

## DAY 4 | SUNDAY, SEPTEMBER 8th, 2019

6:30 – 7:30 AM Breakfast (Reception Room, Sheraton Palo Alto)  
*\*\*For hosted attendees only, registration required\*\**

8:00 – 9:15 AM FUNDER PANEL: Review and Future Directions

Moderator: **Brian Nosek** *Center for Open Science, USA*

Panelists: **Chonnetia Jones** *Wellcome Trust, UK*  
**Dawid Potgieter** *Templeton World Charity Foundation, BHS*  
**Arthur "Skip" Lupia** *National Science Foundation, USA*

### COFFEE BREAK

9:45 – 11:00 AM PANEL DISCUSSION:  
Reflections on metascience topics and findings

Moderator: **Jon Krosnick** *Stanford University, USA*

Panelists: **Jon Yewdell** *NIAID/DIR, USA*  
**Lisa Feldman Barrett** *Northeastern University, USA*  
**Kathleen Vohs** *University of Minnesota, USA*  
**Norbert Schwarz** *University of Southern California, USA*

### BREAK

11:15 – 12:30 PM PANEL DISCUSSION:  
Journalists' perspective on metascience and engagement  
with the broader public

Moderator: **Leif Nelson** *University of California, USA*

Panelists: **Ivan Oransky** *Retraction Watch, USA*  
**Christie Aschwanden** *Emerging Form, USA*  
**Richard Harris** *National Public Radio, USA*  
**Stephanie M. Lee** *BuzzFeed News, USA*

### LUNCH BREAK (CENTENNIAL LAWN)

1:30 PM UNCONFERENCE (Centennial Lawn)  
Breakouts, Open Space for Collaboration  
*\*\*Beverages & Snacks provided\*\**

## GENERAL INFORMATION



### ADDRESS

Cubberley Auditorium |  
School of Education |  
Stanford University  
485 Lasuen Mall  
Stanford, CA 94305

### PARKING

Complimentary Conference  
Parking is available  
in the Galvez Lot.

Walking to Cubberley Auditorium  
from Galvez Lot: *This lot is a 15-20  
minute walk from the Cubberley  
Auditorium. Please allow yourself  
plenty of time for a stroll through  
the beautiful Stanford Campus!*  
Follow the Metascience signs  
from the Galvez Lot to Cubberley  
Auditorium.

### TAXI/UBER/LYFT

Use the following address:  
615 Escondido Road, Stanford,  
CA 94305

Walking to Cubberley Auditorium  
from Taxi/Uber/Lyft drop-off: *It is  
a 10-15 minute walk to Cubberley  
Auditorium. Please allow yourself  
plenty of time for a stroll through  
the beautiful Stanford Campus!*  
Follow the Metascience signs to  
Cubberley Auditorium.

### CONTACT

fetzer@elementsmettings.com

### IMPRINT

Fetzer Franklin Fund  
www.fetzer-franklin-fund.org

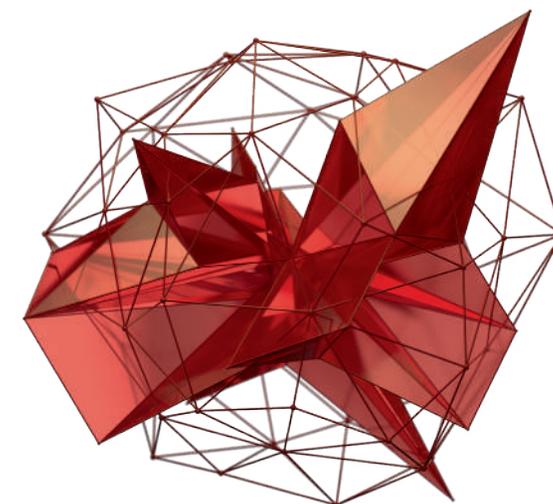
Design: www.kakoii.com

### ORGANIZERS

Brian Nosek | Jonathan Schooler |  
Jon Krosnick | Leif Nelson |  
Jan Walleczek

Share us on social media: **#Metascience2019**

## PROGRAM



# METASCIENCE

## 2019 SYMPOSIUM

The Emerging Field of Research  
on the Scientific Process.

September 5th-8th, 2019  
Stanford University | Cubberley Auditorium

[www.metascience2019.org](http://www.metascience2019.org)



**DAY 1 | THURSDAY, SEPTEMBER 5th, 2019**

6:30 – 7:30 AM Breakfast (Reception Room, Sheraton Palo Alto)  
 \*\*For hosted attendees only, registration required\*\*

7:00 – 8:00 AM Registration (Cubberley Auditorium)

8:00 – 8:30 AM Welcome, Purpose & Logistics  
**Jan Walleczek** *Fetzer Franklin Fund, USA*  
**Jonathan Schooler** *University of California, USA*  
**Brian Nosek** *Center for Open Science, USA*

**TOPIC 1 ↓ How Do Scientists Generate Ideas? ↓**

8:30 – 10:45 AM **Dean Keith Simonton** *University of California, USA*  
 Scientific Creativity: Discovery and Invention as Combinatorial

**Roberta Sinatra** *IT University of Copenhagen, DK*  
 Quantifying the evolution of scientific careers

**Melissa Schilling** *New York University, USA*  
 Where do breakthrough ideas come from?

**COFFEE BREAK**

11:00 – 12:30 PM **Jacob Foster** *University of California, USA*  
 Made to Know: Science as the Social Production of Knowledge (and its Limits)

**Carole Lee** *University of Washington, USA*  
 Gender-based homophily in collaborations across a heterogeneous scholarly landscape

**LUNCH BREAK (CENTENNIAL LAWN)**

1:30 – 2:15 PM **Marta Sales-Pardo** *Universitat Rovira i Virgili, ES*  
 Collaboration patterns in science

**TOPIC 2 ↓ What is Replication and Its Impact and Its Value? ↓**

2:20 – 3:05 PM **Tim Errington** *Center for Open Science, USA*  
 Barriers to conducting replications – challenges or opportunities?

**COFFEE BREAK**

3:20 – 5:35 PM **Shirley Wang** *Harvard Medical School, USA*  
 What does replicable ‘real world’ evidence from ‘real world’ data look like?

**Jonathan Schooler** *University of California, USA*  
 How replicable can psychological science be?: A highly powered multi-site investigation of the robustness of newly discovered findings

**Daniele Fanelli** *London School of Economics, UK*  
 Low reproducibility as divergent information: A K-theory analysis of reproducibility studies

6:00 – 8:00 PM **Dinner & Poster Session** (Centennial Lawn)  
 \*\*All attendees invited\*\*

**DAY 2 | FRIDAY, SEPTEMBER 6th, 2019**

6:30 – 7:30 AM Breakfast (Reception Room, Sheraton Palo Alto)  
 \*\*For hosted attendees only, registration required\*\*

**TOPIC 2 ↓ What is Replication and Its Impact and Its Value? ↓**  
 \*\*Continued from Day 1\*\*

8:00 – 9:30 AM **Annette N. Brown** *FHI 360, USA*  
 Is replication research the study of research or of researchers?

**Adam Russell** *DARPA, USA*  
 Fomenting (Reproducible) Revolutions: DARPA, Replication, and High-Risk, High-Payoff Research

**TOPIC 3 ↓ How Are Our Statistics, Methods, & Measurement Practices Affecting Our Capacity to Identify Robust Findings? Does the distinction between exploratory (hypothesis generating) and confirmatory (hypothesis testing) research matter? ↓**

9:30 – 10:15 AM **Bernhard Voekl** *University of Bern, CH*  
 Biological variation is more than random noise

**COFFEE BREAK**

10:30 – 12:00 PM **Michèle B. Nuijten** *Tilburg University, NL*  
 Checking Robustness in 4 Steps

**Steven Goodman** *Stanford University, USA*  
 Statistical methods as social technologies versus analytic tools: Implications for metascience and research reform

**LUNCH BREAK (CENTENNIAL LAWN)**

1:05 – 3:20 PM **Andrew Gelman** *Columbia University, USA*  
 Embracing Variation and Accepting Uncertainty: Implications for Science and Metascience

**Zoltán Kekecs** *Eötvös Loránd University, HU*  
 How to produce credible research on anything

**Jan Walleczek** *Phenoscience Laboratories, DE*  
 Counterfactual Meta-Experimentation and the Limits of Science: 100 Years of Parapsychology as a Control Group

**COFFEE BREAK**

3:35 – 4:20 PM **Edward Miguel** *University of California, USA*  
 Innovations in Pre-registration in Economics

**TOPIC 4 ↓ How do Scientists Interpret and Treat Evidence? ↓**

4:25 – 5:55 PM **Carl Bergstrom** *University of Washington, USA*  
 The inherent inefficiency of grant proposal competitions and the possible benefits of lotteries in allocating research funding

**James Evans** *University of Chicago, USA*  
 The social limits of scientific certainty

6:45 – 10:00 PM **Dinner**  
 \*\*Private dinner by invitation only\*\*

**DAY 3 | SATURDAY, SEPTEMBER 7th, 2019**

6:30 – 7:30 AM Breakfast (Reception Room, Sheraton Palo Alto)  
 \*\*For hosted attendees only, registration required\*\*

**TOPIC 4 ↓ How do Scientists Interpret and Treat Evidence? ↓**  
 \*\*Continued from Day 2\*\*

8:00 – 10:15 AM **Yang Yang** *Northwestern University, USA*  
 The Replicability of Scientific Findings Using Human and Machine Intelligence

**Fiona Fidler** *University of Melbourne, AU*  
 Misinterpretations of evidence, and worse misinterpretations of evidence

**Cailin O'Connor** *University of California, USA*  
 Scientific Polarization

**COFFEE BREAK**

10:30 – 11:15 AM **Daniel Kahneman** *Princeton University, USA*  
 The Psychology of Scientific Overconfidence: The Case of Psychology

**TOPIC 5 ↓ What Are the Cultures and Norms of Science? ↓**

11:15 – 12:00 PM **Paula Stephan** *Georgia State University, USA*  
 Practices and Attitudes Regarding Risky Research

**LUNCH BREAK (CENTENNIAL LAWN)**

1:05 – 2:35 PM **Staša Milojević** *Indiana University, USA*  
 The Changing Landscape of Knowledge Production

**Dorothy Bishop** *University of Oxford, UK*  
 The psychology of scientists: The role of cognitive biases in sustaining bad science

**COFFEE BREAK**

2:50 – 4:20 PM **Jevin West** *University of Washington, USA*  
 Echo Chambers in Science?

**Simine Vazire** *University of California, USA*  
 Towards a More Self-Correcting Science

4:30 – 5:30 PM OPEN DISCUSSION

7:00 PM **Dinner**  
 \*\*Private dinner by invitation only\*\*