3/2021 Curriculum Vitae

PAMELA H. SMITH

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EDUCATION

THE JOHNS HOPKINS UNIVERSITY, Baltimore, Maryland (1983-1990) Ph.D., May 1991. Department of the History of Science.

Dissertation: "Alchemy, Credit, and the Commerce of Words and Things: Johann Joachim Becher at the Courts of the Holy Roman Empire, 1635-82" (Advisers: Owen Hannaway, Mack Walker).

UNIVERSITY OF WOLLONGONG, Wollongong, New South Wales, Australia (1976-79) B.A. First Class Honors, November 1979. Major: History and Philosophy of Science.

EMPLOYMENT

2005-present: Seth Low Professor of History, Columbia University, New York. Courses in early modern European history and history of science.

2014-present: Founding Director, Making and Knowing Project, Columbia University A pedagogical and research initiative that explores the intersections of craft making and scientific knowing. <u>www.makingandknowing.org</u>

- 2014-present: Founding Chair, Presidential Scholars in Society and Neuroscience, Columbia University, <u>https://presidentialscholars.columbia.edu/</u>
- The aim of this crosscutting initiative is to bring together scholars from all fields around questions of brain and mind. A community of postdoctoral scholars form the heart of a rich program of interdisciplinary events and research
- 2013-present: Founding Director, Center for Science and Society, Columbia University, <u>https://scienceandsociety.columbia.edu/</u>.
- 2000-2005: Margaret and Edwin F. Hahn Professor in the Social Sciences, and Professor of History, Pomona College (1990-2005: Assistant and Associate Professor of History)
- 1996-2003: Director of European Studies, Claremont Graduate University

1992-2003 (excluding leaves): Chair, Science, Technology and Society Program of the Claremont Colleges

FELLOWSHIPS AND GRANTS

- **Provost's Interdisciplinary Teaching Award** (with Dennis Tenen) for an interdisciplinary hybrid hands-on laboratory and digital humanities course.
- Henry Luce Foundation: Higher Education Grant for Making and Knowing core activities, August 2017-July 2020.
- **NSF:** Research Grant #1734596: "Making and Knowing: The Role of Craft Skill in Scientific Practice," September 2017-August 2020.
- Gerda Henkel Foundation: Making and Knowing Postdoctoral Research Scholar for research in Toulouse, France, February 2017-January 2020.
- **NSF**: Summer Workshop Grant #1656227 for Making and Knowing Paleography and Translation Workshop, June 19-30, 2017.
- **NEH**: Scholarly Editions and Translations Grant #RQ249842 for "Craft Techniques and Knowledge Systems in a 16th-Century Artist's Manuscript: An Open-Access Critical Edition and Translation," October 2016-June 2020.
- **Collaboratory@Columbia**: Seed Grant, September 2016-August 2017, and Fellows Fund grant, *"Transforming Texts: Computational Approaches to Text Analysis,"* September 2017-August 2020.
- **Provost's Hybrid**: Hybrid Course Grant for Digital Humanities Course: "What is a Book in the 21st Century?" June 2016-July 2017.
- **Dorothy Borg Research Program**: Funding for "Weaving: Cognition, Technology, Culture" conference (April 2017), and "Weaving Knowledge," two-week Workshops for PhD students in Chiang Mai, Thailand (July 2017, January 2019). See <u>https://weavingknowledge.org/</u>
- Alliance Program: Innovative Co-Teaching and Research Initiative grant, co-PI with Frédéric Brechenmacher, Director of LinX at École polytechnique, Paris, January 2016-October 2017.
- Gladys Krieble Delmas Foundation: Research Grants for the Making and Knowing Project Summer Paleography Workshops, January 2016-August 2018. Follow-on funding July 2020-June 2021.
- **Folger Shakespeare Library**: Dissertation Research Seminar co-instructor, Folger Shakespeare Library, Washington, D.C., October 2014-May 2015.
- Andrew Mellon Foundation: Grant awarded to Columbia University for the founding of the Center for Science and Society at Columbia University, Oct 1-Sept 30, 2017, and Phase II, Feb 1, 2019-January 2022.
- NSF: Research Grant #1430843 "The Role of Tacit Knowledge in Experimentation," September 2014-August 2018.
- IIAS: Co-convenor, International Institute for Asian Studies (IIAS), Leiden, Summer School for current PhD students, Chiang Mai, Thailand: "Reading Craft: Itineraries of Culture, Knowledge and Power in the Global Ecumene," August 15-25, 2014.
- Max Planck Institute for the History of Science, Berlin: Visiting Scholar. Convenor of the Working Group "Itineraries of Materials, Recipes, Techniques, and Knowledge in the Early Modern World," March and August 2014. http://www.mpiwgharlin mag.de/en/magarah/majasta/Dantu. Smith Itineraries

berlin.mpg.de/en/research/projects/DeptII_Smith_Itineraries

- **History in Action:** Historical Thinking in Public Life, co-organizer, Department of History AHA-Mellon grant for Broadening the Career Horizons of History PhDs, September 2014-2017.
- **Global Innovation Fund Project:** Co-PI, President's Global Innovation Fund Project: Enhancing the Research Component of the History Major, Columbia University, September 2013-2016.

Folger Research Institute: Faculty Weekend Seminar Leader, "Writing Down Experience," May 2012.

- Victoria & Albert Museum, London: Scholar in Residence, Robert H. Smith Renaissance Sculpture in Context Workshop, May 3-22, 2012.
- Max Planck Institute for the History of Science, Berlin: Visiting Scholar, July 2011.
- Davis Center for Historical Studies, Princeton: Fellow, 2009-10.
- Alliance Program: seed grant for project on "Circulating and Connecting Knowledge in Early Modern Europe, 1450-1850," with Bruno Belhoste, Université Paris 1 Panthéon Sorbonne, 2009 2010.

Samuel H. Kress: Samuel H. Kress Paired Fellow, Center for Advanced Study in the Visual Arts, National Gallery of Art, Washington, D.C., co-grantee Tonny Beentjes, Program Leader, Metalwork Conservation, University of Amsterdam, 2007-08.

- NSF: Conference Grant #SES-0444302 for "Ways of Making and Knowing: The Material Culture of Empirical Knowledge," London, 11-15 July 2005.
- Andrew Mellon Foundation: Co-organizer, Andrew Mellon Faculty Seminar on "Science and the Islamic World," Pomona College, 2004-5.
- Andrew Mellon Foundation: New Directions Fellowship for research at the Victoria and Albert Museum, London, 2003-4; supplement for further research, 2009-11.
- Mellon 8 Grant: Andrew Mellon Foundation Summer Research Grant, Pomona College, 2003.
- NEH: Summer Research Assistance Grant, Pomona College, 1992, 1996, 1997, 2000 and 2002.
- **NEH Summer Institute:** Co-Director, NEH Summer Institute for College and University Teachers, "Experience and Experiment in Early Modern Europe," Folger Shakespeare Library, Washington, D.C., Summer 2001.
- Getty Research Institute: Scholar, 2000-01.
- Downing College, Cambridge: Visiting Fellow, Summer 2000.
- John S. Guggenheim Foundation: Fellow, 1997-98.
- National Endowment for the Humanities (NEH): Year-long Research Fellowship, 1997-98.
- Sidney M. Edelstein: International Fellowship for research in the history of chemistry, 1997-98.
- Irvine Grant: Curriculum Development, Pomona College, 1996.
- Wissenschaftskolleg Institute of Advanced Study, Berlin: Fellow, 1994-95.
- Steele Fellowship: Research Leave, Pomona College, 1993-94.

Pew Liberal Arts: Enrichment Program Grant, Pomona College, 1992.

HONORS AND AWARDS

- **2020:** Belle Ribicoff Distinguished Lecture and Seminar, Vassar College.
- **2019:** The Eugene S. Ferguson award to The Making and Knowing Project for *Secrets of Craft and Nature*, a reference work that supports future scholarship in the history of technology.
- 2019: Dibner Annual Lecture in the History of Science, Huntington Library.
- 2018: Dickson Annual Lecture, Pennsylvania State University.
- **2018:** Columbia University Faculty Mentoring Award awarded by the Graduate Student Advisory Council to celebrate excellence in the mentoring of PhD and MA students. Selections are made entirely by graduate student representatives based on student nomination letters.
- 2017: Walter Benjamin College Distinguished Lecturer and Residency, University of Bern, Switzerland
- 2017: Annual Lecture, Modern European History Research Centre, Oxford
- 2016: Distinguished Lecturer, Center for Renaissance and Reformation Studies, University of Toronto
- 2014: Dean's Distinguished Lecturer in the Humanities, Columbia University Medical School
- 2013: Provost's University Lecture, Columbia University
- 2012: Scholar in Residence, Robert H. Smith Renaissance Sculpture in Context Workshop, Victoria & Albert Museum, London.

2009-10: Fellow, Davis Center for Historical Studies, Princeton University

- **2005:** Leo Gershoy Prize for *The Body of the Artisan* awarded in early modern European History by the American Historical Association
- 2003-04: Andrew Mellon Foundation New Directions Fellowship
- 2000-01: Getty Research Institute Scholar
- 1997-98: John S. Guggenheim Fellow
- **1995:** Pfizer Prize for *The Business of Alchemy* awarded for best book of the year in the history of science by the History of Science Society.
- 1994-95: Fellow, Wissenschaftskolleg Institute of Advanced Study, Berlin.

PUBLICATIONS: BOOKS

- Pamela H. Smith, From Lived Experience to the Written Word: Reconstructing Practical Knowledge in Early Modern Europe (Chicago: University of Chicago Press, forthcoming).
- Why did European craftspeople begin to write down their making practices around 1400? What were they attempting to convey and who was interested in their knowledge? This book considers the nature of craft knowledge and skill, as well as the means by which we can reconstruct this largely lost knowledge, especially in cases when textual evidence is scarce. It focuses in particular on metalworking in the early modern period (1400-1800) by studying present-day and historical practices, objects, recipes, and artisanal manuals in an attempt to reconstruct the historical experience of working with natural materials. The aim is not only to come to understand the material processes and experience of the past, but also to gain insight into the mental world of artisans and their understandings of matter.
- Making and Knowing Project, Pamela H. Smith, Naomi Rosenkranz, Tianna Helena Uchacz, Tillmann Taape, Clément Godbarge, Sophie Pitman, Jenny Boulboullé, Joel Klein, Donna Bilak, Marc Smith, and Terry Catapano, eds., Secrets of Craft and Nature in Renaissance France. A Digital Critical Edition and English Translation of BnF Ms. Fr. 640 (New York: The Making and Knowing Project, 2020), https://edition640.makingandknowing.org.
- For additional information, see www.makingandknowing.org.
- Pamela H. Smith, ed., *Entangled Itineraries of Materials, Practices, and Knowledges Across Eurasia* (University of Pittsburgh Press, 2019). https://www.upress.pitt.edu/books/9780822965770/
- Twelve essays that trace the pathways of diverse materials, techniques, and systems of knowledge across Eurasia, 800-1800.
- Christy Anderson, Anne Dunlop, and **Pamela H. Smith**, eds., *The Matter of Art: Materials, Practices, Cultural Logics, c. 1250-1750* (Manchester University Press, 2015; paperback 2016).
- Fifteen essays that explore attitudes to matter and materials in the early modern world, as well as the meaning, use, and production of materials for building, mining, and various types of artistic production.

- Pamela H. Smith, Amy R. W. Meyers, and Harold J. Cook, eds., Ways of Making and Knowing: The Material Culture of Empirical Knowledge (Bard Graduate Center/University of Michigan Press, 2014; new paperback edition, University of Chicago Press, 2017).
- Sixteen essays by museum and academic scholars that explore the circumstances under which making constituted knowing, and that examine the relationship between making objects (crafts) and knowing nature (the natural sciences) in Europe and its colonies from about 1450 to 1850.
- Pamela H. Smith and Benjamin Schmidt, eds., *Making Knowledge in Early Modern Europe: Practices, Objects, and Texts, 1400-1800* (Chicago: University of Chicago Press, 2008).
- Fifteen essays presenting new approaches to material and intellectual culture, including investigating groups of people marginalized in the history of science and technology; new approaches to the practices of reading and writing; and new ways of understanding calls for reform in the early modern period.
- Pamela H. Smith, *The Body of the Artisan: Art and Experience in the Scientific Revolution* (Chicago: University of Chicago Press, 2004; Paperback 2005; new paperback edition 2018). Winner of the 2005 Leo Gershoy Prize for early modern European History awarded by the American Historical Association.
- Pamela H. Smith and Paula Findlen, *Merchants and Marvels: Commerce, Science and Art in Early Modern Europe* (New York: Routledge, 2002).
- Eighteen essays that examine representations of nature produced by artists and scientists in Europe from the fifteenth through the eighteenth centuries and their connections to the expanding commercial economy.
- Pamela H. Smith, *The Business of Alchemy: Science and Culture in the Holy Roman Empire* (Princeton: Princeton University Press, 1994; paperback, 1996; new paperback edition with a new foreword, 2016). Winner of the 1995 Pfizer Prize for best book in the history of science awarded by the History of Science Society.

PUBLICATIONS: ARTICLES

- Andrew Lacey and **Pamela H. Smith**, "Thinking through Molds: Metal Flow and Visualizing the Unseen," Special issue *West 86th: A Journal of Decorative Arts, Design History, and Material Culture*, edited by Caspar Meyer and Ittai Weinryb (Fall 2021).
- "Materials, Mimesis, and Meaning in Linda Bond's *Prayer*," in *Salvage Art*, ed. Elka Krajewska, forthcoming.
- "Hands-on History: The Making and Knowing Project," in Marta Ajmar, ed., *Encounters on the Shop Floor*, under review.
- Pamela H. Smith and Isabella Lores-Chavez, "Investigating, Philosophizing, and Imitating in the Early Modern Workshop," in Marjolijn Bol and Emma Spary, eds., *The Matter of Mimesis* (Leiden: Brill, forthcoming).

- Tillmann Taape, Tianna Helena Uchacz, and **Pamela H. Smith**, "Schooling the Eye and Hand: performative methods of research and pedagogy in the Making and Knowing Project," *Berichte zur Wissenschaftsgeschichte*, 43 (2020): 323-40.
- Pamela H. Smith, Tianna Helena Uchacz, Naomi Rosenkranz, and Claire Conklin Sabel, "The Making of Empirical Knowledge: Recipes, Craft, and Scholarly Communication," in *Reassembling Scholarly Communications: Histories, Infrastructures, and Global Politics* of Open Access, ed. Martin Paul Eve and Jonathan Gray (Cambridge, MA: The MIT Press, 2020), pp. 125-144, <u>https://doi.org/10.7551/mitpress/11885.003.0014</u>.
- Divya Anantharaman and Pamela H. Smith. "Animals Dried in an Oven," in Secrets of Craft and Nature in Renaissance France. A Digital Critical Edition and English Translation of BnF Ms. Fr. 640, ed. Making and Knowing Project, et al. (New York: Making and Knowing Project, 2020), <u>https://edition640.makingandknowing.org/#/essays/ann_502_ad_20</u>.
- Emily Boyd, Jef Palframan, and Pamela H. Smith. "Making Gold Run for Casting," in Secrets of Craft and Nature in Renaissance France. A Digital Critical Edition and English Translation of BnF Ms. Fr. 640, ed. Making and Knowing Project, et al. (New York: Making and Knowing Project, 2020), https://edition640.makingandknowing.org/#/essays/ann 505 ad 20.
- Emily Boyd, Jef Palframan, and Pamela H. Smith. "Molding with Cuttlefish Bone," in Secrets of Craft and Nature in Renaissance France. A Digital Critical Edition and English Translation of BnF Ms. Fr. 640, ed. Making and Knowing Project, et al. (New York: Making and Knowing Project, 2020), https://edition640.makingandknowing.org/#/essays/ann_506_ad_20.
- Celia Durkin and Pamela H. Smith, "Molding Fruits and Animals in Sugar," in Secrets of Craft and Nature in Renaissance France. A Digital Critical Edition and English Translation of BnF Ms. Fr. 640, ed. Making and Knowing Project, et al. (New York: Making and Knowing Project, 2020), https://edition640.makingandknowing.org/#/essays/ann 017 sp 15.
- Kathryn Kremnitzer, Siddhartha Shah, and Pamela H. Smith, "Gemstones and Imitation," in Secrets of Craft and Nature in Renaissance France. A Digital Critical Edition and English Translation of BnF Ms. Fr. 640, ed. Making and Knowing Project, et al. (New York: Making and Knowing Project, 2020), https://edition640.makingandknowing.org/#/essays/ann_029_fa_15.
- Kathryn Kremnitzer and Pamela H. Smith, "Imitation Rubies and Failure," in Secrets of Craft and Nature in Renaissance France. A Digital Critical Edition and English Translation of BnF Ms. Fr. 640, ed. Making and Knowing Project, et al. (New York: Making and Knowing Project, 2020), https://edition640.makingandknowing.org/#/essays/ann 082 fa 15.
- Yijung Wang and Pamela H. Smith, "Fat, Lean Sweet, Sour: Sand of Ox Bone and Rock Salt," in Secrets of Craft and Nature in Renaissance France. A Digital Critical Edition and

English Translation of BnF Ms. Fr. 640, ed. Making and Knowing Project, et al. (New York: Making and Knowing Project, 2020), http://edition640.makingandknowing.org/#/essays/ann_012_fa_14.

- Michelle Lee and Pamela H. Smith, "Fat Sands and Lean Binders," in Secrets of Craft and Nature in Renaissance France. A Digital Critical Edition and English Translation of BnF Ms. Fr. 640, ed. Making and Knowing Project, et al. (New York: Making and Knowing Project, 2020), <u>http://edition640.makingandknowing.org/#/essays/ann_009_fa_14</u>.
- "Making the Edition," in Secrets of Craft and Nature in Renaissance France. A Digital Critical Edition and English Translation of BnF Ms. Fr. 640, ed. Making and Knowing Project, et al. (New York: Making and Knowing Project, 2020), https://edition640.makingandknowing.org/#/essays/ann_300_ie_19.
- "An Introduction to BnF Ms. Fr. 640 and its Author-Practitioner," in Making and Knowing Project, Pamela H. Smith, Naomi Rosenkranz, Tianna Helena Uchacz, Tillmann Taape, Clément Godbarge, Sophie Pitman, Jenny Boulboullé, Joel Klein, Donna Bilak, Marc Smith, and Terry Catapano, eds., Secrets of Craft and Nature in Renaissance France. A Digital Critical Edition and English Translation of BnF Ms. Fr. 640 (New York: The Making and Knowing Project, 2020), https://edition640.makingandknowing.org/#/essays/ann_329_ie_19.
- Pamela H. Smith, Tianna Helena Uchacz, Sophie Pitman, Tillmann Taape, and Colin Debuiche, "The Matter of Ephemeral Art: Craft, Spectacle, and Power in Early Modern Europe," *Renaissance Quarterly* 73 (2020): 1–54.
- "Practical Knowledge in Early Modern Europe," *Renaissance Invention: Stradanus's Nova Reperta*, ed. Lia Markey (Evanston: Northwestern University Press, 2020), 135-146.
- "Courtly Marvels and the new experimental philosophy," *Making Marvels: Science and Splendor at the Courts of Europe*, Metropolitan Museum of Art, New York (New York: Metropolitan Museum of Art/Yale University Press, 2019), 41-50.
- "Experimenting in the Material World and on Paper in sixteenth-century France, *Bernard Palissy : Nouveaux regards sur la céramique française aux xvi and xvii siècles*, special issue of *Techne*, ed. by Françoise Barbe, Anne Bouquillon, Thierry Crépin-Leblond, and Aurélie Gerbier (2019) 47: 18-29.
- "Tracing the Movement of Knowledge across Vast Distances and Long Temporal Spans," special issue, ed. Dagmar Schäfer, of *Transfers: Interdisciplinary Journal of Mobility Studies 9* (2019): 75-86.
- "Introduction: Nodes of Convergence, Material Complexes, and Entangled Itineraries across Eurasia," in Smith, ed., *Entangled Itineraries of Materials, Practices, and Knowledges Across Eurasia* (University of Pittsburgh Press, 2019), 5-24.

- Tansen Sen and Pamela H. Smith, "Trans-Eurasian Routes of Exchange: A Brief Historical Overview," in Smith, ed., *Entangled Itineraries of Materials, Practices, and Knowledges Across Eurasia* (University of Pittsburgh Press, 2019), 25-43.
- Pamela H. Smith, Joslyn DeVinney, Sasha Grafit, and Xiaomeng Liu, "Smoke and Silkworms: Itineraries of Material Complexes across Eurasia," in Smith, *Entangled Itineraries of Materials, Practices, and Knowledges Across Eurasia* (University of Pittsburgh Press, 2019), 165-181.
- "Artisanal Epistemology," *Encyclopedia of Renaissance Philosophy*, ed. Marco Sgarbi (Springer, doi:10.1007/978-3-319-02848-4_1182-1), 2018.
- "Des recettes et des secrets à l'expérience: le "Making and Knowing Project," *Toulouse Renaissance*, Musée des Augustins, Toulouse (Paris: Somogy éditions d'art, 2018), 340-43.
- "The Making and Knowing Project," Exhibition Catalog, L'Accademia a l'Académie: il disegno dal vero come pratica storica e sapere contemporaneo (Rome, 2017).
- "The Codification of Vernacular Theories of Metallic Generation in sixteenth-century European Mining and Metalworking," *The Structures of Practical Knowledge*, ed. Matteo Valeriani (Cham, Switzerland: Springer, 2017): 371-392. DOI 10.1007/978-3-319-45671-3_14.
- Foreword, Special Issue of *Nuncius 31* (2016), on "The Varied Role of the Amateur in Early Modern Europe," 1-4.
- Entry on "Franz Xaver Messerschmidt, 'schmerzhaft stark Verwundeter' (Charakterkopf Nr. 19)," in the Exhibition Catalog +*ultra. gestaltung schafft wissen* (Leipzig 2016).
- Guest Editor, *New Directions in Making and Knowing*, a special issue of *West 86th: A Journal of Decorative Arts, Design History, and Material Culture 23.1* (2016): 3-101, with four invited essays, and an introduction (3-5).
- Donna Bilak, Jenny Boulboullé, Joel Klein, and Pamela H. Smith, "The Making and Knowing Project - Reflections, Methods, and New Directions," in New Directions in Making and Knowing, a special Issue of West 86th: A Journal of Decorative Arts, Design History, and Material Culture, 23.1 (2016): 35-55.
- Pamela H. Smith and the Making and Knowing Team, "Historians in the Laboratory: Reconstruction of Renaissance Art and Technology in the Making and Knowing Project," *Art History*, special issue on Art and Technology, 39.2 (2016): 210-233 (a collaboration with the Making and Knowing Team; students from the 2014-15 Columbia University course, Hist G8906: Craft and Science: Making Objects in the Early Modern World; students in the University of Amsterdam M.A. in conservation and restoration of cultural heritage, metals specialization course; and students from the V&A/RCA PhD in History of Design).

- "Itineraries of Materials and Knowledge in the Early Modern World," *The Global Lives of Things*, ed. Anne Gerritsen and Giorgio Riello (Routledge, 2015), pp. 31-61.
- Christy Anderson, Anne Dunlop, and Pamela H. Smith, "Introduction," pp. 1-20, in *The Matter* of Art: Materials, Practices, Cultural Logics, c. 1250-1750, ed. Christy Anderson, Anne Dunlop, Pamela H. Smith (Manchester University Press, 2015).
- "The Matter of Ideas in the Working of Metals in Early Modern Europe," pp. 42-67, in *The Matter of Art: Materials, Practices, Cultural Logics, c. 1250-1750,* ed. Christy Anderson, Anne Dunlop, Pamela H. Smith (Manchester University Press, 2015).
- Harold J. Cook, Pamela H. Smith, and Amy R. W. Meyers, "Introduction," pp. 1-16; in *Ways of Making and Knowing: The Material Culture of Empirical Knowledge*, ed. Pamela H. Smith, Amy R. W. Meyers, and Harold J. Cook (Bard Graduate Center/University of Chicago Press, 2014, 2017).
- "Making as Knowing: Craft as Natural Philosophy," pp. 17-47, in *Ways of Making and Knowing: The Material Culture of Empirical Knowledge*, ed. Pamela H. Smith, Amy R. W. Meyers, and Harold J. Cook (Bard Graduate Center/University of Chicago Press, 2014, 2017).
- "Between Nature and Art: Casting from Life in Sixteenth-Century Europe," *Making and Growing: Anthropological Studies of Organisms and Artefacts*, ed Elizabeth Hallam and Tim Ingold (Ashgate, 2014): 45-63.
- "Knowledge in Motion: Following Itineraries of Matter in the Early Modern World," *Cultures in Motion* ed. Daniel Rogers, Bhavani Raman, Helmut Reimitz (Princeton: Princeton University Press, 2014), 109-33.
- "The History of Science as a Cultural History of the Material World," *Cultural Histories of the Material World*, ed. Peter Miller (University of Michigan Press, 2013), 210-25.
- Tonny Beentjes and Pamela H. Smith, "Sixteenth-century life-casting techniques: experimental reconstructions based on a preserved manuscript," *The Renaissance Workshop*, ed. David Saunders, Marika Spring and Andrew Meek (London: Archetype Publications Ltd, 2013), 144-51.
- "Making Things: Techniques and books in early modern Europe," *Things*, Paula Findlen, ed. (London: Routledge, 2013), pp. 173-203.
- "Craft Techniques and How-To Books," *Transmission of Artists' Knowledge*, ed. Mark Clarke, Bert De Munck and Sven Dupré (Koninklijke Vlaamse Academie van Belgie voor Wetenschappen en Kunsten, 2012), pp. 75-84.
- "In the Workshop of History: Making, Writing, and Meaning," *Shaping Objects: Art, Materials, Making, and Meanings in the Early Modern World*, an article series of *West 86th: A Journal of Decorative Arts, Design History, and Material Culture, 19* (2012): 4-31.

- "What is a Secret? Secrets and Craft Knowledge in Early Modern Europe," *Secrets and Knowledge in Medicine and Science*, 1500-1800, ed. Elaine Leong and Alisha Rankin (Ashgate, 2011): 47-66.
- "Science," A Concise Companion to History, ed. Ulinka Rublack (Oxford University Press, 2011): 268-97.
- "Why Write a Book? From Lived Experience to the Written Word in Early Modern Europe," *Bulletin of the German Historical Institute*, 47 (Fall 2010): 25-50.
- Pamela H. Smith and Tonny Beentjes, "Nature and Art, Making and Knowing: Reconstructing Sixteenth-Century Life Casting Techniques," *Renaissance Quarterly*, 63 (2010): 128-179.
- "Vermilion, Mercury, Blood, and Lizards: Matter and Meaning in Metalworking," in *Materials* and Expertise in Early Modern Europe: Between Market and Laboratory, "ed. Ursula Klein and Emma Spary (University of Chicago Press, 2010), pp. 29-49.
- Tonny Beentjes and Pamela H. Smith, "'Moyen de faire le gect pour petite lezardes': Een reconstructie aan de hand van een zestiende-eews manuscript," *De Stavelij. Jaarboek 2009*: 15-18.
- Contributor, A Mysterious Masterpiece: The World of the Linder Gallery, ed. Michael John Gorman (Florence: Alias, 2009).
- "Science on the Move: Recent Trends in the History of Early Modern Science," *Renaissance Quarterly*, 62 (2009): 345–375.
- "Alchemy as the Imitator of Nature," *Glass of the Alchemists*, catalog for an exhibition at the Corning Museum of Glass, ed. Dedo von Kerssenbrock-Krosigk (Corning, NY: Corning Museum of Glass, 2008), 22-33.
- "Collecting Nature and Art: Artisans and Knowledge in the Kunstkammer," in Engaging With Nature: Essays on the Natural World in Medieval and Early Modern Europe, ed. Barbara Hannawalt and Lisa Kiser (University of Notre Dame Press, 2008), 115-136.
- Pamela H. Smith and Benjamin Schmidt, "Introduction: Knowledge and Its Making," *Making Knowledge in Early Modern Europe* (University of Chicago Press, 2008), 1-16.
- "'Art' is to 'Science' as 'Renaissance' is to 'Scientific Revolution'? The problematic algorithm of writing a history of the modern world," *New Directions in Renaissance Art History*, ed. James Elkins and Robert Williams (Routledge, 2008), 427-445.
- "Artisanal Knowledge and the Representation of Nature in Sixteenth-Century Germany," *The Art and History of Botanical and Natural History Treatises*, ed. Therese O'Malley and Amy

Meyers (Washington D.C., The National Gallery Center for the Advanced Study of the Visual Arts, 2008), 14-31.

"Making and Knowing in a Sixteenth-century Goldsmith's Workshop," in *The Mindful Hand: Inquiry and Invention between the Late Renaissance and Early Industrialization*, ed. Lissa Roberts, Simon Schaffer, Peter Dear (Amsterdam: KNAW Press, 2007), 20-37.

"Words and Last Things: In Memory of Owen Hannaway," Isis, 98 (2007): 143-48.

"Alchemy as Kulturträger," Essay Review, Metascience, 15 (2006): 474-82.

- "Laboratories," ch. 13, *The Cambridge History of Science, Vol. 3: Early Modern Europe*, ed. Lorraine Daston and Katharine Park (Cambridge University Press, 2006), 290-305.
- "Art, Science and Visual Culture in Early Modern Europe," Isis, 97 (2006): 83-100.
- Pamela H. Smith and Paula Findlen, "Introduction: Commerce and the Representation of Nature in Science and Art," in *Merchants and Marvels*, ed. Pamela H. Smith and Paula Findlen, 1-25.
- Larry Silver and Pamela H. Smith, "Splendor in the Grass: The Powers of Nature and Art in the Age of Dürer," in *Merchants and Marvels*, ed. Pamela H. Smith and Paula Findlen, 29-62.
- "Giving Voice to the Hands: The Articulation of Material Literacy in the Sixteenth Century," *Popular Literacy: Studies in Cultural Practices and Poetics*, ed. John Trimbur, University of Pittsburgh Press, 2001, 74-93.
- "Vital Spirits: Alchemy, Redemption, and Artisanship in Early Modern Europe," in *Rethinking the Scientific Revolution*, ed. Margaret J. Osler, Cambridge University Press, 2000, 119-135.
- "Artists as Scientists: Nature and Realism in Early Modern Europe," *Endeavour*, 24 (2000): 13-21.
- "Science and Taste: Painting, the Passions, and the New Philosophy in Seventeenth-century Leiden," *Isis*, 90 (1999): 420-461.

"Alchemy as a Language of Mediation at the Habsburg Court," Isis, 85 (1994): 1-25.

"Paracelsus as Emblem," Essay Review, Bulletin of the History of Medicine, 68 (1994): 314-322.

"Chemistry and Commerce: Johann Joachim Becher at the Elector's Court in Munich," in *Johann Joachim Becher (1635-1682)*, ed. Gotthardt Frühsorge and Gerhard F. Strasser (Wiesbaden: Otto Harrassowitz, 1993), 143-158.

"Curing the Body Politic: Chemistry and Commerce at Court, 1664-1670," in *Patronage and Institutions: Science, Technology, and Medicine at the European Court, 1500-1750*, ed. Bruce Moran (Suffolk: Boydell, 1991), 195-209.

"Consumption and Credit: The Place of Alchemy in Johann Joachim Becher's Political Economy," *Alchemy Revisited*, ed. Z.R.W.M. von Martels (Leiden: Brill, 1990), 143-158.

Postscript entry on J.J. Becher, *New Dictionary of Scientific Biography*, ed. Noretta Koertge (Thomson Gale, 2007).

Entry on "Georgius Agricola," *The World from Here: Treasures of the Great Libraries of Los Angeles*, Exhibit Catalogue, The Hammer Museum, Los Angeles, 2001.

Entries on "J. J. Becher" (pp. 77-78); "Laboratories," *The Encyclopedia of the Scientific Revolution*, ed. Wilbur Applebaum (Garland Publishing, 2000), 351-53.

Entries on "J. J. Becher" (pp. 75-77); "Fürstenalchemie" (140-143); "Hermetik" (176-177); "J. Kunckel" (202-205), *Encyclopedie der Alchemie*, ed. Claus Priesner and Karin Figala, (Munich: C.H. Beck, 1998).

Entry "J. J. Becher," *Literatur Lexikon. Autoren und Werke deutscher Sprache*, vol. 1, ed. Walther Killy (Munich: Bertelsmann Lexikon Verlag, 1988), pp. 363-365.

REVIEWS

Bert De Munck, *Guilds, Labour and the Urban Body Politic: Fabricating Community in the Southern Netherlands, 1300-1800* (Routledge, 2018), *Journal of Interdisciplinary History* 51.1 (2020): 151-53.

Maikel H. G. Kuijpers, An Archaeology of Skill: Metalworking Skill and Material Specialization in Early Bronze Age Central Europe (Routledge, 2018), Journal of the Royal Anthropological Institute (N.S.) 26.3 (2020): 660-61.

Karel Davids and Bert De Munck, eds., *Innovation and creativity in late medieval and early* modern European Cities (Ashgate, 2014), *Business History* (2017).

Sarah Blake McHam, *Pliny and the Artistic Culture of the Italian Renaissance* (Yale University Press, 2013), *Isis 105* (2014): 427-429.

Andrea Feeser, Maureen Daly Goggin and Beth Fowkes Tobin, eds., *The Materiality of Color-The Production, Circulation, and Application of Dyes and Pigments, 1400-1800* (Brill, 2012), *West 86th: A Journal of Decorative Arts, Design History, and Material Culture, 20* (2013): 238-39.

Sven Dupré and Christoph Lüthy, eds., Silent Messengers: The Circulation of Material Objects of Knowledge in the Early Modern Low Countries (LIT Verlag, 2011), Renaissance Quarterly, 66 (2013): 634-5.

Warren A. Dym, *Divining Science: Treasure Hunting and Earth Science in Early Modern Germany* (Brill, 2010), *Journal of Modern History*, 84.3 (2012): 762-64.

Daniela Bleichmar, Visible Empire: Botanical Expeditions and Visual Culture in the Hispanic Enlightenment (Chicago, 2012), Science 338 (9 Nov 2012): 743-44.

Celina Fox, *The Arts of Industry in the Age of the Enlightenment* (Yale 2010), *Technology and Culture*, 52 (2011), 8-10.

Karl Appuhn, A Forest on the Sea: Environmental Expertise in Renaissance Venice (Johns Hopkins, 2009), Isis, 102 (2011): 158-59.

- Karel Davids, The *Rise and Decline of Dutch Technological Leadership: Technology, Economy, and Culture in the Netherlands, 1350-1800, 2 vols.* (Brill 2008), *Technology and Culture,* 54 (2010): 470-73.
- Didier Kahn, Alchimie et Paracelsisme en France (1567-1625) (Droz 2007), Bulletin for the History of Medicine (BHM), 83.3 (2009): 605-607.

Dominique Collet, Die Welt in der Stube: Begegnungen mit Außereuropa in Kunstkammern der frühen Neuzeit, 2008, German Historical Institute Bulletin, 31 (2009): 50-55.

Lawrence M. Principe (ed.), *Chymists and Chymistry: Studies in the History of Alchemy and Early Modern Chemistry*, 2007, and Anna Marie Roos, *The Salt of the Earth. Natural Philosophy, Medicine, and Chymistry in England, 1650-1750, 2007, British Journal for the History of Science (BJHS), 42 (2009): 130-32.*

Thomas Hofmeier, Michael Maiers Chymisches Cabinet. Atalanta fugiens deutsch nach der Ausgabe von 1708 (Thurneysser, 2007), Medical History, 53 (2009): 141-42.

Philip Ball, *The Devil's Doctor: Paracelsus and the World of Renaissance Magic and Science* (2006), *BHM*, 82 (2008): 442-43.

Adam Mosley, *Bearing the Heavens: Tycho Brahe and the Astronomical Community of the Late Sixteenth Century* (Cambridge UP 2007), *BJHS*, 41 (2008): 605-606.

Bruce Moran, Andreas Libavius and the Transformation of Alchemy: Separating Chemical Cultures with Polemical Fire (Science History Publications, 2007), Renaissance Ouarterly, 61 (2008): 637-38.

Sachiko Kusukawa and Ian Maclean, eds., *Transmitting Knowledge: Words, Images, and Instruments in Early Modern Europe* (Oxford 2006), *BJHS*, 41 (2008): 137-38.

William R. Newman, Atoms and Alchemy: Chymistry and the Experimental Origins of the Scientific Revolution (Chicago 2006), Science, 5 Jan. 2007 (315): 43-44.

Gianna Pomata and Nancy Siraisi, eds., *Historia: Empiricism and Erudition in Early Modern Europe* (MIT 2005), *Aestimatio: Critical Reviews in the History of Science 3* (2006): 48-51. http://www.ircps.org/publications/aestimatio/pdf/Volume3/2006-05-01_Smith.pdf

Volker Fritz Brüning, Bibliographie der alchemistischen Literatur. Band 1: Die alchemistischen Druckwerke von der Erfindung der Buchdruckerkunst bis zum Jahr 1690 (Munich, 2004), BJHS, 39 (2006): 289-90.

Londa Schiebinger and Claudia Swan, eds., *Colonial Botany: Science, Commerce, and Politics in the Early Modern World* (Philadelphia, 2005), *Renaissance Quarterly*, 58 (2005): 1414-1416.

Stanton J. Linden (ed.), *The Alchemy Reader: From Hermes Trismegistus to Isaac Newton* (Cambridge UP, 2003), *BJHS*, 38 (2005): 363.

Helen Watanabe-O'Kelly, *Court Culture in Dresden* (Palgrave, 2002), *Central European History* (*CEH*), 37 (2004): 593-596.

Lorraine Daston and Fernando Vidal (eds.), *The Moral Authority of Nature* (Chicago, 2004) *Isis*, 95 (2004): 675-76.

David Freedberg, *The Eye of the Lynx: Galileo, His Friends, and the Beginnings of Modern Natural History* (Chicago, 2002), *Print Quarterly*, 21 (2004): 461-63.

Rudolph Gamper and Thomas Hofmeier, *Das Alchemiehandbuch des Appenzeller Wundarztes Ulrich Ruosch* (Schwabe, 2002), *BJHS*, 37 (2004): 348-49.

William R. Newman and Lawrence M. Principe, Alchemy Tried in the Fire: Starkey, Boyle, and the Fate of Helmontian Chemistry (Chicago, 2002), American Historical Review, 109 (2004): 244-45.

- Lyndy Abraham, *A Dictionary of Alchemical Imagery* (Cambridge UP, 1998) and Hans-Werner Schütt, *Auf der Suche nach dem Stein der Weisen: Die Geschichte der Alchemie* (Munich, 2000), *BJHS*, 35 (2002): 354-56.
- Veerle Fraeters, Gods gouden thesaurus. Het Middelnederlandse handschrift Wenen, ÖNB 2372 in de alchemistische traditie (Peeters, 1999), Speculum, 77 (2002): 1286-88.
- Lorraine Daston, Katharine Park, *Wonders and the Order of Nature* (Zone, 1998), *Configurations*, 8 (2000): 419-23.
- John T. Young, *Faith, Medical Alchemy and Natural Philosophy* (Ashgate, 1998), *BHM*, 74 (2000): 359-60.
- Ole Peter Grell, ed., Paracelsus (Brill, 1998), BHM, 74 (2000): 157-58.
- Oswaldus Crollius, *Alchemomedizinische Briefe 1585 bis 1597*, ed. and trans. by W. Kühlmann and Joachim Telle (Stuttgart, 1998), *BHM*, 74 (2000): 155-56.
- Anthony Grafton, *The Footnote* (Harvard UP, 1997), *Journal of American History*, (1999): 1312-13.
- Wolfgang Behringer, Shaman of Oberstdorf (U. of Virginia Pr., 1998), CEH, 33 (2000).
- Lawrence M. Principe, *The Aspiring Adept* (Princeton UP, 1998), *Early Science and Medicine*, 4 (1999): 264-65.
- Edward Muir, Ritual in Early Modern Europe (Cambridge UP, 1997), CEH, 31 (1998): 430-32.
- Andrew Weeks, Paracelsus (SUNY Pr., 1997), BHM, 72 (1998): 323-24.
- Edward G. Ruestow, *The Microscope in the Dutch Republic* (Cambridge UP, 1996), *Technology and Culture*, 39 (1998): 762-64.
- Antoine Faivre, *The Golden Fleece and Alchemy* (SUNY Pr., 1993), *International Journal of the Classical Tradition*, 4 (1997): 7-9.
- Stanton J. Linden, *Darke Hierogliphicks: Alchemy in English Literature from Chaucer to the Restoration* (U. Pr. of Kentucky, 1996), *Isis*, 88 (1997): 705-706.
- Gareth Roberts, The Mirror of Alchemy (British Library, 1995), BHM, 71 (1997): 339-340.
- William R. Newmann, Gehennical Fire (Harvard UP, 1994), BHM, 70 (1996): 709-710.
- Samuel J. Klingensmith, The Utility of Splendor (Chicago UP, 1993), CEH, 29 (1996): 239-40.
- Benno Parthier, *Die Leopoldina: Bestand und Wandel der ältesten deutschen Akademie* (Halle, 1994), *Annals of Science*, 53 (1996): 304-305.
- Anthony Pagden, *European Encounters with the New World* (Yale UP, 1993) and Louis De Vorsey, Jr., *Keys to the Encounter* (Library of Congress, 1992), *Isis*, 86 (1995): 638-640.
- William Chester Jordan, *Women and Credit in Pre-Industrial and Developing Societies* (U. Penn Press, 1993), *Women's Studies*, 24 (1995): 281-85.
- Thomas DaCosta Kaufmann, *The Mastery of Nature: Aspects of Art, Science, and Humanism in the Renaissance* (Princeton UP, 1993), *American Scientist*, 82 (1994): 275-76.
- Udo Benzenhöfer, ed., Paracelsus (Darmstadt, 1993), BHM, 68 (1994):516-517.
- Jost Weyer, Graf Wolfgang II. von Hohenlohe und die Alchemie: Alchemistische Studien in Schloss Weikersheim, 1587-1610. (Sigmaringen, 1992), Isis 85 (1994): 509-510.
- Albert Krayer, Mathematik im Studienplan der Jesuiten: Die Vorlesung von Otto Cattenius an der Universität Mainz (1610/11). (Stuttgart, 1991), Isis, 85 (1994): 327-28.
- Bruce T. Moran, *Chemical Pharmacy Enters the University* (Madison, 1991) and *The Alchemical World of the German Court* (Sudhoffs Archiv, 1991), *BHM*, 66 (1992): 654-56.
- Christoph Meinel, ed., Die Alchemie in der europäischen Kultur- und Wissenschaftsgeschichte (Wiesbaden, 1986), BHM, 64 (1990): 303-305.

PUBLIC OUTREACH

Could Doing Things The Old-Fashioned Way Make Us Better Modern Scientists? Popular Science, Spring 2020

Consultant to Nova, American Masters/PBS films on Oliver Sacks and James Watson, 2017-20. Interview, Nova, *Secrets of the Shining Knight*, PBS, October 2017.

The Making and Knowing Project was the subject of Sam Kean, <u>"Twenty-First-Century</u> <u>Alchemists"</u> (<u>https://www.newyorker.com/magazine/2016/09/26/twenty-first-century-</u> <u>alchemists</u>), *The New Yorker*, 26 Sept. 2016.

Mullin, Rick. "Scientific Searches for Dragon's Blood ...," *Chemical and Engineering News* 94.24 (2016): 40.

- British Society for the History of Science, *Viewpoint* no. 11, "Experiments in the early modern European investigation of nature," 2016.
- <u>Sciences et Avenir</u> covers the Making and Knowing Project, in "La science redécouvre les secrets de la Renaissance," by Bernadette Arnaud, 2016.
- The Recipes Project, "<u>A Recipe for Recipe Research: The Making and Knowing Project</u>," February 2016. See also <u>"Making 'Powder for Hourglasses' in the Early Modern</u> <u>Household."</u>

Columbia College Magazine, "Ancient Workshop Discovers New Ideas"

WHYY visits Smith's Making and Knowing Project in <u>The power of failure, and other lessons</u> from a 400-year-old 'book of secrets' (https://whyy.org/segments/the-power-of-failure-andother-lessons-from-a-400-year-old-qbook-of-secretsq/)

Quoted in *Chemical & Engineering News* <u>"Science Historians Revive Ancient Recipes."</u> Mentioned in the *Observer*'s <u>"An April 'Renaissance' in Performance Art."</u>

- Interview, The History Channel, "The Next Nostradamus?" aired November 30, 2008.
- Executive Advisory Committee, Exhibition of "Fortune and Folly: Images of Alchemy in Northern European Art, 1500-1700," Chemical Heritage Foundation and the Philadelphia Museum of Art.

Interview, Nova, Isaac Newton as Alchemist, PBS, 2005.

- Panelist, "Art and Science," Odyssey (an hour-long live discussion of culture and society), Chicago Public Radio, 3 April 2002.
- Interview on Dr. F. Sylvius (1614-1672) in the documentary, "The Science and Art of Dr. Sylvius," Radio Netherlands, 2000.

Interview on A & E television special, "Alchemy," 1997.

WEBSITES

https://weavingknowledge.org/

www.scienceandsociety.columbia.edu

www.makingandknowing.org

https://presidentialscholars.columbia.edu/

Advisory Editor and Contributor to Folger Institute website for Experience and Experiment in Early Modern Europe <u>http://www.folger.edu/institute/experience/index.htm</u>

Advisory Editor, HRE (Holy Roman Empire), H-NET

INVITED LECTURES

- **2021:** "Making and Knowing in Sixteenth-Century Europe," Center for Medieval and Renaissance Studies, Ohio State University, 5 March.
- 2020: "The Making and Knowing Project: Experiments in Hands-On History," V&A Lecture series, 16 Nov.
- "Making and Knowing in a sixteenth-century Workshop," keynote, Microscopic Records conference, Manchester (online), 29 Sept-1 Oct.
- "The Making and Knowing Project: Experiments in Teaching Lab and Digital Humanities," keynote lecture, Summer Teacher Institute, Georgetown University, 5 August.
- "Making and Knowing in Early Modern Europe," keynote lecture, Metropolitan Science conference, London (online), 6-7 April.
- "Art and Science: Making and Knowing in a Sixteenth-Century Artist's Workshop," Belle Ribicoff Distinguished Lecture, Vassar College, 26 Feb.
- "Making and Matter in a sixteenth-century Workshop," UCSB Art History, 16 Jan.
- **2019:** "The Making and Knowing Project," V&A Research Institute conference, Encounters on the Shop Floor, London, 26-28 June.
- "Making and Knowing: Leonardo da Vinci in Prospect," International Colloquium on Leonardo da Vinci, Tours, France, 24-26 June.
- "Practical Knowledge in Sixteenth-Century Europe," Newberry Library, Chicago, 2-3 May.
- "Of Lizards, Laboratories, and History: The Making and Knowing Project, annual Dibner Lecture in History of Science, Huntington Library, 20 March.
- "Experimenting and Philosophizing in the Sixteenth-Century Workshop," University of Amsterdam, 21 February.
- "The 'Mysteries' of Bodily Knowledge in Early Modern Europe," Finding the Way to Truth: Sources, History, and Impact of the Meditative Tradition, Columbia University, 1-2 February.
- **2018**: "Making and Knowing in the Early Modern European Republic of Letters," Art and Artists in the Republic of Letters, keynote address, Tel Aviv University, 30-31 December.
- "Inverting Knowledge Hierarchies by Hands-on Pedagogy: The Making and Knowing Project," conference on "Anchoring innovation in handloom weaving in India: rethinking Indian industrialization of crafts," Chirala, Andhra Pradesh, India, 11-18 November.
- "Making and Knowing: Material Imaginaries of the Early Modern," keynote address for the conference "French Natures," NYU, 26 October.
- "Making and Knowing in a sixteenth-century Workshop," Penn State University Art History department, Dickson Lectures, 4 October.
- "Learning through Reconstruction: The Making and Knowing Project," Summer Teachers Institute in Technical Art History, Yale University Institute for the Preservation of Cultural Heritage, 30 July.
- "Des secrets d'atelier de la Renaissance à l'expérimentation contemporaine/ Making Art and the Origins of Science," World Science Festival, Toulouse, France, 11 July.
- "From Lived Experience to the Written Word: Making, Writing, and Knowing in the early modern Workshop," keynote lecture for the conference, "Learning by the Book," Princeton, 6 June.
- "Making, Writing, and Knowing: Artisans and Books in Early Modern Europe," in "Du manuscrit au livre, l'écriture des savoir-faire à la Renaissance," international colloquium co-organized with Pascal Julien, Univ. Toulouse-Jean Jaurès, 15-16 March.
- "Kunstkammer as Laboratory," Yale Center for British Art, 2 March.
- **2017:** "Artisanal Epistemologies," Practices of Knowledge, the Stevanovich Institute of Knowledge, University of Chicago, 16-18 November.
- "Imitation and Deception in Alchemy and Art," Rhode Island School of Design," 24 October.
- "Making Art, Knowing Nature," Walter Benjamin College residency, University of Bern, Switzerland, 5-8 October.
- "Fire and Transformation in Early Modern European Art and Alchemy," Rhode Island School of Design, 18 April.
- "Making Art and Knowing Nature in Early Modern Europe," University of Wisconsin, Madison, 3-4 March.

2016: "Historians in the Laboratory: The Making and Knowing Project," Cal Tech, 9 Nov.

- "Making Art and Knowing Nature in a Sixteenth-Century Workshop," Virginia Commonwealth University STS Program, 21 September.
- "Making Art and Knowing Nature," Artisanal Knowledge, University of Lisbon, 4-7 May.

"Making Art and Knowing Nature," UC Berkeley, 7-8 April.

Distinguished Lectureship, Center for Renaissance and Reformation Studies,

University of Toronto, 14-16 March (2 lectures and 2 graduate workshops).

"Craft and Innovation," Society for the History of Technology special workshop, Chennai, India, 29 Jan-2 Feb.

- **2015:** "Making Art and Transforming Matter in a sixteenth-century Workshop," CRASSH, Cambridge, U.K., 16 December
- "Craft Knowledge," Around the Loom, Shillong, India, 4 November.

"Historians in the Laboratory: The Making and Knowing Project," Harvard Art History, 24 September.

- "Philosophizing Artworks in Early Modern Europe," Art and Science, Rijksmuseum, Amsterdam, 17 September.
- "Historians in the Laboratory," joint presentation with Jenny Boulboullé and Joel Klein, in The Senses and the Methodology of Reconstruction, Berlin, 10 July.
- "Fat and Lean," No End of Wonders, Harvard University, 5 June.
- "Ways of Making and Knowing," Centre d'Histoire des Techniques, Paris, 20 May.

"Performing the Renaissance in the Lab: The Making and Knowing Collaboration," Paradiso: Performing the Renaissance, 24 April.

"The Making and Knowing Project," Victoria and Albert Museum, London, 17 April.

Speaker/Participant, International Institute of Asian Studies, Leiden, Roundtable on "Reconsidering Craft as Pedagogy from Below," Jaipur, India, 16-17 March.

"Conservation Conversation," with Andrew Lacey, sculptor, Bard Graduate Center, 3 March.

"The Making and Knowing Project: Historians in the Laboratory," UCSB, 28 February.

"The Future of Making and Knowing," Bard Graduate Center, 10 February.

- **2014:** "The Codification of Vernacular Theories of Metallic Generation in sixteenth-century European Mining and Metalworking," MPIWG, Berlin, 4 December.
- "The History of Early Modern Science in Practice," University of Pennsylvania, 27 October.

"Science, Art, and Medicine: A Historian in the Laboratory," Dean's Distinguished Lecturer in the Humanities, Columbia University Medical School, 13 October.

- "Sixteenth-Century Audiences for How-To: Who read How-To Books?" MPIWG, 20 September.
- "From Workshop to Laboratory: Experiment and Experience in a sixteenth-century Technical Manual," Humboldt University, Berlin, 8 July.
- "From Matter to Ideas: Making Natural Knowledge in early Modern Europe," University of North Carolina, Chapel Hill, 5 April.
- "Enroute along the Itineraries of Materials, Recipes, Techniques, and Knowledge in the Early Modern World," Max Planck Institute for the History of Science, Berlin, 13 March.

"Materials, Practices, and Ideas in Eurasia," Max Planck Institute for the History of Science, 6 March.

- "The Matter of Ideas in the Working of Metals in Early Modern Europe," NYU History of Science, Technology, and Medicine lecture series, 10 February.
- 2013: "Snakes, Lizards, and Manuscripts: Humanists in the Laboratory," University Lecture, Columbia University, 2 December. Available here:

http://www.youtube.com/watch?v=NhRXVKDlYjo&feature=youtu.be

- "Crafting Things, Crafting Words," Plenary panel, History of Science Society Annual Meeting, Boston, 21 November.
- "Sharing Practices in Metallurgy: The Codification of Vernacular Theories of Metallic Generation in sixteenth-century European Mining and Metalworking," Max Planck Institute for the History of Science, 6 November.

- "New Worlds of Stuff: Nature, Books, and Things in early Modern Germany," John Carter Brown Library, 12 September.
- "In the Workshop of History: Reconstructing Technique and Natural Knowledge in Early Modern Europe," Holmes Lecture, Yale University, 28 January.
- **2012:** "Itineraries of Matter and Knowledge in the Early Modern World," Global Commodities, Warwick University, 12-14 December.
- "Material complexes in early modern European metalworking," Beyond Representation, BGC and IFA, New York, 27-29 September.
- "Itineraries of Matter and Knowledge in the Early Modern World," Cohn Institute, Tel Aviv, 3 July.
- "Casting Life: Matter, Making and Meaning in Bronze," French Bronzes, Louvre, Paris, 9 June.
- "In the Workshop of History: Reconstructing Sculpture and Experience in Early Modern Europe," Robert H. Smith Lecture, V&A, 15 May.
- "Why write a book? Artisanal experience and the written word in early modern Europe," Histoire des sciences, Histoire du texte, CNRS, Paris, 19 January.
- **2011:** "Artisanal Experiments on Paper in Early Modern Europe," Symposium on Prints and the Pursuit of Knowledge, Harvard University, 2 December.
- "Lived Experience and the Written Word: Craft and Science in Early Modern Europe," Keynote lecture. At the Crossroads of Popular Knowledge and Science, Basel, 27 October.
- The Movement of Knowledge in the Early Modern World," Keynote lecture, Global Dimensions of European Knowledge, London, 25 June.
- "The Movement of Knowledge in the Early Modern World," Keynote lecture, History of Science Association, Woudschoten, The Netherlands, 17 June.
- "Craft Techniques and How-To Books," VLAC, Brussels, Belgium, 16 June.
- "In the Workshop of History: Reconstructing Lived Experience in Early Modern Europe," Huygens Institute Annual Descartes Lecture, Amsterdam, 15 June.
- "Why write a book? Artisanal experience and the written word in early modern Europe," University of Bern, Switzerland, 10 May.
- "Knowledge in Motion in the Early Modern World," University of Zurich, Switzerland, 12 May.
- "Science in motion in the early modern world," NYU Atlantic World Seminar, 8 March.
- **2010:** "Art, Science, and Technē: Practical Knowledge and the Written Word in Early Modern Europe," Silberberg Lecture, New York Institute of Fine Art, 23 Nov.
- "Art put into writing: reconstructing knowledge in early modern Europe," keynote lecture, "Knowledge in the Making, 1400-1700: Science, Art, and Epistemology," SUNY Buffalo, 1 October.
- "Curious Modes of Production: Making objects in the Early Modern World," keynote lecture, "Curious Specimens: Enlightenment Objects, Collections, Narratives," London, 15-18 April.
- "Knowledge in Motion: A Tentative History of Science of the Early Modern World," Davis Center, Princeton University, 12 March.
- "Science and Craft: An experiment in reconstructing early modern knowledge," History of Science Colloquium, Princeton University, 17 February.
- "Making Things: Techniques and books in early modern Europe," Stanford University, 29 January.
- **2009:** "What is History Now?" Comment, Heyman Center for the Humanities, Columbia University, 17 November
- "Butter and Gold, Lizards and Vermilion: Art and Science in Early Modern Europe," Oberlin College, 22 September.
- "Why Write a Book? From Lived Experience to the Written Word," Grolier Club, New York, 16 September.
- "Vermilion, Gold, Blood and Lizards: Art and Science an Early Modern Europe, University of Colorado, Boulder, 8 September.
- "Making Images of Nature," Showing Making, Amsterdam Filmmuseum, 18 June.
- "Local Crafts and Universal Science: Lived Experience and the Written Word in the Early Modern World," Rausing Annual Lectureship, University of Cambridge, 28 May.

"Making and Knowing: Reconstructing Historical Experience," "Practical Knowledge," NYU, 17 April.

- "Making Objects, Knowing Nature: Techniques and the Knowledge of Nature in the Early Modern World," UCLA Center for 17th- and 18th-century Studies, 6 February.
- **2008:** "Making and Knowing: Reconstructing Knowledge in a Renaissance Goldsmith's Workshop," Renaissance Seminar, Columbia University, 14 October.

"Alchemy, Metalworking, and Vernacular Science," El Escorial, Spain, 10 September.

- "Objects, Practices, Techniques, and Texts: The Movement of Knowledge in the Early Modern World," New Trends in the History of Early Modern Science, CUNY Graduate Center, May 16.
- Ena H. Thompson Lectureship, "Making and Knowing: Lived Experience and the Written Word in Early Modern Europe," Pomona College, Claremont, 7-11 April.
- "Tacit Knowledge and the Written Word: Reconstructing Knowledge in Early Modern Europe," University of Minnesota, Minneapolis, 14 February.
- 2007: "Making and Knowing: Lived Experience and the Written Word in the Early Modern World," University of Texas, Austin, 18 October.
- "Butter and Mercury, Lizards and Vermilion: Art and Vernacular Science in the Early Modern World," Wesleyan University, 28 September.
- "Science and Craft: Reconstructing Knowledge in Early Modern Europe," History of Science Research Group, University of Ghent, 8 May.
- "Making and Knowing: Craft and Natural Philosophy in the Scientific Revolution," keynote lecture, International Workshop on "The Material Vehicles of the Circulation of Natural Knowledge in the Low Countries," Ghent, 10-11 May.
- "Global Science in the Renaissance," Introduction to the Plenary Session of the Renaissance Society of America, Annual Meeting, Miami, 23 March
- "Butter and Mercury, Lizards and Vermilion: Art and Vernacular Science in Early Modern Europe," Bard Graduate Center, 17 January.
- **2006:** "Making as Knowing: Artisanal Craft as Science, 1400-1700," New York Academy of Sciences, 25 October.
- "Blood and Mercury: Towards a Vernacular Science of Nature," Princeton University, 19 October.
- Mercury, Blood, and Lizards: Matter and Meaning in Metalworking," Max Planck Institut für Wissenschaftsgeschichte, Berlin, 2-5 August.
- Comment, International Conference on the History of Alchemy, Chemical Heritage Foundation, 19-22 July.
- Comment, "Everyday Technology, Materiality and Gender in China, 1890 to 1960," Columbia University, 19-21 May.
- "Nobles and Insects: Collecting Nature at Court," UCLA Center for 17th- and 18th-century Studies, 12 May.
- "The Authority of Nature in the Late Seventeenth Century," in "Transformations in the Atlantic World," Harvard University, 30 March – 1 April.
- Panelist, "The Persistence of Techne: Nature, Design, and Early Modern Practice of the Arts," The Getty Research Institute, 15-18 March.
- **2005:** "Transforming Lived Experience into the Written Word," Michael of Rhodes (ca. 1380-1455) and His Manuscript, MIT, 2 December.
- "Vernacular Science: The Powers of Nature and Art in Renaissance Europe," Henry Moore Institute, Leeds, 26 October.
- "Making as Knowing: Craft as Natural Philosophy," in "Ways of Making and Knowing: The Material Culture of Empirical Knowledge," Victoria and Albert Museum, London, 14 July.
- **2004:** "Making as Knowing: Craft as Natural Philosophy," at "The Making of Materials: Science and Technology in the 17th and 18th centuries," Max Planck Institut für Wissenschaftsgeschichte, Berlin, 10-11 December.
- "The 'Philosophy of Laborers': Scenes from the Early Modern Workshop," Academy of Sciences of The Netherlands, Amsterdam 22-24 September.

- "Butter and Mercury: Towards a history of artisanal knowledge in early modern Europe," Institute for Historical Research, London, 25 May.
- "Vision, Representation, and Artisanal Practice in Early Modern Europe," Centre for Research in the Arts, Social Sciences, and Humanities, University of Cambridge, 14 May.

"Butter and Mercury: Towards a history of tacit knowledge," Manchester University, 27 April.

- "Matter and Mind: Early Modern Artisans, Material Culture and the Production of Knowledge," University of Cambridge, 26 February.
- **2003:** "Natural Knowledge and the Experience of Dreams in Early Modern Europe," Program in the Study of the Imagination, Northwestern University, 7 December.
- "Collecting Nature: Knowledge and Naturalism in the early modern *Kunstkammer*," Center for Medieval and Renaissance Studies, Ohio State University, 3 December 2003.
- "Early Modern Artisans, Material Culture, and the Production of Knowledge," Victoria and Albert Museum, 4 November.
- "Toward a History of Vernacular Science: Early Modern Artisans, Material Culture, and the Production of Knowledge," UCLA History of Science Colloquium, 21 April.
- "Towards a History of Vernacular Science: Early Modern Artisans, Material Culture, and the Production of Knowledge," Early Modern Studies Program, University of Michigan, Ann Arbor, 25 January.
- **2002**: "Artisanal Knowledge and the Representation of Nature in Sixteenth-Century Germany," Center for the Advanced Study of the Visual Arts, The National Gallery, Washington, DC, 3 May.
- "The Philosophy of Laborers: Artisanal Knowledge of Nature," Historians of Netherlandish Art, Antwerp, 14 March.
- **2001**: Keynote Speaker, Claremont Early Modern Studies Symposium, CGU, 17 March. "The Body of the Artisan: Vernacular Epistemology and the Scientific Revolution."
- "Material Experience: The Role of Artisans in the Rise of Experimental Science," University of Maastricht, The Netherlands, January 26.
- "The Artisanal Body: Narrating Bodily Knowledge in Early Modern Europe," American Historical Association, Boston, January 7.
- **2000**: "The Body of the Artisan: Vernacular Epistemology and the Scientific Revolution," Harvard University History of Science, March 7.
- "Vernacular Epistemology and the Scientific Revolution," Southern California Colloquium in the History of Science, Medicine and Technology, UCLA, January 22.
- **1999:** "Artisans, Alchemists, and the Scientific Revolution," Symposium on Chemists and Texts, Chemical Heritage Foundation, Philadelphia, April 24.
- "The Body of the Artisan: Science, Art, and the Senses in Early Modern Europe," Johns Hopkins University History of Science, Medicine and Technology, April 22.
- "Science and Taste: The New Philosophy and Painting in Leiden," The Culture of Exchange, University of Pennsylvania, March.
- "Science, Art, and the Senses," Annual Historical Studies Lecturer, Richard Stockton College, New Jersey, March.
- "Science and Art in Early Modern Europe," California Institute of Technology, February.
- "The Body of the Artisan: Material Experience in the Scientific Revolution," UCSD, February.
- **1998:** "The Body of the Artisan: Art, Science, and Nature in Early Modern Europe," The Getty Research Institute, December.
- "Science and Taste: The Passions and the Senses in Seventeenth-Century Europe," Hebrew University, Jerusalem, June.
- "Bodily Encounters: Science and Material Experience in Early Modern Europe," Rutgers University, Newark, April.
- "Nature and the Senses: Hermeticism and Empiricism in the Scientific Revolution," Einstein Forum, Berlin, March 10.
- "Science, Art, and the Senses," Cohen Institute, Tel Aviv University, January 26.

- **1997:** "Carnal Knowledge: Science, Art, and the Senses in Early Modern Europe," University of Pennsylvania, March 22.
- **1996:** "Depicting Nature: Realism in Art and Science," New Directions in Early Modern Culture and Society, Clark Library, Los Angeles, December 7.
- "Scholars, Scientists, Merchants, and Kings: *Kunstkammer* in the Making of Social Status in Early Modern Europe," Internationales Forschungszentrum Kulturwissenschaften, Vienna, November 29.
- **1995:** "Painting, Science, and Modernity in Seventeenth-Century Leiden," Art History Dept., Technische Universität, Berlin, June 20.
- "Art, Artisanship, and Alchemy in Northern Europe," Max-Planck-Institut für Wissenschaftsgeschichte, Berlin, June 14.
- "Representing Nature: Artistic Realism and Artisanal Self-Consciousness in Seventeenth-Century Europe," Historisches Institut, Ruhr-Universität Bochum, June 12.
- "Art, Alchemy, and Redemption in Northern Renaissance Europe," Natural Philosophy and the Disciplines in the Renaissance, Dibner Institute, MIT, May 4-7.
- "The Authority of Natural Philosophy at the Early Modern Noble Court," Doing is Believing: Credibility and Practice in Science, Cornell University, April 21-24.
- "The House that Sylvius Built: Painting, the New Philosophy, and Modernity in Seventeenth-Century Leiden, or, The Ivory Lathe in the Attic," Wissenschaftskolleg zu Berlin, March 21.
- **1991-94:** "Giving Voice to the Hands: An Artisanal Worldview in the Scientific Revolution?" Institute for the History and Philosophy of Science, Göttingen, December 6.
- "The Authority of Scholars and the Practice of Artisans: Natural Philosophy and Technology at the Early Modern Noble Court," Conference on Technological Change, Oxford, 1993.
- "Between Words and Things: Natural Knowledge and Noble Society in Early Modern Europe," Univ. of California, Davis.
- "Theory, Practice, and Experimental Etiquette: The German Courts in the Seventeenth Century," Workshop on Civility, Court Society and Scientific Discourse: Reframing the Scientific Revolution, Clark Library, November 1991.
- "Natural Philosophy in 1669: Alchemy and Sugar; Curiosities and Colonies," Univ. of California, San Diego, 1991.

OTHER SELECTED LECTURES

- Comment, "Virtuosity. Ethics and Aesthetics of the Technical Gesture from the Middle Ages to the 19th Century," INHA, Paris, January 2021
- Panelist, Roundtable Discussion, "Revisiting Master Narratives," History of Science Society Virtual Forum, October 2020.
- "Knowledge-Making and the Material Imaginary in the Early Modern Workshop," Renaissance Society Annual Meeting, April 2017.
- Invited panelist, Purity and Contamination, Northeast Renaissance Society, MIT, October 2016.
- Presenter, Chemical Encyclopedia Database Resource, Chemical Heritage Foundation, 4-7 May 2016.
- Chair, *Textiles and the Origins of Industrial Revolution: Linking Markets and Technique*, University of Reading, April 2015.
- "Visualizing the Subterranean World: Miners and Scholars in the Sixteenth Century," Renaissance Society of America Annual Meeting, 28 March 2014.
- Panelist, New Trends in the History of Science and Medicine, Renaissance Society of America, CUNY, 19 October, 2012.
- "Matter and Meaning in Metalworking," co-organizer and speaker in "Materials and Meaning," Renaissance Society of America Annual Meeting, Venice, 8-10 April, 2010.
- "Objects, Practices, Techniques, and Texts: The Movement of Knowledge in the Early Modern World," American Historical Association annual meeting, 2009, in "Recent Trends in Renaissance Science," read in absentia by Sheila Rabin.

- Comment, "Collecting Particulars: List-making and the Organization of Natural Knowledge, Material Goods, and Communities in Early Modern Science," History of Science Society, November 2008.
- Comment, "The Practice of Drawing and the Construction of Artistic Identity," College Art Association Annual Meeting, 15 January 2007.
- "Butter and Mercury, Lizards and Vermilion: Artisanal Views of Nature in Early Modern Europe," History of Science Society Meetings (HSS), November 2006.
- Organizer and speaker, "From Objects to Ideas: Material Culture in Art and Science," Historians of Netherlandish Art, 9 November 2006.
- Chair and Commentator, "Science and Material Culture," Renaissance Society of America annual meeting, 25 March, 2006.
- "Making and Knowing: Reconstruction as an Historical Source," organizer and speaker, panel on "Reconstructing Historical Experience: Material Culture and the Making of Knowledge," held at Bartram's Garden, Philadelphia, American Historical Association annual meeting, 5 January 2006.
- Comment, "Envisioning New Science, Turning Back in Time: The Role of Near-Eastern Sources in Early Modern Practices of Science," HSS, 9 November 2005.
- "Knowledge of Nature in sixteenth-century Craft Treatises," in "Craft Treatises and Handbooks: The Dissemination of Technical Knowledge in the Middle Ages," Cordoba, Spain, 6 October 2005.
- Comment, "Plants and Insects in Early Modern Europe," Huntington Library, 2005.
- Comment, "Seeing Science: Image, Text, and Nature, 1500-1800," Princeton University, 2005.
- Comment, "Trading Knowledge: Art and Science in the Renaissance," Renaissance Society of America meeting, Toronto, 2003.
- "The Five Senses," organizer and speaker, panel discussion, Frühe Neuzeit Interdisziplinär, Pittsburgh, 2001.
- "Nature, Naturalism, Natural Philosophy: Artisans and Realism in Early Modern Europe," HSS, Kansas City, 1998.
- Comment, "Capitalism and Science in Early Modern Europe," HSS, San Diego, 1997.
- Comment, "Gender and Science," Clark Library, March 1994.
- "The Erasure of the Artisan in Seventeenth-Century Natural Philosophy," HSS, Washington D.C., 1992.
- "The Promise of Ars: The Seventeenth-Century Search for a Theory of Practice," Society for the History of Technology, Uppsala, Sweden, 1992.
- "Science and Symbols: Alchemical Transmutation at the Habsburg Court in Vienna," Renaissance Society of America, Stanford University, 1992.
- "Coining Reputations: The Financing of Social Credit at the Court of Emperor Leopold I," American Historical Association, Chicago, 1991.
- "Curing the Body Politic: Johann Joachim Becher and Commerce at the Bavarian Electoral Court," International Congress for the History of Science, Hamburg and Munich, August 1989.
- "Consumption and Credit: The Place of Alchemy in Johann Joachim Becher's Political Economy," Conference on the History of Alchemy, University of Groningen, The Netherlands, April 1989.
- "Chemie und Politik bei Johann Joachim Becher," Deutsches Museum, Munich, February 1987.

CONFERENCES ORGANIZED

- Printmaking, Inscription, Impression in BnF Ms. Fr. 640, Working Group Meeting of the Making and Knowing Project, 14-16 May 2019, Columbia University.
- *The Role of Narrative in the Sciences and the Humanities*, co-organizer, 28 Feb-1Mar 2019, Center for Science and Society, Columbia University.
- *The Transmission of Songs in Birds, Humans, and Other Animals,* co-organizer, 17-18 Feb 2019, Columbia University.
- Workshop, *Weaving Knowledge*, a two-week hands-on weaving immersion workshop for PhD students, Chiang Mai, Thailand 4-18 January 2019

- Making Art, Making Meaning in Fifteenth-century Flanders, co-organizer, 18-19 October 2018, Columbia University and the Frick Museum.
- *Embodied Cognition Workshop: Prosthetics and Cognition*, co-organizer, 15 October 2018, Columbia University.
- *Ephemeral Art in BnF Ms. Fr. 640*, Working Group Meeting of the Making and Knowing Project, 22-24 May 2018, Columbia University.

The Success of Failure: Perspectives from the Arts, Science, Humanities, Education, and Law, co-organizer, 7-8 December 2017, Columbia University.

- Workshop, *Weaving Knowledge*, a two-week hands-on weaving immersion workshop for PhD students, Chiang Mai, Thailand 8-24 July 2017, <u>https://weavingknowledge.org/</u>
- *Practical Knowledge in BnF Ms. Fr. 640*, Working Group Meeting of the Making and Knowing Project, 23-25 May 2017, Columbia University.
- *Evidence: An Interdisciplinary Conversation about Knowing and Certainty*, Center for Science and Society, 21-22 April, 2017, Columbia University.
- Embodied Cognition Workshop: "Weaving: Cognition, Technology, Culture," Center for Science and Society, Columbia University, 4-8 April 2017.
- Colormaking in BnF Ms. Fr. 640, Working Group Meeting of the Making and Knowing Project, 26-28 May 2016, Columbia University.
- Embodied Cognition Workshop: Neuroscience and Music,"11 February, 2016, Columbia University.
- *"Historical Reconstruction in Early Modern Europe,"* co-organizer, Chemical Heritage Foundation, Philadelphia, 9-10 October 2015.
- *"Moldmaking and Metalworking in BnF Ms Fr. 640,"* Working Group Meeting of the Making and Knowing Project, 27-30 May 2015, Columbia University.
- *"Itineraries of Materials, Recipes, Techniques, and Knowledge in the Early Modern World,"* Max Planck Institute for the History of Science, Berlin, March & July 2014, July 2015.
- Embodied Cognition Workshop: Physics and Dance, Heyman Center, 11 February, 2016.
- *"The Circulation of Knowledge—Europe,"* co-organized with Bruno Belhoste, Paris, 27-28 June, 2011.
- International Conference on the History of Alchemy and Chymistry (Advisory Committee), 19–22 July 2006, Chemical Heritage Foundation, Philadelphia.
- "Ways of Making and Knowing: The Material Culture of Empirical Knowledge," co-organizer with Amy Meyers (Yale Center for British Art) and Hal Cook (Wellcome Institute), held at the Chelsea Physic Garden, the British Museum, Kew Gardens, The Natural History Museum, London, The Victoria and Albert Museum, and Painshill Park, London, 10-15 July 2005.
- "Early Modern Metalworking and Alchemy," V&A Research Department Study Day, Victoria and Albert Museum, London, 23 June 2004.
- "Knowledge and its Making in Northern Europe 1500-1800," Westergaard Workshop, Pomona College, April 11-12, 2003
- "The Hermetic Imagination in the 17th and 18th Centuries," Clark Library, Los Angeles, October 4-5, 2001.
- "Biotechnology and Beyond," co-organizer with the STS senior seminar, Claremont Colleges, February 18-19, 2000.
- "Commerce and the Representation of Nature in Early Modern Europe," Clark Library, Los Angeles, October 2-3, 1999.

- "Chemists and Texts: A Symposium in the History of Chemistry in Honor of Owen Hannaway," Chemical Heritage Foundation, Philadelphia, April 24, 1999.
- Organizer, 1998 Ena H. Thompson Lectureship, Pomona College (Prof. Lynn Hunt, "The French Revolution and Human Rights")
- "Mastery of Nature, Mastery of the World: Science and Power," West Coast History of Science Society Annual Meeting, The Claremont Colleges, April 12-13, 1997.
- "Nature and Natural Philosophers," New Directions in the Study of Early Modern Culture and Society, Clark Library, Los Angeles, December 6-7, 1996, co-organizer.

PROFESSIONAL ORGANIZATIONS

American Historical Association American Association for Netherlandic Studies History of Science Society Historians of Netherlandish Art Frühe Neuzeit Interdisziplinär British Society for the History of Science Renaissance Society of America Society for the History of Technology Historical Metallurgy Society

PROFESSIONAL SERVICE

Gladys Krieble Delmas Venice Advisory Board, 2018-NEH-NHPRC Convening on Digital Futures Sept-Dec 2020 Renaissance Society of America

President 2016-18 (Vice President 2014-16; Past President 2018-20) Associate Editor, *Renaissance Quarterly* and Council Member, 2006-12 Gordan Prize Committee member, 2008-09.

External Scholarly Advisory Committee, Folger Institute, Mellon Initiative on Collaborative Research, 2019-

Board of Advisors, The Heyman Center for the Humanities, Columbia University, 2018-

Scientific Advisory Committee, Max Planck Institute for the History of Science, 2013-2018.

Board of Editors, History of the Humanities, 2014-

Editorial Board, Journal of Modern History, 2014-2017

Steering Committee, V&A Research Institute, 2014-2016

Advisory Board member, *Genius Before Romanticism: Ingenuity in Early Modern Art and Science*, ERC grant project, Cambridge University, 2014-2019.

Expert Advisory Committee, Library of the New York Academy of Medicine, 2014-2018.

Editorial Board, *Early Modern Cultural Studies*, Centre for Renaissance and Reformation Studies, University of Toronto, 2016-

Advisory Board, The Stevanovich Institute on the Formation of Knowledge, the University of Chicago, 2014-2017

American Historical Association Board of Editors, *American Historical Review*, 2008-11 Executive Council, 2004-06 (elected position) Research Division Committee member, 2005-06 Gershoy Prize Committee, 1996-98

History of Science Society

Nominating Committee member (elected position), 2000-01 and 2008-09
Executive Committee member, History of Science Society, New York Section, 2008-present
Osiris Editorial Board, 2000-04
Executive Council (elected position), 2000-02
Committee on Education, 2000-02, Chair 2001-02
Isis Editorial Board, 1997-2000
President, West Coast History of Science Society, 1997

Society for Austrian and Habsburg History, Executive Council, 2003-08

Studies in Netherlandish Art and Cultural History, publ. by Brill, Advisory Board, 2018-

Nederlands Kunsthistorisch Jaarboek, Advisory Board, 2008-present

Bard Graduate Center and University of Michigan Press series, "Cultural Histories of the Material World," External Editorial Board Member, 2009-2017.

Interpretatio: Sources and Studies in the History and Philosophy of Classical Science, Editorial Advisory Board member, 2007-present

Chemical Heritage Foundation, Fellowship Committee, 2011 Huntington-Dibner Fellowship Committee, 2008 Review of UCLA Center for 17th- and 18th-century Studies, 2006. Section Member, History and Philosophy of Science, New York Academy of Sciences

Committee Member, Nachwuchsgruppe Komitee, Max-Planck-Institut für Wissenschaftsgeschicthe, Berlin, December 2004.
Reviewer of mss. for Cambridge University Press, University of Pennsylvania Press, Johns Hopkins University Press, University of Chicago Press, Harvard University Press, Yale University Press, MIT Press, Oxford University, Princeton University Press.
Grant reviewer, NSF, 1994-present
NSF Grant Panelist for SES/STS grants, 2003
Fellowship application reviewer, ACLS, 2000, 2002
Associated Faculty, Clark Library, Los Angeles, 1994-2005

UNIVERSITY SERVICE

Columbia University Department of History Undergraduate Committee, 2020-21 Curriculum Representative, Early Modern Europe, 2020-21 Curriculum Representative for History of Science, 2018-19 Curriculum Representative for Early Modern Europe and History of Science, 2017-18 Society of Fellows reading committee, 2017-18 History Development Committee, 2015-16; 2017. Co-Coordinator, History in Action Initiative, 2014-15 Acting Chair, 2012-13 Vice Chair, 2011-12 Personnel Committee, 2011-13 Director of Graduate Studies, History Department, 2006-2009. Development Committee, co-chair 2007-09, chair 2010-12. Board of Visitors steering committee, 2007-13 Spending Priorities Committee, 2010-13 Mellon Distinguished Professorship Search committee member 2010-11 Graduate Education Committee, 2005-06 Oueen Wilhelmina/Taalunie Dutch program, member 2007-present; co-chair 2010-13; chair 2011-12; co-chair 2013-.

University

Climate School Design Committee, 2021-Climate and Humanities Committee, 2020-Advisory Board, Heyman Center for the Humanities, 2018-2021 Uris Vision Committee, 2018-2019 **ISERP** Executive Committee, 2018-20 Provost's Committee on Interdisciplinary Activity, Columbia, 2018-Arts & Sciences Space Planning Committee 2014-2017. Founding Chair, Presidential Scholars in Society and Neuroscience, 2014-present. Founding Director, Center for Science and Society, 2013-present. Interim Academic Director, Italian Academy, Spring 2012 Committee on Instruction, Columbia College, 2011-12 Art History, search committee member, 2011-12 University Seminar for the History and Philosophy of Science, co-chair 2007-present Classroom Technology Committee, 2011-13. Space Planning subcommittee on classroom use and scheduling, 2010-11 Space Planning Committee for Manhattanville, 2009-11. Trilling Seminars Selection Committee member, 2008-present Arts Initiative Faculty Advisory Committee, 2008-10 Executive Committee of the Faculty of Arts and Sciences (ECFAS), 2006-09 (elected position) ECFAS Department/UDAR Working Group, 2007-09 Founding member, Science, Technology and Society Colloquium, Columbia University Faculty Fellow, ISERP, 2005-06. Classics ARC Review, Internal Review Committee, 2005-06. Ad Hoc committees, Columbia University

Claremont Colleges

Mellon Faculty Seminar co-leader (with Shahriar Shahriari) on "Science in the Islamic World," Pomona College, 2004-05 Coordinator, Science, Technology, and Society Program: 1992-93, 1996-97, 1999-2000, 2001-03 Research Committee, 1995-1997, 1999-2000, 2002-03 (Chair), 2004-05 Working Group on Seminar scheduling, 2004 Watson Fellowship Committee, 1991-92 Curriculum Committee, 1991-92; 2001-02 Faculty Executive Committee, 1992-93 Buildings and Grounds Committee, 1992-93 Size of the College Committee, 1992-93 History Department search committee member: 1991/92, 1992/93, 1995/96, 1996/97, 1997/98 Steering Committee, Science, Technology, and Society Program: 1991-2005 Women's Studies Faculty: 1992-2005 Westergaard Foundation Fund supervisor: 1992-2000, 2002-3 German across the Curriculum Program, member, 1994-2005 European Union Center Intercollegiate Council member for Pomona, 1998-99 EU Center Curriculum Development committee, 1998-99 Women's Commission, 1998-99 Mellon Fellowship Advisor, 1998-99 Faculty mentor, Office of Black Students Association, 1992-93

GRADUATE ADVISING

Ph.D. – Columbia University Elizabeth Branscum (2019-), History, early modern Europe, sponsor Julia Thomasson (2019-), History, early modern Europe, committee member Celine Camps (2018-), History, early modern Europe, sponsor Amanda Faulkner (2018-), History, early modern Netherlands, sponsor Reut Ullman (2017-), History, early modern Europe, "The Battle for the Soul of Russia: Orthodoxy and Enlightenment in the Scientific Thought of Mikhail Vassilvavich Lomonosov," co-sponsor Joslyn DeVinney (2016-), History, South Asia, "Mysore Science: A Connected History of Natural Knowledge, 1761-1837," committee member Sohini Chattopadhyay (2016-), History, South Asia, "Dead Matter: The Dead Body as an Urban Problem in Bombay and Calcutta, 1896 - c.1950,", committee member Robin Reich (2015-), History, medieval, "Copper-alloys and Cures: A material history of scientific translation in Norman Sicily," committee member Diana Mellon (2014-), Art History, "Sites of Healing: Art, Health, and Embodied Experience in Early Renaissance Italy," committee member Cleo Nisse (2016-), Art History, "On Canvas: The Adoption and Development of Canvas Supports from Bellini to Tintoretto," committee member Rozemarijn Landsman (2015-), Art History, "Jan van der Heyden (1637-1712), Inventor: Art, Technology, and the City," committee member Wenrui Zhao (2015-), History, early modern Europe, "Dissecting Sight: Eye Surgery and Vision in Early Modern Europe History," sponsor Jordan Katz (2014-2020), History, early modern Europe, "Jewish Midwives, Medicine and the Boundaries of Knowledge in Early Modern Europe, 1650-1800," co-sponsor, defense June 2020. Kathryn Kremnitzer (2012-20), Art History, "Edouard Manet's pictorial translations, mediations, and reproductions," committee member/defense chair, defense April 2020.

- Yuan Yi (2014-2020), EALAC-History, History of Technology, "Malfunctioning Machinery: The Global Making of Chinese Cotton Mills, 1889-1949," committee member, defense June 2020.
- Rachel Boyd (2012-20), Art History "Experimentation and Specialization: The Glazed Terracotta Sculpture of the Della Robbia Workshop, c. 1430–1550," committee member, defense April 2020.
- Sean O'Neil (2011-19), History of Science, early modern Europe, "The Art of Signs: Symbolic Notation and Visual Thinking in Early Modern Europe, 1500-1800," sponsor, defense August 2019.
- Joshua Schlachet, History, early modern Japan, committee member.
- Fred Kim (2012-19), Union Theological Seminary, History, "Avoiding Plague: Medical Debates on Contagion in Early Modern Europe," co-sponsor, defense August 2019.
- Julianna van Visco, Italian Literature, (2014-19), "Dante and Boccaccio: A Poetics of Textiles," committee member, defense September 2019.
- Hannah Elmer (2011-19), History, Medieval, "Alive Enough: Reanimating the Dead in Central Europe, 1200-1545," committee member, defense September 2019.
- Yijun Wang (2013-19), EALAC-History, "From Tin to Pewter: Craft and Statecraft in China, 1700-1844," co-sponsor, defense chair, defense March 2019.
- Sofia Gans, (2012-18), Art History, "A whole chapel cast and engraved with images": New Perspectives on the Tomb of Saint Sebald in Nuremberg," committee member, defense April 2018.
- Shehab Ismail (2012-18), History of Science, 18th early 20th-century Egypt, committee member.
- Abram Kaplan (2011-18), History of Science, early modern Europe, committee member.
- Etienne Stockland (2010-2017), History of Science, early modern Europe, "Insects, Anthropogenic Change, and Rural Environments in the Global French Enlightenment," sponsor, October 26, 2017.
- Caroline Wazer, History, ancient, "Salus Patriae: Public Health and the State in the Early Roman Empire," defense chair, August 30, 2017.
- Melissa Morris, History, Atlantic World, "Cultivating Colonies: Tobacco and the Upstart Empires, 1580-1640," committee member, defense August 2017.
- Joseph Skloot, History, early modern Europe, "Printing, Hebrew Book Culture and *Sefer Hasidim*," committee member, defense April 2017.
- Debra Glasberg Gail (2010-2016), History, early modern Europe, "Innovative Tradition: Encyclopedias, Medicine, and Jewish Culture in Eighteenth-Century Italy," committee member, defense June 2016.
- Kyoungjin Bae (2009-2016), International and Global History, "Joints of Utility, Crafts of Knowledge: The Material Culture of Sino-British Furniture Trade, 1730-1830," sponsor, defense May 2016.
- Katherine Johnston, Early Modern Europe, History, Atlantic World "Atlantic Bodies: Health, Race, and the Environment in the British Greater Caribbean," defense chair, February 2015.
- Divya Cherian, History, South Asian, "Ordering Subjects: Caste, Vaishnav Devotionalism, and the Administration of Society in Early Modern Marwar, 1650-1818," defense chair, August 2015.
- Sixiang Wang, History, "Contesting Empire in Early Chosŏn Korea: Knowledge Production and the Culture of Diplomacy (1392–1592)," committee member, defense March 2015.

Lan Wu, East Asian Languages and Cultures, "Refuge from Empire: Religion and the Cosmopolitan Qing China in the 1700s," committee member, defense April 2015.

- Saskia Cornes, English Literature, "Literature of Landscape: The Enclosure Movement in the Seventeenth Century English Imagination," committee member, defense October 2014.
- Kaijun Chen, EALAC, "The Rise of Technocratic Culture in High-Qing China: A Case Study of Bonservant (Booi) Tang Ying (1682-1756)," committee member, defense August 2014.

Elizabeth Han Lawrence, EALAC, committee member, "The Chinese Seal in the Making, 1904-1937," committee member, defense June 2014.

Abhishek Kaicker (2007-14), History, South Asian, "Unquiet City: Making and Unmaking Politics in Mughal Delhi, 1707-39," defense chair, January 2014.

- Meha Priyadarshini (2006-13), International and Global History, "Mexican Chocolate in Chinese Cups: Trade, Artisanal Knowledge and the Education of Tastes in the Early Modern World," defense chair and co-sponsor, September 2013.
- Jun Hee Cho, (2005-13), History, early modern Europe"Court in the Market: The 'Business' of a Princely Court in the Burgundian Netherlands, 1467-1503," defense chair, September 2013.
- Michael Neuss (2006-13), History, early modern Europe, "Balancing Blood, Balancing Books: Medicine, Commerce, and the Royal Court in Seventeenth-Century England," defense chair and second reader, May 2013.

Kira von Ostenfeld, History, Early Modern Spain, PhD, committee member, March 2013.

Abigail Schade (2004-11), International and Global History, "Hidden Waters: Groundwater

Histories of Iran and the Mediterranean" defense chair and second reader, July 2011.

Kim-Ly Thi Moynihan, Art History, external examiner, 2012.

Lianne Habinek, English and Comp Lit, external examiner, 2009.

Laurel Brown, Middle Eastern Languages and Cultures, committee member, 2009.

Renzo Baldasso, Art History, external examiner, 2007.

Dana Tulodziecki, Philosophy, external examiner, 2007.

Federico Marcon, EALAC, external examiner, 2007.

Jessica Maier, Art History, external examiner, 2005.

Ph.D. – Other institutions

- Indra Kneepkens, University of Amsterdam, Conservation, PhD, committee member, defense 2021.
- Tonny P. C. Beentjes, University of Amsterdam, Art History, PhD, committee member, defense 2019.
- Garth Reese, Claremont Graduate University, Religious Studies, PhD, committee member, defense 2009.
- Stephanie Seery, Claremont Graduate University, Religious Studies, PhD, committee member, defense 2008.
- Ayesha Mukherjee, Cambridge University, Comparative Literature, PhD, external examiner, defense 2007.

Greg Dodds, Claremont Graduate University, History, PhD advisor, defense 2004.

Antonio Barrera, University of California, Davis, History of Science, PhD, committee member, defense 1999.

M.A.

Katherine Bergen, International and World History, MA Thesis advisor, 2019-20.

Angela Kun-Gazda, Columbia University, European Studies, MA Thesis advisor, 2017-18.

Jeffrey Palframan, Columbia University, Medieval and Renaissance Studies, MA Thesis advisor, 2014.

Ariel Duncan, Columbia University, History, MA Thesis advisor, 2010.

Jenny Tromski, Columbia University, History, MA thesis advisor, 2010.

Jocelyn Friend, Claremont Graduate University, History, M.A. thesis advisor, 2001.

Dawn Setzer, Claremont Graduate University, History, M.A. thesis advisor, 2001.

Tillman Nechtman, Claremont Graduate University, History, M.A. thesis advisor, 1999.