

May 24, 2022

Organization: American Association for Dental, Oral, and Craniofacial Research (AADOCR) Committee: House Appropriations Subcommittee on Labor, Health and Human Services,

Education and Related Agencies

Agency Funding Requests: National Institutes of Health (NIH) and National Institute of Dental

and Craniofacial Research (NIDCR)

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Chair DeLauro, Ranking Member Cole, and members of the Subcommittee,

Thank you for the opportunity to submit this testimony on behalf of the American Association for Dental, Oral, and Craniofacial Research (AADOCR). For FY 2023, AADOCR is seeking at least \$540 million for the National Institute of Dental and Craniofacial Research (NIDCR) and a total of \$49 billion for all of the Institutes and Centers at the National Institutes of Health (NIH). Funding at these levels is necessary for the entities' base budgets to keep pace with the disproportionately high level of biomedical inflation and the development price index (BRDPI).

The NIH, through the biomedical research it conducts and supports, plays a critical role in improving Americans' health and well-being. When the COVID-19 pandemic hit our nation and the world, the NIH helped safeguard the public health through its significant contributions to the development of testing, vaccines and treatments. The NIH continues to develop and maintain the resources, both human and scientific, that provide our nation with the tools it needs to address other diseases and disabilities.

The NIDCR, established by President Harry S. Truman in 1948, is the largest institution in the world exclusively dedicated to researching ways to improve dental, oral, and craniofacial health for all. Investments in NIDCR-funded research during the past half-century have led to improvements in oral health for millions of Americans and continue to show promise in areas encompassing the prevention of dental caries (tooth decay) and periodontal (gum) disease, new diagnostic methods of oral and dental conditions, pain biology and management to help alleviate the opioid crisis, regenerative medicine, oral cancer prevention and treatment, and in assessing the efficacy of an HPV vaccine for oral and pharyngeal cancers.

Despite NIDCR's impressive research agenda and scientific accomplishments, the federal government's annual investment in the Institute has not kept pace with the overall funding increases provided to NIH over the past several years. Funding of at least \$540 million in FY 2023 would help bring NIDCR funding into alignment with the overall NIH appropriation and allow NIDCR to build on its myriad successes in its mission to improve dental, oral and craniofacial health.

The research being conducted at, and supported by, NIDCR impacts not only the oral health, but the overall health of Americans. Poor oral health can affect activities that may be taken for granted including the ability to eat, drink, swallow, smile, speak, and maintain proper nutrition. It also creates an economic burden that disproportionately harms older adults, low income, and underserved communities.

The oral cavity also serves as a window into many health issues, including but not limited to systemic diseases, such as diabetes, HIV/AIDS, and Sjögren's, an autoimmune disease that causes one's immune system to attack parts of its own body. Additionally, researchers are exploring the debilitating loss of salivary gland functioning and saliva production stemming from

radiation treatment for head and neck cancers and even from common medications and aging itself. Lack or loss of saliva, which causes xerostomia, or uncomfortable dry mouth, has also been shown to be a risk factor for dental caries.

The NIDCR played a critical role in responding to the COVID-19 public health crisis funding approximately \$3.9 million in high-impact coronavirus research. The Institute's research into minimizing infection risk in dental offices, the use of biosensors to detect SARS-CoV-2 in saliva, the role of periodontal disease in COVID-19 complications, and exploring mechanisms of viral entry into the tissues of the oral cavity played a critical role in combatting COVID-19. Continued research into the link between oral infection and taste loss, an early COVID-19 symptom, will help us better prepare for the next pandemic.

NIDCR-supported research is expanding into new exciting areas of research, such as the interplay between the oral microbiome—which encompasses over 700 microorganisms, including bacteria, fungi, and viruses—and the immune system. We are increasingly learning that the oral microbiota can help predict or identify a diverse range of oral and systemic diseases, including dental caries, periodontal diseases, oral cancer, colorectal cancer, pancreatic cancer, and inflammatory bowel syndrome. Further research in this area is critical to improving Americans' oral and overall health.

In December 2021, NIDCR released its landmark report "Oral Health in America: Advances and Challenges", with input from over 400 contributors documenting 20 years of progress in oral health since the 2000 Surgeon General's Report on Oral Health. The comprehensive and data-driven report provides insight into issues currently affecting oral health and serves as a call to action for a coordinated effort among oral health practitioners; researchers; and other stakeholders to improve oral health for all Americans.

AADOCR deeply appreciates Congress' longstanding and bipartisan support for the public health research enterprise. The funding increases NIDCR has received since 2015 have allowed the Institute to build its data repository and registry in several disease and research areas to meet the increasing need for open-source data sharing. These include clinical registries and repositories related to head and neck cancers, orofacial birth defects and craniofacial anomalies, and craniofacial microsomia cohorts to identify genetic risk factors. The Institute also participates in trans-NIH and NIH Common Fund initiatives for data analysis and sharing.

Recognizing that federal research and public health efforts work in concert with one another and that success in one area can benefit another, we encourage Congress to support the full breadth of federal agencies supporting oral health. Complementing our NIDCR and NIH requests, we urge you to provide \$35 million for the CDC's Division of Oral Health, \$46 million for the Title VII Health Resources and Services Administration (HRSA) programs that train the dental health workforce, \$500 million for the Agency for Healthcare Research and Quality (AHRQ), and \$210 million for the National Center for Health Statistics (NCHS) in FY 2023.

Finally, AADOCR strongly supports the establishment of the Advanced Research Projects Agency for Health (ARPA-H), which will help fill gaps in the biomedical research ecosystem by utilizing a bold new approach focused on the development of evidence-based, real-world-driven cures for a range of diseases. We urge you to support the Administration's request of \$5 billion for ARPA-H in FY 2023, but not at the expense of funding for the NIH's base budget. It's critical that funding for this new agency complement – not supplant – the foundational investment in traditional NIH Institutes and Centers.

We appreciate the opportunity to submit this testimony and thank the Subcommittee for its support of biomedical research, including dental, oral and craniofacial research, in FY 2023 so

our nation's citizens can continue to enjoy the benefits of state-of-the-art and world-leading health care. We stand ready to assist the members of this Subcommittee in any way we can and are happy to answer any questions you may have.

Sincerely,

Jan Alrehal

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AADOCR President (2022-2023)