HANDS-ON WORKSHOPS

The Hands-on Workshops (HOW) will take place at the Moscone West Convention Center. Registrations will be processed on a first-come, first-served basis.

For workshops that have limited attendance and/or a fee associated, if you register in advance, a ticket will be printed on your name badge sheet. If a session fills up, you can request to be placed on a waiting list. Individuals on the waiting list are encouraged to arrive at the applicable session at the meeting in case there are attendees who do not show up; entry will be facilitated by the organizer.

More information including speakers/descriptions will be available when the online Scientific Program is released in January 2017.

WEDNESDAY, MARCH 22, 2017

10:15 a.m. – 11:45 a.m.

HOW #1: Working With Sustainable Development Goals to Reduce Oral Health Inequalities

Sponsored by: Global Oral Health Inequalities Research Network, Behavioral, Epidemiologic, and Health Services Research, Nutrition Research

Organizers:
Georgios Tsakos (University College London, United Kingdom) Organizer/Chair
Manu Mathur (Public Health Foundation of India, Jaipur) Organizer
Peter Mossey (University of Dundee, United Kingdom) Organizer

Recognizing the need for a more sustainable, equitable and inclusive approach to development and health, the United Nations replaced Millennium Development Goals with Sustainable Development Goals (SDGs) in 2015. Among the different SDGs, SDG3 ("Ensure healthy lives and promote well-being for all at all ages") is specifically dedicated to health. The SDGs provide a framework for international development that stresses the need for inter-sectorality and trans-disciplinary research as a key to reduce inequalities. This is in line with the scope of GOHIRN as outlined in the Budapest Declaration and the "Call to Action".

Since the oral health determinants and dynamics extend across multiple sectors, the post-2015 development agenda with its increased focus on inter-sectoral action has potential to promote synergies and partnerships linking several stakeholders towards policies and interventions to improve oral health. Consequently, there is now a need to outline research priorities aimed at reducing oral health inequalities in conjunction with the international development agenda.
The aim of this Hands-on-Workshop is to discuss and prioritize feasible oral health research initiatives that are relevant for the post-2015 sustainable development agenda. The workshop contains three brief presentations setting the scene for discussions into thematic breakout groups that focus into research opportunities to mainstream oral health within SDG3, as well as how oral health inequalities research fits into the broader sustainable development agenda beyond SDG3. A final plenary will summarize the discussions and provide guidance for a research strategy to reduce oral health inequalities using the SDGs framework.

This Hands-on-Workshop deals with a key global health development that has largely gone unnoticed by the oral health research community. Sustainable Development Goals (SDG) have provided a framework for international development that guides the implementation of interventions across a range of themes and disciplines, with health recognized as a key theme for holistic human development. This guides the efforts of the main international bodies such as the United Nations and the WHO. This workshop will bring forward the SDG agenda and attempt to make oral health a part of it, with particular focus on addressing inequalities. This will promote the integration of oral health into the wider health and development research roadmap post-2015 and will provide a pathway to implementation of intersectoral approaches to improving oral health and reducing inequalities. The introduction of the SDG agenda in oral health and the focus on the implementation and related research are clear innovative aspects of this workshop. We aim for this workshop to be the first step in a process that fosters ideas and brings together key stakeholders with a potential to lead to oral health input on research projects embedded within the global health and development field, and as such should be seen both as an innovation and a priority for IADR.

12 p.m. – 1:15 p.m.
HOW #2: IADR/AADR/CADR/NIDCR Mentoring and Networking Lunch
(Attendance Limited to 90 people, must register to attend. Fee: $20)
Sponsoring Group/Network: IADR/AADR
Organizers:
Leslie Frieden (National Institute of Dental and Craniofacial Research, Bethesda, MD, USA) Organizer
Lynn Mertens King (National Institute of Dental and Craniofacial Research, Bethesda, MD, USA) Organizer

The IADR/AADR/CADR and NIDCR are offering a mentoring and networking lunch aimed at facilitating interactions among predoctoral and postdoctoral trainees and investigators with expertise in dental, oral and craniofacial research. This event is designed to provide an opportunity for students and postdoctoral fellows to discuss research careers with experienced investigators. The goal is to provide an informal venue for participants to obtain guidance on their research programs and research career trajectories and to expand their network of mentors and peers to support and facilitate their research career success. Mentors will be encouraged to lead informal, motivational and realistic discussions about developing a successful research career.

Lunch tables will be organized by research topic or career pathway, and two mentors will be assigned to each table. When registering, participants do not need to select a specific table and are free to move among topics/tables during the session.

IADR/AADR General Session attendees who are students and non-independent postdoctoral researchers will be able to register for this event for the added price of $20.00 with their meeting registration.
1:30 p.m. – 3 p.m.
**HOW #3: Hands-On Workshop for Clinical Trials and Research**

**Sponsored by:** NIDCR/NIH  
**Organizer:** Melissa Riddle (National Institute of Dental and Craniofacial Research, Bethesda, MD, USA)  

An overview of NIH policies about clinical research and clinical trials in effect or coming soon.
Learning about the new and forthcoming NIH clinical trial and clinical research policies will allow investigators to flexibly and successfully adapt their research ideas to the new policies.

3:15 p.m. – 4:45 p.m.
**HOW #4: Salary Negotiations and Promotion in Dental Academia**

*(Attendance Limited to 50 people, must register to attend. Fee: $25)*  
**Sponsored by:** Women in Science Network  
**Organizers:**  
Effie Ioannidou (University of Connecticut, Farmington, USA)  
Tamanna Tiwari (University of Colorado, Aurora, USA)  

Despite the Equal Pay Act, salary inequality between men and women has been a recognized problem in Science, Technology, Engineering and Medicine established as early as one-year post bachelor’s degree. Current efforts at a Congressional level aim to strengthen the Equal Pay Act with the proposed legislation of Paycheck Fairness Act, which aim to bring more transparency related to wages and to prohibit retaliating actions against employees, who challenge the gender-based wages. Consistent data and reports of the National Academy of Science, the Institute of Medicine, and the American Association of University Women have confirmed the compensation gender gap in academia, even persisting at the level of start-up packages in Public Research Universities and often affecting faculty attrition rates. Moreover, financial support for dependent care has been recognized by some Universities and funding agencies as instrumental to faculty retention and research development. Our group has produced evidence confirming gender-based salary inequality in dental academic leadership positions based on ADEA public salary surveys. Given the significant compensation gap mainly observed in total compensation in academia, one may assume that women do not negotiate benefits, incentives, laboratory space and start-ups as effectively as men do. As pay gap increases with age and education level, it becomes critically important for women at all career levels to develop negotiation strategies and skills in order to achieve salary equity. This workshop will aim to train women faculty and researchers on negotiation strategies as they relate to compensation, development and promotion. At the end, the panel discussion (Recommendation from the Deans) will offer opportunities for open-end questions on negotiation tips regarding new academic position or relocation.

This workshop aims to discuss matters of career advancement and promotion in a very innovative and interactive way. This workshop puts emphasis on the gender salary gap. The present workshop has been updated involving Deans and Associate Dean of Research, who will offer guidance and advice for negotiating research positions and start-ups.
THURSDAY, MARCH 23, 2017

8 a.m. – 9:30 a.m.
HOW #5: Exploring Ethical Dilemmas in Educational Research
Sponsored by: Network for Practice-based Research, Evidence-based Dentistry Network, Behavioral, Epidemiologic, and Health Services Research
Organizer:
James Field (Newcastle University, United Kingdom) Organizer/Chair
Laura Dempster (University of Toronto, ON, USA) Chair

Whilst most dental research involving participants follows a biomedical model of ethical approval, there is an ever-increasing body of researchers who are interested in participatory action research within the dental environment. The social construct within which this educational research exists is complex, and often oversimplified by scientific ethics committees. Action Research doesn’t try to avoid ethical dilemmas but recognizes the ethical complexity that changes in professional practice unavoidably entail. Participants and researchers need to be continually reflexive about their research activities, combining research, education and action.

This workshop aims to discuss the ethical requirements and considerations of an educational research project, and to explore methods of obtaining ethical approval. We will consider a number of research scenarios and also spend time exploring the concept of a continual ethical dialogue with project sponsors and committees, rather than an initial and singular oversight. Finally, the concept of a gatekeeper will be discussed, facilitated by a number of worked examples. It is hoped that participants will feel empowered to openly discuss educational ethics at their own institutions and ensure that appropriate methods are in place to safeguard all participants.

Speakers will include subject matter experts from the Higher Education Academy, Educational Professional Standards Advisors and Educational Researchers with experience of ethical approval processes and governance issues.

This session is intended to improve the understanding of ethical issues in educational research and explore the various methods of obtaining ethical approval. As such, it is hoped that more educational projects will be appropriately recognized and supported by parent institutions. The concept of action research is, by its very nature, ‘innovative’ and so the workshop will highlight the need for investigators to be continually reflexive about their research activities, combining research, education and action. Worked examples will provide opportunity to identify, plan, and discuss methods of implementing educational action research in an ethical way.

2 p.m. – 3:30 p.m.
HOW #6: How Cloud Electronic Health Records (EHRs) Support Research
Sponsoring Group/Network: Education Research, Cariology Research
Organizer: Lynn Johnson (University of Michigan, Ann Arbor, USA) Organizer/Chair

Many who study epidemiology know John Snow’s map that depicts clusters of cholera cases in the London epidemic of 1854. Accurate patient data and a map allowed Snow to discover that cholera is spread by contaminated water. Electronic health record systems (EHRs) were once thought to be the next tool to assist modern day John Snow’s improve health. However EHRs have failed in that quest for knowledge, and are often best described as glorified billing systems. How can we replicate the John Snow legacy of discovery from data and use expensive (EHRs) to help researchers in their quest to improve health? This hands-on workshop
will briefly describe our journey from John Snow to paper records to traditional EHRs. Then, using caries research as a foundation, the presenters will describe four distinct characteristics of innovative cloud-based dental EHRs: (1) connectivity to other cloud-based open data sources, (2) inherent adherence to industry standards, (3) build-in data repository ability for data pooling, and (4) integrated business intelligence and Big Data analytics through flexible computing power. After each aspect is described, the audience will brainstorm with the presenter how this particular aspect can be exploited as a potential pathway from transforming a traditional EHR (also known as data cemetery) to research-oriented EHR (also known as source of knowledge). The workshop will conclude by wrapping the participants’ contributions and thoughts into the vision of a Learning Health System that facilitates meaningful access to data in order to improve patient care outcomes and advance dental research.

Oral health providers spend a great deal of time entering information about patients into electronic health records (EHRs). However, little of this patient data is used or able to be used by researchers in order to improve health. This workshop will use the needs of caries researchers to explore ways we can move from traditional EHRs (also known as data cemeteries) to research-oriented EHRs (also known as source of knowledge).

FRIDAY, MARCH 24, 2017

8 a.m. – 9:30 a.m.

HOW #7: Publishing Your Manuscript: A JDR Perspective
Sponsored by: IADR/AADR
Organizer: William Giannobile (University of Michigan, Ann Arbor, USA) Organizer/Chair

Dissemination of research is critical to its uptake by other researchers and translation by end-users. This session will consider how best to reach your target audience and aims to assist you in how to present your research in a clear and logical manner for publication in scientific journals with particular emphasis on the Journal of Dental Research, although much of the session will be pertinent to scientific publishing in general.

8 a.m. – 9:30 a.m.

HOW #8: Advocacy: Communicating Science to Policy Makers and Patients
Sponsored by: Evidence-based Dentistry Network, Salivary Research, Women in Science Network, National Student Research Group
Organizers:
Kyulim Lee (University of Florida, Gainesville, USA) Organizer/Chair
Cameron Randall (West Virginia University, Morgantown, USA) Organizer

Advocating for the support of dental research and the appropriate use of research findings is crucial for the advancement of our dental profession. Learning how to be an effective advocate is essential. Through effective advocacy, we can convey the value of dental research for the scientific and patient communities by communicating the important contributions of that research. This Hands-on-Workshop will focus on addressing the needs of scientists and clinicians to effectively communicate scientific, evidence-based information in a variety of public and professional interactions, whether those are advocating for dental research funding to members of Congress or communicating the importance of the use of evidence-based treatments to our patients.
The workshop will follow a panel discussion format. Three panelists with unique backgrounds and work experiences will be invited. Each panelist will give a brief introduction prior to focusing on one of the topics below and small group sessions.

- Patient positively impacted the lives of patients and give recommendations about how participants can communicate evidence-based treatments more efficiently to our patients.
- Science Policy Analyst: This representative will provide insights on the background of science policy and how science policy statements are developed and used. Current trending topics in dentistry will also be discussed.
- Advocacy: The representative will demonstrate advocate: This representative will provide specific examples of how research has direct and meaningful interaction methods with members of Congress and/or their staffers.

2 p.m. – 3:30 p.m.

**HOW #9: Poster Presentations: Making the Visual and Verbal Excellent**

**Sponsored by:** Education Research, Dental Materials

**Organizer:** Sharon Grayden (University of Michigan, Ann Arbor, USA) Organizer

The Education Research Group is committed to improving the quality of inputs at the IADR meeting and has run workshops on improving abstract quality. Building on last-year’s oversubscribed hands-on workshop on improving abstract quality, this practical session aims to develop the poster presentation skills of IADR participants.

Led by skilled educators, the objectives are to enable attendees to: (1) construct well-designed posters with greater impact; (2) practice summarizing key points for 3-minute verbal presentations; and (3) take away tips for future reference. Sample fictional posters will be evaluated for strengths and weaknesses and generic quality issues identified.

Before the meeting we will use an online message system (web or email) for participants to raise questions: those requiring a straight-forward response will be replied to before the meeting; others will be used to shape the input at the meeting. In this way the workshop aims to be responsive to need. Participants will be actively involved in tasks and in discussion. They will hear from respected, experienced presenters about the qualities needed for excellent visual and verbal poster presentations. Significant time will be reserved for hands-on activities.

The target audience is all dental researchers or educators with an interest in improving their poster design and presentation skills, including those who may have limited experience. The workshop is not discipline-specific.

Poster design and the verbal presentation are skills many poster presenters struggle with when preparing for scientific meetings. This workshop will focus on the "how tos" of layout and design highlighting the use of quality visuals that clearly represent the researcher’s data. The session will also provide guidelines for preparing a 3-minute summary of the research to encourage concise, yet thoughtful verbal presentations.
Clinical guidelines aim to provide recommendations that optimize patient care. They should not limit or replace clinical judgement but have the potential to reduce inappropriate variation in clinical practice and enable joint decision-making between health professionals. Guidelines can also provide explicit criteria against which levels of performance of measured. Ideally clinical guidelines should be informed by high quality systematic reviews of evidence. The evidence feeding into the systematic review should, ideally, be internally and externally valid and fully accessible. This workshop will illustrate some of the potential pitfalls in translating primary research evidence into high quality clinical guidelines.

This workshop will start with 3 brief presentations by the invited speakers followed by a hands-on element that focuses on current recommendations, the use of GRADE in assessing the evidence and the impact of emerging research findings. The workshop will promote the use of high quality research to inform clinical practice, exploring ways in which the translational pathway can be informed to enable a timely uptake of research findings.

This hand-on workshop will demonstrate and allow participants to practice the Diagnostic Criteria for Temporomandibular Disorders (DC/TMD; Schiffman et al, 2014) clinical examination in English. The DC/TMD is the result of two decades of research sponsored by NIDCR and conducted by members of the Consortium Network. Its predecessor was the RDC/TMD and was the first operationalized dual axis diagnostic criteria for a chronic pain condition (Ohrbach & Dworkin 2016). Due to their dual axis approach, and therefore biopsychosocial orientation, both the RDC and the DC/TMD have been established in US and UK national guidelines for TMD (Greene 2010; Durham 2015) and also held up as exemplars for chronic pain diagnostic instruments by the Analgesic, Anesthetic, and Addiction Clinical Trial Translations, Innovations, Opportunities, and Networks-American Pain Society Pain Taxonomy initiative (Bruehl et al 2016). The DC/TMD is the only scientifically validated classification system for the most common TMDs recommended for both research and clinical purposes (Schiffman et al. 2014). The RDC/TMD and now DC/TMD are the standard diagnostic system for proposals submitted to NIH. Currently, numerous translations (>30) of the entire protocol are either completed or in process. The DC/TMD protocol includes instruments for the clinical assessment of the patients (Axis I) shown to be highly reliable (Schiffman et al 2010) together with instruments assessing self-reported symptoms and the psychosocial aspects of the patients (Axis II) that have very good to excellent internal consistency (Ohrbach et al 2010). In order to use the DC/TMD protocol the researcher/clinician is
required to become familiar with the procedure through self-study of the available material and the accompanying video that explains, in detail, the clinical examination procedure. Moreover, a thorough calibration session is also recommended for reliable and valid diagnosis. The properties of the instrument mean that with such training sensitivity and specificity are thereby maximized.

The purpose of the present HOW is to provide theoretical lectures and clinical training covering the entire protocol for the participants regarding Axis I and Axis II assessment tools and procedures (Schiffman et al. 2014).

2 p.m. – 3:30 p.m.
HOW #12: Using CBCT for Measuring Temporo-Mandibular Joint Changes and Tooth Movement
Sponsored by: Craniofacial Biology
Organizers:
Clement Mirabel Organizer
Juan Prieto (University of North Carolina, Chapel Hill, USA) Organizer
Prisiclle Dumast Organizer
Lucia Cevidanes (University of Michigan, Ann Arbor, USA) Organizer/Chair

We will present novel quantitative tools based in 3D Shape Analysis to evaluate the Temporomandibular Joints and measure tooth movement. Working under the Dental and Craniofacial Bionetwork for Image Analysis, funded by NIDCR/NIBIB R01 DE024450, we have developed open-source software for diagnosis, treatment planning and assessment of outcomes of orthodontic, orthopedic and surgical treatments. The open source tools allow clinicians and researchers to measure bone and dental changes, after registration relative to anatomical structures of interest. This workshop will focus specifically on procedures for TMJ analysis and for measuring tooth movement. All participants will receive a USB drive for software installation and example files. Participants are required to bring their laptops to take full advantage of the hands-on workshop.