American Association for the Advancement of Science, and the World Federation of Science Journalists.

The White House, Office of Science & Technology Policy Spring 2013

Intern — Washington, D.C.

- Compiled evidence for, assembled, and edited policy memos on agricultural biotechnology.
- Designed hands-on STEM-related projects to be incorporated into elementary classrooms.
- Participated in STEM meetings held in OSTP, as well as across government and industry.
- Participated in activities surrounding oversight and regulation of emerging technologies.

Cornell University Department of Animal Science 2011-2013

Research and Teaching Assistant

- Assisted on a variety of PRO-DAIRY projects, ranging from dairy cow comfort, manure management cost analysis, and anaerobic/biogas digestion feasibility studies.
- Responsibilities included: data input, literature reviews, spreadsheet design, and on-farm data collection and analysis used to advise farmers and policymakers.
- Teaching Assistant, ANSC 2500: Dairy Cattle Principles, an introductory course to the background and scientific principles relating to dairy cattle production, as well as the social, economic, and ethical influences on local and global dairy industries. Prepared and implemented laboratories, participated in class field trips, and hosted exam review sessions.

Cornell University Cooperative Extension Summer 2011

Forage Quality and Feed Management on Dairies, Intern — Lewis & Jefferson Counties, NY

- Worked with a variety of dairy farm initiatives to help promote and improve forage quality and feed management nutrition practices.
- Performed forage management assessment and worked with Cornell University faculty to interpret data and develop recommendations for participating farms in the two-county area. Studied recent literatures on forage quality and feed management and its impacts on a farm's efficiency, profitability, and environmental footprint.
- Data collection included assessment of forage harvests, storage practices, and forage sampling for quality analysis. Collected information was used to (1) provide each farm with assessments of their forage management practices compared to recognized industry benchmarks; (2) enhance existing datasets to better understand how overall farm management factors affect forage quality; (3) to develop criteria for a forage judging system to be used in an educational forage quality competition in Northern New York.
- Assisted in a calf feeding study on engineering group feeding systems to decrease labor costs and increase efficiency of dairy calf production. Compared calves reared in traditional, individual pens versus those reared in groups, on three different farms.

PROFESSIONAL ACTIVITIES & SERVICE

Cornell University governance activities and service:

- Voting member, General Committee of the Graduate School (2017-2021)
- Member, University Hearing & Review Board (2020-2021)
- Student representative, Cornell University's Fall 2020 COVID-19 Reopening Committee: Provost's Committee on Teaching Reactivation (2020)
- Graduate representative, Committee for Campus-Constituency-Elected Trustees (2020-2022)
- Arts & Humanities Division Chief, Graduate & Professional Student Assembly (2019-2020)
- Arts & Humanities Voting Member, Grad & Professional Student Assembly (2017-2020)
- S&TS Field Representative, Graduate & Professional Student Assembly (2016-2019)

Cornell University Center for Teaching Innovation, Graduate Fellow (2019)

Cornell University Department of Science & Technology Studies, weekly Science Studies Reading Group (SSRG) organizer and moderator (2017-2018)

Cornell University Center for Teaching Innovation, Scholarship of Teaching and Learning Practitioner Program (2016-2017)