



The *Women in Science Network* aims to serve the need for promoting the interests of women, communication, research collaboration and career mentoring among – but not restricted to – female members.

## May 2020

### Message from the WISN President

While experiencing social distancing due to COVID-19, we are proud to recognize and celebrate women making a difference in science! To overcome the restrictions imposed by the pandemic, which led to the cancellation of our IADR Centennial meeting in Washington – DC, this special edition of our newsletter aims to recognize our 2020 WISN awardees! We are thrilled to showcase the outstanding and successful students and researchers who are being celebrated this year!

I also would like to take this opportunity to raise awareness on the serious gender disparities caused by this pandemic. Although COVID-19 seems to be more prevalent and harmful in men than women, its economic consequences on women have been very detrimental given the preexisting economic inequalities. Sadly, this pandemic also had an impact on the international rates of violence against women and children, as reported by the UN, as well as in mental health levels. In research and academia, the COVID-19 lockdown has resulted in higher scholarly productivity for men, while women academics stay behind due to their individual demands and well-known struggle to balance work and life, especially in isolation.

The WISN members would like to acknowledge that we are aware of this disparity and willing to take some action to better understand and minimize the effects of this pandemic on women's career, aiming to support our highly dedicated female researchers! Stay tuned!

Sincerely,

Effie Ioannidou

WISN President 2019-2020

<http://www.iadr.org/IADR/Join-Renew/Groups-and-Networks/Women-In-Science>

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## Promising Talent Award

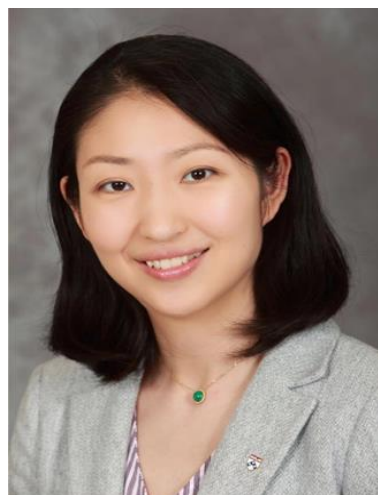
The Women in Science Promising Talent Award recognizes the dedication and promise of young female researchers going through dental School, grad or postgraduate studies. Both the candidate's past accomplishments and future career plans are considered to determine the winner. Researchers are recognized in two different categories: Dental Student and Graduate/Post-graduate Student.

### Dental Student Promising Talent Award Genevieve Romanowicz



Genevieve Romanowicz is pursuing dual doctoral degrees in Dentistry and Oral Health Sciences at the University of Michigan School of Dentistry. Genevieve decided to pursue a DDS/PhD at the University of Michigan in 2013 to translate bench science into a clinical setting. Her current dissertation work focuses on resolving the role of bone collagen cross-linking in mineralization and its effects on mechanical properties. Previous research has shown that collagen cross-links drive a significant portion of the mechanical properties of long bones. Genevieve's current research incorporates *in vivo* studies to determine the effects of perturbed collagen cross-linking on mineralization and change in mechanical properties between bone sites. This work brings to light some inherent differences between craniofacial and long bones not previously described. As such, her research will provide a better understanding of the altered effects of conditions altering collagen cross-linking in systemic conditions between craniofacial and long bones and may lead to more effective personalized medicine treatments for bone-related wound healing in the future.

### Post-graduate Student Promising Talent Award Yuan Liu



Yuan Liu is currently a Postdoctoral Researcher at School of Dental Medicine, University of Pennsylvania. Yuan holds a DDS, MS, and PhD from West China College of Stomatology, and since 2014, she has been a postdoctoral researcher at Penn Dental Medicine, Department of Orthodontics and Divisions of Pediatric Dentistry & Community Oral Health. She previously served as Vice Director of Pediatric Dentistry at her alma mater, where her research focused on early childhood caries. At Penn Dental Medicine, Yuan has been conducting innovative work on understanding the mechanism of cariogenic biofilm virulence (especially the role of *Candida*) and developing new anti-plaque/anti-caries therapies using nanoengineering and biotechnology-based approaches. She has authored over 30 scientific articles in top-tier journals, including *Nature Communications*, *Science Robotics*, *ISME J*, *ACS Nano*, *Biomaterials*, *PLoS Pathogens*, and *Journal of Dental Research*. Her research contributions were recognized by various awards including AADR Hatton Awards. She has also served as reviewer for a number of journals, such as *Scientific Reports*, *Caries research* and *Oral disease*.

## Distinguished Research Award

The Women in Science Award for Distinguished Research recognizes a single research paper published in the previous year (2019) in the Dental/Oral/ Craniofacial Research. It is intended to recognize excellence in Oral/ Dental/ Craniofacial Research by a female researcher (first or senior author).

### Nikita Ruparel



Niki Ruparel is an Associate Professor and Director of the Advanced Education Program in Endodontics at UT Health San Antonio (UTHSCSA). She is a Diplomate of the

American Board of Endodontists and maintains both a clinical and research program at UTHSCSA. Her research program has been funded by foundation and federal grants and she is currently the Principal Investigator for a study on endogenous peripheral pain regulatory systems in orofacial pain patients and a co-investigator for a study on sexually dimorphic pain mechanisms mediated by serotonin in the dental pulp. The awarded manuscript, published in the journal *Molecular Pain*, was entitled *Apical Periodontitis-Induced Mechanical Allodynia: A Mouse Model to Study Infection-Induced Chronic Pain Conditions* and was co-authored by Saeed B Mohaved, Ganatra Shilpa, Qun Li, Obadah Austah, Michelle Bendele, Robert Brock, having Dr. Ruparel as the most senior author. The model presented in the study simulated signs of clinical pain experienced by patients with apical periodontitis, detected sex differences in allodynia, and will allow for the study of peripheral and central trigeminal pain mechanisms.

## Distinguished Female Mentor Award

The Women in Science Distinguished Female Mentor award recognizes a female researcher-mentor with demonstrated excellence in mentorship who has made an impact on several young women's careers in the area of Dental/Oral/ Craniofacial Research.

### Rena D'Souza



Rena D'Souza is professor of Dental Sciences, Neurobiology & Anatomy, Pathology, Surgery and Biomedical Engineering. She serves as assistant vice president for academic affairs and education at the University of Utah and is responsible for

research training and development in the health sciences. Throughout her career as a clinician-scientist, Dr. D'Souza has been dedicated to discovery and mentoring. Several of her mentees now hold successful academic positions worldwide. Dr. D'Souza has received 15 institutional awards for Teaching Excellence and is the recipient of the 2017 Irvin Mandel Distinguished Mentor Award from AADR. Dr. D'Souza has authored over 150 peer-reviewed manuscripts and book chapters and has maintained an active research program for over 30 years through grant awards from the NIH and other agencies. She has also led two major NIH-funded institutional grants that supported the research training of dentists and dentist-scientists. Dr. D'Souza received the 2002 Distinguished Scientist Award from the International Association for Dental Research (IADR) and the Presidential Award for Research Excellence from the Texas A&M Health Science Center in 2010. She is a fellow of AADR and AAAS and was inducted into the German National Academy of Sciences (Leopoldina) in 2012. Dr. D'Souza has served as President of AADR and IADR.

## Legends and Legacies Symposium

The Women in Science Legends and Legacies Symposium aims to honor female researchers who have contributed significantly to further our understanding of a particular discipline and blazed the trail for others to follow. Nominees are selected based on their demonstration of commitment to the IADR mission, having achieved the highest level of professional excellence and garnered respect within the scientific community, being a role model and assisting women in their attainment of professional excellence and leadership skills. Part of the recognition comes as a symposium held at the IADR meeting, which unfortunately did not happen this year.

### Dr. Lois Cohen



A member of the IADR since 1965, Dr. Lois Cohen, Ph.D. research sociologist, was featured in one of the first Discovery! pieces of the JDR in 1999 by the late Irwin D. Mandel, editor, and Samuel F. Dworkin. Her career in oral health research, then 30+ years along, was highlighted in the title of the article *“The Emergence of the Social and Behavioral Sciences in Dentistry: Lois Cohen as the Principal Architect”*. As a non-dentist, Dr. Cohen has earned honorary memberships in the American Dental Association, the American and International Colleges of Dentistry, the Academy of Dentistry International, and Alpha Omega International Dental Fraternity. The Federation Dentaire Internationale presented her with their high honor

of Merit Award in 1995 and she has received multiple IADR awards. Upon her official retirement from the US Government Federal service, the Lois K. Cohen International Travel Award was established and she was recognized by Research America as the first oral health person to be designated as a Paul G. Rogers Ambassador for Global Health Research (2006). Lois Cohen continues to be a mentor for those already in the oral health professions and/or for those outside who may not be aware of the opportunities afforded within the oral health science space. She has mentored numerous scientists who went on to become grantees of NIH and other federal agencies as well as non-governmental foundation support. Upon her retirement from NIH, Dr. Cohen worked tirelessly to help new staff with the global health issues facing the Institute. Her accomplishments are legendary and her legacy is the promotion of a global vision of oral health for all, a vision she has been working on since she was 18 years old and still a student in Israel. As reported by one of Dr. Cohen’s past mentees (Dr. Saskia Estupinan-Day): *“One of Lois’ greatest attributes as a mentor is her ability to see ahead of everybody else, indeed she is a visionary”*.

### SPECIAL THANKS TO:



**For their continuous support to our WISN awards!**

We want to hear from you!  
Please send us an e-mail with enquiries and suggestions:  
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### References supporting COVID-19 impact in women:

Liu et al. Prevalence and Predictors of PTSS During COVID-19 Outbreak in China Hardest-Hit Areas: Gender Differences Matter. *Psychiatry Res.* 2020; <https://doi.org/10.1016/j.psychres.2020.112921>  
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