

EVENT

# DEVSEC: Conference on the Use of Secondary and Open Source Data in Developmental Science

A 2018 SRCD Special Topic Meeting

## EVENT DETAILS

### When?

THURSDAY, OCTOBER 4, 2018 9:00AM TO  
SATURDAY, OCTOBER 6, 2018 5:00PM

### Where?

**Doubletree by Hilton Hotel Phoenix Tempe**  
2100 South Priest Drive Tempe, Arizona 85282

### Organizers

Pamela Davis-Kean, *University of Michigan*;  
Justin Jager, *Arizona State University*; Adriene  
Beltz, *University of Michigan*; Colter Mitchell,  
*University of Michigan*

## #DEVSEC18

Every day, every moment, and in every environment we are collecting data on how individuals develop across the lifespan. There is a wealth of data for understanding development but only a small number of developmental scientists have taken advantage of this data to study human development from cells to the environment. This meeting will provide a venue for scientists to learn and share research using these resources, but also training opportunities on using data archives and open source data that are well-suited for addressing questions of developmental scientists across multiple methods of data collection (survey, video, audio, neuroimaging, genetic testing, and evaluation, administrative), disciplines (psychology, sociology, economics, pediatrics, public health, anthropology, education), and cultures. This conference will highlight research using secondary sources of data but also provide a unique opportunity for the community to address their own developmental questions by being connected to a data resource for answering that question.

- [Download the Program Guide \(Printed copies will not be distributed.\)](#)
- [Browse the full Online Program](#)
- [Registration information](#)
- [Explore the Invited Program](#)
- [DEVSEC18 Student Travel Awards Information](#)
- [FAQs for Presenters](#)

Questions? Email [programoffice@srcd.org](mailto:programoffice@srcd.org)

## Registration and Hotel Information

This meeting has a cap of approx. 250 attendees determined by the space constraints at the hotel. Registration will be on a first-come first-served basis.

### Conference Fees (includes breakfast, lunch and receptions):

SRCD Regular Member

\$375.00

SRCD Early Career Member	\$295.00
SRCD Student Member	\$220.00
SRCD Emerging Nations Member	\$75.00
Regular Non-member (more than 5 years since receiving a doctoral degree)	\$410.00
Early Career Non-member (within 5 years of a doctoral degree)	\$350.00
Student Non-member (have not received a doctoral or undergraduate degree)	\$260.00

### Conference Hotel

Doubletree by Hilton Hotel Phoenix Tempe  
2100 South Priest Drive  
Tempe, Arizona 85282

### Getting There

Phoenix Sky Harbor International Airport (PHX) is 4 miles from the Doubletree Hilton Hotel. The hotel provides a complimentary airport transfer on a space available basis as well as complimentary local transfers to nearby locations. Please call 480-967-1441 after you have collected your luggage at the airport to request the shuttle.

## Invited Program

**Thursday, October 4, 2018**

**Opening Keynote Address:** *Promoting Openness and Reproducibility in Developmental Research*

**Room:** Fiesta I; 1:00 to 2:30 pm

**Chair:** Pamela Davis-Kean, University of Michigan

**Keynote Speaker: Brian Nosek, Executive Director and Co-founder, Center for Open Science (COS)**

**Abstract.** Shifting the scholarly culture toward open data and open workflow is partly an incentives problem, partly an infrastructure problem, and partly a coordination problem. The [Center for Open Science](#)

(COS; <http://cos.io/>) is a non-profit technology and culture change organization working to solve this. The central components of COS's strategy are providing free, open, public goods infrastructure that scholarly communities brand and operate based on their local norms (OSF; <http://osf.io/>), and coordinating across disciplinary and stakeholder silos to align scholarly practices with scholarly values. Greater openness of data, materials, and process will accelerate discovery and improve trust and credibility in the outputs of research.

**Biography.** Brian Nosek is the Executive Director and Co-founder of the Center for Open Science, a non-profit organization in Charlottesville, Virginia, USA. COS has a mission to increase the openness, integrity, and reproducibility of scientific research worldwide. The COS team builds technology that enables researchers to share their research; conducts trainings to teach more open, reproducible research practices; and studies the processes by which scientists can improve their science. Brian is also a Professor in the Department of Psychology at the University of Virginia. He received his Ph.D. from Yale University in 2002. He co-founded [Project Implicit](#), a multi-university collaboration for research and education investigating implicit cognition--thoughts and feelings that occur outside of awareness or control. Brian investigates the gap between values and practices, such as when behavior is influenced by factors other than one's intentions and goals. Research applications of this interest include implicit bias, decision-making, attitudes, ideology, morality, innovation, barriers to change, open science, and reproducibility. In 2015, he was named one of Nature's 10 and to the *Chronicle for Higher Education* Influence list.

**Twitter:** [@BrianNosek](#)

**Wikipedia:** [https://en.wikipedia.org/wiki/Brian\\_Nosek](https://en.wikipedia.org/wiki/Brian_Nosek)

**Website:** <http://projectimplicit.net/nosek/>

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**Invited Symposium:** *Using Administrative Data to Examine Development*

**Room:** Coronado; 3:00 to 4:30 pm

**Chair:** Justin Jager, Arizona State University

**Integrative Statement.** This international, interdisciplinary symposium features three presentations that employ administrative data to evaluate and inform public policy as well as illuminate health and well-being at different points of the lifespan. The symposium will begin with a presentation by the symposium's invited speaker, Elizabeth Gershoff, who will discuss and highlight the use of secondary and administrative data to

address policy-relevant developmental questions. The symposium will then proceed with two additional presentations that cleverly and aptly utilize administrative data to either evaluate or inform public policy. Specifically, the symposium's second presentation uses state-wide administrative records from North Carolina to assess the impact of SNAP (formerly known as food stamps) receipt as well as the timing of SNAP receipt on adolescent school test scores. The symposium's third presentation uses merged Swedish nationwide population registers to determine the predictors of opioid-prescription receipt among adolescents and young adults. The merits, opportunities, and challenges associated with the use of administrative data will be discussed and highlighted.

**Invited Speaker: Elizabeth Gershoff, Ph.D., University of Texas at Austin**

**Presentation Title:** *Using Secondary and Administrative Data to Answer Developmental and Policy Questions*

**Abstract.** Many developmental scientists have embraced the benefits of using secondary, longitudinal datasets. Fewer have turned to administrative datasets, which are more challenging to obtain and to use but which have promise for informing developmental science. In this talk, Dr. Elizabeth Gershoff will discuss the practicalities, benefits, and challenges of using secondary research data and administrative data to address research questions that can contribute both to developmental science and to policy evaluation. Dr. Gershoff will use examples from her own research, including the use of FBI crime data to determine whether state changes in school discipline policy are linked with changes in youth crime, the analysis of an entire cohort of children entering the foster care system in a large state in order to characterize the experiences of children in foster care, and the utilization of achievement tests administered to all elementary school children in a state to examine the impacts of school instability on children's achievement trajectories.

**Biography.** Dr. Gershoff's research takes a population-level approach to understanding the impacts of poverty and violence exposure on children and their families as well as to identifying the role large-scale intervention programs can play in mitigating these impacts. Two key topics of her research have been how parental and school discipline affect child and youth development and how parent education and early education programs, such as the federal Head Start program, can improve the lives of at risk children. She is an internationally recognized expert on the effects of physical punishment on children.

**Friday, October 5, 2018**

**Invited Symposium:** *Open Developmental Science*

**Room:** Coronado; 3:00 to 4:30 pm

**Chair:** Pamela Davis-Kean, University of Michigan

**Integrative Statement:** Dr. Rick Gilmore will lead a symposium on the value of an open science approach to developmental research. Drawing from the movement in psychological science more broadly, he will discuss the current state of available tools for facilitating transparent and reproducible work in developmental science and highlight opportunities and a vision for the future. Next, two research teams will share research that actualizes the promise of an open science approach to developmental science. Rebecca Beights and colleagues utilize data from the open Autism Brain Imaging Data Exchange (ABIDE) II initiative to examine the link between structural brain volume and working memory in children and adolescents with and without autism spectrum disorder. Dr. Melissa Kline with colleagues from the ManyBabies Consortium present data from a replication of infant directed speech experiments across over 60 labs, aiming to get an accurate estimate of effects and to examine how testing practices influence results.

**Invited Speaker: Rick O. Gilmore, Co-Director, Databrary.org**

**Presentation Title:** *The Promise of Open Developmental Science*

**Abstract.** There has been significant progress across the psychological sciences in expanding access to data, materials, analysis procedures, and computer code. The widespread adoption of new open science tools and practices are making psychological science more transparent and reproducible than ever before. In this talk, I will describe a time in the very near future when open data, materials, and code sharing will become universals that combine to spark a renaissance of discovery in developmental science.

**Biography.** Rick Gilmore is Associate Professor of Psychology at the Pennsylvania State University. He earned his bachelor's degree in Cognitive Science, magna cum laude, from Brown University, and his master's and doctoral degrees in Psychology from Carnegie Mellon University. Gilmore's research on the neural bases of perceptual and cognitive development has been funded by NIH and NSF. He was the founding Director of Human Imaging at Penn State's Social, Life, & Engineering Sciences Imaging Center, and is the Co-Founder and Co-Director of the Databrary.org data library. Gilmore chairs the SRCD Task Force on Openness and Scientific Integrity, and he embraces open and reproducible practices in all aspects of his teaching and research.

**Twitter:** [@rogilmore](https://twitter.com/rogilmore)

**Website:** <http://gilmore-lab.github.io>

**Saturday, October 6, 2018**

**Invited Symposium:** *ABCD Study*

**Room:** Coronado; 10:45 to 12:15 pm

**Chair:** Adriene Beltz, University of Michigan

**Integrative Statement.** The Adolescent Brain Cognitive Development (ABCD) Study is a large-scale, multi-site study of health and behavior focusing on the developing brain, and on factors that influence adolescent trajectories of cognitive, intellectual, and social-emotional development. The goal is to enroll well over 10,000 children at 9 or 10 years of age, at 21 sites nationwide, and follow them for 10 years. The ABCD consortium has embraced an open-science model and an aggressive timeline for sharing, not only the terabytes of data collected, but the computational workflows used to produce them, and some novel computational tools that the scientific community can use to explore and model them. Three members of the ABCD team will provide additional information about the ABCD Resource: Terry Jernigan, Co-Director of the Coordinating Center, will give an overview of the ABCD study, the cohort and data collected, and the data sharing policies and timelines; Hugh Garavan, Associate Director of the Coordinating Center and U. Vermont site PI, will describe in more detail the functional imaging data and some early results emerging from the study; and Wes Thompson, Associate Director for Biostatistics (of the ABCD Data Analysis and Informatics Center) will describe a powerful new tool under development in ABCD to help users to optimize their analyses of ABCD data.

**Invited Speakers:**

- *ABCD & The Open Science Model*

**Terry L. Jernigan, Professor of Cognitive Science, Psychiatry, and Radiology; Director, Center for Human Development, UC San Diego; Co-Director, ABCD Study Coordinating Center**

- *Brain Function in the Pre-Adolescent Brain: Results from the ABCD Study*

**Hugh Garavan, Professor, University of Vermont**

- *ABCD Data Exploration and Analysis Portal: Enabling Open and Reproducible Science*

**Wesley K. Thompson, Ph.D., Associate Professor In Residence, Division of Biostatistics and Halıcıoğlu Data Science Institute, Department of Family Medicine and Public Health, University of California, San Diego; Associate Director of the Data Analysis and Informatics Core, Adolescent Brain and Cognitive Development Study; Director of Statistics, National Consortium on Alcohol & Neurodevelopment in Adolescence**

**Biographies.**

Dr. Terry Jernigan is Professor of Cognitive Science, Psychiatry, and Radiology, and Director, Center for

Human Development at the University of California, San Diego. For over 30 years, she has studied the human brain using noninvasive imaging. This work has focused on brain development and aging, neurodevelopmental disorders, neuropsychiatric and substance use disorders, and neurodegenerative disorders. For the last decade her central research interest has been the developing human mind and brain, with a focus on the dynamic neurodevelopmental processes that give rise to human individuality—and on how these processes are affected by experience, substance exposure, genetic variation, and other factors. She is Co-Director of the Coordinating Center for the ABCD Study. She has served on the National Advisory Council on Drug Abuse and the Council of Councils of the National Institutes of Health, and she currently serves on the scientific advisory boards of several research organizations in the United States and Europe. Website: <http://terryjernigan.ucsd.edu/>

Dr. Hugh Garavan is a Professor in the Department of Psychiatry at the University of Vermont. He received his PhD in Cognitive Psychology from Bowling Green State University in Ohio and completed postdoctoral fellowships at Cornell University and the Medical College of Wisconsin. His research uses structural and functional neuroimaging to study cognitive control and reward processes with a particular interest in how functional changes in these systems may contribute to addiction. In addition to studying current abusers of numerous drugs, he has researched the importance of cognitive control systems for successful drug abstinence. His primary research focus of the last few years has been risk factors for drug use during adolescence and he is a co-investigator on the IMAGEN project, a longitudinal neuroimaging-genetic study of over 2,000 teens. He is a site PI and Associate Director of the Adolescent Brain Cognitive Development study. Dr. Garavan is a member of several professional societies, has served as secretary for the Organization for Human Brain Mapping, is a standing member of the NPAS study section, has been a reviewer for the NSF, several European grant-giving agencies, and over 50 journals. He has published almost 250 papers in the fields of cognitive neuroscience and addiction.

Dr. Thompson earned his Ph.D. in Statistics from Rutgers University in 2003, with a focus on statistical methods for longitudinal data analysis. He was appointed Assistant Professor of Statistics and Psychiatry at the University of Pittsburgh in 2005, where he received a five year NIH K25 Career Development Award to develop novel methods for studying co-variation in brain function and depression. Dr. Thompson joined the UCSD Department of Psychiatry in 2008. His current work involves Bayesian semi-parametric and mixture models with applications to (i) improving effect size estimation, replication, and prediction in genome-wide association studies, (ii) predicting onset of illness from multivariate biomarker trajectories, (iii) applications of functional data analysis to functional MRI data. Dr. Thompson is currently the Director of Statistics for the

National Consortium on Alcohol and Neurodevelopment in Adolescence (NCANDA) and Associate Director of the Data Analysis and Informatics Core for the Adolescent Brain and Cognitive Development Study.

Website: <https://profiles.ucsd.edu/wesley.thompson><https://profiles.ucsd.edu/wesley.thompson>

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**Invited Symposium:** *Genomics and Development Across the Life Course*

**Room:** Coronado; 1:15 to 2:45 pm

**Chair:** Colter Mitchell, University of Michigan

**Invited Speaker:** **Kathleen Mullan Harris, University of North Carolina, Chapel Hill**

**Presentation Title:** *Lifecourse Gene-Environment Interaction*

**Abstract.** This symposium will highlight integrative science that combines psychosocial, environmental, and genetic data to understand developmental and health trajectories across the life course using publically-available large, population-based, representative datasets. In this presentation, Dr. Harris will discuss the important role that gene-environment interactions may play in lifecourse human development focusing on the design and data from the National Longitudinal Study of Adolescent to Adult Health, or Add Health. Add Health is a longitudinal study of a nationally representative cohort of 20,000 adolescents in 1995 followed for 25 years into adulthood and for whom social, psychological, behavioral, environmental, biological, and genetic data have been collected over time. With its extensive longitudinal, multilevel, environmental data and genome-wide data, Add Health provides one of the richest datasets to explore how the environments of young people may operate to suppress or amplify genetic effects on health and behavior. Illustrative findings will also be presented.

**Biography.** Kathleen Mullan Harris is the James E. Haar Distinguished Professor of Sociology, Adjunct Professor of Public Policy, and Faculty Fellow at the Carolina Population Center at the University of North Carolina at Chapel Hill. Her research focuses on social inequality and health with particular interests in health disparities, sociogenomics, and life course processes. Dr. Harris is Director and Principal Investigator of the National Longitudinal Study of Adolescent to Adult Health (Add Health) in which she is leading multidisciplinary research on the social, environmental, behavioral, biological and genetic linkages in developmental and health trajectories from adolescence into adulthood. Her publications appear in a wide range of disciplinary journals including demography, genetics, family, epidemiology, biology, public policy, survey methodology, and medicine. Dr. Harris is past president of the Population Association of America and

a member of the National Academy of Sciences. She received her Ph.D. in demography from the University of Pennsylvania.

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**Closing Keynote Address:** *How Data Sharing Succeeded in Neuroimaging*

**Room:** Fiesta I; 3:00 to 4:30 pm

**Chair:** Pamela Davis-Kean, University of Michigan

**Keynote Speaker:** **Russell A. Poldrack, Albert Ray Lang Professor of Psychology, Stanford University**

**Abstract.** The sharing of data has become a central goal in many areas of science, but some areas have been more successful than others. I will discuss the collective journey towards open data sharing that has happened in the neuroimaging community over the last two decades, which has now led to fairly widespread sharing and re-use of imaging datasets. I will focus on two sets of factors that have been central to this journey: incentives to share data, and infrastructure to facilitate data sharing.

**Biography.** Russell A. Poldrack is the Albert Ray Lang Professor in the Department of Psychology and Professor (by courtesy) of Computer Science at Stanford University, and Director of the Stanford Center for Reproducible Neuroscience. His research uses neuroimaging to understand the brain systems underlying decision making and executive function. His lab is also engaged in the development of neuroinformatics tools to help improve the reproducibility and transparency of neuroscience, including the OpenNeuro.org and Neurovault.org data sharing projects and the Cognitive Atlas ontology.

**Twitter:** [@russpoldrack](https://twitter.com/russpoldrack)

**Website:** <http://www.poldracklab.org>

## 2018 SRCD Student Travel Awards

The SRCD Student Travel Award is offered as a benefit for SRCD members to support attendance at the 2018 Special Topic Meeting: DEVSEC: Conference on the Use of Secondary and Open Source Data in Developmental Science. A \$250 award will be given to 20 awardees in the form of a debit card at the conference in Arizona. For full qualification details, please see below.

## General Information:

- **Applicants must have an active SRCD membership to access the application site.**
- Recipients of all travel awards must be members of SRCD at the time of this 2018 special topic meeting and attend the meeting.
- The award may be used for special topic meeting-related expenses, as determined by the recipient. No receipts are required.

## SRCD Student Travel Award Qualifications:

- Applicants must be current and ongoing graduate student members of SRCD who have not received their doctoral degree. Having more than one year of membership will be given favorable consideration.
- Applicants must be presenting as a first author on at least one accepted submission. High review ratings for a submission count positively as does the number of accepted presenting roles.
- The award may be used for special topic meeting-related expenses, as determined by the recipient. No receipts are required, but awards will be distributed at the meeting in Arizona.

## FAQs for Presenters

### 1) What presentation A/V equipment is provided by SRCD in each room? **Laptops are not provided; you must bring your own.**

- Poster Sessions: no A/V is provided or needed. Please see questions #3, 4 and 5 below. All individual posters displayed in these sessions will be presented on standard 8' wide x 4' tall poster boards.
- Paper Symposia and Workshops: One LCD projector (PC compatible; bring adapter for connector cord if using a Mac laptop or have a relatively new laptop), a screen, sound and a microphone will be available in your presentation room. **SRCD does not provide laptops.** Any additional A/V equipment needed for your presentation must be reserved and paid for by you. **Please read this important information if you have a relatively new laptop: [Adaptors for Laptops](#).** To avoid any technical issues, please bring your own adaptor if you have either a Mac or a newer laptop.

### 2) How long should my presentation be?

- Poster Presentation: displayed in 90-minute sessions.

- Paper Symposium: 90 minutes; at least 30 minutes must be set aside for discussion with the audience as part of the symposium.
- Workshop: 90 minutes; the audience must be given the opportunity to raise questions/issues.

### **3) What size are the poster boards?**

SRCD provides a poster board that is 8 ft. (2.4 meters) wide and 4 ft. (1.2 meters) high, with a 2-inch (2.4 centimeters) frame all around and mounted on a 4 ft. (1.2 meters) stand. This poster board space is devoted to one poster presentation; the actual poster size is at the discretion of the presenter but may be no larger than the allotted space.

### **4) How do I hang my poster?**

SRCD provides push pins on site with which to hang your poster on the poster board.

### **5) When should I put my poster up and take it down?**

Mount your poster on the designated board during the 15 minutes immediately preceding the start of the scheduled poster session. Your poster must be removed promptly at the end of the session, so that the poster for the next session can be hung on the poster board. Please take your poster and any additional items with you when you leave the poster area.