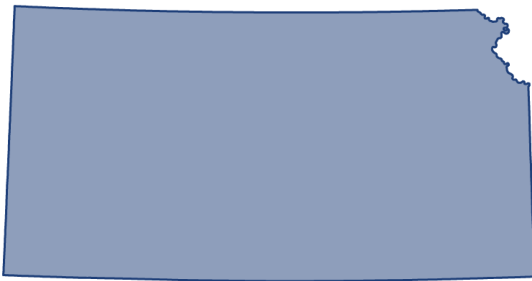


# Kansas & The National Institute of Dental and Craniofacial Research



FY20 Total Funding: **\$1,275,438**

Number of Institutions Funded: **2 (University of Kansas, Lawrence; University of Kansas Medical Center)**

Number of Grants Awarded: **4**

Number of Congressional Districts with NIDCR Grants: **2**

## Improving Kansas's Oral Health through NIDCR Funding:

- Tooth decay affects 60-90% of school children in industrialized countries resulting in billions of dollars in annual expenditures in the United States alone. The University of Kansas Medical Center is studying *Streptococcus mutans* (*S. mutans*), a bacterium known to form dental plaque and contribute to tooth decay. This investigation aims to understand a key mechanism required for dental plaque development and oral colonization by *S. mutans*. Successful completion of this project could lead to the development of novel therapeutic treatments to reduce tooth decay.
- Composite restorations fail twice as rapidly as amalgam restorations with recurrent dental decay being the leading cause for failure. This decay typically occurs at the restoration margin where the bond between the tooth and restoration can be breached by enzymes that degrade the adhesive material. Scientists at the University of Kansas, Lawrence are working to develop dental materials that resist enzymatic activity. Results from this study could lead to a longer lifespan for composite restorations, especially as dental amalgam is slowly being phased out

