Reflections on Gender in our Society

Editor’s note: Following up on the recent report from the co-editors of Isis, Alix Hui and Matt Lavine, about the disproportionate impact of the COVID-19 pandemic on submissions from women, the HSS Newsletter invited them to talk about the meaning and implications of the data collected for the journal and the society more broadly. Future HSS President, Karen Rader, and the co-chairs of the HSS Committee on Diversity and Inclusion (CoDI), Don Opitz and Myrna Perez Sheldon, joined them with their insights on this important issue.

What was the impetus for conducting this survey? Could you give us some of the backstory?

*Isis editors*: We had known coming into the editorship in 2019 that we had an obligation to make sure that the Society’s publications, especially *Isis*, reflected the diversity of its membership. At the start, that endeavor took the form of working with CoDI, the Women’s Caucus, and the Executive Committee on planning how to do intake surveys that would let us collect data on gender, race, career status, and nationality in the best possible way. For us, that meant finding the best possible middle ground between techniques that yield easily computable data and those that would allow people submitting manuscripts to accurately self-define without having to fit their identities into pre-established categories. Given how complicated a process finding that path promised to be, we decided not to collect that data until the ITGR had a chance to weigh in, and until we’d received some feedback from *Isis’s June 2020 Open Conversations* special section on the subject.

*Isis* had collected and shared data on the gender of authors submitting to the journal with the Women’s Caucus for many years before we took over as editors. We put this effort on hold when we took over, in part because it had relied on assignment of gender after the fact. Within a few weeks of the start of pandemic-related shutdowns at universities, however, there were already rumors circulating about the sudden and disproportionate increase in childcare and classroom teaching responsibilities falling on women. This problem wasn’t limited to the humanities, but it wasn’t long before we noticed our own submissions had begun to skew towards men. Alix reached out to a number of our peer journals and convened a discussion about whether this was idiosyncratic to us—it wasn’t—and what steps we should all take going forward. Part
Reflections on Gender in our Society, cont.

of our response was to see what we could learn, quantitatively, from the submissions we received in the months following the shutdown.

CoDI: The earlier (2020) *Isis* report, to which the latest report was a follow-up, exposed a gender differential in article submission during the initial months of the pandemic. It was discussed among the plenary “Futures” panels of the HSS Virtual Forum last October. Various panelists and attendees affirmed anecdotally their sense that the pandemic indeed disproportionately affected women scholars as well as scholars of the “Global South,” independent scholars, and early-career scholars. These latter groups already tend to experience less access to resources and therefore have felt more acutely the impact of archive and library closures.

It is also worth noting that shortly after the release of the follow-up report, *Nature* ran an editorial that discussed the gender patterns across scientific fields more broadly, and that the trends observed therein seem consistent with what we observed with *Isis*.

Was your survey looking at the gender of the authorship of submissions, or also at the way in which gender itself was a topic of papers in *Isis*, or both separately.

*Isis* editors: These are two separate issues for us, although it’s female scholars who do the greater share of work on female historical actors, so they’re not unrelated. In fact, that goes directly to why having a representative author pool is essential to keeping *Isis* relevant to our field. The work that historians do isn’t determined by their personal experiences, but it is shaped by it. For us, staying current with our field’s notoriously difficult-to-define boundaries means doing what we can to nurture and promote scholarship that considers the widest possible range of actors, places, institutions, and forms of scientific knowledge. In “normal” times—that is, the first nine months of our editorship before March 2020—that meant doing things like encouraging submissions from as wide a variety of scholars as we could, and making clear to as many people as we could the ecumenical approach we brought to the question of what an *Isis* article is. But that’s also why we understood the gender skew after shutdowns began as such a threat, even though, on the whole, 2020 was a banner year for total manuscripts submitted.

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Could you talk a little about what data you collected and what the numbers mean?

*Isis editors:* Because HSS had not yet settled on a demographic-collection policy, the need to confirm the general trend forced us to make the uncomfortable decision to arbitrarily assign gender to authors after the fact and without their input. This decision was not one we took lightly, or without regret. We recognize that this kind of act is a form of trans erasure, to say nothing of the possibility of outright error. What we found confirmed our suspicions in stark terms: our new submissions had gone from exact male/female parity in the first three months of 2020 to a 3:1 ratio of men to women in the second three months. We also saw that the responses from women to requests for article or book reviews after the shutdowns took place was disproportionately low.

Between us, we have remembered enough college statistics to know that our sample size is not large enough to let us draw mathematically unimpeachable conclusions. But our quantitative findings were confirmed by the individual comments we heard from would-be authors and reviewers. Everyone had new kinds of challenges, and we heard about them from a lot of the members of our community, but women especially frequently cited increased responsibilities for caring for their families. There doesn’t seem to be any room for doubt that the middle months of 2020 were simply lost to many women in our field in ways that they weren’t to men.

**Going forward, what are plans for data collection?**

*CoDI:* We have been advising both *Isis* and the Committee on Meetings and Programs on better practices in demographic data collection. Based on this advice the latter implemented a demographic survey that allows for self-description of identity characteristics as part of the proposal submission process. CoDI has also developed a set of recommendations for data collection and analysis by the Society (which was presented to the Council in June) and which we hope will offer further guidance on the implementation of demographic data collection measures, whether as part of member and meeting registration or journal submissions for starters. We look forward to participating in further discussions related to this subject.

Whether from the survey, or based on your anecdotal evidence or indeed your own observations, could you comment how gender issues change or color the overall picture on the impact of the pandemic on things such as child-care or personal health?

*Isis editors:* As we mentioned earlier, increased family-care responsibilities was the most frequently cited reason for declining to write reviews or contribute to special sections, and one we heard most often from women. And this is surely an underrepresentation; it’s hard to imagine that everyone for whom this was true mentioned it to us in precisely those terms.

*Karen:* My first leadership role in HSS was as co-chair of the Women’s Caucus, back when I was just starting my first tenure-track job at Sarah Lawrence College, and I had small children. The fact that many decades later, despite concerted efforts and attention, we are still talking about how to make things like childcare at annual meetings truly work for members is discouraging, to say the least. But as with all things pandemic, COVID-19 has both made visible and sharpened existing inequalities and rifts in the fabric of our scholarly community. One of those is rifts that fall along gender lines—paraphrasing Faulkner, “the past isn’t even past” when it comes to gendered cultural practices, norms, and discourses around caregiving and health. So why would those issues not also affect who submits (and who does not) to our flagship journal?

But these observations are not unique to HSS or even to the history of science more widely,
and it should go without saying: we cannot understand our gender issues in isolation from other intersectionalities such as race, sexuality, and class. In the 2021 expanded edition of her book *From #BlackLivesMatter to Black Liberation*, Keeanga-Yamahtta Taylor asks: “can the conditions created by institutional racism be transformed within the existing capitalism order?” I see this particular intersectional question as something every (neo)liberal educational institution—schools, universities, museums, libraries and archives, and yes, scholarly societies—must immediately reckon with. And that would not have happened if not for the new work-life boundary conditions of the pandemic and (especially in the US) the work of the Black Lives Matter movement. This imperative will continue to push us to build stronger HSS communities that openly struggle both with making immediate fixes in our organization and with longer-term more revolutionary projects like rethinking the possibilities for scholarly societies.

**What is being done to promote more equal representation from scholars across the fields and indeed, Society-wide?**

**Isis editors:** On the editorial and reviewing side, we’ve made a conscious effort to diversify our reviewer pool and the membership of our advisory board, without—we hope—asking too much of scholars upon whose time and energy many demands are already made. This is a practical consideration as much as an ideological one: *Isis’s* readership is broad, and the work we publish will be more relevant to that readership if the path through peer review is representative of the field as a whole. On the publication side, our focus has been on ensuring that our colleagues understand that we see no tension between our mandate to publish excellent scholarship in the history of science and an eclectic approach to the methods and topics that such scholarship might encompass.

**Karen:** Using existing mechanisms of formal governance, the Nominating Committee, co-chaired this year by Elaine Leong and Hannah Marcus, has been one group that has worked hard to follow processes that generate slates of candidates for Society Council and Executive Committee which better represent the broadening diversity of history of science as a field. CoDI, who have weighed in on this conversation, has been working to formulate a recommendation about demographic data collection for everything from meetings to publications, since that shapes how we understand who we are as a Society and whether or not members feel they can “show up” in HSS as their whole selves. Finally, some really important work is happening in various HSS scholarly spaces—such as at the 2020 Virtual Forum, where the HSS Graduate and Early Career Caucus (GECC) led a Teach-In on supporting international scholars in pandemic times and the Forum for the History of Human Sciences (FHHS) led an Open Discussion about how to dismantle white supremacism.

**What do you hope to see and accomplish going forward?**

**Karen:** Under President Jan Golinski’s leadership, we have begun a comprehensive Inclusive and Transparent Governance Review, known by the acronym “ITGR.” Supported and reviewed first by HSS’s elected leadership, namely the Executive Committee and Council, the ITGR will soon be turned over to volunteer subcommittees on key issues that need attention: elections and committee membership (ITGR1), *amicus curiae* statements and advocacy policy (ITGR3), communication practices and policies (including the use of social media) (ITGR4), and finally, our general practices of governance and oversight (ITGR5). As VP, I am committed to following through the ITGR as a member-driven process. That means creating the spaces for us to have the difficult conversations we need to have as a Society about what is working and what isn’t, for whom, and why—and then showing up and listening. If you’re interested, there is still time to get involved! Email me at vp@hssonline.org.
Autobiography of an Article
by Mark B. Adams, Professor emeritus, University of Pennsylvania

Editor’s note: The act of reviving and polishing the text of a thirty-year old article led this author on a trip down memory lane. The HSS Newsletter is delighted that he shared his memories with us, thereby offering a peek into how history is made and done.

Remembrance and reflection, how allied!
What thin partitions Sense from Thought divide!
—Alexander Pope, Essay on Man

Pope’s words have a special resonance for me. I spent much of 2020 updating for publication what is perhaps the most important and unusual article I have ever written: “Little Evolution, BIG Evolution: Rethinking the History of Darwinism, Population Genetics, and the ‘Synthesis.’” It brought back many memories.

Four things make the article unusual. First, the text had been collecting dust in my drawer for 30 years. Second, it was my only publication that drew upon all the varied training and research I have undertaken in the course of my professional life. Third, the paper argues that the traditional story of Darwinism through the “synthesis” that I (and many others) have taught for more than 40 years (and to which I contributed) was… wrong. Finally, it is the only paper of mine that discusses in detail the thinking and writing of legendary scientific figures, now mostly dead, whom I actually had met, known, and worked with.

In a sense, the paper originated with a week-long interview of the geneticist and evolutionary biologist Theodosius Dobzhansky (“Doby”) conducted in Mather Camp, Yosemite during his field trip there in 1973, two years before his death. This interview itself was the outcome of the fact that my mentor, the evolutionary biologist Ernst Mayr, had invited me to the two conferences on the “evolutionary synthesis,” which became the raw material for Mayr and Will Provine’s book on the subject, to which I contributed two articles on Russian developments. It was at one of those meetings that I first met Dobzhansky. I asked him if there was any way I could interview him at length, especially about his early career and all his firsthand experiences in Russia during the 1920s. He graciously suggested that if I could come to California, I could join him for a week on one of his field trips. I took him up on his offer.

Each day during that week at Mather Camp, after he had finished his field work, I would join Doby on his porch, chatting and recording our conversations, one day in English and the next in Russian. He spoke a lot about his Leningrad mentor, Iurii Philiptschenko, for whom he had an almost worshipful respect and admiration, pronouncing him as the finest geneticist, biometrician, breeder, and evolutionary theorist in pre-revolutionary Russia and throughout the 1920s. It was from Philiptschenko that Doby adopted the terms “micro-evolution, macro-evolution” that his own 1937 book, Genetics and the Origin of Species, made standard. He also noted that his mentor had created those neologisms in 1927 to distinguish varieties and species from genera and higher taxa, to make the
case that, however useful in understanding the former, genetics could not illuminate the latter, namely evolution. Yet, I knew that a decade later, now at Columbia, Dobzhansky deployed his mentor’s neologisms to argue just the opposite!

Puzzled, I asked him how he accounted for that difference. I was expecting a technical answer—perhaps it had been the influence of the Morgan School, his work with ladybird-beetles, or some experience he had had. Instead, he shrugged, and said, almost indifferently, “He bet on the wrong horse.” Doby, I should mention, was an inveterate horseback rider, and was riding in Central Park when he was injured; he convalesced for weeks in hospital, where, at the urging of L.C. Dunn, he used the time to draft his classic 1937 book from memory, only adding the bibliography when he could return to his office.

“Bet”? “On the wrong horse?” I was startled, having never in my innocence thought of science as a “horse race” or a “betting” matter. That comment changed my perception. Here was a scientist who had not been certain of his own approach, but rather someone who realized it might have gone either way, and chose the option that, if it turned out to be right, would both justify and energize his newly coined specialty, “population genetics.” At the time, I was collecting information on the Russian eugenics movement, but I never forgot Doby’s remark, and stored it away.

In subsequent years, I began to explore population genetics and the evolutionary synthesis in greater detail, gradually losing patience with triumphalist accounts. Aside from giving an annual lecture course on the history of evolutionary thought at the University of Pennsylvania, where I continued to teach the “traditional” view, I broadened and deepened my understanding while preparing for various invited talks at universities, meetings, and other settings throughout Europe and North America. My first published version of these ideas was actually in French, but fearing that many of my colleagues could not (or would not) read French—and engrossed in the subject—I set about writing a more extended English version of my thoughts. It was then that certain memories came to mind, which ultimately led to my “epiphany.”

I remembered Bill Coleman’s paper at the Mayr meeting when he had asked, “What exactly is the evolutionary synthesis, and what did it synthesize?” At the time, I thought he was uninformed; on reflection, I thought it an excellent question. I also remembered how “Darwinism” meant such different things to different thinkers. Lysenko’s “Creative Darwinism,” for example, was almost the complete opposite of the Darwinism of the “evolutionary synthesis.” I remembered Bentley Glass’s review of the Mayr/Provine volume, which asked: Could it be the case that Creationism had absolutely no impact on the evolutionary synthesis? (Another
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autobiography of an article, cont.

Haldane’s classic book had declared, “Many would refuse to dignify the changes which man has effect in the dog as evolution.” Just five years later Doby had redefined evolution as “a change in the genetic composition of populations,” which surely included dog breeding. Weren’t those two claims by founding population geneticists contradictory? I remembered conversations with my good friend Steve Gould about his “punctuated equilibrium” theory, which Mayr had so opposed (“evolution by jerks,” he once called it.). A final memory brought my meditations into focus: Doby’s comment that Philiptschenko, his revered mentor, had “bet on the wrong horse” about the “micro-/macroevolution” issue. When was that ever settled, I wondered? Something didn’t feel right.

So I set about digging into all the classic texts that I had been collecting over the years. I knew perfectly well what they were supposed to have said… but what did they actually say, in print? I was gobsmacked by what I found: it had never been settled! Had Philiptschenko bet on the right horse, after all? It was only then that I finally came to realize: the “micro/macro” issue had always been, throughout, the core problem of Darwinian evolution! That discovery led to my first draft of the English version of the paper. As I shared my findings with colleagues, I was strongly encouraged to prepare it for publication in Isis by its editor, who suggested that I extend and revise it in certain ways. Despite a heavy workload, I eventually came up with an almost final version, but Isis had changed management meanwhile. So the article remained in the drawer, while I returned to demanding teaching and administrative duties, and published on other subjects.

I did retain a digital version of the article, however, and when correspondents sent me questions about Doby, Mayr, G. G. Simpson, and other scientists whom I had known, I would send them a copy of my paper. Over the years, various colleagues, including biologists, historians, and philosophers, encouraged me to find some way to make it public, so they could cite it. After several such requests, I received an inquiry from Richard Delisle (whom, unfortunately, I have never met), and sent him a copy of the paper. Unbeknownst to me, he was (and is) the editor of a Springer series on evolutionary biology, and he immediately suggested publishing it in his forthcoming volume on “Natural Selection.” We came to an understanding, I updated it here and there, and benefited from the feedback and criticism from him and other colleagues, new and longstanding. Only the section on Julian Huxley was newly added, at Delisle’s prompting. The standard references are from 1990; the footnotes provide new, 2020, relevant information, perspectives, comments, reflections, memories, and personal experiences.

I am neither a biologist nor a philosopher, but an historian. At one point, with the passage of time, I thought that by now, surely, many would have already realized the failings of the traditional view, so there was no need for me to publish my ideas. But as I learned from co-teaching a course on evolution with a biologist a few years ago, such was not the case: the “traditional” narrative still holds sway. The biologist’s “evolution” was entirely “micro”—population genetics, equations, fitnesses, and how intraspecific populations “evolve” when their gene frequencies change—and no mention whatsoever of the “macro”: the origin of higher taxa, fossils, extinctions, or the unfolding history of life and nature on our planet. I am not so foolish as to think that my updated 1990 paper’s publication will overthrow the prevailing narrative, but I am very pleased to finally be able to make it available to interested colleagues and a broader readership.
Matthew Goodrum: One of the interesting ideas proposed in your book was the notion of “colloquial science” writers and the decision to focus the book on such individuals. There has been interest among historians of science in examining popular science and its relationship to the intellectual and social history of science generally. I am curious to know your thoughts regarding how the concept of “colloquial science” writers might offer new ways to think about and explore subjects in the history of science. What might a focus on “colloquial science” writers contribute that has not been captured by other conceptual approaches to the history of science?

What a great question to get us started! As I worked on Creatures of Cain, I was inspired by historical scholarship that has demonstrated the importance of scientific ideas in the public realm and their capacity to shape ongoing programs of research. One of the more surprising angles of my research was the continued importance of books as places of scientific discourse among professionals in the decades after the Second World War. Scientific books as a genre existed in a space of fluid authority. They might sell well because of their appeal to other scientists and the standing of the author within a discipline. They also might sell because non-scientists found them of gripping interest. In fact, they might do both.

It was this overlap of intended audience that caught my attention and it struck me that postwar conversations about human nature were taking place in and about books that could not be classified as belonging strictly to the realm of the “popular” nor the primarily “professional”—they were read, debated, and reviewed in newspapers and academic journals alike. I coined “colloquial science” as a term to highlight that fluid space and the powerful overlap between text, television, and film during this period. Creatures of Cain offers one set of stories, about the evolution of human nature as marketed and discussed in the United States. There are, I think, many other subjects that operate in this realm, whether debates over environmental policy or neurobiological subjecthood.

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Both Marga and Georgina, had follow-ups to Matthew’s opening gambit, from specific parts of the book. **Marga asks:** In your introduction, you note “the highly visual nature of colloquial scientific publications” (p. 11). And later, you show the importance of visual depictions of humanity’s evolutionary past, the images of scientists at work, and the representations of animal behavior. Do you see this key aspect of your story as something that is specifically important during the period you cover and/or in the disciplines you examine? Or is this an ingredient of all colloquial science?

I would suggest an appeal to multiple senses, certainly both sight and sound, played a role in most colloquial science of the era, for far more subject areas than just human evolution. *Scientific American* and *Natural History*, for example, made ample use of images for all their content. For human nature, standout examples were the headline stories created by National Geographic. Packed with images in the magazines, the organization also released study guides for children and documentaries that aired on national television. After the Second World War, with the exciting coverage of paleoanthropological fossil discoveries in Africa and nature documentaries about modern human cultures from all over the world, still and moving images stirred audiences’ interests in anthropological and paleoanthropological topics.

As I wrote, I kept an eye out for drawings and illustrations that depicted the theories under discussion or scientists at work. Their striking visual styles reflect both the artistic conventions of the time and the highly visual nature of scientific conversations. More so than photographs, which can easily be read as flat representations of the past, I hope these images center readers’ attention on the creativity required to bring theories of human nature to life. Thank you for asking about this.

**Georgina:** The chapter “Unmaking Man” is particularly vivid and as a reader, I was transported to The Berks in 1972. You note how “such debates rendered treacherous the porous boundary between professional and colloquial discourse, especially for women” and the challenges encountered by women “who entered academic from the periphery rather than the center.” Building on Matthew’s question, I would love to hear what you think about how Creatures of Cain is in discourse with the broader field of women and gender in science.

As I was working on *Creatures of Cain*, I thoroughly enjoyed collaborating with Robert A. Nye on our co-edited *Osiris* volume, *Scientific Masculinities*—and by enjoyed, I mean lucky! Bob and all of our wonderful contributors pushed me to think through the ways that difficulties faced by women in the sciences should be understood as a function of masculine norms. That led me to think of *Creatures* as an exploration of how firmly those norms were embedded in the sciences of human nature during the 1960s and 1970s, as a function of women entering these fields. I found this part of the research rather disheartening, too, especially the research published during the era on strategies for keeping women in the sciences. As a graduate student in biology, I had attended a number of ‘women in science’ leadership events. The suggestions and advice I received in 1999 matched exactly the advice proffered by Harriet Zuckerman and Jonathan Cole in 1975. If we knew all of this in the 1970s, I wondered, why were the same issues of gender and science still so pertinent at the turn of the century and today, now two decades after that? As the time horizon of historians’ investigations is just now reaching the 1980s, these are important questions to keep asking.
Again from **Georgina**: In addition to a wealth of published and archival sources, you draw on fifteen interviews taken across eight years. How did these interviews enrich your narrative, and indeed, your experience as a historian? What challenges come with interviewing scientists, many of whom continue to be influential figures in the sciences that you study? Do you have some highlights or favorite moments from interviewing these scientists?

**Creatures of Cain** would have been a very different book without the generosity of the scientists and writers who took the time to speak with me about their research. In reconstructing past events, historians necessarily rely on archival research. This works brilliantly when people have already deposited their correspondence and papers in an archive, but those collections can be hard to come by, are quite selective, and are usually available only after someone has died. (Not everyone is keen to have future historians read through old letters!)

When working on recent history, talking with scientists while they are still alive allows historians like myself access to voices and perspectives that would otherwise be difficult to include. Much about a scientist’s life is never recorded in a paper trail: from the books and experiences people found inspiring when they were teenagers to the friends and colleagues who sustained them during and after graduate school. Talking with people about their histories is thus invaluable, especially in trying to re-create informal networks of collaboration that I would have otherwise missed. Plus, I find it thrilling to meet people in person. The lilting cadence of a voice, the disorderliness of an office, or the art on a wall: each of these things leaves a singular impression impossible to glean from the written word alone.

There are challenges, too, of course. The thrill is accompanied by a heightened sense of responsibility and a commitment to represent the experiences of my interviewees in a way that they would recognize as themselves. Yet when you interview several people about the same events, everyone’s accounts differ—which is exactly why I wanted to interview such a wide array of people. Just as with archival evidence, then, the historian has to find a way through these wonderful and sometimes conflicting accounts.

**Marga:** Toward the end of your introduction, you say that we “are still living” with the legacy of the events you trace in your book. Can you elaborate on this point? Do you think evolutionists still have a privileged voice in discussing questions about human nature?

The ‘human condition’ is an enduring conundrum that theologians, humanists, and scientists pondered long before the events I document in *Creatures of Cain*. Even in the mid-twentieth century, it was not obvious that questions about the meaning and nature of humanity could, perhaps even should, be answered by scientists. One living legacy of this story, then, is that science is now seen as crucial to understanding human nature. Evolutionary theories continue to play an important role in these public conversations—just think of the Paleo diet, the idea that humans were born-to-run long distances because of our deep history, or the fascination with genetic ancestry test kits. However, evolutionists are far from the only scientists vested with the cultural authority to speak about human nature. Human nature plays a role, too, in the experimental psychology research and the interpretation of fMRIs, neuroscience and brainhood, *Homo economicus*, the microbial nature of humans, and more.
Matthew: Your book offers a wonderful analysis of ideas circulating among scientists and science writers about human nature and the arguments generated by these ideas. Stepping back from the diverse range of individuals and dimensions of this subject that your book examines, I would like to know what lessons you think practicing scientists today might draw from the history you outline. Equally, what lessons might non-scientists (average citizens) draw regarding the social and political consequences and implications of scientific research on human nature? Fundamental questions about the nature of humanity addressed head-on in colloquial science have helped recruit and inspire generations of students to pursue careers in the natural and social sciences. Even though such discussions now appear only rarely in the pages of professional scientific journals, they are central to how scientific and popular ideas about human nature change. We need scientists to write, to keep writing these books, to educate and inspire interest in the physical and biological world in which we live.

At the same time, historians of science, technology, and medicine also have real lessons for general readers (including scientists), about the political and social nature of knowledge. I was delighted when Alondra Nelson was appointed the Deputy Director for Science and Society for the White House Office of Science and Technology Policy. Someone with real experience analyzing issues of science and social inequality, past and present, is helping to shape national science policy at the highest levels of government. It’s just terrific. It’s also a reminder that historical books, like Nelson’s, that have the potential to reach wide audiences—colloquial history, if you will, addressed to both colleagues and non-experts alike—are crucial to the public profile of our profession, as well as the bottom-line of university presses. (This answer has veered away from my book to the profession more broadly, I recognize, so I’ll stop).

Georgina: In terms of historical research and writing, I am interested to know how you approached Creatures of Cain in comparison to you earlier book, Looking for a Few Good Males. And what advice do you have for early-career historians of science about how to approach writing their first book? Every project presents its own challenges. In Looking for a Few Good Males, it was transforming a mass of details into a story, with real people. As someone who became a historian after training in biology, I was used to writing about the ideas, never the people. My father, whom I adore, jokingly told me my dissertation was a brilliant cure for insomnia. Revising it into a book forced me to imagine an audience larger than my dissertation committee and a book that would not induce instant sleepiness in well-meaning readers. (No, I never asked my dad whether I succeeded.) For Creatures of Cain, it was narrative structure. I conceptualized the structure as shaped like an American football—all the threads start together and end together, but the middle balloons out in a series of chronologically parallel stories. I tried a number of different organizational schemes before settling on the final chapter sequence of the book.

I found the writerly tools I needed for thinking about these issues—audience, story-telling, and narrative structure—in novels. If I have only one piece of advice to convey to early-career scholars thinking about their first book it would thus be: Read lots of fiction!
Editor’s note: A few years ago, the British Society for the History of Science launched a new initiative, BSHS Translations, an online series featuring scholarly translations of publications in our discipline, which were originally published in a language other than English. The first offering to the series, in 2016, titled “Legumes and linguistics” was a translation of Mendel’s classic “Experiments on Plant Hybrids” by Staffan Müller-Wille and Kersten Hall, which was followed soon thereafter by Nils Roll-Hansen’s translation of a lesser-known Danish tract by the geneticist Wilhelm Johannsen, about Darwinism. Following the recent publication of the translation of Friedrich Miescher’s 1871 discovery of DNA (he called it nuclein) by Kersten and me, all of us engaged in a conversation exchanging accounts of our experiences and reflecting on the role of translation in the history of science. For a change, I am on the other side, so to speak (i.e. as a participant rather than interlocutor), in such a conversation featured in the HSS Newsletter.

What do you think is the place of translation in scholarship in general, and in the history of science, in particular?

Staffan: For me, translation is a historiographic method, not just a practical necessity. Multilinguality used to be the norm in our discipline, and to quite some degree still is, since English as the established lingua franca has opened up the discipline to a much wider international community. This makes English translations of primary sources more useful than ever. The genre of scholarly editions and translations was once highly regarded, but today it is hard to find support and recognition for it. Scholarly translations are nevertheless absolutely essential, not only for the access they give to sources written in foreign languages, but also for the research they involve. It is a trivial fact of life that translation is not a straightforward process of one-to-one correlation. But this does not make translation impossible or dubious, as many seem to believe, but rather turns it into a productive site for philological, hermeneutical and historical research.

Neeraja: Addressing the more specific issue of the place of translation in our discipline, I’d say

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that it is absolutely vital in making available and accessible a much larger bank of primary sources—work by researchers who did not publish in English—to a larger population of historians of science. It is true that the scientific community worldwide has become increasingly Anglophone since the mid-twentieth century—but such has certainly not been the case in earlier eras. And if we are to truly understand the development of science in different parts of the world, we really should be looking at local literatures.

Why these particular texts?

Nils: My interest in Johannsen started when I was teaching at a Danish university almost fifty years ago. I bought his books in second-hand Copenhagen bookshops and published my first Johannsen-paper in 1978. So when Greg Radick asked for a paper to translate into English, this one seemed to me the right choice. It is not technical and presents vividly the issue of variation and heredity as Johannsen saw them in 1903.

Neeraja: In late 2018/early 2019—I forget the exact reasons why—I was trying to put together a syllabus for a course on the history of DNA in which I wanted to feature primary papers. That was when I realized that Miescher’s paper about the discovery of the substance itself had never been translated. I e-mailed Kersten because I knew of his work on the Mendel translation, and our shared interest in the history of DNA, molecular biology and such. To my delight he responded almost immediately with a quick translation of the first few paragraphs, and over the next few more weeks, the complete paper in two more installments. He also suggested that once done, we might try to submit it to this translation series.

Staffan/Kersten, in your case, Mendel’s paper had already been translated into English multiple times for over 100 years—what made you think there was need for one more?

Staffan: My interest in translating Mendel was piqued during a conversation with Mendel’s biographer Vítězslav Orel, many, many years ago. Vítězslav pointed out to me that the existing English translations had systematically mistranslated the word that Mendel used in German to designate the pea varieties he was working with. Rather than designating them as varieties, strains, or stocks, he addressed them in German as Arten, or species. My aim with translating Mendel was not, however, to produce a better, more accurate translation, but rather to reveal not only idiosyncrasies of the original text but also those that occur in later interpretations.

Nils, compared to the other two examples which are either one-of-a-kind (Mendel) or “firsts” (Miescher), Johanssen’s paper, which you translated, was not his first, most famous, or even, to borrow a phrase you used to describe his 1909 work, his most “magisterial” on the topic of Darwinism, in any language. So why this one?

Nils: Most of Johannsen’s scientific papers/books are in German, whereas only two relatively short papers were published in English. But in his native Denmark, he wrote a number of popular articles and books, that were broader in scope, with more explicit relations to contemporary social and cultural issues, and which were appreciated as well written and adequate popularizations.

As a suitable short introduction to Johannsen’s biological thinking I chose his 1903 paper about Darwinism and genetics because it has a broad popular perspective on evolution and heredity, and was written at a salient point in the history of genetics as well as his own scientific career. Johannsen himself had just written his famous 1903 paper on selection in pure lines, first in Danish and then also in German. In this popular paper he presented the discovery and the implications of the stability of pure lines, including his ambivalence toward the biometricians. He praised and used their
statistical approach to variation and heredity but concluded that their view of continuous change in hereditary variation was untenable.

Also, it is significant that Johannsen was a Scandinavian. The region around the Sound (Øresund), including parts of Denmark and Skåne in Sweden contributed much to genetics in the early 20th century.

Neeraja: In this case it was definitely the paper. My German—especially reading and writing—is not great and so translation was not a high priority item on my radar of publishable scholarly activities, until I went to look up something and found that there was no full translation available.

Staffan: I knew Mendel’s paper fairly well already, but in many ways, I discovered it anew in the process. One thing that continues to astonish me is the care with which Mendel constructed his paper, and the experiments on which it was based. Every single step, and every single sentence, was deliberate. I was also surprised that one could actually detect some traces of political discourses at the time. His talk of a “compromise”—Ausgleichung—between differing elements that unite in a fertilized cell was directly lifted from the daily press in Brno.

Kersten, since you’re the co-author on two of the three endeavors discussed here, could you comment on some of the similarities and differences in the two experiences (beyond the obvious one of subject difference of course).

Kersten: In the introduction to his now classic “Mendel—no Mendelian?,” Robert Olby said that his aim was to strip away “inflated Whiggish interpretations” of Mendel’s work and to place it “squarely within the context of mid-nineteenth century biology.” And it was this aspect that perhaps accounts for the starkest difference between the projects of translating Mendel and Miescher, as well as providing me with what I felt to be the biggest challenge. As a former research fellow in molecular biology I came to Mendel’s paper and indeed, history of science more broadly, heavily encumbered by precisely such “inflated Whiggish interpretations,” even if only unconsciously, by default. Such a mindset would have presented an obstacle even if I had been tackling just the interpretation of a primary source in English; but in German, the challenge was even more formidable. With each sentence, I found that I had to take a step back, look at it from a distance, breathe slowly and ask myself to what extent I was imposing my Whiggish preconceptions about Mendel, learned ever since the days of A-level textbooks, onto my interpretation of this text. It made for a slow, onerous, but ultimately, very rewarding process. It’s a worthwhile undertaking that I hope others will build on.

Being weighed down by a Whiggish view was less of an issue with Miescher. First, I think, because Miescher had not been elevated to the revered status as had Mendel, one came to his paper with less baggage. Textbooks may routinely hail Mendel as the “founding father of genetics” but I don’t think there is any comparable talk of Miescher as being the discoverer of the genetic material. But it actually made the task of translating Miescher somewhat more straightforward.

Another reason why I think I found translating Miescher’s paper less complicated was the difference in the ambit of the two papers. Right from the outset, Mendel made it clear that although he was working on the humble pea plant, his aim with this work was to tackle a big question in biology—what is the mechanism by which new species emerge? So as well as providing me with what I felt to be the biggest challenge. As a former research fellow in molecular biology I came to Mendel’s paper and indeed, history of science more broadly, heavily encumbered by precisely such “inflated Whiggish interpretations,” even if only unconsciously, by default. Such a mindset would have presented an obstacle even if I had been tackling just the interpretation of a primary source in English; but in German, the challenge was even more formidable. With each sentence, I found that I had to take a step back, look at it from a distance, breathe slowly and ask myself to what extent I was imposing my Whiggish preconceptions about
by stressing the importance of understanding the cell in terms of its chemical composition, but very quickly launched into what is mostly empiricism—the paper tells us what he added, how much of it he added, and what happened as a result. It made me feel as if I were reading a glorified biochemical cookbook—albeit one from which a curious and very important result emerged—the discovery of a hitherto unknown compound that, unlike proteins, contained a high amount of phosphorus. The farthest Miescher went with his interpretation was to speculate that this substance might have some function in growth. And as I say, it made the job of translation somewhat easier.

What were some of the biggest challenges in undertaking the translation?

Staffan: The biggest challenge in producing the Mendel translation was actually to find ways of making the most of the opportunities an online presentation offers in terms of cross-references—and then reproducing these features in a print version of the text.

Nils: Danish is very close to my native Norwegian. And so language was no barrier to understanding the original text. The challenge was to produce good English. I consciously kept to a relatively literal translation in the hope that it would best preserve the cognitive content.

Neeraja: For me it was the fact that there were actually two translations happening simultaneously; besides the obvious translation German to English there was also a translation across time, from the nineteenth to the twenty-first century. Certain words were used in an entirely different way. Most significantly for us in this paper was the use of the word “genetic,” genetischen in German. When Miescher used this word in 1871, it had not yet acquired the meaning of its most common usage today, that is, in the sense of something being passed down the generations via “genes,” namely hereditary. We need to remember that the word “gene” as a unit of heredity was yet to be coined. Rather, Miescher seems to have used the term as meaning “generative,” that is, giving rise to or relating to or influenced by genesis or origins, a meaning that is, incidentally, still valid even in English, although far less used.

A second challenge, also exacerbated by the time factor, was translating abbreviations for which there were no guides or keys. A specific example was Miescher’s notation of “Pt.” while discussing the results of certain chemical analysis. Now Pt (without the period) is the chemical symbol for the element platinum, but common sense told us that Miescher could not have been referring to platinum; the quantities of yield reported were simply too high. We puzzled over it for quite a while, playing around with some ideas, but eventually context and again, common sense, led us to the conclusion that Miescher must have used Pt. as shorthand for “precipitate,” which today, is usually abbreviated in English as “ppt” (no capitals).

All the examples here are primary sources, actually scientific publications—have any of you translated or considered translating historical/historiographic papers?

Staffan: I can think of two important works in German that I’d like to translate if I had the time: Árpád Szabó’s Das geozentrische Weltbild (1992), a book that roots the geocentric world view in a simple astronomical device, the gnomon; and Michael Wolff’s Geschichte der Impetus-theorie, which reveals fascinating connections between medieval and early modern conceptions of mechanics, reproduction, and economics. It is quite a shame that these two works are not available for students who cannot read German.

Neeraja: I have done so for personal use. The originals were in French, which I can navigate a tiny bit more easily than I can German, without as much help. There were some important historiographic papers on the history of
bacteriophage lysogeny, a subject that was quite central to what eventually became my book. One was a very long paper and I only translated what I needed to, in much the same manner that Miescher’s paper had been treated by scholars before us. The second paper was short enough and the translation more recently undertaken, by which time online translation tools had improved vastly and so I powered through and did it all.

Kersten: Funny you should mention it, but in the course of research for my book *Insulin, The Crooked Timber*, due to be published by Oxford University Press later this year, I’ve been using my knowledge of German to try and translate several key papers by the German clinician Georg Zuelzer (1870-1949), who felt more than a little put out when he first heard that the 1923 Nobel Prize in Medicine or Physiology had been awarded to the Canadian scientists Frederick Banting and his supervisor John J. R. Macleod for the discovery of insulin. In several letters of protest (including some to the Nobel committee) Zuelzer argued that as early as 1908 he had already found a pancreatic extract that could bring diabetic patients out of a coma and had filed a patent on this substance that he called “Acomatol.” He therefore felt that he should rightfully be recognized as its discoverer. Due to the carnage of the two world wars, most writings on Zuelzer are few and far between, so his scientific papers have been invaluable. But equally invaluable have been a couple of secondary, historical sources in German in the early 1970s by K. H. Mellinghoff, a researcher at the Institute for the History of Medicine, at the University of Dusseldorf. Translating Mellinghoff’s work has provided some crucial insights into assessing Zuelzer’s claims and understanding exactly why his plight has since been compared to a figure from a Greek tragedy.

If you were to undertake such an endeavour again, what would you choose and why?

Kersten: As it happens, I am currently working on translating a paper published in 1924, in which the Luxembourgian chemist Camille Reuter described work that he and Zuelzer had done on pancreatic extracts ten years earlier in the labs of the Swiss company Hoffman La Roche at Grenzach in Germany. Few Anglophone historians if any, are likely to have heard of Reuter, but had he published this work August 1914 when it was first carried out, it might well have been him and Zuelzer, and not Fred Banting and Macleod, who received the Nobel Prize for the discovery of insulin.

Zuelzer’s early work in 1908 had been hampered not only by adverse side effects resulting from the extracts that he introduced into patients, but also by the fact that he had not been able to make blood sugar measurements to demonstrate their effectiveness. But as far as I can understand from Reuter’s paper, by August 1914, they had prepared a new batch of extract that was shown to be effective at reducing the blood sugar levels in a diabetic patient. Had this advance been made public at the time, it might well have clinched the case for Zuelzer and Reuter’s claim to be the discoverers of insulin. But unfortunately, no sooner had they carried out this work, when Europe exploded into the First World War.

Nils: Staffan has suggested to me that we translate another work by Johannsen, a small book, *Falske Analogier* [False Analogies], which in a nutshell provides his historiography of genetics and his philosophy of science—Bacon his hero and Bergson his foe, standing, as Staffan characterized it, for clear thinking and obscurantism respectively. We think such a translation could be an enlightening contribution to proper understanding of Johannsen’s role in the history of genetics.

Neeraja: Offhand, I cannot think of any that would be appropriate for this series. There are some longer book-length works I am thinking about. For now, the work is sporadic and need-based, but if I get enough done, and can find a publisher willing to publish it, maybe I will in the
future. But I would prefer to undertake such an effort with a collaborator, fluent in the language I’m translating from, as was the case with Kersten.

Also I’d like to mention the copious amounts of extra translation that Kersten undertook in order for us to properly contextualize Miescher’s first DNA paper. Some years after Miescher’s death in 1895, his uncle, the renowned anatomist Wilhelm His, published a 2-volume collection of letters that Miescher had written to him and to his parents during the 1860s and 1870s, which gave valuable insights into the young investigator’s state of mind at the time. In addition to translating large chunks of the relevant letters (which we quoted in our commentary) Kersten also undertook some quick translations of scientific papers that were either published along with Miescher’s discovery or shortly thereafter, which also proved mighty useful in contextualizing his discovery.

Scholars whose first language is French have said that a lot of the humor and irony in Michel Foucault’s writings are lost in translation. Have you ever felt that about a primary source; that the original was so beautifully written that translating it might be doing the text a disservice?

Staffan: It is indeed difficult to get across the aesthetic feel of a text in translation. Especially with regard to humor, understanding it often depends on contextual circumstances that cannot be transported with the translation alone. Thus, Wilhelm Johannsen wrote a short preface to the Swedish translation of his book *Falske Analogier*. On the face of it, it was simply a warm thank you for having his book translated. To appreciate the sarcastic undertone, one has to know that reading Danish texts poses no difficulty for Swedish speakers, and that the Swedish were (and still are) known for being convinced of their cultural superiority in relation to their Scandinavian neighbors.

Neeraja: The writings of the French microbiologist André Lwoff, who was a great bilingual writer himself, come to mind. His prose style in English is distinctive and I can only imagine how much more stylish his writings would have been in his native French. So I think it would be difficult to reproduce his panache! Also, since he did, in fact, translate some of his French papers into English, I would be diffident about translating anything he chose not to.

Incidentally, I should add that I like the new trend of publishing the translation in tandem with the original—this way scholars can actually look up the words and decide where they agree with the translator’s interpretation or not.

Nils: I agree that the presentation of a double text with the original and translation side by side, is a very important tool for making translation a more productive research activity. It provides an excellent opening for enlightening comments and information.

Are there any papers or books in other languages that you wish someone would translate so that you could understand and discuss it better?

Staffan: This would be a long list; let me just mention Henri Daudin’s two volumes on eighteenth-century botanical and zoological classifications (1926), published in French and Giulio Barsanti’s *La scala, la mappa, l’albero* (1992) in Italian. I do have enough French and Italian to make use of these, but it is tedious. I particularly regret not having enough knowledge of a Slavic language to make use of Eastern European literature on the history and philosophy of the life sciences. We’re literally cut off from this tradition.

Neeraja: Hesitant as I’ve said I am about translating Lwoff myself, I think it would be fascinating to read his autobiography in English. (I could muddle through the French version, I suppose, but as Staffan said so aptly, it is tedious to do so).
Pnina Abir-Am (Brandeis University) was named the winner of a 2021 SIIA Excel Award in the Diversity and Inclusion Initiatives Features category (Silver) for her article “The Women Who Discovered RNA Splicing” published in the September-October 2020 issue of the American Scientist (Vol. 108, no. 6). An opinion piece by the author about the implications of the journal’s editors to not feature the article on the cover was the cover article in our previous issue (HSS Newsletter, April 2021).

Warwick Anderson (University of Sydney) has been interviewed for the American Historical Association’s Perspectives on History “AHA Member Spotlight” Series.

Patrick Anthony (Vanderbilt University) was the editor for a special issue of Berichte zur Wissenschaftsgeschichte (Volume 44, issue 2) June 2021 on “Working at the Margins: Labor and the Politics of Participation in Natural History, 1700–1830,” with the following articles:

- Plantation Botany: Slavery and the Infrastructure of Government Science in the St. Vincent Botanic Garden, 1765–1820s by J’Nese Williams
- Socrates on the Farm: Agricultural Improvement and Rural Knowledge
- Visible Labour? Productive Forces and Imaginaries of Participation in European Insect Studies, ca. 1680–1810 by Dominik Hünniger
- Natural History as a Family Enterprise: Kinship and Inheritance in Eighteenth-Century Science by Alix Cooper
- Forgotten Botany: The Politics of Knowledge within the Royal Botanical Garden of New Spain by Anna Toledano
- Afterword: Ani Choki, Indian Exploration, and the Work of Invisibility by Tapsi Mathur


Elena Canadelli (University of Padova) was elected president of the Italian Society for the History of Science in February 2021. The Society has just signed an important agreement with the Museo Galileo in Florence in order to enhance and spread the study and knowledge of the history of science in Italy. An on-line early career conference is scheduled for mid-October 2021 and a new website is on its way. Stay tuned!

Kenneth Caneva (Professor emeritus, UNC Greensboro) established a personal website, through which he has made available downloadable a comprehensive bibliography on the conservation of energy, consisting of around 2700 primary sources, counting reprints and translations, covering principally the period 1830–1900.

Ian M. Davis (Universidade de Coimbra) gave an invited talk, “Antoni van Leeuwenhoek: Defining Proportion in the Microscopic Realm,” on 23 June 2021 for the Historical Microscopy Symposium during the World Microbe Forum, a combined virtual conference of the American Microbiological Society and the Federation of European Microbiological Societies.

Luis Campos (University of New Mexico), Michael R. Dietrich (University of Pittsburgh), Tiago Saraiva (Drexel University), and Christian C. Young are pleased to announce the publication of their new multi-author volume: *Nature Remade: Engineering Life, Envisioning Worlds* (University of Chicago Press, 2021). Organized around three themes, the volume charts different means, scales, and consequences of intervening and reimagining nature, and explores the many ways in which “engineering” has firmly taken root in the entangled bank of biology.

Richard A. Duschl (Executive Director, Caruth Institute for Engineering Education in the Lyle School of Engineering at Southern Methodist University and Professor Emeritus, Penn State University) was elected in February 2021 to the National Academy of Education - NAEd in recognition for his many contributions. He is also a recipient of the 2021 NARST Fellow Award.

Nahyan Fancy (DePauw University) was awarded a National Endowment for the Humanities Fellowship (2021-2022) with his project titled “In Ibn al-Nafis’s Shadow: Arabic Medical Commentaries in the PostClassical Period (1200–1520).” He also published “Plague and the Fall of Baghdad (1258),” *Medical History* 65, no. 2 (April 2021): 157-177.

Jim Fleming (Colby College) will become an emeritus professor on September 1 and will begin his “permanent sabbatical.”


Simon Grote (Wellesley College) has received the Dr. Liselotte Kirchner Fellowship from the Francke Foundations in Halle (Saale) for four months of research, beginning in August 2021, on a new project: “Searching for the World-Soul: Experimental Science, Philosophy, and the Bible in the Early German Enlightenment.”

Anita Guerrini (Oregon State University/UC Santa Barbara) delivered the Stillman Drake Lecture, “Galileo among the Giants,” on May 30 to the annual meeting of the Canadian Society for the History and Philosophy of Science. Also, together with Georgina Montgomery (Michigan State University), she organized and edited “Sustainability and the history of scientific environments,” a special issue of *Notes and Records: the Royal Society Journal of the History of Science* (Vol. 75, no. 2) containing the following articles:

- From war zone to biosphere reserve: the Korean DMZ as a scientific landscape, by Lisa M. Brady
- Ant mazes and astronomy: Harlow Shapley’s entomological experiments at Mount Wilson Observatory and Pasadena, California by Emily Simpson
- ‘Never so at home’: Charles Elton and the Woods of Wytham by Georgina M. Montgomery
- ‘An exceedingly simple, little ecosystem’: Devils Hole, endangered species conservation, and scientific environments by Kevin C. Brown
- The Wild Garden: landscaping southern California in the early twentieth century by Anita Guerrini

Bert Hansen (Baruch College of CUNY, Emeritus) recently published “Pasteur’s Lifelong Engagement with the Fine Arts: Uncovering a Scientist’s Passion and Personality,” in the Annals of Science, (online April 29, 2021).

In April 2021 Hans Haubold (United Nations) and Barbara Haubold (International Atomic Energy Agency) remembered the international celebrations that have been held in 1981 in Potsdam, Germany, at the Centenary of Albert Abraham Michelson’s first aether drift experiment performed in Potsdam in 1881.

Ernst Homburg (University of Maastricht, retired) was awarded the John and Martha Morris Award for 2021 for his outstanding work on the history of the chemical industry.

Gerald Holton (Harvard University), emeritus professor of the history of science and a former president of HSS, turned 99 years old on 23 May 2021 and was awarded the 2021 BBVA Foundation Frontiers of Knowledge Award in the Humanities “for articulating the cultural dimension of science and the liberating power of scientific rationality.” Many congratulations to Gerry on this magnificent award and happy birthday as well!

Kim Kleinman (Webster University, Missouri Botanical Garden) has published the eighth paper in a series examining the contributions of Edgar Anderson of the Missouri Botanical Garden to 20th century evolutionary biology: “From Geneticist to the Garden to Senior Botanist: Edgar Anderson and the Study of Plants in the 20th Century,” Annals of the Missouri Botanical Garden, Volume 105, Number 4 (December, 2020), 578-587.

In February, Francesco Luzzini (Max Planck Institute for the History of Science) was awarded an EU-funded Marie Skłodowska-Curie Global Fellowship for his project “SOUNDDEPTH - Sounding the Depths of Providence: Mineral (Re)generation, Natural Resources, and Human-Environment Interaction in the Early Modern Period.” The project is hosted by Johns Hopkins University—where Francesco will carry out his research from 2021-2023 in collaboration with Prof. Lawrence Principe—and by Ca’ Foscari University of Venice (Department of Philosophy and Cultural Heritage) in 2023 where he will work with Prof. Pietro Daniel Omodeo.


Gods and Robots has now been translated into Spanish, Chinese, German, Korean, and Arabic, and her lecture of the same title for the Long Now Foundation on YouTube has more than a million views. Other recent presentations (also delivered remotely) include: “Imagining Robots in Antiquity,” at the University of Massachusetts, Amherst on 4 March, 2021 a lecture on ancient automatons in myth and history, for the Institute for Ethics in Artificial Intelligence colloquium, Oxford, UK, on 11 February 2021, and a workshop on “Ancient Science Fictions,” for Everyday U, Everyday Robots Project, AlphabetX (GoogleX) Moonshot Division, on Nov. 12, 2020. Mayor’s book The Amazons: Lives and Legends of Warrior Women Across the Ancient World (Princeton University Press, 2016) was recently optioned by FreeForm Disney, and she has also given two podcast interviews for National Geographic on the archaeology of ancient women warriors.

Deprived, as most of us are, of the pleasure of delving into archives, David Orenstein (Danforth CTI, Retired) has turned to electronic study and communication. He has been blogging regularly with the Canadian Science and Technology Historical Association (CSTHA), looking at archival resources and the commemoration of special events in the history of Canadian science. He has also produced a pair of blog posts on “Time Zones” for the British Society for the History of Mathematics (BSHM). In addition to attending and promoting the monthly online colloquia of the Canadian Society for the History and Philosophy of Mathematics (CSHPM), he and Michael Barany (University of Edinburgh) debated “The Success of the 1924 Toronto International Mathematical Congress” for the Society’s colloquium series in October 2020. On May 30, 2021, David delivered his paper “A Scientific Centennial: The 1921 Toronto Meeting of the American Association for the Advancement of Science” for the online conference of the Canadian Society for the History and Philosophy of Science (CSHPS).


Mark Solovey (University of Toronto) published *Cold War Social Science: Transnational Entanglements* (Palgrave Macmillan, 2021).

Frank W. Stahnisch (University of Calgary, Alberta, Canada) has received the “Established Scholar Research Award” of the University of Calgary’s Faculty of Arts. Additionally, he recently published *A New Field in Mind—A History of Interdisciplinarity in the Early Brain Sciences* (McGill-Queen’s University Press, 2020).


Carlos Sierra (Universidad Nacional de Colombia) has been involved in the following:

- Conference: Historia de la ciencia y la tecnología: Raíces de la Ciencia (Fondo de Cultura Económica)
- Conference: Historia de la ciencia y la tecnología: La polémica de la ciencia hispana (Fondo de Cultura Económica)
- Conference: La ausencia de pensamiento sistémico en Occidente como obstáculo para capear la pandemia en curso, 5 April 2021
- Conference: Conspiranoia y negacionismo: Obstáculos epistemológicos para un mundo en crisis, 22 February 2021
- Article: La idea de futuro en Cajal (1): *Comarca* (APIAC), No 107
- Article: La idea de futuro en Cajal (2): *Comarca* (APIAC), No 108


Plan Ahead

Future HSS Meetings

2021
New Orleans, LA
November 18–21
SHOT and HSS meeting together

2022
Chicago, IL: November 17–20

2023
Portland, OR: November 9–12
In Memoriam

Frances Kohler
by Robert Kohler

Frances Coulborn Kohler passed away this past February after a gradual decline. She was the first of five children born to Rushton Coulborn and Helen McIntosh Coulborn, who taught comparative history and English literature respectively at Atlanta University, in Atlanta, Georgia. We met and married in 1958 while she was a student at Wellesley College from where she graduated in 1960 with a BA in classical studies. She went on to complete a PhD in comparative literature from Harvard (1973), while simultaneously raising a young family of two boys. Our family moved to Philadelphia in 1973, when I was appointed assistant professor in the University of Pennsylvania’s Department of History and Sociology of Science, newly reconstituted under the leadership of Arnold Thackray.

After several uncertain years of teaching classics at Penn (University of Pennsylvania) and Haverford College, Frances serendipitously entered into what was to be her life’s work, for which she had a singular gift: in literary editing and publication. From 1978-1979 Thackray was engaged in transferring the *Isis* editorship from the Smithsonian Institution to Penn, and in desperate need of expert help in editing manuscripts and getting issues ready for the printer. He approached me, who being no expert, was aghast at my chairman’s request. Frances, just then at a dead end in her academic prospects, reminded me that she was an excellent editor, and why didn’t Arnold talk to her? So it was that from a modest start as emergency copy editor, Frances quickly became full time assistant to the editor, and then managing editor and the creator and head of the expanding publications office of the History of Science Society, where she worked until 1991.

Frances’s special gift as textual editor was her ability to grasp the essential point of what authors were trying to say, and to show them how they could say it more precisely and clearly, without ever interjecting what she herself might do with their subjects. The opportunity to edit a premier scholarly journal freed her, for the first time, to apply and develop that gift in a wide range of topics. She loved to learn and was a quick learner. As an editor she was by universal assent the best—as I well knew from her editing of my own work (I never argued: she was always right.) Some *Isis* authors might have balked, but they almost always ended in gratitude.

Frances’s work in the publications office went well beyond textual editing, however, to encompass the entire process of getting journal issues to the printer: ordering the growing tide of manuscripts, finding appropriate and attractive illustrations, and designing and laying out the final product. She loved the whole process, especially the final layout. She had an eye for graphic design—tasteful, elegant, never showy—and was known and respected by all for the reliably high quality of everything to which she put her hand.

And that “everything” went beyond scholarly publications. HSS was at the time transforming itself from a small and largely volunteer organization focused on *Isis*, to one that was more fully professional in scope and organization. And in this expansion the *Isis* Publications Office was an epicenter of activity: with the revival of *Osiris*, in 1985, enlarging
and greatly improving the *HSS Newsletter*, as well as a range of social activities in news, public relations, fund-raising, and member services—each of which required cogent and good-looking illustrated text. Arnold was fruitful, even profligate, in thinking up new things to do; and Frances, his creative and capable partner, in her calm and orderly way made them happen. Her work as head of the publications office thus came to include much that might have been done in an office of executive secretary but, as yet, was not. The variety suited her. After the office of executive secretary was created in 1987, and the editorship relocated from Penn in 1989, Frances moved with Arnold to build the publications side of the then Chemical Heritage Foundation (now Science History Institute) in the historical district of Philadelphia.

Frances’s exceptional skill in building and managing a complex institution was apparent to all in the quality of what was produced, and in her open participation in HSS activities. Less visible, though no less significant, was her dedication to nurturing human relations among her half dozen or so assistants—the “invisible technicians” who behind the scenes in any organization keep things running. To her staff—most of them young, and many of them women—Frances was not just a boss but a mentor and role model of a professional woman and working wife and mother, of whom there were then still precious few in academia. She went out of her way to encourage younger women to pursue their own life paths, and to give them the know-how and opportunities to explore and navigate the difficult first steps into academic and other careers. Work and life, for Frances, were always one. She is remembered with affection by all she served so willingly and well.

*Robert Kohler is professor emeritus of history and sociology of science at the University of Pennsylvania.*

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Welcome to our new Executive Director!

As we all know from the recent notice that our president Jan Golinski circulated among our members, John Paul Gutierrez has been appointed as the new Executive Director of the HSS. Since JP (as he likes to be called) will only take over after this issue of the HSS Newsletter is put to bed, we will have to wait for the October issue to hear from him about his vision and his plans for HSS. Meanwhile, we extend a warm welcome to JP.

2021-2022 HSS/NASA Fellowship in Aerospace History

The HSS/NASA Fellowship Committee, chaired by Omar Nassim and joined by Emily Margolis and Teasel Muir-Harmony, has selected Rebecca A. Charbonneau as the winner of the 2021-2022 HSS/NASA Fellowship. Ms. Charbonneau is a Gates Cambridge Scholar in the Department of History and Philosophy of Science at the University of Cambridge; Richard Staley is her supervisor. Her project, “Dealing with the World”: Conflict and Cooperation in Ground-Based Space Infrastructure,” addresses scientific internationalism during the Cold War, with an emphasis on international collaboration in radio astronomy between the US and USSR as a major point of inquiry. She focuses on the institutional and individual dimensions of scientific freedom under stress and highlights the role of transnational science as an instrument of both democracy and imperialism.

HSS Election Results

We are pleased to announce the outcome of the 2021 election. First, we wish to thank the Nominating Committee, co-chaired by Elaine Leong and Hannah Marcus, and who were joined by Myrna Perez Sheldon, Marie Thébaud-Sorger, and Charlotte Bigg. We are grateful for the many hours that they devoted to this most-important process. We received over 340 votes (25% of the membership), a percentage that is about 5 points higher than a typical election. We also wish to thank those who agreed to run and who were not elected. It takes courage to put one’s name out there, and we are grateful for that courage.

Council 2022-2024

Monica Azzolini
Rebekah Higgitt
Terence Keel
Alisha Rankin
Harun Küçük

Nominating Committee 2021-2023

Jaipreet Virdi
Victor Seow

Council Delegate 2021-2022

Helen Anne Curry

Vice President (President elect) 2022-2023

Evelynn M. Hammonds
HSS 2021 Sarton Medal

Bernadette Bensaude-Vincent, Professor Emerita in the History of Science and Technology and in Epistemology at the Université de Paris 1—Panthéon-Sorbonne is the recipient of the History of Science Society’s 2021 Sarton Medal, awarded annually to an outstanding historian of science, selected from the international scholarly community. The medal honors a scholar for lifetime scholarly achievement.

Over more than forty years, Professor Bensaude-Vincent has been a highly original and influential scholar who has integrated philosophical and sociological perspectives with historical analyses of scientific ideas, practices, and technologies. Her approach is rooted in a long tradition of French scholarship that is philosophically astute and politically insightful. Her methods and achievements are exemplified in books such as her Paul Langevin: Science et vigilance (1987); Lavoisier, mémoires d’une révolution (1993); History of Chemistry (with I. Stengers, English translation, 1996); Chemistry: The Impure Science (with J. Simon, 2008); and Carbone (with S. Loeve, 2018). Professor Bensaude-Vincent has authored or co-authored at least sixteen books and edited or co-edited another sixteen volumes, including editions of primary texts. About half of her 120 research articles and essays have appeared in English, including in the history of science journals Isis, Annals of Science, and British Journal for the History of Science.

In both her work on the physicist Langevin and on the chemist Antoine Lavoisier, Bensaude-Vincent’s aim is to replace hagiography, at the boundary of memory and history, with critical narrative and analysis that deconstructs the origin and perpetuation of mythic histories and biographies. In their History of Chemistry, Bensaude-Vincent and Isabelle Stengers move away from triumphalist history toward an account of the construction of scientific knowledge which de-emphasizes heroic discovery in favor of the history of the professions as well as the history of ideas. In Chemistry: The Impure Science, co-authored with Jonathan Simon, she reiterates earlier insights into the categories of “artificial” and “natural,” by way of arguing that the dual essential nature of the chemical sciences is the active production of manufactured objects as well as experience-and-theory based knowledge—in that way less than “pure.” Bensaude-Vincent and Simon extend the notion of impurity to harmful effects that pose ecological, ethical, and political dilemmas. These themes of impure science, technoscience, constructed scientific objects, and science without borders come together in Bensaude-Vincent and Sacha Loeve’s book Carbone, a kind of poetic-philosophical biography of the chemical element Carbon, from the beginnings of life on earth to the threat of global warming.

Bensaude-Vincent’s work is uniquely original and also highly collaborative, including joint projects with colleagues in France, the USA, Germany, and elsewhere. She has directed more than twenty doctoral dissertations at the Université de Paris Nanterre and the Université de Paris 1, often co-authoring publications with students and helping launch careers of younger scholars. Teaching and lecturing positions have taken her to Barcelona, Madrid, Vienna, Bielefeld, and elsewhere, recently including fellowships at the Science History Institute in Philadelphia and the Huntington Library in Pasadena. Bensaude-Vincent is a Chevalière of the Légion d’honneur and a recipient of several other major prizes, as well as an honorary doctorate at the University of Lisbon.
Professor Bernadette Bensaude-Vincent is an engaged intellectual not only in her academic scholarship, teaching, and service but also in speaking to the challenges of the scientific and technological enterprise for the present and future of our society. The 2021 Sarton Medal will be awarded to Professor Bensaude-Vincent during the annual meeting of the History of Science Society in New Orleans, 18-21 November 2021.

Mohandas Towne, Student, history of science

An HSS@Work Career Profile

I came to the history of science via an odd path. When I was young, all I cared about was learning. I collected textbooks on just about any subject and was absolutely certain that I would someday have a PhD. What exactly I might study to achieve that lofty goal changed from year to year, but I was sure that I would get there. Unfortunately, the real world did not live up to my expectations. It became apparent soon after high school that I simply couldn’t afford to go to college. I had many people suggest that I go to community college or take out loans, but as it turns out, when you have to work two or three jobs to make rent and groceries, you simply don’t have time for school, and at that time, lacking a degree it was very difficult to get a job that paid better than minimum wage.

Life continued along like that for years, and I began to forget about my childhood ambitions. Then, in 2006, I was introduced to the world of competitive lockpicking. I had never picked a lock prior to that and had no interest in the subject. However, at a “Hackers On Planet Earth” conference I attended in 2006, I happened to meet one of the best lockpickers in the world. He not only taught me how to pick locks but invited me out to the Dutch Open of lockpicking later that year. I won half of my head-to-head matches, shocking no one more so than myself. It turned out I had a knack for it and won the speed-picking competition at the American Open the following year. I soon gained enough of a reputation that I was offered a contract to write a book about lockpicking. While writing a brief introduction on the history of the lock, I found myself regurgitating the history I had been taught, when I suddenly thought “this doesn’t seem right” and decided to do some research. Ultimately, I didn’t finish the book because I spent three years writing a paper positing a new theory for the origin of the lock.

That process was difficult to say the least. Lacking any institutional affiliation, I had to beg and borrow access to journals and other texts and collections from my friends. I once got the library at the University of Vermont locked out of JSTOR for an hour because I had shown up with a long list and an external hard drive and apparently pulled down articles too quickly. Early on in my obsession, I realized that while gaining access to academic publications was incredibly difficult, gaining access to the academics themselves wasn’t so hard. I got into the habit of just reaching out directly with questions, requests for feedback on my work, etc. and was met with enthusiasm, kindness, and advice.

Around that time, I learned about the Ronin Institute, an organization that had very recently gotten off the ground with the express goal of bringing together independent academics. I emailed the founder with the subject line “I am a barista and also an independent academic.” After some vetting, I suddenly found myself part of a community of scholarship for the first time. Not long after joining the Ronin Institute, I learned about the History of Science Society.
when an acquaintance took me out to lunch to discuss my research and what I wanted to do next. He made it very clear to me that there was a place for me in HSS.

I spent a few years giving lectures and workshops across the country, often at colleges and universities I would have loved to attend. Being a stranger in the halls of academia, just visiting for a moment before I was off to my next talk, wore on me.

The final piece of my journey from deserted dreams to serious scholarship came when the company I work for, Starbucks, announced they would pay for the first bachelor’s degree of any employee through a partnership with Arizona State University. I applied to the anthropology program, as I wanted to gain new perspectives and methodologies to apply to the history of security technologies. Attending college for the first time in my 30s has been incredible for two reasons. First, I was able to fill many gaps in my knowledge. As an autodidact it is difficult to know what you don’t know. Second, I suddenly had access to ASU’s library. Aside from my wife and daughter there is nothing that has improved my life more than having consistent access to an academic library. My output since beginning my bachelor’s degree has increased in both volume and rigor.

While it is unlikely that I will ever have the opportunity to complete a PhD, I now feel like I am living out the dream of my childhood self. This winding path has left me with an appreciation for open access journals and an undying love of libraries. I have always wanted to contribute to the sum of human knowledge, but I haven’t always had access to the resources I needed to accomplish that. As a member of the HSS@Work caucus, I only hope that I can be of some use to other scholars working outside of academia, as I have received a great deal of support and kindness in my own history that needs to be paid forward.

JSTOR for HSS Members

In its strategic plan, HSS identified professional development as one of our six goals. Specifically, the Society is focusing on supporting the “professional development of emerging history of science scholars in and outside the academy.” One of the ways in which the HSS can help our members advance their research and teaching is to facilitate access to the literature, and we are pleased to work with JSTOR to offer a 50% savings on a one-year JPASS subscription for members (regularly $199). JPASS, available as monthly or yearly plans, allows you to read whatever journal article you like and enjoy up to 120 PDF downloads a year from the JSTOR archive, an archive with over 7 million articles from 2 thousand journals (including Isis and Osiris), representing some 50 academic disciplines.

In addition to past issues of Isis and Osiris, members may find the following journals of particular interest:

• The British Journal for the History of Science
• Journal of the History of Medicine and Allied Sciences
• Science Progress
• Science, Technology, & Human Values

JSTOR adds new titles to JPASS every month so you’ll have a growing collection of the world’s leading scholarly journals only a click away. Sign up here.
This month I want to talk about how publishing the annual *Isis* Bibliography has opened doors to a relatively new form of academic essay production that is still experimental for most of us: namely, open peer review. It is a practice that is becoming more widely accepted in the sciences, so I think it is worth considering whether and when this form of review might be relevant for history of science.

When HSS first gave me the go-ahead to publish peer-reviewed bibliographical essays in 2018, the technical capabilities that I already had at my disposal gave me a lot of flexibility in the way that I produced them. The peer reviews of the first two bibliographic essays were managed in the normal way. In both cases, the *Isis* journal editor at the time (first Floris Cohen and then Matt Lavine) commissioned the reviews for me.

When it came to the special issue on pandemics, however, it quickly became evident that a different approach was in order. Right from the outset, my co-editor Neeraja Sankaran and I decided that we wanted rapid publication of the essays online. The exigencies of the COVID-19 pandemic made it clear that teachers and researchers might be wanting these bibliographies right away. So we took a page from the handbook of the COVID researchers themselves who were working collaboratively all over the world, sharing results as they wrote them up, many of them using public peer review. I turned to the Wellcome Open Research platform as a model because it seemed especially straightforward.


**STATUS: ACCEPTED**

An example of how different versions of the essay, bibliographies and peer reviews will continue to be made available online.
In open peer review, all versions of an essay and all reviews of essays are available for any reader to access. In addition to rapid publication, the open review model is ideal for highlighting multiple perspectives. As the essays work their way from first submission through final revision, readers can watch the essays develop and explore the scholarly conversation that ensues. Reading the review reports and author responses, one learns a lot more about the field than reading the essays alone. The final printed volume will not contain the peer reviews, but all of the documents will be preserved so that one can always go back to read them.

There are, of course, potential downsides to this practice. Initially, when we talked about it with our advisory board, some of the board members worried that publishing peer-reviews would not work because they would be either professionally damaging—because the criticism might undermine a scholar’s work—or worthless—because reviewers would not be honest about their criticisms. Indeed, we wondered whether anyone—authors or reviewers—would take us up on the deal, some of them despite anticipating contention. Along the way, we realized that some discussion had to be done privately over email between editors, authors, and reviewers. Not everything could or should be part of the public record. Indeed, we explain this to reviewers as well when we tell them “You may also include, in addition, a more detailed report directed only to the authors if there are things you would like to indicate that you would prefer not be part of a public commentary.” On the whole, however, we have published nearly everything that we’ve been sent and have encouraged authors and reviewers to find ways to present their criticisms in constructive ways.

The bibliographic essay format seems to me to be a perfect venue for this kind of peer review. These essays are short (with a few exceptions), and their explanatory nature gives readers a sense of the literature. Some of the essays highlight historiographic differences, and serious disagreements do sometimes occur. By allowing those disagreements to reach the public, however, people new to these areas can better understand what the intellectual stakes are. While open review might not be suitable for all kinds of publication, I can say from my experience with this issue so far that it shows great promise.

Here’s what we say to reviewers:

Our goal is to have a constructive and open review process that will help the authors develop a strong bibliographical essay that other researchers can use to better understand the literature on this topic. Primarily, we need a public comment on the article that will help the authors strengthen it for publication.

As it turned out, although there was some initial hesitation, over twenty authors and roughly twice as many reviewers took us up on the deal, some of them despite anticipating contention.
News from the Profession

Science History Institute Receives CLIR Grant

The Science History Institute has been awarded a $198,454 grant from the Council on Library and Information Resources (CLIR) for the project Science and Survival: Digitizing the Papers of Georg and Max Bredig. Smuggled out of Nazi Germany, these documents tell the story of this noted German Jewish scientist’s rise to prominence and his family’s struggle to survive the Holocaust. More information about this award may be seen at the Institute’s website: https://www.sciencehistory.org/news/bredig-clir-grant

NEH Makes over 200 Awards in the Humanities

In April 2021, the National Endowment for the Humanities (NEH), announced $24 million in grants for 225 humanities projects across the country. The following projects may be of interest to HSS members:

- Julia Bursten, University of Kentucky Research Foundation. $6,000 [Summer Stipends] for “Making Knowledge: Synthesis and the Aims of Science” aimed at the research and writing of a book about how the study of nanotechnology contributes to the philosophy of science.
- Western New England University, $34,989 [Humanities Connections Planning Grants] for “Interdisciplinary Ethics Training for Students in the Biosciences,” a one-year planning grant to develop an ethics certificate program for students in the biosciences, under project director Valerie Racine.
- Alcorn State University, $35,000 [Humanities Connections Planning Grants] for “Teaching Scholarly and Popular Science Writing through Field Research in Mycology,” a one-year planning grant to develop a science-writing curriculum, under project director Logan Wiedenfeld.
- Joanna Wuest, Princeton University, $6,000 [Summer Stipends] for “Science, Citizenship, and Inequality in the LGBTQ+ Movement,” aimed at writing a book on the influence of scientific concepts of LGBTQ identity on policy debates.
- Para la Naturaleza, Inc., San Juan, Puerto Rico, $290,750 [Exhibitions: Implementation] for “Flora Borinqueniana: Three Centuries of Botanical Illustration” aimed at the implementation of a traveling exhibition on the history, science, and politics of botanical illustrations of Puerto Rican flora, under project director Ivonne Sanabria.
- University of Tennessee, Knoxville, $35,000 [Humanities Connections Planning Grants] for “Designing a Humanistic Computing Curriculum,” aimed at planning a humanistic computing curriculum integrating the humanities and computer science, under project director Amy Elias.
- Maddalena Rumor, Case Western Reserve University, [Summer Stipends] for “Dreckapotheke” in Ancient Mesopotamia and the Graeco-Roman World. Description,” with the aim of research and writing a book about how ancient Mesopotamian medical knowledge influenced later Greco-Roman scholars.
- Swati Srivastava, Purdue University, [Summer Stipends] for “Algorithmic Empires: The Political and Ethical Implications of Data Extraction by Technology Companies,” aimed at writing two chapters for a book on the development and use of algorithms by big technology companies.
- Peter Runge, Northern Arizona University, [Humanities Collections and Reference Resources] for “Digitizing the Moving Images of the Colorado Plateau and the American Southwest” proposing the digitization of 400 rare and unique moving images documenting
the human and natural history of the Colorado Plateau and the American Southwest, which would be made accessible through the Colorado Plateau Digital Archives at Northern Arizona University. The library would work with the Hopi Tribe, the Hualapai Tribe, and the Dine College on the Navajo Nation to digitize and create access to additional films that are held by these partners.

- Chantal Frankenbach, University of California, Sacramento, [Summer Stipends] for “Isadora Duncan and the Popularization of Race Hygiene and Eugenics in Pre-War Germany, 1902-1905” to do research and write a book about American modern dancer Isadora Duncan (1877-1927), her early career in Germany (1902-1905) and on pre-World War I German culture and politics.

- Michael McDuffie, University of California, San Marcos, [Humanities Connections Planning Grants Humanities General Education] for “A Pathway in Philosophy of Engineering Majors” to plan a general education curriculum pathway in philosophy for students enrolled in engineering degree programs.

**Mellon/ACLS Dissertation Completion Fellowships**

Thanks to a generous grant from The Andrew W. Mellon Foundation, the Mellon/ACLS Dissertation Completion Fellowships support a year of research and writing to help advanced graduate students in the humanities and social sciences in the last year of PhD dissertation writing. Now in its fifteenth year, the program has supported over 1,000 promising emerging scholars. The following projects may be of interest to HSS members:

**Kathleen M. Burns** | Doctoral Candidate, English, Duke University—*Vegetal Forms: How Plants Cultivate Life in Literature and Science*

**Tara Suri** | Doctoral Candidate, History, Princeton University—*Selling Simians: Science, Empire, and the Borders of the Human in South Asia, 1925–1983*

**UNAM Seminar series launched**

The National Autonomous University of Mexico (UNAM) authorities launched their seminar series on history, philosophy, and studies of sciences and medicine (Seminario Universitario de Historia, Filosofía y Estudios de las Ciencias y la Medicina, SUHFECIM) on April 15, 2021. Coordinated by Ana Barahona, the series aims to make visible and institutionalize the reflection on science and medicine, produce new knowledge about these areas’ history and philosophy, and increase the dissemination and extension of knowledge to society to face the challenges of our time. It will be a space where discussions and studies are encouraged and enriched, necessary and relevant above all in moments like those we live in.

**New online Omeka exhibit on stigma at the Oskar Diethelm Library**

The Oskar Diethelm Library part of the DeWitt Wallace Institute of Psychiatry: History, Policy, & the Arts at Weill Cornell Medical College, is pleased to announce the release of a new exhibit on stigma. Made possible through the wonderful curation and assistance of Jaina Shaw, who completed her Advanced Certification
in Archives and Records Management at the Palmer School at Long Island University in December of 2020, the exhibit focuses on the works of Erving Goffman and feature items from the collection, such as the library’s 1492 copy of *Malleus Maleficarum*, which describes how to identify witches and people with witches’ marks similar to stigmata, and advertisements on asylum tourism in 19th century New York. In addition, the library recently updated its book catalog, and has continued to add many new finding aids to the [Empire Archival Discovery Cooperative](https://www.eparc.org/). Last but not least, the Richardson History of Psychiatry Research Seminars recorded through Zoom over the past year can be viewed online. To attend the seminars, please contact Dr. Megan Wolff at mew2008@med.cornell.edu.

**Da Vinci in Berlin**

What works did Leonardo da Vinci read? What knowledge did he possess when he set out on his own studies? The Max Planck Institute for the History of Science (MPIWG) along with the Museo Galileo and the Staatsbibliothek zu Berlin organized *Leonardo’s Intellectual Cosmos*, an exhibit which was on view at the Staatsbibliothek zu Berlin from May 11 to June 28, 2021. The exhibit offered a new look and new insights into Leonardo da Vinci, one of the most fascinating historical figures to date. The re-creation of his library and how it developed over the course of his life offers a new perspective, showing Leonardo as an intellectual who strove to see the connections between the microcosm and macrocosm in all aspects of nature and human existence. Since his own library is lost, the exhibition presents comparable contemporary works made available by various Berlin libraries. In addition to books, visitors can also see various objects that provide a unique insight into Leonardo’s working environment and the world in which he lived.

**JAS-Bio 2021 “at” Philadelphia**

Personal and lively despite its virtual format, the delayed 55th annual Joint Atlantic Seminar in the History of Biology was held April 9-10, 2021. Organized by Susan Lindee and colleagues at the University of Pennsylvania, and with the help of Babak Ashrafi and staff at the Consortium for the History of Science, Technology and Medicine, the meeting came close to its usual in-person conviviality. All speakers slated by Sharon Kingsland at Johns Hopkins University for the cancelled April 2020 meeting were invited back, and some new participants were added for 2021. Topics were wide ranging and provocative, with stimulating sessions on Darwin and evolution, environmental sciences, extinction, animals as research subjects, stress and the human mind, and biological ideas about race. The Consortium’s web access permitted the 22 presenters to upload talks a week early for viewing, and they were kept up online for one week afterward. Our enthusiastic discussions reflected the promise of the new work.

Recent PhDs and current students usually come to JAS-BIO from institutions in the Northeastern US, but due to the virtual format this year’s seminar included presenters from the University of Queensland, University of Copenhagen, University of California, San Diego, and University of Chicago. Faculty participants were also broader than usual, with participants in New Mexico, Michigan, Ohio and other places. Among the special pleasures was welcoming Polly Winsor back to the JAS.

Winsor, who had been involved in the seminar since its earliest days, had not traveled from Toronto to the meetings in many years. The chance to hear so many exciting papers by junior scholars reminded her of why the meeting is so special. She told me after the meeting “It made me excited about the future of our discipline.”
Next year’s Joint Atlantic Seminar (probably not virtual?) will be hosted by Janet Browne at Harvard University and Robin Scheffler at the Massachusetts Institute of Technology.

This report was provided by meeting organizer M. Susan Lindee (University of Pennsylvania).

The Midwest Junto Goes Virtual

The Midwest Junto for the History of Science convened its first-ever virtual meeting on April 24, 2021. This online event marked a return to form for America’s oldest regional history of science organization, whose 2020 meeting was cancelled due to the coronavirus pandemic. While the Junto’s leadership team had hoped that the increasing availability of COVID-19 vaccines might facilitate an in-person conference, they ultimately decided to err on the side of caution by hosting the entire event on Zoom.

Teleconferencing software could not fully replicate the informal atmosphere of previous Junto meetings, but it enabled people who might otherwise be unable to travel with the opportunity to participate in a full day’s worth of presentations. The program began with a series of talks exploring the history of science in higher education. The remainder of the morning was divided between two sessions exploring the history of medicine and the life sciences, which considered earthquakes and disease in the early modern Atlantic world, the origins of Robert Koch’s eponymous postulates, and endocrinology in 19th-century France.

Following a brief lunch break, the Junto held its annual business meeting and selected officers for the coming academic year, listed at the bottom of this page. The business meeting concluded with a group photograph, and then it was time for the afternoon sessions.

After a full day of presentations, Junto participants were given some time to mingle with colleagues or step away from their screens for a few minutes before the Stuart Pierson Memorial Lecture. Our speakers, Leila McNeil and Anna Reser, are the founders and editors-in-chief of Lady Science, an online magazine devoted to women and gender in the history of science. Their presentation focused on their new book, Forces of Nature: The Women Who Changed Science (Frances Lincoln, 2021), which seeks to move beyond extolling “female firsts” toward a broader appreciation of how women have shaped our knowledge of the natural world.

The 2021 Midwest Junto confirmed the benefits of embracing new technologies to facilitate access to academic conferences, as well as the logistical challenges associated with virtual programming. The Junto officers will certainly reflect upon this year’s experiences as they consider how to make next year’s meeting at Iowa State University accessible to broader audiences. Further updates about the 2022 Junto and the programs from previous meetings can be found on the Junto website.

This report was provided by Benjamin Gross, Vice President for Research and Scholarship, Linda Hall Library for Science, Engineering & Technology
From Our Readers

An Open Letter to Members of HSS

from Jaipreet Virdi, University of Delaware

The COVID-19 pandemic has changed the way we host conferences and teach our classes. The virtual Zoom World has replaced lecture halls and event stages, and frustrations with excessive screen time notwithstanding, these virtual events have made scholarship accessible in ways that they have not always been before COVID-19. Space has been made for scholars who have long struggled to participate in academic and public events, notably those whose disabled body-minds cannot work under the conventional standards of academia.

One thing that has been consistently, universally learned in this pandemic, is that access is only made possible when it benefits able-bodied workers. Disabled people have long campaigned for remote access to work and learning, but have routinely been denied for reasons of impracticability and expense. Yet COVID-19 brought unprecedented accommodations, enabling disabled scholars and those regularly excluded from academic spaces to benefit and thrive from this access. But not all digital spaces are equitable. Disabled people will be the first to tell you the toll that expectations for “normal” labor performance can have on your body-minds. This “new digital normal” in which we are expected to persevere has exacerbated accessibility challenges that also reflect existing socio-economic, racial, and gender disparities: we regularly refer to “zoom fatigue,” the increased hours spent staring at a screen which results in physiological and mental drainage; we observe spaces that are meant to be accessible, but fail to provide accommodations; and we are becoming increasingly aware of how people of color, especially women, are targeted and doxed by digital trolls.

Crip time requires us to reimagine our expectations of what we can do, and should be expected to do, within a given time; it requires us to rethink about how our expectations of “normalcy” can severely harm or restrict our body-minds. Rather than expecting our body-minds to meet the clock, crip time bends the clock to meet our body-minds. In the Zoom World, most of us operate on crip time. But as Shew explains, the bitter irony is that as disabled hacks and accessible infrastructures have been normalized, we are still in a pandemic in which disabled people are dying from COVID-19 in far greater numbers. Disabled scholar-activists also predict that Long COVID-19 will create the largest group of disabled people since the polio epidemics of the mid-20th century.

I bring this matter to your attention because as vaccination rates increase in the United States and parts of the Global North, we are expected to persevere in our “new normal,” but there is nothing normal, nor sustainable, about working and living through a pandemic. The worsening COVID-19 situation in the Global South has highlighted social, racial, and class disparities, including those within academia. It is difficult to prepare for a “normal” fall semester or organize a conference, when my colleagues in India are losing family and co-workers to COVID-19. As we in the Global North shift towards vaccinated, in-person, spaces, I hope that we do not forget the lessons of the pandemic—particularly the importance of accommodations. We have made significant gains with creating virtual events that can serve as a model for our future collegial spaces, especially for hybrid conferences. In the past year, for instance, I have experimented and tested closed captioning applications for virtual events and shared the report with several organizations and universities. The document, which I update regularly, is available here on the HSS website for anyone to consult. Moreover, disabled scholar-activists have shared documents on accessibility, including the Critical Design Lab’s protocols for disability justice-centered work and teaching, and guidelines by the advocacy organization Rooted in Rights. Let us all work together to widen the circle of scholarship.