### **VIVIEN HAMILTON**

HSA Dept., Harvey Mudd College 301 Platt Blvd, Claremont, CA 91711 vhamilton@hmc.edu

#### **ACADEMIC POSITIONS**

2017 -	Associate Professor, History of Science, Harvey Mudd College
2011 - 17	Assistant Professor, History of Science, Harvey Mudd College
2009 - 10	Lecturer, Institute for the History and Philosophy of Science and
	Technology, University of Toronto

#### **EDUCATION**

2012	PhD in History of Science, University of Toronto
	o Dissertation: "Incongruent Bedfellows": Physics and Medicine in
	the Formation of North American Radiology, 1896 - 1930.
	(Committee: Chen-Pang Yeang, Lucia Dacome, Janis Langins)
2005	MA in History and Philosophy of Science, University of Toronto
2003	BSc (Honours) in Physics and History of Science, Dalhousie University

#### **EDITED VOLUMES**

2018	Inevitably Toxic: Historical Perspectives on Contamination, Exposure and
	Expertise. Brinda Sarathy, Vivien Hamilton and Janet Farrell Brodie
	(Editors). Pittsburgh: University of Pittsburgh Press.

- Association of College and Research Libraries Outstanding Academic Title 2019.
- Reviewed in *Bulletin for the History of Medicine, Environmental History*

2009 Epistemic Boundaries: Spontaneous Generations 3. Sebastian Gil-Riano and Vivien Hamilton, (Editors).
http://jps.library.utoronto.ca/index.php//SpontaneousGenerations

#### PEER-REVIEWED ARTICLES AND BOOK CHAPTERS

2020	Vivien Hamilton and Daniel M. Stoebel, "History in the Education of
	Scientists: Encouraging Judgement and Social Action," Isis 11 (2020),
	623- 630.
2018	"X-Ray Protection in American Hospitals," in Inevitably Toxic: Historical
	Perspectives on Contamination, Exposure and Expertise, edited by
	Brinda Sarathy, Vivien Hamilton and Janet Farrell Brodie, 23-49.
	Pittsburgh: University of Pittsburgh Press.
2018	"Toxicity, Uncertainty and Expertise," and "Containment: Discussing
	Nuclear Waste with Peter Galison," with Brinda Sarathy, in Inevitably

	Toxic: Historical Perspectives on Contamination, Exposure and Expertise,
	edited by Brinda Sarathy, Vivien Hamilton and Janet Farrell Brodie, 3-
	20, 284-302. Pittsburgh: University of Pittsburgh Press.
2017	"Medical Machines as Symbols of Science?: Promoting Electrotherapy
	in Victorian Canada," <i>Technology and Culture</i> 58 (4): 1017 - 1045.
2003	Vivien K. Cumyn, M.D. Fleishchauer, T.D. Hatchard and J.R. Dahn.
	"Design and testing of a low-cost multichannel pseudopotentiostat for
	quantitative combinatorial electrochemical measurements on large
	electrode arrays." Electrochemical and Solid-State Letters 6: E15 – E18.
2003	S.J. Penney, <u>V. K. Cumyn</u> , D.D. Betts. "A new method for the S=1/2
	antiferromagnetic Ising model's properties at any temperature and any
	magnetic field on the infinite square lattice." PHYSICA A 330: 507-518.
2001	L.Y. Beaulieu, <u>V.K. Cumyn</u> , K.W. Eberman, L.J. Krause, and J.R. Dahn. "A
	system for performing in-situ afm/optical microscopy studies on
	electrode materials for Li-ion batteries." Rev. Sci. Ins., 72: 3313-3319.

## **R**EVIEWS

2018	"Review of Rebel Genius: Warren S. McCulloch's Transdisciplinary Life
	in Science," Journal of the History of Neurosciences 27: 402-403.
2016	"Essay Review of Radium and the Secret of Life by Luis
	Campos," Distillations 2: 44-45.
2016	"Review of Planck: Driven by Vision, Broken by War by Brandon R.
	Brown," History Review New Books 44: 171 - 172.
2014	"Review of Imogen Clarke, Negotiating Progress: Promoting 'modern'
	physics in Britain, 1900-1940," Dissertation Reviews.
	http://dissertationreviews.org/archives/7256
2009	"Review of Maria Rentetzi, Trafficking Materials and Gendered
	Experimental Practices: Radium Research in Early 20th Century
	Vienna," Spontaneous Generations 3: 246-248.

### **GRANTS AND AWARDS**

2020	Summer Research Grant, HMC (\$4500)
2020	Lemelson Travel Grant, National Museum of American History (\$750)
2020	Huntington Library Short-Term Fellowship (\$3500)
2019	Summer Research Stipend, HMC (\$6,000)
2017	Mellon Course Development Grant, with Dan Stoebel, HMC (\$6,000)
2016	Course Development Grant, Digital Humanities at Claremont (\$6,000)
2016	Summer Research Grant, Harvey Mudd College (\$4,500)
2010 - 11	University of Toronto Doctoral Completion Award (\$18,000 CAD)
2009 - 10	Ontario Graduate Scholarship (\$23,000 CAD)
2005 - 08	Canada Graduate Scholarship, Social Sciences and Humanities
	Research Council (\$105,000 CAD)
2009	School of Graduate Studies Travel Grant, University of Toronto
2005 - 06	Ontario Graduate Scholarship (awarded but declined)
2004 - 05	University of Toronto Fellowship (\$18, 000 CAD)
1999 – 2003	Chancellor's Scholarship, Dalhousie University (\$28, 000 CAD)

# **INVITED TALKS**

2019	"Competing Virtues of Measurement: Physics, Medicine & Quantification
	in Early X-Ray Therapy," History of Science Colloquium, UCLA.
2018	"Radiology in WWI," American Association of Physics Teachers, San
	Diego.
2017	"Digital Humanities: Publishing Student Projects with Scalar," Bite of
	Learning Talk, HMC.
2017	HSA Panel: Liberal Arts in the Age of Trump, HMC
2012	"Inspiring Awe in Physics through Textbooks: An examination of early
	20th century medical pedagogy," Stauffer Talk, HMC.
2010	"Jenny Trout: Canada's First Licensed Female Physician," Women in
	Medicine Group, Undergraduate Medical Students, University of
	Toronto.
2008	"Privacy Threatened: Popular Perceptions of the dangers of early
	medical x-rays" Surveillance Studies Colloquium Series, Queen's
	University.

# **CONFERENCE AND WORKSHOP PAPERS**

2020	"Plant Cognition and the Re-enchantment of Nature," with Delia
	Gavrus. Canadian Society for the History and Philosophy of Science.
2020	June 2020 (cancelled). "Scientific Assurance, Dental X-Rays and the Patient Consumer,"
2020	Technology and the Patient Consumer Workshop, McGill University,
	Montreal (postponed).
2020	"Mechanical Womb and Artificial Mother: Early 20 <sup>th</sup> Century Infant
2020	Incubators," Hixon-Riggs Workshop: Reproductive Technologies and
	Reproductive Justice, Claremont, CA.
2020	"Teaching the History of Genetics and Race," American Historical
	Association Meeting, New York, NY.
2018	"Roundtable: Imagined Futures in Pedagogy," History of Science
	Society Meeting, Seattle, WA.
2018	"Book Panel on Rebel Genius: Warren S. McCulloch's Transdisciplinary
	Life in Science by Tara Abraham," Canadian Society for History and
	Philosophy of Science, Regina SK, (session organizer).
2017	"Integrating the History of Science with the History of Technology,"
	Forum for the History of the Physical Sciences Panel, History of Science
	Society, Toronto, ON.
2017	"Negotiating Risk and Responsibility: Radiation Safety in American
	Hospitals," Canadian Society for the History and Philosophy of Science,
	Toronto, ON.
2017	"Insensible Danger: Radiation Safety in American Hospitals," Science
	and the Senses Hixon Forum, Harvey Mudd College.
2015	"X-Ray Safety," Contested Expertise and Toxic Environments
	Workshop, Claremont Colleges (Conference organizer, pre-circulated
	paper).

2015	"Physics in the New York Times, 1880-1920," History of Physical
2014	Sciences Working Group (pre-circulated paper).
2014	"Physics in the New York Times: 1880 – 1920," International Conference on the History of Physics, Cambridge UK (poster).
2014	"Finding Meaning in Digital Data: Physics in the News," British Society
	for the History of Science, St. Andrews, UK.
2012	"X-Ray Safety," History of Science Society, San Diego, CA (Session
	Organizer).
2012	"Textbook Physics: An Examination of Early 20th Century Medical
	Pedagogy." Meeting of the Three Societies, Philadelphia, PA.
2011	"Incongruent Bedfellows": Physics and Medicine in Early 20th Century
	X-ray Therapy," Continuity/Discontinuity Conference, American
2010	Institute of Physics, Washington DC.  "Payrildoned Physicians? Resonanciains souly models of V. roys."
2010	"Bewildered Physicians? Reappraising early medical models of X-rays," Canadian Society for the History of Medicine, Montreal, QC.
2010	"Material Evidence in History: An Examination of Early 20th Century X-
2010	Ray Technology," HAPSAT Graduate Conference, University of Toronto.
2009	"Technology without Science: Electrotherapeutics in Victorian
	Canada," Canadian Science and Technology Historical Association,
	Quebec City, QC.
2009	"Can Trading Zones Have Experts?" Canadian Society for the History
2222	and Philosophy of Science, Carleton University.
2008	"Physics in use: Models of electricity in 19th century electrotherapy
2008	textbooks," History of Science Society, Pittsburgh, PA. "Between physics and medicine: The role of the first hospital physicists
2006	following the discovery of x-rays," Meeting of the Three Societies,
	Oxford, UK.
2008	"Safe from prying eyes? Competing notions of danger in the use of
	early medical x-rays," Interface 2008: Culture and Technology,
	Carleton University.
2006	"The Curative Powers of Electricity Demonstrated: Electro-
	therapeutics in Victorian Canada," Canadian Society for the History and
	Philosophy of Science, York University.

#### **COURSES TAUGHT**

### Harvey Mudd College

History 81: Science and Technology in the Early Modern World

History 82: Science and Technology in the Modern World

History 150: Technology and Medicine

History 151: Science in Fiction

History 152: History of Modern Physics

History 179: Genetics and Race (with Dan Stoebel)

HSA 10: Science, Gender, Sex

History 198 (Independent Study): Recreating Experiments in Physics (Spring 2012); History of Sexuality (Spring 2014); Transgender History (Spring 2015); Biographies in Physics (Spring 2019)

STS 115: Communicating Science STS 190: Senior Seminar in STS Writ 1: Science and Gender

# The University of Toronto

HPS 211: Scientific Revolutions II (Spring 2009, Summer 2010)

#### **GUEST LECTURES**

2020	"Medical Technologies," Material Culture and History, CGU
2016	"Research in History of Science," STS Senior Seminar, Pomona College
2015	"History of Science," Bio 81A: Science vs. Pseudoscience, HMC
2013	"Manufacturing Doubt," STS Senior Seminar, Pomona College
2012	"Objectivity," STS Senior Seminar, Pomona College

#### **UNDERGRADUATE THESIS SUPERVISIONS**

<u>Advisor:</u>	
2020	Lee Meyer, STS, Pomona College, "Patient Empowerment and <i>The</i>
	Transsexual Phenomenon: An Analysis of Harry Benjamin's Treatment
	Model."
2019	Megan Fuelling, STS, Scripps College, "Mitigations of the Toxic Shock
	Syndrome Health Crisis."
2017	Haley Marber, STS, Pomona College, "The Medicalization of Childbirth
	in the United States."
2014	Antonietta Iannaccone, STS, Scripps College, "Cutting Out Worry:
	Popularizing Psychosurgery in America."
2014	Marta Bean, STS, Scripps College, "Shots Everybody?: British Anti-
	Smallpox Vaccination and the Development of Multifaceted Anti-
	Vaccine Rhetoric on Internet Parenting Forums."
2014	Simone Maule, STS, Scripps College, "The MSM Deferral Controversy:
	An Analysis of the 2000 BPAC Meeting."
2nd Reader:	
2020	Conor Chapman, STS, Pitzer College, "A Continuous Disruptor: An
	Orienting Analysis of CRISPR's Revolutionary Status."
2016	Amelia Hamiter, STS, ScrippsCollege, ""It's Not a Real Disorder":
	Attention Deficit/ Hyperactivity Disorder and Paradigms of Childhood
	Harm."
2016	Ashley Achee, History, Scripps College, "The Colonial Construction of
	Disease: Deconstructing the Effects of Race, Gender and Class in the
	Nineteenth Century British Asylum Complex."
2014	Logan Galansky, PPA, Pomona College, "Reclaiming the Diagnosis: The
	Effects of Demographic Characteristics on Patient Group Agency and
	Treatment Paradigms in the Political and Medical Spheres."
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# PROFESSIONAL AND COLLEGE SERVICE

Ongoing	
2017 -	Chair, STS Steering Committee, Claremont Colleges
2017 -	Director, Hixon Riggs Program for Responsive Science and Engineering, HMC
2018-	HSA Advising Coordinator, HMC
2018 -	Core Curriculum Revision Committee, HMC
2018 -	Advisory Committee, Canadian Society for History and Philosophy of
2010	Science
2019 -	Faculty Mentor, Alfred Flores, HSA Department
2016-	Teaching Committee, Sal Plascencia, HSA Department
<u>Past</u>	
2020	Book Manuscript Reviewer, Ohio University Press
2018	Chapter Reviewer, <i>History of Medical Education</i> , Delia Gavrus and Susan Lamb, Editors.
2017 - 18	Program Committee, Canadian Society for the History and Philosophy of Science
2016 - 17	Scholarly Standing Committee, HMC
2018	Organizer, Claremont STS Lecture, "Marginalization of Experience,
	Women of Color in STEM," Dr. Evelynn Hammonds.
2017	Chair, Nelson Lecture Series Committee, HMC
2011 - 17	STS Steering Committee, Claremont Colleges
2013 - 17	Hixon Riggs Steering Committee, HMC
2015 - 17	HSA Writing Requirement Committee, HMC
2016 - 17	Cultural Geography Search Committee, HMC
2016	Dean of Faculty Search Committee, HMC
2015 - 16	Research Committee, HMC
2016, 2017	Society of Women Engineers Event: Ran two workshops, "Science and
_010, _01/	Gender," for high school students, HMC
2014 - 16	President's Scholar Program Interviewer, HMC
2015	Co-Organizer, Contested Expertise, Toxic Environments Workshop,
-	Claremont Colleges
2015	Presentation Days Committee, HMC
2012 - 15	Mentor, HMC OID Mentoring Program
2012 - 14	Study Abroad Committee, Harvey Mudd College
2013	Academic Affairs Committee, Harvey Mudd College
2012	HSA Space Planning Committee, Harvey Mudd College
2012	Reviewer, Spontaneous Generations: A Journal for the History and
	Philosophy of Science
2006 - 11	Editor, Spontaneous Generations: A Journal for the History and
	Philosophy of Science
2009 - 10	Curator, University of Toronto Scientific Instruments
	Collection
2005 – 07	HAPSAT executive, The History and Philosophy of Science Graduate
	Student Association, University of Toronto
	President (2006-2007), Treasurer (2005-2006)
2005 – 07	HAPSAT Conference Committee, University of Toronto

## **PROFESSIONAL DEVELOPMENT**

2019 – 20	Professional Development Network, Associate Women Professors
2019	Faculty Success Program, National Center for Development and
	Diversity (12 weeks)
2019	Hixon Reading Group: Race After Technology, Ruha Benjamin
2019	Hixon Reading Group: The Cultural Authority of Science
2018 - 19	5C Faculty Leadership Program
2017 - 18	Hixon Reading Group: Doing Science Differently (Co-organizer)
2017	HMC Beyond Diversity Workshop
2017	Center for Teaching and Learning Reading Group: bell hooks, Teaching
	to Transgress
2016	Digital Humanities Summer Institute, Claremont
2016	Hixon Reading Group: Science and the Senses
2015	Hixon Reading Group: Political Technologies of Expertise
2014	Hixon Reading Group: Science, Expertise and Environment (Co-
	organizer)
2013	STS Pedagogy Workshop, Vassar College
2012	Writ1 Training, Harvey Mudd College
2012	Faculty Writing Work Group, Harvey Mudd College
2012	Hixon Reading Group: Darwin, Marx, Freud
2009	THE500: Teaching in Higher Education, University of Toronto
2008	Teaching Assistant's Training Program, University of
	Toronto

## PROFESSIONAL MEMBERSHIPS

AHA, American Historical Association CSHPS, Canadian Society for the History and Philosophy of Science HSS, History of Science Society