# Understanding the Role of the Brain in Race/Ethnicity-Based Stressors

Jamie Hanson<sub>1</sub>, Jaime Booth<sub>2</sub>, & Seong-Jae Hwang<sub>3</sub>

1-Department of Psychology (Dietrich school of arts and sciences); 2-Social Work; 3- School of Computing and Information

### Motivation

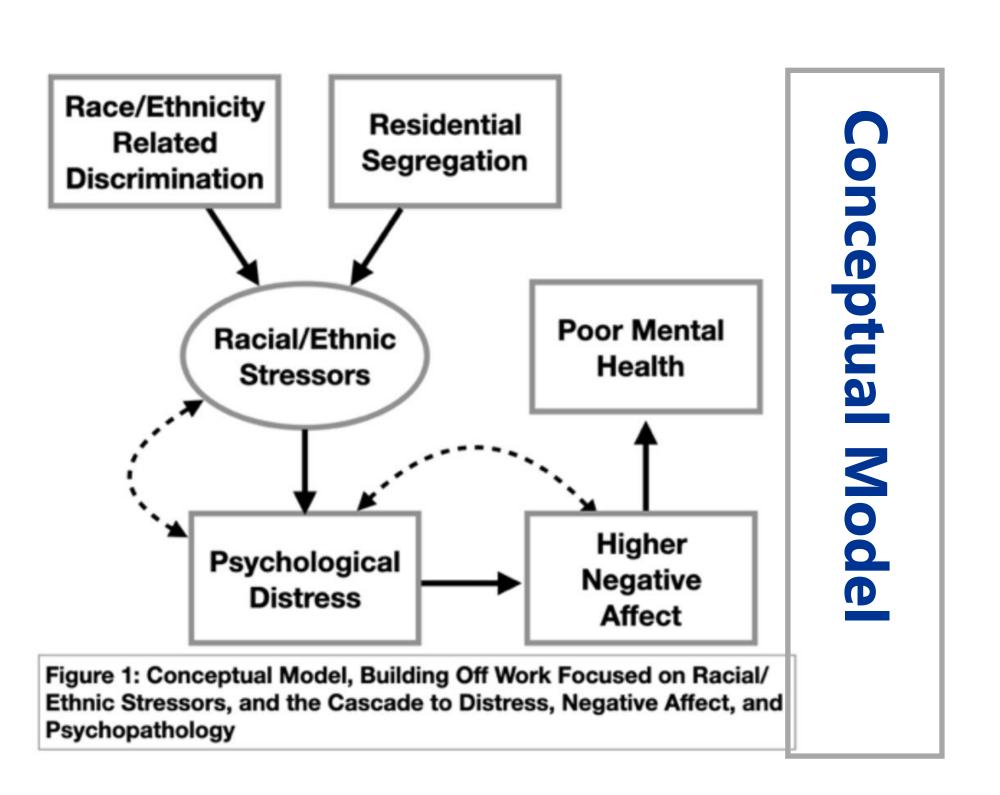
- Experiences of racism gets under the skin, relating to a verity of health outcomes including mental health in adolescence
- More specifically, experiencing racial/ethnic discrimination are related to changes in how the body responses to stress
- This dysregulation could impact the development emotion and reward processing centers of the brain, during a critical developmental period

## **Project Description**

- Aim 1: Examine impact of race/ethnicitybased stressors on brain regions involved with emotion and reward processing
- Aim 2: Test if these brain differences relates to mental health outcomes in adolescence.

#### Context

 Information about how racism impact the brain may shed light on underlying mechanisms (i.e., reward processing) that play a role in the mental health youth of color.



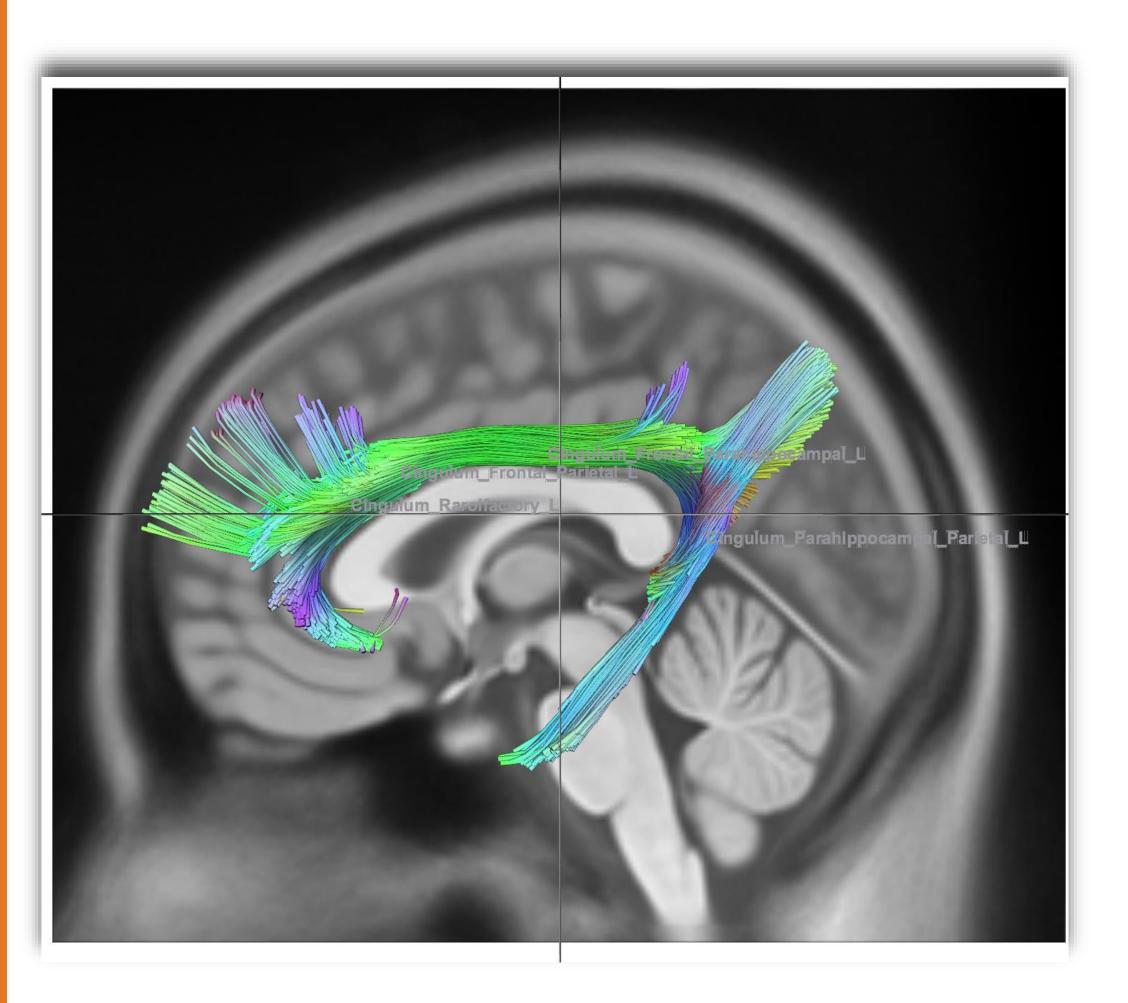


The stress associated with experiencing racism and discrimination during adolescence may influence brain development



## **Project Deliverables**

- Academic -- Grant Applications;
  Research Publications
- Applied -- Policy Briefs and Outreach Talks to Community Organizations
- Funding will allow staff and students to be hired to complete the technical elements of the work
- Benchmarks at 6 months— Initial Processing of the dataset
- Benchmarks at 1 year— Submission of 1 grant application (to allow for future funding to support the work)



# **Potential Impact**

- Understanding critical pathways between youth of color's context and brain development may be crucial to promote mental health in communities of color.
- These pathways that are typically overlooked when youth are aggregated.
- Understanding these mechanisms may also give insight into brain development that may be applied to promoting mental health and preventing health disparities.