

# Talking Back

Meet the Museum's Mind Lab researchers.



*Dr. David Sobel,  
professor of cognitive  
science and psychology  
at Brown University and  
principal investigator at  
Brown's Causality and  
Mind Lab*

## What's your background?

I have a BA in psychology and computer science from Swarthmore College and an MA and Ph.D. in psychology from UC Berkeley. I've been at Brown since 2001. I approached the Museum about collaborating and we started working together in 2004. We formed Mind Lab in 2009.

## What's the focus of your research?

The first is on how children learn, particularly how they learn cause and effect relations and make inferences about causality. The second is on what children understand about play, particularly pretending. Most of my work has focused on toddlers and preschoolers.

## What's the benefit of doing research at the Museum?

There are many children who want to participate in our experiments and a wide range of ages as well as a diverse, representative sample of the population. The Museum provides a forum and we hope families come away with an understanding of the importance of developmental science and its relation to everyday life.

## What's an interesting finding from your work?

I'm quite fond of a joint study with researchers Deena Weisberg and Kathy Hirsh-Pasek that asked children ages 3 to 10, "What is science?" Three to 6-year-olds either couldn't answer or would respond with a specific activity ("Science is mixing things" or "Science is dinosaurs"). We observed a clear developmental change around age 7 – children begin to articulate science as a process ("Science is doing experiments" or "Science is figuring stuff out").

## What can parents and teachers learn from your research?

Children naturally explore and seek explanations of how the world works. Parents and teachers can learn a great deal about their children simply by watching them, and I hope they come away with the motivation to do so.



*Dr. Jennifer Van Reet,  
associate professor  
of psychology  
and principal  
investigator of  
Kid Think at  
Providence College*

## What's your background?

I've been studying developmental psychology since 2000, first at the University of Texas at Austin. I went to graduate school at the University of Virginia and started my own lab at Providence College in 2008. I joined the Mind Lab program at the Museum in 2010.

Learn more about these researchers  
on the Museum's blog.

## What's the focus of your research?

I'm interested in how people are able to think about things that are not real – people, places, events, objects – and how this ability develops. Right now, I'm getting at this big question by focusing on pretend play and its development.

We're starting a study this summer designed to test how toddlers understand pretend actions. We hope to discover a couple things: Do toddlers understand that knowledge of something is required in order to pretend? Is toddlers' self-control ability related to their ability to understand pretending? These questions have been tackled with older children, but I'm interested in 1-year-olds, the age that children first begin pretending.

## What's an interesting finding from your work?

One of my favorite findings is that preschoolers become more pro-social – more helpful, cooperative and generous – after engaging in games that require them to exert self-control, like Simon Says.

## What can parents and teachers learn from your research?

Remember that pretend play is a complicated and sometimes challenging activity for children. But, the fact that it's challenging is probably part of what makes it so valuable – it exercises all sorts of important "mental muscles."

Requiring children to exert self-control is incredibly important for their cognitive development. Even though it is sometimes easier to just do things for children or let them do whatever they want, we can do a huge service by making them wait, teaching them to delay gratification, and making sure they learn how to control their thoughts, bodies and emotions.