

# Curriculum Vitae

Nicole C. Nelson  
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## Professional Appointments

- 2014– **Assistant Professor**  
University of Wisconsin–Madison, Department of the History of Science/Department of Medical History and Bioethics, Madison, WI
- 2011–2013 **Postdoctoral Research Fellow**  
McGill University, Social Studies of Medicine, Montreal, QC

## Education

- 2011 **Ph. D. Science and Technology Studies**  
Cornell University, Ithaca, NY
- 2007 **M. A. Science and Technology Studies**  
Cornell University, Ithaca, NY
- 2004 **B. Sc. Genetics and Social and Political Thought, with distinction**  
University of Western Ontario, London, ON

## Publications

### Monographs

- forthcoming Nelson, Nicole C. *Model Behavior: Animal Experiments, Complexity, and the Genetics of Psychiatric Disorders*. Chicago: University of Chicago Press.

### Peer-reviewed articles

- forthcoming Nelson, Nicole C. and Aaron Panofksy. “How boundary crossings make epistemic communities in behavior genetics.” In *Handbook of Genomics, Health, and Society*, edited by Sahra Gibbon, Barbara Prainsack, Stephen Hilgartner and Janelle Lamoreaux. New York: Routledge.

- forthcoming Cambrosio, Alberto, Etienne Vignola-Gagné, Nicole C. Nelson, Peter Keating, and Pascale Bourret. “Genomic platforms and clinical research.” In *Handbook of Genomics, Health, and Society*, edited by Sahra Gibbon, Barbara Prainsack, Stephen Hilgartner and Janelle Lamoreaux. New York: Routledge.
- forthcoming Nelson, Nicole C. and Kaitlin Stack Whitney. “Becoming a research rodent.” In *How to Do Things with Animals: Field Guides for Social Tasks*, edited by Natalie Porter and Ilana Gershon. Ithaca, NY: Cornell University Press.
- forthcoming Cambrosio, Alberto, Pascale Bourret, Peter Keating, and Nicole C. Nelson. “Opening the regulatory black box of clinical cancer research: transnational expertise networks and ‘disruptive’ technologies.” Accepted for publication in *Minerva*.
- 2016 Keating, Peter, Alberto Cambrosio, and Nicole C. Nelson. “Triple negative breast cancer”: Translational research and the (re)assembling of diseases in post-genomic medicine.” *Studies in History and Philosophy of Science Part C* 59:20–34.
- 2016 Davies, Gail F. et al. “Developing a collaborative agenda for humanities and social scientific research on laboratory animal science and welfare.” *PLoS ONE* 11(7):e0158791.
- 2016 Nelson, Nicole C. “Model Homes for Model Organisms: Intersections of Animal Welfare and Behavioral Neuroscience around the Environment of the Laboratory Mouse.” *BioSocieties* 11(1):46–66.
- 2015 Nelson, Nicole C. “A Knockout Experiment: Disciplinary Divides and Experimental Skill in Animal Behavior Genetics.” *Medical History* 59(3):465–485.
- 2014 Cambrosio, Alberto, Peter Keating, & Nicole C. Nelson. “Régimes thérapeutiques et dispositifs de preuve en oncologie: l’organisation des essais cliniques des groupes coopérateurs aux consortiums de recherche.” *Sciences Sociales & Santé* 32(3):13–42.
- 2014 Ankeny, Rachel A., Sabina Leonelli, Nicole C. Nelson, & Edward Ramsden. “Making Organisms Model Humans: Situated Models in Alcohol Research.” *Science in Context* 27(3):485-509.
- 2014 Nelson, Nicole C., Peter Keating, Alberto Cambrosio, Adriana Aguilar-Mahecha, & Mark Basik. “Testing Devices or Experimental Systems? Cancer Clinical Trials Take the Genomic Turn.” *Social Science and Medicine* 111:74–83
- 2013 Nelson, Nicole C., Alberto Cambrosio, & Peter Keating. “On Being ‘Actionable’: Clinical Sequencing and the Emerging Contours of a Regime of Genomic Medicine in Oncology.” *New Genetics and Society* 32(4):405–428
- 2013 Keating, Peter, Alberto Cambrosio, Nicole C. Nelson, Andrei Mogoutov, & Jean-Philippe Cointet. “Therapy’s Shadow: A Short History of the Study of Resistance to Cancer Chemotherapy.” *Frontiers in Pharmacology* 4:58.
- 2013 Nelson, Nicole C. “Modeling Mouse, Human, and Discipline: Epistemic Scaffolds in Animal Behavior Genetics.” *Social Studies of Science* 43(1):3–29.

2012 Nelson, Nicole. "Shooting Genes, Distributing Credit: Narrating the Development of the Biolistic Gene Gun." *Science as Culture* 21(2):205–232.

#### Other

2008 Nelson, Nicole, Anna Geltzer and Stephen Hilgartner. "The Anticipatory State: Making Policy-Relevant Knowledge about the Future – A Special Issue." *Science and Public Policy* 35(9): 545–624.

2002 Nelson, Nicole. "Countercultural Revolution: The Nixon Era of Conservatism and the Rise of the Feminist Movement." *The Mirror* 22: 77–92. London, ON: University of Western Ontario.

#### Book Reviews

2016 Nelson, Nicole C. "Book Review: Misbehaving Science: Controversy and the Development of Behavior Genetics." *Medical Anthropology Quarterly* 30(3).

2015 Nelson, Nicole C. "Book Review: Gene Jockeys." *Journal of the History of Medicine and Allied Sciences* 70(3):481–483.

2008 Nelson, Nicole. "Book Review: Living with the Genome." *Public Understanding of Science* 17: 505–507.

2008 Nelson, Nicole and Geoff Nelson. "Book Review: The Spirit Catches You and You Fall Down." *Journal of Health Psychology* 13: 839–840.

#### Awards and Honors

2017 **Honored Instructor Award, Spring 2017**  
University of Madison–Wisconsin

2016 **Honored Instructor Award, Spring 2016**  
University of Wisconsin–Madison

2015 **First Book Award**  
Center for the Humanities, University of Wisconsin–Madison

2015 **Honored Instructor Award, Spring 2015**  
University of Wisconsin–Madison

2014 **Honored Instructor Award, Spring 2014**  
University of Wisconsin–Madison

2013 nominated for **Alice Wilson Award**  
Royal Society of Canada

- 2013 **Fellowship Award**  
Canadian Institute for Health Research (Value: Can\$ 90 000 over two years; declined)
- 2013 **Bisby Fellowship Prize**  
Canadian Institute for Health Research (Value: Can\$ 10 000 over two years; declined)
- 2013 **Postdoctoral Fellowship (B3)**  
Fonds de recherche Société et culture Québec (Value: Can\$ 30 000; declined)
- 2009 **Jasanoff Prize Winner**  
For best graduate student paper in the Department of Science and Technology Studies, Cornell University (Value: US\$ 100)
- 2007 **SSHRC Doctoral Fellowship**  
Social Sciences and Humanities Research Council (Value: Can\$ 20 000)
- 2006 **Knight Award for Writing Exercises**  
John S. Knight Institute, Cornell University (Value: US\$ 125)
- 2004 **Sage Fellowship**  
Cornell University (Value: US\$ 40 000 over two years)
- 2004 **SSHRC Masters' Scholarship (declined)**  
Social Sciences and Humanities Research Council (Value: Can\$ 17 500)
- 2004 **Ontario Graduate Scholarship (declined)**  
Government of Ontario (Value: Can\$ 15 000)

## Grants

- 2017 **“Autonomy and the Algorithm: Where Machine Learning Meets Human Decisions in the Cancer Clinic,”** UW–Madison Fall Competition Research Grant  
Nicole C. Nelson (PI), Pilar Ossorio (PI; Value: US\$28 131)
- 2016 **“Model Behavior: Animal Experiments and the Genetics of Psychiatric Disorders,”** Research Service Grant, UW–Madison (Value: US\$20 000)
- 2015 **“Traveling Facts: Circulating Genetic Knowledge through Animal Models,”** UW–Madison Fall Competition research grant (Value: US\$20 798)
- 2014–2018 **“Genomic Medicine Enters the Clinic: Translational Research, Actionable Mutations, Clinical Utility, and the Reframing of Oncology,”** CIHR operating grant  
Alberto Cambrosio and Peter Keating (PI), Nicole C. Nelson (Co-PI; Value Can\$325 000)
- 2008 **Doctoral Dissertation Improvement Grant,** National Science Foundation (Value: US\$ 8000)
- 2007 **Emerging Technologies Grant,** Cornell University (Value: US\$ 2000)
- 2007 **Contentious Politics Seed Grant Competition,** Institute for the Social Sciences, Cornell University (Value: US\$ 3000)

2007                    **Mellon Humanities Project Grant**, Mellon Central New York Humanities Initiative, Syracuse University (Value: US\$ 3500)

## Workshops and Conferences

### Invited Presentations

- November 2016    “Containing complexities: Producing knowledge about psychiatric disorders in an animal behavior genetics laboratory.” Invited lecture for the Center for the Humanities, UW–Madison.
- October 2016     “Representing the human drinker: Modeling binge drinking with mice.” Invited lecture for the STS colloquium series, Massachusetts Institute of Technology, Cambridge.
- May 2016         “Ethical aspects of personalized medicine: What’s in the spotlight, and what’s not” Invited lecture for the European Clinical Research Infrastructure Network, Prague, Czech Republic.
- February 2016    “Knowledge byproducts in the mouse laboratory: learning about environments while doing genetics.” Klopsteg Lecture, Northwestern University, Evanston, IL.
- April 2015        “Handling research animal ethics: Interactions between science and welfare” Invited talk for Research Ethics Grand Rounds, University of North Carolina at Chapel Hill.
- October 2014     “Knowledge byproducts in the mouse laboratory: Learning about environments while doing genetics.” Invited talk for the Egenis seminar series, University of Exeter, Exeter, UK.
- January 2014     “The New Politics of Knowledge Production”. Invited talk for the CCRLA Social Justice Speaker series “What is Knowledge?”, Wilfrid Laurier University, Waterloo, ON.
- October 2013     “Containing Complexities: Experimental Practice in an Animal Behavior Genetics Laboratory.” Invited talk for the seminar series “Entanglements of Instruments and Media in Exploring Organic Worlds,” York University, Toronto, ON.
- June 2012        “What’s Wrong with My Mouse?: Learning to Experiment in the Animal Behavior Genetics Laboratory.” (Invited paper at the workshop “The History of Skill in Science and Medicine,” McGill University, Montreal).
- November 2008    “A Furry, One Ounce Human?” (Invited lecture for the Society for the Humanities Faculty Group on “The Human,” Cornell University, Ithaca, NY).
- October 2007     “Mice Study Shows Genes Are Not Always Destiny: Methodological Debates and the Moral Economy of Behavior Genetics.” (Invited paper for the Mellon Foundation workshop on the Interface of Science and the Humanities, Syracuse, NY).

## Selected Conference and Workshop Presentations

- November 2016 Panel commentator for “Harm reduction and public health.” History of Science Society Annual Meeting, Atlanta, GA.
- September 2016 “Judging genomics: The role of STS critique in an era of complexity” Presented at the Society for the Social Studies of Science, Barcelona, Spain.
- January 2016 “Representing the human drinker.” Presented at the Working across Species workshop, Kings College, London, UK.
- November 2015 “Why Objects?” Roundtable, Participant, History of Science Society Annual meeting, San Francisco, CA.
- November 2015 “Complexity crisis! The roles of complexity talk in the laboratory.” Presented at the Society for the Social Studies of Science Annual Meeting, Denver, CO.
- September 2015 “Can a mouse be anxious? Developing and validating models of complex phenomena”, Chalk talk at the Wisconsin Institutes for Discovery, UW–Madison
- October 2015 “The public life of scientific facts: Animal behavior genetics in the news media.” Presentation for the Evolution Seminar Series, UW–Madison
- July 2015 “Accumulating and circulating knowledge about genes and environments in animal behavior genetics.” Presented at the International Society for the History, Philosophy and Social Studies of Biology 2015, Montreal, QC.
- November 2014 “Techniques of care, techniques of science: Interactions between scientists and welfare technicians in animal behavior genetics.” Presented at the History of Science Society Annual Meeting, Chicago, IL.
- September 2014 “Accumulating knowledge about genes and environments in animal behavior genetics.” Holtz Center for Science and Technology Studies Brown Bag Series, UW–Madison.
- November 2013 “Molecular oncology’s hybrid entities and the redefinition of risk: The case of triple negative breast cancer.” Peter Keating & Alberto Cambrosio; presented at the History of Science Society Annual Meeting, Boston, MA.
- November 2013 “Testing devices or experimental systems? Cancer clinical trials take the genomic turn.” Nicole Nelson, Peter Keating, & Alberto Cambrosio; poster/presentation at the Canadian Cancer Research Conference, Toronto, ON.
- October 2013 “From Risk to “Actionable”: Clinical Sequencing and the Emerging Contours of Genomic Medicine in Oncology.” Nicole Nelson, Peter Keating, & Alberto Cambrosio; presented at the Society for Social Studies of Science Annual Meeting, San Diego, CA.
- July 2013 “Handling the situated mouse: interactions between science and welfare in animal behavior genetics.” Presented at the International Society for the History, Philosophy and Social Studies of Biology 2013 Meeting, Montpellier, France.

- November 2012 “Modeling humans, standardizing the environment: making organisms model humans in research on alcohol addiction.” Sabina Leonelli, Rachel Ankeny, Nicole Nelson, & Edmund Ramsden; presented at the History of Science Society Annual Meeting, San Diego, CA.
- October 2012 “From clinical to bioclinical work in cancer research.” Nicole Nelson & Peter Keating; presented at the Society for the Social Studies of Science Annual Meeting, Copenhagen, Denmark.
- April 2012 “Framing ‘binge drinking’ in the animal laboratory.” Presented at the conference “The Mutual Challenges of Neuroscience and Public Health,” King’s College, London.
- November 2011 “Trials and tribulations: building the future of translational research in oncology.” Nicole Nelson, Peter Keating, & Alberto Cambrosio; presented at the Society for the Social Studies of Science Annual Meeting, Cleveland, OH.
- August 2010 “The mouse multiple: managing the care of mice in a behavior genetics laboratory.” Presented at the Society for Social Studies of Science Annual Meeting, Tokyo, Japan.
- October 2009 “The concept of ‘complexity’ in animal behavior genetics.” Presented at the Society for Social Studies of Science Annual Meeting, Washington, DC.
- August 2009 “Generating ‘anxiety like phenotypes’ in the elevated plus maze: a measure of mouse anxiety or a model of human anxiety?” Presented at the International Congress of History of Science and Technology, Budapest, Hungary.
- May 2009 “Generating ‘anxiety-like phenotypes’ in the elevated plus maze: a measure of mouse anxiety or a model of human anxiety?” Presented at the Annual Conference of the Canadian Society for the History and Philosophy of Science, Ottawa, ON.
- August 2008 “How fatty is your mouse chow?: communicating protocol information in mouse research.” Presented at the Society for Social Studies of Science Annual Meeting, Rotterdam, Netherlands.
- June 2008 “Model homes for model organisms: environmental enrichment for laboratory rodents.” Presented at the Lab for Social Anthropology and the Life Sciences, Humboldt University, Berlin, Germany.
- October 2007 “A model home for model mice: environmental enrichment and the meanings of the mouse body.” Presented at the Society for Social Studies of Science Annual Meeting, Montreal, QC.
- July 2007 “Politicizing methodology: standardization debates in behavior genetics.” Presented at the International Society for the History, Philosophy and Social Studies of Biology 2007 Meeting, Exeter, UK.
- November 2006 “Three blind mice trials: replication in behavioral genetics.” Presented at the Society for Social Studies of Science Annual Meeting, Vancouver, BC.

July 2005 “Configuring the worm: scientists as users and designers in *C elegans* and *Planaria* research.” Presented at the International Society for the History, Philosophy and Social Studies of Biology, Guelph University, Guelph, ON.

## Workshops

2014 **Laboratory Animal Welfare: Developing a Collaborative Agenda for Humanities and Social Scientific Research**  
Invited participant, Laboratory Animals in the Social Sciences and Humanities Network, London, UK

2012 **Politics of Care in Technoscience**  
Invited discussant, York University, Toronto, ON

2008 **European Neuroscience and Society Network “Neuroschool” on Behavior Genetics**  
Invited participant, Monterotondo, Italy

## Panels Organized

2015 “Reductionism and Complexity in the Contemporary Biosciences.” Panel at Society for the Social Studies of Science Annual Meeting, Denver, CO, organized by Nicole Nelson, Daniel Navon, and Nadine Levin.

2013 “Working in Biology: How Laboratory and Field Practices Shape Biological Knowledge.” Panel at ISHPSSB 2013 Meeting, Montpellier, France, organized by Caitin Wylie and Nicole Nelson.

2009 “Understanding Behavior Genetics.” Panel at Society for the Social Studies of Science Annual Meeting, Washington, DC, organized by Nicole Nelson and Michele Easter.

2008 “Standardizing, controlling, and understanding the mouse in biomedical research.” Panel at Society for the Social Studies of Science Annual Meeting, Rotterdam, Netherlands, organized by Nicole Nelson and Monika Cwiartka.

## Teaching Experience

### Courses Taught (\* Undergraduate † Graduate/Professional)

Fall 2014; 2015; 2016 **Proseminar in Historiography and Methods,**† University of Wisconsin–Madison (Instructor)

Fall 2014; Spring 2016; Spring 2017 **Where Science Meets Society,**\* University of Wisconsin–Madison (Instructor)

Spring 2014; 2015; 2016; 2017 **Biology and Society, 1950–today,**\* University of Wisconsin–Madison (Instructor)



Spring 2014; 2015; Fall 2016	<b>The 20th Century Gene: From Eugenics to Epigenetics,</b> <sup>*</sup> University of Wisconsin–Madison (Instructor)
Winter 2013	<b>Physicianship 4: Medicine and Society,</b> <sup>†</sup> Faculty of Medicine, McGill University (Small Group Instructor)
Fall 2010	<b>Sociology of Medicine,</b> <sup>*</sup> Cornell University (Teaching Assistant)
Summer 2010	<b>Mind, Body, Health: Historical Perspectives for Future Medical Professionals,</b> <sup>*</sup> Cornell University (Teaching Assistant)
Spring 2010	<b>New User Orientation, Social and Ethical Issues Module,</b> <sup>†</sup> Cornell NanoScale Science and Technology Facility (Instructor)
Spring 2007	<b>Sociology of Medicine,</b> <sup>*</sup> Cornell University (Teaching Assistant)
Fall 2006	<b>Technology and Society: Tinkering with Sex,</b> <sup>*</sup> Cornell University (Instructor)
Summer 2006	<b>Mind, Body, Health: Historical Perspectives for Future Medical Professionals,</b> Cornell University (Teaching Assistant)
Spring 2006	<b>Law, Science and Public Values,</b> <sup>*</sup> Cornell University (Teaching Assistant)
Fall 2005	<b>Ethical Issues in Health and Medicine,</b> <sup>*</sup> Cornell University (Teaching Assistant)

#### Guest Lectures

April 2016	“Historical and sociological perspectives on animal models” (Guest lecture for “Zoology/Neuro655: Modeling Neurodevelopmental Disease,” Madison WI).
April 2015	“Eugenics in America” (Guest lecture for the Molecular Biology Undergraduate Club, Madison, WI).
June 2014	“Situating Science Summer School: Science in Human Contexts” (Guest faculty, Queens University/Situating Science Cluster, Kingston, ON).
April 2011	“Legal Sex: Defining ‘Male’ and ‘Female’ in the Courtroom” (Guest lecture for “Law, Science, and Public Values,” Cornell University).
July 2010	“Alcoholism and Medicalization” (Guest lecture for “Mind, Body, and Health: The History of American Medicine,” Cornell University).
July 2009	“Intersexuality and Transsexuality: Ethical Issues for Medical Professionals” (Guest lecture for “Mind, Body, and Health: The History of American Medicine,” Cornell University).
November 2005	“Ethical Issues in the Treatment of Intersex” (Guest lecture for “Ethical Issues in Health and Medicine,” Cornell University).

- July 2006 “Ethical Issues in Treating Intersex Infants” (Guest lecture for “Mind, Body, and Health: The History of American Medicine,” Cornell University).
- April 2006 “Legal Sex” (Guest lecture for “Law, Science, and Public Values,” Cornell University).

## Research Experience

- 2009–2010 **Living Legacy: An Oral History of U. S. and Soviet Bioweaponers**, Research Assistant, Cornell University, Ithaca, NY
- 2008–2009 **PEW Scholars in Biomedical Sciences Oral History Project**, Interviewer, Chemical Heritage Foundation, Philadelphia, PA
- Summer 2005 **Intellectual Property Modelling Group**, Research Assistant, McGill University / Université du Québec à Montréal
- Summer 2001 **Pathways Skills Development**, Researcher and New Project Developer, London, ON

## Professional Development

- Fall 2014 “Representing Animals.” Faculty Development Seminar Center for the Humanities, UW–Madison
- February 2014 “Strategies for responding to and evaluating student writing.” Workshop, The Writing Center, UW–Madison.
- October 2013 “Designing effective multiple choice questions.” Workshop, Teaching and Learning Services, McGill University.
- June 2013 “Beyond the research paper: New ways to get students writing.” Workshop, Teaching and Learning Services, McGill University
- May 2013 “Introduction to Course Design.” Workshop, Teaching and Learning Services, McGill University

## Professional Service

- Grant Reviewer for Institut National du Cancer (INCa)
- Manuscript Reviewer for *Social Studies of Science*, *Perspectives on Science*, *Science as Culture*, *Biosocieties*, *Tecnoscienza*, *Advances in Medical Sociology*, *Theory, Culture & Society*, *Journal of Cultural Economy*, *New Genetics and Society*, *Science, Technology and Human Values*, *Social Science and Medicine*, University of Chicago Press, Cambridge University Press, Elsevier
- 2015– **New Genetics and Society**  
Member of the Editorial Board

- 2015– Member of the Undergraduate Committee, Department of the History of Science, UW–Madison
- 2014– Member of the ad hoc committee for the Health and Humanities Certificate, UW–Madison
- 2014– **Social Studies of Science**  
Collaborating editor
- 2017 Member of the Faculty Search Committee, Department of the History of Science, UW–Madison
- 2013–2017 **InVisible Culture**  
Member of Advisory Board
- 2016 **MidweSTS Graduate Student Conference**  
Co-organizer
- 2016 **STS Summer School, UW–Madison**  
Co-organizer and faculty member
- 2014–2016 **“Disclosing and Enclosing Knowledge: The Paradoxes of Information Flow in Knowledge Communities,”** Robert and Jean Holtz Center Thematic Cluster Grant  
Thematic cluster leader
- 2014–2015 Member of the Graduate Committee, Department of the History of Science, UW–Madison.
- 2012–2014 **Social Studies of Science**  
Book reviews editor
- 2009–2010 **Science Studies Research Group**  
Co-organizer, Cornell University
- 2008 **“The Anticipatory State: Making Policy-Relevant Knowledge about the Future”**  
Guest Editor for *Science and Public Policy* Special Issue
- 2007 **“Futures of Life” Workshop**  
Co-organizer, Cornell University
- 2005–2006 **Science Studies Research Group**  
Co-organizer, Cornell University
- 2004–2005 **“Science for Sale” Conference**  
Conference organizing committee, Cornell University

## Community Outreach

- October 2015 “The rationale for basic research.” Panel moderator, WARF 90<sup>th</sup> Anniversary Celebration, UW–Madison

## Memberships

2004–	<b>Society for Social Studies of Science</b>
2005–	<b>International Society for the History, Philosophy, and Social Studies of Biology</b>
2008–2012	<b>European Neuroscience and Society Network</b>
2012–	<b>History of Science Society</b>