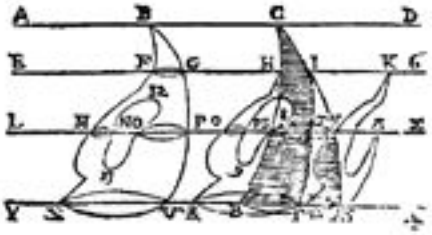
BULLETIN

CSHPM SCHPM



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WHAT'S INSIDE

Canadian Society for History and Philosophy of Mathematics

Société canadienne d'histoire et de philosophie des mathématiques

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ABOUT THE SOCIETY

Founded in 1974, the Canadian Society for History and Philosophy of Mathematics/Société canadienne d'histoire et philosophie des mathématiques (CSHPM/SCHPM) promotes research and teaching in the history and philosophy of mathematics. Officers of the Society are:

President: **Robert Bradley**, Adelphi University, Garden City, NY 11530, USA, bradley@adelphi.edu
Vice-President: **Maria Zack**, Point Loma Nazarene University, San Diego, CA 92106, USA, MariaZack@pointloma.edu
Secretary: **Patricia Allaire**, 14818 60th Ave., Flushing, NY 11355, USA, PatAllaire@gmail.com
Treasurer: **Craig Fraser**, University of Toronto, Toronto, ON, M5S 1K7, CAN, craig.fraser@utoronto.ca
Past President: **Nicolas Fillion**, Simon Fraser University, Burnaby, BC, CV5A 1S6, CAN, nfillion@sfu.ca

Members of Council

Marion (Wendy) Alexander, Houston Community Colleges, TX 77002 , USA, marion.alexander@hccs.edu
Cynthia Huffman, Pittsburg State University, KS 66762, USA, cjhuffman@pittstate.edu
Jemma Lorenat, Pitzer College, Claremont, CA 91711, USA, Jemma_Lorenat@pitzer.edu
Valérie Lynn Therrien, McGill University, Montreal, QC H3A 0B9, CAN, vtherri@uwo.ca

Volunteer Positions

The Society's Web Page (www.cshpm.org) is maintained by **Eisso Atzema**, University of Maine, Orono, ME 04469, USA, eisso.atzema@maine.edu; he also manages the Society's Archives. CSHPM *Annals* volumes are edited by **Maria Zack** (see above) and **David Waszek**, Montréal, QC, H2H 2C9, CAN, david.waszek@posteo.net. The *Bulletin* is prepared by Content Editor **Amy Ackerberg-Hastings**, Rockville, MD 20851, USA, aackerbe@verizon.net, Layout Editor **Eisso Atzema** (see above), and Production Editor **Maria Zack** (see above). **Amy Ackerberg-Hastings** (see above) and **Nic Fillion** (see above) edit the CSHPM Notes column for *Notes* of the Canadian Mathematical Society.

Nic Fillion is also serving as CMS Liaison.

New Members are most cordially welcome; please contact the Secretary.

President's Message

As I write this message, war is raging in the Persian Gulf. Partly as a consequence of this, many in the mathematical community are urging the International Mathematical Union (IMU) to move its July 2026 International Congress of Mathematicians (ICM) from Philadelphia, in the United States, to another country. For historical context, in 2018 the IMU awarded the 2022 ICM to Russia, with Saint Petersburg as the venue. However, following the Russian invasion of Ukraine in February 2022, the Executive Committee of the IMU took the meeting almost entirely online, with essential in-person activities held in Helsinki, Finland.

Fortunately, the CSHPM has no such difficult decisions to consider this year. In 2024, when the executive was planning future gatherings, we leant towards holding our 2026 meeting in conjunction with the British Society for History of Mathematics (BSHM) and History of Mathematics Special Interest Group of the Mathematical Association of America (MAA) in Boston, as part of the MAA's annual MathFest. We had held similar meetings in 2013 (Hartford, CT) and in 2015 (Washington, DC). However, as early as the spring of 2025 it was clear that the US was not an attractive destination for the BSHM, nor for many members of the CSHPM. This had nothing to do with foreign wars or decapitations, but rather with difficulties in obtaining visas and difficulties crossing the border.

Instead, we will be meeting this year at Dalhousie University in Halifax, NS, on 4–6 June. The meeting was primarily organized by the Canadian Philosophical Association (CPA) and features the participation of the CSHPM, the Canadian Society for the History and Philosophy of Science (CSHPS), and five other academic societies. I want to thank Paul Bartha, president of the CPA, and his team for putting this great meeting together. Many members will recall that we also met in conjunction with the CPA in 2018 at Université de Québec à Montreal. The 2026 special session is on Ancient Mathematics and the Kenneth O. May Lecture will be given by Jacqueline

Feke of the University of Waterloo, who will speak on "Simplicity and Equipoise: Criteria for Ancient Greek Astronomical Models."

On a personal note, this is my last President's Message. My current term began with the celebration of the 50th anniversary of the CSHPM. I also served a term in 2004–2006 and, as past president in 2006–2008, I had the honor of organizing our 2007 meeting at my alma mater, Concordia University in Montreal. It was a joint meeting with the BSHM and I organized the special session on Leonhard Euler's Tercentenary. The Kenneth O. May Lecture was given by Ed Sandifer, the noted Euler scholar who left us far too early in 2022. As my term comes to an end, our vice president Maria Zack, who is nominated for president in 2026–2028, is poised to become the 4th president to serve two terms, the other two being Len Berggren and Glen Van Brummelen. Maria has edited the *Annals* since 2014 and has organized or co-organized the General Session no fewer than 6 times.

Finally, I want to make a special shout-out to Pat Allaire, our secretary. Pat joined the CSHPM in 1998 and first spoke at the Ottawa meeting. In 2000, the structure of our executive council was changed. Up until that point, there was a secretary-treasurer. Glen Van Brummelen was the last person to hold that position, from 1994 to 2000. During Glen's tenure, the World Wide Web came into general use and he additionally took on the duties of our first webmaster. In the year 2000, Glen was elected president and the position of secretary-treasurer was divided into three parts: Robert Thomas served as treasurer, I became webmaster, and Pat began her term as secretary. This summer, the CSHPM turns 52 and Pat notches 26 years of service as Secretary, so she has handled minutes, records, and membership for fully half of our history. Thank you, Pat!!!

Robert Bradley

2026 May Lecturer

This year's Kenneth O. May Lecture will be delivered at Dalhousie University in Halifax by Jacqueline Feke, who is an associate professor in the Department of Philosophy at the University of Waterloo, as well as a senior fellow at Massey College in the University of Toronto. She earned a bachelor's degree, with honors, from Brown University and a PhD in the history and philosophy of science and technology from the University of Toronto. She has held postdoctoral fellowships at Stanford University, the University of Chicago, and the Max Planck Institute for the History of Science in Berlin, and she was a visiting professor at l'École des Hautes Études en Sciences Sociales in Paris. Her 2018 book, *Ptolemy's Philosophy: Mathematics as a Way of Life*, connected Ptolemy's accomplishments in mathematics and astronomy to his unique philosophical agenda. Her June 2021 CSHPM Notes column offers an introduction to these arguments. Courses she has taught include "Great Works: Ancient and Medieval," "Ancient Science," and "Studies in Ancient Philosophy: Cosmology — Plato to Galileo."

Figure 1: Jacqueline Feke

Feke's address is titled "Simplicity and Equipoise: Criteria for Ancient Greek Astronomical Models." The abstract is as follows: In ancient Greek astronomy, mathematicians faced a decision. They aimed to construct models that corresponded to the true configurations of bodies in the heavens—that is, the realm from the Moon outward to the spherical circumference of the cosmos—but two models equally accounted for the Sun's apparent motion: the eccentric model and the epicyclic model. In this talk, I will examine two criteria that mathematicians used to choose between these models: simplicity and equipoise. In the *Almagest*, Ptolemy appeals to simplicity as grounds for preferring the eccentric model for the Sun's motion, whereas Theon of Smyrna, a second-century Platonist, ascribed to Hipparchus the use of equipoise as a criterion for preferring the

epicyclic model. I will analyze what Ptolemy and Theon meant by 'simplicity' and 'equipoise', how they used these criteria to adjudicate between competing astronomical models, and why, philosophically, they were concerned with simplicity and equipoise, respectively. The May Lecture serves as the keynote for the 2026 special session on ancient mathematics. We look forward to welcoming Feke to Halifax.

Erratum

The appointment of the Nominating Committee was omitted from the minutes of the 1 June 2025 Annual General Meeting in the November 2025 *Bulletin*. Items 12 and 13 should have read:

12. Zoe Ashton, Rob Bradley, and Dan Curtin volunteered to serve as the Nominating Committee.

13. The meeting was adjourned at 1:35 pm EDT.

The Content Editor apologizes for the omission.

2025 Financial Statements

The following financial statements cover the period 1/1/2025 through 12/31/2025.

TD Canada Trust CAN Funds	
Income	$CAN
Dues by Cheque	134.00
Transferred from PayPal	2600.00
Sheldon Richmond lunch (annual meeting)	15.00
CFHSS Net Receipts (2024)	531.00
Total	3,280.00
Expenses	$CAN
BSHM Memberships, 2025	728.09
Office Expenses	50.00
Student Bursaries	500.00
Transfer to US Account	8,000.00
Gaggle	533.25
Cheque Image Fee	1.50
Total	9,812.84
Net Income minus Expenses	(6,532.84)
...continued in next column	

...continued from previous column	
TD Canada Trust US Funds	
Income	$US
Dues by Cheque	338.50
Transfer from CA Account	5,636.58
Total	5,975.08
Expenses	$US
Philosophia Mathematica	596.64
Historia Mathematica	1,618.42
Annals	419.23
Student Bursaries	1,725.00
Bank Fees	63.90
Koumbit (Server)	203.40
Total	4,626.59
Net Income minus Expenses	1,348.49

Paypal	
Income	$CAN
Membership	6,999.55
Balance from 2024	1,041.09
Total	8,040.64
Expenses	$CAN
Transfer to TD CAD Account	2,400.00
PayPal Service Charges	279.98
Total	2,679.98
Net Balance for 2025	5,360.66

BALANCE SHEET	
Assets in Canadian Funds	
Cash, TD Canada Trust Account	$CAN
Balance (12/31/2024)	37,070.05
Net Income	(6,532.84)
Balance as of 12/31/2025	30,537.21
Cash, PayPal Account	$CAN
Balance (12/31/2024)	1,041.09
Income for 2025	4,319.57
Balance (12/31/2025)	5,360.66
Investments	
Meridian Credit Union (4.8%, matures 01/26)	10,000.00
Balance	10,000.00
Total Assets (CAD)	45,897.87

Assets in US Funds	
Cash	$US
Balance (12/31/2024)	2,897.36
Net Increase	1,348.49
...continued in next column	

...continued from previous column	
Balance (12/31/2025)	4,245.85
Total Assets (USD)	4,245.85
=$CAN	5,816.23
Grand Total Assets (12/31/2025, $CAN)	51,714.10

Comments:

The Society has three accounts: a TD Canada Trust account for Canadian funds (CAD), a TD Canada Trust account for American funds (USD), and a PayPal account (CAD). The two bank accounts are used to deposit income or pay expenses in the appropriate currency. For example, journal subscriptions are paid in US dollars (with the exception of SCIAMVS which is paid in CAD dollars). Payments to the BSHM for memberships are made in GBP and sent by wire. Memberships paid by cheque can be in CAD or USD. The PayPal account is used to collect membership dues and journal subscriptions via the Internet; the PayPal account is kept in Canadian dollars. The December 31 2025 exchange rate of 0.73 CAD per USD was used to convert USD assets to a CAD equivalent and enable members to assess the Society's overall financial position.

Craig Fraser

Gregory Lavers (1974–2025)

Born on 14 August 1974, Gregory Alexander Lavers earned Concordia University's W.R. Fraser Medal in Philosophy on the way to completing his bachelor's degree in 1998. Over the next seven years, Greg earned an MA and PhD in philosophy at the University of Western Ontario and was hired to a tenure-track position at Concordia. He kept up that intense pace throughout his career, publishing dozens of journal articles, book chapters, and encyclopedia entries. His book, *Mathematics Is (mostly) Analytic*, appeared in the Cambridge Elements in Philosophy of Mathematics series in January 2025. He twice served Concordia's Department of Philosophy as interim chair. He was involved in the Groupe de recherche interuniversitaire de Montréal en histoire et en philosophie de la logique et des mathématiques, received funding for his own research project, and created an online course, PHIL 210 Critical Thinking.

Greg did research at the intersection of the history of analytic philosophy, the philosophy of language and the philosophy of mathematics, and he was particularly interested in how this intersection was manifested in the writings of Gottlob Frege and Rudolf Carnap. His PhilPapers profile can be accessed at `philpeople.org/profiles/gregory-lavers`. An avid bicyclist, Greg would typically ride a unicycle to the first day of each logic course and lecture while remaining balanced, in order to demonstrate to students that things which look hard can become easier with practice. He was passionate about engaging with students and had a wicked sense of humor, suggesting he would have been both amused and touched to read this comment on Rate My Professors: "He is a great prof and because of how amazing he is I almost changed my major to philosophy" (7 December 2018).

Figure 2: Greg Lavers

Greg belonged to several academic societies, including the Canadian Philosophical Association and Society for the Study of the History of Analytical Philosophy, but he found time to be an active regular in CSHPM. He first gave a talk in 1999 ("Set Theory's Status as Foundation for Mathematics"); in 2024 he spoke on "Frege's Three Definitions of Number in the *Grundlagen*" and chaired one of the philosophy sessions. After three consecutive terms on the Executive Council (2008–2014), he agreed to stand for Treasurer, serv-

ing from 2016 until 2021, when he resigned to fight blood cancer. He also served as local organizer for the 2007 and 2010 AGMs. He enjoyed a period of remission around 2023–2024 but experienced a recurrence in early 2025 and died on 10 May. His family held a private service at home on 18 May 2025.

Greg is survived by his beloved wife, Eglantine Pandelé and son Maxwell, mother Carolyn Badger, father Robert Lavers, sisters Christina Lavers (Tom Rothsey) and Natalie Lavers (Bill Roberts) and treasured nephews Callum, Jasper and Edwin. Greg also leaves behind his stepsiblings Willy (Sumie Morota), Jill (Cash Caldwell) and Robyn Badger and their children. He was predeceased by his stepfather William Badger and stepsister Stacy Badger. Peace to his memory.

The Editors

I didn't know Greg Lavers too well but we had some contact over the years. I would see him at the annual CSHPM meetings. We exchanged emails when I took over as treasurer of CSHPM and needed some advice, particularly on how to deal with PayPal. At the meeting in Montreal in 2024 we had some good conversations about Gottlob Frege. Greg was of course an authority on Frege's philosophy. When I started teaching the history of mathematics, I included topics in logic and mathematical philosophy. Frege's writings were a focus, particularly his 1884 *Die Grundlagen der of Arithmetik* (which we read in J. L. Austin's authoritative English translation). At the Montreal meeting I spoke on some work of Alfred Clebsch and Greg spoke on Frege's *Grundlagen*. Frege attended Clebsch's lectures at the University of Göttingen and became his doctoral student. Clebsch was a deep and reflective thinker and would have been a model for the young Frege. I look forward to reading more of Greg's writings on Frege and on the emergence of modern mathematical philosophy. Greg will be greatly missed by the philosophy and history of mathematics community in North America.

Craig Fraser

Greg Lavers was my master's degree supervisor at Concordia University during 2007–2008 and I may have been Greg's first, or anyway I was one of his first, master's students. When I met Greg for the first time, a couple of years before that, I was a computer programmer with a side-interest in physics and philosophy, taking a few undergraduate courses in his spare time. After taking various lower-level and intermediate-level courses, I eventually signed up for two advanced seminars, one on the metaphysics of mind and cognitive science taught by Murray Clarke, and the second on 19th-Century Language and Logic, taught by Greg. My experiences, in both of those seminars, convinced me to leave my job (or at least take a leave of absence to start with) and apply to the master's degree program at Concordia. Greg's seminar was of special interest to me. Before attending it I had never dreamed that logic, mathematics, and computation—subjects in which I have always had a deep interest but until then had never appreciated philosophically—could be so philosophically rich. I'll never forget Greg's class. There were just a handful of us in a windowless brick room that looked more like a storage unit than a classroom. We read through Mill's *System of Logic*, George Boole's *Mathematical Analysis of Logic*, Frege's *Begriffsschrift*, and finally Frege's *Foundations of Arithmetic*. I don't know if I've ever been more excited to learn about anything, and a large part of that came from knowing that I was learning from someone who was just as excited to teach it. At the end of that semester I chatted with both Murray and Greg about applying to the master's degree program. They were both very supportive, and Greg helped me to put together an application. I feel very lucky to have been Greg's student. He knew so much more than I did about the subjects that I (and he) cared so deeply about and that I wanted to learn absolutely everything about at the time. He also advised me that the University of Western Ontario, where he pursued his own PhD, might be a good place for me to pursue mine, and I can't thank him enough for that, and for everything that's followed.

Mike Cuffaro

Help Needed: CSHPM Colloquium

One of the most interesting ways to support the CSHPM is by organizing (or co-organizing) the society's online colloquium series. As the organizer, you get to select interesting speakers based on your acquaintances, your readings, or member recommendations, so that their interesting knowledge and insights can be shared with our members. The time commitment is not too onerous, especially in relation to the network-building opportunities it offers. We hope you'll be willing to help out! If so, please contact Nic

Fillion at *nfillion@sfu.ca*.

HSSFC Strategic Plan

The Canadian Federation for the Humanities and Social Sciences (HSS) has created a new strategic plan, called *Inflection Point*, to update priorities that were last reviewed in 2016. Members should have received an email with a link to the 22-page document, which can be accessed from `www.federationhss.ca/en/strategic-plan-inflection-point`. Three strategic directions are envisioned for the next five years: The Federation will 1) amplify its impact through advocacy and public engagement; 2) strengthen the humanities and social sciences community through creating opportunities for knowledge sharing, professional development, and peer support; and 3) reimagine new ways of convening. These directions will be shaped by the Federation's commitments to advance equity, diversity, inclusion, and decolonization; to communicate in both French and English so that Francophone participation is broadened; and to enhance operational excellence.

Strategic direction 3 is likely of the most interest to the greatest number of CSHPM members, since it relates to the future of Congress. It has become financially infeasible for many Canadian educational institutions to host the large numbers of scholars who want to gather for Congress, while in-person meetings in one location can be financially and logistically difficult to access for students, independent scholars, people with special needs, and others. The strategic plan thus expresses the Federation's pledge to increase possibilities for HSS academics to gather, such as by adding regional and virtual events to a Congress that is scoped at a size that is more manageable for potential hosts. While firm arrangements have yet to be rolled out, it is possible that the actual Congress experience would not change dramatically for small societies such as CSHPM. To inform its planning, the Federation collected information about strengths and areas for improvement in its current approaches and models throughout most of 2025. This included five meetings of a "Reimagining Congress Task Force" in which Amy Ackerberg-Hastings and Maria Zack participated, along with CSHPS's Tara Abraham. Any of those three people would be happy to share further information and reactions from their notes. Please continue to watch your inbox for communiqués from the Federation as it works out the details for in-person and virtual meetings in the years to come. For instance, while more information will be available later in the summer, the Federation has announced that the location for Congress 2027 will be Simon Fraser University in Vancouver, which is certainly a place of importance to our Society.

Amy Ackerberg-Hastings

2026 CSHPM/SCHPM Meeting Programme

The Annual Meeting of the Canadian Society for History and Philosophy of Mathematics will be held at Dalhousie University in Halifax, 4–6 June 2026, alongside meetings of the Canadian Philosophical Association, Canadian Society for the History and Philosophy of Science, Canadian Society for Aesthetics, Canadian Jacques Maritain Association, Canadian Section of the International Association for Philosophy of Law and Social Philosophy, Canadian Society of Christian Philosophers, and Canadian Society for the Study of Practical Ethics.

Except for the one-hour May Lecture, presentations are 20 minutes, with 5 minutes for discussion and 5 minutes of set-up before the next talk. Robert Bradley and Duncan Melville organized the special session on Ancient Mathematics; Maria Zack organized the general session. All CSHPM sessions will be held in McCain Room 2102.

THURSDAY, JUNE 4

8:45 President's Welcome (Robert E. Bradley)

General Session

9:00 Robert Bradley, Servois' Anticipation of Hyperbolic Geometry

9:30 Andrew Perry, Stefan Banach (1892–1945) and the Lwów Mathematical School

10:00 Maria Zack, Torricelli's Puzzling Proof of the Quadrature of the Cycloid

10:30 Coffee Break

11:00 Asya Ciftci, Why did Lakatos write *Proofs and Refutations* as a dialogue?

11:30 Susan Vineberg, Mathematical Explanation in Henkin's Proof of Completeness

12:00 Lunch Break

13:30 Roger Petry, Geometry in Jerusalem Prior to the Fall: Findings from Jerusalem's Absalom Pillar

14:00 Stela Segev, Integer Sums in Hebrew Math-

ematics (12th–16th Century) Methods, Proofs, and Cross-Cultural Connections

14:30 Yugi Sun, The Practical Approach to Motion Theory: Tartaglia's Imperfect Ballistics

15:00 Coffee Break

15:30 Bradley Dart, Signicism and the Foundations of Geometry in late 19th-Century Italy

16:00 Stephen Perry, Applying Mathematics By Fitting Descriptions: The Case of Borsuk-Ulam and the Necklace-Splitting Problem

16:30 S. Blake Allan, A Case for the Extrinsic Theory of Surfaces

FRIDAY, JUNE 5

Special Session on Ancient Mathematics

9:30 Cynthia Huffman, From Tags to Totals: A Photographic Survey of Ancient Egyptian Numeration

10:00 Thomas Drucker, What God Left to Aristotle

10:30 Coffee Break

11:00 Gregg De Young, Euclidean diagrams as evidence for historical continuities and discontinuities

11:30 Glen Van Brummelen, Writing the History of Pre-Modern Geometry and Trigonometry

12:00 Harsha Wijayawardhana, Sri Lankan Brahmi Numerals as Precursor to Place-Value Notation and as a Multiplicative and Additive System

12:30 CSHPM Annual General Meeting (Lunch Provided)

14:00 THE 2026 KENNETH O. MAY LECTURE, by Jacqueline Feke (University of Waterloo): Simplicity and Equipoise: Criteria for Ancient Greek Astronomical Models

15:00 Coffee Break

General Session

15:30 Anshula Gandhi and Patricia Marino, What Proofs Leave Out: Should Mathematicians Publish their Proof Discovery Processes?

16:00 Koray Akçagüner, What Counts as a Proof? Criteria and Value Judgments in Mathematics

16:30 Thomas Donaldson, The Inductive Argument for the Consistency of Classical Mathematics

17:00 Zoe Ashton, Rigor and Significance

SATURDAY, JUNE 6

General Session

9:00 Linyuan Li, "Coordinating" Mathematical Criteria: Why did Huygens and Sluse Solve Alhazen's Problem Again (and Again)?

9:30 Craig Fraser, Isaac Todhunter: Historian and Researcher of the Calculus of Variations

10:00 Larry D'Antonio, Remembering the Forgotten – John Lodge Cowley FRS

10:30 Coffee Break

11:00 Jean-Charles Pelland, All units are unequal, but some are more unequal than others

11:30 Francis Proulx, L'intuitionnisme brouwérien face au problème de l'existence en mathématiques

12:00 Sophia Kimiagari, Feminist Critiques of Logic and the Elusiveness of Logical Form

12:30 Lunch Break

14:00 Patrick Wallach, The Evolution of College Algebra: An Analysis of Textbooks and Curricula of the Early 20th Century

14:30 Irina Lyubchenko, The Jolly Square Root of Minus One: Tracing the Mathematical Poetics of Khlebnikov in Malevich's Suprematism

15:00 Eugene Boman and Robert Rogers, History-Driven Storytelling and Mathematical Pedagogy

15:30 Beverly Wood, Using the Past to Visualize the Present

17:30 Reception with CPA and other co-located societies (Dalhousie Art Gallery)

Big Data before Data Science

With funding from the International Centre for Mathematical Sciences (ICMS) programme in Mathematics for Humanity, Deborah Kent and Jemma Lorenat organized a workshop held at the Pacific Institute for Mathematical Sciences (PIMS) in Vancouver, BC, 9–12 December 2025: "Big Data before 'Data Science': Legacies from the collection, analysis, and communication of large-scale human data from an era of paper tools." Participants from a wide range of backgrounds shared from their ongoing research into an equally wide range of topics. For example, Amira Moeding opened the meeting with a consideration of how changing uses of data have transformed the meaning of data and vice versa. Christopher Phillips continued that theme with a survey of how statistical analysis in the 20th century shifted focus from individuals to aggregates.

Several presentations considered the complex inter-

play between physical health, mental health, psychology, perceived intelligence, race, and social class, including: "Moral Statistics: Freedom, Bias and Dr James McCune Smith's Encounter with the 1840 American Census," by Matthew Daniel Eddy; "Alice [Lee, a British statistician who worked for Karl Pearson] Through a Looking-Glass Darkly," by Jemma Lorenat; "Encoding Race: A History of Statistics, Biometric Data, and Algorithms," by Iris Clever; and "Paradoxical Reproducibility and Generalisation? Collecting Textual 'Data' through Case Histories of Psychotherapy," by Kim M. Hajek. Jessica Otis showed that people might be measured and judged by this interplay of factors even after death, as was the case with the early modern London Bills of Mortality. Stephanie Dick brought in the policing of behavior with "'The Blaze of Lights at Western Avenue': 'Criminality' and Computation in the first American Law Enforcement Databank."

Punch cards as paper tools for the collection, management, and tabulation of data were the focus of presentations by Peggy Aldrich Kidwell and David Dunning, who were both able to provide appealing illustrations from the National Museum of American History collections. Moon Duchin explained the history of paper tools at every stage of the voting process, from registration to post-election audits. Florence Hsia compared the current flood of astronomical data from 21st-century telescopes with the long endurance of the paper tool of astronomical tables. Hannes Junker considered weather data at the institutional level with "Gone with the Wind: Statistics at the British Met Office in the Second Half of the 19th Century," while Amy Ackerberg-Hastings fit weather data into the individual biographies of several Harvard Hollis Professors. Prashant Kumar considered efforts to limit human errors in recording data with "'Machines Without the Certainty of Machinery': On Some Attempts to Automate Intelligence in the Trigonometrical Survey of India, 1790–1858."

With respect to historiographical and methodological concerns, Michael Friedman raised the problem of processing collections of data in primary sources with "From the 17th century paper tools of Joachim Jungius to the digitalization of his *Nachlass*," while Daniel Rosenberg introduced the history of information searching with "The Age of the Keyword." François Le applied methodological tools borrowed from philosophy and literature to an analysis of Charles Hermite's writing style. Finally, Lee Kennedy-Shaffer and Deborah Kent brought the use of historical data into today's classrooms. Many of the talks from the workshop will be shared with a broad audience of current data practitioners through a special issue of the *Journal of the Royal Statistical Society*, Series A, which focuses on statistics in society.

Amy Ackerberg-Hastings

ESHS/HSS Joint Meeting

The 2026 Joint Meeting of the European Society for the History of Science (ESHS) and History of Science Society (HSS) will be held 12–16 July 2026 at various venues in Edinburgh. The conference theme is "Shifting Perspectives: Plural Worlds, Contested Sciences." For the full program as well as registration and accommodation information, see `hssonline.org/page/Edinburgh26`.

Featuring a whopping 527 sessions, the meeting promises to be one of the most significant gatherings of historians of science for years to come. Highlights related to the histories of mathematics, statistics, astronomy, and/or instruments include sessions on:

- Astrology, Thought, and Power in the Premodern Mediterranean Region
- Celestial Spheres
- Contested Success and Celebrated Failure: The Practice of Mathematical Instruments in Varied Settings (includes a talk by Davide Crippa)
- Cosmologies Ancient and Early Modern (includes a talk by Daryn Lehoux)
- Data Visualization and the History of Statistics
- Euclid and Geometry Across Traditions (includes a talk by Gregg De Young)
- Histories of Mathematics
- Imperial Instruments: Tools for Astronomy and Mathematics in China from Song to Qing (includes talks by Christopher Cullen and Catherine Jami)
- Instruments and Imperialism: Markets, Networks, and Patronage in the World of James Dinwiddie (1746–1815)
- Mathematics and Practical Knowledge (includes talks by Carlos Gonçalves and Jeff Chen)
- Mathematics in Manuscripts (includes talks by Emmylou Haffner and David Waszek)
- Mathematics in Motion: Equations as Mediators for the Circulation of Knowledge (includes talks

by Andrew Fiss and Peggy Aldrich Kidwell)
- Material Culture and the History of Mathematical Science: Exploring Regional Traditions
- Measurement and Instrumentation
- Modernity, Mysticism and Mathematics (includes a talk by Jeremy Gray, who will also chair the session)
- New Perspective on the Histories of Mathematics
- Old Problems, New Angles: Toward a Global History of Mathematics (roundtable whose panelists include Brigette Stenhouse and Madeline Muntersbjorn; organized by Julia Tomasson, E. A. Hunter and chaired by Karine Chemla)
- Practitioners, Artisans and Instruments in the Making of Premodern Science
- Recent Archaeological Excavations: New Light on Ancient Chinese Mathematics (co-chaired and co-organized by Joseph Dauben)
- Rewriting the Histories of Algebra (includes a talk by William Branson)
- Tabular Practices and the Cross-cultural Exchange of Knowledge in Ancient and Medieval Astronomy
- Thinking about Time and the Cosmos
- Transformations of Mathematics in the 20th Century (chaired by Michael Barany)

2026 CSHPM Nominating Committee Report

In keeping with the bylaws of CSHPM/SCHPM, the Nominating Committee (comprised of Zoe Ashton, Rob Bradley (chair), and Dan Curtin) has contacted the following people who agreed to stand for the positions below. It is the recommendation of this committee that the following people should stand for election: President: Maria Zack, Point Loma Nazarene University

Vice-President: Jemma Lorenat, Pitzer College

Secretary: Patricia Allaire, Queensborough Community College, CUNY

Treasurer: Craig Fraser, University of Toronto

Council:

Ximena Catepillán, Millersville University of Pennsylvania (1st term)

Cynthia Huffman, Pittsburg State University (2nd term)

Elaine Landry, University of California, Davis (1st term)

Madeline Muntersbjorn, University of Toledo (1st term)

Members who wish to nominate themselves or another member for any of the offices were asked via email to notify a member of the committee before 1 May 2026 (Janet Heine Barnett nominated herself for Council and was added to the ballot). After that date, the Secretary will distribute a link to the electronic ballot. Please note that only those who have paid membership for 2026 are eligible to vote. Results of the election will be communicated at the Annual General Meeting on June 5 at Dalhousie University.

We thank the candidates for their willingness to serve the Society. Terms are two years and thus run from June 2026 to May 2028. The bylaws restrict Councilors to two consecutive terms. By tradition, the President serves one term and is succeeded by the Vice-President. The positions of Secretary and Treasurer are not term-limited. The other positions on the Executive Council (Past President, various editors, Webmaster, Archivist, CMS Liaison) do not require elections.

Respectfully submitted,

Zoe Ashton, Rob Bradley, Dan Curtin

Greetings from HOM SIGMAA!

This past fall and spring, we continued our HOM SIGMAA Virtual Speaker Series presentations with several excellent talks. Meetings will resume in fall 2026 on the second Friday of the month at 3pm ET. For more information on past and future presentations, see our website, `homsigmaa.net`. If you have any suggestions for speakers for our Virtual Speaker Series, or if you would like to give a talk yourself, please contact Abe Edwards, the HOM SIGMAA Program Coordinator, at *aedwards@msu.edu*.

Save the date for MathFest 2026 in Boston, MA, 5–8 August 2026. Phil Blau, Chair of the Department of Mathematics at Shawnee State University, will be our invited speaker. HOM SIGMAA is sponsoring a Contributed Paper Session called "Teaching through Time: Historical and Cultural Perspectives on Mathematics," organized by Abe Edwards, Ximena Catepillán, and Cynthia Huffman; a "Read the Masters" session organized by Danny Otero that will read and discuss a paper by solvability by radicals by Evariste Galois; and a Poster Session called "Stories from Our Section History," organized by Rick Gillman. Additionally, HOM SIGMAA is planning on having an-

other History of Mathematics Trivia event. Other history and philosophy of mathematics on the program includes a workshop, "Discovering Mathematics Through Primary Historical Sources," hosted by members of the TRIUMPHS Society, including Jennifer Clinkenbeard, Abe Edwards, and Daniel Otero; an Invited Paper Session on "50 Years of the Four-Color Theorem," organized by Walter Stromquist and Paul Kainen; the NAM David Harold Blackwell Lecture on "Celebrating 100 Years of Black History Month: Protecting the Truth about Black Scholars in the Mathematical Sciences," by Christopher Jett; and a POM SIGMAA Invited Paper Session.

The International Congress of Mathematicians 2026 (ICM) will take place in Philadelphia, 23–30 July 2026. Adrian Rice is one of the organizers of a history session at the ICM meeting. Plenary lecturers for the History of Mathematics Section include Maarten Bullynck ("Enlightened Mathematics. How Gauss Was Led to the Construction of a Regular 17-Sides Polygon,"); Jemma Lorenat (Title TBA); and Clemency Montelle ("Counting on The Past: The Birth of Combinatorics in Classical India").

Plenary lectures for the Logic Section include "Complexity of Local Problems," by Anton Bernshteyn; "From Cell Decomposition to Motivic Integration, Hensel Minimality, and Point Counting," by Raf Cluckers; "Henselianity and NIP Fields," by Will Johnson; and "From the Cherlin-Zilber Conjecture via sharply 2-transitive groups to the Burnside problem," by Katrin Tent. Itaï Ben Yaacov will also deliver a plenary lecture for the Logic Section. David Aspero and Ralf Schindler are giving a Joint Logic Section Lecture on "Forcing Axioms and The Continuum Problem: Hilbert's First Problem Revisited." Marlies Gerber and Philipp Kunde are giving a Joint Logic Section Lecture on "Anti-Classification Results in Ergodic Theory." Find program and event updates at the ICM website, `www.icm2026.org`.

Ximena Catepillán & Abe Edwards

HoM Seminars

Several organizations hold regular colloquia and talks on the history and philosophy of mathematics. If yours is not mentioned below or elsewhere in this issue of the *Bulletin*, please send a schedule to *aackerbe@verizon.net*.

The Philadelphia Area Seminar on the History of Mathematics (PASHoM), organized by Alan Gluchoff, hosted the following speakers in 2025–2026: Maryam Vulis (CUNY and CT State Community College), "Boris Vladimirovich Gnedenko: Life and Work of the Mathematician (1912–1995)," on September 18; Julian Gould (University of Pennsylvania), "History of Integration," on October 23; Lawrence D'Antonio (Ramapo College), "Berlin Academy 18th-Century Prize Contests," on November 20; Anna Englesone (Villanova University), "William Sealy Gosset," on January 15; Cliff Landesman, "Leibniz's *Nova Methodus Pro Maximus et Minimus*," on February 19; Jeff Suzuki (CUNY Brooklyn), "Gauss, The Heptadecagon, and String Art," on March 19; and Julian Gould (University of Pennsylvania), "Zeno's Paradox of Measure," on April 16.

The Ohio River Early Sources in Mathematical Exposition (ORESME) Reading Group, organized by Dan Curtin and Danny Otero, met October 17–18 at Xavier University to read excerpts from the second edition of Jean–Victor Poncelet's *Traité des propriétés projective des figures* [Treatise on the projective properties of figures] (1822), a seminal work in the development of projective geometry. On January 30–31 the group returned to Xavier to read Abel's proof that the quintic equation cannot be solved, in general, by radicals.

The Claremont History and Philosophy of Mathematics Seminar hosted its second annual one-day workshop on April 11, "The Alchemy of Mixing Mathematics." A slate of four speakers featured Otávio Bueno (University of Miami & Tohoku University), "Why There are No Styles of Mathematical Reasoning"; E. L. Meszaros (Brown University), "Algorithmic Translations and Interpretations of Late Babylonian Mathematics"; Jed Buchwald (Caltech), "The Winding Trail to Newton's *Principia*"; and Mate Szabo (University of Southern California), "Turing's Machines and Max Newman's Symbolic Machinery for Mathematical Physics."

The Forum for the History of the Mathematical Sciences of the History of Science Society holds a monthly reading group for the works of Archimedes as well as a monthly reading group examining various recent contributions to historiography. To receive Zoom links and readings for either group, contact E.

A. Hunter, *eahunter@uchicago.edu*.

New from *MAA Convergence*

MAA Convergence is the MAA's refereed, online journal for using the history of mathematics in the teaching of mathematics. It offers materials suitable for the full range of courses in the K–16 curriculum, with a focus on grades 8–14. Find these recent publications at our new home within the MAA suite of journals published by Taylor & Francis, `maa.tandfonline.com/journals/ucnv20`.

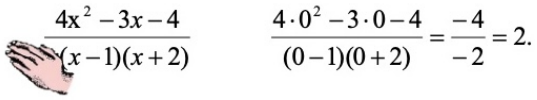

Figure 3: Heaviside's "Cover-Up" Method.

In 2025, Michael Waters took a walk that was "A Little on the Heaviside," in which he considered the mathematics and history of a clever algebraic trick—attributed to but almost certainly not invented by the 19th-century English electrical engineer Oliver Heaviside—that Waters learned as an undergraduate and has been sharing with his students. Michael Molinsky also added an installment of his long-running series of "Quotations in Context" that examines the origin of a quotation from Archimedes' famous treatise on counting large numbers, *The Sand-Reckoner* (3rd century BCE): "There are things which seem incredible to most men who have not studied mathematics."

Figure 4: Quiller-Couch's rider on Euclid I.1.

The editors opened Volume 23 of *MAA Convergence* by publishing an editorial discussing the journal's plans for 2026. In our latest installment of the series "Historically Speaking," edited by associate editor Betty Mayfield, Andrew Fiss and Laura Kasson Fiss have commented on a mathematical parody written by Arthur Quiller-Couch in the 19th century and publicized by Philip S. Jones in 1955. Ximena Catepillán has translated into Spanish a 2004 article by Rick Faloon, "Teaching Leonardo: An Integrated Approach." Sal Petrilli, Rob Bradley, and Patrick Wallach have translated François-Joseph Servois's final publication, "Sur la théorie des parallèles," into English. They added historical commentary and classroom exercises to facilitate the use of this thought-provoking essay in geometry (and other) courses.

MAA Convergence's "old" website presence at `old.maa.org/press/periodicals/convergence` is scheduled to be taken offline on 30 June 2026. The editors continue to prepare the journal's articles from 2004–2024 for transfer to T&F, but there will be a gap during which these materials are available only via the Internet Archive. Readers are urged to make sure to download any items they would like to use in their teaching during the Fall 2026 semester as soon as possible, and before the old website is no longer accessible. If you have problems or questions, please contact the editors at *convergence@maa.org*. We are also always happy to discuss possible submissions; T&F's submission portal can be accessed at the link in the first paragraph.

We remind readers that our long-running Calendar of conferences on the history of mathematics and its use in teaching is now located on HOM SIGMAA's website, `homsigmaa.net`, where it is managed by Electronic Resources Coordinator (and former *MAA Convergence* associate editor) Bud Boman.

Daniel E. Otero & Amy Ackerberg-Hastings

Quotations in Context

While in the past I have always examined quotations made up of complete sentences, this column is about a curious phrase which is frequently associated with the French mathematician Michel Rolle (1652–1719). In modern publications, when discussing Rolle's criticism of the new calculus, it will often be stated that he viewed the differential calculus as "a collection of ingenious fallacies." Some works will describe the sen-

tence fragment as a direct quotation from Rolle, a few will admit that the quoted words come only from unnamed secondary sources, and others strangely will not even denote it as a quotation, despite the fact that they are presumably taking that exact choice of words from some other recent source.

As far as I can determine, the original source for this quotation is Walter William Rouse Ball's 1888 work, *A Short Account of the History of Mathematics*, where it appears in the very brief biography of Rolle:

> Michel Rolle, born at Ambert on April 21, 1652, and died in Paris on Nov. 8, 1719, wrote an algebra in 1689 which contains the theorem on the position of the roots of an equation which is known by his name. He published in 1696 a treatise on the solutions of equations, whether determinate or indeterminate, and he produced several other minor works. He taught that the differential calculus was nothing but a collection of ingenious fallacies [Rouse Ball, p. 351].

While the specific wording may have originated with Rouse Ball, his pithy phrase does seem to accurately sum up the beliefs expressed in multiple publications by Rolle about the new calculus. To pick one example, consider the paper *Du nouveau système de l'infini*, which Rolle submitted to the French Academy of Sciences in 1703. In the first paragraph of the paper, Rolle extolled the precision of geometry and the unquestionable solid foundation on which it was built. However, in the second paragraph, shown below, Rolle complained that infinitesimals could provide no such certainty—and often were used to hide mistakes rather than to reveal truth.

> Mais il semble que ce caractere d'exactitude ne regne plus dans la Geometrie depuis que l'on y a mêlé le nouveau Systême des Infiniment petits. Pour moy, je ne vois pas qu'il ait rien produit pour la verité, & il me paroît qu'il couvre souvent l'erreur [Rolle, p. 312].

Rolle presented a sequence of examples related to the contents of l'Hôpital's 1696 work, *Analyse des Infiniment Petits*. In some cases, he claimed that the differential calculus did nothing that cannot be done without it.

> Par les difficultés que j'ay proposées jusqu'icy, l'on voit que les Infiniment petits que l'on a introduits dans le calcul differentiel, ne contribuent rien pour trouver la verité, qu'ils sont encore inutiles pour l'operation, & qu'après les avoir mis dans une question, il faut d'ailleurs pour la résoudre, faire tout ce que l'on feroit si l'on ne les y avoit point mis [Rolle, p. 328].

In other cases, he argued that infinitesimals led to misconceptions and errors, calling the results "absurd" [Rolle, p. 332] and the entire system "highly defective" [Rolle, p. 334]. However, having roundly condemned the differential calculus throughout the paper, Rolle did offer a slightly more generous view on the topic in his final paragraph, shown below, in which he called the subject both "novel" and "ingenious." This final word suggests that Rouse Ball may have based his paraphrase, "a collection of ingenious fallacies," on this particular work.

> Nonobstant toutes ces difficultés, il est vrai de dire que l'Analyse des Infiniment petits est un Ouvrage trés curieux, & qu'il s'y trouve quantité de choses nouvelles & trés ingenieuses [Rolle, p. 336].

My thanks to Danny Otero, who suggested the topic for this column.

Mike Molinsky

References

Rouse Ball, W. W. 1888. *A Short Account of the History of Mathematics.* London: Macmillan and Co.

Rolle, M. 1720. Du nouveau système de l'infini. *Histoire de l'Académie Royale Des Sciences, 1703: Avec Les Mémoires de Mathématique et de Physique Pour La Même Année*, pp. 312–336. Second edition. Paris: C.-E. Hochereau.

TRIUMPHS Society Update

As previously announced in this newsletter, the TRIUMPHS Society (TRansforming Instruction: Understanding Mathematics via Primary Historical Sources) seeks to bring together practitioners and others interested in the use of primary historical sources in the teaching and learning of mathematics (see `triumphssociety.org`).

The Society's efforts in 2026 to promote the proliferation of primary source-based pedagogy in mathematics through conversation among its members have thus far included a virtual discussion focused on classroom use of Primary Source Projects (PSPs) and the launch of a new quarterly Primary Source Virtual Reading Group (VRG). Recordings of these and all of the Society's prior professional development offerings are available to all under the archived section of the Society's Programming webpage.

The inaugural session of the Society's VRG series took place on Friday afternoon, 16 January 2026 (Session 1) and Saturday morning, 17 January 2026 (Session 2). Participants read and discussed selections from Euclid's *Elements*, Book II, using David Joyce's online edition.

Session I began with an introduction about the author and text by Danny Otero (Xavier University, and the Society's Lord Viscount Brouncker President Emeritus). Next, participants—across four time zones—were divided into breakout groups of 3–4 people to read selections from Book II, focusing on Propositions 1 through 4. The small-group discussions were interspersed with time for collective check-ins and participant-driven exploration. The session ended with more small group discussion driven by each individual group's interest. To open Session 2, the whole group reflected on what transpired during Session 1, with participants offering insights and other takeaways. Participants then again split into smaller breakout sessions to read from a list of suggested propositions (8, 11, 12, and 14). Groups were also prompted to reflect on the pedagogical value of the source, a topic to which the entire group returned at the closing discussion.

In all, 17 members participated in at least one of the sessions, with most taking part in both. The main takeaways by participants were an increased appreciation of this ancient work, a gaze into the challenges as well as the possible rewards of using this source in the classroom, and ideas for new Primary Source Projects (PSPs).

The Society is planning for four VRG meetings annually in sessions designed to work through texts that are not very well-known but speak to core mathematical ideas. Source readings will be selected from a variety of historical periods, places, and cultures organized roughly chronologically (Greek antiquity to the twelfth century, in 2026; 1200–1750, in 2027; 1750–2000, in 2028).

The second-quarter installment of the VRG was scheduled for 10–11 April 2026 (6 pm and 11 am Eastern start times, respectively) and featured selections from Book III of Isidore of Seville's *Etymologies*. The next VRG sessions will be on 17–18 July 2026 and will look at the Euclidean algorithm and Diophantine equations via selections from Brahmagupta's *Brāhmasphutasiddhānta*. No advanced reading or preparation is required. Participants must be current members of the TRIUMPHS Society.

In keeping with the Society's goal to promote the use of primary historical sources in the teaching of mathematics, its peer-reviewed journal, *Annals of the TRIUMPHS Society*, publishes PSPs ready for classroom use, as well as artifacts and documents related to the development of or that support the implementation of such projects, and articles on the scholarship of teaching and learning with primary sources. If a topic is related to teaching mathematics with primary sources, then it is potentially of interest to the journal—*please consider submitting your own work in this exciting field for publication!*

Membership in the TRIUMPHS Society is only US$12 annually and allows for participation in all Society events. Note that membership is not required, however, to access or submit to the *Annals*.

Janet Heine Barnett

New Members

Congratulations to the following new members who have joined the Society since our last Bulletin. We look forward to your contributions.

Stephen Schmitt
Edmonton, AB
Canada

Harsha Wijayawardhana
Sri Lanka

From the Editor

Graduation for Richard Montgomery High School is at the University of Maryland, Baltimore County until approximately 9:00 pm EDT on June 3, so unfortunately I will be unable to join many of you in Halifax the next morning. I look forward to receiving your reports, however, and I am nonetheless engag-

ing in the experience of flying to airports that are not airline hubs and have limited daily capacity for flights, having been to Des Moines twice since January en route to campus visits at Central College in Pella, IA. Indeed, it has somehow been 18 years since Peter's birth was announced in these pages.

Times of transition make us think of those we have lost, as well. I was senior to Greg Lavers by a few years in both age and PhD completion date, but being somewhat height-challenged, I literally looked up to him throughout a quarter-century of being colleagues. He gave excellent talks that simultaneously engaged philosophers and non-philosophers, and we had several meaningful catch-up chats over the years. What I will remember longest about Greg, though, is that shortly after he became treasurer in 2016, PayPal began holding hostage $13,000 of CSHPM's funds on the grounds that Canada Revenue Association believed the Society needed to be registered as a non-profit charity, for which the paperwork requirements were onerous and expensive. Then-Past President Dirk Schlimm and Greg spent approximately 8–10 months convincing PayPal that CSHPM is actually a not-for-profit organization, finally prevailing with an assist from the Federation and being required to provide only a utility bill and bank statement. When Dirk and Greg reported to the 2018 AGM that the funds had been released, Greg's zealous delight at vanquishing the faceless multinational corporation reminded me so strongly of a medieval knight that I half-expected him to grab a lance and gallop away on his trusty steed.

The *Bulletin*'s next submission deadline is **1 October 2026**. As always, the editors seek items of interest to historians and philosophers of mathematics, such as reports on conferences attended, activities of other societies, or discussions of publications. We also welcome memorials of historians or philosophers of mathematics who have passed away and short yet substantive articles that are informative or thought-provoking as well as relevant to the practice of history or philosophy of mathematics. Les soumissions en français sont les bienvenues. If you are interested in preparing an Off the Shelf column (re-examinations of classic or overlooked works in the philosophy or history of mathematics) or interviewing someone whose career is related to the history or philosophy of mathematics, please contact me. The preferred formats for submissions are Microsoft Word (please turn off its auto-formatting features such as "curly quotes") or LaTeX data files (not compiled PDFs). Photos and other images are most welcome; they should be sent as separate files (JPG or PNG formats work well). Please **do not** embed images, hyperlinks, or other media into your Word document, as the Content Editor is then required to remove all of that data so that the Layout Editor can typeset the full issue in LaTeX. Submissions may be sent to *aackerbe@verizon.net*.

Have an announcement about an event that is time-sensitive? Learn something from another organization that is relevant to CSHPM's mission? Have some good news to share? All members may post information on the announcements elist by sending an email to *cshpm-announcements@gaggle.email*. If you are not comfortable distributing an announcement yourself, please feel free to ask me to take care of it on your behalf. I also post fellowship and job opportunities, upcoming conferences, publications, and the like on CSHPM's Facebook page, which at press time has 1382 followers (approximately 55% of whom are younger than 45).

Amy Ackerberg-Hastings