## CURRICULUM VITÆ

Name: Karen Virginia Hunger Parshall

#### Addresses: Offices:

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Research Areas: History of Science, History of Mathematics

**Teaching Areas:** History of science (including the history of mathematics *per se*), Mathematics

## Education:

| University of Chicago  | 1978-1980              |
|--|------------------------|
| Ph.D. in History   | August, 1982           |
| University of Virginia   | 1977-1978              |
| M.S. in Mathematics  | May, 1978              |
| University of Virginia<br>B.A. with Highest Distinction<br>in Mathematics and French | 1973-1977<br>May, 1977 |

## **Employment History**:

May 31, 2023 to present: Commonwealth Professor Emerita of History and Mathematics.

August 2016 to May 31, 2023: Commonwealth Professor of History and Mathematics.

August 2016 to August 2019: Chair, Corcoran Department of History, University of Virginia.

June 2009 to June 2012: Associate Dean for the Social Sciences, College of Arts and Sciences, University of Virginia.

Typeset by  $\mathcal{A}_{\!\mathcal{M}}\!\mathcal{S}\text{-}T_{\!E}\!X$ 

Fall 1999 to August 2016: Professor of History and Mathematics, University of Virginia.

Fall 1993 to Spring 1999: Associate Professor of History and Mathematics, University of Virginia.

Fall 1988 to Fall 1993: Assistant Professor of History and Mathematics, University of Virginia.

Fall 1987 to Spring 1988: Visiting Assistant Professor of Mathematics, University of Illinois at Urbana-Champaign.

Fall 1982 to Spring 1987: Assistant Professor of Mathematical Sciences, Sweet Briar College.

## Short-Term Positions:

December 2022: Professeur invité (Invited Professor), Université Pierre et Marie Curie, Paris, FRANCE.

March-April 2016: Professeur invité (Invited Professor), Université Pierre et Marie Curie, Paris, FRANCE (Lectures given in French).

May 2010: Enseignant-Chercheur (Professor-Researcher) in the History of Science, École des Hautes Études en Sciences Sociales, Paris, FRANCE (Lectures Given in French).

Fall 1996 to Summer 1997: Visiting Associate Professor, Morris Fishbein Center for the History of Science and Medicine and the Committee on the Conceptual Foundations of Science, University of Chicago

May–June, 1992: Visiting Fellow, Centre for Mathematics and Its Applications, Australian National University, Canberra, AUSTRALIA.

Spring 1985: Foreign Director of Studies in the History of Science, École des Hautes Études en Sciences Sociales, Paris, FRANCE (Lectures Given in French).

Fall 1980: Lecturer in Mathematics, University of Virginia.

## **Fellowships:**

- John Simon Guggenheim Foundation Fellow, 1996–1997.
- Noyes Fellowship, University of Chicago, 1979–1980.
- Governor's Fellowship, University of Virginia, 1977–1978.

## Honors:

• Elected Fellow of the American Association for the Advancement of Science (Section A), 2020.

• American Mathematical Society (AMS) Invited Hour Speaker, Joint Mathematics Meetings, Baltimore, MD, January 2019.

• Winner of the 2018 Albert Leon Whiteman Prize of the American Mathematical Society. (This international prize honors "notable exposition and exceptional scholarship in the history of mathematics.")

• Centennial Speaker, Mathematical Association of America, Centennial Meeting, Washington, D.C., August 2015.

• Elected to the Raven Society (the University of Virginia's "oldest and most prestigious honorary society"), March 2013.

• Inaugural Fellow of the American Mathematics Society (one of only six historians of mathematics so named), Fall 2012.

• Australian Mathematical Society/New Zealand Mathematical Society, Plenary Hour Speaker, Joint Meeting, Christchurch, NEW ZEALAND, December 2008.

• Mathematical Association of America (MAA) Invited Hour Speaker, Joint Mathematics Meetings, San Francisco, CA, January 1995; Washington, DC, January 2000; and San Diego, CA, January 2008.

• American Mathematical Society Plenary Hour Speaker, Sectional AMS Meetings, Eugene, OR, June 1994; and Miami, FL, April 2006.

• Selected for inclusion in Who's Who In America, 58th ed., 2004-.

• Elected Corresponding Member of the Académie internationale d'histoire des sciences, June 2002; Effective Member, 2016.

• Selected as the 2002 British Society for the History of Mathematics/Gresham College Lecturer, Gresham College, London, ENGLAND.

• Brazilian Society for the History of Mathematics, Plenary Hour Speaker, Natal, BRAZIL, April 2001.

• Selected as a Forty-Five-Minute Lecturer in the History of Mathematics, International Congress of Mathematicians, Zürich, SWITZERLAND, August 1994.

• Phi Beta Kappa, Beta of Virginia, Elected 1977.

## Grants:

• National Science Foundation Grants, Program in Science, Technology, and Society, Awarded 1985 (taken 1986–1987); July 1990–June 1993; April 1999–April 2000; and February 2003–February 2004.

• National Science Foundation, Visiting Professorship for Women Recipient, 1996–1997.

• University of Virginia Sesquicentennial Fellowships, 1996–1997; 2003–2004; 2009–2010 (deferred to 2012–2013); and 2015–2016.

• University of Virginia Summer Faculty Research Grants, Summer 1990; and Summer 2004.

• Faculty Grant for Interdisciplinary Studies, Sweet Briar College, Summer 1984; and Summer 1985.

• Cabell Faculty Enrichment Grant, Sweet Briar College, Summer 1983.

## **Professional Memberships:**

American Mathematical Society British Society for the History of Mathematics Canadian Society for the History and Philosophy of Mathematics Phi Beta Kappa

**Dissertation Advisers:** Allen G. Debus<sup> $\dagger$ </sup> (History) and I. N. Herstein<sup> $\dagger$ </sup> (Mathematics), University of Chicago

**Dissertation:** "The Contributions of J. H. M. Wedderburn to the Theory of Algebras: 1900–1910"

## **Doctoral Students:**

(1) Della Dumbaugh (Fenster) (Mathematics), "Leonard Eugene Dickson and His Work in the Theory of Algebras," (Ph.D., August 1994), Professor of Mathematics, University of Richmond.

(2) Patti Wilger Hunter (Mathematics), "The Formation of a Discipline: Mathematical Statistics in the United States in the Nineteenth and Twentieth Centuries," (Ph.D., January 1997), Professor of Mathematics, Westmont College.

(3) Sloan Evans Despeaux (Mathematics), "The Development of a Publication Community: Nineteenth-Century Mathematics in British Scientific Journals," (Ph.D., August 2002), Professor of Mathematics, Western Carolina University.

(4) Deborah Kent (Mathematics), "Benjamin Peirce and the Promotion of Research-Level Mathematics in America: 1830–1880," (Ph.D., August 2005), Associate Professor of Mathematics, Drake University.

(5) Laura Martini (Mathematics), "Political and Mathematical Unification: Algebraic Research in Italy, 1850–1914," (Ph.D., May 2006), Contractor, PraHealth-Sciences (Italy).

See also Della Dumbaugh, Patti Hunter, Sloan Despeaux, Deborah Kent, and Laura Martini, "Celebrating Karen Parshall as an Advisor," *Notices of the American Mathematical Society* 69 (2022), 400-403.

# **Postdoctoral Student:**

Adrian C. Rice (Mathematics)

# **Publications:**

# Books:

(1) The Emergence of the American Mathematical Research Community (1876-1900): J. J. Sylvester, Felix Klein, and E. H. Moore (with David E. Rowe), AMS/LMS Series in the History of Mathematics, vol. 8 (Providence: American Mathematical Society and London: London Mathematical Society, 1994; paper-back edition, 1997).

(2) James Joseph Sylvester: Life and Work in Letters (Oxford: Clarendon Press, 1998).

(3) James Joseph Sylvester: Jewish Mathematician in a Victorian World (Baltimore: Johns Hopkins University Press, 2006).

(4) Taming the Unknown: A History of Algebra from Antiquity to the Early Twentieth Century (with Victor J. Katz) (Princeton: Princeton University Press, 2014; Japanese translation (Tokyo: Kyoritsu Shuppan, Co., 2023).

(5) The New Era in American Mathematics, 1920–1950 (Princeton: Princeton University Press, 2022).

# Editions:

(1) Experiencing Nature: Proceedings of a Conference in Honor of Allen G. Debus, (co-edited with Paul H. Theerman) (Boston/Dordrecht: Kluwer Academic Publishers, 1997).

(2) Mathematics Unbound: The Evolution of an International Mathematical Community, 1800–1945 (co-edited with Adrian C. Rice) AMS/LMS Series in the History of Mathematics, vol. 23 (Providence: American Mathematical Society and London: London Mathematical Society, 2002).

(3) Episodes in the History of Modern Algebra (co-edited with Jeremy G. Gray) AMS/LMS Series in the History of Mathematics, vol. 32 (Providence: American Mathematical Society and London: London Mathematical Society, 2007).

(4) Bridging Traditions: Alchemy, Chemistry, and Paracelsian Practices in the Early Modern Era: Essays in Honor of Allen G. Debus (co-edited with Michael T. Walton and Bruce Moran) (Kirksville: Truman State University Press, 2015).

#### Monographs:

(1) "Joseph H. M. Wedderburn and the Structure Theory of Algebras," Archive for History of Exact Sciences 32 (1985): 223-349.

#### **Articles and Book Chapters:**

(1) "Varieties As Incipient Species: Darwin's Numerical Analysis," *Journal of the History of Biology* 15 (Summer 1982), 191-214.

(2) "In Pursuit of the Finite Division Algebra Theorem and Beyond: Joseph H. M. Wedderburn, Leonard E. Dickson, and Oswald Veblen," *Archives internationales d'Histoires des Sciences* 35 (December 1983), 274-299.

(3) "E. H. Moore and the Founding of a Mathematical Community in America: 1892–1902," Annals of Science 41 (1984):313-333; reprinted in A Century of Mathematics in America–Part II, ed. Peter L. Duren et al. (Providence: American Mathematical Society, 1988), pp. 155-175.

(4) "Le développement de la théorie des algèbres au XIX<sup>ème</sup> siècle," *Sciences et techniques en perspective* 10 (1985–1986), 129-144.

(5) "The Art of Algebra From Al-Khwarizmi to Viète: A Study in the Natural Selection of Ideas," *History of Science* 26 (1988), 129-164.

(6) "America's First School of Mathematical Research: James Joseph Sylvester at the Johns Hopkins University 1876–1883," Archive for History of Exact Sciences 38 (1988), 153-196.

(7) "Toward a History of Nineteenth-Century Invariant Theory," in *The History of Modern Mathematics*, ed. David E. Rowe and John McCleary, 2 vols. (Boston: Academic Press, 1989), 1: 157-206.

(8) "American Mathematics Comes of Age: 1875–1900" (with David E. Rowe), in *A Century of Mathematics in America—Part III*, ed. Peter L. Duren *et al.* (Providence: American Mathematical Society, 1989), pp. 1-24.

(9) "A Century-Old Snapshot of American Mathematics," *The Mathematical Intelligencer* 12 (3) (1990), 7-11.

(10) "The One-Hundredth Anniversary of the Death of Invariant Theory?," *The Mathematical Intelligencer* 12 (4) (1990), 10-16.

(11) "A Study in Group Theory: Leonard Eugene Dickson's Linear Groups," *The Mathematical Intelligencer* 13 (1) (1991), 7-11.

(12) "New Light on the Life and Work of Joseph Henry Maclagan Wedderburn (1882–1948)," in Amphora: Festschrift für Hans Wussing zu seinem 65. Geburtstag, ed. Menso Folkerts et al. (Basel/Boston/Berlin: Birkhäuser Verlag, 1992), pp. 523-537.

(13) "The One-Hundredth Anniversary of Mathematics at the University of Chicago," *The Mathematical Intelligencer* 14 (2) (1992), 39-44.

(14) "Embedded in the Culture: Mathematics at the World's Columbian Exposition" (with David E. Rowe), *The Mathematical Intelligencer* 15 (2) (1993), 40-45.

(15) "A Profile of the American Mathematical Research Community: 1891–1906" (with Della Dumbaugh Fenster), in *The History of Modern Mathematics*, ed. Eberhard Knobloch and David E. Rowe, vol. 3 (Boston: Academic Press, 1994), pp. 179-227.

(16) "Women in the American Mathematical Research Community: 1891-1906" (with Della Dumbaugh Fenster), in *The History of Modern Mathematics*, ed. Eberhard Knobloch and David E. Rowe, vol. 3 (Boston: Academic Press, Inc., 1994), pp. 229-261.

(17) "Mathematics in National Contexts (1875–1900): An International Overview," in *Proceedings of the International Congress of Mathematicians: Zürich*, 2 vols. (Basel/Boston/ Berlin: Birkhäuser Verlag, 1995), 2: 1581-1591.

(18) "Come to the Fair: The Chicago Mathematical Congress of 1893" (with David E. Rowe), in *Meetings of Mathematicians*, ed. Bettye Anne Case *et al.* (Providence: American Mathematical Society, 1996), pp. 61-69 (this is a shortened version of chapter 7 in book (1) above).

(19) "How We Got Where We Are: An International Overview of Mathematics in National Contexts 1875–1900," *Notices of the American Mathematical Society* 43 (March 1996), 287-296 (this is a somewhat different version of (17)).

(20) "Building an International Reputation: The Case of J. J. Sylvester (1814–1897)" (with Eugene Seneta), American Mathematical Monthly 104 (March 1997), 210-222.

(21) "Chemistry Through Invariant Theory? James Joseph Sylvester's Mathematization of the Atomic Theory," in *Experiencing Nature: Proceedings of a Conference in Honor of Allen G. Debus*, ed. Paul Theerman and Karen Hunger Parshall (Boston/Dordrecht: Kluwer Academic Publishers, 1997), pp. 81-111.

(22) "The Unfinished Scientific Revolution and Stendhal's *La Chartreuse de Parme*," in *The Unfinished Revolution*, ed. Robert T. Denommé and Roland Simon (State College: Pennsylvania State University Press, 1998), pp. 103-120.

(23) "To Belong: The Role of Community in the Life and Work of J. J. Sylvester," *The Mathematical Intelligencer* 20 (1998), 35-39.

(24) "The Mathematical Legacy of James Joseph Sylvester," *Nieuw Archief voor Wiskunde*, 4th ser., 17 (July 1999), 247-267.

(25) "Telling the Life of a Mathematician: The Case of J. J. Sylvester," *Revue d'Histoire des Mathématiques* 5 (1999), 285-302.

(26) "Perspectives on American Mathematics," Bulletin of the American Mathematical Society 37 (2000), 381-405.

(27) "Nineteenth-Century Developments in Geometric Probability: J. J. Sylvester,
M. W. Crofton, J.-É. Barbier, and J. Bertrand" (with Eugene Seneta and François Jongmans), Archive for History of Exact Sciences 55 (2001), 501-524.

(28) "Historical Contours of the American Mathematical Research Community," in Anais: IV Seminaário nacional de história da matemática, ed. John Fossa (Rio Claro: Editora SBHMat, 2001), pp. 42-66. (A more detailed version of this also appears in A History of School Mathematics, 2 vols., ed. George M. A. Stanic and Jeremy Kilpatrick (Reston, VA: National Council of Teachers of Mathematics, 2003), 1: 113-157. An abbreviated version of this article also appeared in Chinese translation.)

(29) "Victor Kac and Robert Moody: Their Paths to Kac-Moody Lie Algebras" (with Stephen Berman), *The Mathematical Intelligencer* 24 (1) (2002), 50-60.

(30) "The Evolution of an International Mathematical Research Community, 1800–1945: An Overview and an Agenda" (with Adrian C. Rice), in *Mathematics Unbound: The Evolution of an International Mathematical Research Community, 1800–1945*, AMS/LMS Series in the History of Mathematics, vol. 23 (Providence: American Mathematical Society and London: London Mathematical Society, 2002), pp. 1-15.

(31) "Entering the International Arena: E. H. Moore, the University of Chicago, and Hilbert's *Grundlagen der Geometrie*," in *Il Sogno di Galois: Scritti di storia della matematica dedicata a Laura Toti Rigatelli per il suo* 60° *compleanno*, ed. Raffaella Franci, Paolo Pagli, and Annalisa Simi (Siena: Centro Studi della Matematica Medioevale, 2003), pp. 199-227.

(32) "Defining a Mathematical Research School: The Case of Algebra at the University of Chicago, 1892–1950," 31 *Historia Mathematica* 31 (2004), 263-278.

(33) "The Emergence of the American Mathematical Research Community," in *Mathematics and the Historian's Craft: The Kenneth O. May Lectures*, ed. Glen Van Brummelen and Michael Kinyon (New York: Springer-Verlag, 2005), pp. 183-202.

(34) "The British Development of Invariant Theory, 1841–1895," Newsletter of the British Society for the History of Mathematics 21 (2006), 186-199.

(35) "Dal Liberal Arts College alla Research University: Harvard, Yale e Princeton [From the Liberal Arts College to the Research University: Harvard, Yale, and Princeton]" (with Joseph W. Dauben) in *Matematica e Cultura*, ed. Claudio Bartocci and Piergiorgio Odifreddi, 4 vols. (Turin: Giulio Einaudi Editore S.p.a., 2007), 1: 477-504.

(36) "L'evoluzione della ricerca universitaria: Johns Hopkins, Chicago e Berkeley [Mathematics and the Evolution of the Research University: Johns Hopkins, Chicago, and Berkeley]" (with Joseph W. Dauben) in *Matematica e Cultura*, ed. Claudio Bartocci and Piergiorgio Odifreddi, 4 vols. (Turin: Giulio Einaudi Editore S.p.a., 2007), 1: 505-529.

(37) "A Mathematical 'Good Neighbor': Marshall Stone in Latin America (1943)," Revista Brasileira de História da Matemática: Especial No 1—Festschrift Ubiratan D'Ambrosio (Dec. 2007), 19-31.

(38) "The Development of Abstract Algebra" in *Princeton Companion to Mathematics*, ed. Tim Gowers (Princeton: Princeton University Press, 2008), pp. 95–106.

(39) "The Internationalization of Mathematics in a World of Nations: 1800–1960" in *The Oxford Handbook of the History of Mathematics*, ed. Eleanor Robson and Jackie Stedall (Oxford: Oxford University Press, 2009), pp. 85-104.

(40) "Marshall Stone and the Internationalization of the American Mathematical Research Community," *Bulletin of the American Mathematical Society* 46 (2009), 459-482.

(41) "Algebra: The Freedom To Create New Mathematical Entities" in *Victorian Mathematics*, ed. Raymond Flood, Adrian Rice, and Robin Wilson (Oxford: Oxford University Press, 2011), pp. 339-356.

(42) "The Evolution of a Community of Mathematical Researchers in North America: 1636–1950" for *Recent Developments on Introducing a Historical Dimension in Mathematics Education*, ed. Victor J. Katz and Constantine Tzanakis (N.p.: Mathematical Association of America, 2011), pp. 241–250.

(43) "Mathematics Education in America in the Premodern Period" (with Ubiratan D'Ambrosio and Joseph W. Dauben), in *Handbook on the History of Mathematics Education*, ed. Alexander Karp and Gert Schubring (New York: Springer Verlag, 2014), pp. 175–199.

(44) "Crafting the Chemical Interpretation of Nature: The Work of Allen G. Debus," in *Bridging Traditions: Alchemy, Chemistry, and Paracelsian Practices in the Early Modern Era: Essays in Honor of Allen G. Debus*, ed. Karen Hunger Parshall, Michael T. Walton, and Bruce Moran) (Kirksville: Truman State University Press, 2015), pp. 1-16.

(45) "The Stratification of the American Mathematical Community: The Mathematical Association of America and the American Mathematical Society, 1915–1925," in *A Century of Advancing Mathematics*, ed. Steve Kennedy, *et al.* (Washington, DC: Mathematical Association of America, 2015), pp. 159-175.

(46) "'A New Era in the Development of Our Science': The American Mathematical Research Community, 1920–1950," in *A Delicate Balance: Global Perspectives on Innovation and Tradition in the History of Mathematics: A Festschrift in Honor of Joseph W. Dauben*, ed. David E. Rowe and Wann-Sheng Horng (Basel: Birkhäuser Verlag, 2015), pp. 275-308.

(47) "'Increasing the Utility of the Society': The Colloquium Lectures of the American Mathematical Society," *Philosophia Scientiae* 19 (2015), 153-169.

(48) "Training Women in Mathematical Research: The First Fifty Years of Bryn

Mawr College (1885–1935)," The Mathematical Intelligencer 37 (2015), 71-83.

(49) "Ivor Grattan-Guinness (1941–2014)" (with Joseph W. Dauben, Niccolò Guicciardini, Albert C. Lewis, and Adrian C. Rice), *Historia Mathematica* 42 (2015), 385-406.

(50) "Mathematics and the Politics of Race: The Case of William Claytor (Ph.D., University of Pennsylvania, 1933)," *American Mathematical Monthly* 123 (2016), 214-240.

(51) "The American Mathematical Monthly (1894–1919): A New Journal in the Service of Mathematics and Its Educators," in *Research in History and Philosophy of Mathematics*. Ed. Maria Zach and Elaine Landry. Basel: Birkhäuser Verlag, 2016, pp. 193-204.

(52) "A Plurality of Algebras, 1200–1600: Algebraic Europe from Fibonacci to Clavius," *BSHM Bulletin: Journal of the British Society of the History of Mathematics* 32 (2017), 1-15.

(53) "Training Research Mathematicians circa 1900: The Cases of the United States, Germany, France, and Great Britain," in *A Global History of Research Education: Disciplines, Institutions, and Nations*, ed. Ku-ming "Kevin" Chang and Alan Rocke, History of Universities, vol. 34(1) (Oxford: Oxford University Press, 2021), pp. 65-83.

(54) "Journals in the Evolution of a National Research Community: The Case of Mathematics in the United States (1776–1940)," for a volume co-edited by Hélène Gispert, Jeanne Peiffer, and Philippe Nabonnand, 30 pages in LaTeX, to appear.

(55) "James Joseph Sylvester," in Oxford's Savilian Professors of Geometry: The First 400 Years, ed. Robin J. Wilson (Oxford: Oxford University Press, 2022), pp. 120-143.

(56) "The American Mathematical Society and Applied Mathematics from the 1920s to the 1950s: A Revisionist Account," *Bulletin of the American Mathematical Society* 59 (2022), 405-427.

(57) "A Mathematical Snapshot: The University of Rochester, 1933–1936," *The Mathematical Intelligencer*, 45 (1) (2023), 64-70.

(58) "Speaking to the Public: Mathematicians on American Radio, the 1920s through the 1940s" (with Albert C. Lewis), *The Mathematical Intelligencer* 45 (3) (2023), 208-222.

(59) "A Convergence of Paths: Arthur Cayley, Charles Hermite, James Joseph Sylvester, and the Early Development of a Theory of Invariants," *Revue d'histoire des mathématiques*, completed August 2022, accepted December 2022, 22 pp. in LaTeX.

(60) "Mathematicians Confront Political Tests: The American Mathematical Society and the Red Scare in 1954" (with Albert C. Lewis), *Notices of the American Mathematical Society*, 71 (4) (2024), 500-513.

(61) "'The Bedrock of Logical Thought': Mathematics on the Television in 1957," *The Mathematical Intelligencer* 46 (2) (2024), 156-163.

#### **Entries in Encyclopedias and Other Reference Works**

(1) Entry on A. Adrian Albert in *Dictionary of Scientific Biography: Supplement II* (New York: Charles Scribner's Sons, 1990), pp. 6-8.

(2) Entry on "The United States, and Canada" (with David E. Rowe), in *Companion Encyclopedia of the History and Philosophy of the Mathematical Sciences*, ed. Ivor Grattan-Guinness (London: Routledge, 1994), pp. 1512-1525.

(3–17) Entries on A. Adrian Albert, Oskar Bolza, Arthur Coble, Thomas Craig, Leonard Eugene Dickson, Edward Kasner, Heinrich Maschke, Eliakim Hastings Moore, Hubert Anson Newton, Truman Henry Safford, James Joseph Sylvester, Charles Scott Venable, Henry Seely White and (with Loren Feffer Butler) articles on Ernest Julius Wilczynski and Edward Burr Van Vleck (1000 words each) for *American National Biography* (New York: Oxford University Press, 1999).

(18) Entry on "Mathematics and Statistics" (750 words) in *The Oxford Companion* to United States History (New York: Oxford University Press, 2001), p 478.

(19) Entry on "American Mathematical Society" for *The History of Science in the United States: An Encyclopedia*, ed. Mark Rothenberg (New York: Garland Publishing, Inc., 2001), pp. 34-35.

(20) Entry on Charles Bonnycastle in *Dictionary of Virginia Biography* (Richmond: Virginia State Library and Archives, 2001), pp. 77-78.

(21–22) Entries on Edwin Bailey Elliott (1000 words) and James Joseph Sylvester (2000 words) for the Oxford Dictionary of National Biography: In Association with the British Academy: From the Earliest Times to the Year 2000, 60 vols. (Oxford: Oxford University Press, 2004), 18: 201-202 and 53: 567-570, respectively.

(23–24) Entries on George Salmon and James Joseph Sylvester for the *Dictionary* of Nineteenth-Century British Scientists, 4 vols. (London: Thoemmes Press, 2004), 4: 1756-1757 and 4: 1949-1955, respectively.

(25) Entry on James Joseph Sylvester for *The Princeton Companion to Mathematics*, ed. Tim Gowers (Princeton: Princeton University Press, 2008), pp. 768-769.

(26) Entry on William Holding Echols (800 words) for the *Dictionary of Virginia Biography* (Richmond: Library of Virginia), submitted (2008), to appear in volume 4.

(27) Entry on Nathan Jacobson (1000 words) for American National Biography Online (New York: Oxford University Press, 2008).

(28) Entry on "Mathematics" (1500 words) for the *Palgrave Dictionary of Transnational History*, ed. Akira Iriye and Pierre-Yves Saunier (London: Palgrave, 2009), pp. 698-700.

(29) Entry on "Mathematics and Statistics" (3,000 words) for the Oxford Encyclopedia of American Science, Medicine, and Technology, ed. Hugh Slotten, 2 vols. (New York: Oxford University Press, 2014), 2:25-30.

(30) Entry on William Holding Echols in *Dictionary of Virginia Biography* (Richmond: Virginia State Library and Archives, 2022), publication online at https://www.lva.virginia.gov/public/dvb/bio.php?b=Echols\_William\_Holding

#### **Book Reviews:**

(1) Review (in French) of Lewis Pyenson's Neohumanism and the Persistence of Pure Mathematics in Wilhelmian Germany in Revue de Synthèse, 3d ser., no. 115, (1984): 376-377.

(2) Review of Markus Fierz's Girolamo Cardano (1501–1576): Physician, Natural Philosopher, Mathematician, Astrologer, and Interpreter of Dreams in the Journal of the History of Medicine and Allied Sciences 39 (1984): 478-480.

(3) Essay Review of the English Translation of Hans Wussing's Genesis of the Abstract Group Concept in the American Mathematical Monthly 93 (1986): 823-826.

(4) Review of Tony Lévy's Figures de l'infini: Les mathématiques au miroir des cultures in ISIS: The Journal of the History of Science Society 79 (1988): 325-326.

(5) Review of Dorothy Stein's Ada: A Life and a Legacy in Historia Mathematica 16 (1989): 94-95.

(6) Review of Discrete Thoughts: Essays on Mathematics, Science and Philosophy by Mark Kac, Gian-Carlo Rota, and Jacob T. Schwartz in ISIS: The Journal of the History of Science Society 80 (1989): 155-156.

(7) Review of *Mathematics of the Nineteenth Century*, ed. A. N. Kolmogorov and A. P. Yushkevich in the *American Mathematical Monthly* (1994): 369-374.

(8) Review of Aldo Brigaglia, Ciro Ciliberto, and E. Sernesi, ed., Algebra e Geometria: Il Contribuo italiano in Historia Mathematica 24 (1997): 334-339.

(9) Review of Stanley Rabinowitz, ed., Problems and Solutions from "The Mathematical Visitor" 1877–1896 in the Mathematical Gazette (Summer 1998): 9.

(10) Review of Ivor Grattan-Guinness and Gérard Bornet, ed., *George Boole: Selected Manuscripts on Logic and Its Philosophy* (Basel: Birkhäuser Verlag, 1997) in *Historia Mathematica* 29 (2002): 491-493.

(11) Book review of Richard Mankiewicz, *The Story of Mathematics* (Princeton: University Press, 2001) in the *Notices of the American Mathematical Society* 49 (4) (2002): 458-461.

(12) Book review of Reinhard Siegmund-Schultze, Rockefeller and the Internationalization of Mathematics between the Two World Wars (Basel: Birkhäuser Verlag, 2001) in the Mathematical Association of America's On-line Reviews; see http://www.maa.org/reviews/rockefeller.html

(13) Review of Richard Pipes's *The Degaev Affair: Terror and Treason in Tsarist Russia* (New Haven: Yale University Press, 2003) in the *Mathematical Association* of *America's On-line Reviews*; see http://www.maa.org/reviews/degaev.html

(14) Review of Tinne Kjedlsen *et al.*, ed., New Trends in the History and Philosophy of Mathematics (Odense: University Press of Southern Denmark, 2004) in ISIS: The Journal of the History of Science Society 96 (2005): 314-315.

(15) Review of Saunders Mac Lane: A Mathematical Autobiography (Wellesley, MA: A K Peters, Ltd., 2005) in History and Philosophy of Logic 27 (2006): 83-87.

(16) Review of John Parker's *R. L. Moore: Mathematician and Teacher* (N.p.: The Mathematical Association of America, 2005) in *Historia Mathematica* 34 (2007): 448-451.

(17) Review of Daniel J. Cohen's *Equations from God* (Baltimore: Johns Hopkins University Press, 2007) in *ISIS: The Journal of the History of Science Society* 99 (2008): 193-194.

(18) Review of Alex Craik's Mr Hopkins' Men: Cambridge Reform and British Mathematics in the 19th Century in ISIS: The Journal of the History of Science Society 100 (2009): 669-670.

(19) Review of M. B. W. Tent's *Emmy Noether: The Mother of Modern Algebra* for *The American Women in Mathematics Newsletter* 39 (Sept.-Oct. 2009), pp. 14-16.

(20) Review of Amir Alexander's Duel at Dawn: Heroes, Martyrs, and the Rise of Modern Mathematics (Cambridge, MA and London: Harvard University Press, 2010) in British Journal for the History of Science 44 (2011): 134-135.

(21) Review of *Pluralité de l'algèbre à la Renaissance*, ed. Sabine Rommevaux, Maryvonne Spiesser, and Maria Posa Massa Esteve (Paris: Honoré Champion Éditeur, 2012), 348 pp. for *The Renaissance Quarterly* 66 (2013): 1000-1002.

(22) Review of A History in Sum: 150 Years of Mathematics at Harvard, 1825– 1975 by Steve Nadis and Shing-Tung Yau (Cambridge, MA: Harvard University Press, 2013), 249 pp. for Canadian Journal of History 43 (2014): 300-302.

(23) Review of American Mathematics 1890-1913: Catching Up to Europe by Steve Batterson (Washington, DC: Mathematical Association of America Press, 2017),
230 pp. for MAA Reviews (24 November, 2017) https://www.maa.org/press/maa-reviews/american-mathematics-1890-1913-catching-up-to-europe

(24) Review of *Giovanni Battista Guccia: Pioneer of International Cooperation in Mathematics* by Benedetto Bongiorno and Guillermo P. Curbera (Cham, Switxzerland: Springer, 2018), 301 pp. *Notices of the American Mathematical Society* 68 (2021), 411-413.

(25) Review of Framing Global Mathematics: The International Mathematical Union between Theorems and Politics by Norbert Schappacher (Cham, Switzerland: Springer, 2022), 384 pp. Annals of Science 82 (2025), 335-338. (in Word).

#### **Miscellaneous Publications and Products:**

(1) "Editorial: The History of Mathematics, the History of Science, Mathematics, and *Historia Mathematica*" (with Jan P. Hogendijk), *Historia Mathematica* 23 (1996): 1-5.

(2) "Editorial: *Historia Mathematica* and the World Wide Web" (with Jan P. Hogendijk), *Historia Mathematica* 23 (1996): 353-354.

(3) "Editorial: Changes Underway at *Historia Mathematica* (with Jan P. Hogendijk), *Historia Mathematica* 24 (1997): 359.

(4) "Thoughts and Thanks from the Editors" (with Jan P. Hogendijk), *Historia Mathematica* 26 (1999): 311-313.

(5) "The University of Virginia, 1825–1900: A Case Study in the Institutionalization of Mathematics in the United States" (with Sloan Despeaux, Laura Martini, and Adrian C. Rice), in *History of Undergraduate Mathematics in America: Proceedings of a Conference Held at the United States Military Academy, West Point, New York, June 21–24, 2001*, ed. Amy Shell-Gellasch, pp. 237-254.

(6) "The Value of Mathematical Archives" (with Steve Batterson, Charles Curtis, and Albert Lewis) *Notices of the American Mathematical Society* 50 (2003): 1409-1415.

(7) "The Fifth Award of the Kenneth O. May Medal and Prize," *Historia Mathematica* 32 (2005): 397-399.

(8) "The Sixth Award of the Kenneth O. May Medal and Prize," *Historia Mathematica* 37 (2010), pp. 4-7.

(9) "Éloge: Allen George Debus, 16 August 1926–6 March, 2009" (with Ku-ming "Kevin" Chang), *ISIS* 101 (March 2010): 159-162.

 (10) Finding Guide for the Gordon T. Whyburn Collection, Special Collections, University of Virginia, 28 pages (in Word). See also
 http://smallnotes.library.virginia.edu/2015/01/15/historian-of-science-turns-archivist/

(11) "Éloge: Ivor Grattan-Guinness (23 June 1941 - 12 December 2014)" (with Joseph W. Dauben), ISIS 106 (2015): 875-879.

(12) "David E. Zitarelli (1941-2018)," Bulletin of the Canadian Society for the History and Philosophy of Mathematics 64 (May 2019), 12-13.

(13) "Brian J Parshall (28 October, 1945–17 January, 2022)" (with Leonard Scott, Jie Du, Jian-pan Wang, and Eric Friedlander) Notices of the American Mathematical Society 69 (2022), 1353-1357.

(14) (with Sergei Tabachnikov) "An Interview with Alexander Razborov," *The Mathematical Intelligencer* 44 (2022), 193-202.

(15) "James Joseph Sylvester and the 'Black Drop of Gall'" *Testimony: Voices of Diversity at New College, Oxford* (Oxford: New College, Oxford Publications, 2024), pp. 166-169.

(16) (with Sergei Tabachnikov) "An Interview with Efim Zelmanov," *The Mathematical Intelligencer* 46 (2024), 244-246.

(17) (with Sergei Tabachnikov) "An Interview with Susan Friedlander," *The Mathematical Intelligencer* 47 (2025), 13-19.

(18) (with Alex J. Feingold, Duncan J. Melville, Kailash C. Misra, and Daniel K. Nakano) "George B. Seligman (April 30, 1927 – April, 25, 2024)," Notices of the American Mathematical Society, to appear.

## Invited Lectures:

To date, I have given 243 invited lectures in Australia, Brazil, Canada, China, Denmark, France, Germany, Italy, the Netherlands, New Zealand, Spain, Switzerland, Taiwan, Tibet, the United Kingdom, and the United States. (Full list available upon request.)

## National and International Academic Activities:

## General:

• Evaluator in the History of Science, Technology, and Economics, John Simon Guggenheim Foundation, 2013 competition.

• Member of the Editorial Board, Virginia Quarterly Review, Jan. 2009–Jan. 2012.

## **History of Mathematics:**

• (Elected) Member, Council of the Canadian Society for the History and Philosophy of Mathematics, 2014–2018.

• (Elected) Chair, International Commission for History of Mathematics, January 2002–December 2009; member (*ex officio*), January 2010–2018.

• International Mathematical Union Member of the Executive Committee of the International Commission for the History of Mathematics, January 1995–December 2001.

• Editor, Historia Mathematica, January 1996–December 1999.

- Managing Editor, *Historia Mathematica*, January 1994–December 1995.
- Book Review Editor, Historia Mathematica, January 1990–December 1993.
- Member, Editorial Board, Cahiers François Viète, March 2016-present.
- Member, Editorial Board, Revue d'histoire des mathématiques, 2001–2018.
- Member, Editorial Board, *Historia Mathematica*, January 2000–present.

• Member, Editorial Board, American Mathematical Monthly, January 1996–December 2006.

• Co-organizer (with Joseph Dauben and DALUO Langjie) of a Satellite Conference on the history of mathematics in conjunction with the Fourth International Conference on Representation Theory, Lhasa, TIBET, 19-20 July, 2007.

• Co-organizer (with Michel Armatte, Hélène Gispert, and Donald MacKensie), "Symposium: Méthodologie et Corpus," Luminy, FRANCE, 20-24 September, 1999.

• Co-organizer (with Adrian C. Rice), "Mathematics Unbound: The Evolution of an International Mathematical Community, 1800–1945," Charlottesville, VA, 27–29 May, 1999 (partially funded by the NSF).

# History of Science:

• Member, Committee on Finance of the History of Science Society (HSS), 2009–2017.

- Chair, Forum for the History of the Mathematical Sciences of the HSS, 2006-2022.
- Member, Committee on Publications of the HSS, 2004–2008 (Chair in 2007–2008).

• (Elected) Member, Council of the HSS, 2001–2004 (the Council is the national governing and policy-making body of the HSS).

• Member, HSS Committee on Meetings and Programs, 1999–2001.

• Program Co-Chair (with Paul Theerman), History of Science Society (HSS) National Meeting, Atlanta, 1996.

• Member of the Schuman Prize Committee of the HSS, 1989–1991 (chair in 1991) (this committee to selects the best graduate student essay in the history of science).

• Associate Editor for Mathematical Subjects, *American National Biography* published by Oxford University Press, December 1990–December 1999.

• Organizer, Session entitled " 'The center of gravity of mathematics has moved more definitely toward America': The Mathematical Sciences in America, 1930-1950," National Meeting of the History of Science Society, Chicago, Illinois, November, 2014.

• Organizer, Session on "'Secreta Secretorum'? Sarton, the History of Mathematics, and the History of Science," National Meeting of the HSS, Boston, MA, 14–17 November, 2013.

• Co-organizer (with Patti Hunter), Session on "Studies in the Internationalization of Mathematics: Goals, Strategies, and Outcomes in the 19th and 20th Centuries," National Meeting of the HSS, Pittsburgh, PA, 6-9 November, 2008.

• Co-organizer (with Mary Sol de Mora), Session on "Speciation in Science: Historical-Philosophical Studies on the Emergence and Consolidation of Scientific Disciplines," International Congress for the History of Science, Beijing, CHINA, 22-29 July, 2005.

• Organizer and Commentator of (refereed) Session, "Tracing the Development of Mathematics in Early Twentieth-Century America," National Meeting of the HSS, Austin, TX, November 2004.

• Co-Organizer and Co-Chair (with Joseph Dauben), Session on "Innovations in Mathematics: Historical Perspectives," National Meeting of the American Association for the Advancement of Science (AAAS), Anaheim, CA, January 1999.

• Co-Organizer (with Joseph Dauben) and Chair, Session on "Mapping the Contours of the American Mathematical Research Community: 1900-1950," National Meeting of the HSS, New Orleans, LA, 13-16 October, 1994.

• Co-Organizer and Co-Chair (with Judith Grabiner), Session on "How Mathematicians Think," National Meeting of the American Association for the Advancement of Science (AAAS), Boston, MA, 11-16 February, 1993.

• Co-Organizer and Co-Chair of Session (with Joseph Dauben), Session on "The History of American Mathematics," National Meeting of the HSS, Washington, DC, 27-30 December, 1992.

• Co-Organizer and Co-Chair (with Paul Theerman), Conference "Experiencing Nature: A Conference Honoring Allen G. Debus on His Sixty-Fifth Birthday and Thirtieth Anniversary at the University of Chicago," University of Chicago, Chicago, IL, 30 October, 1991.

• Organizer and Chair of Session, "The History of Mathematics in the Nineteenth Century," National Meeting of the HSS, Raleigh, NC, October 1987.

## Mathematics:

• Member, Editorial Board of the Bulletin of the American Mathematical Society, 1 February, 2024–31 January, 2028.

• Chair, Committee to Select the Winner of the Whiteman Prize of the AMS, 1 February, 2023–31 January, 2024.

• Chair, Speaker Selection Committee for Section 20, International Congress of Mathematicians 2022.

• (Elected) Member of the AMS Nominating Committee, 2016-2018 (the Nominating Committee sets the slate for all candidates for office in the AMS).

• (Elected) Member of Council, American Mathematical Society, 1998-2001 (the Council is the national governing and policy-making body of the AMS).

• Member, AMS Committee on Meetings and Programs, 1998–2001.

• Member, AMS/MAA Joint Archives Committee, 1992–2005, 2006–2008; Chair 1998–2005, 2007–2008, 2015–2018 (this committee is concerned with the acquisition and preservation of archival materials pertaining to American mathematics and its development).

• Member, AMS HMATH Committee, 1996–2013 (Chair in 1999-2013) (this committee reviews and selects book manuscripts to be published in the AMS's series in the History of Mathematics).

• Chair, Selection Committee for Invited Speakers in the History of Mathematics at the International Congress of Mathematicians, Berlin, 1998.

• Member, Selection Committee for AMS/MAA hour speakers for the national meeting in Baltimore, January 1998; San Antonio, January 1999 (committee chair).

• Member, Committee on the History of Mathematics, MAA, 1997–2001 (this new committee oversees the MAA's initiatives in the history of mathematics).

• AMS Representative to the AAAS's Section L (History and Philosophy of Science), February 1995–February 1998.

• "Year's Ago" Column Editor, *The Mathematical Intelligencer*, September 1989–December 1992.

• Co-Organizer and Co-Chair (with Paul Wolfson and Frank Grosshans) of a Special Session on "Nineteenth-Century Algebra and Analysis" for the Joint Meetings of the AMS, Baltimore, MD, January 2014.

• Co-Organizer and Co-Chair (with Joseph Dauben, Patti Wilger Hunter, and Deborah Kent) of the Special Session in the History of Mathematics at the Joint Meetings of the AMS, Washington, DC, January 2009; (with Joseph Dauben, Patti Wilger, and Victor Katz), San Diego, CA, January 2008; and New Orleans, LA, January 2007; (with Joseph Dauben and Patti Wilger Hunter), San Antonio, TX, January 2006; (with David Zitarelli), Washington, DC, January 2000; (with Victor Katz), San Antonio, TX, January 1999; (with Jim Tattersall), Baltimore, MD, January 1998; and San Diego, CA, January 1997.

• Organizer, Special Session on the History of Mathematics, American Mathematical Society Sectional Meeting, Miami, FL, 1-2 April, 2006.

• Co-organizer (with Jeremy Gray and Michael Singer), "Workshop on the History of Algebra in the Nineteenth and Twentieth Centuries," Mathematical Sciences Research Institute, Berkeley, CA, April 2003.

• Co-organizer (with Umberto Bottazzini), Special Session on "Mathematical Research Schools: Italy and the United States," Joint Meeting of the American Mathematical Society and the Italian Mathematical Society, Pisa, ITALY, 15 June, 2002.

• Co-organizer and Co-chair (with David Zitarelli), Special Session on the History of American Mathematics, Regional Meeting of the AMS, Philadelphia, PA, April 1998.

• Member, Editorial Board, *The American Mathematical Monthly*, January 1997–December 2006.

• Conference Organizer and Chair, "The History of Mathematics: How Is It Done? Who Is It For?," University of Chicago, Chicago, IL, 9 May, 1997.

## Committee Service:

## University- and College-level:

• Member, Dean's Ad Hoc Committee to recommend a new Associate Dean for the Social Sciences, Spring 2018

• Chair, Dean's Task Force on Non-Tenure-Track Faculty, 2014-2015, appointed

• Member, Provost's Committee to select the new Dean of the College and Graduate School of Arts and Sciences, 2013–2014, appointed.

• Member, Dean's Emergency Promotion and Tenure Committee, 2013–2014, appointed.

- Member, Arts and Sciences Nominating Committee, 2013–2016, elected.
- Member, President's Faculty Budget Advisory Committee, 2010–2012, appointed.
- Member, Provost's Undergraduate Research Committee, 2010-2011, appointed.
- $\bullet$  Member (ex officio), College Promotion and Tenure Committee, 2009–2012, appointed.
- Member, Third-year Review Committee, 2009–2012, appointed.
- Member (*ex officio*), Page-Barbour and Richards Lecture Committee, 2009–2012, appointed.
- Member, Foster Site Review Committee, 2009–2010, appointed.
- Member, Dean's Steering Committee, 2003–2006, elected.
- Member, President's 2020 Commission for Science and Technology, 1998-2000, appointed.

• Member, Dean's Strategic Planning Committee for the Sciences, 1999-2000, appointed.

• Member of Dean's Steering Committee, 1998–2001, elected; chair in 1999-2001.

• Member of the Provost's and Dean's Committee on the University of Virginia in Qatar, 1998–1999, appointed.

- Member of the Dean's Orientation Committee, 1998–1999, appointed.
- Member of the Committee to Plan the Unified Curriculum, 1998–1999, appointed.
- Senator, University of Virginia Faculty Senate, 1994–1996, elected.
- Member, Page-Barbour and Richardson Lecture Committee, 1995–1998, appointed.

• Co-Chair, University Self-Study Committee on Interdisciplinary Studies, 1994–1995, appointed.

- Secretary, Phi Beta Kappa, Beta Chapter of Virginia, 1993–1995, elected.
- Member, Dean's Committee on Sesquicentennial Awards, 1993–1994, appointed.
- First- and Second-Year Adviser, 1989–1990, 2004–2008, 2013–.

# Department of History:

- Member, Tenure Committee, Fall 2022.
- Department Chair, 2016-2019.
- Member and Chair, Peer Review Committee, 2014-2015.
- Member, Steering Committee, 2013–Fall 2015.
- Chair, Review Committee for a Non-Tenure-Track Faculty Member, Spring 2015.

- Director of Graduate Studies, Fall 2008–Spring 2009.
- Member, Promotion to Full Professor Committee, Spring 2008.
- Member, Search Committee for an Assistant Professor in Modern Japanese History, 2006–2007.

• Chair, Committee to Recommend to the Dean Candidates for the Chair of History, Fall 2005.

- Member, Chair's "Probable Cause Committee" to determine the viability of two potential cases for promotion from Associate to Full Professor, Spring 2005.
- Member, Promotion to Full Professor Committee, Fall 2003.
- Member, Departmental Steering Committee, 2001–2004.
- Member, Search Committee for an Assistant Professor in Modern British History, 2001–2002.
- Chair, Promotion to Tenure Committee, Fall 2000.
- Member, Promotion to Tenure Committee, Fall 1999.
- Director, Graduate Admissions, 1994–1996 and 1998–1999.
- Member, Graduate Committee, 1990–1991, 1994–1996, 1998–2001, 2004–2011.
- Member, Personnel Committee, 1990–1991 and 1993–1995.
- Major Adviser, 1990–present.

## **Department of Mathematics:**

• AWM graduate student mentor 2016 to the present.

• EOP Representative, Whyburn Postdoc Selection Committee and Special Postdoc Selection Committee, 2014-2015.

- Member, Undergraduate Major Advising Committee, 2014–Fall 2015.
- Member, Long-range Planning Committee, 2013–2014.
- Member, Committee on Departmental Governance, 2006–2008 (Chair 2006–2007).
- Member, Library Committee, 2000–2001 and 2007–2012.
- Member, Promotion to tenure committee, 2005.
- Member, Chair's Advisory Committee, 2004–2007.
- Chair, Planning Committee, 2004–2007.
- Member, Promotion to tenure committee, 2004.
- Member, Lower Division Committee, 1998–1999.
- Member, Upper Division Committee, 1995–1996.
- Mathematics Club Faculty Co-sponsor (with Loren Pitt), 1993–1994.
- Major Adviser, 1990–present.
- Member, Ad Hoc Committee on Assessment, 1988–1989.

# At the University of Illinois at Urbana-Champaign and at Sweet Briar College:

• Member, Library Committee, Department of Mathematics, University of Illinois at Urbana-Champaign, 1987–1988, appointed.

• Secretary, Faculty Senate, Sweet Briar College, 1985–1987, elected.

• Chair, Lectures Committee, Sweet Briar College, 1984–1986, elected; Chair in 1985–1986.

• Secretary/Treasurer, Phi Beta Kappa, Theta of Virginia, Sweet Briar College, 1983–1985, elected.

- Member, Pre-medical Advisory Committee, Sweet Briar College, 1984–1986, appointed.
- Member, Committee for Interdisciplinary Studies, Sweet Briar College, 1982–1986, appointed.
- Member, Honors Committee, Sweet Briar College, 1984–1985, appointed.