

SOCIAL AND AFFECTIVE NEUROSCIENCE OF AUTISM LAB

Official Laboratory Newsletter



In Solidarity

The Social and Affective Neuroscience of Autism Lab would like to express our grief, frustration, and indignation regarding the murder of George Floyd, Breonna Taylor, Ahmaud Arbery, and countless others. As a research institution and clinic, part of our mission is to serve our community and we recognize that in this moment the Black community is especially hurting as a result of years of ongoing systemic racism and police brutality in our country. We stand with our community and invite others to do the same. We are here for you.

In This Issue

In light of current events, this issue includes resources (including books, websites, and press articles) we have compiled to assist parents in discussing race, racism, difference, and inclusion with their children (see page 4). In addition to these resources, our speech pathologist Ms. Megan Lyons has prepared a short guide on taking advantage of everyday home activities to elicit and build communication skills (see page 5). We sincerely hope you find all these resources helpful in navigating these painful and confusing times.

Get Involved

We are currently accepting new referrals to any of our studies. However, given prevailing guidance and in the interest of participant safety, our on-site visits are on hold for now.



Prenatal Study



Neonatal Study



Preschool Study



School-Age Siblings Study



Biological Markers Study

Our Clinical & Administrative Team



Kelly Powell, PhD

Dr. Kelly Powell is the director of our lab's clinical characterization core, an assistant Professor in the Child Study Center, and Co-director of the Yale Toddler Developmental Disabilities Clinic. She specializes in the assessment and treatment of individuals with ASD.



Megan Lyons, LCSW, CCC (SLP)

Megan Lyons is an assistant clinical professor of social work and a speech and language pathologist in the Toddler Developmental Disabilities Clinic. She specializes in comprehensive clinical evaluations for infants and children suspected of having ASD.



Chelsea Morgan, PsyD

Chelsea is a Postdoctoral Associate at the Yale Child Study Center. She received her doctoral degree in Clinical Psychology, Child and Adolescent Track, at the University of Hartford in 2019. Her clinical interests are in the assessment of ASD; her research interests are focused on earlier and more accurate diagnosis of ASD.



Amy Giguere Carney, LCSW

Amy Giguere Carney is a social worker in the Yale Child Study Center. She specializes in clinical work with children and families. Amy provides clinical supports to our families during and after their visits with us. She also acts as a liaison between families and the community.



Karyn Bailey, MSW

Karyn Bailey is an assistant clinical professor of social work and the lead social worker in the Autism and Developmental Disabilities clinic. She specializes in adult learning and family adjustment with regard to the early diagnosis of ASD.



Evelyn Pomichter

Evelyn Pomichter is the Administrative Coordinator at the Developmental Disabilities Clinic for Infants and Toddlers as well as the Yale Social Affective Neuroscience of Autism Program. she is a central source of information and support to families, clinicians, and researchers alike.



Amy Margolis

Amy Margolis is the Program Manager of the Yale Social Affective Neuroscience of Autism Program. Amy directs the day to day activities of the lab, acts as the primary contact for outreach, and oversees the management of clinical studies and regulatory requirements.



Talking to Young Children About Race

We have compiled a short list of resources that we hope may come in handy in addressing conversations surrounding race, racism, and diversity with young children. We hope you find these to be helpful and insightful conversation starters for the whole family.



Books

[Antiracist Baby Board Book](#) by Ibram X. Kendi (2020)

[5 Picture Books About Inclusion for Children \(And Everyone Else\)](#)

[10 Children's Books About Racism And Activism To Help Parents Educate Their Kids](#) in *Huffington Post*



Radio, Podcasts & Specials

[Talking Race With Young Children](#) (NPR)

[Brené Brown with Ibram X. Kendi on How to Be an Antiracist](#) (Apple Podcasts)

[Brené Brown with Austin Channing Brown on I'm Still Here: Black Dignity in a World Made for Whiteness](#)

[Where Do We Go From Here: A Conversation Led By Oprah](#)

[CNN/Sesame Street Town Hall "Coming Together: Standing Up To Racism"](#)



Websites & Articles

[American Psychological Association's Resources for Parents](#)

[Tools to Raise an Anti-Racist Generation](#) ([Doing Good Together](#))

[Racism and Violence: How to Help Kids Handle the News](#) ([Child Mind Institute](#))

USING EVERYDAY ACTIVITIES TO PROMOTE COMMUNICATION AT HOME



1. Tips for helping your child with Imitation skills

Children with autism may have difficulty developing imitation skills. Imitation is an important skill because children learn by copying the actions and vocalizations of others. The following are strategies to promote imitation skills at home using naturally occurring routines, materials, and toys your child enjoys. Keeping in mind that depending on your child's level of development, activities may need to be brief or you may need to intrude in on your child's routines:

i. To start, capture your child's attention: Get down on your child's level and communicate face-to-face so they can see your eyes, mouth, and facial expressions. It may help to hold a motivating toy close to your face to capture and keep your child's attention.

ii. Introduce imitation in back-and-forth routines. This involves you imitating your child's actions, facial expressions, and vocalizations during naturally occurring play routines. For instance, if your child is banging two toys together, imitate that action. If your child produces babble, babble back to them, allowing for your child to keep the routine going. Use actions that are linked to specific words, such as clapping and saying "yay" each time an activity is finished, putting your finger to your lips and saying, "ssshh" when pretending to put a doll to sleep, or pushing a car while saying, "vroom-vroom". Initially, you may want to use gentle hand-over-hand support to help your child form gestures.

iii. Engage your child in repetitive action-based songs (e.g., Row, Row, Row Your Boat, The Wheels on the Bus) **or playing musical instruments** (e.g., using real instruments or creating them by using two Tupperware bowls as drums, or a sealed plastic container filled with rice as a maraca, for example). **Pause periodically to allow your child to imitate** the actions or sounds that are part of the routine.

iv. Similarly, have fun with **animal play sets, puzzles, or books modeling animals sounds** (e.g., moo, meow) and pausing to allow your child a chance to imitate.

v. If verbal imitation is developing, **use routines like bath or dinner time to repeatedly model a new word** (e.g., model the word “bubble” during your child’s bath while blowing bubbles). **Use natural pauses** of up to 5 seconds (versus saying, “Say bubble”) to allow time for your child to imitate the targeted word. If your child doesn’t imitate the word, carry on with the routine repeatedly modeling the word and action while regularly pausing to naturally elicit imitation.

Resources:

<https://www.hanen.org/Helpful-Info/Articles/Imitation-with-Children-on-the-Autism-Spectrum.aspx>

<https://www.educatall.com/page/956/Simple-imitation-games.html>



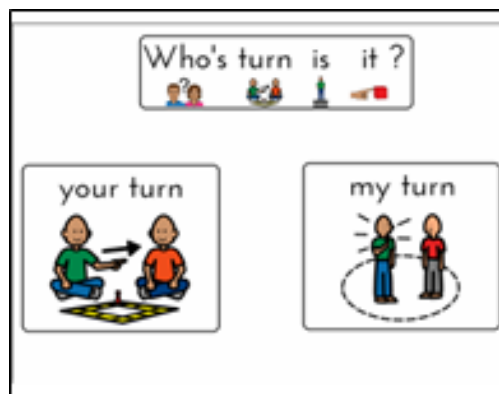
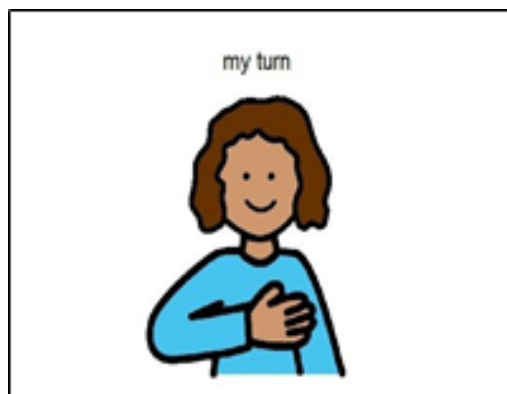
2. Tips for helping your child with Turn-taking skills

Learning to engage in enjoyable back-and-forth interactions is a precursor language-building skill. For instance, by learning to wait his turn, your young child is likely to attend to the facial expressions, body language, and the spoken language of his turn-taking partner. Parents should choose turn-taking activities based on their child’s developmental level. The following are examples of turn-taking activities that can be used within everyday routines:

i. During familiar routines (e.g., peek-a-boo, tickle games, action-based activities), **pause during the activity and wait expectantly (wait for spontaneous communication versus prompting) for the child to “tell” you what he wants.** For example, if your child enjoys peek-a-boo, after a few times, pause and wait to see if he will communicate that he wants the game to continue using eye gaze, body movements, gestures, or vocalizations. Rewarding the child’s communication with the desired object or activity will teach him the value of communicative turn-taking. If your child does not communicate after a few moments of expectant waiting, you may provide a prompt (e.g., “What do you want?”) or model the targeted communication (e.g., “Oh, you want more” while simultaneously using the manual sign for “more”) and continue with the activity providing your child with additional opportunities to communicate his or her desire to continue with the turn-taking activity.

ii. Model turn-taking by enlisting a sibling to model the behavior and language associated with an activity. For instance, while rolling a ball back-and-forth, have a sibling say, “It’s my turn” to play with the ball. Next, it will be your turn”. Couple this language with gestures such as patting your chest for “my turn” and pointing to indicate “your turn”.

iii. Visual cues may help your child with turn-taking activities. For instance, while playing a game, use physical objects to clarify in concrete ways whose turn it is. Similarly, use available picture cards to provide visual cues to your child about whose turn it is. Parents can also use free social story apps to create social stories which will introduce their child to the language of turn-taking.



Resources:

<https://www.boardmakeronline.com>

<https://autismspeaks.org>

Social Story Creator & Library; Touch Autism.



3. Tips for helping your child understand language

Use everyday activities to incorporate language-building into your child's routines. During natural routines, monitor how your child is responding to your language. This is important because some young children with ASD have relatively greater difficulties with language comprehension over expressive language skills. Therefore, your child may need repetitive and focused opportunities to learn how to link words with people, objects, and activities. The following are strategies to promote receptive language skills in everyday activities:

i. Initially, capture your child's attention. Get down on your child's level and communicate face-to-face so he or she can see your eyes, mouth, and facial expressions.

ii. Use single words or short phrases to simplify messages. During a preferred activity, such as building with blocks, use lots of single words and phrases to talk about the activity. For example, use the word "up" every time the child adds a block to a tower or count the blocks as they are stacked (e.g., "One block", "two blocks", "three blocks" ...). Give your child opportunity to respond to your language and offer him support to follow your simplified language as needed.

iii. Spend short periods of time observing your child during everyday routines for **opportunities to engage in comprehension-building**. For example, when you and your child are dressing in the morning, and he is holding his socks or shoes, use those words to talk about getting dressed (e.g., “socks on”, “red socks”, “shoes on feet”, “tie shoes”).

iv. Use **family-specific or child-specific words in simple phrases that are important for your child to learn**. Talking directly to your child with simplified language connected to play routines, again, helps him directly link objects and people with actions. For example, if your family enjoys cooking, use simple phrases while playing with a kitchen set or cooking bowls such as “mommy cook”, “cut tomato”, or “Elmo eat” so that he can eventually understand simple sentence structure connected to family routines.

v. Children with language delays often rely on visual cues when they don’t understand the words or sentences used. Therefore, **use gestures** such as pointing to direct your child’s attention to objects or **making sure objects are in his line of vision** so that he knows what you are talking about (i.e., shared attention). Likewise, social stories, as well as **books with sound and picture cards** can help your child better understand the actions associated with an event or object.

vi. When it comes to giving familiar directions or commands (e.g., “go sit at the table”), you may need to **repeat the directions multiple times**. For example, if it’s dinner time, use basic gestures such as patting the chair to let your child know you want him to sit or showing him his plate and cup. Once he’s routinely following directions and commands that are simply stated, begin to reduce the number of visual cues used and begin to add more parts to familiar directions.

Resources:

<https://www.boardmakeronline.com>

<https://autismspeaks.org>

<https://www.rif.org>

Social Story Creator & Library; Touch Autism (communication application for iOs)



4. Tips for promoting expressive communication skills

For children who are communicating with gestures, sounds, jargon (vocalizations that sound word-like), or using a picture exchange communication system (PECS) or augmentative and alternative communication (AAC), build these skills so they can communicate for social purposes such as requesting, commenting, and for initiating shared attention. The following are strategies to promote expressive communication, keeping in mind that nonverbal communication is a building block for language, so it's important to be responsive to your child's communicative stage:

- i. When playing with your child and he or she communicates (e.g., reaching, giving, pushing away, manual sign, hand-over-hand, sounds, words), **put your child's communication into words**. One strategy to elicit communication during a targeted activity is to put preferred items such as puzzle pieces or snack into a Tupperware container the child can't open. Look expectantly (versus prompting) and wait for your child to request access to the materials. Based on his stage of communication, requesting may be clear or less clear (e.g., handing the Tupperware container to you to open versus excitedly moving his body) so it's important to pay attention to your child's movements and vocalizations. As soon as he tries to communicate, **reward his communicative bid** by giving him a piece of snack or puzzle piece and begin the process again, remembering to put simplified words or phrases to your child's actions (e.g., "more snack", "open jar", "I want puzzle").
- ii. **Give your child time to use his language** when engaging with him. For example, when looking at books, label a few of the pictures and pause, allowing him time to also comment or label a picture. Allowing him time to communicate, and excitedly responding to that communication, reinforces the power of communication. For instance, if your child labels a cat in the book, say, "That's right, it is a cat. The cat says, "meow"").
- iii. **Use choice-making as a time to elicit language**. When it's snack time, for example, offer your child a choice between two snacks, labeling each as you show it to him (e.g., "Do you want goldfish or a banana?"). Wait for your child to communicate his choice by reaching toward the desired snack, using a manual sign, looking at the desired snack, or labeling the snack. Allowing your child to make choices reinforces the concept that communicating results in access to preferred items or activities.

iv. During playtime with your child, **narrate what your child is doing**. This keeps you socially connected to your child while teaching him the language associated with the activity. For instance, when playing outside on a slide, narrate the child's behaviors such as saying, "You are going up the ladder" or "You are going down the slide". After a few times, pause and see if your child will use communication to keep the routine going. Keeping in mind, nonverbal children may use gaze or body movements to let you know what they want.

v. Even if your child is communicating in single words, **refrain from asking them too many open-ended questions**. Using comments about what the child is doing provides them with the language for that activity, versus open ended questions. For example, rather than asking, "What are you doing?", as your child is pushing a car, comment on his actions, such as, "You are pushing the car" or "The car goes vroom-vroom."

Resources

<http://hanen.org>

<https://autismspeaks.org> (A Parent's Guide to Autism)



Megan Lyons, LCSW, CCC (SLP)

Megan Lyons is an assistant clinical professor of social work and a speech and language pathologist in the Toddler Developmental Disabilities Clinic. She specializes in comprehensive clinical evaluations for infants and children suspected of having ASD.

Off the Press

Featured News and Publications



Fragile attention to faces during live interactions in 6-12-month-olds later diagnosed with autism (Macari et. al. 2020)

An important question in the field of autism research is how early can we detect signs of autism spectrum disorder (ASD). A potential early sign is in the domain of attention, specifically, **attention to social information such as faces**. Previous research from our lab using eye-tracking methods has shown that infants as young as 6 months of age who are later diagnosed with ASD look less at the face of a speaking person shown on a computer screen compared to infants without ASD. We wanted to know whether this was also true for live face-to-face interactions.

We designed a set of social play tasks and administered them to babies at high and low risk for ASD at 6, 9, and 12 months of age (some of the infants were later diagnosed with ASD). The one-minute play interactions with a friendly adult included talking to the baby (Dyadic Bid), singing a nursery rhyme, playing peek-a-boo, demonstrating a toy, and playing a tickle game. We recorded the infants' gaze during the tasks.



At all ages, the babies with a future ASD diagnosis spent less time looking at the social partner's face than all other infants during two of the interactions: Dyadic Bid and Tickle. In the other three interactions (Song, Peek-a-Boo, and Toy) all infants looked at the social partner's face equally. In summary, during the pre-symptomatic stages of ASD, **infants later diagnosed with autism showed decreased attention to faces of interactive partners during verbal interactions** (with and without physical contact), but not during interactions involving singing, peek-a-boo, or toy play.

Reduced attention to faces of social partners in specific situations may be a promising early sign of ASD in infancy. To follow up this work, current studies in our lab are focusing on social attention and learning during live interactions, as well as the brain mechanisms underlying social attention in the prenatal and early postnatal period. **Many thanks to the 176 families who made this study possible!**

Featured Research

Yale Autism Center of Excellence Prenatal and Neonatal Studies

This Autism Center of Excellence (ACE) study will help our understanding of the fundamental changes that occur in the brains of fetuses and newborns with high and low familial likelihood for ASD.

We are recruiting mothers (24 weeks pregnant or fewer) with older children who have and do not have ASD.

Participation includes two MRI scans during pregnancy, one MRI of your infant at 4 weeks of age, and follow-ups through 24 months that assess social, adaptive, cognitive, language, and attentional development in your child. If you are over 24 weeks pregnant or have just had your baby, you can still participate in the neonatal portion of the study!



We are currently accepting new referrals to any of our studies. However, given prevailing guidance and in the interest of participant safety, our on-site visits are on hold for now.



What is an MRI and is it safe for my baby?

An MRI is a safe imaging technique that uses a magnet --no radiation or contrast dyes. MRIs have no known side effects for mom or baby.

What is the MRI like for my baby?

Before the MRI, you will feed, swaddle, and rock your baby. This way, during the scan, your baby will simply sleep!

Other Studies Currently Recruiting

In addition to our ACE prenatal and neonatal research, we are recruiting for several other studies. If you have a child in these age ranges, you may be eligible to participate!

- **14-30 month-olds with ASD, or who are typically developing**
- **4-5 year-olds with ASD, with or without symptoms of anxiety, with developmental concerns, or who are typically developing**
- **7-17 year-olds with ASD, who have an older sibling with ASD, or who are typically developing children**

INTERESTED IN PARTICIPATING?

Call our Intake Coordinator, Evelyn Pomichter: (203) 764-5933





"It takes away my worries and my anxiety and my wondering because I don't have to wonder. I'll know just as any signs (of ASD) are evident."

Melissa Patao, Autism Center of Excellence Parent

Resources for Parents

Here are some resources which families and caregivers might find helpful during social distancing:

Should you like to learn more about the [COVID-19 virus](#) and ways of [protecting yourself and others from its effects](#), please take a look at two ingenious guides to COVID-19 created by a first year graduate student at the Yale School of Medicine.

The [Yale Child Study Center](#) has compiled ASD-specific resources for COVID-19.

[Help is in your Hands](#) is a free website for families of very young children with social communication challenges. It includes narrated video lessons with suggestions for activities parents can try. Strategies are based on the Early Start Denver Model. More information can be found [here](#).

Family Corner

Parent Support Group

Dr. Kelly Powell's monthly support group has gone virtual! The meeting takes place the **4th Tuesday of every month at 6pm**, with additional meetings scheduled depending on need and interest. Please email Kelly directly, at kelly.powell@yale.edu, if you are interested in participating!

We Want to Hear From You!

Let us know how your family is doing! You can send us updates, pictures, and cards to:

Yale Child Study Center
Developmental Disabilities Program
Social Neuroscience Laboratory
300 George St. Suite 900
New Haven, CT 06511

New contact info? Let us know with an email to sanalab@yale.edu

"It has been a pleasure being a part of the ACE prenatal and newborn studies. The staff and clinicians are extremely knowledgeable, kind, and helpful. The visits get more and more fun for my son as he gets older, and I find it interesting to learn about his development at each visit."

Deanna Macris, Autism Center of Excellence Parent

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 medicine.yale.edu/lab/chawarska/

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