

# NEWSLETTER

featuring the BRIDGES Study

## Who Are We?

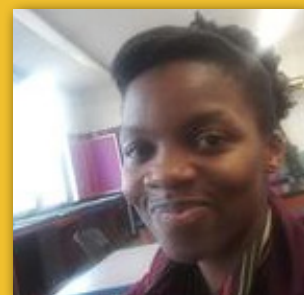
In the **R**esearch on **A**dolescent **D**epression **L**aboratory (RAD Lab), we are a team of researchers dedicated to conducting research about adolescent mental health. Our research aims to advance understanding of (a) how the adolescent brain develops; (b) how depression, self-injury, and suicide risk emerges in the teenage years, and (c) how new investigational treatments may work to restore health in young people.



Katie Cullen, Primary Investigator



Bonnie Klimes-Dougan, Primary Investigator



Ifeoluwa Olayinka, Study Coordinator



## What is the BRIDGES Study?

BRIDGES stands for **B**rain **I**maging **D**evelopment of **G**irls' **E**motions and **S**elf. This is a study funded by the National Institute of Health. We recruited 168 adolescents who were identified as female at birth to participate in this 3-year longitudinal study. We are examining developmental change across multiple domains (emotion, cognition, self-understanding) in the brain and body in teenagers with and without self-injury.

## Where are we now in the study?

In **December** 2020, we completed all data collection for Year 1 for all participants! Since then we have begun to analyze the data we have, and once all of the data from Year 3 is complete, we will be able to analyze all of our data.

## What changed with the COVID-19 pandemic?

- All in-person visits were paused March -July 2020
- All interviews switched over to zoom
- MRI scans resumed August 2020 with safety precautions
- Speech task visits restarted as zoom visits in December 2020
- We received a [grant from the medical school](#) to invite all BRIDGES participants to complete additional surveys to learn more about their experiences during the pandemic



## When will the study end?

We **expect** to complete final data collection in the summer of 2022.

## Past project managers: Where are they now?



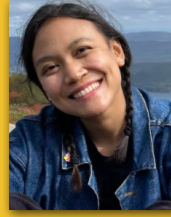
**Anna** is in her third year of the Developmental Psychology Ph.D. program at the University of

California - Davis, studying the role of stress in shaping children's physical and mental health, with a focus on emotion regulation, and studying stress outside of the lab context. She has become quite fond of exploring her new surroundings in California on her bike.



**Patty** now lives in Northern, MN, and will complete her Masters in Social Work in May with

a focus on clinical infant/toddler mental health.



**Poojah** is in the first year of her Clinical Psychology Psy.D. at Rutgers University. Here, she is

providing counseling to young adults and adolescents. She also continues to research self-harm behaviors at Rutgers' Dialectical Behavior Therapy Clinic with Dr. Shireen Rizvi. Upon graduating, she hopes to provide quality mental health care to adolescents of color.



**Helen** is in the process of earning her Masters in Integrated Behavioral Health at the University of

Minnesota. Her goal is to become dually licensed to conduct therapy in substance abuse and mental health. She is currently completing her internship at Evergreen Recovery.

## Published in Scientific Journals



Zeynep Basgöze

**We studied** how self-injury relates to how the body responds to threat. We found that the severity of self-injury in teens relates to specific patterns of stress hormone responses during stress, brain connection patterns and brain activation to fear and angry faces. [Published in Developmental Psychopathology](#). This paper has gotten some [press](#)!



Helen



Poojah

**Greater parents'** supportive responses to their teen's negative emotion relates to lower severity of self-injury in teens. [\[Published in Research on Child and Adolescent Psychopathology\]](#) Based on these results, our team is collaborating with Drs. Kristina Reigstad and Meredith Gunlicks-Stoessel to test if a parent intervention to boost parent's supportive responses to teen's negative emotion to help reduce teen self-harm.



Kate Carosella

**Support from** family is a key factor in determining whether adolescents persisted with NSSI during the pandemic. [\[Published in Journal of Affective Disorders\]](#)

## Presented in National and International Scientific Meetings



Kate Carosella

**Pre-pandemic** brain activation relates to teens' perception of stress during the pandemic. [Presented at the Society of Biological Psychiatry](#).



Katie Cullen

**Greater brain** flexibility relates to better mood in the BRIDGES participants. [Presented as a Hot Topics at the American College of NeuroPsychopharmacology](#).



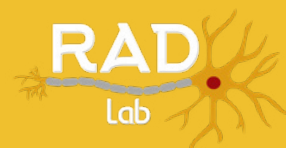
Andrea Wiglesworth

**Brain volumes** and adverse childhood experiences relate suicidal thoughts and behaviors among adolescents. To be presented at the Society for Research on Adolescence by Andrea.

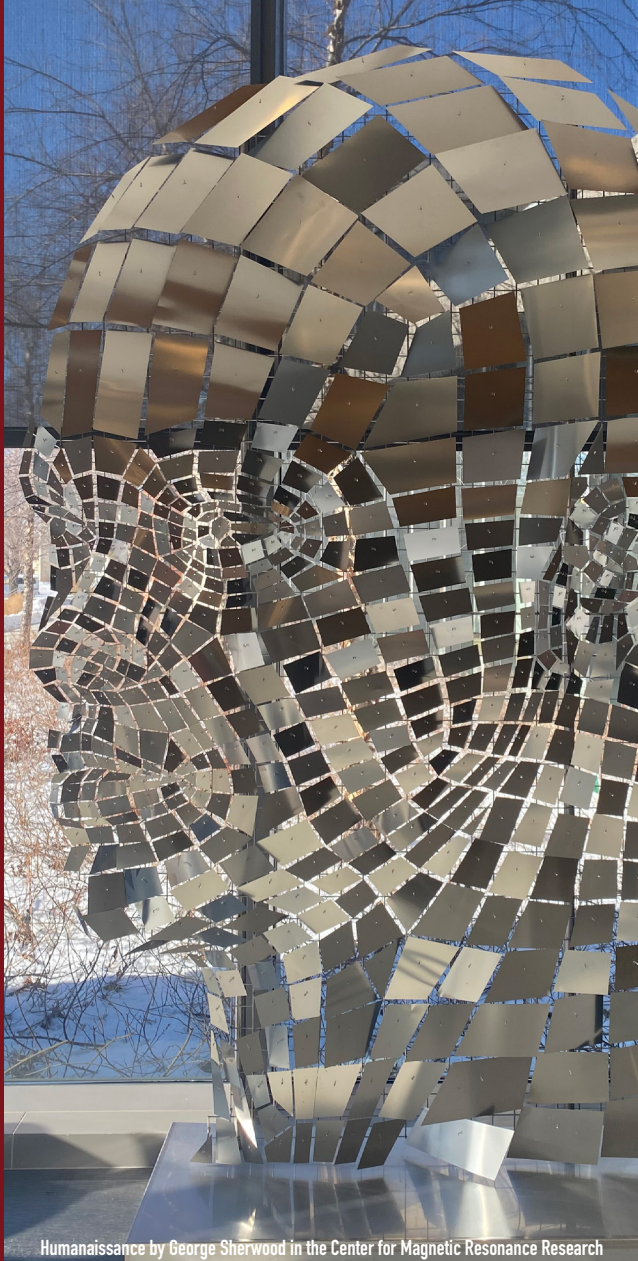


Zeynep Basgöze

**Self-injury** is found to be linked with behavioral, structural, and functional cognitive control measures. To be presented in the 2022 Society of Biological Psychiatry Annual Meeting.



[Visit our website](#) to get to know the other members of our team!



Humanaissance by George Sherwood in the Center for Magnetic Resonance Research

## Other updates from RAD Lab

- We contributed to an international expert review on the neurobiology of adolescent Self-Injury: [“Advancing a temporal framework for understanding the biology of nonsuicidal self-injury: An expert review.”](#)
- We wrote a chapter for an Oxford Handbook
- We wrote a [commentary](#)

## What is next for BRIDGES?

In the coming year, we will finish up all the BRIDGES data collection, and analyze all of our data. We are excited about the many discoveries that this data will tell us about adolescent brain development and mental health. We can't wait to share these discoveries with you in our 2023 newsletter!!!

## A round of applause to our MRI scanners:



Zeynep Başgöze, Kate Carosella,  
Dawson Hill, Laura Padilla,  
Donovan Roediger, and Justin Roemer

## Update on other current RAD Lab projects

[Creativity Camp Study](#) - Starting Phase 1 this winter, Phase 2 Summer 2022

[Sexual and Gender Minority Study](#) - Phase 1 in progress; Phase 2 starting in February 2022

[N-AcetylCysteine for self-injury in adolescents and young adults](#) - completing Phase 1 this Spring

[Bioenergetics in Depression in Young Adults](#) - Starting this Spring

[Mindful Breathing and Neuromodulation for Depression in Young People](#) -in data analysis

[Transcranial Magnetic Stimulation for Adolescent Depression](#) - in data analysis

[Check out this link to see if you are eligible to participate in another study](#)

We could not have done any of this without YOU!!! It is hard to fully express how deeply we appreciate your contributions to our research. THANK YOU for your time, your energy, and your support.



*Sincerely,*  
Katie Cullen and Bonnie-Klimes Dougan

