

## **NEWS**

Published three times annually by the American Economic Association's Committee on the Status of Women in the Economics Profession.

2015 ISSUE III

### **IN THIS ISSUE**

### **Feature Section**

**Ethical Issues in Economics** 

Research, Part II
Introduction by Amalia Miller and
Ragan Petrie
Get Credit Where It's Due by Daniel
Hamermesh
How Transparent Is Economics
Research by Edward Miguel 5
Incentivize Replications, Pre-Analysis
Plans Can Wait by Lucas Coffman &
Muriel Niederle 6
Why We Watch Retractions by Adam
Marcus & Ivan Oransky

### **Analysis**

Looking for Women on the AEA
Program by Rosemary Cunningham
& Madeline Zavodny . . . . . . . 1, 9

### From the CSWEP Chair

Chair's Letter				
by Marjorie B. McElroy				2

### **Tributes & Commendations**

*Interview of Hilary Hoynes* by Diane Whitmore Schanzenbach . . . 1, 14

### CSWEP @ AEA/ASSA Meeting

Event Schedule
Women Economists & the Media Roundtable12
Paper Sessions
Mentoring Breakfasts
Nursing Room14
Business Meeting

### **Calls & Announcements**

WEAI Call for Papers 1	4
2017 AEA/ASSA Call1	4
Summer Fellows & Haworth Mentoring Fund	4
EEA, MEA 2016 Sessions	

## An Interview with Bell Award Recipient Hilary W. Hoynes

Hilary Williamson Hoynes, Haas Distinguished Chair in Economic Disparities and Professor of Economics and Public Policy at the University of California, Berkeley, is the 2014 recipient of the Carolyn Shaw Bell Award. The Bell award is given annually by CSWEP to an individual who has furthered the status of women in economics through example, achievements, increasing our understanding of how women can advance in the economics profession and the mentoring of others.

Hoynes has a broad research agenda in the economics of tax and transfer programs on low-income populations, with deep expertise in the Earned Income Tax Credit, cash welfare program and food stamps. She has written over 40 articles, with publications in top general interest and field journals, including the American Economic Review, Econometrica, American Economic Journal:

### Diane Whitmore Schanzenbach



Applied Economics, Review of Economics and Statistics, Journal of Labor Economics, Journal of Public Economics and Journal of Human Resources, among others. She has a strong record of service to the profession. She currently serves as Co-Editor of the American Economic

continues on page 14

### Rosemary Cunningham & Madeline Zavodny

## Looking for Women on the AEA Program

Being on the American Economic Association (AEA) program at the annual meeting gives economists high-profile exposure within the profession. Authors can also receive valuable feedback on their research. Concern about underrepresentation of women and of research related to women on the AEA program motivated CSWEP to begin organizing sessions at the annual meetings

in 1974. CSWEP currently organizes six sessions for the meetings, three of which usually concern topics related to gender. Since papers in CSWEP sessions typically have at least one female author (junior men can present sole-authored papers in gender-related CSWEP sessions), CSWEP sessions may offer an important way for women to be on the program. This article examines the

continues on page 9

### **About the Authors**





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### Marjorie B. McElroy

### From the Chair

### The Big News

First, after 4.5 years I am more than delighted to announce that Shelly Lundberg will be the next Chair of CSWEP. A distinguished economist needing little introduction, Shelly holds the Leonard Broom Endowed Chair in Demography at the University of California, Santa Barbara. Pending AEA approval, she will take the reins on July 1. Shelly will be an outstanding and innovative Chair. Together with Margaret Levenstein (Associate Chair and Director of the Survey) and Terra McKinnish (Associate Chair and Director of Mentoring), Shelly's leadership will ensure that CSWEP continues to ever more fully carry out its mission to promote the careers of women in the economics profession and to monitor their progress.

Second, Janet M. Currie won the 2015 Carolyn Shaw Bell Award. Janet is the Henry Putnam Professor of Economics and Public Affairs and department chair at Princeton University. The award presentation and celebration of mentoring as an integral part of an exemplary career will take place during CSWEP's Annual Business Meeting (January 3, 12:30PM).

*Third,* in partnership with CSWEP, the AEA will host a room for nursing mothers attending the 2016 Meetings (see page 13 for more details) and advocate for similar accommodations at other meetings.

Fourth, CSWEP has again spawned a new mentoring event at the AEA/ASSA Meetings. One breakfast, two breakfasts, three breakfasts, four? No! The fourth event will be an afternoon Panel Discussion (January 4, 2:30PM). Partly in response to infamous media slights of Anne Case, Claudia Goldin, Janet Yellen and others, Diane Whitmore Schanzenbach has put together Who's Doing the Talking: Women Economists and the Media. Diane will moderate a discussion with three well-known economists and two writers (Forbes, the Washington Post and Vox). For details see page 12.

More generally we are hatching future events on the theme of owning your own impact on the profession. Send your ideas, comments and offers of resources and help to Shelly (!) & Diane via cswep@econ.duke.edu.

In this vein, in this issue's focus, Dan Hamermesh writes on how to get credit for your research, one of four articles in the conclusion to our series on *Ethical Issues in Economics Research*. Organized by Amalia Miller and Ragan Petrie, additional articles discuss transparency in research; the relationship between pre-analysis, substitute studies and replicability; and the balance between the

penalties for retracting honest errors and optimal retraction rates. I encourage you to circulate this feature to your students and colleagues.

Are you going to San Francisco? The spread starting on page 12 covers CSWEP events at the 2016 AEA/ASSA Meetings. Here I simply note that as compared to last year, submissions to CSWEP's paper sessions more than doubled. A big thanks to all of the CSWEP Liaisons who promoted this opportunity and a special thanks to members of the selection committees: Kevin Lang and Madeline Zavodny (gender) and Amalia Miller and Ragan Petrie (public economics).

Any doubts about the importance of these paper sessions? Analysis in this issue by Rosemary Cunningham and Madeline Zavodny of women's representation on the AEA Program over the last year, reveals that a sizeable share derives from CSWEP-sponsored sessions.

The 2016 CeMENT Mentoring Workshop for Faculty in Doctoral Programs follows immediately after the AEA/ASSA Meetings. Shown to be effective, these workshops have been emulated by other disciplines and in other countries. While now offered annually, the Workshop remains oversubscribed. This marks the second year of Kosali Simon's excellent directorship. Thanks to Kosali and the 16 mentors who will sacrifice their vacation time to share their expertise with 40 mentees.

Applications are open to senior graduate students and faculty for the Economics Summer Fellows Program. Stay up to date on many other opportunities with a free digital subscription to the CSWEP News.

I'll close with this invitation to all CSWEP events at the Meetings and especially encourage friends and colleagues of Professor Currie to join the celebration of her Bell Award at the Business Meeting. Note that preregistration is required for this event as well as for the three mentoring breakfasts and the panel discussion.

Peace and joy to you and I'll hope to see you at CSWEP Events in San Francisco.

-Marjorie B. McElroy

#### Note

 Don't be silly, the Meetings only last three days! Here's the history. One mentoring breakfast in 2013 (inaugural breakfast for mentoring Junior Economists), two in 2014 (added a second one for juniors), and three in 2015 (added a peermentoring breakfast for mid-career economists).



### Ethical Issues in Economics Research, Part II

### **Amalia Miller & Ragan Petrie**

This is the second in a pair of issues of the CSWEP News addressing "Ethical Issues in Economics Research" with contributed articles from individuals representing different perspectives on the topic of how to ensure integrity in economics research and publication. The first part, published in Issue II 2015, focused on the role of journals and granting agencies in ensuring integrity in the research and review processes. In this issue, we solicited three contributions from established economists and one from outside of the profession.

The first article, by Daniel Hamermesh, covers the topic of intellectual property in economics research and addresses the question of how to "get credit" for original contributions. Hamermesh writes that people "rarely steal ideas." This is encouraging, but not enough to ensure that good work will always receive appropriate credit. In the article, Hamermesh provides 12 specific pieces of advice, with the first nine related to getting credit and the final three related to the equally important practice of giving credit. These are useful practical tips, and the emphasis on original contributions should be a guiding principle for researchers.

In the next article, Edward Miguel discusses the importance of transparency and openness in economics research. He provides context for the concerns that biases in the research and publication processes—including "publication bias" and "specification searching"—might lead to spurious empirical results being accepted in the literature. He then discusses new tools to address these concerns, focusing on public registration of empirical studies and submission of pre-analysis plans.

The article by Lucas Coffman and Muriel Niederle similarly addresses the concern of spurious results and failures of replication in the social sciences, noting the widely-publicized recent efforts led by Brian Nosek in psychology that failed to replicate 61 out of 100 important published results. The authors then discuss the strengths and weaknesses of pre-analysis plans as a solution to the problem of "false positive" publications and argue that even rigorous and restrictive plans may be an incomplete solution. They present replication studies as a more robust solution (in their model, even when replicators are biased) and propose two changes in our profession to encourage more replication work: valuing the work and providing publication outlets for it.

As computing tools continue to improve, and as the quantity and impact of published research in economics continues to grow, ensuring the quality and reliability of that work will remain a pressing challenge for the profession. Pre-analysis plans and replication studies may both become more common. The discussion in these two articles should provide helpful background to new researchers as they design and implement studies and navigate the evolving requirements of grant agencies and journals.

The final article in this issue is a contribution from the editors behind the *Retraction Watch* blog (http://retractionwatch. com/), Adam Marcus and Ivan Oransky. In it, they discuss starting their project in the midst of a period of rapid growth in retractions of published articles, what they call the "nuclear option" of scientific self-correction. The authors argue that retractions reflect (at least in part) a success of science because they show that researchers are paying attention and willing to make corrections; in fact, the authors want to encourage more researchers to retract their own papers if they uncover honest mistakes. They briefly mention the low retraction rate in economics and discuss the effects of retractions on authors, citing research that the career penalties are limited to cases involving fraud and misconduct.

### Get Credit Where It's Due

### Daniel S. Hamermesh

Priority is central in the "hard sciences"—simultaneous discoveries are fine, but being viewed as second gets a scholar very little (as James Watson demonstrates in The Double Helix). Economics isn't much different. So how does one increase the odds of being viewed as "first" in the Internet Age—how does one "get credit" for one's original work?

- I. Most important, don't sit on your work. Too many junior economists (and many seniors too) hesitate about completing an initial draft of their work for fear that it will contain mistakes. Even most finished products contain errors of commission (usually very minor), and all contain errors of omission—important extensions/modifications that might have been made. But so long as the basic, novel idea is generally correct, it's crucial to put your work out as a draft to assert priority.
- 2. Perhaps the most important components of the first complete draft—the characteristics that will grab potential readers' attention and cement the priority of your work in their minds are the title and the abstract. The title should brief, but should indicate the novelty of the work. Do not use ": Evidence from ..." or "A Note on ..." or ": The Case of ..." Those formulations guarantee that your work will be viewed as derivative and/or minor. The abstract must state what you've done, but must also highlight the novelty of your work. Remember, you are a monopolistic competitor in the market for economic ideas, and you need to differentiate your product.
- 3. Put the date (month and year) on the title page of this initial draft. On subsequent drafts, leave that date, say, e.g., "Initial

continues on page 4



### Hamermesh continued from page 3

Draft March 2015," and list the date of the current draft (e.g., "This Draft September 2015"). Do not give a complete history of all drafts—two dates are enough to establish priority and place the current draft in time.

- 4. Post the paper on your website, but, more important, don't be embarrassed about emailing the draft to people who might be interested—those economists whom you cite and/or who might have worked on similar topics. At worst they'll delete the email, but if you include the title in the subject line along with "This might interest you," and include the abstract in the body of the email, you'll establish your ownership and might also get some helpful comments. Most people in this profession like to help juniors, and we're all intrigued by something new—that's why we're in the research business.
- 5. With the paper written, you need to "strut your stuff," both to get comments and to establish your ownership of your ideas. Present it ASAP in your own institution, but also submit abstracts or papers to as many meetings and conferences as possible. Don't be embarrassed about being "relegated" to poster sessions—I get better comments on my work at those than at standard sessions. Unless you are very senior and are awash in seminar invitations, never turn down an offer to give a lecture at another institution, even if you view the place as an intellectual backwater. Serious research in economics is now widespread, and I'm amazed how many useful comments I've received at places that are well outside what are viewed as the Top 50 departments. No matter what the venue, it's better to be visible and appear somewhat jejune than to forfeit credit for your original idea and be unknown. (I attended a conference in 1986 where a fresh PhD gave a mediocre paper. I thought he was a nincompoop, but I remembered him, have followed his subsequent career and will be shocked if he doesn't win a Nobel Prize in the next 15 years.)
- 6. Worries about being beaten out by other researchers are overblown. While working on my dissertation a new assistant professor told me a classmate of his was doing the same thing. I panicked, wrote to the "culprit" about his work and in return he sent me his draft dissertation. We were using similar data but had much different ideas. People mentally categorize research broadly, so this kind of misclassification is common. All the more reason to demonstrate clearly and early the novelty of your work.
- 7. With half of the articles in the top economics journals having two authors, and 25 percent having three or more, your listing among authors affects how people view your ownership of the idea. Standard practice in economics is to list authors alphabetically, with departures indicating a larger contribution by the first-listed author. Even with alphabetical listing, as a junior person (and, given residual discrimination, as a woman) people may think you are a glorified research assistant. You should never let a more senior person list him/herself ahead of you non-alphabetically out of deference to him/her. (And senior people might defer to juniors by listing them ahead out of alphabetical order.)

- 8. Your name is your brand; once you have established a brand, you should never change it. Hyphenating your name with a partner's surname, or adopting his or her surname, is fine in the "real world," but not all relationships last a lifetime, and hyphenated names may not either. Best bet: Use your original family name professionally ab initio and stick with it throughout your career. This admonition is especially relevant when people try to gauge your scholarly impact through the Web of Science or Google Scholar, as having several different names makes it difficult to aggregate the impacts you have had.
- 9. Robert Merton père described a "Matthew effect" in science, with better-known authors given credit for something that was done simultaneously or even earlier by a lesser-known author. (A "Matthew effect" on steroids was made clear personally when someone presented a paper citing Gary Becker's important work on suicide. Becker never worked or published on that topic, and a colleague kindly pointed out that this was my work.) As a junior person the only way to minimize this tendency is to follow the guidelines in the previous eight points.

These points deal with getting credit, but giving credit matters too, as it both demonstrates that you understand the basis for your work (no work comes out of nowhere—all have antecedents), and it helps to demarcate the novelty of your contribution. To do this you should observe a number of strictures:

- I. Don't think that if you fail to cite a paper that readers will attribute greater originality to your work. Rather, they'll assume either that you don't know the field well or are being vindictively or strategically exclusionary. For the papers that are closest to your work you must (briefly) make clear in the body of your article why yours is original and, more important, why yours is more general than related work.
- 2. Don't hesitate to cite your own related work if it is at least somewhat relevant. The "Ego Index" in a paper (the ratio of self to total citations) should be far below 1, but if you have published or even unpublished material that is relevant, by all means include it.
- 3. Never ever publish the same or nearly the same piece more than once. "Self-plagiarism" is viewed as totally unethical in economics, and your sins will eventually be discovered and tarnish your reputation forever. Even appearing to self-plagiarize just is not worth any potential gain in visibility.

I cannot stress strongly enough the importance of originality and of ensuring that your originality is recognized. People in this profession want originality—it's more fun reading something novel than the nth minor variation on an old theme. People rarely steal ideas, but given the extent of the market, you need to make your work, and yourself, visible.

### **Edward Miguel**

## How Transparent is Economics Research?

There is growing awareness that current research methods and practices in economics can sometimes produce misleading bodies of evidence (Miguel et al., 2014). Meta-research documents the prevalence of publication bias, as well specification searching, and wide-spread inability to replicate empirical findings. While some of these issues have been widely discussed within economics for some time, there has been a recent flurry of activity documenting these problems, and also new ideas for how to solve them.

With the vastly greater computing power of recent decades and the ability to run a nearly infinite number of regressions, there is renewed concern that null-hypothesis statistical testing is subject to both conscious and sub-conscious manipulation. At the same time, technological progress has facilitated various new tools and potential solutions, including the online sharing of data, statistical code and other research materials as well as the creation of easily accessible online study registries, data repositories and tools for synthesizing research results across studies. Yet the progress to date is partial, with some iournals and research communities within economics adopting new practices to promote transparency—including study registration, data sharing and more detailed disclosure standards and many others failing to do so.

Multiple problems have been identified within the body of published research results in economics, including publication bias, specification searching and the inability to replicate results. Here I mainly focus on the first two and discuss some recent progress on solutions.

Publication bias arises if statistically significant results—papers that reject the null hypothesis—are more likely to be published than other results. If we do

not keep track of the statistical tests that fail to reject the null, then we cannot determine the fraction of hypotheses tested that reject. Since we should expect to reject the null five out of a hundred times even in a population with no true effect, it is clearly important to know how many tests have been run. The term "file drawer problem" was coined decades ago (Rosenthal, 1979), and the idea that some analyses are simply never reported to other scholars was well known even before that.

New research documents that a large share of analyses across the social sciences that are conducted are never published or even written up, and the likelihood that a finding is shared with the research community falls sharply for null findings that are not statistically significant (Franco et al., 2014). Franco et al.(2014) are uniquely able to look inside "the file drawer" through their access to a universe of studies that passed NSF peer review and utilized a nationally representative social science survey. This finding has potentially severe implications for our understanding of the core findings in whole bodies of research, a point that has also been made in other branches of science (Ioannidis, 2005).

Consistent with these findings, new analyses document how widespread publication bias is in economics (Vivalt, 2014; Brodeur et al., forthcoming), as well as in related social science fields, including political science (Gerber et al., 2001; Gerber and Malhotra, 2008a), sociology (Gerber and Malhotra, 2008b) and psychology (Simmons et al., 2011), and in clinical research (Easterbrook et al., 1991), as assessed by the "spikes" in p-values observed among published studies just below the traditional significant level of 0.05. These patterns are not likely to occur by chance (Simonsohn et al., 2014), and in fact are likely to indicate some combination of selective editor (and referee) decision making, the file drawer problem alluded to above and/or widespread specification searching.

These issues have received some attention in economics, mainly within the labor economics literatures on minimum wage impacts (Card and Krueger, 1995), returns to schooling (Ashenfelter et al., 1999), and on the value of a statistical life (Doucouliagos et al., 2014). In some cases, scholars have argued that these literatures have been characterized by considerable publication bias.

A closely related but distinct concern is specification searching. In the 1980s and 1990s, the growing ease of computing led to concerns that researchers were selectively reporting econometric analysis that supported pre-conceived notions (or were seen as particularly interesting within the research community), and ignoring, consciously or not, specifications that but did not support a certain view. The overabundance of p-values just below traditional significance levels is consistent with this being a widespread problem, as is anecdotal evidence about the ubiquity of these practices within economics. While the growing use of extra robustness checks is designed to limit this problem, it is unclear how effective they are in practice. One area of flexibility in analysis that may be particularly important is subgroup analysis. There has been extensive work on this issue within medical research (Schulz and Grimes, 2005), where the use of non-prespecified subgroup analysis is frowned upon, and the FDA and NIH specifically disallow evidence based on subgroup analysis.

Several new methods and tools have emerged in economics research over the past two decades—and more forcefully over the past 10 years—to address these concerns. These approaches have in common a focus on greater transparency and openness in the research process. They include improved research design (including experimental designs and meta-analysis approaches), study registration and pre-analysis plans, strengthened disclosure and reporting

continues on page 8

## Incentivize Replications, Pre-Analysis Plans Can Wait

### Lucas C. Coffman & Muriel Niederle

Science, including the social sciences, is under growing attack for the pervasiveness of results that cannot be replicated. There are some high profile cases of retractions of work due to direct fraud, such as blatantly making up data, though these are infrequent. The more common problem is likely questionable research practices known as "p-hacking." In psychology, searching for the right regression specification, adding observations until results are significant, or restricting the data until a subsample is found which provides the desired results are all unfortunately common practices (John et al., 2012; Simonsohn et al., 2014), and these practices can greatly increase the odds of producing false positives (Simmons et al., 2011). There is also recent evidence of p-hacking in economics. Brodeur et al. (forthcoming) analyze every z-statistic reported in the American Economic Review, Journal of Political Economy and Quarterly Journal of Economics between 2005 and 2011. Plotting the z-scores, they find a valley of "missing" z-stats of results that fall just short of significance, and in turn, a peak of "extra" zstats of results that are just significant. This suggests that results that fall "just" short of a significance threshold are phacked to provide "nicer" and "significant" results. However, for the specific subsample of 122 experimental papers (laboratory, field and randomized control trials), Brodeur et al. cannot conclude that these papers exhibit signs of p-hacking.

Most recently, and famously, Brian Nosek spearheaded an effort (dubbed "the Reproducibility Project") with 269 co-authors to replicate 100 important results from 98 psychology papers (*Open Science Collaboration*, 2015). While measures for a successful replication may be somewhat ambiguous, the authors concluded that 39 of the 100 replication attempts were successful. This prompted *Nature News* to claim, "Don't trust

everything you read in the psychology literature. In fact, two thirds of it should probably be distrusted" (Baker, 2015).

There are two responses to this "crisis." The first response to all of this dire news is to put policies in place to reduce *p*-hacking, and hence ensure fewer false positives. The most prominent of these policies is perhaps pre-analysis plans. A pre-analysis plan is a credibly fixed plan for data collection and analysis. It is typically stored with a date stamp on a third-party website, without the possibility to edit, only append. The idea is that locking in the sample size, specification, subsample and so on ahead of time will effectively eliminate the researcher degrees of freedom behind *p*-hacking.

In Coffman and Niederle (2015), working with the model from Ioannidis (2005), we provide a theoretical analysis of the impact of a pre-analysis plan on the probability that a published, positive result is true. In addition to standard statistical analysis parameters, like power and level of significance, the model has three key considerations. First is the proportion of hypotheses tested that are true. As this parameter goes down, we may be asking more provocative questions, but this comes at the expense of a higher rate of false positives. Second is what Ioannidis dubbed "study bias:" the probability with which a study that would have been reported false is instead reported positive (regardless of the tools used to flip the results). We consider the impact of pre-analysis plans to be a reduction in this parameter, limiting any type of behavior that may inorganically produce positive results. The final parameter is the number of substitute studies that were, or ever would be, investigated for a given hypothesis. The most obvious example is K different research teams over time would test hypothesis X, and only the first to find a positive result publishes it (and perhaps the remaining teams never pursue it in

the first place). Mathematically, all that is necessary is this substitution effect out of K studies, only one positive result is published. It is easy to consider many other common scenarios where this might be the case. One example is that a researcher may have multiple projects that are ongoing. Due to time limits, however, only the one that yields a positive result is written up. Another example is that a researcher pre-tests many hypotheses, maybe through a survey in the field, or even through thought experiments, and only proceeds with the most promising. While all hypotheses considered would be "substitute studies," in this case the substitutes may not be independent, so the number of substitutes may be less than the number of K thought experiments that did occur or would have occurred had a great scenario not been found yet. It should however be clear that, at the very least, the number of substitute studies is still greater than one.

The model shows that for pre-analysis plans to be effective at reducing the rate of false positives, two things need to jointly hold: (i) the number of substitute studies needs to be small, and (ii) pre-analysis plans need to effectively eliminate "study bias," not just reduce it. Therefore, for cases where there are clearly few substitute studies, like in the Oregon Health study (Finkelstein et al., 2012) or the Moving to Opportunity experiment (Katz et al., 2001), which are gigantic field experiments, pre-analysis plans may be a justified policy. For example, if the prior that a hypothesis is true was 30 percent, then, using standard values for type I and type II errors, for a paper with a very rigorous pre-analysis plan (reducing study bias to only switching I percent of negatives to positives), our posterior would be that we think the hypothesis is true with 86 percent. That's pretty reasonable, but it requires both a restrictive pre-analysis plan and no substitute studies. If,

continues on page 11

### Why We Watch Retractions

### **Adam Marcus & Ivan Oransky**

In 2012, when Solmaz Filiz Karabag and Christian Berggren went looking for retractions in the economics, business, and management literature, they could find only 31. You could therefore understand why, when one of us (Adam) was interviewed in 2010 about the launch of our blog, Retraction Watch.com, he said, "We wondered if we'd have enough material" to keep the project going (Wade, 2010). Based on our experiences covering the subject as journalists, we knew there would be important stories to tell, and lessons about transparency and the scientific process. How much material would there be though, really?

Lots, it turned out. We've covered thousands of retractions in five years and can't even keep up with all of the new ones. To wit: If Karabag and Berggren repeated their study today, they'd find a lot more retractions, thanks to a slew of recent retractions from James Hunton (32.5), Ulrich Lichtenthaler (16) and Fred Walumbwa (7). Those figures are a good illustration of why we're never short of material and how retractions, while still rare events, are becoming more common and a bigger part of the conversation about the scholarly literature.

Unbeknownst to us when we launched *Retraction Watch* on August 3, 2010, we were in the midst of a dramatic increase in retractions. From 2001 to 2010, the number grew ten-fold, while the number of papers published rose 44 percent, which strikes us as a pretty big increase on its own (Van Noorden, 2011). The figure—about 400 in 2010—has continued to increase, and we estimate there will be somewhere between 500 and 600 this year. It's important to point out that this is still a vanishingly small percentage of the 2 million or so papers published annually.

Something, however, is happening. Thanks to a small but dedicated group of researchers—economists among them—who have begun studying retractions as a phenomenon, our

understanding of this "nuclear option" of scientific self-correction has grown. It has become clear, for example, that scientists—and sometimes the public—are better at finding problems in papers than they used to be. That stands to reason. After all, plagiarism detection software is a relatively recent introduction. And in nearly all cases, papers are published online, making them available for scrutiny by far more eyeballs.

All of that means that more researchers are having what some consider their worst nightmare: showing up on *Retraction Watch*. The fact is that retractions still carry a significant stigma. And while we know that retracting one's work is painful, no matter what the reason, we would contend, as have others (e.g., Fanelli, 2013), that the growing retraction rate is a good sign. Indeed, when authors retract for honest error, they're doing science a significant service and appear not to take a hit to their careers.

Politicians looking to reduce government's financial contributions to science and others who have some anti-science axe to grind often cite retractions and fraud as reasons not to trust science. For that reason, it's perhaps understandable that some scientists grimace at the mass media's coverage of these issues, and at ours. But retractions—and corrections, for that matter—actually mean the opposite, namely that someone is paying attention and willing to correct the record. We all make mistakes and some small fraction of us even commit fraud. It's those journals and fields that have no retractions that perhaps we shouldn't trust. (This sort of analysis does have to take into account the publishing behavior in particular fields. Researchers in economics and physics, which both have low retraction rates, tend to use preprint servers much more often than those in the life sciences, which means that once something appears in a journal, it has been through a finer-toothed comb than in other fields.)

There's evidence that researchers do in fact trust colleagues who have come forward about honest errors. One study found that while retractions lead to a 7 percent decline in citations on average, those "citation losses among prior work disappear when authors self-report the error" (Lu et al., 2013). And an NBER working paper out earlier this year found that "eminent scientists are more harshly penalized than their less-distinguished peers in the wake of a retraction, but only in cases involving fraud or misconduct" (Azoulay et al., 2015).

To really move the needle, however, will require changing academic incentives. One of the reasons it seems that authors and editors often refuse to retract clearly problematic papers is that a researcher can't use the paper when applying for grants, promotion or tenure, regardless of why the paper was withdrawn from the scientific literature. Removing that impediment would mean finding metrics other than the scientific paper. There's a lot of interesting work being done in that area, but it's still embryonic.

In the meantime, we hope it's clear that showing up on *Retraction Watch* needn't be a nightmare. Perhaps appearing in our "doing the right thing" category could even one day be part of a tenure committee dossier. Well, we can dream, can't we?

### References

Azoulay, Pierre, Alessando Bonatti and Joshua L. Krieger. 2015. "The Career Effects of Scandal: Evidence from Scientific Retractions." NBER working paper no. 21146. Fanelli, Daniele. 2013. "Why Growing Retractions Are

Fanelli, Daniele. 2013. "Why Growing Retractions Are (Mostly) a Good Sign." *PLoS Med* 10(12): e1001563.

Karabag, Solmaz Filiz and Christian Berggren. 2012. "Retraction, Dishonesty, and Plagiarism: Analysis of a Crucial Issue for Academic Publishing, and the Inadequate Responses from Leading Journals in Economics and Management Disciplines." Journal of Applied Economics and Business Research 2(3): 172-183.

Lu, Susan Feng, Ginger Zhe Jin, Brian Uzzi and Benjamin Jones. 2013. "The Retraction Penalty: Evidence from the Web of Science." *Scientific Reports* 3: 3146.

Van Noorden, Richard. 2011. "Science Publishing: The Trouble with Retractions." *Nature* 478: 26-28.

Wade, Nicholas. 2010. "3 Harvard Researchers Retract a Claim on the Aging of Stem Cells." *New York Times* 14 October.

### Miguel continued from page 5

practices, and new norms regarding open data and materials. There has also been progress in developing new transparency best practices for journals (Nosek et al., 2015). Here I focus mainly on study registration and pre-analysis plans, one of the most exciting new developments in the field.

A leading proposed solution to the problem of publication bias is the registration of empirical studies in public registry. This would ideally be a centralized database of all attempts to conduct research on a certain question, irrespective of the nature of the results, and such that even null (not significant) findings are not lost to the research community. The most high profile attempt at a registry within economics, and indeed, across the social sciences, is the new AEA Randomized Trial Registry. The registry was launched in May 2013 and was inspired in part by existing registries for medical trials. While recent research in medicine finds that the registry has not eliminated all under-reporting of null results or other forms of publication bias and specification searching (Laine et al., 2007; Mathieu et al., 2009), it allows the research community to quantify the extent of these problems and over time helps constrain inappropriate practices. It also helps scholars locate studies that are delayed in publication or are never published, helping to fill in gaps in the literature and thus resolving some of the problems identified in Franco et al. (2014).

Though it is too soon after the adoption of the AEA's trial registry to measure its full impact, the registry is already being used by many empirical researchers. In its first two years, over 400 studies conducted in dozens of countries had been registered, and the number continues rising each month. In addition to the AEA registry, several other registries have been created across the social sciences, although they have received fewer studies and less attention so far. These include registries created by the International Initiative for Impact Evaluation (3ie) for

international development studies (the Registry for International Development Impact Evaluations, RIDIE, launched in September 2013), and the Experiments in Governance and Politics (EGAP) registry, also created in 2013.

In addition to serving as a useful way to search for findings on a particular topic, most supporters of study registration also promote the pre-registration of studies, including pre-analysis plans (PAPs) that can be posted and time stamped even before analysis data are collected or are otherwise available for prospective studies (Miguel et al., 2014). While there were scattered earlier cases of pre-analysis plans being utilized in the social sciences (most notably Neumark's 2001 study on minimum wage impacts), the numbers of published papers using pre-specified analysis has grown rapidly in the past few years, mirroring the rise of studies on the AEA registry.

There remain many open questions about whether, when and how pre-analysis plans could and should be used in economics research, with debates about how useful they are in different subfields of the discipline. There appears to be a growing consensus that, in certain situations at least—such as large-scale randomized trials that are expensive or difficult to repeat, and/or cases where a government, policymaker or corporation has a vested interest in the outcome—pre-analysis plans can increase the credibility of reporting and analysis.

There is also the question of how widely these approaches could be used (if at all) for retrospective observational studies. This issue has been extensively discussed in recent years within medical research but there is as yet no consensus in that research community. A major concern with the pre-registration of non-prospective observational studies using pre-existing data is that there is often no credible way to verify that pre-registration took place before analysis was completed, which is different than the case of prospective studies in which the data has not yet been collected or accessed.

A frontier topic in this area is the use of pre-specified algorithms (potentially including machine learning approaches), rather than exact pre-analysis plans, to lay out future analysis in prospective studies. For instance, the exact testing procedure to choose covariates that give the most statistically precise estimate can be laid out in advance, even if those covariates are unknown (and unknowable) before the data has been collected. This approach has not yet been adopted in economics (to my knowledge), but has begun to see use in medical trials (van der Laan et al., 2007; Sinisi et al., 2007).

It is clear that the rising interest in transparency and reproducibility in economics reflects broader global trends regarding these issues, both among academics and beyond. As such, we argue that "this time" really may be different than earlier bursts of interest in research transparency within economics (such as in the mid-1980s) that later mostly died down. The increased institutionalization of new practices including through the new AEA RCT registry, which has rapidly attracted hundreds of studies, many employing pre-analysis plans, something unheard of in economics until a few years agois evidence that new norms are emerging. The Berkeley Initiative for Transparency in the Social Sciences (BITSS) is another new institution that has emerged to promote dialogue and build consensus around these new practices, and BITSS also has an active training component for the next generation of Economists. My hope is that the changes underway in norms among journals, funders and most importantly within the scholarly community itself will make future economics research more accurate, credible and reproducible.

### References

Ashenfelter, Orley, Colm Harmon and Hessel Oosterbeek. 1999. "A Review of Estimates of the Schooling/Earnings Relationship, with Tests for Publication Bias." Labour Economics 6(4): 453-470.

Brodeur, Abel, Mathias Le, Marc Sangnier and Yanos Zylberberg. Forthcoming. "Star Wars: The Empirics Strike Back." American Economic Journal: Applied Economics. Card, David and Alan B. Krueger. 1995. "Time-Series

continues on page 9

### Miguel continued from page 8

Minimum-Wage Studies: A Meta-Analysis." American Economic Review 85(2): 238-243.

Doucouliagos, Hristos, T.D. Stanley and W. Kip Viscusi. 2014. "Publication Selection and the Income Elasticity of the Value of a Statistical Life." Journal of Health Economics 33: 67-75. Easterbrook, P.J., R. Gopalan, J.A. Berlin and D.R. Matthews. 1991. "Publication Bias in Clinical Research." The Lancet 337 (8746): 867-872.

Franco, Annie, Neil Malhotra and Gabor Simonovits. 2014. "Publication Bias in the Social Sciences: Unlocking the File Drawer." Science 345 (6203): 1502-1505.

Gerber, Alan S., Donald P. Green and David Nickerson. 2001. "Testing for Publication Bias in Political Science." Political Analysis 9(4): 385-392.

Gerber, Alan and Neil Malhotra. 2008a. "Do Statistical Reporting Standards Affect What is Published? Publication Bias in Two Leading Political Science Journals." Quarterly Journal of Political Science 3.3: 313-326.

Gerber, Alan S. and Neil Malhotra. 2008b. "Publication Bias in Empirical Sociological Research: Do Arbitrary Significance Levels Distort Published Results?" Sociological Methods & Research 37(1): 3-30.

Ioannidis, John P.A. 2005. "Why Most Published Research Findings Are False." PLoS Med 2(8): e124.

Laine, Christine et al. 2007. "Clinical Trial Registration -Looking Back and Moving Ahead." New England Journal of Medicine 356 (26): 2734-2736.

Mathieu, Sylvain et al. 2009. "Comparison of Registered and Published Primary Outcomes in Randomized Controlled Trials." JAMA 302(9): 977-984.

Miguel, E. et al. 2014. "Promoting Transparency in Social Science Research." Science 343 (6166): 30-31.

Neumark, David. 2001. "The Employment Effects of Minimum Wages: Evidence from a Prespecified Research Design." Industrial Relations: A Journal of Economy and Society 40(1): 121-144.

Nosek B.A. et al. 2015. "Promoting an Open Research Culture: Author Guidelines for Journals Could Help to Promote Transparency, Openness, and Reproducibility." Science 348 (6242): 1422-1425.

Rosenthal, Robert. 1979. "The File Drawer Problem and Tolerance for Null Results." Psychological Bulletin 86(3).

Schulz, Kenneth F. and David A. Grimes. 2005. "Multiplicity in Randomised Trials II: Subgroup and Interim Analyses." The Lancet 365 (9471): 1657-1661.

Simmons, Joseph P., Leif D. Nelson and Uri Simonsohn. 2011. "False-Positive Psychology: Undisclosed Flexibility in Data Collection and Analysis Allows Presenting Anything as Significant." Psychological Science 22(11): 1359-1366. Simonsohn, Uri, Leif D. Nelson and Joseph P. Simmons.

2014. "P-Curve: A Key to the File-Drawer." Journal of Experimental Psychology: General 143(2): 534-547.

Sinisi, S.E. et al. 2007. "Super Learning: An Application to the Prediction of HIV-1 Drug Resistance." Statistical Applications in Genetics and Molecular Biology 6(1).

van der Laan, M.J., E.C. Polley and A.E. Hubbard. 2007. "Super Learner." Statistical Applications in Genetics and Molecular Biology, 6(1).

Vivalt, Eva. 2014. "How Much Can We Generalize from Impact Evaluations?" Unpublished working paper, NYU.

### Cunningham & Zavodny continued from page 1



representation of women in the AEA program during 1985 to 2015 and the role of CSWEP in women's participation on the program.

To examine women's participation on the program, we created a dataset of all AEA program participants based on the preliminary programs published in the American Economic Review for 1985 to 1999 and on the printed programs for 2000 to 2015. We only examined "paper sessions," which typically include a chair, several paper authors and several discussants. We do not include any non-CSWEP-organized sessions labeled in the program as an invited lecture, roundtable, panel, symposium, celebration or the like, or sessions with a single speaker, poster sessions or luncheons.

We attempted to ascertain the gender of every participant in an AEA session. Most participants' gender is obvious from their first name. In cases where there was any doubt, we first searched for a website with a photograph of the participant. If we were unable to find a photograph, we then searched for a mention of them on the Internet that included a pronoun. For a few individuals, we contacted a former colleague, another session participant or a dissertation supervisor to ask about gender. We also used the website www.behindthename.com, which provides etymologies of names, to assign gender for some foreign names. We were able to assign gender to 99.6 percent of the 35,997 program participants during this period. We dropped from our sample the 149 participants to whom we were not able to assign gender.

During the 30-year period as a whole, 21 percent of program participants are female. The female share is similar when distinguishing between roles: 21 percent of chairs are female, 22 percent of paper authors and 20 percent of discussants.

The representation of women on the AEA program has increased over time, albeit at an uneven pace. Figure I shows the share of program participants who are female by year, overall and by role. For each measure, there is an upward trend, and these trends are stronger after 2000. Other studies also suggest that women's participation in AEA sessions has increased over time. Robin Bartlett (2009) found the percentage of paper presenters who are female was higher in 1993 to 1994 than in 1983 to 1984, and even higher in 2003 to 2004. Cecilia Conrad (1992) found that 3 percent of papers had at least one female author in 1968, compared with 23 percent in 1989. In an earlier study, we found that women's participation increased during 1985 to 1989, was fairly stagnant during 1990 to 2002, and rose again during 2003 to 2010 (Cunningham and Zavodny, 2012).

The increase in women's participation in the program is not surprising given the growth in the female share of the profession over time. For example, the proportion of new economics PhD recipients who are female rose from 15 percent in 1985 to 33 percent in 2014. The key question is, has the growth in the representation of women on the program kept pace with their growth in the economics profession?

Women appear to be increasingly underrepresented on the AEA program relative to their numbers within the economics profession. Figure 2 shows the female share of untenured assistant professors, tenured associate professors and tenured full professors at economics PhD-granting programs along with the share of program participants who are female. The growth in the female share of professors at the assistant and associate ranks has outpaced the growth in the female share of program participants. Only the share of full professors at PhD-granting programs has risen more slowly than the female share of program participants. And since women tend to be overrepresented among faculty at non-PhD-granting programs and in non-academic jobs relative to their numbers at PhD-granting programs, it seems likely that the AEA program underrepresents female economists in general.

CSWEP plays a key role in the representation of women on the AEA

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### Cunningham & Zavodny continued from page 9

program. About 17 percent of women on the program during 1985 to 2015 were in a session organized by CSWEP. Not surprisingly, the vast majority of participants in CSWEP-organized sessions are female: 70 percent. Only 19 percent of participants in non-CSWEP sessions are female, in contrast. The share of the program participants who are in a CSWEP session has fallen slightly over time, as has the share of women who are on the program via a CSWEP session. As a result, if we remove CSWEP-session participants from the data, the trend in the share of women is similar to the trend when all sessions are included.

In sum, the representation of women on the AEA program rose significantly during 1985 to 2015. However, the gains were smaller than the increases in women's representation at junior and mid-level faculty ranks in economics

PhD-granting programs. The role of CSWEP-organized sessions in ensuring that women are represented on the program has declined over time. This partially reflects the fact that the number of CSWEP sessions, which is determined by the AEA, has risen more slowly than the total number of sessions. Given women's continued underrepresentation on the program, boosting the number of CSWEP-organized sessions seems a clear way to ensure that women's participation on the AEA program reflects their numbers in the profession.

#### References

Bartlett, Robin L. 2009. "The AEA Annual Program Selection Process and Participation: Institutional Affiliations and Gender." Paper Presented at 2009 ASSA Meeting, San Francisco, CA. Conrad, Cecilia A. 2012. "Why Are Women More Visible at the American Economic Association Meetings?" Mimeo, Barnard College.

Cunningham, Rosemary and Madeline Zavodny. 2012. "How Well Are Women Represented at the AEA Meeting? A Study of the 1985-2010 Programs." IZA discussion paper no. 6597.

Figure 1. Share of AEA Program Participants Who Are Female

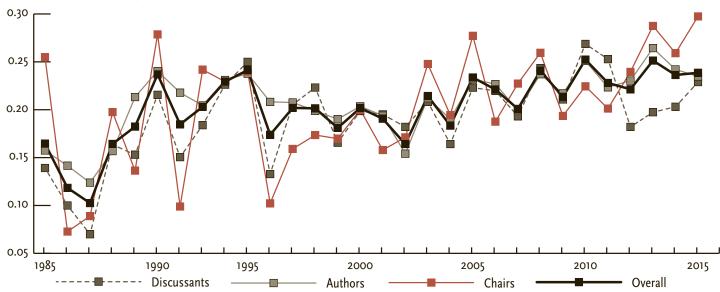
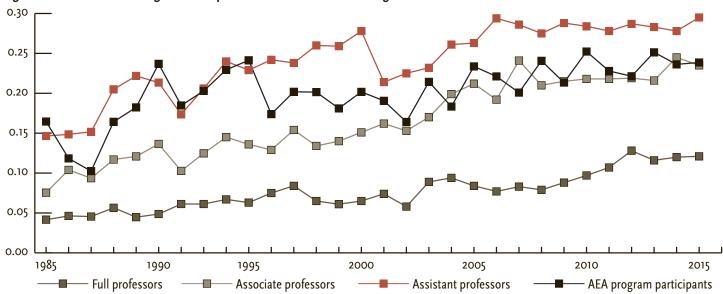


Figure 2. Female Share of Program Participants and Professors in PhD Programs



Note: 1985-1992 data on professors provided by Donna Ginther; 1993-2015 data from CSWEP and AEA UAQ annual reports

### Coffman & Niederle continued from page 6

say, 10 percent of negative results were flipped to positives through study biases, the posterior drops to 71 percent. However, even with a most rigorous and restrictive pre-analysis plan, if there are, or ever will be, even just 10 substitute studies, the posterior would only be 52 percent that a published positive result is true.

Put another way, even if pre-analysis plans of a very restrictive form are put in place, if we are working on projects for which there may be substitute studies, the probability that a published positive result is true is not very high, far from being dispositive of the result. We would have to continue investigating the research question with future work regardless.

The second, and our preferred, response to the "crisis" of false positives comes in two parts: first to recognize that it's okay if it takes many papers to conclusively prove a result rather than just one, and second to encourage more replication work. The Reproducibility Project is not an outside auditor coming in to judge the state of science; work like this is very much a part of science, and a very important part. Their work provided a second datum for 98 of the more provocative and important recent hypotheses in psychology. Such work helps us to correct false beliefs, but also allows provocative, low probability-of-being-correct research to occur in the first place. Instead of discouraging such endeavors, or (falsely) concluding that results that don't replicate have to be due to "sloppy research practices" or "bad apples in the profession," we should acknowledge that one positive finding is not sufficient and therefore ramp up motivation for replicative efforts.

In Coffman and Niederle (2015), we assess the value of replication studies in much the same way we measured pre-analysis plans. One common concern about replications is that replicating researchers could be biased—they either want the replication to succeed or fail for whatever reason, and will design

the experiment or analyze the results to increase the likelihood of this happening—so we built this into the model. With almost no researcher bias, for a published result that we believe to be true with 50 percent chance (and actually is true), then after only two replications, our posteriors will increase to 87 percent. Even if we include fairly substantial researcher bias, say 10 percent of would-be-negatives are flipped to positive and vice versa, our posterior increases to 84 percent after only three replications. Replications are efficacious even in a world of "bad" replicating.

For replications to occur, as a profession, two things need to happen: We need to value replications, and we need an outlet for replicative work. To value replications, we can use the two currencies in our professions: citations and publications. For the former, we need to establish a norm of citing replications alongside the original work. For the latter, it may help to establish a journal to collect well-run replication attempts, a Journal of Replication Studies. The purpose of the journal would go beyond providing an outlet for work that is intended to be a replication study; the journal can also collect replications that often happen organically in our work, as a side effect of the main project. For example, in experimental economics, a paper that builds and expands on a previous finding cannot simply compare the new results to the results from the previous published paper. Rather, the new paper has to replicate the old results as well, primarily to assess whether small design or subject pool changes generate already a different result in and of themselves rather than just the expansion of choice considered in the new paper. Hence, replications of important results are somewhat common in experimental economics, though even there they are often hard to find, as no common outlet exists that would allow for publishing simply the replication. A Journal of Replication Studies could help collect and organize these data alongside full-fledged replication attempts. While it is clear replication work will never be as revered as novel studies, the profession only has to acknowledge that they form an important part of a researcher's portfolio. For talented, young researchers eager to add lines in a CV, replications should be a good option. It's useful for the profession, and if done well, they should be published regardless of the results.

#### References

Baker, Monya. 2015. "Over Half of Psychology Studies Fail Reproducibility Test: Largest Replication Study to Date Casts Doubt on Many Published Positive Results." *Nature News* 27 August.

Brodeur, Abel, Mathias Lé, Marc Sangnier and Yanos Zylberberg. Forthcoming. "Star Wars: The Empirics Strike Back." *American Economic Journal: Applied Economics*.

Coffman, Lucas and Muriel Niederle. 2015. "Pre-Analysis Plans Have Limited Upside especially where Replications are Feasible." *Journal of Economic Perspectives* 29 (3): 81-98. Finkelstein, Amy et al. 2012. "The Oregon Health Insurance Experiment: Evidence from the First Year." *Quarterly Journal of Economics* 127(3): 1057-1106.

Ioannidis, John P.A. 2005. "Why Most Published Research Findings Are False." *PLoS Med* 2(8): e124.

John, Leslie K., George Loewenstein and Drazen Prelec. 2012. "Measuring the Prevalence of Questionable Research Practices with Incentives for Truth Telling." *Psychological Science* 23(5): 524-532.

Katz, Lawrence F., Jeffrey R. Kling and Jeffrey B. Liebman. 2001. "Moving to Opportunity in Boston: Early Results of a Randomized Mobility Experiment." *Quarterly Journal of Economics* 116(2): 607-54.

Open Science Collaboration. 2015. "Estimating the Reproducibility of Psychological Science." *Science* 349 (6251): aaca716

Simmons, Joseph P., Leif D. Nelson and Uri Simonsohn. 2011. "False-Positive Psychology: Undisclosed Flexibility in Data Collection and Analysis Allows Presenting Anything as Significant." *Psychological Science* 22 (11): 1359-1366. Simonsohn, Uri, Leif D. Nelson and Joseph P. Simmons. 2014. "P-Curve: A Key to the File-Drawer," *Journal of Experimental Psychology: General* 143 (2): 534-547.

## CSWEP at the 2016 AEA/ASSA Annual Meeting

### **Gender Sessions**

### **Education and Gender**

January 4, 2016, 10:15AM-12:15PM
Hilton Union Square, Continental Parlor 3
IEL: JI, J2

Chair: Shulamit Kahn, Boston University The STEM Gender Gap: Evidence from the CA State Science Fair

Nanneh Chehras, University of California, Irvine

Educational Mobility across Three Generations of American Women

Sarah Kroeger, University of Wisconsin–Milwaukee; Owen Thompson, University of Wisconsin–Milwaukee

Student Appearance and Class Performance Christina Peters, Metropolitan State University of Denver; Rey Hernandez-Julian, Metropolitan State University of Denver

The Math Gender Gap: The Role of Culture
Núria Rodríguez-Planas, City University of
New York, Queens College; Natalia
Nollenberger, IAE-CSIC; Almudena
Sevilla, Queen Mary, University of London
Discussants:

Shulamit Kahn, Boston University; Gary Solon, Michigan State University; Tanya Rosenblat, University of Michigan; Margaret Blume-Kohout, New Mexico Consortium and Mount Holyoke College

### Motherhood and the Labor Market January 5, 2016, 8:00–10:0AM

Hilton Union Square, Franciscan C

Chair: Kevin Lang, Boston University Social Norms, Labor Market Opportunities, and the Marriage Market Penalty for Skilled Women

Jessica Pan, National University of Singapore; Marianne Bertrand, University of Chicago Booth School of Business; Patricia Cortes, Boston University School of Management; Claudia Olivetti, Boston University

Employment Adjustments Around Childbirth: How Mothers Smooth their Careers

Barbara Pertold-Gebicka, Charles University in Prague; Nabanita Datta Gupta, Aarhus University; Filip Pertold, CERGE-EI

The Role of Paid Parental Leave in Reducing Women's Career Interruptions: Evidence from Paid Leave Laws in California and New Jersey Tanya Byker, Middlebury College Can Financial Incentives Reduce the Baby Gap? Evidence from a Reform in Maternity Leave Benefits

**Anna Raute**, University of Mannheim *Discussants:* 

Catalina Castilla, Colgate University; Núria Rodríguez-Planas, City University of New York, Queens College; Christopher J. Ruhm, University of Virginia; Kevin Lang, Boston University

### Long Hours Jobs and Specialization in Marriage

January 5, 2016, 1:00–3:00PM Hilton Union Square, Franciscan C

JEL: J1, D1

Chair: **Madeline Zavodny**, Agnes Scott College

Overtime Premiums, Labor Supply, and the Social Value of Occupations

**Dora Gicheva,** University of North Carolina at Greensboro

When Time Binds: Returns to Working Long Hours and the Gender Wage Gap among the Highly Skilled

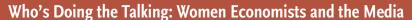
Patricia Cortes, Boston University; Jessica Pan, National University of Singapore Has the Increased Attachment of Women to the Labor Market Changed the Ability of Families to Smooth Shocks to Family Income?

Olga Gorbachev, University of Delaware Selection and Specialization in the Evolution of Couples' Earnings

Chinhui Juhn, University of Houston; Kristin McCue, U.S. Census Bureau Discussants:

Ron Oaxaca, University of Arizona; Ina Ganguli, University of Massachusetts-Amherst; Bradley Hardy, American University; Mary Ann Bronson, Georgetown University

continues on page 13



In an open letter earlier this fall, Ralph Nader called on Janet Yellen, chairwoman of the Fed, to "sit down with [her] Nobel Prize winning husband," to learn about the intricacies of monetary policy. This is only one of several sagas that have played out this fall for famous female economists. In recent coverage of their fascinating work on rising mortality among middle-aged white men and women, Princeton Economics Professor and Econometric Society Fellow Anne Case was repeatedly reduced to junior co-author-and sometimes simply "wife"—of Angus Deaton. Likewise, in the original version of Adam Davidson's September New York Times Magazine piece on rising college costs, Claudia Goldin, the Henry Lee Professor of Economics at Harvard University and 2013 President of the American Economic Association, was mentioned almost parenthetically in relation to pioneering work with her partner Lawrence Katz.

In a recent article for the *New York Times*, Justin Wolfers hypothesized that the female halves of these economics power couples have gotten short shrift because of subconscious biases on the part of those who hold the pen. But

journalist Dan Diamond, at *Forbes*, subsequently foisted the blame back on the women, writing, "... the problem isn't just how we talk about economists. It's who's doing the talking the first place."

### We want to start changing the conversation.

Join us at the ASSA meetings in San Francisco on Monday, January 4, 2:30-4:00PM in Franciscan A&B for a panel discussion, Who's Doing the Talking: Women Economists and the Media. Panelists include economists Claudia Goldin of Harvard; Susan Dynarski and **Justin Wolfers**, both of the University of Michigan; and media representatives Catherine Rampell, national syndicated opinion columnist for the Washington Post, and **Dan Diamond**, contributor to Forbes, Vox and other outlets. Diane Whitmore Schanzenbach of Northwestern University and the Brookings Institution will moderate. Stay after for refreshments and further

Reserve a seat through Eventbrite.com. Visit CSWEP.org for more details. Questions? Contact cswep@econ.duke.edu

informal conversation.

### **Public Econ Sessions**

### Public Finance January 3, 2016, 2:30–4:30PM

Hilton Union Square, Golden Gate 8

JEL: H3

Chair: **Ragan Petrie**, George Mason University

The Role of Medical Expenditure Risk in Portfolio Allocation Decisions

Padmaja Ayyagari, University of Iowa; Daifeng He, College of William and Mary Saving Lives or Saving Money? Understanding the Dual Nature of Physician Preferences Alice Chen, University of Southern California; Darius Lakdawalla, University of Southern California

The Effect of Public Pensions on Household Saving

Marta Lachowska, W.E. Upjohn Institute for Employment Research; Michal Myck, Centre for Economic Analysis

The Spillover Effects of Two-Rate Property Taxation in Pennsylvania: a Zero-Sum Game or a Win-Win Game?

**Zhou Yang**, Robert Morris University *Discussants:* 

Nicole Maestas, Harvard University; Joshua Gottlieb, University of British Columbia; John Friedman, Brown University; Daniel Millimet, Southern Methodist University

### Health Behavior and Outcomes January 4, 2016, 8:00–10:00AM

Hilton Union Square, Golden Gate 8

JEL: H8, II

Chair: **Janet M. Currie**, Princeton University

The Impact of Scheduling Birth Early on Infant Health

**Cristina Borra**, University of Seville; **Libertad Gonzalez**, Universitat Pompeu Fabra; **Almudena Sevilla**, Queen Mary, University of London

Air Pollution and Pro-Cyclical Mortality: Causal Evidence from Thermal Inversions Paulina Oliva, University of California, Santa Barbara; Daniel Hicks, The University of Oklahoma; Patrick Marsh, NOAA/NWS Storm Prediction Center Strategic Self-Ignorance

Linda Thunström, University of Wyoming; Mariah Ehmke, University of Wyoming; Jonas Nordstrom, Lund University; Jason Shogren, University of Wyoming; Klaas van't Veld, University of Wyoming Health Effects of Transportation Policy: Quito's 'Pico y Placa' Program

Viscon Yoo The George Weshington

**Yiseon Yoo**, The George Washington University

Discussants:

Emily Oster, Brown University; Garth Heutel, Georgia State University; Michael Lovenheim, Cornell University; Janet M. Currie, Princeton University

### **Education**

January 5, 2016, 2:30-4:30PM

Hilton Union Square, Continental Parlor 1

Chair: **Terra McKinnish**, University of Colorado, Boulder

The Impact of Authorization on the Schooling and Labor Market Outcomes of Undocumented Immigrants: Evidence from the Deferred Action for Childhood Arrivals Program

**Francisca Antman**, University of Colorado, Boulder; **Catalina Amuedo-Dorantes**, San Diego State University

Cities Drifting Apart: Heterogeneous Outcomes of Decentralizing Public Education **Zelda Brutti**, European University Institute and London School of Economics

Information Matters: Salient Student Loan Information Affects College Students' Behavior

Carly Urban, Montana State University; Maximilian Schmeiser, Federal Reserve Board; Christiana Stoddard, Montana State University

Federal Grant Coverage of Female Graduate Students and Professors in STEM Programs: Evidence from STARMETRICS Data linked to the 2010 Census

Catherine Buffington, U.S. Census Bureau; Benjamin Harris, U.S. Census Bureau; Christina Jones, American Institutes for Research; Bruce Weinberg, Ohio State University

Discussants:

Kelly Bedard, University of California, Santa Barbara; Caroline Hoxby, Stanford University; Sarah Turner, University of Virginia; Paula Stephen, Georgia State University

continues on page 14 -



### **CSWEP Sponsored Events**

### Sunday, January 3

All Events Take Place in the Hilton Union Square, Franciscan A & B except where indicated 8:00–10:00 AM

Mentoring Breakfast for Junior Economists\*

10:00 AM-5:00 PM

**Hospitality Suite** 

12:30-2:15 PM

Business Meeting & Luncheon\*

Hilton Union Square, Continental Parlors 7 & 8

#### Monday, January 4

8:00-10:00 АМ

Peer Mentoring Breakfast for Mid-Career Economists\*

IO:00AM-2:30PM

**Hospitality Suite** 

2:30-5:00 PM

Who's Doing the Talking: Women Economists and the Media\*

### Tuesday, January 5

8:00-10:00 АМ

Junior Mentoring Breakfast\*
10:00AM-4:00PM

**Hospitality Suite** 

\*Pre-registration required. Visit cswep.org for registration links.

### CSWEP Mentoring Breakfasts @ 2016 AEA/ASSA Meetings

The 4th Annual Mentoring Breakfasts for Junior Economists will be held from 8:00–10:00 AM on Sunday, January 3 and Tuesday, January 5. At these informal meet and greets, senior economists (predominately women) will be on hand to provide mentoring to junior economists on topics such as the tenure process, publishing, research, teaching, work-life balance and the job market. Intended for male and female economists who have completed their PhD in the past 6 years or graduate students on the job market.

The 2nd Annual Peer Mentoring Breakfast for Mid-career Economists will be held from 8:00–10:00 AM on Monday, January 4. Breakfast tables will be organized around common interests with each table moderated by two senior facilitators. The event will include brief talks from senior mentors and time to network in table groups and as a larger group. Intended for female economists who are tenured academics at either associate or full rank or non-academics

who are 10+ years post-PhD.

Space is limited and pre-registration is required through Eventbrite.com. Visit CSWEP.org. Questions? Contact cswep@econ.duke.edu.

### Annual Meeting continued from page 13

Co-sponsored with the **History of Economics Society** 

### 200 Years of Women Economists January 3, 2016, 2:30-4:30PM

Hilton Union Square, Union Square 23

JEL: B1, B2

Chair: Margaret Levenstein, University of Michigan

Jane Marcet and the Scholarship of **Popularization** 

Evelyn Forget, University of Manitoba; Women in the American Economics Association: The First Sixty Years (1885-

Ann Mari May, University of Nebraska; Robert Dimand, Brock University Female Award Winners in Economics Kirsten Madden, Millersville University Women Economists in the Academy: Struggles and Strategy, 1890-1940

Mary Ann Dzuback, Washington University-St. Louis

Discussants:

Claire Hammond, Wake Forest University; Jane Humphries, All Souls College-Oxford; Deirdre McCloskey, University of Illinois-Chicago; Margaret Levenstein, University of Michigan

### **Room for Nursing Mothers**

The CSWEP Board is pleased to announce that the AEA will host a room for nursing mothers attending the 2016 AEA/ASSA Meetings in Tower 2 of the Hilton Union Square. The room will be open:

Saturday, Jan. 2 12:00–9:00РМ Sunday, Jan. 3 7:00AM-7:00PM Monday, Jan. 4 7:00AM-7:00РМ Tuesday, Jan. 5 7:00AM-4:00РМ

The room contains a private restroom and a small refrigerator. It will be set up with four "pods" near outlets. Disinfectant wipes will be provided at each pod. Information on the room's specific location will be provided as part of registration confirmation. All interested women are asked to register through Eventbrite.com to indicate their interest and the date(s) they anticipate utilizing the space. CSWEP will monitor and be responsive to demand and will contact participants via email should we need to assign specific time slots.

Visit **cswep.org** for more details.

### Hoynes continued from page 1

Review and previously served as Co-Editor of the American Economic Journal: Economic Policy and as Associate Editor for several journals. She has served on various national advisory committees and program review committees and recently chaired the search committee for the next editor of the Journal of Economic Perspectives.

Hoynes received the Bell Award because in addition to this excellence in scholarship and service, she is extraordinary as a role model, teacher and mentor. The Bell Award committee received a total of 20 letters of support from current and former students, colleagues, coauthors and several others who have benefitted from her mentorship. Described by one as an "equal-opportunity mentor," letters of support came from economists ranging from full professors to current PhD candidates, each privileged to call Hoynes a mentor and friend. A common refrain in the letters was Hilary's energy, enthusiasm and optimism. In conducting the interview, it became clear that the genesis for her successes stem from three factors: a love of economics, a love of learning and a love of people. These characteristics synergize and are the reasons she has been so highly effective in the areas honored by the Bell Award.

### **CSWEP Annual Business Meeting**

This event is open to all economists.

It is a time for us to recognize our award recipient, present the Annual Report on Women in the Economics Profession and to hear your input on CSWEP's activities.

Join us on

Sunday, January 3, 2016, at 12:30 PM in the Hilton Union Square, Continental Parlors 7 & 8.

Pre-registration for the lunch is required through Eventbrite.com

Visit **CSWEP.org** 

### Q: Why did you decide to become an economist?

I do have to admit some sort of destiny to being in this profession. I am the daughter of an economist. My father, Jeffrey Williamson, spent his career as an economic historian at Wisconsin and Harvard. My mom, Nancy Williamson, worked as a professional staff member at the Institute for Research on Poverty (IRP) at Wisconsin. Her specialty was that she was a facile computer programmer in the early days when you'd have to do programming on cards and submit them on the mainframe. Countless PhD students from that era have reported that my mom saved them while writing their dissertations. But also, my grandfather, Kossuth Williamson, was an economist who was a professor at Wesleyan and also worked in Washington. My own two daughters are acutely aware of this lineage, but as of yet are not embracing their destiny—they may be running from it!

As I grew up, I saw my parents work together as a team. I also saw both parents working outside the home at something they loved, while at the same time keeping our home life together and solid. As I reflect on this, I recognize that I absorbed much by watching my mom and dad and see that there is great value in leading by example.

Q: The example you set for your students and mentees was a recurring theme in the nomination letters, which commented on your active engagement in reading and commenting on others' work while simultaneously producing your own innovative research. How on earth do you make the time to do everything? Do you have tips for us?

First, I must say that I have an awesome husband, Tom, who is a real partner in all things, so that helps with time availability. We also hired a lot of help, especially when our daughters were young.

Beyond that, I would say that I have become very good at prioritizing tasks. Part of this is time management skills that I learned from being a serious athlete as a child. (I spent four hours per day training in the swimming pool in middle and high school.) I also got better at this when my children were young, and

the time constraint was binding in ways that are less true for me now that my girls are both off to college. My best advice is to figure out what are your highest priority items and use these to guide tradeoffs in how you use your time.

### Q: I'm going to push you for nuts and bolts here.

Sure, I have an elaborate system for tracking what I have to do. I have a compulsive list of ongoing projects on the whiteboard in my office that helps me keep track of the big picture of what I have going on. I also have a weekly list and a daily list of items to do. I keep these in an old-school planner—I'm not electronic on any of these lists. I find that there's something about the paper copies that is useful, and I don't have to worry about keeping the items in my head any more. I should be quick to add that I don't get through my list every day or every week.

Beyond this, I focus on what I'm doing at the moment. I try to organize each day so that I have mornings free for research and writing, meetings are in the afternoon, and stuff that requires less hard thinking is at the end of the day. For example, I read student papers in the evening. When I'm reading, I scribble my comments directly on the papers, then scan it and send back to the students. After the students have gone through my comments, they come talk to me, and that makes meetings more efficient. Another example is that when I am advising a student who is in the stage of developing an idea, I have them write a memo and send it to me to review before we meet. This helps me get up to speed on their work and gets them focused for the meeting.

I'll also admit that at this stage in my life I work too much. I was much more disciplined when my daughters were young, but once they started doing more of their own thing I had more free time. I've used some of this extra time for recreation, but work always seems to be the residual claimant.

Q: Another theme that echoed throughout the nomination letters was that your mentees credit you with helping them feel more confident in speaking out in

## seminars. Is this another example of leading by example, or is there something else that you're doing?

I have observed that there are ways to pose questions that are threatening, and ways that aren't so threatening. I have never found it productive to be more aggressive in questioning, and I prefer a more collaborative way of asking questions. I think this makes graduate students more able to answer questions, and also more able to think about the questions being raised and use the economics to answer them. Also, it's just part of my personality that once something is in my head, I have to ask it. This goes back to how I was raised, because my parents always expected me to be part of the conversation from the beginning. As a result, I don't feel like I have to say something brilliant when I ask a question. I think of seminars and questions as an opportunity for us all to learn about economics together.

Interacting with others is an important way that I learn, so I think it's important to be surrounded by the best people and to be part of a great team. This holds at every stage of your career. Go to the best grad school you can where you can surround yourself with smart people who will make you better. This holds for colleagues in your job, research collaborators and I'd add to this list the editorial boards I have served on, notably the American Economic Review board led by Penny Goldberg, etc. I recommend trying to create a community of people you enjoy being around, and also people who are going to make you

Q: One of my favorite statements from the many letters of nomination was this: "While I, like the rest of the profession, have every reason to know who Hilary is, Hilary knows me only because she has chosen to be a generous mentor. Hilary never was my supervisor, professor, collaborator, or campus or departmental colleague." That's certainly true for my relationship with you! If you remember, you invited me out for coffee to talk about food stamps when I was a new post-doc. We had a lot of interesting ideas to talk about, and one thing led to another and now—I just counted—we have nine

### papers together! How do you go about reaching out to people in the profession?

I guess I just gravitate to young scholars and women in the profession because I like talking to them. I like meeting them and learning about their work even if they are far outside of my field. I love the energy and enthusiasm of young scholars and the new ideas they bring—it is very infectious to be around that energy, and it gets me thinking about new ideas. I also just enjoy getting to know people I have never met before at conferences and other events. You never know what that is going to lead to.

# Q: I certainly would not have guessed what our afternoon coffee meeting in 2003 was going to lead to! Finishing up, tell us more about how you think of a mentor's role, and how that has evolved over time.

Some of this just comes naturally to me, because I really like human interaction. I like building relationships, and I get consumption value from interacting with students and colleagues. When it comes to mentoring, while I started with the idea of "just being there," I have evolved a bit to becoming more proactive in supporting and mentoring young faculty, particularly women. I realize I have learned things that I did not know when I was just starting out: how tenure works, the importance of communicating with senior faculty, the importance of saying no-or yes, how journals work, how to get invited to give a seminar, the importance of saying no (did I mention that already?). These are things I did not know early in my career, and I didn't even know that I was supposed to seek advice about them. We often forget this, that not everyone even knows what they are supposed to know! This comes naturally to me—as my husband likes to say, I "overshare." As I came to understand this. I have moved from "just be there" to "tell them what they should know."

### Q: Any parting words?

Receiving the Carolyn Shaw Bell award has caused me to reflect on mentoring. My takeaway message to all of you is: **Pass it on.** Find a mentor, be a mentor and pass it on.

### Calls & Announcements

Visit cswep.org for full details on each of the below opportunities, including submission guidelines for paper and application calls as well as participant, panelist and paper titles for currently scheduled sessions.

### **CSWEP Call for Papers @ 2016 Western Economic Association International Conference**

June 29-July 3, 2016 Hilton Portland & Executive Tower, Portland, OR Organizer: Catalina Amuedo-Dorantes, San Diego State University

Papers on gender, immigration, race/ethnicity and, more broadly, labor economics particularly solicited. Entire sessions or panel submissions in any area of economics also welcome. Deadline: January 25, 2016.

### CSWEP/CSMGEP Call for Applications @ 2016 Summer **Economics Fellows Program**

Fellowships, sponsored by the American Economic Association and the National Science Foundation, are open to senior graduate students at the dissertation stage, post-docs and junior faculty. All economists are welcome to apply without regard to gender or minority status, although the intention of the program—advancing the careers of women and underrepresented minorities—will drive the selection process. Fellows are selected by the program with the agreement of the sponsoring institution in line with the program's intention, the fit of the candidate with the activities of the sponsoring institution's research group, and the value of the proposed research to advancing the sponsoring institution's own goals. **Deadline:** February 15, 2016.

### **CSWEP Call for Papers** @ 2017 AEA/ASSA Meetings

January 6-8, 2017, Chicago, IL **Organizers: Kevin Lang, Boston University and** Petra Todd, University of Pennsylvania

Submissions considered for sessions on genderrelated topics and on secondary topic(s) to be determined by January 2016. CSWEP's primary intention in organizing these sessions is to create an opportunity for junior women to present at economics meetings and receive feedback from leading economists in their field. Coauthors may be of either sex and may be junior or senior. Junior men may submit sole-authored papers in the genderrelated sessions. Accepted authors may also submit their paper for publication consideration in the Papers & Proceedings issue of the American Economic Review. Deadline: March 7, 2016.

### **CSWEP Call for Applications Haworth Committee Mentoring Funding**

The Haworth Committee administers co-sponsorship of mentoring events and experiences through the Joan Haworth Mentoring Fund and CSWEP experimental funding. Most successful applications are for less than \$1K and they must be consistent with the mission of CSWEP. Successful applicants will be asked to write a summary of what they have gained from the mentoring effort. Deadline: Ongoing.

### **CSWEP Sessions @ 2016 Eastern Economics Association Meeting**

February 25–28, 2016, Washington Marriott Wardman Park, Washington, DC, Organizer: Amalia Miller, University of Virginia

CSWEP will sponsor a networking event and four paper sessions: "Topics in Macroeconomics," "Social, Cultural and Trade Effects on Labor Outcomes," "Determinants and Effects of Health Spending, Behaviors and Outcomes" and "Topics in Health and Labor Economics."

### CSWEP Sessions @ 2016 Midwest **Economics Association Meeting**

April 1-3, 2016, Hilton Orrington, Evanston, IL Organizer: Anne E. Winkler, University of Missouri-St. Louis

Join CSWEP on Friday, April 1st for a Networking Lunch and two professional development panels: "Advice for Job Seekers: Finding the Right 'Fit'" and "Career Advice on Mentoring, Grants & Teaching."

Questions? Contact cswep@econ.duke.edu

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