IRINA MIKHALEVICH, PH.D.

Assistant Professor, Department of Philosophy Artificial Intelligence M.A. Program Cognitive Science Ph.D. Program Rochester Institute of Technology

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ACADEMIC EMPLOYMENT

2017-present Assistant Professor, Rochester Institute of Technology, Department of

Philosophy. Rochester, NY.

2016-2017 Visiting Fellow, Northeastern University, Department of Philosophy and

Religion. Boston, MA.

2016 Postdoctoral Fellow, Humboldt-Universität, Berlin School of Mind and Brain.

Berlin, Germany.

2014-2016 James S. McDonnell Postdoctoral Fellow, Washington University in St. Louis,

Philosophy-Neuroscience-Psychology Program. St. Louis, MO.

EDUCATION

Boston University, Ph.D. (2014)

Doctoral Dissertation Title: "Experiment and Bias: The Case of Parsimony in Comparative Cognition." Advisor: Alisa Bokulich

Indiana University, Visiting Scholar (2012)

Supervised by Colin Allen, now Distinguished Professor of Philosophy, University of California, Santa Barbara

University of California at Berkeley, B.A. (2003)

Major: Philosophy

AREAS OF SPECIALIZATION AND COMPETENCE

AOS: Philosophy of Science, Philosophy of Cognitive Science (especially animal cognition and

artificial intelligence), Philosophy of Mind, Bioethics

AOC: Philosophy of Biology, Epistemology, Philosophy of Technology, Metaphysics

BOOKS

Alien Minds: Invertebrate Intelligence and the Evolutionary Meaning of Life (in preparation, with R. Powell)

ARTICLES, BOOK CHAPTERS, & BOOK REVIEWS

2023. "Wonderful mind: convergentism and the crusade against evolutionary progress" *Journal of Philosophy of History* (with R. Powell).

2022. "Animal cognition." In *Mind, Cognition, and Neuroscience: A Philosophical Introduction*, eds. B.D. Young and C.D. Jennings. Routledge. pp. 229-247

2021. "How the moral community evolves" In Rethinking Moral Status, eds. S. Clarke and J.

- Savulescu. Oxford University Press. pp. 231-249 (with R. Powell and Allen Buchanan)
- **2021.** Review of the book *How to Study Animal Minds*, by K. Andrews. *BJPS Review of Books, https://www.thebsps.org/reviewofbooks/mikhalevich-on-andrews/*
- **2021.** "Affective sentience and moral protections." *Animal Sentience* 29(35) (20 pages; reply to ~40 commentaries; with R. Powell) DOI: 10.51291/2377-7478.1668.

 https://www.wellbeingintlstudiesrepository.org/cgi/viewcontent.cgi?article=1668&context=animsent
- **2020.** Target article: "Minds without spines: evolutionarily inclusive animal ethics." *Animal Sentience* 29(1) (with R. Powell) *https://www.wellbeingintlstudiesrepository.org/animsent/vol5/iss29/1/* (refereed by 8 reviewers from four different fields)
- **2018.** "Animal suicide: An account worth giving?" *Animal Sentience 20(19)*https://www.wellbeingintlstudiesrepository.org/cgi/viewcontent.cgi?article=1316&context=animsent
- **2017**. "Consciousness, evidence, and moral standing: A reply to Woodruff on teleost consciousness" *Animal Sentience 13*.
 - https://www.wellbeingintlstudiesrepository.org/cgi/viewcontent.cgi?article=1208&context=animsent
- 2017. "Is flexible behavior evidence of cognitive complexity? How evolution can inform comparative cognition" *Journal of the Royal Society Interface Focus 7(3), 20160121* (with R. Powell and C. Logan) https://royalsocietypublishing.org/doi/pdf/10.1098/rsfs.2016.0121
- 2017. "Convergent minds: The evolution of cognitive complexity in nature," Journal of the Royal Society Interface Focus 7 https://royalsocietypublishing.org/doi/10.1098/rsfs.2017.0029 (with R. Powell, C. Logan, and N. Clayton)
- **2017**. "Simplicity and cognitive modeling: avoiding old mistakes in new experimental contexts." In *The Routledge Handbook of Philosophy of Animal Minds*, eds. K. Andrews and J. Beck.
- 2016. "Sex, lies, and gender" 43:14-16 Journal of Medical Ethics (with R. Powell)
- **2015**. "Experiment and animal minds: why the choice of the null hypothesis matters" *Philosophy of Science*. 82: 1-11
- **2015**. "Honor among (the beneficiaries of) thieves." *Ethical Theory and Moral Practice* 18: 385-402 (published under Meketa)
- **2014.** "A critique of the principle of cognitive simplicity in comparative cognition." *Biology and Philosophy.* 29: 731-745 (published under Meketa)

MAJOR GRANTS

2020-2024: Awarded \$234,000 from the Templeton World Charity Foundation through the Diverse Intelligences Initiative for a project titled, *Minds Without Spines: Uncovering the Deep Structure of Mind, Meaning, and Morality*, with Co-PIs, Rachell Powell (Boston University) and Kristin Andrew (York University) and in consultation with Allen Buchanan (Arizona/Duke).

JOURNAL ISSUES EDITED

Special Issue of the Royal Society's *Interface: Focus*, titled: "Convergent Minds: The Evolution of Cognitive Complexity in Nature" (co-editors: N.S. Clayton FRS, C. Logan, R. Powell)

MEDIA APPEARANCES AND EDITORIALS

Expert guest, mini-series on the lives and minds of the octopus [title undisclosed], filmed June 2022 "The Misguided Rush to Reopen Universities: Science and Ethics Paint a Harsh Reality," *Inside Higher Education* (with R. Powell)

- Panelist, "What is intelligence?" Conable Lecture Series, Rochester Institute of Technology. November 2023 (upcoming).
- "Authenticity and AI" Faculty Colloquium Series. Rochester Institute of Technology. November 2023 (upcoming).
- "AI, Democracy, and Justice" facilitator of and speaker at a one-day workshop for AWARE-AI NSF Research Traineeship Program. https://www.rit.edu/events/aware-ai-nsf-research-traineeship-program-workshop-democracy-justice-and-ai Rochester Institute of Technology. September 2023.
- Panelist, "Reproductive Rights, Women's Rights, Human Rights" WGSS Speaker Series. Rochester Institute of Technology. November 2022.
- "AI and Distributed Responsibility" facilitator of speaker at a one-day workshop for AWARE-AI NSF Research Traineeship Program. https://www.rit.edu/events/aware-ai-nsf-research-traineeship-program-workshop-democracy-justice-and-ai Rochester Institute of Technology. November 2022.
- "AI, Justice, and Democracy" facilitator of and speaker at a one-day workshop for AWARE-AI NSF Research Traineeship Program. https://www.rit.edu/events/aware-ai-nsf-research-traineeship-program-workshop-democracy-justice-and-ai Rochester Institute of Technology. April 2022.
- "The Convergent Evolution of Welfare and Value" *American Philosophical Association, Pacific Division*. Vancouver, BC (presented via video recording and participated via phone) April 2022.
- "Welfare, Affect, and Moral Standing" Society for the Study of Ethics and Animals Colloquium Series. Zoom. March 2022.
- "The Consistency Case for Invertebrate Moral Standing," *Invertebrate Animal Sentience Webinar* major two-session remote seminar hosted by Wellbeing International with over 2,000 registrants in attendance. October 2021
- "Normativity and Moral Value." NIH Joint Bioethics Colloquium on Normative Ethics in Relation to Evolutionary Moral Psychology, National Institute of Health and George Washington University, online. April 2021
- "Normativity in the Living World." *Evolution of Normativity Series,* York University and John Carrol University, online. April 2021
- Invited panelist/presenter for two-day workshop on Allen Buchanan's forthcoming book, "Beyond Tribalism: The Evolution of Exclusive Morality," *The Center for Philosophy of Freedom*. University of Arizona, Tucson, AZ. March 2019
- "Robot Crickets and Arthropod Intelligence: How Insect Models Shape Metaphors of Mind." Stan McKenzie Salon Speaker Series titled "Liberal Arts and AI," Rochester Institute of Technology. December 2018
- "Arthropod Intelligence: What Entomology Can Teach AI" *Artificial Intelligence Seminar Series*, Rochester Institute of Technology, Rochester, NY. November 2018
- "Simplicity and Models of Mind" invited speaker at the *Cognitive Science Colloquium Series* at the Center for Cognitive Science, University at Buffalo. Buffalo, NY. November 2018
- "Cognitive Bias and Moral Deliberation: The Case of Invertebrate Animals." "Ethics in Entomology: Considerations for Research and Policy" symposium at the *Joint Annual Meeting of the Entomological Society of America and the Entomological Society of Canada*, Vancouver, Ca. November 2018
- "Experimentation and Manipulation," Philosophy of Science Association, Seattle WA. November 2018.
- "Minds Without Spines" Seminar Series at the Uehiro Centre for Practical Ethics, Oxford University, Oxford, England. June 2018
- "Minds Without Spines: Toward a More Comprehensive Animal Ethics." *Animal Philosophy Lecture Series*. Williams College, MA. April 2018

- "Minds Without Spines: Implications of Invertebrate Cognition for Cognitive Science and Animal Ethics" *Cognitive Science Lecture Series*. York University. Toronto, CA. February 2018
- "Minds Without Spines: Toward a More Comprehensive Animal Ethics" *Hale Ethics Series*, Rochester Institute of Technology, Rochester NY. October 2017
- "Experimenting and Intervening" *Upstate Philosophy of Science Workshop Series*, Hobart & William Smith Colleges, Geneva, NY. August 2017
- "Is Behavioral Flexibility Evidence of Cognitive Complexity?" Faculty Works-in-Progress Series Northeastern University. January 2017
- "Simplicity in Cognitive Modeling" Colloquium Series for the Adaptive Rationality & Adaptive Behavior and Cognition Groups, Max Planck Institute for Human Development, Berlin Germany. July 2016
- "No Simplicity Simpliciter" *Mind-Brain Lecture Series* at the Berlin School of Mind and Brain, Humboldt University. Berlin, Germany. July 2016
- "Smart Moves: Is Behavioral Flexibility Evidence of Cognitive Complexity?" *Convergent Minds:*Investigating the Evolution of Cognitive Complexity in Nature at Boston University. October 2015
- Invited Commentary for Marta Halina's "Inference and Error in Comparative Psychology: The Case of Mindreading" *Minds Online Conference*. September 2015
- "Experimenting and Intervening" Australasian Association of Philosophy Conference at Macquarie University. July 2015
- "Behavioral Flexibility as Evidence of Cognitive Complexity: The Argument Behind the Intuition" Philosophy-Neuroscience-Psychology Colloquium at Washington University-St. Louis. March 2015
- "Behavioral Flexibility as Evidence of Cognitive Complexity: The Argument Behind the Intuition" Saint Louis Area Philosophy of Science Association Conference. St. Louis University, March 2015
- "Experiment and Animal Minds: Why Statistical Choices Matter" Biennial Meeting of the Philosophy of Science Association, November 2014
- "A Critique of the Principle of Cognitive Simplicity in Comparative Cognition" *History and Philosophy of Science Research Group* at the University of Cambridge, UK. October 2014
- "How Parsimony Biases Experimental Design in Comparative Cognition." *Philosophy of Scientific Experimentation Conference 4 (PSX4)* hosted by The Center for Philosophy of Science at the University of Pittsburgh, April 2014
- "A Critique of the Principle of Cognitive Simplicity in Comparative Cognition." Southern Society for Philosophy and Psychology (SSPP). February 2014
- "A Critique of the Principle of Cognitive Simplicity in Comparative Cognition." Fourth Conference of the European Philosophy of Science Association (EPSA) at the University of Helsinki. August 2013 (accepted but unable to attend)
- "Constructing the Null Hypothesis: Epistemic and Non-Epistemic Values in Statistical Methods." Symposium Session at the APA Pacific Division. San Francisco, CA. March 2013
- "A Critique of the Principle of Cognitive Simplicity in Comparative Cognition." 39th Annual Meeting of the Society for Philosophy and Psychology at Brown University. May 2013 (poster)
- "Coping with Interdisciplinarity in Animal Studies." Navigating a Multispecies World: A Graduate Student Conference on the Species Turn. Harvard University. April 2013
- Invited Commentary for Dan W. Brock's "Physician-Assisted Suicide and End-of-Life Issues." Boston University Institute for Philosophy and Religion 2013–2014 Lecture Series. October 2013
- "The False Dichotomy Between Experiment and Observation: The Case of Comparative Cognition." *Philosophy of Scientific Experimentation Conference 3 (PSX3)*. University of Colorado. October 2012
- "The Importance of Attending to the Null Hypothesis in Comparative Psychology: Replacing Occamism with Empirical Information in Statistical Analysis." *Animal Cognition Conference*. Ruhr Universität. Bochum, Germany. June 2012

- "Sentimentality and Objectivity: Challenging the Ideal of Emotional Detachment in Comparative Cognition." *Minding Animals Conference* at Utrecht, Netherlands. July 2012 (poster)
- "Experiment and Observation in Comparative Cognition." Indiana University Center for Integrative Study of Animal Behavior. September 2012
- Invited Commentary for Ronald Sandler's "Climate Change, Ecosystem Management, and Ecological Virtue." *Boston University Karbank Symposium in Environmental Philosophy*. April 2010
- "Irreversible Loss of Personhood: Toward a Viable Model of Human Death." *Graduate Student Presentation Serie*s, Boston University. June 2008

ACADEMIC AWARDS

Outstanding Teaching Fellow Award, Boston University (2009)

Shimony Prize for best philosophy of science essay for: "Value-explicit Demarcation Criteria: Is There a Difference Between Bad Science and Pseudoscience?" (2007)

Travel grants: Animal Cognition Conference, awarded by the Department of Philosophy at Ruhr Universität in Bochum, Germany (2012) and the Philosophy of Scientific Experimentation Conference, by the Department of Physics at the University of Colorado, Boulder (2012)

Research Fellowship, Boston University (fall 2012)

Dissertation Fellowship, Boston University (2010-2011)

REFEREE WORK

MIT Press, Biology & Philosophy, British Journal for the Philosophy of Science, European Journal for Philosophy of Science, Medicine Healthcare & Philosophy, Philosophy of Science, Philosophical Psychology, Review of Philosophy and Psychology, Synthese, Foundations of Science, Studies in History and Philosophy of Science, Philosophical Quarterly

PROFESSIONAL CONSULTING

Ethics Advisor, Anthrobots project at the Levin lab, Tufts University (2022)

Referee, Austrian Science Fund (2021)

Panelist, National Science Foundation, remote (Fall 2021, 2 days)

Panelist, National Science Foundation, remote (Spring 2020, 3 days)

Panelist, National Science Foundation, Washington D.C. (Spring 2019, 3 days)

Panelist, National Science Foundation, Washington D.C. (Fall 2019, 3 days)

PROFESSIONAL AFFILIATIONS

Philosophy of Science Association, American Philosophical Association, Society for Philosophy and Psychology, Comparative Cognition Society

TEACHING EXPERIENCE

Rochester Institute Introduction to Moral Issues

of Technology Responsible Knowing

Bioethics and Society
Philosophy of Mind
Philosophy of Science

Seminar: Philosophy of Experiment Seminar: Animals, Minds, and Morals

Ethics of Artificial Intelligence (graduate course for engineers in the M.S. in AI

Program)

Philosophical Foundations of Cognitive Science (upcoming graduate course for cognitive

scientists in the Cognitive Science Ph.D. Program)

Northeastern Moral and Social Problems in Healthcare
University Philosophy of Science (Capstone course)

Berlin School of Philosophy of Experiment (graduate seminar)

Mind and Brain, Humboldt-Universität

Washington Introduction to Cognitive Science

University in St. Louis, Philosophy-Neuroscience-Psychology Program

Boston University Ethics of Healthcare (advanced undergraduate/graduate)

Introduction to Ethics (supervised one graduate student teaching fellow)
Medical Ethics (supervised four graduate student teaching fellows)

Introduction to Ethics Philosophy of Science

THESIS SUPERVISION

May 2022: Ricardo Ernesto Aguilera Ochoa, "Reference, Not Representation: Descriptive and Causal-historical Bridges Between Models and the World"

SERVICES AND ACTIVITIES

2023 Ezra Hale Series on Artificial Intelligence, co-organizer and

moderator

2023 Philosophy Faculty Colloquium Series, co-organizer and moderator

2020-present Elections Committee, RIT

2019-2020 Master's in Artificial Intelligence Taskforce Committee at RIT
 2018-2020 PhD in Cognitive Science Development Committee at RIT

2017-2018 RIT Undergraduate Philosophy Conference, co-organizer
2015 Co-organizer of the joint Washington University-St. Louis and

Boston University international conference, "Convergent Minds: Investigating the Evolution of Cognitive Complexity in Nature," hosted by Boston University's Center for Philosophy and History of Science

2014-2016 Co-organizer of the PNP/Medical School Colloquium Series at

Washington University in St. Louis

2012-2013 Founder of weekly Boston University Dissertation Writing Group
 2011 Boston University Center for the Philosophy and History of Science

Colloquium, titled "Animal Minds," co-organizer and moderator

2009-2010, Summer 2010 Boston University Graduate Student Presentation Series (BU GSPS),

organizer and moderator

2008-2009 President of the Philosophy Graduate Student Association

LANGUAGES

English (native), Russian (native), Italian (some reading)

REFERENCES

DR. KRISTIN ANDREWS

Professor of Philosophy and York Research Chair in Animal Ethics

York University

Email: andrewsk@yorku.ca

DR. ALISA BOKULICH

Professor of Philosophy Director, Center for Philosophy & History of Science Boston University

Email: abokulic@bu.edu

DR. DALE JAMIESON

Professor of Philosophy and Professor Emeritus of Environmental Studies Director, Center for Environmental and Animal Protection

Affiliated Professor of Law, Medical Ethics, and Bioethics Founding Director of Environmental Studies Program

Email: dale.jamieson@nyu.edu

Dr. Colin Allen

Distinguished Professor of Philosophy University of California, Santa Barbara Email: prof.colin.allen@gmail.com

DR. RON MALLON

Chair and Professor of Philosophy and Director of Philosophy-Neuroscience-Psychology (PNP) Program Washington University-St. Louis Email: rmallon@artsci.wustl.edu