

# Implementing Health Sciences After-School Programming for Mississippi High School Students: the Impact of Social Determinants of Health

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## PROJECT DESCRIPTION

Systemic inequities in access to healthcare and quality educational opportunity for the youth of Mississippi (MS) are powerful forces that disengage students from entering pathways toward STEM careers. Project SCORE (Student-Centered Outcomes Research Experience) brings together underrepresented high school and graduate health sciences students from two communities with significant health disparities in a year-long weekly afterschool program to introduce students to public health and the health sciences, develop relevant health behavior research questions, provide training in research methods, and facilitate the development of student-conducted research projects mentored by near-peer graduate health sciences students and faculty.

While the planning and objectives of SCORE are clear, the SCORE program has experienced major setbacks in implementation due to public health-related issues: COVID19, climate issues and the Jackson Water Crisis. These experiences highlight the challenges of offering informal STEM education.

PLAN	IMPLEMENTATION IN OXFORD	IMPLEMENTATION IN JACKSON
<b>Fall 2021 Sessions</b>	Canceled due to COVID19	Canceled due to COVID19
<b>Spring 2022</b>		
Week 1: Orientation	Late start due to COVID19	Late start due to COVID19
Week 2: Public Health	✓	✓
Week 3: COVID19 Epidemiology	✓	✓
Week 4: Health Disparities	✓	✓
Week 5: Health Literacy	✓	Postponed due to tornado
Week 6: Developing Strong Research Questions	Postponed due to tornado	✓
Week 7: Fundamentals of Social/Behavioral Research	✓	✓
Week 8: Developing a Student-Centered Research Agenda	Postponed due to tornado	✓
Week 9: Research Ethics	✓	✓
<b>Fall 2022</b>		
Week 1: Orientation	✓	Postponed due to Water Crisis
Week 2: Public Health	✓	Postponed due to Water Crisis
Week 3: Epidemiology	✓	Postponed due to Water Crisis <b>Implemented Week 1 Orientation Session</b>

## SOCIAL DETERMINANTS

**COVID19:** In Fall 2021, Oxford and Jackson schools were starting to come back in-person. However, there were challenges surrounding school and afterschool programs openings and intermittent school closings due to the Delta wave of COVID-19. Additionally, virtual communication and recruitment with community members posed a challenge.

**Climate:** While our sessions started in Spring 2022, from March 22<sup>nd</sup> through April 17<sup>th</sup> there were storms each week, some of which led to school and afterschool closings and delaying our sessions with the students. A Jackson-based meteorologist from the National Weather Service (NWS) reported that there were 76 tornado warnings put out within 5-weeks, more than any other NWS office in the country.<sup>1</sup>

**Jackson Water Crisis:** At the end of August 2022, while preparing for Year 2 SCORE sessions, flood waters overwhelmed Jackson's water treatment system, cutting off water pressure and leaving 150,000 Jackson residents without access to safe drinking water for weeks.<sup>2,3</sup> Because of this crisis our Jackson community partner Stewpot was not able to support afterschool programming for weeks, resulting in a delayed program start.

## COMMUNITY PARTNERS

Our community partners are integral to this program!  
@BGClOU @StewpotJackson



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