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March 3, 2021

Dear Colleagues,

It is with great enthusiasm that we write this letter nominating Jessica Utts for the George Cobb Lifetime Achievement Award in Statistics Education. We believe that Jessica is eminently deserving of the honor. The description of the award—an individual who, over an extended period of time, has made lasting contributions with broad impact to the field of statistics education—describes Jessica perfectly, as she has been enormously influential in statistics education on both a national and international level.

Jessica's work in the statistics education community is second to none. She has written two best-selling textbooks for Introductory Statistics. *Seeing Through Statistics* was first published in 1996 and is now in its fourth edition. Using key examples, the text revolutionized how statistics instructors teach the intuitive side of statistics. The thought questions at the beginning of each chapter engage students with real life examples, including counterintuitive situations that leave the students wanting to understand the concepts more deeply. Even if they don't use the text in their own classrooms, many instructors use them to supplement other texts which follow a more formulaic structure. Her second book, *Mind on Statistics* (with Robert Heckard) bridges the gap between intuition and technical skills taught in a standard introductory course.

In a 2003 *American Statistician* article, Jessica wrote a call to arms for statisticians to rethink how they teach students to interpret statistical results. As the majority of students taking statistics go on to become causal observers of studies (and not practitioners themselves), the most important skills they can obtain are those related to understanding results. Over the last 25 years, Jessica has continued push the statistics community toward more understanding and less rote application, and her work has had a direct impact on the undergraduate statistics curricula.

Beyond her books and other scholarship, Jessica has had an impact in the statistics education community through major leadership roles. At the undergraduate level, she was the Chair of the Consortium for the Advancement of Undergraduate Statistics Education (CAUSE) where she oversaw the creation of the comprehensive and essential website that serves as a resource for undergraduate teachers and the establishment of the electronic Conference on Teaching Statistics (eCOTS), a virtual conference which allows teachers of any means to gather biennially to share ideas and resources.

At the high school level, Jessica served as Chief Reader for the AP Statistics exam. As Chief Reader, she was responsible for leading a group of university and high school teachers through the onerous task of consistent grading of hundreds of thousands of AP Exams each year. During Jessica's time as chief reader, she was responsible for the assessment of almost 1,000,000 students! Additionally, as professional development for the readers, each year she brought in a well-regarded speaker who examined current issues in introductory statistics.

As the Chief Reader, Jessica's outreach extended past the AP Reading to a broader group of AP teachers. Every year she gave a talk at the AP Annual Conference (primarily attended by high school teachers) in which she went over the rubrics, common student errors, and teaching tips for all of the questions from that year's exam. She posted the talks on her home page so that teachers who could not attend the conference could view them. She also wrote a report with common student errors and teaching tips. Jessica's work as the Chief Reader has had a direct positive impact on the professional development of the AP statistics readers, AP statistics teachers, and AP statistics students.

A passionate advocate for statistical literacy for all, Jessica's impact extends beyond the classroom. She has written numerous papers on what educated citizens should know about statistics, and even papers on "What your future doctor should know about statistics." Even in her "retirement" Jessica continues to speak and write on the importance of community education in the service of enabling statistically literate citizens, including giving workshops for science writers, the National Park Service, and staff of the U.S. Congress.

In addition to her leadership within the statistics education community, Jessica has also been a passionate and effective advocate for statistics education in the wider statistics community. As President of the American Statistical Association, Jessica developed presidential initiatives related to statistics in the media and statistics education. She was able to create Statistical Media Ambassadors who are trained and can work directly with the media when the ASA is called to provide experts on a given statistical topic. Her second initiative was a program that enables ASA members to go into high school classrooms to talk about what they do. Pairing working statisticians with engaged high school students allows the students to get excited about the myriad possible ways that statistics can be used in the real world.

Jessica has also served as Chair or President of the Caucus for Women in Statistics, the International Biometric Society, and the Committee of Presidents of Statistical Societies. She has held leadership roles in the American Association for the Advancement of Science and the International Association for Statistical Education. She has been an advocate for statistics education within each of these organizations.

On a personal level, Jessica has been a mentor and role model. It was a chance interaction with Jessica at a WNAR meeting in 1976 that proved to be a pivotal moment for Roxy and convinced her that there was a place for people like her in the profession. Jessica was a role model and mentor to Jo while Jo was a graduate student at UC Davis, and Jo still turns to Jessica for advice on how to navigate professional and ethical dilemmas. Brad appreciates Jessica being a trusted colleague and a rock of support during difficult times, and describes Jessica as a model for the

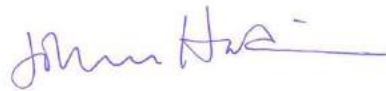
phrase “learning in the company of friends.” Jessica is a role model not only for us, but also for our entire profession.

There are many people who have had an impact on statistics education, but few have been as influential and visionary as Jessica. Jessica’s work has encouraged us all to see statistics education differently and to reflect on our classroom and professional practice. She has broadened the discussion of the role of statistical thinking in all areas of life, and the richness of her own life has informed her work as a statistician and an educator.


As we continue to look for ways to have an impact in the statistics education community, we continue to look to Jessica as an exemplar. Jessica has made exceptional contributions to our field, and just looking at her accomplishments makes us feel like total slackers! We marvel at what she has accomplished, and she has done it all with humor, grace, and an enthusiasm that is contagious. We believe that she is incredibly deserving of this award.



Roxy Peck  
Professor Emerita  
Cal Poly, San Luis Obispo



Johanna Hardin  
Professor  
Pomona College



Brad Hartlaub  
Professor  
Kenyon College

Attached letters of support from:

Helen MacGillivray  
Ron Wasserstein  
Kari Lock Morgan  
Ann Cannon  
Stacey Handcock

Attached email statements of support from:

Larry Lesser  
Beth Chance  
Nick Horton  
Nathan Tintle  
Ken Koehler  
Jeff Witmer  
Amanda Goldbeck  
Anna Bargagliotti  
Michele Guindani

14th February, 2021

It gives me great pleasure to **support Professor Jessica Utts for the 2021 George Cobb Lifetime Achievement Award in Statistics Education.**

I have interacted professionally and personally with Jessica since 2002. In my professional roles as above, but also including President, International Association for Statistics Education, and Statistical Society of Australia, I have interacted with many internationally renowned leaders in the statistical profession, and remarkable leaders in tertiary and school education. Professor Utts ranks highly in all contexts, providing exceptional leadership and achievements in the profession and education.

I was honoured to introduce Jessica as a plenary speaker at ICOTS in 2010 and to invite Jessica to be a plenary speaker at OZCOTS (Australian Conference on Teaching Statistics). I was especially pleased to be able to invite and present Jessica as the Presidential plenary speaker at the 2019 ISI World Statistics Congress, attended by more than 2500 delegates in Kuala Lumpur. Jessica's presentation on *Enhancing Data Science Ethics through Statistical Education and Practice* received much praise, and has led to international requests for Jessica to write more on the topic.

Jessica's exceptional and far-reaching initiatives in statistical education represent the best in combining depth of statistical expertise and understanding with remarkable insight and independent thinking in how to teach statistics, whether to future statisticians, statistical users across disciplines, citizens or school students. I have had many discussions with Jessica on teaching statistics, statistical thinking and statistical investigating, and her ability to see through student eyes and to think outside the box is a delight. It is more than 20 years since Jessica first wrote her book "*Seeing through Statistics*" but I still hear, again and again, references around the world to "this is how you teach statistics". I consulted with Jessica when I was asked to write MacGillivray et al (2014), adapted from Utts and Heckard (2012) for publication external to USA and Canada, as I was given a free hand to write whatever I wished, and our conversations demonstrated yet again the breadth of her understanding and dedication to achieving authentic learning in statistics.

Jessica's achievements are remarkable, spanning real and challenging roles in university, national and international contexts. In all contexts, I have heard nothing but respect and praise for her outstanding leadership, role model, dedication, integrity and her innate humanity and down-to-earth pragmatism. For all her truly remarkable achievements, Professor Utts would be an outstanding recipient of the **George Cobb Lifetime Achievement Award in Statistics Education.**

Yours sincerely,



Helen MacGillivray

#### References

- MacGillivray, H.L., Utts, J. and Heckard, R. (2014) *Mind on Statistics* (Australia and New Zealand 2<sup>nd</sup> edn). Cengage Learning Australia.
- Utts, J.M. and Heckard, R.F. (2012) *Mind on Statistics*. Brooks Cole/Cengage Learning.



February 27, 2021

Dear Cobb Award Selection Committee,

I know that the formality of letters of reference is required for any award, especially one as prestigious as the George Cobb Lifetime Achievement Award in Statistical Education. So, I and others are writing them. But as she was the chair of the CAUSE Board for a decade, I am sure each of you is familiar with the outstanding accomplishments and extraordinary leadership of Jessica Utts, and why, therefore, it is such a pleasure to write on her behalf.

As the ASA's President in 2016 (and president-elect and past president), she was relentless in promoting statistics education and ensuring that the ASA engaged in the education community at all levels. She championed the creation of the position of ASA K-12 Statistical Ambassador. She sought to develop a set top statistics education research questions that should be pursued. She created a task force to improve information for high school students about careers in statistics. The ASA's "This is Statistics" program is part of her legacy. She spoke in countless venues about the ASA and specifically about statistics education. The ASA continues to feel the impact of her statistics education leadership.

Dr. Utts has been committed to the AP Statistics Program for many years. Her leadership and knowledge are reflected in her selection for the distinguished post of Chief Reader, the person with overall responsibility for orchestrating the grading (reading) of some 200,000 exams.

Dr. Utts has spoken across the US and in many other countries. I've heard her speak many times. She is an interesting and engaging speaker, bringing to her talks a wealth of knowledge and experience resulting from having published nearly 100 journal articles and taught for many decades. Her textbooks, *Mind on Statistics* and *Seeing through Statistics*, are widely used and well regarded.

In no small part because of her contributions to statistics education, Dr. Utts is a Fellow of the ASA, the IMS, and AAAS. Not many people have all three of those distinctions. Similarly, Dr. Utts has received the highest award for service from three different organizations, ASA (Founders Award), IMS (Carver Medal), and NISS (Distinguished Service Award).

CAUSE will honor itself and the memory of George Cobb by selecting Jessica Utts to receive this award.

Sincerely,

A handwritten signature in black ink that reads "Ron Wasserstein". The signature is written in a cursive style with a long horizontal line extending to the right.

Ron Wasserstein, Executive Director



DATE: March 1<sup>st</sup>, 2021

TO: USCOTS Lifetime Achievement Award Committee

I am writing in support of Jessica Utts' nomination for the 2021 USCOTS Lifetime Achievement Award in statistics education. As a young(ish) female professor hoping to make a substantial impact in statistics education, I find Jessica's career inspiring for so many different reasons.

My first encounter with Jessica Utts was at ICOTS 2010 in Slovenia, and I remember it vividly. Jessica gave a plenary address there as well as an invited paper talk. I remember her invited talk in particular, on why we should be teaching more to address unintentional lies in the media. Despite it being over a decade ago, I can still picture the crowded room, being completely riveted and convinced, and the impression it made on me. With just one talk, she had substantially impacted my thinking about statistics education and my future teaching, and also opened my eyes to the potential impact of a single talk. I also remember personally interacting with her at that conference. I was still a graduate student at the time, and nervous to approach one of the famous plenary speakers, but was struck by how approachable, friendly, and encouraging she was. At that conference she became a hero and inspirational role model for me.

I have also been inspired more generally by her impact in statistics education. As I try to improve introductory statistics, I'm still trying to promote concepts over procedures and formulas, yet Jessica was promoting these ideas back in the 1990s or earlier. Her ability to turn her novel vision for a statistics literacy course into a widespread reality that has positively impacted so many students is truly inspirational, and demonstrates to people like me that such impact is possible.

As a female tenure-track faculty member at an R1 institution hoping to focus on statistics education, there are scant examples of people who have come before me and succeeded in such a role. However, Jessica Utts serves as an inspiring example that one can be tenured at R1 universities while maintaining a passion for improving statistics education on a large scale. She has also been inspirational in showing that someone whose most valuable (in my opinion) statistical contributions have been in statistics education can rise to the top and become the president of the ASA.

I could be wrong about this, but I believe Jessica was the first female to receive a PhD in statistics from Penn State. Although not statistics education, this is yet another inspiring example of how Jessica opened new doors and paved the way for those to come after her.

In conclusion, Jessica Utts' contributions to and career in statistics education has been inspiring extremely deserving of the USCOTS Lifetime Achievement Award in statistics education.

Sincerely,

Kari Lock Morgan

Kari Lock Morgan  
Assistant Professor of Statistics  
Pennsylvania State University

February 21, 2021

Dear Award Committee Members,

It is with great enthusiasm that I write this letter in support of awarding Jessica Utts the George Cobb Lifetime Achievement Award in Statistics Education. I can't think of a person more deserving of the award than Jessica. Her contributions to statistics education have been many and far-reaching. In fact, I might argue that she has had a chance to connect with one of the biggest audiences of any statistics educator: high school statistics instructors from her tenure as Chief Reader for the AP statistics exam; college statistics instructors through her two popular introductory statistics textbooks; and, indeed, all ASA members from her time as ASA President when several of her presidential initiatives were on statistics education.

In this letter, I am going to focus on Jessica's time as Chief Reader (CR) for the AP statistics exam as that is when I worked most closely with her (I was her Assistant Chief Reader for 4 years). A good CR needs to be a jack-of-all-trades. Of course they need to have a deep understanding of statistics, but they also have to be able to communicate that statistical understanding respectfully to teachers who likely have not had any exposure to statistics beyond the course that they, themselves, teach. The CR needs to be willing and able to deal with all personality types with grace and diplomacy. They need to have good organizational skills and be able to work under pressure. They must have patience and be very good at multitasking. Finally, the CR must be comfortable being the public face of the AP Stat program. Jessica excelled in all these dimensions. And because of that she was a well-loved and well-respected CR. In this letter I will hit just a few highlights from her tenure as CR.

Every year, a few days before the official reading of the exams starts, a number of leaders arrive at the reading site to refine the rubrics that the CR had drafted. The goal is to make sure that the rubrics are not only valid, but written in such a way that up to 400 people will come to the same score on the same paper. The leaders use the rubrics to practice score a number of actual student papers to identify any areas of potential confusion. As you can imagine, there are often heated discussions about the balance between being statistically valid and being easy to use consistently by people who may not have much statistical background. Jessica was very good about listening to all voices, considering them, making decisions, and communicating those decisions in a way that everyone could understand and appreciate.

Once the reading began, there was rarely a time during the workday when Jessica would have more than 10 minutes without being interrupted. I was continually amazed at how she approached every interruption with a genuine smile and gave her full attention to the new issue before returning to what she had been doing. Her ability to multitask in this way had several positive outcomes. First, everyone felt like their concern/issue was important and knew that Jessica would address it. This helped tremendously with her being a very good "public face" of the AP Stat program. Second, because she was so good at multitasking and organizational details, despite the interruptions, things still got done in a timely manner. This meant that the reading generally progressed without major issues. Again, helping the reputation of the reading among AP Stat teachers.

For these, and many other reasons, I believe Jessica Utts is a very deserving recipient of this award.

Ann Cannon

Watson M. Davis Professor of Statistics; Cornell College



March 1, 2021

Dear CAUSE Awards Committee,

I am writing this letter in resounding support of Jessica Utts' nomination for the George Cobb Lifetime Achievement Award in Statistics Education. Jessica's contributions to the statistics education community are invaluable, and I cannot think of a better candidate for this award. I have known Jessica in two capacities—as a colleague in the Department of Statistics at UC Irvine, and as a reader and table leader for the AP Statistics Reading during Jessica's tenure as Chief Reader. Jessica has been one of my primary mentors in my career, and I am excited to share her impact not only in my own career, but on the entire statistics education community.

### Teaching Mentor

When I applied to join the Statistics faculty at the University of California, Irvine in 2012, I was not actively seeking a new position. I read an announcement that the department was hiring, and the fact that Jessica was the Department Head at the time was the primary reason I applied. At that time, I had not met Jessica personally, but I was familiar with her introductory statistics textbooks and her many publications and presentations in statistics education.

When I arrived at UCI, I was scheduled to teach the introductory statistics course, which is a large lecture course of approximately 200 students in each section. The largest course I had taught up to that time was at most 30 students. Thus, I needed a lot of support in my transition to teaching these large courses. Jessica had also been teaching these courses (and indeed, wrote the textbook for the course), and she provided me with copies of all her materials. I met with her prior to the quarter and regularly throughout the quarter to discuss pedagogy, administration and logistics of the course. Her door was always open, and had she not been there to mentor me, my first quarter would not have gone so smoothly!

During my four years as an Assistant Teaching Professor at UCI, Jessica and I had regular conversations on the teaching and learning of statistics. Together, we co-advised two PhD students in statistics education, and my own research in statistics education flourished under her mentorship. To this day, I still use her 2003 *The American Statistician* article, "What Educated Citizens Should Know about Statistics and Probability," as inspiration for both my teaching and my education research.

### AP Statistics

Jessica has long been involved with the AP Statistics exam, and she served as Chief Reader from 2014–2018. I started as a reader in 2009, and became a table leader in 2014. Many people wonder why anyone would want to spend two weeks of their summer grading AP Statistics exams, but, as Jessica explains in her 2016 *Amstat News* article,<sup>1</sup> the community of educators you meet and the professional development opportunities you experience keep readers coming back.

Though AP Statistics is one of the relatively newer exams, by the time Jessica became Chief Reader, over 200,000 students were taking the exam each year. Needless to say, the job of Chief Reader is all-encompassing. Jessica handled the position expertly. Readers scored consistently and according to the rubric, and we somehow always finished on time, with no group of readers needing to work long after any other group. In addition to overseeing and managing the AP Reading, the Chief Reader is the primary spokesman to high school AP Statistics teachers. Jessica presented results and teaching tips to teachers at the AP Annual Conference each year, and continues to give presentations and outreach events on the importance of statistical literacy. Jessica served as ASA President in 2016, and through this role and many others, she has truly been an ambassador for statistics and statistics education.

### Overall Impact

In this letter, I have only gone into detail on a few examples of Jessica's substantial impact in my career. She has made many other contributions to statistics education that are not mentioned here. (For more discussion of her wide range of contributions to the discipline, see her interview in the *Journal of Statistics Education* with Allan Rossman from 2014.<sup>2</sup>) However, hopefully these few examples of her impact in my life and career offer a sense of her broad impact on the entire field.

Sincerely,

Stacey Hancock,  
PhD Assistant Professor of Statistics  
stacey.hancock@montana.edu

<sup>1</sup> <https://magazine.amstat.org/blog/2016/05/02/pres-may16/>

<sup>2</sup> <http://jse.amstat.org/v22n2/rossmanint.pdf>

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Mountains & Minds



## **Email Statements of Support**

### **Larry Lesser**

I am happy to add my very strong support of Jessica Utts' nomination -- the course I have taught the most in my career is Statistical Literacy from her visionary and groundbreaking *Seeing Through Statistics* book which absolutely made me a more inspired teacher, learner, and statistics education researcher. Also, with all of the many times I've seen her talks, she clearly masters the art of taking a nuanced, often-misunderstood concept and getting to the heart of it with clarity and just the right real-world illustrative examples. But on top of all of her individual contributions is a high level of serving the field (which has continued even into her emerita status), including leading her department, the American Statistical Association, the AP Statistics Exam, etc. She is a wonderful colleague, a true ambassador, and very worthy of this lifetime achievement award.

### **Beth Chance**

What stands out to me about Jessica is how she has contributed to statistics and statistics education and the community in so many different ways; it seems like every time I see her name pop up it's in a new capacity that I didn't know she was even involved with (e.g., award committees, ASA governance, online learning). And then on top of that, she is always so giving of her time and mentorship, even when I asked her "how do you do it all"! This recognition is a long time coming because of her willingness to selflessly serve on the CAUSE board for so long. I first met her at a Chance workshop, probably 1995; she was already well-known for her contributions to statistics literacy and has been doing so and having enormous impact ever since, whether it is accessible textbooks focused on how to read the news and be an educated citizen or talks at international teaching conferences that are repeatedly cited for their clarity and important messages. Her contributions to the AP Statistics community alone are tremendous -- is there a role or job she has not filled? When I teach a course on "how to teach statistics," she is always one of my first calls to visit, and she almost always says yes! There are few that can match her breadth of contribution or her warmth and humor serving the greater good.

### **Nick Horton**

Jessica Utts has been a remarkable contributor to the teaching and learning of college-level statistics. I'll briefly mention two highlights. Along with many others, I've benefited from her lively and engaging textbooks, most notably "Seeing Through Statistics" that provide an introduction to statistics that illustrates the importance of quantitative literacy for all. The examples and case studies are exemplary. Jessica's impact goes far beyond her textbooks, papers, talks, and her extended service as Chief Reader of the AP Statistics program. She was literally the Education President of the American Statistical Association and used her tenure to help ensure that key issues regarding statistics and data science education were addressed by the association. I'm hugely appreciative of Jessica's long-standing dedication to the community.

### **Nathan Tintle**

Jessica epitomizes someone worthy of this noteworthy Lifetime achievement award. She is an internationally respected, forward thinking, visionary in statistics education. She has served in numerous leadership roles with distinction, has nearly universal respect and support in and beyond statistics education and has impactful textbooks and research publications. I can think of no one better to receive this award this year.

**Ken Koehler**

I enthusiastically support the nomination of Jessica Utts for the USCOTS Lifetime Achievement Award. In addition to her excellent scholarship, teaching and widely used textbooks, Jessica has been a tireless promoter of the practical importance of providing high school and college students with a basic understanding of statistical thinking to enable them to critically evaluate sources of information and use data to make decisions about important personal issues, such as health, nutrition and careers, and develop informed opinions about national and international policies throughout their lives. Over the last twenty-five years, Jessica has been an influential leader in the development and growth of the AP Statistics Program, serving as the Chief Reader from 2014 through 2018. This program currently annually provides a high-quality introduction to statistical reasoning and methodology for over 200,000 high school students, and it has provided workshops and training in teaching statistics to many hundreds of high school teachers. Jessica played important roles in recruiting teachers into the AP Statistics program and providing mentoring. She continues to inspire thousands high school and college teachers.

**Jeff Witmer**

Jessica Utts has long been one of the leading figures in statistics education. She has been involved in so many associations for some many years in so many ways that she seems to be a fixture. Yet she is no mere contributor to the profession. Rather, for years she has pushed the rest of us to think about not just how to teach statistics, but what we should be teaching. She has contributed greatly to an ever-broadening discussion of the role of statistical thinking in all areas of life, as the richness of her own life has informed her work as a statistician and an educator.

**Amanda Golbeck**

Jessica Utts is a thought leader in promoting the teaching of statistical literacy in college-level introductory statistics courses. She understood early in her career that teaching the mechanics of statistics alone was not enough to develop a statistically literate person. Over the course of her career, Jessica has helped us to understand what educated citizens should comprehend about statistics. Our society has become more statistically literate because of her thoughtful leadership. I fully support the nomination of the visionary Jessica Utts for the USCOTS Lifetime Achievement Award.

**Anna Bargagliotti**

My first semester as an assistant professor I taught introductory statistics for nursing students. I was handed one of Jessica Utt's books to teach with. Her book was very influential in shaping my thinking about teaching statistics. I am now in my thirteenth year as a faculty member and I still refer to Jessica's work. She has had so many contributions to statistics education and the Lifetime Achievement Award would be a wonderful way to honor such an influential person in statistics education.

**Michele Guindani**

Jessica has promoted statistical literacy in the world. As ASA President: she has established two innovative programs to deal with the challenges of today's environment: the Media Training Program, to provide statisticians with the necessary skills required for communicating with journalists and the public; and the Statistical Media Ambassador Program, to train media spokespeople for ASA. At UCI, she had the vision to start the first accredited BS in Data Science in the nation. She also actively pushed for and succeeded in making statistical literacy a part of every undergraduate student's training at UCI. Perhaps most importantly, she led by example, being a role model and serving as a mentor to countless students, faculty, and staff. For all those reasons, I believe that Jessica Utts is absolutely deserving of the George Cobb Lifetime Achievement Award, and I enthusiastically support her nomination.