**Current Position**

Associate Professor, Department of the History of Science, University of Oklahoma.

Research Interests: history of technology, colonial and postcolonial science and technology, history of international development, Southeast Asian history and politics.

***Professional Service***

2015 - present: Trustee, D. Kim Foundation

2013 -2021: Editor: *Technology’s Stories,* [www.technologystories.org](http://www.technologystories.org)

2010 - 2020: Editor-in-Chief, *Technology and Culture*

2006 - present: Advisory editor, *East Asian Science, Technology, and Society*

2009 - 2017: Advisory editor *History and Technology*

2005-2010: Associate Editor, *Technology and Culture*

**Education**

Cornell University: Ph.D. Science and Technology Studies, 2000, *Constructing “Native Development”: Technological Change and the Politics of Colonization in the Netherlands East Indies, 1905-1930*.

Duke University: 1984-1986. M.S., Electrical Engineering.

Auburn University: 1981-1984. B.S. Computer Engineering

**Awards and Recognition**

Leonardo Da Vinci Medal, Society for the History of Technology 2021

Council for Editors of Learned Journals, Best Special Issue Prize, 2014 for *Technology and Culture* 55 no. 2, “Shifting Gears”

**Publications**

***Books***

In preparation: *Technology in Southeast Asian History*, for the *SHOT: Historical Perspectives on Technology* series, under contract with the Johns Hopkins University Press.

*Technology and Ethical Idealism: A History of Development in the Netherlands East Indies,* Leiden: CNWS. (2007)

***Scholarly Reference Works***

*Critical Readings in the History of Technology*, London: Bloomsbury, 2020. Co-edited with Peter Soppelsa.

In preparation: *Cultural History of Technology* (six volumes), Co-editing with Jennifer Alexander, Amy Bix, William Storey

***Articles or Book Chapters***

“Moral Narratives of Technologyical Change in the early Green Revolution”. Chapter under preparation for *Thinking Through Science and Technology*, edited by Glen Miller.

“Sugar”, Chapter 17 in *Oxford Handbook on Agriculture*, forthcoming by Oxford University Press, 2023.

“Imagining a Technological Umma: Islam and High Technology in New Order Indonesia”, *History and Technology*, September 2020.

“Religions and social progress: Critical assessments and creative partnerships”, in *Rethinking Society in the Twenty-First Century*, Cambridge: Cambridge University Press, 2018. Coauthored with Grace Davie, Nancy T. Ammerman, Samia Huq, Lucian Leustean, Tarek Masoud, Jacob K. Olupona, Vineeta Singh, David A. Smilde, Linda Woodhead and Fenggang Yang.

“Engineering and the Postcolonial: Considering Ethics and Actions in Historical Perspective”, in The Philosophy of Engineering, East and West, C. Mitcham, B. Newberry, B. Zhang (eds.), Springer International Publishing, 2018.

“Building from the Outside In: Sociotechnical Imaginaries and Civil Society in New Order Indonesia”, in Dreamscapes of Modernity, edited by Sheila Jasanoff and Sang-hyun Kim (Chicago, 2015).

“Green Revolution”, in *Ethics, Science, Technology, and Engineering*, edited by J. Britt Holbrook and Carl Mitcham, (New York: Macmillan), second edition. 2014. 413-416.

“Theory and Community in STS”, *East Asian Science, Technology, and Society* 6, no. 4 (2012), 493.

“Engaging Asia: A Forum on the History of Science and Technology*”, East Asian Science, Technology, and Society* 6, n. 2 (2012), 223-227.

co-authored w/Donna Mehos, “The Uses of Portability: Circulating Experts in the Technopolitics of Cold War and Decolonization.” *Entangled Geographies: Empire and Technopolitics in the Global Cold War* Gabrielle Hecht (ed.), Cambridge, MA: MIT Press, 2011.

“Place, Voice, Interdisciplinarity: Understanding Technology in the Colony and the Post-colony”, *History and Technology* 26, no. 3 (September 2010).

“Justice, Geography, and Steel: Technology and National Identity in Indonesian Industrialization”, *OSIRIS* 2009.

“The Emergence of Technological Development and the Question of Native Identity in the Netherlands East Indies”, *The Journal of Southeast Asian Studies*, June 2005.

“Development, Technology, and the Unique Economy of the Colony: the Dual Economy Thesis in Netherlands East Indies’ Development Policies, c. 1920”, in  *Science, Tropical Medicine, and Empire. Western Europe and the Colonial World Since 1800*, Benedikt Stuchtey (ed.), Oxford University Press, 2005.

Retrospective essay review of Tracy Kidder, *Soul of a New Machine*, for *Technology and Culture*, Classics Revisited feature, June 2004.

“Empirical Knowledge, Colonial Authority, and Native Development: The Controversy over Sugar/Rice Ecology in the Netherlands East Indies, 1905-1914.” *Environment and History,* April 2004*.*

“The Trouble with Mechanized Farming: Colonial Politics of Technological Change in the Netherlands East Indies c. 1920.” *East Asian Science, Technology, and Medicine* (1999).

“Takeoff or Self-Sufficiency: Ideologies of Development in Indonesia 1957-1961,” *Technology and Culture*, vol. 39, no. 2 (April, 1998).

***Encyclopedia Articles***

“The Green Revolution”, revised. *Encyclopedia of Science, Technology, and Ethics*, Carl Mitcham (ed.), New York: Macmillan, 2013.

“From European Enclave to Indonesian Institution: Technological Development and the Growth of Science in Southeast Asia”, for *The Cultural History of Humanity*, vol. 7, Bocar Dia (ed.), UNESCO (2007).

“The Green Revolution”, *Encyclopedia of Science, Technology, and Ethics*, Carl Mitcham (ed.), New York: Macmillan 2005

***Book Reviews***

Review of Lynn Hollen Lees, *Planting Empire, Cultivating Subjects: British Malaya 1786-1941*, H-SCI-MED-TECH reviews 2019.

Review of Eden Medina, *Cybernetic Revolutionaries: Technology and Politics in Allende’s Chile*, *American Historical Review* 118, no 1(2013).

Review of Inez Hollander, *Silenced Voices: Uncovering a Family's Colonial History in Indonesia, Pacific Affairs* 83, no. 4 (December 2010).

Review of Vaclav Smil, *Transforming the Twentieth Century: Technological Innovations and their Consequences*, Oxford: Oxford University Press, 2006, for *The Journal of World History*, forthcoming September 2009.

Review of Michael Adas, *Dominance by Design: Technological Imperatives and America’s Civilizing Missions*, for *East Asian Science, Technology, and Society*. (vol. 2, no. 1, 2008)

Review of Paul Josephson, *Resources under Regimes: Technology, Environment, and the State*, ISIS, June 2006, vol. 97, no. 2.

Review of *Research in Science and Technology Studies: Knowledge and Technology Transfer,* Marianne De Laet (ed.). *Technology and Culture*, April 2004.

Review of *Agrarian Environments: Resources, Representation, and Rule in India*, A. Agrawal, K Sivaramakrishnan (eds.), *Environmental History*, April 2002.

Review of Roberto J. González, *Zapotec Science: Farming and Food in the Northern Sierra of Oaxaca, Technology and Culture,* July 2002.

Review of Richard Tucker, *Insatiable Appetite: The United States and the Ecological Degradation of the Tropical World*. *Technology and Culture,* January, 2002*.*

Review of Jared Diamond, *Guns, Germs, and Steel: The Fates of Human Societies*, *Technology and Culture*, vol. 41, no. 3. June 2000.

Review of Wiebe Bijker, *Of Bicycles, Bakelites, and Bulbs: Towards a Theory of Sociotechnical Change*, in *Science, Technology and Human Values* 1997, vol. 1.

**Presentations**

“Expanded Geographies in the History of Technology: Da Vinci Medal Address”, November 19, 2021. Virtual.

“Sociotechnical Imaginaries in Histories of Technology in Latin America”, commentary for “Dreamscapes of Mexican and Guatemalen Modernity” panel in SHOT annual meeting, Milan, Italy, October 26, 2019.

“Global Innovation”, Invited Lecture for University of Twente CuriousU Summer School, “Goverance and Ethics of Technology” track, August 14, 2019.

“Sharing Stories: The Problem of Significance in the Global History of Technology”, Keynote Lecture for the workshop “Writing Global History of Technology from a Local Perspective: Cases from the South”, Univerity of Darmstadt, July 10, 2019.

“The Anthropocene in Asia”, invited seminar, KAIST (Korean Advanced Institute for Science and Technology), Center for Anthropocene Studies, June 18, 2019.

“Botanical Gardens in the History of Science in Southeast Asia” commentary for the panel “Botanic Gardens and the Mastery of Nature: Empire, Nation, and Environment in Southeast Asia”, Annual Meeting for the Association of Asian Studies, Denver, CO, March 22, 2019.

“

“Reporting the Indonesian Green Revolution”, colloquium for Harvard University Asia Center and Dept. of the History of Science, Cambridge, MA, October 15, 2018.

“Roundtable: Technology and Users in the Global South”, in the workshop “The Role of Users in Global Technological History”, University of Bern, Switzerland, June 15, 2018.

“The Moral Economy of Scholarly Publishing”, Colloquium for Science Research Policy Unit, University of Sussex, UK. May 16, 2018.

“Science, Technology and Religion in Social Progress”, Rethinking Technology for the Twenty-First Century Roundtable, Science Research Policy Unit, University of Sussex, UK. May 15, 2018.

“Narrating Technology and Morality in Postcolonial Indonesia: A Historical View”, Symposium on Technopolitics and Empire, University of California, Berkeley, Berkeley, CA. November 3, 2017.

“Virtuosity and Insight: Tensions, Aspirations, and Changing Modes of Storytelling in the History of Technology”, Society for the History of Technology Annual Meeting, Philadelphia, October 27, 2017

“Coercion, Compliance, and Consent: Mass Mobilization and Mass Media in Indonesia’s Green Revolution”, Science, Technology, and Mass Dictatorship in Asia, 24 June 2017

“Científicos Migrantes: El Caracter Internacional de la Ciencia” (Round table panelist), El Colegio Nacional, Mexico City, Mexico, 26 May 2017

“Out from the shadow of development? Exploring diverse modes and relations of “technical assistance” in the twentieth century”, Colloquium for Instituto de Investigaciones Filasófica, UNAM, 25 May 2017

“Commentary on Research Initiative: Making Modernity in East Asia”, November 24, 2016 University of Hong Kong

“Exploring religion in the International Panel for Social Progress”, World Social Forum, August 12, 2016

“Religion in the History of Technology: Methodological Considerations and Historiographic Possibilities”, Summer School for the International Committee on the History of Technology, 23 July-25 July 2016.

“Rethinking Society for the Twenty-first Century”, Roundtable, Society for the History of Technology Annual Meeting, June 23, 2016

“Needham in Southeast Asia? The Archive and Expanded Histories of Technology”. Society for the History of Technology Annual Meeting, June 24, 2017

“Imagining a Technological Umma: Islam and High Technology in New Order Indonesia”, Cornell University Dept. of Science and Technology Studies Colloquium, 9 May 2016.

Technology and Political Islam in Cold War Indonesia”, Workshop: Dark Matters (organized by Jennifer Wang and John Krige), University of British Columbia, Vancouver, CA, “September 6, 2014.

“Assessing Eurocentrism and gender bias. Diversity in the teaching of HPST”, Workshop: Teaching the history and the philosophy of science and technology (HPST) in higher education, Université Pierre et Marie Curie, Paris, June 19, 2014

“Thinking Through Technology and Religion: Industry and Islam in Postcolonial Indonesia”, University of Minnesota Dept. of History Colloquium, April 18, 2014.

“Thinking Through Technology and Religion: Industry and Islam in Postcolonial Indonesia”, Yale University History of Science Colloquium, March 24, 2014.

“Public Views of Technology and Agricultural Change in Post-colonial Indonesia”, Asia-Pacific STS Network Meeting, Singapore, July 17, 2013.

“Ghosts of the Future: Histories of Technology in STS”, Asia-Pacific STS Network Meeting, Singapore, July 16, 2013.

“Engineering and the Postcolonial: Considering Ethics and Actions in Historical Perspective”, Keynote talk, Forum for the Philosophy of Engineering and Technology, Beijing, China, November 3, 2012

“Building from the Outside In: Sociotechnical Imaginaries in New Order Indonesia”, Graduate University of the Chinese Academy of Sciences, Beijing, China, October 31, 2012.

“Exploring Industrial Ethics and Sociotechnical Imaginaries in Indonesian Popular Culture”, Society for the History of Technology Annual Meeting, Copenhagen, Denmark, October 5, 2012.

“The Transnational in the History of Technology”, Plenary, Society for the History of Technology Annual Meeting, Copenhagen, Denmark, October 4, 2012

“On the Road with the History of Technology: Seeking a Sense of the World”, German Society for the History of Technology Annual Meeting, Keynote Talk, Max Planck Institute of the History of Science, June 4, 2011.

“Imagining Democratic Technologies in Postcolonial Indonesia”, Invited lecture, Case Western Reserve University, April 6 2011.

“Fighting poverty with technology: exploring a sociotechnical imaginary in post-colonial Indonesia”, Association of Asian Studies Meeting, Honolulu, Hawaii, April 3, 2011

“Transfer, Exchange, and Circulation: Technology and Innovation in Indonesia”, Pelita Harapan University, Jakarta Indonesia, November 10, 2010

“Industrial Revolution in the Colonial World”, part of roundtable “The Industrial Revolution in Global Perspective”, Annual meeting Society for the History of Technology, Tacoma, WA. October 2, 2010

“Strong Multiculturalism in the History of Technology: The Geographies of a Field”, Max Planck Institute for the History of Science, Technological Cultures Workshop, March 16, 2010

“Justice, Geography, and Steel”, OU Department of Geography Colloquium. March 10, 2010

“Everyday Technologies: Exploring its use for Asian History”, Everyday Technologies in Monson Asia Workshop, University of Warwick, UK, March 18, 2010

Sociotechnical Imaginaries: Cross National Comparisons (workshop for edited volume), Harvard University Weatherhead Center for International Affairs November 13-14, 2008. “Mohammad Hatta and the Cooperative Movement: Autonomy and Interdependence in Indonesia”

Society for the History of Technology Annual Meeting, October, 2009, “The Construction of the Cold War Development Expert: Politics and Technological Expertise at the United Nations.”

OSIRIS Workshop, University of South Carolina, Sept. 20-22, 2007, “Symbol and Mediator: Technology and National Identity in the Republic of Indonesia 1950-2007”

Bodies, Networks, Geographies: Technology in the Cold War (workshop for edited volume), “Economies of Expertise: Circulating Experts in Cold War and Decolonization”, April 22, 2007.

Colby College, Invited lecture at the Goldfarb Center for Public Affairs and Civic Engagement and the Oak Institute, “Environmental Human Rights: The Physical and Political Space of Mining in West Papua, Indonesia.”, Nov. 17, 2006.

Society for the History of Technology Annual Meeting, October 14, 2006, “The Challenge of De-centering Europe: A Conversation between Southeast Asian History and the History of Technology”

National University of Singapore workshop *Asian Experiences of Development: South Asia, Southeast Asia, and East Asia, 1945197*5. Presented a paper entitled: “Circulating Experts: Economies of Expertise in Cold War Development,1945-1955”, June 9, 2006.

Princeton University workshop *Science at the Crossroads: Geopolitics, Marxism, and SeventyFive years of Science Studies*, presented a paper entitled: “Considering 'Eastern Development': Science, Technology, and Communist Activism in Southeast Asia c.1930”, April 1, 2006

American Historical Association Annual Meeting, presented a paper entitled “Details, Details: Aiming Big and Thinking Small in Colonial Development Projects in the Netherlands East Indies” for the session “Foreign Expertise and Environmental Change in Nineteenth and TwentiethCentury Asia”, January 6, 2006

University of Michigan workshop *Bodies, Networks, Geographies: Colonialism, Development, and Cold War Technopolitics*, presented a paper called “Circulating Experts in the Cold War: Questioning Colonial Influence in the Public and Private Spheres”, University of Michigan, October 29, 2005

Colorado School of Mines, Hennebach Lecture, November 16, 2004, “Colonial Politics of Science and the Environment”

Society for the History of Technology Annual Meeting, October 7, 2004, organized the panel, *Technology and Political Legitimation in the Twentieth Century*, and presented the paper: “ ‘All Teachers Demand Pay’: Technology, Development and the Delegitimization of the Colonial Government in the Netherlands East Indies, c. 1920.”

University of British Columbia, History Colloquium, April 1, 2004, “Failed Technologies and Successful Development: The Politics of Technical Change in Colonial Indonesia.”

Cornell University, *Connecting S&TS* Conference, September 28, 2003, “Technocracy and the Colony”

Technical University at Eindhoven, History of Technology Colloquium, “Empirical Knowledge, Colonial Authority, and Native Development: The Controversy over Sugar/Rice Ecology in the Netherlands East Indies, 1905-1914”

Johns Hopkins University, History of Science Colloquium, September 26, 2002. “Empirical Knowledge, Colonial Authority, and Native Development: The Controversy over Sugar/Rice Ecology in the Netherlands East Indies, 1905-1914.”

European Society for Environmental History annual meeting, September, 2001. Presented paper: “Pliable Nature and Rationalized Agriculture: The Uses of Natural Knowledge in Colonial Java c. 1920.”

Invited presentation, MIT Workshop in Science, Technology and Agrarian Change, March 2001,“The Path to *Kemajuan*: Modernization, Agriculture, and Revolution in the Netherlands East Indies, 1918-1933.”

Society for the History of Technology annual meeting, August 2000. Presented paper: “Practicing Development in the Field.”

Invited presentation, German Historical Institute, London conference: “Science and Empire (1850-1950): Britain, Germany, France, The Netherlands,” November 1999. “J.H. Boeke and the Rural Elite: The Dual Economy in Netherlands Indies Agricultural Policy c. 1925.”

Society for the History of Technology annual Meeting, October 1999. Organized and presented commentary for panel entitled “Farming the Colony, Colonizing the Farm: Agricultural Technology and the Colonial State.”

American Society of Environmental History annual meeting, April 1999. “A Technical Measure of Justice: Constructing Native Welfare and Environmental Justice in Colonial Java.”

History of Science Society annual meeting, Oct. 1998. “Applying Science to Colonial Development: Agricultural Experiment and Demonstration in the Netherlands East Indies c. 1905.”

TAO (Technical and Agrarian Development) Seminar at Wageningen Agricultural University, The Netherlands, May 1998. “History Repeating Itself: Ideologies of Mechanization in Colonial and Post-Colonial Indonesia.”

Society for the History of Technology annual Meeting, October 1997. “The Trouble with Mechanized Farming: The Colonial Politics of Technological Change and Social Responsibility in the Netherlands East Indies c. 1920,” for the session “Technological Imperialism in Asia.”

Center for Development Studies Seminar at the University of Bogor, Indonesia. May 1997. “Technology and the History of Agricultural Change in Colonial Indonesia”

**Grants**

2015-2020: Society for the History of Technology, Editorship Technology and Culture ($390,000)

2010-2014: Society for the History of Technology, Editorship Technology and Culture ($390,000)

**Fellowships**

2013: Visiting Research Fellow, Asia Research Institute, National University of Singapore. Regretfully declined for personal reasons.

2010: Faculty Enrichment Grant and Presidential Travel Fellowship, University of Oklahoma

2009: Faculty Enrichment Grant, University of Oklahoma

2009: Junior Faculty Fellowship, University of Oklahoma

July 2002 Fellow in the Visiting Junior Scholars Program at the Peter Wall Institute for Advanced Studies, University of British Columbia.

May 2002: Awarded Visiting Scholar Fellowship for Australian National University. Regretfully declined.

2001 Society for the History of Technology Brooke Hindle Postdoctoral Fellowship for development of a book manuscript..

1998-1999 Cornell University Sage Fellowship

1996-1997 Dissertation research grant from NSF Training Grant for Research in the Life Sciences

1995: Social Science Research Council Pre-dissertation Research Fellowship for travel and study in Indonesia.

1994: Foreign Language Area Studies fellowship for intensive Indonesian language study.

1993: Cornell University Sage fellowship.

**Academic/Teaching experience previous to current position**

Hixon-Riggs Visiting Assistant Professor in Science, Technology and Society, Harvey Mudd College, 2006-2007

Assistant Professor, Division of Liberal Arts and International Studies, Colorado School of Mines, August 2002 – 2007.

Assistant Professor, Science, Technology, and Society Program, Penn State University, August 2000-May 2002.