# Lloyd Ackert, Ph.D.

# **Current Position**

2006-Present Teaching Professor of History, Department of History, Drexel University 2018-Present Research Associate, Patrick Center for Environmental Research, Academy of Natural Sciences of Drexel University

## **Previous Positions**

2004-2006 Yale University Library Special Collections Humanities Fellow, and Post-Doctoral Associate at the Department of the History of Science and History of Medicine at Yale University (Supervisor, Alice Prochaska, University Librarian, Yale University Library)
2009-2013 Director - Science, Technology and Society Master's Program, Drexel University
2013-2017 Faculty Fellow, Honors Symposium, Pennoni Honors College
2014-2019 Director - Emerging Scholars Program, College of Arts and Sciences

## **University Committees**

- 2014-Present: Library Advisory Group, Monthly, Develop policies for library access and collections, CoAS and Pennoni Honors College Representative.

- 2014-Present: Fulbright Fellowship Review Committee, Drexel Fellowships Office

- 2014-Present: Boren Scholarship Review Committee, Drexel Fellowships - 2016-2022: Elected as Senator to the Faculty Senate – Representing CoAS Faculty at the monthly meetings across the Academic Year.

- 2015-2019: Chair of the Faculty Senate on Student Life.

- 2014-Present: Student Recruitment for International Admissions, Enrollment Management.

- Summer 2017: Search Committee for Vice President of the Steinbright Career Development Center, Faculty Senate Representative.

- 2017-2019, 2020-2022: Faculty Senator and Chair of the CoAS Caucus.

## Education

1997-2004 Ph. D. Program in the History of Science, Medicine, and Technology, The Johns Hopkins University. Program completed and degree awarded May 2004

<u>Fields</u> Completed graduate fields in History of Russian Science (with Professor Daniel Todes), History of Biology and Ecology (with Professor Sharon Kingsland), and Russian History (with Professor Jeffrey Brooks), 1999-2000

<u>Thesis</u> From the "Thermodynamics of Life" to Ecological Microbiology: Sergei Vinogradskii and the Cycle of Life, 1850-1950, Abstract Number, AAT 3130632

Languages Russian (fluent), French (reading/basic speaking), German (reading)

1996-1997 Graduate Student, The Institute for the History of Natural Science and Technology, The Russian Academy of Sciences, St. Petersburg, Russia (tutorials in the history of Russian biology and ecology, and the sociology of scientific knowledge, conducted in Russian, with Professors Eduard Kolchinskii and Yasha Gall)

1991-1996 Interdepartmental Interdisciplinary Major, College of Liberal Arts, The University of Minnesota-Twin Cities Campus. Interdisciplinary Major in History of Science, Evolutionary Biology (in Professor James Curtsinger's Genetics Laboratory), and Russian Language and Areas Studies (Major Supervisor, Professor John Beatty). BA awarded 1997

#### Research

#### Current Project

Ruth Myrtle Patrick (1907-2013): A Life in Science--Limnology as Environmentalism

I am currently engaged in working with the Patrick collection at the Academy of Natural Sciences of Drexel University with the aim of writing a scientific biography of Ruth Patrick. Her life opens windows onto several crucial aspects of the history of ecology and environmentalism, of women on science during the 20<sup>th</sup> century, and the relationship between science and society, industry and government.

## Monographs

Sergei Vinogradskii and the Cycle of Life: From the Thermodynamics of Life to Ecological Microbiology, 1850-1950, Vol. 34 (Dordrecht: Springer Press, 2013)

#### Scholarly Essays

"The Origin of Life," Encyclopedia of Evolutionary Biology (Elsevier B.V., 2015), Vol. 20.

"The "Cycle of Life" in Ecology: Sergei Vinogradskii's Soil Microbiology, 1885-1940," *Journal of the History of Biology*, Volume 40, No. 1, March 2007, 109-145.

"The Role of Microbes in Agriculture: Sergei Vinogradskii's Discovery and Investigation of Chemosynthesis, 1880-1910," *Journal of the History of Biology*, Volume 39, 2006, No. 2, 373-406.

w/ Benno Warkentin, "Introduction," *Footsteps in the Soil: People and Ideas in Soil History* (Elsevier, 2006), ed. Benno Warkentin.

"Ehkologicheskii podkhod Sergeia Nikolaevicha Vinogradskogo k izucheniiu mikrobiologii pochvy, 1920-1940" ("Sergei Nikolaevich Vinogradskii's Ecological Approach to Soil Microbiology, 1920-1940"), *Ehvoliutsionaia Biologiia: Istoriia i Teoriia (Evolutionary Biology: History and Theory*) (St. Petersburg, St. Petersburg Institute of History RAS, Nestor-History Press, Russia, 2005), Vol. 3, eds. Yasha Gall and Eduard Kolchinskii, 160-175.

"Vasilii Vasil'evich Dokuchaev, 1846-1903" Supplement to the Modern Encyclopedia of Russian, Soviet, and Eurasian History, editors Bruce Adams, Eward J. Lazzerini, and George N. Rhyne, Vol. 7.

"Vivien Theodore Thomas (1910-1985)," *The African American National Biography Project* (Cambridge: W. E. B. Du Bois Institute for Afro-American Research and Oxford University Press), December 2003.

"Ferdinand Cohn's Influence on the Development of Modern Bacteriology," *Science and Its Times: Understanding the Social Significance of Scientific Discovery* (Chicago: Gale Group, Inc., 2001), Neil Schlager, ed., Vol. 6. (2000 word topical essay).

"Ferdinand Julius Cohn," *Science and Its Times: Understanding the Social Significance of Scientific Discovery* (Chicago: Gale Group, Inc., 2001), Neil Schlager, ed., Vol. 6. (600 word biography).

"Sergei Sergeevich Chetverikov," *Science and Its Times: Understanding the Social Significance of Scientific Discovery* (Chicago: Gale Group, Inc., 2001), Neil Schlager, ed., Vol. 6. (75 words).

"Theodosius Grigor'evich Dobzhansky," *Science and Its Times: Understanding the Social Significance of Scientific Discovery* (Chicago: Gale Group, Inc., 2001), Neil Schlager, ed., Vol. 7. (600 word biography).

Fukui, H. H., Ackert, L. & Curtsinger, J. W., "Deceleration of age-specific mortality rates in chromosomal homozygotes and heterozygotes of *Drosophila melanogaster*" *Experimental Gerontology*, No. 31, 1996, 517-531.

## Book Reviews

Review of Nikolai Krementsov, <u>Revolutionary Experiments: The Quest for Immortality in</u> <u>Bolshevik Science and Fiction</u> (New York: Oxford University Press, 2014), *Social History of Medicine*, Forthcoming.

"Red Blood, Red Science, Red Fiction: Bogdanov's Proletarian Assemblage." A Review of Nikolai Krementsov, <u>A Martian Stranded on Earth: Alexander Bogdanov, Blood Transfusions,</u> <u>and Proletarian Science</u> (Chicago and London: University of Chicago Press, 2011), *Metascience*, July 2014, Volume 23, Issue 2, pp 377-380. Review of Claude E. Dolman and Richard J. Wolfe, *Suppressing the Diseases of Animals and Man, Theobald Smith, Microbiologist* (Boston, MA: Boston Medical Library, 2003); *Journal of the History of Biology*, October 2004, Vol. 37, No. 3, 597-598.

"Patronage Politics in the Rise of an Imperial Human Ecology," a review of Peder Anker, *Imperial Ecology: Environmental Order in the British Empire, 1895-1945* (Cambridge, Mass.: Harvard University Press, 2001); *Metascience*, November 2002, Vol. 11, No. 3, 333-335.

"In This Corner, Nature," a review of Douglas R. Weiner, *A Little Corner of Freedom: Russian Nature Protection from Stalin to Gorbachev* (Berkeley: University of California Press, 1999); *Metascience*, July 2002, Vol. 11, No. 2, 256-261.

Review of "Debra Jan Bibel, *Microbial Musings: A History of Microbiology, Breakthroughs, Controversies, Philosophical Issues, and Connections* (Belmont, CA: Star Publishing Company, 2001); *Bulletin of the History of Medicine*, Summer 2003, Vol. 77, No. 2, 466-467.

#### Scholarly Presentations

Health Metaphors in Ecology: A Show and Tell of Ruth Patrick's Conestoga River Basin Report, 1948-1949, in the Session: Legacies of Silent Spring II: From Scientist to Nation, History of Science Society Annual Meeting, New Orleans (Virtual), October 2020.

Ruth Patrick's Collaborative Study of the Conestoga River Basin: Determining the Health of a Watershed, 1945-1950," Guest Lecture, Lite Lunch Series, "Franklin and Marshall College," February 2020

"Rivers, Humans, and Microbes: Ruth Patrick's Limnological Approach to Measuring the Health of Ecological Systems, 1940-1960," paper presented at the International Society for the History, Philosophy and Social Studies of Biology, Oslo, Norway, July 2019.

"Mapping River Radiation: Ruth Patrick's Savannah River Diatometers, 1950-1960" a Poster presentation at the History of Society Society annual meeting, Toronto CA, November 2017.

"Sergei Winogradsky and the *Cycle of Life*: A Story of Plant Physiology, Microbiology, and Ecology," UPenn EcoLunch, Biology Department, University of Pennsylvania, September 2016.

"From Gray Boxes to 'Cosmos': Teaching the History of Science in Science Courses," Drexel Center for Academic Excellence, Third Annual Showcase of Teaching, Poster Presentation on May 11, 2015

"The Cycle of Life: A History of Ecological Microbiology," New Jersey Agricultural Experiment Station and School of Environmental and Biological Sciences, Rutgers University, Invited Seminar, May 1, 2015. "Holistic Thought in the late-18th Century: Lavoisier, Lamarck, and Humboldt," paper presented at the Annual Meeting of the East Central/American Society for Eighteenth Century Studies, November 2013.

"A Scientific Critique of Experimental Socialism: Winogradsky's Pseudonymous Essays on the Bolshevik Revolution, 1910-1920," an oral report in the session "Science and Historical Cataclysm: Russian Scientists' Interpretations of and Responses to War and Revolution" at the annual meeting of the History of Science Society, San Diego, California, November 2012.

"Exploring Boundaries in Experimental Ecology: Vinogradskii's Sulphur Bacteria Research, 1880-1900," in the Session: *Towards an Historical Ecology of Research Environments* History of Science Society Annual Meeting, Cleveland, OH, November 2011.

"A Russian Pasteurian: Sergei Winogradsky's French Career in Brie-Conte-Robert" at the international conference "Russian-French Links in Biology and Medicine, Russian Academy of Sciences, St. Petersburg, Russia, September 2011.

"Freshman Honors Courses" at the workshop "High Impact Educational Practices" organized by the Drexel Center for Academic Excellence, Drexel University, May 5, 2010.

"Biological Thermodynamics: Andrei Famintsyn's "Exchange of Matter and Transformation of Energy, 1850-1885," at the Annual Meeting of the History of Science Society, Washington, D.C., November 2007.

"Parallel Biography: Ferdinand Cohn versus Louis Pasteur on Bacterial Speciation, 1850-1870," and Session Organizer for "Exploring Biography: Approaches to 'Lives in Science'" for the Annual Meeting of the History of Science Society, Vancouver, BC, November 2006.

"Sergei Winogradsky and the Cycle of Life: The Rise of Ecological Soil Microbiology, 1925-1950," at the Rutgers University Seminar, Department of Biochemistry and Microbiology, Rutgers University, December 2006.

"Serge Winogradsky," at the Conference "Serge Winogradsky Aujourd'hui" co-organized by Syndicat Interdepartmental pour L'Assainissement de L'Agglomeration Parisienne (S.I.A.A.P.) and Res Naturalis sarl, Versailles, France, October 2006.

"The Cycle of Life in Soil Science," at the 18th World Congress of Soil Science, July 2006.

"Organic Matter and the Rise of Holistic Agriculture: John Pitkin Norton and William Henry Brewer at Yale, 1840-1900," Annual Meeting of the History of Science Society, Minneapolis, MN, November 2006.

"The Role of Biography in History: Creativity, Concepts, and Lives in Science at Yale, 1840-1900," to the Whitney Humanities Center Fellows, Yale University, September 2005. "Organic Matter and the Rise of Holistic Agriculture: John Pitkin Norton and William Henry Brewer at Yale, 1840-1900," to the Annual Meeting of the International Society for the History, Philosophy, and Social Studies of Biology, Guelph, Canada, July 2005.

"The Cycle of Life in Ecology: From Romantic Naturphilosophie to the Ages of Gaia," Guest Lecturer, Franklin and Marshall College, March 2005.

"The 'Cycle of Life' in Ecology: Sergei Vinogradskii's Soil Microbiology, 1885-1940," to the Holmes Workshop, Department of the History of Science and History of Medicine, Yale University, January 2005.

"The Russian Influence on American Soil Science," invited paper at the Annual Meeting of the Soil Science Society of America, Seattle, WA, November 2004.

"A Classic in Émigré Status: The Curious Intellectual Authority of Sergei Vinogradskii in the 1930s," at the Conference *Intelligentsia: Russian and Soviet Science on the World Stage, 1860-1960*, University of Georgia, Athens, GA, October 2004.

"Experimental Ecology in Soil Science: The Reception of Sergei Vinogradskii's 'Direct Method,' 1920s-1930s," to the Annual Meeting of the International Society for the History, Philosophy, and Social Studies of Biology, Vienna, Austria, July 2003.

"Sergei Winogradsky's 'Direct Method' and his International School of Soil Microbiologists," invited paper at the Annual Meeting of the Soil Science Society of America, Indianapolis, IN, November 2002.

"Sergei Vinogradskii: From the "Cycle of Life" to "Microbiological Ecology," 1890-1930," to the Annual Meeting of the History of Science Society, Denver, CO, November 2001.

"Sergei Vinogradskii and the Cycle of Life, 1885-1905," to the Joint Atlantic Seminar for the History of Biology, Department of the History and Sociology of Science, University of Pennsylvania, Philadelphia, PA, April 1999.

"An Interim Period Ends: An Analysis of Theodosius Dobzhansky's Diaries, 1929-1935," to the 8<sup>th</sup> National Conference on Undergraduate Research, Western Michigan University, Kalamazoo, MI, April 1994.

## Newspaper Articles

"Streptomycin, TB Vanquisher, Discovered via Winding Path," in @ISSUE: What was past century's most important discovery? *Asbury Park Press*, July 5, 2015.

## Public Talks

"Traveling Talks: The Science Behind the Traveler Artist," Olana Partnership and Historic House, Hudson, NY, 27 May 2018

"Frederick Church as Explorer" in the "Panorama Children's Summer Program," Olana Partnership and Historic House, Hudson, NY, Summer 2017.

"History of Science Series: Exploring Church's Library and 19th Century "Evolution" Writings. A series of three talks delivered at the Olana Partnership and Historic House, Hudson, NY, Summer 2015.

#### **Fellowships and Grants**

International Travel Award, to present at the conference "Russian-French Links in Biology and Medicine, Russian Academy of Sciences," St. Petersburg, Russia, September 2011.

Grant, to organize a Post-Doctoral Working Group, Whitney Humanities Center, Yale University, 2005-2006.

Grant, Dibner Institute for the History of Science and Technology, to attend the Woods Hole Biology Seminar "Cosmic Evolution and Astrobiology," May 2005.

Travel Grant, International Society for the History of Science, Philosophy, and Social Studies of Biology, to present paper, July 2003.

Advanced Graduate Training Fellowship, Social Sciences Research Council, Eurasia Program, for the project "Sergei Vinogradskii and the 'Cycle of Life,'" 2000-2001.

Travel Grant, History of Science Society/National Science Foundation, to present paper, November 2001.

Invited Speaker Travel Grant, Soil Science Society of America, October 2001.

Grant, Dibner Institute for the History of Science and Technology, to attend the Woods Hole Biology Seminar "Putting Humans into Ecology," June 2000.

Travel Grant, Joint Atlantic Seminar in the History of Biology, to present paper, April 1999.

University of Minnesota Travel Subsidy, to present paper at the 8<sup>th</sup> National Conference on Undergraduate Research, April 1994.

Undergraduate Research Opportunities Grant, for the project "A Translation of Theodosius Dobzhansky's Diaries," 1993-1994.

#### **Professional Activities**

Refereeing

- History of Science, 2018-Present

- Slater Predoctoral Fellowship in HSTM, American Philosophical Society Library, Application Reviewer, 2017-Present

- Centaurus, 2014-Present

- *Metascience*, 2012-Present

- *Studies in the History of Biology*, Institute of the History of Science, Russian Academy of Sciences, 2011-Present

- Endeavour, 2010-Present

- Journal of the History of Biology, 2005-Present

- New Jersey Agricultural Experiment Station Press, Rutgers, The State University of New Jersey, 2005-Present

- Bulletin of the History of Medicine, 2004-Present

Professional Service

- Secretary and Moderate, International Society for the History, Philosophy and Social Sciences of Biology, 2020-Present

- Chair, Committee on Education and Engagement (COEE), History of Science Society, 2016-2020

- Co-Chair, Joint Caucus for Socially Engaged Philosophy and History of Science (JCSEPHS), 2018-2020

# **Memberships**

- Biological Sciences Working Group - Consortium for History, Science, Technology and Medicine.

- Earth and Environmental Sciences Working Group, Consortium for History, Science, Technology and Medicine.

- History of Science Society, Committee on Education and Engagement 2012-Present

- Council on the History, Philosophy, and Sociology of Soil Science (Soil Science Society of America), 2001-2008.

- Post-Doctoral Working Group, Whitney Humanities Center, Yale University, Coordinator, 2005-2007.

- American Association for the Advancement of Slavic Studies, 2002-2007.

- International Society for the History, Philosophy, and Social Studies of Biology, 2000-Present.

- History of Science Society, 1994-Present.

## Participation in Seminars

Session Chair, "Framing Eugenics in the 21st Century: Engaging current debates with the history of science session," at the Annual Meeting of the History of Science Society, Seattle, WA, November 2, 2018

Session Chair, "From Biology and Chemistry to Astrobiology and Astrochemistry" in the Cain Conference on *The Evolving Search for Life in the Universe*, Chemical Heritage Foundation, Philadelphia, PA, May 26-27, 2016.

Session Chair, "Exploring Human/Animal and Biological/Social Boundaries in Twentieth-Century Science," at the Annual Meeting of the History of Science Society, San Francisco, CA, November 2015.

"Cosmic Evolution and Astrobiology," Dibner Institute for the History of Science and Technology Seminar in the History of Biology, Marine Biological Laboratory, Woods Hole, MA, May 2005.

Panel Discussion on "Improving Soil Science History: The Interaction between Historians and Soil Scientists," at the Annual Meeting of the Soil Science Society of America, Seattle, WA, November 2004.

"Workshop: Putting History into Medicine," Institute of the History of Medicine, The Johns Hopkins University, Baltimore, MD, March 2003.

"Putting Humans into Ecology," Dibner Institute for the History of Science and Technology Seminar in the History of Biology, Marine Biological Laboratory, Woods Hole, MA, June 2000