9th AADR Fall Focused Symposium: Advances in Precision Oral Health Research
Proceedings Published in Advances in Dental Research

Alexandria, VA, USA – On November 8-9, 2018 the American Association for Dental Research (AADR) held the “9th AADR Fall Focused Symposium: Advances in Precision Oral Health Research” meeting on the National Institutes of Health (NIH) campus in Bethesda, Maryland, USA. The papers resulting from this symposium are published in the latest issue of Advances in Dental Research, an e-Supplement to the Journal of Dental Research (JDR).

Unprecedented advances in genomics, data science and biotechnology have ushered in a new era of healthcare in which interventions are increasingly tailored to individual patients and extended to population precision-based approaches which can be applied oral health. Harnessing the full potential of precision oral health will depend on research to more fully understand the factors that underlie health and contribute to disease — including the human genome, microbiome, epigenome, proteome and others.

This two-day symposium addressed the current state of precision oral health research and its clinical application, the future of personalized oral health and the research gaps that need to be filled to realize the full potential of personalized oral care. The symposium, summarized in these proceedings, was organized into sessions on the topics of: an introduction to precision oral health research, oral health in the context of overall health, precision reengineering of the oral microbiome for caries management, the molecular basis of dental caries and periodontitis, the integration of studies for diagnostic and therapeutic precision in head and neck cancer and the rehabilitation of patients sustaining orofacial injuries.

“Precision medicine continues to revolutionize healthcare. Oral health professionals and insurers will need to work with the research community and industry to develop new strategies to achieve optimal oral and overall health based on advances in precision oral health research that utilizes genomics, proteomics, metabolomics, bioinformatics and systems biology,” said AADR Immediate Past President Maria Ryan, Colgate-Palmolive Company. “Clearly implementing precision health care into clinical practice is not without challenges. Precision healthcare will require human capital, infrastructure and education of the healthcare workforce, as well as empowering the general public with accurate information to facilitate adoption of new preventive and therapeutic strategies. Various ethical and social issues should be addressed, such as privacy, protection of genomic data and access to care.”
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About Advances in Dental Research

Advances in Dental Research is an e-supplement supplement to the Journal of Dental Research (JDR). A subscription to JDR grants you access to the articles in Advances in Dental Research. This journal is a member of the Committee on Publication Ethics (COPE).

About the Journal of Dental Research

The IADR/AADR Journal of Dental Research (JDR) is a multidisciplinary journal dedicated to the dissemination of new knowledge in all sciences relevant to dentistry and the oral cavity and associated structures in health and disease. The JDR continues to rank #1 of 90 journals in Eigenfactor with a score of 0.021290, ranks #2 in Impact Factor of 90 journals in the “Dentistry, Oral Surgery & Medicine” category at 5.125 and ranks #2 of 90 in Article Influence with a score of 1.643. The JDR’s 5-year Impact Factor has remained above 5 for the fourth year at 5.722, ranking #2 of 91 journals. With over 20,000 citations, the JDR also boasts the most citations in the “Dentistry, Oral Surgery & Medicine” category — 4,500 citations above the second ranked journal in the field.

International Association for Dental Research

The International Association for Dental Research (IADR) is a nonprofit organization with over 11,400 individual members worldwide, with a Mission to drive dental, oral and craniofacial research to advance health and well-being worldwide. To learn more, visit www.iadr.org. The American Association for Dental Research (AADR) is the largest Division of IADR with 3,300 members in the United States. To learn more, visit www.iadr.org/aadr.