Mississippi & The National Institute of Dental and Craniofacial Research
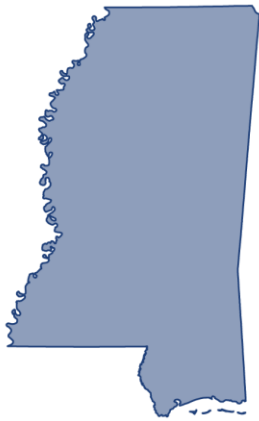

FY20 Total Funding: **$748,594**

Number of Institutions Funded: **1 (University of Mississippi Medical Center)**

Number of Grants Awarded: **3**

Number of Congressional Districts with NIDCR Grants: **1**

Improving Mississippi's Oral Health through NIDCR Funding:

- Ceramic dental prostheses, including crowns and bridges, are at risk for fracture due to repetitive jaw movements and loading. The University of Mississippi Medical Center is developing a new automated, unbiased method to analyze the fracture surface of various dental materials to better understand what chemical and mechanical properties contribute to the material's fracture susceptibility. Data from this study will provide valuable information on commonly used dental materials enabling dentists to choose materials that are less likely to fail after placement in the patient's mouth.

- Tooth decay is the most significant oral health issue currently resulting in billions of dollars in annual expenditures in the United States alone. Early detection of tooth decay is ideal because interventions can reverse the disease process avoiding costly treatments. Researchers at Jackson State University are designing an automated laser imaging device that can identify early-stage dental decay.