



South Carolina & National Institute of Dental and Craniofacial Research



FY20 Total Funding: **\$4,785,957**

Number of Institutions Funded: **3 (Clemson University; Medical University of South Carolina; University of South Carolina at Columbia)**

Number of Grants Awarded: **17**

Number of Congressional Districts with NIDCR Grants: **3**

Improving South Carolina's Oral Health Through NIDCR Funding:

- **Clemson University** is currently researching the mechanisms behind Temporomandibular joint disorders (TMJDs). TMJDs are of unknown etiology and affect as many as 10 million Americans, with women 3-8 times more likely to be treated than men. Sex differences in human temporomandibular lateral capsuloligament complex tissue properties could be responsible for the increased rate of temporomandibular joint disorders among women. The university is investigating a variety of tissue mechano-electro-chemical properties to determine whether sex-specific differences exist that may predispose women to temporomandibular joint disorders.
- The **Medical University of South Carolina** is investigating the field of oral cancer therapy. Although significant advances have been made in cancer treatment, the prognosis for an oral cancer patient remains poor. Small proteins called peptides have the potential to be utilized as transporters for highly specific small-molecule drugs. This research will lead to improved designs and further development of peptide-mediated treatments for human oral cancer.

