# NEWS ETTER UCBERKELEYDEVELOPMENTAL LABS



The UC Berkeley Developmental Labs come together monthly to present research, provide feedback, and exchange ideas. We all look forward to the events, organized by professors Arianne Eason and Jan Engelmann, especially the part where they end with Sliver pizza in the Berkeley Way West courtyard!

### Who We Are

The UC Berkeley Developmental Labs are overseen by faculty in the Department of Psychology. We specialize in studying how children think, learn, and grow. Together, we discover how children develop language, mathematical, and reasoning abilities. Our discoveries are regularly covered by NPR, the BBC, the New York Times, the Washington Post, the Atlantic, Scientific American, and many others.

We are a collaborative of 8 different research labs, each overseen by a different faculty member with a distinct area of expertise. Each lab has its own team of researchers at a range of levels, from undergraduate students through postdoctoral scholars.

### **Contact us!**

devlabs@berkeley.edu

## **Letter From Our Faculty**

Dear Families, Teachers, and Directors,

Thank you very much for participating in our research this past semester! Our research is made possible by the generosity of families and communities like yours, and we greatly appreciate your support, especially during the last two years, which have been challenging and unpredictable.

Our research focuses on cognitive, linguistic, and social development in children from infancy to middle childhood. This newsletter highlights some of the studies that your child or student may have participated in over the past two years and gives an overview of our current findings.

We are very grateful for those of you who have been able to participate in our studies both remotely and in person.

If you have any questions about our projects, please feel free to contact us at devlabs@berkeley.edu. Please check our lab websites for recent publications.

Go bears! Fiat lux!

Drs. Fei Xu, Alison Gopnik, Celeste Kidd, Arianne Eason, Jan Engelmann, Mahesh Srinivasan

#### What are our studies like?

Studies involve your child playing a short game with a UC Berkeley researcher.

Sometimes researchers analyze where a child **looks**, what a child **says**, or how a child **plays** with a toy.

One current game involves showing children a **puppet show** and seeing what they think will happen next, and another **uses toys to teach children** how to write simple code!

#### When do we play our games?

Throughout the school year, we coordinate with teachers to come back to school at times of the day that work with the classroom's schedule to play our games. We keep a list of children whose parents gave consent for them to participate. Then we ask children from that list if they would like to play our game. If they say no, we do not pursue it further.

#### Consenting

At the beginning of the semester, we ask parents to sign **consent forms** if they are okay with our researchers playing with their child.

Here are some things we emphasize about consent:

- Confidentiality
- Anonymity
- The right to stop at any time

Consent is an **ongoing process**. Signing the consent
form gives your child the **opportunity** to play, but if
they are not interested, we will
not play.

Your child can also **choose to stop playing at any time**during the game; if they lose interest, our researchers will stop playing.



## Ø

#### **ABOUT US**

Our lab researches children's learning: What types of learning mechanisms are available to infants and children, and how do they use them in different domains of learning, e.g., cognitive, language, and social development? We have found that young learners have remarkable learning capacities; they are rational, constructive learners who can evaluate evidence and build new knowledge and concepts, much like scientists do.

#### **INTERESTED IN PARTICIPATING?**

If you are interested In having your child participate in our studies or if you know a friend who is, please contact the lab manager at babylab@berkeley.edu

#### **CONNECT WITH US!**

Website: <a href="https://www.babylab.berkeley.edu/">https://www.babylab.berkeley.edu/</a>



Instagram: <a href="mailto:obellbabylab">obellbabylab</a>

#### **LAB MEMBERS**

Principal Investigator: Dr. Fei Xu Lab Manager: Kaitlyn Tang Postdoctoral Researchers: Elena Luchkina and Tina Tang PhD Students: Stephanie Alderete and Rongzhi Liu

To learn more about us, click **here**!

#### **PROJECTS**

We are interested in how young learners reason about probabilities, develop new categories, and acquire language.

For more details about particular studies running in lab, please visit the **Projects** page on our website.

#### **READ ALL ABOUT IT**

Please feel free to visit our lab website <u>here</u> for our publications!





## About Us

In the **Gopnik Lab**, we are particularly interested in how children learn **causal** relations – cases where one event causes another.

For example, we are all quick to understand that flipping a light switch causes a light to turn on, or that smiling at someone may make them feel happy. However, our world is chock full of causal relations – so full of them that it's sometimes hard to imagine how children come to understand their world so thoroughly in only a few short years!

## Researchers

**Principal Investigator** 

Dr. Alison Gopnik

Lab Manager

**Emily Rose Reagan** 

**Postdoctoral Researchers** 

Ashley Thomas, Benjamin Pitt, Josh Rule, Ny Vasil, Rebecca Zhu

PhD Students

Annya Dahmani, Eliza Kosoy, Eunice Yiu

## Recent Findings

- Children seem to explore more than adults, and can even learn more than adults in an identical task! (2022)
- Toddlers are able to learn and flexibly apply **multiple** possible causes for events, much earlier in development than previously thought <u>(2021)</u>
- Providing children explanations for metaphors ("Eyes are windows, because you can see through them") can change what types of nonliteral language children learn from (2021)
- Children can use even sparse evidence to determine which factors "make a difference" and which do not (2020)



#### **ABOUT US**

In the **Kidd Lab**, we study the processes involved in learning and belief formation, especially in young children, using a combination of computational and behavioral methods. Our behavioral experiments measure how learners attend and explore throughout the process of learning. We employ a range of methods, including eye-tracking and touchscreen testing, in order to show how learners sample information from their environment and build knowledge gradually over time.

#### LAB MEMBERS

Lab Director: Celeste Kidd
Lab Manager: Holly Palmeri
Staff Researcher: Alex Yang
Postdoc: Carolyn Baer

**Grad Students:** Evan Orticio & Sarah Stolp **Research Assistants:** Aaraam Granera, CiCi
Jiang, Pragya Kallanagoudar, Lucy Ko,
Martin Meyer, Roshni Sarathy, & Jolie
Witkowski

To read more about the lab and find links to our published articles, please visit our website: www.kiddlab.com

#### RESEARCH HIGHLIGHTS

**Attention & Counting** (ages 3-5): We use a special eye-tracking camera to measure where kids look while they count objects on a computer screen. This will help us understand how visual attention helps kids learn to count.

**Skepticism & Belief Formation** (ages 3 - 8): We're investigating how children choose to gather information before they are willing to accept a fact as true. Discerning when to form a new belief versus when it's smart to remain skeptical is an important part of learning about the world, and this study will help us understand how kids make those decisions.

**Visual Engagement & Learning** (ages 2 - 5): This study investigates the relationship between visual attention and word learning. We are curious whether the level of visual engagement while learning new words can affect learning outcomes.

If you are interested in participating in any of these studies at the Kidd Lab, please email us at **kiddlab@berkeley.edu** so we can find a time for you to visit the lab. We would love to meet you!



#### **ABOUT US**

In the **LCD Lab**, we focus on how children learn different aspects of language, what this might tell us about the nature of cognitive and social development, and how these different aspects of development interact.

#### LAB MEMBERS

Principal Investigator: Mahesh Srinivasan
Lab Manager: Emily Chau
Postdocs: Paul Haward, Marina Ortega
Andres, Jenny Lu, & Ye Rang Park
Grad Students: Monica Ellwood-Lowe,
Antonia Langenhoff, Roya Baharloo, Victoria
Keating, & Sophie Regan

#### **WEBSITE**

To learn more about our research including studies your child may have participated in, please visit our website: <a href="mailto:lcdlab.berkeley.edu">lcdlab.berkeley.edu</a>.

To access a list of our publications, click here!

#### CONTACT

If you're interested in participating, please email us at **lcdlab@berkeley.edu** to be connected to a researcher or **lcdmanager@berkeley.edu** to be connected to the lab manager.

#### RECENT FINDINGS



"I don't Think the Bunny Went to the House. I Asked One Person and the Person said the Bunny Went to the Bridge. So I Think the Bunny Went to the Bridge."

With age, children are more likely to adjust their own beliefs in light of disagreement when the other's beliefs contain stronger evidence. Read more <a href="here">here</a>!



What causes the word gap? In part, caregivers may speak less to children when experiencing financial scarcity.

Read more here!



Children are able to seize language learning opportunities and/or select the linguistic information they want to receive to enhance their own learning.

Read more <a href="https://example.com/here/">here!</a>



## Social Origins Lab





#### ABOUT US

Our lab studies the evolutionary and developmental roots of human sociality. Specifically, we are interested in how children reason and cooperate to navigate their social environments. Most of our projects study children to learn how our social and cognitive abilities arise and interact with one another over the course of development. We also study our closest living relatives, chimpanzees, to see how these abilities are rooted in our evolutionary history. To read more about us, please visit socialorigins.berkeley.edu

## **Recent Findings**

- How children revise their beliefs in light of reasons (Schleihauf et al., 2022)
- Children's developing ability to adjust their beliefs reasonably in light of disagreement (Langenhoff, Engelmann, &

Srinivasan, 2022)
READ MORE

#### LAB MEMBERS

**Director**: Dr. Jan Engelmann **Lab Manager**: Eliza Swindell

Postdocs: Carolyn Baer, Hanna Schleihauf,

Dorsa Amir, & Laura Lewis

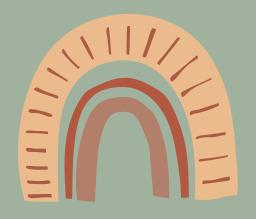
Grad students: Antonia Langenhoff,

Joshua Confer, Oded Ritov, & Colin Jacobs

## **Participation**

If you are interested In having your child participate, please contact the lab manager at socialoriginsmanager@berekeley.edu





## UC DREAMS. Lab

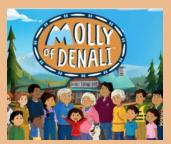
Understanding Culture &
Development to Re-imagine
Equitable And More just Societies



#### **ABOUT US**

In the UC DREAMS Lab, directed by Professor Eason, we research how our social and cultural contexts shape attitudes and behavior, and reinforce inequality. We investigate prejudice, attitudes, stereotyping, discrimination, omission, media representation, identity, socialization, and the experiences of marginalized groups. We have several projects investigating the perceptions and experiences of Native American, LGBTQ+, Asian, and Black people, as well as other marginalized groups.

#### **PROJECTS**



up with RISE and the producers of Molly of Denali to understand how kids' TV affects how they think about themselves and others!

You can earn up to \$75 in giftcards for participating!

The Research for Indigenous Social Action and Equity Center



#### LAB MEMBERS

#### **Principal Investigator:**

Professor Arianne Eason

#### Lab Manager:

Fmma Roth

#### **PhD Students:**

Victoria Keating, Emma Ward-Griffin, Sarah Ryan

#### **INTERESTED IN PARTICIPATING?**

Please contact the lab manager at ucdreams@berkeley.edu



## Thank You to Our Community Partners!

Museums
Bay Area Discovery Museum
Lawrence Hall of Science
Children's Creativity Museum of San Francisco
Oakland Zoo
Exploratorium
Berkeley Public Library

UC Berkeley Early Childhood Education Program Centers
University Village Albany
Haste Street
Dwight Way
Clark Kerr Campus
Harold E. Jones Child Study Center

Community Schools
Ecole Bilingue de Berkeley
East Bay German International School
Marin Elementary
Chinese American International School
Yerba Buena Gardens Child Development Center
Child Education Center

# Make science happen.

You and your child can help developmental scientists discover how children learn, explore, and make decisions.

Bay Area families have helped us make world-famous discoveries for more than two decades. Help us keep learning. We have studies for **infants through teens**.

Sign-up to find out about new studies today: http://devlabs.berkeley.edu.

