AADOCR
American Association for Dental, Oral, and Craniofacial Research

Written Statement

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Subcommittee on Labor, Health and Human Services, Education, and Related Agencies
In Support of Fiscal Year 2024 Appropriations for National Institutes of Health (NIH) and National Institute of Dental and Craniofacial Research (NIDCR)

Chair Aderholt, Ranking Member DeLauro, 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 2024, AADOCR is seeking at least **$558 million for the National Institute of Dental and Craniofacial Research (NIDCR)** and a total of **$51 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.

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. AADOCR deeply appreciates Congress' longstanding and bipartisan support for the public health research enterprise.

The NIDCR, established 75 years ago by President Harry S. Truman, is the largest institution in the world exclusively dedicated to researching ways to improve dental, oral, and

craniofacial health for all. The Institute supports scientists at all stages of their careers, from high school students to independent researchers, and funds cutting-edge basic, translational, and clinical research to create the scientific foundation for oral health policy and practice. NIDCR shares its research findings and health information with the public, health care professionals, researchers, and policy makers to promote oral 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 multiple areas impacting the dental and craniofacial complex and overall health of Americans, including the prevention of dental caries (tooth decay) and periodontal (gum) disease, pain biology and management, helping alleviate the opioid crisis, temporomandibular disorders (TMD), regenerative medicine, oral cancer prevention and treatment, and in assessing human papillomavirus (HPV) vaccine efficacy for oral and pharyngeal cancers.

The research being conducted at, and supported by, NIDCR impacts not only the oral health, but the overall health of Americans. Oral diseases not only cause pain, discomfort, social isolation, interruption of school and work, and economic hardship, but also place undue strain on health systems and reduce economic productivity, leading to direct and indirect costs estimated at $545 billion stemming from dental diseases worldwide.

The oral cavity 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.

Oral diseases share many of the same behavioral and social determinants as other noncommunicable diseases such as diabetes and hypertension, including tobacco use, environmental setting, and lack of access to health care, and these vulnerabilities accumulate along the life course and contribute to disparities in oral health outcomes. NIDCR is addressing these health disparities by funding research that investigates how social determinants of health affect oral health and access to dental care.

NIDCR recently launched a national, NIH-wide consortium called the TMD Collaborative for Improving Patient-Centered Translational Research (TMD IMPACT) to help improve clinical care for TMD by establishing a national, interdisciplinary, patient-centered consortium to advance research and help train the next generation of TMD researchers. The research seeks to identify the nerves in the temporomandibular joint and discover new approaches to pain relief.

The federal investment in NIDCR has also 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.

NIDCR-supported research is also expanding into exciting new 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.

Finally, NIDCR is dedicated to building an inclusive and diverse community in its research training and employment programs. In FY 2022, NIDCR invested over $23 million to support research training and career development programs spanning the career stages of scientists to help build a vibrant and inclusive community of researchers. It's "MIND the Future" (Mentoring an Inclusive Network for a Diverse Workforce of the Future) initiative provides mentored research career development and grant writing activities for postdoctoral and junior faculty scientists from groups traditionally underrepresented in biomedical research to help support their pursuit of academic research careers.

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. Providing NIDCR with at least $558 million in FY 2024 would help bring the Institute's 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.

AADOCR strongly supports the Administration's request of $2.5 billion for the Advanced Research Projects Agency for Health (ARPA-H) and $2.7 billion in new mandatory funding for the NIH to support pandemic preparedness in FY 2024. These investments, however, must not come at the expense of funding for traditional NIH Institutes and Centers. The White House

proposal of $48.3 billion for NIH's base budget, a 1.7% increase over the comparable FY 2023 funding level, does not come close to keeping pace with biomedical inflation, undermines the future medical research workforce, and risks America's long-term leadership in biomedical research.

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 2024 so our nation's citizens can continue to enjoy the benefits of state-of-the-art and world-leading medical and dental 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. Thank you.