

# Dr. Kathryn S. Plaisance

Associate Professor & Chair  
Department of Knowledge Integration  
Cross-appointed to the Department of Philosophy  
Cross-appointed to the Department of Psychology  
University of Waterloo  
[kathryn.plaisance@uwaterloo.ca](mailto:kathryn.plaisance@uwaterloo.ca)

## Degrees

- 2006 Ph.D., Philosophy (minor in Bioethics), University of Minnesota  
*Dissertation:* “Behavioral Genetics and the Environment: The Generation and Exportation of Scientific Claims”
- 2004 M.A., Philosophy, University of Minnesota
- 2000 B.S., Molecular Biology and Philosophy, University of Wisconsin-Madison

## Professional Employment

- 2023-present Department Chair, Department of Knowledge Integration, University of Waterloo
- 2016-present Associate Professor, Department of Knowledge Integration, University of Waterloo  
(*Cross-appointed to the Departments of Philosophy & Psychology*)
- 2013-2019 Associate Chair, Undergraduate Studies, Department of Knowledge Integration
- 2009-2016 Assistant Professor, Department of Knowledge Integration, University of Waterloo
- 2007-2009 Postdoctoral Research Fellow, Center for Philosophy and Ethics of Science,  
Leibniz Universität Hannover, Germany

## Areas of interest

Engaged philosophy of science, philosophy of the human behavioral sciences, social epistemology, interactional expertise, interdisciplinary collaboration, the science of team science.

## Awards

- 2022 Ontario Undergraduate Student Alliance (OUSA) Teaching Excellence Award
- 2021 Ontario Confederation of University Faculty Associations (OCUFA) Teaching Award
- 2020 Outstanding Performance Award, University of Waterloo
- 2016 Distinguished Teacher Award, University of Waterloo

### Research Grants – Active

Co-PI, SSHRC Partnership Grant, “Experiential Learning Toolkits to Increase Social Sciences, Humanities, and Arts (SSHA) Capacity for Research and Innovation in the Social Sector,” \$2,500,000, 2024-30. (PI: Sandra Lapointe)

PI, SSHRC Insight Grant, “Engaging Science with Philosophy: Best Practices for Fostering Effective Collaboration,” \$188,179, 2020-26.

Co-PI, SSHRC Insight Development Grant, “Inventory of Models and Practices in Community Focused and Interdisciplinary Social Sciences and Humanities Research,” \$60,764, 2021-24. (PI: Sandra LaPointe)

### Research Grants – Completed

PI, UW/SSHRC Explore Grant, “Developing a Collaborative Mindset: The Importance of Psychological Safety, Epistemic Humility, and Valuing Diverse Perspectives,” \$6978, Sept 2019 – Dec 2022.

Co-PI, Genetics & Human Agency Grant (funded by the Templeton Foundation), “Understanding ‘What Could Be’: Heritability in Randomized Twin Design,” \$550,000 CAD, Jan 2017 – Dec 2019. (PI: S. Alexandra Burt)

PI, SSHRC Insight Development Grant, “Increasing the Impact of Philosophy of Science in Scientific Domains,” \$59,302 CAD, June 2016 – Dec 2018. (Co-PI: John McLevey)

PI, UW International Research Partnership Grant, “Communities of Integration,” \$18,000 + \$52,000 in matching funds, Jan 2014 – Aug 2016.

### Publications (\* indicates student co-author)

#### Refereed Journal Articles

**Plaisance, Kathryn S.**, Christine Logel, and Christopher Lok (2024). “Making Collaboration Work: Fostering Positive Attitudes and Experiences around Psychological Safety, Diversity, and the Value of Teamwork,” *Canadian Journal for the Scholarship of Teaching and Learning*.

**Plaisance, Kathryn S.**, and Kevin Elliott (2021). “A Framework for Analyzing Broadly Engaged Philosophy of Science,” *Philosophy of Science*, 88(4): 594-615.

**Plaisance, Kathryn S.** Jay Michaud\*, and McLevey, John (2021). “Pathways of Influence: Understanding the Impacts of Philosophy of Science in Scientific Domains,” *Synthese*, 199: 4865-4896.

**Plaisance, Kathryn S.** (2020). “The Benefits of Acquiring Interactional Expertise: Why (Some) Philosophers of Science Should Engage Scientific Communities,” *Studies in History and Philosophy of Science Part A*, 83: 53-62.

Burgoyne, AP\*; Carroll, S; Clark, DA; Hambrick, DZ; **Plaisance, KS**; Klump, KL; Burt, SA. (2020). “Can a Brief Intervention Alter Genetic and Environmental Influences on Psychological Traits? An Experimental Behavioral Genetics Approach,” *Learning and Motivation*, 72.

**Plaisance, Kathryn S.**, Alexander V. Graham\*, John McLevey, and Jay Michaud\* (2019). “Show Me the Numbers: A Quantitative Portrait of the Attitudes, Experiences, and Values of Philosophers of Science Regarding Broadly Engaged Work,” *Synthese*, 198: 4603-33.

Burt, S. Alex, **Kathryn S. Plaisance**, and Zach D. Hambrick (2019). “Understanding ‘What Could Be’: A Call for Experimental Behavioral Genetics,” *Behavior Genetics*, 49: 235-243.

McLevey, John, Alexander V. Graham\*, Reid McIlroy-Young\*, Pierson Brown\*, and **Kathryn S. Plaisance** (2018). “Interdisciplinarity and Insularity in the Diffusion of Knowledge: An Analysis of Disciplinary Boundaries Between Philosophy of Science and the Sciences,” *Scientometrics*, 117: 331-349.

**Plaisance, Kathryn S.**, and Eric B. Kennedy\* (2014). “A Pluralistic Approach to Interactional Expertise,” *Studies in the History and Philosophy of Science Part A*, 47: 60-68.

**Plaisance, Kathryn S.**, Thomas A.C. Reydon, and Mehmet Elgin (2012). “Why the (Gene) Counting Argument Fails in the Massive Modularity Debate: The Need for Understanding Gene Concepts and Genotype-Phenotype Relationships,” *Philosophical Psychology*, 25(6).

Fehr, Carla, and **Kathryn S. Plaisance** (2010). “Socially Relevant Philosophy of Science,” *Synthese*, 177(3): 301-316.

#### Chapters in Books

**Plaisance, Kathryn S.** (forthcoming), “Socially Engaged Philosophy of Science,” *Routledge Handbook of the History of Philosophy of Science*. Routledge.

**Plaisance, Kathryn S.**, and Thomas A.C. Reydon (2012). “The Philosophy of Behavioral Biology,” *Boston Studies in the Philosophy of Science*, 282: 3-24. Springer Press.

#### Books and Edited Volumes (refereed)

**Plaisance, Kathryn S.**, and Thomas A.C. Reydon, eds. (2012). “Philosophy of Behavioral Biology,” *Boston Studies in the Philosophy of Science*, vol. 282. Springer Press.

**Plaisance, Kathryn S.**, and Carla Fehr, eds. (2010). “Making Philosophy of Science More Socially Relevant,” *Synthese* [special issue], 177(3): 301-492.

#### Research Reports

Lapointe, Sandra, Shannon Boss, **Kathryn S. Plaisance**, Christian Dagenais (2024). “Community Innovation and Impact in University-Based Social Sciences, Humanities and Arts: Report and Discussion Paper,” <https://collaborativessh.humanities.mcmaster.ca/wp-content/uploads/2024/04/Community-Innovation-and-Impact-in-SSHA.pdf>.

## Presentations of Scholarly Work (\* indicates student co-author)

(For Scholarship of Teaching and Learning presentations, see the following section)

### Invited Talks

**Plaisance, Kathryn S.**, “Making Collaboration Work: Lessons from a Study on Teaching Students How to Collaborate in Diverse Teams.” INTEREACH: Interdisciplinary Integration Research Careers Hub panel, March 2024.

**Plaisance, Kathryn S.**, “The Science of Team Science: Building Effective and Inclusive Teams.” *University of Nevada, Reno*, December 2023.

**Plaisance, Kathryn S.**, and Sara Doody, “What ‘Counts’ as Good Science? The Role of Disciplinary Habitus in Restricting Diverse Approaches to Science.” *Workshop on “Credit, Diversity, and Research Quality in Science,” University of Barcelona*, April 2023.

**Plaisance, Kathryn S.**, “Psychological Safety for Whom? Integrating Feminist Epistemology & Philosophy of Science with Research on Collaboration & Teamwork.” McMaster University, Department of Philosophy, March 2022.

**Plaisance, Kathryn S.** “The Science of Team Science: How to Foster Productive Collaboration in Interdisciplinary Team Science.” University of Toronto-Mississauga, Department of Biology, December 2021.

**Plaisance, Kathryn S.** and Kevin C. Elliott, “A Framework for Broadly Engaged Philosophy of Science.” *Socially Relevant Philosophy of/in Science and Engineering (SRPoiSE) conference*, May 2021.

**Plaisance, Kathryn S.**, “Making Collaboration Work: The Importance of Deliberate Practice.” *Science of Team Science conference*, online (due to COVID), June 2020.

**Plaisance, Kathryn S.**, “The Collaborative Skills Gap.” Lyman Briggs College, Michigan State University. February 2020.

### Refereed Conference Presentations

**Plaisance, Kathryn S.** and Sara Doody, “What Makes Collaborations Between Philosophers and Scientists Work? Perspectives from Scientists and Engineers.” *International Society for the History, Philosophy, and Social Studies of Biology (ISHPSSB)*, Toronto, July 2023.

**Plaisance, Kathryn S.** and Sara Doody, “In Their Own Words: What Scientists and Engineers Say about Their Collaborations with Philosophers of Science.” *Philosophy of Science Association*, November 2022.

**Plaisance, Kathryn S.** and Sara Doody, “Better Science with Philosophy: The Challenges and Benefits of Including Philosophers of Science on Science Teams.” *Science of Team Science (SciTS)*, August 2022.

**Plaisance, Kathryn S.**, “Integrating Methods in the Human Behavioral Sciences: Implications for Scientific Pluralism.” *Philosophy of Science Association, Society for Philosophy of Science in Practice Cognate Session*, November 2021.

**Plaisance, Kathryn S.** and Payton Mikrogianakis\*, “Psychological Safety for Whom? Why We Need to Attend to Diversity, Status, and Power Dynamics in Science Teams.” *Science of Team Science (SciTS)*, June 2021. (Presented as a pre-recorded splash talk.)

**Plaisance, Kathryn S.** and Kevin C. Elliott, “A Framework for Analyzing Broadly Engaged Philosophy of Science.” *Public Philosophy Network (PPN)*, Lansing, Michigan, October 2019.

**Plaisance, Kathryn S.**, John McLevey, Alexander V. Graham\*, and Janet Michaud\*, “Enhancing Our Understanding of the Relationship Between Philosophy of Science and the Sciences: Results from a Survey.” *Philosophy of Science Association (PSA)*, Seattle, Washington, Nov 2018. (Poster designed and presented by K. Plaisance)

**Plaisance, Kathryn S.**, John McLevey, Alexander V. Graham\*, and Janet Michaud\*, “Enhancing Our Understanding of the Relationship Between Philosophy of Science and the Sciences: Results from a Survey.” *International Consortium for Socially Relevant Philosophy of/in Science and Engineering (SRPoiSE)*, Atlanta, Georgia, June 2018. (Presented by K. Plaisance)

**Plaisance, Kathryn S.**, “An Empirical Portrait of Engaged Philosophy of Science.” *Philosophy of Science Association, SRPoiSE Cognate Session*, Chicago, November 2018.

**Plaisance, Kathryn S.**, John McLevey, and Janet Michaud\*, “Investigating the Impact of Philosophy of Science in Scientific Domains.” *Public Philosophy Network (PPN)*, Boulder, Colorado, February 2018. (Presented by K. Plaisance)

**Plaisance, Kathryn S.** and Janet Michaud\*, “The Goals of Philosophy of Science (with Respect to Science)” *SRPoiSE*, Dallas, Texas, May 2016.

**Plaisance, Kathryn S.**, “Leveraging Diversity in Interdisciplinary Collaboration and Team Science: Theoretical and Empirical Considerations”, *SciTS*, May 2016.

**Plaisance, Kathryn S.**, and John McLevey, “Mapping the Uptake of Philosophy of Science,” *SRPoiSE*, Detroit, Michigan, March 2015.

**Plaisance, Kathryn S.**, and Robert Gorbet, “Overcoming Institutional Barriers to Interdisciplinary Collaboration” (co-written with Rob Gorbet), *SRPoiSE*, Detroit, Michigan, March 2015.

**Plaisance, Kathryn S.**, “A Feminist Approach to Facilitating Interdisciplinary Collaboration: A Re-evaluation of the Toolbox Project”, *Philosophy of Science Association, SRPoiSE session*, Chicago (given in absentia by symposium co-organizers), November 2014.

**Plaisance, Kathryn S.**, “A Feminist Approach to Facilitating Interdisciplinary Collaboration: A Re-evaluation of the Toolbox Project”, *FEMMSS*, University of Waterloo, August 2014.

Non-refereed Conference Presentations

Burt, S. Alex, **Kathryn S. Plaisance**, and Zach D. Hambrick, “Understanding ‘What Could Be’: Heritability in a Randomized Twin Design – Methods” *Genetics and Human Agency annual meeting*, Charlottesville, VA, May 2018. (Presented by **K. Plaisance**)

Burt, S. Alex, **Kathryn S. Plaisance**, and Zach D. Hambrick, “Understanding ‘What Could Be’: Heritability in a Randomized Twin Design – Proposed Project” *Genetics and Human Agency annual meeting*, Charlottesville, VA, May 2018.

**Scholarship of Teaching and Learning (SoTL)**SoTL Presentations (refereed)

Mitchell, Carrie, **Kathryn S. Plaisance**, and Christine Logel, “Wellbeing in Student Education and Research (WISER).” *University of Waterloo Teaching and Learning Conference*, May 2024.

Aragón, Lina\*, and **Kathryn S. Plaisance**, “Improving Team Science Education and Training: Lessons from a Course on Interdisciplinary Collaboration.” *Science of Team Science (SciTS)*, August 2022. Conference Poster.

**Plaisance, Kathryn S.**, Alexis Hill, Payton Mikrogianakis, and Bridget Truchon, “Teaching Collaboration as an Essential Skill: Student & Instructor Reflections on Key Concepts, Theories, and Practices for Effective Teams.” *Science of Team Science*, June 2021. Conference Panel.

**Plaisance, Kathryn S.**, “Using Pre-course Surveys to Identify Students' Needs, Interests, and Prior Knowledge.” *Faculty Summer Institute: Rebooting Students' Experiences*, May 2021.

**Plaisance, Kathryn S.**, Christopher Lok\*, and Christine Logel, “Closing the Collaborative Skills Gap: Assessing the Effectiveness of a University-Wide Course Designed to Teach Students How to Work in Diverse Teams.” *Science of Team Science*, Lansing, Michigan, May 2019.

**Plaisance, Kathryn S.**, Christopher Lok\*, and Christine Logel, “Closing the Collaborative Skills Gap: How to Enhance Group Work in the Classroom.” *University of Waterloo Teaching & Learning Conference*, May 2019.

LaMarre, Georgia\*, Akanksha Madan\*, Shane Morganstein\*, and **Kathryn S. Plaisance**, “Teaching Teamwork to Undergraduate Students: A Joint Faculty-Student Pilot Project at the University of Waterloo,” *Science of Team Science*, May 2016.

SoTL Grants (refereed)

Co-PI, UW Learning Innovation and Teaching Enhancement (LITE) grant, “WISER at Waterloo: Implementing and Evaluating Evidence-Based Practices for Student Wellbeing, Belonging, and Equity,” \$7500, 2024-26. (PI: Carrie Mitchell, School of Planning)

PI, UW Learning Innovation and Teaching Enhancement (LITE) grant, “Building Capacity to Teach Collaborative Skills at the University of Waterloo,” \$4000, 2019-22.  
(Co-PI: Scott Anderson, Centre for Teaching Excellence)

PI, UW Learning Innovation and Teaching Enhancement (LITE) grant, “Closing the Collaborative Skills Gap: Assessing the Effectiveness of a University-Wide Course Designed to Teach Students How to Collaborate in Diverse Groups,” \$4970, 2018-19.  
(Co-PI: Christine Logel, Social Development Studies)

PI, UW Learning Innovation and Teaching Enhancement (LITE) grant, “Breaking Down Barriers: A Student-Led Workshop on Interdisciplinary Collaboration,” \$5000, 2015-16.  
(Co-PIs: Georgia LaMarre\*, Akanksha Madan\*, and Shane Morganstein\*, KI students)

## **Educational Leadership**

### Teaching-Related Presentations at the University of Waterloo (*invited*)

Inaugural speaker for the Centre for Teaching Excellence SoTL Stories series, June 2022.

Invited panelist for the Centre for Teaching Excellence workshop, “Engaged Reading Using Perusall’s Annotation Software,” March 2021.

Invited presentation for the Centre for Teaching Excellence (CTE) workshop, “Using Technology to Enhance Collaboration,” March 2016.

Invited presentation, “High Impact Practices and Peer Assessment,” Department of Earth Sciences Teaching Retreat, April 2015.

Inaugural presentation for the Waterloo High Impact Practices group, “High Impact Practices in Knowledge Integration,” January 2015.

Invited teaching presentation at University of Waterloo Senate, “Increasing Student Engagement through Collaborative Course Design,” November 2014.

Invited teaching presentation on teaching scientific literacy, “Teaching Scientific Literacy with Humor: Monty Python and the Holy Grail,” February 2010.

### Teaching-Related Presentations External to the University of Waterloo (*invited*)

Invited talk, “The Science of Team Science.” Colorado School of Mines, August 2020.

Invited keynote, “Making Collaboration Work: The Importance of Deliberate Practice.” *Science of Team Science* conference (online due to COVID), June 2020.

“The Collaborative Skills Gap.” Invited talk, *Lyman Briggs College, Michigan State University*, February 2020.

### Interactive Workshops on Student Collaboration & Teamwork

Co-designed and co-led week-long workshop on “Making Collaboration Work,” for Engineering Faculty at Tecnológico de Monterrey (TEC) in Monterrey, Mexico, December 2019.

*(Co-designed and facilitated with Rob Gorbet, Knowledge Integration)*

Designed and led workshop on “Interdisciplinary Collaboration” for the Collaborative Research & Training Experience (CREATE) program, UWaterloo Engineering, 2019.

Led Toolbox Dialogue Initiative (TDI) workshop at “Leveraging systems approaches to improve planetary and human health,” UWaterloo Applied Health Sciences, April 2018.

Co-facilitated Toolbox Dialogue Initiative workshop at the International Consortium for Socially Relevant Philosophy in/of Science and Engineering (SRPoiSE) meeting, May 2016.

Developed & co-led workshop on “Enhancing Group Work,” hosted by the Centre for Teaching Excellence (CTE) at the University of Waterloo, January & April 2016.

*(Co-designed and facilitated with Georgia LaMarre, Akanksha Madan, & Shane Morganstein)*

Developed & co-led “UW Collaborates: A Crash Course in Collaboration,” January 2016, a full-day of presentations and training workshops for students from across UW.

*(Co-designed with Georgia LaMarre, Akanksha Madan, & Shane Morganstein)*

### **Professional/Service Activities *(Selected)***

#### Professional Association Leadership Activities *(selected)*

Co-director of the International Consortium of Socially Relevant Philosophy of/in Science and Engineering (SRPoiSE), 2022-present.

Board member, International Network of the Science of Team Science (INSciTS), 2021-2023.

Board member & co-founder of the International Consortium of Socially Relevant Philosophy of/in Science and Engineering (SRPoiSE), 2013-present.

European Philosophy of Science Association Program Committee, 2023.

Public Philosophy Network (PPN) Program Committee, 2018-19.

Philosophy of Science Association Public Forum committee, “Data for Whose Good: Values and Accountability in Data Science,” 2017-18.

#### Conference & Event Organizing *(selected)*

Session organizer for “Engaging Science with Philosophy: Case Studies, Empirical Data, and Reflections on Collaborations Between Philosophers of Science and Scientists/Engineers” at the *Philosophy of Science Association*, November 2022.

Lead organizer for “Summit on Responsible Innovation and Technology” at the University of Waterloo, October 2019.

Co-organizer for “Responsible AI” panel at the Centre for International Governance and Innovation (with Rob Gorbet), Waterloo, November 2018.

Lead organizer for “Communities of Integration,” a joint conference of the International Consortium of Socially Relevant Philosophy of/in Science and Engineering (SRPoiSE), Socio-Technical Integration Research (STIR), Studies of Experience and Expertise (SEE), and the Toolbox Dialogue Initiative (TDI), Kitchener, Ontario, June 2014.

Journal/book/grant referee: *Philosophy of Science; Synthese; Studies in the History and Philosophy of Science; Perspectives on Science; European Journal of Philosophy of Science; Behavior Genetics; Erasmus journal for Philosophy and Economics; IEEE International Symposium on Ethics in Engineering, Science, and Technology Ethics; Environmental Policy and Governance*; Cambridge University Press; MIT Press; Routledge Press; the National Science Foundation.

#### Service to the University (selected)

2024-present	Department of Psychology, Chair Nominating Committee
2024-present	Faculty of Environment Awards Committee
2023-present	Faculty of Environment Common First-year Task Force
2020-21	Faculty of Environment Student Course Perceptions Survey Committee
2019-20	University of Waterloo Interdisciplinary Task Force (IDTF)
2018-20	Council for Responsible Innovation & Technology (CRIT)
2014-19	Research Ethics and Integrity Advisory Committee (REIAC)
2018-19	Science and Technology in Society Teaching Director (STSTG)
2013-19	Faculty of Environment Undergraduate Studies Committee
2013-19	Associate Chair, Undergraduate Studies, Knowledge Integration
2015-17	Faculty of Environment HeForShe Committee
2014-16	Program review committee, Knowledge Integration
2011-12	Faculty Association University of Waterloo Board Member (FAUW)
2010-12	Status of Women and Equity Committee (SWEC)
2010-12	Subcommittee on Inclusive Hiring Practices for the University Appointments & Review Committee (UARC) & SWEC

## **Consulting**

Next Generation Event Horizon Telescope (ngEHT) Collaboration Focus Group, 2022

Consulted with researchers about improving collaborations between philosophers and scientists.

Feminist X-Phi (Experimental Philosophy) Group, 2022

Consulted with faculty and graduate students on using qualitative research methods.

WSU ADVANCE, 2022

Critical friend reviewer for book manuscript, “Engaging Faculty Groups in Institutional Transformation for Social Justice: Frameworks for Disrupting Inequity and Building Inclusive Academic Departments,” Routledge Press.

Pandos, Inc., 2021

Consulted with CEO Lam Thieu on improving Pandos’ platform for team formation and assessment (Pandos is an Ontario-based educational technology company).

Ohio State University Integrative Biology program, 2021

Consulted with Principal Investigator regarding a collaboration plan for an NSF proposal.

Colorado School of Mines, Colorado, 2020

Presented talk on “the science of team science” and consulted with faculty and administrators on ways to improve interdisciplinary collaboration amongst science and engineering researchers.

Humber College, Bachelor of Creative Advertising, Ontario, 2019

Consulted with program leaders on how to teach collaboration skills to students in their program.

Government of Ontario Public Service Learning and Development Unit, 2018

Consulted on the development of a workshop on effective collaboration.