

# ABCD Study Newsletter



## What's Next in ABCD

It's been eight years since ABCD started – Wow! When the ABCD Study® began, you were in third, fourth, or fifth grade. Now, many of you are graduating and moving on to your next steps in life. We're thrilled to have been working with you and learning from you over these years, and we're even more excited to continue working with you moving forward!

Late adolescence and early adulthood are critical periods in brain development. New experiences, friends, as well as your work and education environments all can impact your brain development and wellbeing. With your participation, we are beginning to understand how this happens. We look forward to helping you continue with the exciting work of the ABCD Study!

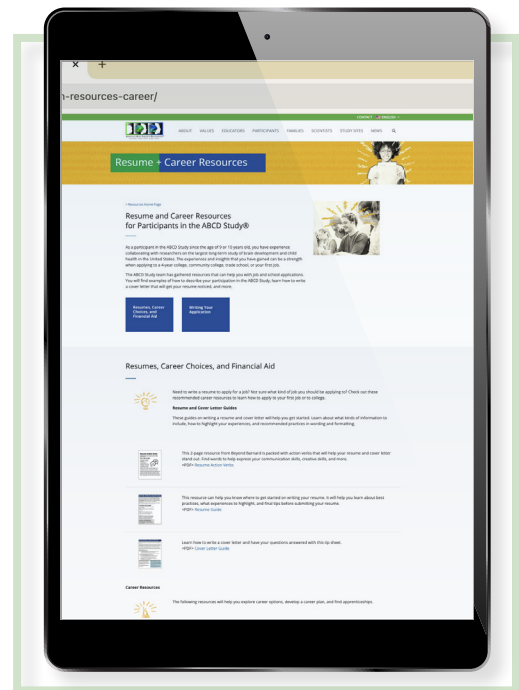
If you have any questions about life circumstances, such as moving, going to college, joining the military, etc., and how they will impact your participation in ABCD, please contact your research site. Parents and caregivers: your involvement is just as important as ever too! We're excited to keep learning about your evolving relationship with your children, your life experiences, and health as well.

Thank you for eight great years! We look forward to seeing you for many more.

### Participant Resource Page

We know that many of you are entering a new chapter in your lives! Whether it's the beginning of college, trade school, or a new job, we're here to support you during this exciting transition. We've compiled a list of resources to help you navigate these next steps, such as applying for jobs or school.

[Click on the link to access the list of resources.](#) Inside, you'll find examples of how to discuss your experience in the ABCD Study when applying for jobs or college, tips for writing cover letters, and other resources to assist you in exploring career options.



# ABCD Science Cutting-Edge Neuroimaging Approach

## nature neuroscience



Dr. Robert Hermosillo



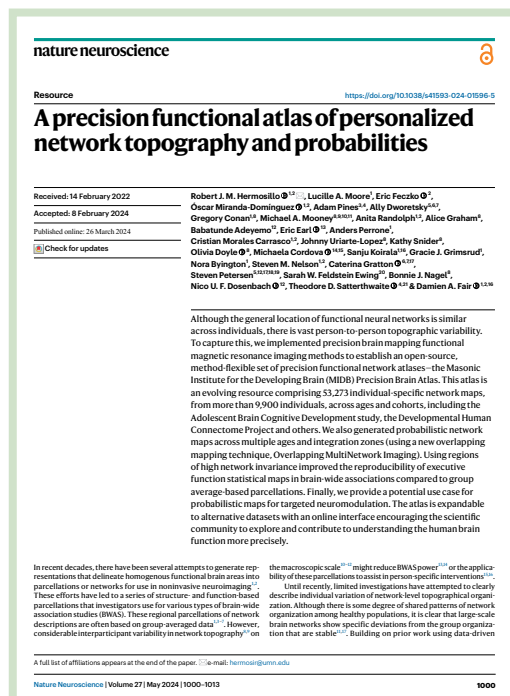
Dr. Damien Fair

A team of researchers led by Drs. Robert Hermosillo and Damien Fair at the University of Minnesota have developed a cutting-edge brain imaging method called precision functional mapping (PFM) using data from the ABCD Study. Their findings, published in March in *Nature Neuroscience*, will usher in a new era of understanding individual differences in brain organization and their implications for healthcare.

For decades, scientists have averaged data across a large number of people to understand brain organization. However, this approach overlooks the significant differences between individuals, potentially limiting the effectiveness of interventions if they are based on groups of people rather than individuals. Dr. Hermosillo and team recognized this gap and set out to develop a method to capture the unique organization of each person's brain.

"With PFM, we aimed to provide a more precise understanding of brain organization of the individual that shows much more reliable relationships to behavior," explains Dr. Hermosillo. By meticulously analyzing the brain's activity during rest, researchers can pinpoint specific patterns and connections that are characteristic of each individual.

One of the most exciting applications of PFM is its potential impact in identifying neural predictors of cognitive function and mental health diagnosis. In the future, the researchers hope that by understanding subtle variations in brain organization, clinicians can tailor interventions to meet the unique needs of each patient, leading to better health outcomes.



# Student Space

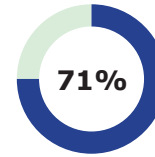
## ABCD by the numbers (all #s as of April 2024)

1

11,878 enrolled participants



2



71% of the ABCD cohort belongs to at least one population that is underrepresented in biomedical sciences

4



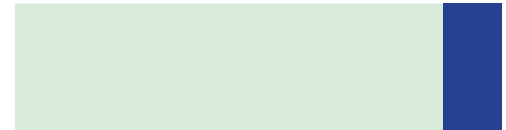
66%



7,797 participants have completed every annual visit through at least the 5-year follow-up

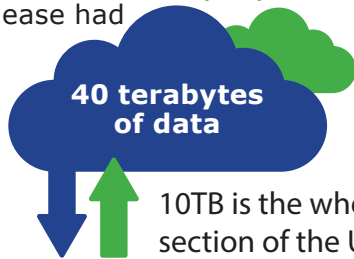
3

129,172 total visits completed since the beginning of the study



5

The most recent (5.1) data release had



40 terabytes of data

10TB is the whole print section of the U.S. Library of Congress or equal to 10 million high quality photos.

3

15,556 completed in 2023

6

Approximately 11,300 teeth have been collected



to understand how early childhood environmental exposures impact development

7



21 Research Sites

8

552 staff members (RAs, PIs, Admin, etc.)



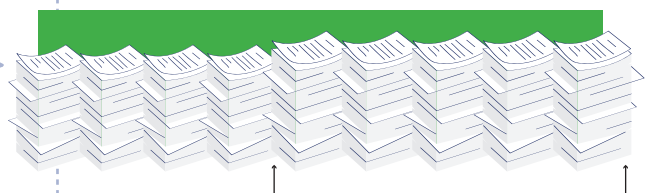
work on ABCD across the consortium

10

Over 50% of papers are by researchers who are not associated with the ABCD Study, highlighting the impact of ABCD's open science model.

9

Nearly 1,000 scientific papers have been published that report original findings using ABCD data



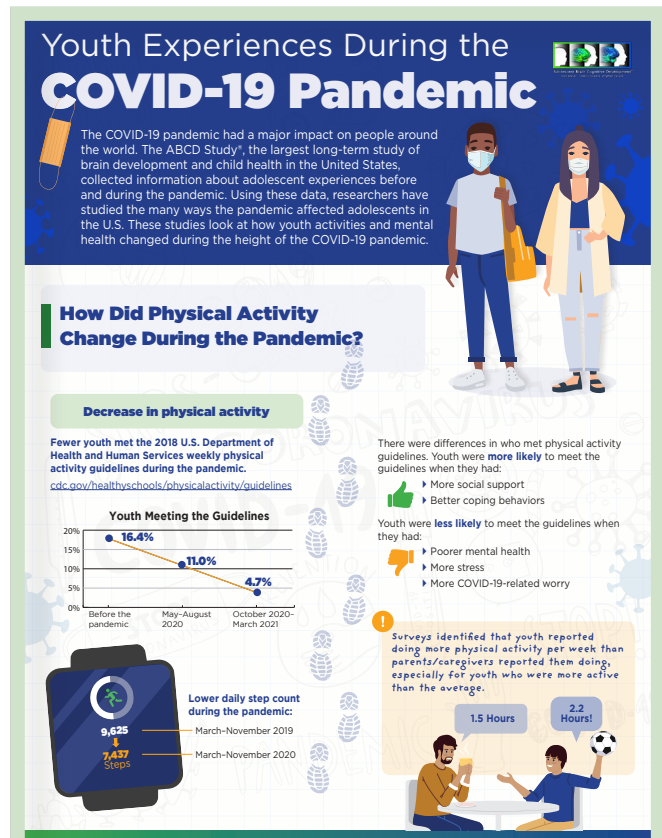


## Participant Q&A—from COVID webinar

Earlier this spring, NIH held a webinar highlighting findings from the ABCD Study on adolescent experiences during the COVID-19 pandemic. An attendee asked this question about youth resilience during the pandemic:

*"I've heard a lot of negative things coming from COVID like mental health struggles and kids not doing great in school. Did any positive factors emerge from your research about how youth coped during the pandemic?"*

Dr. Ran Barzilay pointed to multiple findings showing the benefits of positive coping strategies like exercising regularly, eating healthfully, and getting good sleep. Dr. Marybel Gonzalez added that these routines are relatively simple but super important for maintaining good health and wellbeing, and that a lot of studies support this conclusion. Drawing from his research, Dr. Jason Nagata said that attending school in person is critical for youth wellbeing overall and was associated with lower stress during the pandemic. He also noted that youth who attended school in person had higher step counts, highlighting the benefits of physical education and participation in sports practices for overall health.



Check out the full webinar [here](#). You can also view the latest ABCD infographic on adolescent experiences during the COVID-19 pandemic [here](#). The Spanish version is [here](#).

### Mental Health Resources:

- [I'm So Stressed Out! Infographic](#)
- [Improving Access to Children's Mental Health Care](#)
- [Supporting the Mental Health Needs of All Students with American Rescue Plan Funds](#)

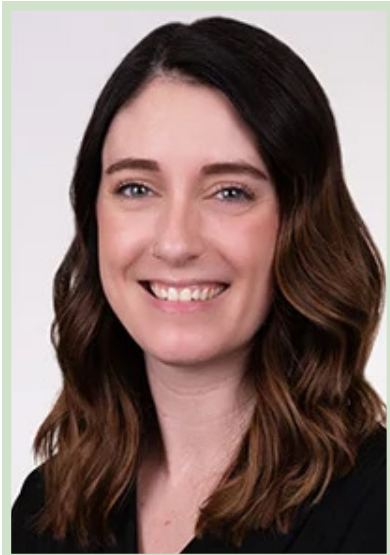
### Resources/Contests/Challenges:

- [May is National Adolescent Health Month](#)
- [Check out this new teen documentary about the brain!](#)

## Family Place

### Get to know your ABCD Study Research Assistants!

RA spotlight: Brittany McKenzie



"I started with the Medical University of South Carolina site of the ABCD Study in January 2019 as a part-time student research assistant. I was completing my final year of undergrad and had just begun exploring the idea of a career in research. Although I was excited to work for the ABCD Study, I had no idea how much I was about to learn! I began working with participants and learning how to administer assessments, which led to further interest in the impacts research could have on individuals and communities. In 2020, I became the Lead Research Assistant for my site and had the opportunity to learn more about managing a large set of data and training new team members. While we all developed new skills and learned from each other, I also got to see several RAs go on to begin careers of their own in research, mental healthcare, and medicine.

Working with the ABCD Study also helped me develop my own professional interests, and in 2021 I began a master's program at the University of South Florida. I graduated in 2023 with my Master of Social Work and moved back to Charleston to build a clinical career and continue working with the ABCD Study as the Site Coordinator. In this new role, I have been able to maintain a connection with the families in our study while also supporting the development of new RAs. In addition to my position with the study, as someone who has always been curious about how people's life experiences affect them, I am also pursuing independent clinical licensure and working directly with young adults as a therapist. Everything I have learned with the ABCD Study has helped me develop a greater understanding of the influences on mental health and has inspired me to build a clinical career in Charleston. Outside of work, I spend my time reading, trying all the great restaurants in Charleston, and hanging out with my cat, Entropy!"



Adolescent Brain Cognitive Development®  
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**For more information about the ABCD Study,  
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