

**Jonson Miller**

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**Drexel University**

Department of History  
3250-60 Chestnut St., Suite 3025  
Philadelphia, PA 19104

**Professional Positions****Drexel University, Department of History**

Associate Teaching Professor: Since July 2015

**Drexel University, Department of History and Politics**

Associate Teaching Professor: September 2013 to July 2015  
Assistant Teaching Professor: June 2009 to September 2013  
Instructor: September 2007 to June 2009  
Adjunct Professor: January 2007 to September 2007

**Virginia Polytechnic Institute, Department of History**

Instructor: Summer 2006

**Education****Ph.D., Virginia Polytechnic Institute, Science and Technology Studies, 2008**

Graduate Certificate in Women's Studies

Dissertation: Citizen Soldiers and Professional Engineers: The Antebellum Engineering Culture of the Virginia Military Institute

Awarded **Outstanding Dissertation in Social Sciences and Humanities**, Virginia Tech

**M.S., University of Wisconsin, Madison, Geology, 2000****B.S., West Virginia University, Geology, 1998****Publications****Book**

Miller, Jonson. *Professional Identity and Social Struggle: Creating Engineers at the Antebellum Virginia Military Institute* (Under review)

**Book Chapters**

Falcone, Alissa, Scott Gabriel Knowles, Jonson Miller, Tiago Saraiva, and Amy Slaton.

“**Continuous Reinvention: A History of Engineering Education at Drexel University.**”

In *Building Drexel: The University and Its City, 1891-2016*. Edited by Richardson Dilworth and Scott Gabriel Knowles. Philadelphia: Temple University Press, 2016.

Miller, Jonson. “**Drexel's Vietnam War.**” In *Building Drexel: The University and Its City, 1891-2016*. Edited by Richardson Dilworth and Scott Gabriel Knowles. Philadelphia: Temple University Press, 2016.

**Peer-Reviewed Articles**

Miller, Jonson. “**Pathways and Purposes of the ‘French Tradition’ of Engineering in Antebellum America: The Case of the Virginia Military Institute.**” *Engineering Studies* 5 (2013): 117-136.

Downey, Gary Lee, Juan C. Lucena, Barbara Moskal, Thomas Bigley, Chris Hays, Brent Jesiek, Liam Kelly, Jane Lehr, Jonson Miller, Amy Nichols-Belo, Sharon Ruff, and Rosamond Parkhurst. “**The Globally Competent Engineer: Working Effectively with People Who Define Problems Differently.**” *Journal of Engineering Education* 95 (April 2006): 107-122.

### **Commissioned Works**

Miller, Jonson. “**Overview of Engineering and Technical Education and Work in the United States.**” National Academy of Engineering Committee on K-12 Engineering Education. Submitted 13 May 2008. Was incorporated into the following NAE report: National Academy of Engineering and National Research Council. *Engineering in K-12 Education: Understanding the Status and Improving the Prospects*. Washington, DC: National Academies Press, 2009.

### **Book Reviews**

Miller, Jonson. Review of *Alexander Dallas Bache: Building the American Nation through Science and Education in the Nineteenth Century*. *Technology and Culture* 54 (2013): 191-193.

### **Popular Writing**

Consultant for:

Peterson, Megan Cooley. *The First Computers*. North Mankato, Minnesota: Capstone Press, 2015.

Peterson, Megan Cooley. *The First Airplanes*. North Mankato, Minnesota: Capstone Press, 2015.

Baxter, Roberta. *The First Cars*. North Mankato, Minnesota: Capstone Press, 2015.

Peterson, Megan Cooley. *The First Space Missions*. North Mankato, Minnesota: Capstone Press, 2015.

### **Non-Print Media**

Zallen, Doris, Executive Producer, and Jonson Miller, Associate Producer. *Food Frights: Genetically Modified Foods and Food Safety*. Produced by Video Broadcast Service of Virginia Tech. 50 min. Public Broadcast System Adult Learning Service, 2003. Videocassette.

Boler, Megan, Jonson Miller, and Brent Jesiek. *Critical Media Literacy in Times of War*. Virginia Tech. [www.tandl.vt.edu/Foundations/mediaproject/home.htm](http://www.tandl.vt.edu/Foundations/mediaproject/home.htm) [no longer active]. 2002.

Web content writer, *The Observatorium*, National Aeronautics and Space Administration, Fairmont, WV, 1997. Wrote science articles for the general public.

### **Theses and Dissertations**

Miller, Jonson. “**Citizen Soldiers and Professional Engineers: The Antebellum Engineering Culture of the Virginia Military Institute.**” PhD diss., Virginia Polytechnic Institute and State University, 2008. **Awarded Virginia Tech’s Outstanding Dissertation in the Humanities and Social Sciences.**

Miller, Jonson. “**Glacial Chronology and Stratigraphy of Central Southern Wisconsin.**” MS thesis, University of Wisconsin-Madison, 2000.

## Conference Panels, Posters, and Presentations

- Miller, Jonson. “**Drexel’s Vietnam War.**” Drexel 125<sup>th</sup> Lecture Series, Drexel University, Philadelphia, PA, 2 February 2017. <https://www.youtube.com/watch?v=COY7kK7PESg>.
- Rosenberg, William, Ron Bishop, Andre Carrington, Robert Farley, and Jonson Miller. “**The 2016 Presidential Election: Issues, Voting, Media, and Polarization.**” College of Arts and Sciences Dean’s Seminar, Drexel University, Philadelphia, PA, October 26, 2016.
- Miller, Jonson. “**Improved Learning Through Student-Driven Assessments.**” Drexel University Annual Showcase of Teaching, Philadelphia, PA, May 18, 2016.
- Miller, Jonson. “**The Transformation of Engineering Knowledge through International Knowledge Transfer.**” Society for the History of Technology, Dearborn, Michigan, November 8, 2014.
- Miller, Jonson. “**Engineering Identity and Authority: New Servant-Leaders for Virginia.**” Introductory Symposium, Philadelphia Area Center for the History of Science, Philadelphia, PA, September 18, 2014.
- Miller, Jonson. “**Improving Freshmen Performance in Large-Lecture Courses in Fifteen Minutes.**” Drexel University Annual Showcase of Teaching, Philadelphia, PA, April 15, 2014. **Awarded 1<sup>st</sup> place award for best morning-session poster.**
- Miller, Jonson. “**Improving Freshmen Performance in Large-Lecture Courses in Fifteen Minutes.**” CIDER Conference on Higher Education Pedagogy, Blacksburg, VA, February 5-7, 2014.
- Miller, Jonson, panelist. “**Book Panel: Historical Understandings of Equity in Science Education: A Discussion of Race, Rigor, and Selectivity in U.S. Engineering: The History of an Occupational Color Line.**” History of Education Society, Cambridge, MA, November 4-7, 2010.
- Miller, Jonson. “**The Origins of the Virginia Military Institute and the Southern Military School Tradition in Virginia’s Antebellum Sectional Tensions.**” History of Education Society, Philadelphia, PA, October 22-25, 2009.
- Miller, Jonson. “**Citizen Soldiers and Professional Engineers: The White Manhood of an Antebellum Engineering Professionalism at the Virginia Military Institute.**” Science, Technology, and the Historical Influence of Race, Philadelphia, PA, March 8-10, 2007
- Panel co-organizer. “**Engineering Education and Professionalism in the United States.**” Society for the History of Technology, Las Vegas, NV, October 12-15, 2006.
- Miller, Jonson. “**Citizen Soldiers and Professional Engineers: Constructing Engineering Professional Identity at the Virginia Military Institute, 1834-1851.**” Society for the History of Technology, Las Vegas, NV, October 12-15, 2006.
- Miller, Jonson. “**Race, Class, Gender, and Knowledge in Early 19th-Century Engineering Education in the Southern US.**” Society for Social Studies of Science, Pasadena, CA, October 21, 2005.
- Downey, Gary Lee, Juan C. Lucena, Barbara Moskal, Thomas Bigley, Chris Hays, Brent Jesiek, Liam Kelly, Jane Lehr, Jonson Miller, and Amy Nichols-Belo. “**Engineering Cultures: Expanding the Engineering Method for Global Problem Solvers.**” *ASEE/AaeE Global Colloquium on Engineering Education*, Sydney Australia, September 26-30, 2005.
- Miller, Jonson. “**19th Century Engineering Education, Citizenship, and White Industrial Class Masculinity at the Virginia Military Institute, Lexington, Virginia, USA.**” Society for the Social Studies of Science, Paris, France, August 26, 2004.

- Miller, Jonson. “**Globalization, Technological Determinism, and the Revolution in Military Affairs.**” Science and Technology in Context: An Interdisciplinary Graduate Student Conference, American Association for the Advancement of Science, Washington, D.C., April 25, 2004.
- Miller, Jonson. “**Nineteenth Century Technical Education and White ‘Industrial’ Class Masculinity at the Virginia Military Institute.**” Popular Culture Association/American Culture Association, San Antonio, TX, April 7, 2004.
- Miller, Jonson. “**Rendering the Land Legible: Federal Enrollment of Geology in Enforcing Land Use Policy in the American West During the Late 19<sup>th</sup> Century.**” Mephistos, Virginia Tech, Blacksburg, VA. March 15, 2002.
- Miller, Jonson. “**Late Pennsylvanian pedogenic environments in the central Appalachian basin and implications for climatic change.**” Geological Sciences Student Research Symposium, Virginia Tech, Blacksburg, VA. March 23, 2001.
- Miller, Jonson. “**A magnetically reversed till in southern Wisconsin.**” Geological Society of America – North Central Section, Champaign-Urbana, IL. April 7, 2000.

## Teaching

### *Teaching Experience*

#### **Drexel University, Department of History and Politics**

HIST 100: American History  
 HIST 162: Themes in World Civilization II  
 HIST 163: Themes in World Civilization III  
 HIST 201: US History to 1815  
 HIST 202: US History, 1815-1900  
 HIST 203: US History Since 1900  
 HIST 203: US History Since 1900 Online  
 HIST 230: US Military History I  
 HIST 231: US Military History II  
 HIST 236: World War II (as Pacific War)  
 HIST 238/338: The Vietnam War  
 HIST 285: Technology in Historical Perspective  
 HIST 292: Technology in American Life  
 HIST 298: Special Studies: American Expansionism  
 HIST 298: Independent Study: Historiography of the American Revolution  
 HIST 298: Independent Study: The Revolution in Connecticut and New York  
 HIST 298: Independent Study: American Social History before 1865  
 HIST 331: The American Revolution  
 HIST 591: Themes in the History of Technology: Technology, Progress, and Determinism  
 HIST 591: Themes in the History of Technology: Race and Reason  
 HNRS 200: Introduction to the Honors Program  
 SCTS 645: War and Technoscience

#### **Delaware County Community College, Broomall, PA**

Through a cooperative program with Drexel University  
 HIST 285: Technology in Historical Perspective

**Virginia Polytechnic Institute, Blacksburg, VA: Department of History**  
HIST/STS 3716: History of Technology II

**Virginia Polytechnic Institute, Blacksburg, VA: Women's Studies Program**  
WS/STS 4704: Gender and Science  
WS 1824: Introduction to Women's Studies

**Virginia Polytechnic Institute, Blacksburg, VA: Science and Technology in Society**  
STS/HIST 2054: Engineering Cultures

*Teaching Experience – Teaching Assistant*

**Virginia Polytechnic Institute, Blacksburg, VA: Science and Technology in Society**  
STS/HIST 2054: Engineering Cultures  
STS 1504: Introduction to Humanities, Science, and Technology

**Virginia Polytechnic Institute, Blacksburg, VA: Department of Geosciences**  
GEOL 3114: Introduction to Meteorology

**University of Wisconsin, Madison, WI: Department of Geology and Geophysics**  
GEOL/GEOG 320: Geomorphology  
GEOL 101: General Geology

**Awards and Honors**

**Teaching Awards**

1<sup>st</sup> place award for best morning-session poster, 2014 Drexel Showcase of Teaching for  
“Improving Freshmen Performance in Large-Lecture Courses in Fifteen Minutes.”  
Drexel University, 2014  
Drexel Center for Academic Excellence Teaching Fellow, 2010-2014  
XCaliber Award, for a team teaching with technology  
Virginia Tech, 2003

**Grants and Research Awards**

Research Fellow, Philadelphia Area Center for the History of Science, 2014-2015  
\$1600  
Outstanding Dissertation in Social Sciences and Humanities  
Virginia Tech, 2008-2009  
College of Liberal Arts and Human Sciences Graduate Student Endowed Scholarship  
Virginia Tech, 2005-2006  
Weeks Research Assistantship  
Includes two semesters and one summer of stipend to support research activities  
University of Wisconsin, Department of Geology and Geophysics, 1998-2000

**Student Awards**

National Association of Geoscience Teachers Field Camp Scholarship  
Used for funding of field course while at West Virginia University, 1998

Galpin Award for the Outstanding Geology Senior  
West Virginia University, Department of Geology and Geography, 1998  
Presidential Award for Academic Excellence  
West Virginia University, 1996-1998

## **Service**

### **Service – Drexel University**

#### **Service to the University**

Teaching Fellow, Drexel Center for Academic Excellence (2010-2016)

As a Teaching Fellow, I participate in the new-faculty orientation and other events to help promote excellent teaching and learning. I have also served on a committee to evaluate proposals for DCAE Faculty Learning Communities (2012, 2013).

Mentor, DCAE Academic Portfolio Workshop (since Spring 2014)

I mentor colleagues on how to develop an academic portfolio that might be used as the bases for promotion, awards, and job searches. Required three training meetings, two or three meetings with each mentee, and time evaluating drafts of the mentees' portfolios. I have also mentored new mentors for the program.

DCAE Advisory Board (Summer 2015)

Attend quarterly board meetings and advise the DCAE staff on administration, events, and programs.

Member, DCAE Teaching Fellows Focus Group (Summer 2015)

Meeting to evaluate the fellows program and the role of the fellows in the broader university.

Judge, University Research Day (2012)

I volunteered to serve as a judge to evaluate student research presentations. Judge evaluations are used by a committee to award prizes for the best research in several categories.

#### **Service to the College of Arts and Sciences**

Judge, Drexel Publishing Group Essay Contest (2014)

I evaluated and ranked ten student essays in the Humanities category.

Judge, College of Arts and Sciences Research Day (2011, 2013, 2014)

I volunteered to serve as a judge to evaluate student research presentations. Judge evaluations are used by a committee to award prizes for the best research in several categories.

#### **Service to the Department of History**

Chair, Departmental Curriculum Committee (Summer 2016 to Spring 2017)

Co-organizer, Professional Development Committee (Spring 2014 to Spring 2015)

Organize departmental discussions on pedagogy. Organize peer-review of teaching.

Chair, Department Prize Committee (2014)

Organized a committee to solicit and evaluate nominees for four department prizes.

Submitted nominees to the college. Made recommendations to the department about future prize nomination processes.

Recruitment of accepted students (Winter 2014)

Called twenty-four accepted students to answer their questions and provide information about our department and university.

Acting Director of Undergraduate Studies (Winter and Spring 2014)

I advise history and political science majors, clear students for graduation, coordinate with other programs on related programs, approve course overrides and study abroad and transfer courses, communicate with students about relevant opportunities and activities, coordinate our department's Honors Day awards, and serve as the department delegate to the college Assessment Committee.

Governance Working Group (2013-2014 year)

Develop proposals for reform of department governance and administration.

Curriculum Working Group (2013-2014 year)

Develop proposals for curriculum reform.

Mentoring of New Faculty (Since Fall 2013)

I informally mentor new faculty on teaching, including construction of syllabi, adapting to Drexel's teaching environment, and development of assignments.

Co-Chair, Teaching Faculty Committee (Spring 2012 to Winter 2013)

This committee is examining alternatives to hiring teaching faculty to fulfill our department's teaching obligations.

Science, Technology, and Society Program Committee (Summer 2011 to Summer 2012)

As a member of this committee, I reviewed applications of prospective students and made recommendations to the program director on their admission.

Thesis advisor

I have co-advised two students on their bachelor's theses and one on her master's thesis.

Raymond M. Lorantas Scholarship Committee (2008-2012, 2016)

As a member of this committee, I reviewed submissions for and helped determine the awarding of a prize for the best undergraduate paper on history of a region outside of the US, Canada, and Western Europe.

Undergraduate Essay Prize Committee, (2007-2008)

As a member of this committee, I reviewed submissions for and helped determine the awarding of a prize for the best undergraduate paper in history or political science.

## **Service – Virginia Tech**

### **Service to the University**

Founder, Co-coordinator, VT Research in Engineering Studies Group (2004-2006)

I founded this research and discussion group to facilitate communication and collaboration on issues related to engineering. Students and faculty from multiple colleges and departments participated. We held regular meetings, at which we shared our own research or discussed other research and developments in engineering.

Science and Technology Studies Delegate, Graduate Student Assembly (2003-2004)

I was elected by the STS graduate students to represent their concerns to VT's Graduate Student Assembly.

### **Service to the Department of Science and Technology in Society**

Secretary, STS Graduate Student Organization (2005-2006)

The organization was recognized by the department as the official representative body for STS graduate students. As secretary, I kept minutes of the organization's meetings and facilitated communication.

Graduate Student Representative, STS Policy Committee (2004-2005)

As the graduate student representative, I represented the views of the STS graduate students to the committee and communicated policy decisions and concerns to the graduate students.

### **Service to the Department of Geological Sciences**

Seminar Committee (2000-2001)

As a member of this committee, I solicited suggestions for outside speakers for our department's regular research seminar series.

### **Service – University of Wisconsin**

#### **Service to Graduate Student Instructors**

Departmental Steward, Teaching Assistants' Association, AFL-CIO, AFT Local # 3220 (1998-2000)

The Teaching Assistants' Association is the labor union representing graduate student instructors at the University of Wisconsin's Madison campus. As steward, I organized the members in my department for actions taken by the union and represented the concerns of my department's members to the union. As such, I attended all union meetings and participated in organizing meetings and actions related to contract negotiations.

#### **Service to Profession**

Book reviewer, *Technology and Culture* (2012)

Reviewer, *Engineering Studies: Journal of the International Network for Engineering Studies* (2011)

Conference Organizer, STS (R)evolutions

This conference was held from March 17 to 19, 2005 at Virginia Tech in Blacksburg, Virginia. As one of the organizers, I helped to plan and coordinate the conference, including the program, travel arrangements, and funding.

Workshop Organizer, Technologies/Moralities: The Ethical Grammar of Technological Systems

This conference was held from March 28 to 29, 2003 at Virginia Tech in Blacksburg, Virginia. As one of the organizers, I helped to plan and coordinate the conference, including the program and travel arrangements.

#### **Service to Community**

Lecturer, Expanding Horizons, Souderton Mennonite Homes (April 2015)

Gave two lectures on American foreign policy in the Israeli-Palestinian Conflict for a life-long learning program for residents of Lutheran and Mennonite retirement homes.

Researcher, National Academy of Engineering Committee on K-12 Engineering Education (2008)

I was commissioned to write a report on the history of engineering and technical education in the United States. My report was incorporated into the following NAE report:

National Academy of Engineering and National Research Council. *Engineering in K-12 Education: Understanding the Status and Improving the Prospects*. Washington, DC: National Academies Press, 2009.