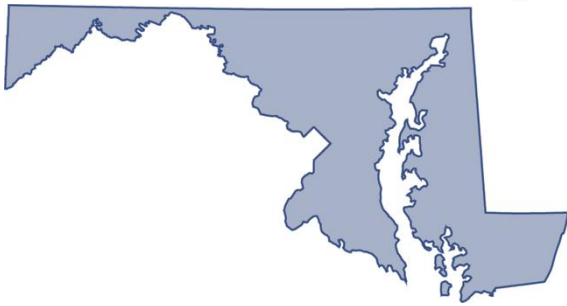


Maryland & The National Institute of Dental and Craniofacial Research



FY20 Total Funding: **\$13,043,969**

Number of Institutions Funded: **5 (Johns Hopkins University; Rise Therapeutics, LLC.; Technology Assessment and Transfer, Inc.; University of Maryland, College Park; University of Maryland Baltimore)**

Number of Grants Awarded: **27**

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

Improving Maryland's Oral Health Through NIDCR Funding:

- Electronic cigarette (EC) use has increased dramatically in recent years. Researchers at The Johns Hopkins University recently completed a survey of EC users in Baltimore and found that a surprising percentage of EC users are non-smoking young adults. The oral cavity is host to one of the most complex microbial floras, and disturbance in this can lead to overpopulation of pathogens. Their recent report indicates that EC exposure increases biochemical stress and inflammation, decreases the innate immune response, and in a mouse model, EC increases susceptibility to pulmonary bacterial infections, indicating a high potential for adverse effects to oral host defense. The Johns Hopkins research team is studying these effects to fill a critical gap in understanding the changes of the oral defense and a potential microbial shift in electronic cigarette users, which may predispose them to oral diseases.
- Scientists at the University of Maryland, Baltimore are researching the central mechanisms of maintenance of orofacial pain after injury. The goal of this study is to better understand the mechanisms that participate in pain chronicity and how persistent pain emerges from the more acute stage after injury. The findings from this research could lead to a transformative shift in the search for unique treatment approaches for persistent pain.

