

Minnesota & The National Institute of Dental and Craniofacial Research

FY20 Total Funding: \$5,666,103

Number of Institutions Funded: 5 (Aster Labs, Inc.;

HealthPartners Institute; Hennepin Healthcare Research Institute; Restful Jaw Company, LLC; University of Minnesota)

Number of Grants Awarded: 17

Number of Congressional Districts with NIDCR Grants: 2

Improving Minnesota's Oral Health Through NIDCR Funding:

- The Health Partners Institute is conducting a study to try to spread evidence based findings to practicing dentists. Dental caries and periodontal disease are two of the most common infection-based dental conditions dentists encounter in daily practice. Although there are evidence-based guidelines for prevention and treatment for these conditions, research shows that dentists often do not to use the most effective treatment methods. This study seeks to assess whether training dentists through simulated patient interaction and feedback rooted in evidence-based guidelines leads to better dental care.
- The Mayo Clinic-Rochester is studying the interaction of a set of genes that represent a crucial step in the process of bone formation and regrowth. One in 750 live births are associated with a craniofacial abnormality and approximately one in 2,000 children develops a form of craniosynostosis, which cases skull malformation and mental retardation. This project explores the molecular interactions between two crucial regulators of bone repair/regeneration. Understanding the pathways that determine bone growth and regeneration may lead to new therapies or preventative treatments for children with these craniofacial birth defects.

