

SHORT CURRICULUM VITAE: Judith Victor Grabiner

April 2022

Education: B.S., Mathematics, with General Honors, University of Chicago, June, 1960
 M.A., 1962, Harvard University, History of Science
 Ph.D., 1966, Harvard University, History of Science

Selected Fellowships and Honors:

Member, Phi Beta Kappa, Sigma Xi
 American Council of Learned Societies Fellow, 1971-72
 Outstanding Professor Award, California State University, Dominguez Hills, 1974-75
 National Science Foundation Research Grant, "The 18th-Century Origins of 19th-Century Analysis,"
 1979-1981, Principal Investigator
 National Science Foundation Faculty Professional Development Fellowship, Computer Science and
 History of Science, Indiana University, 1981-82
 Carl B. Allendoerfer Awards, for the best article(s) in the Mathematics Magazine: 1984, 1988, 1996.
 Paul R. Halmos – Lester R. Ford Awards, for the best article(s) in the American Mathematical
 Monthly: 1984, 1998, 2005, 2010.
 Award for Distinguished College or University Teaching, Southern California Section of the
 Mathematical Association of America, 2002
 Deborah and Franklin Tepper Haimo Award for Distinguished College or University Teaching,
 Mathematical Association of America, 2003.
 Named Fellow of the American Mathematical Society, January 2013
 Awarded 2014 Beckenbach Book Prize January 16, 2014, by the Mathematical Association of
 America for my book *A Historian Looks Back: The Calculus as Algebra and Selected Writings*
 (MAA Spectrum, 2010). The Beckenbach prize recognizes the author of a distinguished, innovative
 book published by MAA.
 Albert Leon Whiteman Memorial Prize for contributions to the History of Mathematics, American
 Mathematical Society, 2021

Major Academic Positions:

Assistant Professor (1972-75), Associate Professor (1975-79), and Professor of History (1979-
 1986), California State University, Dominguez Hills
 Professor of Mathematics, Pitzer College, 1985 - 1994.
 Flora Sanborn Pitzer Professor of Mathematics, Pitzer College, 1994 – 2016.
 Flora Sanborn Pitzer Professor Emerita of Mathematics, since June 30, 2016.

Books:

The Origins of Cauchy's Rigorous Calculus, Cambridge, Mass., and London: M.I.T. Press, 1981.
 Second Edition: Dover Publications, January 2005.

The Calculus as Algebra: J.-L. Lagrange, 1736-1813, New York and London: Garland Publishing, 1990

A Historian Looks Back: The Calculus as Algebra and Selected Writings, Spectrum Books, Mathematical Association of America, 2010.

Refereed Articles:

- "Etienne Bezout," Dictionary of Scientific Biography, vol. II, New York, Scribner's, 1970, pp. 111-114.
- "Budan de Bois-Laurent," Dictionary of Scientific Biography, vol. II, New York, Scribner's, 1970, pp. 573-574.
- "Is Mathematical Truth Time-Dependent?" American Mathematical Monthly 81, April 1974, pp. 354-365.
- "Effects of the Scopes Trial: Was It a Victory for Evolutionists?" Science 185, September 1974, pp. 832-837 (with Peter D. Miller).
- "The Mathematician, the Historian, and the History of Mathematics," Historia Mathematica 2, 1975, pp. 439-447.
- "Mathematics in America: The First Hundred Years," in D. Tarwater, ed., The Bicentennial Tribute to American Mathematics, 1776-1976, Mathematical Association of America, 1977, pp. 9-24.
- "The Origins of Cauchy's Theory of the Derivative," Historia Mathematica 5, 1978, pp. 379-409.
- "Zavisi matematicka pravda od casu?" (Slovak translation of "Is Mathematical Truth Time-Dependent?"), Pokroky matematiky, fyziki a astronomie, XXV, 1980, pp. 80-90.
- "Changing Attitudes toward Mathematical Rigor: Lagrange and Analysis in the Eighteenth and Nineteenth Centuries," H. N. Jahnke and M. Otte, eds., Epistemological and Social Problems of the Development of the Sciences in the Early Nineteenth Century, Dordrecht, D. Reidel, 1981, pp. 311-330.
- "Perspectives on Computers and Society," Computers and Society, Fall, 1982, special issue on Computers and Society Courses, pp. 26-35.
- "Who Gave You the Epsilon? The Origins of Cauchy's Rigorous Calculus," American Mathematical Monthly, March, 1983, pp. 185-194. (Lester Ford Award, 1984)
- "The Changing Concept of Change: The Derivative from Fermat to Weierstrass," Mathematics Magazine, September 1983, pp. 195-206. (Carl Allendoerfer Award, 1984)
- "Cauchy and Bolzano: Tradition and transformation in the history of mathematics," in Everett Mendelsohn, ed., Transformation and Tradition in the Sciences, Cambridge University Press, 1984, pp. 105-124.
- "Artificial Intelligence: Debates about Its Use and Abuse," Historia Mathematica, 11 (1984), pp. 471-480.
- "Computers and the Nature of Man: A Historian's Perspective on Controversies about Artificial Intelligence," Bulletin of the American Mathematical Society, October 1986, pp. 113-126.
- "The Centrality of Mathematics in the History of Western Thought," Mathematics Magazine, 61 (1988), pp. 220-230. (Carl Allendoerfer Award, 1988)

- "The Use and Abuse of Statistics in the 'Real World,'" Skeptic, Summer 1992, pp. 14-21.
- "Descartes and Problem-Solving," Mathematics Magazine 68 (1995), pp. 83-97. (Carl Allendoerfer Award, 1996)
- "The Calculus as Algebra, the Calculus as Geometry: Maclaurin, Lagrange, and Their Legacy," in Ronald Calinger, ed., Vita Mathematica: Historical Research and Integration with Teaching, Washington, D. C., Mathematical Association of America, 1996, pp.131-143.
- "A Mathematician among the Molasses Barrels: Maclaurin's Unpublished Memoir on Volumes," Proceedings of the Edinburgh Mathematical Society 39 (1996), 193-240.
- "Was Newton's Calculus a Dead End? The Continental Influence of Maclaurin's Treatise of Fluxions," American Mathematical Monthly 104 (5), May, 1997, pp. 393-410. (Lester R. Ford Award, 1998)
- "How to Invent the Calculus," in Douglas E. Cameron and James D. Wine, eds., Proceedings of the Midwest Mathematics History Conference, Vol. I, Ames, Iowa, Modern Logic Publishing, 1997, pp. 45-65.
- "Some Disputes of Consequence: Maclaurin among the Molasses Barrels," Social Studies of Science 28, February, 1998, pp. 139-168.
- "Mathematics," in P. Grendel, ed., Encyclopedia of the Renaissance, 6 vols., New York: Charles Scribner's Sons, 1999, vol. 4, pp. 66-72.
- "Maclaurin and Newton: The Newtonian Style and the Authority of Mathematics," in C W J Withers and P B Wood, eds., Science and Medicine in the Scottish Enlightenment, Tuckwell Press, 2002, 143-171.
- "It's All for the Best: How Looking for the Best Explanations Revealed the Properties of Light," Pi in the Sky (Pacific Institute of Mathematics), September 2003, 20-22.
- "Newton, Maclaurin, and the Authority of Mathematics," American Mathematical Monthly, December, 2004, pp. 841-852 (Lester R. Ford Award, 2005).
- "Was Newton's Calculus a Dead End? The Continental Influence of MacLaurin's Treatise of Fluxions," in Glen Van Brummelen and Michael Kinyon, eds., Mathematics and the Historian's Craft: The Kenneth O. May Lectures, New York and London, Springer-Verlag, 2005
- "Why Should Historical Truth Matter to Mathematicians?" Bulletin of the British Society for the History of Mathematics 22 (2007), pp. 78-91.
- "A Conversation with Judith Grabiner," History and Pedagogy of Mathematics Newsletter 66, November 2007, 1-4; <http://www.clab.edc.uoc.gr/hpm/>
- "Why Did Lagrange 'Prove' the Parallel Postulate?" American Mathematical Monthly, January, 2009, pp. 3 – 18. (Lester R. Ford Award, 2010)
- "Why Did Lagrange 'Prove' the Parallel Postulate?" reprinted in Mircea Pitici, ed., Best Writing in Mathematics: 2010, Princeton: Princeton University Press, 2010, pp. 283-302.
- "How to Teach Your Own Liberal Arts Course," Journal of Humanistic Mathematics. Vol. I,(1), 2011, pp. 101-118.
- "Why Proof? A Historian's Perspective," in Gila Hanna and Michael de Villiers, eds., Proof and Proving in Mathematics Education, Springer, 2012, pp. 147-167
- "Mathematik um 1800," in O. Breidbach & R. Burwick, Physik um 1800: Kunst, Naturwissenschaft oder Philosophie, Munich: Wilhelm Fink Verlag, 2012, pp. 285-324.
- "Reasoning and Proof in Society," in S. J. Greenwald and J. E. Thomley, eds., Encyclopedia of Mathematics in Society, Salem Press, 2012, pp. 848-850.
- "Mathematics in Oceania, Australia, and New Zealand," in S. J. Greenwald and J. E. Thomley, eds., Encyclopedia of Mathematics in Society, Salem Press, 2012, pp. 735-737.
- "Mathematics around 1800," in O. Breidbach and R. Burwick, eds., The Transformation of Science in Germany at the Beginning of the Nineteenth Century: Physics, Mathematics, Poetry, and Philosophy, Edwin Mellen Press, 2013, pp. 125-181.

“The Role of Mathematics in Liberal Arts Education,” in M. Matthews, ed., *International Handbook of Research in History, Philosophy and Science Teaching*, Springer, 2014, vol. I, pp. 793-836.

- “How Euclid once ruled the world,” in *Plus*, 2016.
<https://plus.maths.org/content/how-euclid-once-rules-world>
 (*Plus* is an on-line journal published by the Millennium Mathematics Project, an educational initiative based at the University of Cambridge, UK).
- “How new geometries shaped our world,” *Plus*, 2016.
<https://plus.maths.org/content/how-new-geometries-reshaped-our-world>
- “Student Excursions beyond the Textbook in a Survey Course,” in Amy Shell-Gellasch and Richard Jardine, eds., *The Courses of History: Ideas for Developing a History of Mathematics Course*, Mathematical Association of America, in press
- “Foreword” to Paul Nahin, *Hot Molecules and Cold Electrons, From the Mathematics of Heat to the Development of the Trans-Atlantic Telegraph Cable*, Princeton University Press, 2020.
- “Reminiscences, Anecdotes, and Reflections,” in Janet Beery, Sarah Greenwald, and Cathy Kessel, eds., *Fifty Years of Women in Mathematics :Reminiscences, History, and Visions for the Future of AWM*, AWM-Springer, 2022, pp 449-458.
- “Descartes’s Mathematics and Geometry,” to appear in Jorge E. Secada, eds., *The Cartesian Mind*, Routledge. .
- ”It’s All for the Best: Optimization in the History of Science,” submitted for publication..

Selected Professional Activities:

- Co-President, West Coast History of Science Society, 1973-75
 Chair, Southern California Section, Mathematical Association of America, 1982-1983
 Book Review Editor, *Historia Mathematica*, 1976-1988
Teaching Company Course: “Mathematics, Philosophy, and the ‘Real World’”: Summer, 2009.
 [A 36-lecture course based on my course, with the same name, at Pitzer College]
 Service :On many committees of the History of Science Society, the Mathematical Association of America, and at Pitzer College (including still running a register-and-get-out-the-vote campaign at Pitzer).

Invited addresses at national and international meetings since coming to Pitzer College:

- "The Centrality of Mathematics in the History of Western Thought," International Congress of Mathematicians, Berkeley, California, August 1986.
- "Why Isn't This a Proof? Changing Practices of Proof in Historical Perspective," International Congress of Mathematics Education, Université Laval, Québec, Canada, August 18, 1992.
- "Is Your Spirit Satisfied? Maclaurin, Lagrange, and Changing Standards of Proof for the Calculus," International Congress of Mathematics Education, Université Laval, Québec, Canada, August 19, 1992.
- "MacLaurin among the Molasses Barrels: Mathematics and Society in Eighteenth-Century Scotland," Joint Meeting of the Royal Society of Edinburgh, the Edinburgh Mathematical Society, and the British Society for the History of Mathematics, Edinburgh, Scotland, July 21, 1995
- "Maclaurin and His Mathematics," Maclaurin Commemoration, University of Edinburgh, co-sponsored by the Edinburgh Mathematical Society, Royal Society of Edinburgh, and Society of Actuaries, Edinburgh, Scotland, 14 June 1996
- “New Light on Colin Maclaurin,” Mathematical Association of America – American Mathematical Society, San Diego, California, January 10, 1997.
- “Mathematics and the Modern State: The Case of Colin Maclaurin,” American Mathematical Society - Mathematical Association of America, Baltimore, Maryland, January 1998.

- “Maclaurin and Newton,” History of Mathematics Session, Canadian Mathematical Society, Vancouver, BC, Canada, December 11, 2000
- “Newtonianism in Action: Colin Maclaurin and the Newtonian Style,” Mathematical Association of America, Madison, Wisconsin, August 2, 2001
- “You Can’t Do That without Mathematics, and You Can Do Mathematics,” Mathematical Association of America, Haimo Award Lecture, Baltimore, Maryland, January 17, 2003

- “Newton, Maclaurin, and the Authority of Mathematics,” Danish History of Science Society, Copenhagen, March 9, 2004
- “Dispelling Myths while Promoting Maths: Why Should Historical Truth Matter to Mathematicians?” Finnish Mathematical Society, University of Helsinki, Finland, May 7, 2004
- “It’s All for the Best: Optimization in the History of Mathematics,” Swedish Mathematical Society’s annual meeting, Lund, Sweden, June 4, 2004.
- “It’s All for the Best: Searching for Perfection with Mathematical Models,” American Mathematical Society – Mathematical Association of America Joint Meeting, Atlanta, Georgia, January 8, 2005
- “Lagrange, Sufficient Reason, and Space,” American Mathematical Society – Mathematical Association of America Joint Meeting, San Antonio, Texas, January 15, 2006
- “Why Should Historical Truth Matter to Mathematicians?” British Society for the History of Mathematics, Oxford University, February 24, 2007
- “Mathematics for the Liberal Arts,” Mathematical Association of America Summer Meeting, San Jose, California, August 2, 2007
- “Why Did Lagrange ‘Prove’ the Parallel Postulate?” Mathematical Association of America Summer Meeting, San Jose, California, August 5, 2007
- “‘It’s All for the Best’: Optimization in the History of Science,” American Mathematical Society – Mathematical Association of America Joint Meeting, San Diego, California, January 9, 2008
- “Why Should Historical Truth Matter to Teachers of Mathematics?” Research in Undergraduate Mathematics Conference, SIGMAA-RUME, San Diego, California, March 1, 2008.
- “Why Proof? A Historian’s Perspective,” International Commission on Mathematics Instruction Study 19: Proof and Proving in Mathematics Education, National Taiwan Normal University, Taipei, Taiwan, May 13, 2009.
- “Effective strategies for teaching classes for non-majors,” Mathfest (national summer meeting of the Mathematical Association of America), Madison, Wisconsin, August 3, 2012.
- “Hilbert and Hilbert’s Problems,” Video, American Mathematical Society Special Presentation: Who Wants to be a Mathematician Contest, Baltimore, MD, January 16, 2014
- “Euler: Mathematical Genius in the Enlightenment: Commentary on the Papers of Bradley, Klyve, and Calinger,” History of Science Society Annual Meeting, Chicago, Illinois, November 7, 2014
- “Space: Where Sufficient Reason Isn’t Enough,” Association for Core Texts and Courses National Meeting, Plymouth, Massachusetts, April 11, 2015
- “Where Sufficient Reason Isn’t Enough,” Mathematical Association of America Distinguished Lecture, MAA Carriage House, Washington, DC, June 16, 2015
- “Mathematics and Culture: Geometry and its ‘Figures in the Air,’” Ada Lovelace Symposium, Mathematical Institute, University of Oxford, December 10, 2015
- “Mathematics and Culture: Geometry and Everything Else,” February Fourier Talks [FFT], Norbert Weiner Center, University of Maryland, February 18, 2016.
- “‘It’s All for the Best’: Optimization, Theology, Calculus, and Science,” Association for Women in Mathematics Research Symposium, UCLA, April 8, 2017

Other invited talks: 175, to various organizations and in various countries: list available on request

References: Available upon request.