Columbia University College of Dental Medicine

Division of Periodontics 2018 Newsletter

Message from the Division Director

December 23, 2018

Dear Friends,

It honestly feels as if I wrote my last end-of-the-year note to you just a few short months ago. But once again, with the conclusion of yet another successful academic year upon us, I am happy to share with you the highlights of our 2018 Divisional activities, events and accomplishments. On a personal note, this Fall marked my 20th anniversary as Director of the Division of Periodontics at CDM, a milestone that feels surreal and seems to reinforce the theory of the relativity of time...

What has remained unwavering over the past two decades, however, is the commitment and dedication of our alumni, faculty, staff and students, the strength of our clinical and educational programs, the high quality and impact of our research output, and the reputation of our Division as an internationally acclaimed academic unit.

My sincere thanks to all of you for making our Division the special place it is, and my very best wishes to you and your families for the Holiday Season and a Happy and Healthy 2019!

Sincerely,

7

Panos N. Papapanou, DDS, PhD Director, Division of Periodontics Chair, Section of Oral, Diagnostic and Rehabilitation Sciences

Publications

Our Division has a strong record of scholarly activity. The table below describes the cumulative citation record of faculty and students in the Division with publicly available Google Scholar profiles (searched on 12/22/2018). The Table reports total and most recent 5-year citation record, h-index (number of publications cited at least as many times), and i10- index (number of publications cited at least 10 times).

	Citations		h-index		i10-index	
	All	Since 2013	All	Since 2013	All	Since 2013
Celenti, Romanita	2,259	807	25	14	26	19
Chen, Steven	557	345	9	8	9	6
Chesnoiu Matei, Ioana	92	86	4	4	2	2
Eskow, Robert	505	170	11	7	12	6
Fine, James	1,080	307	19	10	22	10
Fletcher, Paul	2,071	877	10	7	10	5
Formicola, Allan	1,756	771	23	13	38	18
Grbic, John	3,731	937	35	15	45	22
Greenstein, Gary	5,854	2,258	39	25	82	48
Han, Yiping	4,082	2,916	31	26	38	34
Kang, Philip	22	9	1	1	1	0
Kebschull, Moritz	1,765	1,446	23	21	35	32
Lalla, Evie	9,564	4,409	43	32	59	57
Linden, Eric	40	16	3	3	1	0
Mitchell, Dennis	2,257	789	23	13	30	15
Momen-Heravi, Flora	1,789	1,653	21	21	30	28
Papapanou, Panos	15,593	7,660	63	44	139	119
Patil, Chetan	363	151	6	6	6	6
Rubinstein, Roxana	576	550	4	4	3	3
Sanz-Miralles, Elena	21	21	3	3	1	1
Shariff, Jaffer	34	234	3	3	2	2
Tarnow, Dennis	13,885	6,552	56	43	125	107
Wolf, Dana	418	246	7	7	7	6

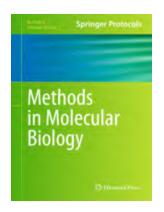
Peer-Reviewed Articles (Members of the Division listed in boldface font).

Acharya, A., Cheng, B., Koralkar, R., Olson, B., Lamster, I.B., Kunzel, C., Lalla, E. (2018) Screening for diabetes risk using integrated dental and medical electronic health record data. *JDR Clinical & Translational Research* 3:188-194.

JDR Clinical & Translational Research

Ananth, C.V., Andrews, H.F., **Papapanou, P.N.,** Ward, A.M., Bruzelius, E., Conicella, M.L. & Albert, D.A. (2018) History of periodontal treatment and risk for intrauterine growth restriction (IUGR). *BMC Oral Health* 18, 161. doi:10.1186/s12903-018-0623-2.

Bailit, H. and Formicola, A.J. (2018) Advancing dental education in the 21st century: Developing the Phase 2 strategic analysis and recommendations. *Journal of Dental Education* 82:1020-1021.



Bakshi, M., **Tarnow, D.**, Bittner, N. (2018) Changes in ridge dimension with pontics immediately placed at extraction sites: A pilot study. *International Journal of Periodontics & Restorative Dentistry* 38:540-547.

Brenner A.W., Su, G.H., **Momen-Heravi F.** (2019) Isolation of extracellular vesicles for cancer diagnosis and functional studies. *Methods Molecular Biology* 1882:229-237.

Billings, M., Holtfreter, B., **Papapanou, P. N.,** Mitnik, G. L., Kocher, T. & Dye, B. A. (2018) Age-dependent distribution of periodontitis in two countries: Findings from NHANES 2009 to 2014 and SHIP-TREND 2008 to 2012. *Journal of Periodontology* 89 Suppl 1, S140-S158. doi:10.1002/JPER.17-0670.

Caton, J. G., Armitage, G., Berglundh, T., Chapple, I. L. C., Jepsen, S., Kornman, K. S., Mealey, B. L., **Papapanou, P. N.**, Sanz, M. & Tonetti, M. S. (2018) A new classification scheme for periodontal and perimplant diseases and conditions - Introduction and key changes from the 1999 classification. *Journal of Periodontology* 89 Suppl 1, S1-S8. doi:10.1002/JPER.18-0157.

Changi K.K., **Greenstein G.** (2018) Cytocone procedure: conservative repair of a buccal plate dehiscence in preparation for implant placement. *Compendium of Continuing Education in Dentistry* 39:294-299.

Chu, S.J., Östman, P-O, Nicolopoulos, C., Yuvanoglu, P., Chow, J., Nevins, M., **Tarnow, D.P.** (2018) Prospective multicenter clinical cohort study of a novel macro-hybrid implant in maxillary anterior post-extraction sockets: 1-year results. *International Journal of Periodontics & Restorative Dentistry* 38:16-27.



Chu, S.J., Saito, H., Salama, M. A., Garber, D. A., Salama, H., Sarnachiaro, G. O., Reynolds, M. A., **Tarnow, D. P.** (2018) Flapless post-extraction socket implant placement, Part 3: The effects of bone grafting and provisional restoration on soft tissue color change - A retrospective pilot study. *International Journal of Periodontics & Restorative Dentistry* 38:509-516.

Coelho P., Pippenger B., Tovar N., Koopmans S.J., Plana N., Graves D., Engebretson S., Van Beusekom H., Oliveira P., **Dard M.** (2018) Effect of obesity/metabolic syndrome and diabetes on osseointegration of dental implants in a miniature swine model. *Journal of Oral & Maxillofacial Surgery* 76:1677-1687.

de Arriba, C.C., Alobera Gracia, M. A., Coelho, P. G., Neiva, R., **Tarnow, D.P.**, Del Canto Pingarron, M., Aguado-Henche, S. (2018) Osseoincorporation of porous tantalum trabecular-structured metal: A histologic and histomorphometric study in humans. *International Journal of Periodontics & Restorative Dentistry* doi:10.11607/prd, 1-7.

Duffy, C. R., D'Alton, M. E., **Han, Y. W.**, Goldenberg, R. L., Gyamfi-Bannerman, C. (2019) Incorporating pre-cesarean vaginal preparation into obstetrics' standard of care. *Obstetrics & Gynecology*: in press.



Fletcher, P., **Tarnow, D.P.** (2018) Circumferential occlusal access procedure (COAP): novel minimally invasive surgical approach for treatment of peri-implantitis – a case series. *Compendium of Continuing Education in Dentistry* 39:626-635.

Formicola, A.J., Bailit, H., Weintraub, J., Fried, J., Polverini. P. (2018) Advancing dental education in the 21st century: Phase 2 report on strategic analysis and recommendations. *Journal of Dental Education* 82e:1-32.

Journal of Dental Research

Fretwurst, T., Nelson, K., Tarnow, D.P., Wang, H-L., Giannobile, W.V. (2018) Is metal particle release associated with peri-implant bone destruction? An emerging concept. *Journal of Dental Research* 97: 259–265.

Garcia-So, J., Zhang, X., Yang, X., **Rubinstein, M. R.,** Mao, D. Y., Kitajewski, J, Liu, K., **Han, Y. W.** (2019) Omega-3 fatty acids suppress *Fusobacterium nucleatum*-induced placental inflammation originating from maternal endothelial cells. *JCI Insight*: in press.

Greenstein G., Cavallaro J., Carpentieri J., Greenstein B. (2018) Alveolar bone and implant therapy. *Decisions in Dentistry* 4:26-32.

Greenstein G., Greenstein B., Carpentieri J. (2018) Replacing two mandibular incisors with one implant: cantilevered pontic versus two crowns germinating off the implant. *Dentistry Today* 37:62-66.

Greenstein G., Greenstein B., Carpentieri J. (2018) A controversial issue: the need to replace a lost 2nd molar with a dental implant restoration. *Compendium of Continuing Education in Dentistry* 39:686-693.

Hakki, S., Bozkurt, S., Türkay, E., **Dard, M.,** Purali, N., Götz, W. (2018) Recombinant amelogenin regulates the bioactivity of mouse cementoblasts *in vitro*. *International Journal of Oral Science* 10:15.





Hsu, Y.T., Nair, M., Angelov, N., Lalla, E., Lee, C.T. (2018) Impact of diabetes on periodontal outcomes after non-surgical therapy. *Journal of Clinical Periodontology*: in press

Jepsen, S., Caton, J., Albandar, J.M., Bissada, N., Bouch:ard, P., Cortellini, P., Demirel, K., de Sanctis, M., Ercoli, C., Fan, J., Geurs, N., Hughes, F., Jin, L., Kantarci, A., Lalla, E., Madianos, P.N., Matthews, D., McGuire, M.K., Mills, M.P., Preshaw, P.M., Reynolds, M.A., Sculean, A., Susin, C., West, N.X., Yamazaki, K. (2018). Periodontal manifestations of systemic diseases and developmental and acquired conditions: consensus report of group 3 of the 2017 World Workshop on the Classification of Periodontal and Peri-Implant Diseases and Conditions. *Journal of Clinical Periodontology* 45 Suppl 20:S219-S229 & *Journal of Periodontology* 89 Suppl 1: S237-S248.

Kang, M. and Kang, P. (2018) Dental implant therapy on a patient with von Willebrand disease: A case study. *Implant Dentistry* 27:599-601.

Kröger, A., Hülsmann, C., Fickl, S., Spinell, T., Hüttig, F., Kaufmann, F., Heimbach, A., Hoffmann, P., Enkling, N., Renvert, S., Schwarz, F., Demmer, R. T., **Papapanou, P. N.,** Jepsen, S. & **Kebschull, M.** (2018) The severity of human peri-implantitis lesions correlates with the level of submucosal microbial dysbiosis. *Journal of Clinical Periodontology* doi:10.1111/jcpe.13023.



Lalla, E. (2018) Summary of the epidemiological evidence on the effect of periodontitis on diabetes. *European Federation of Periodontology Clinical Guidelines and Reports.* Available at: https://www.efp.org/publications/projects/perioanddiabetes/reports/index.html

Lee, K.C., Lee, V.Y., Zubiaurre, L.A., **Grbic, J.T.,** Eisig, S. (2018) Relationship between dental students' preadmission record and performance on the comprehensive basic science examination. *Journal of Dental Education* 82:424-428.

Manresa, C., Sanz-Miralles, E.C., Twigg, J., Bravo, M. (2018) Supportive periodontal therapy (SPT) for maintaining the dentition in adults treated for periodontitis. *Cochrane Database of Systemic Reviews*, Issue 1, Art. No.: CD009376, doi:10.1002/14651858.CD009376.

Momen-Heravi, F., Bala, S. (2018) Emerging role of non-coding RNA in oral cancer. *Cell Signaling* 42:134-143.

Momen-Heravi, F., Bala S. (2018) Extracellular vesicles in oral squamous carcinoma carry oncogenic miRNA profile and reprogram monocytes via NF-κB pathway. *Oncotarget*. 5;9:34838-34854.



Momen-Heravi F., Bala S. (2018) miRNA regulation of innate immunity. *Journal of Leukocyte Biology* doi: 10.1002/JLB.3MIR1117-459R.

Momen-Heravi, F., Getting SJ, Moschos SA. (2018) Extracellular vesicles and their nucleic acids for biomarker discovery. *Pharmacology and Therapeutics* pii:S0163-7258:30134-7.

Momen-Heravi, F., Peters, S.M., Garfinkle, L., Kang, P. (2018) Acellular dermal matrix as a barrier for guided bone regeneration of dehiscence defects around dental implants: a clinical and histological report. *Implant Dentistry* 27:521–524.

Papapanou, P. N., Sanz, M., Buduneli, N., Dietrich, T., Feres, M., Fine, D. H., Flemmig, T. F., Garcia, R., Giannobile, W. V., Graziani, F., Greenwell, H., Herrera, D., Kao, R. T., Kebschull, M., Kinane, D. F., Kirkwood, K. L., Kocher, T., Kornman, K. S., Kumar, P. S., Loos, B. G., Machtei, E., Meng, H., Mombelli,

A., Needleman, I., Offenbacher, S., Seymour, G. J., Teles, R. & Tonetti, M. S. (2018) Periodontitis: Consensus report of workgroup 2 of the 2017 World Workshop on the Classification of Periodontal and Peri-Implant Diseases and Conditions. *Journal of Periodontology* 89 Suppl 1, S173-S182. doi:10.1002/JPER.17-0721.

Papaspyridakos, P., **Tarnow, D.P.**, Eckert, S.E., Weber, H-P. (2018) Replacing six missing adjacent teeth in the anterior maxilla with implant prostheses: A case series. *Compendium of Continuing Education in Dentistry* (1995) 39:e1-e4.



Rubinstein, M.R., Baik, J.E., Lagana, S.M., Raab, W.J., Sahoo, D., Rubinstein Dalerba, P., Wang, T.C., Han, Y. (2019) *Fusobacterium nucleatum* promotes colorectal cancer through induction of noval Wnt/b-catenin modulator Annexin A1 in proliferating cancerous cells. *European Molecular Biology Organization Reports:* in press.

Saha, B., Momen-Heravi, F., Furi, I., Kodys, K., Catalano, D., Gangopadhyay, A., Haraszti, R., Satishchandran, A., Iracheta-Vellve, A., Adejumo, A., Shaffer, S.A., Szabo, G. (2018) Extracellular vesicles from mice with alcoholic liver disease carry a distinct protein cargo and induce macrophage activation through heat shock protein 90. *Hepatology* 67:1986-2000.

Saito, H., Chu, S. J., Zamzok, J., Brown, M., Smith, R., Sarnachiaro, G., Hochman, M., Fletcher, P., Reynolds, Mark A., Tarnow, D. P. (2018) Flapless post-extraction socket implant placement: The effects of a platform switch-designed implant on peri-implant soft tissue thickness-A prospective study. *International Journal of Periodontics & Restorative Dentistry* 38(Suppl):s9-ss15.

Schenkein, H., **Papapanou**, **P.N.**, Genco, R., Sanz, M. (2019) Mechanisms underlying the association between periodontitis and atherosclerotic disease. *Periodontology* 2000 79: in press.

Shariff, J.A., Burkett, S., Watson, C.W., Cheng, B., Noble, J.M. & Papapanou, P.N. (2018) Periodontal status among elderly inhabitants of northern Manhattan: The WHICAP ancillary study of oral health. *Journal of Clinical Periodontology* 45:909-919. doi:10.1111/jcpe.12927.

Vandar Haa, E.L., So, J., Gyamfi-Bannerman, C., and **Han, Y.W.** (2018) *Fusobacterium nucleatum* and adverse pregnancy outcomes: Epidemiological and mechanistic evidence. *Anaerobe* 55: 55-59.

Varthis, S., **Tarnow, D.**, and Randi, A. (2018) Interproximal open contacts between implant restorations and adjacent teeth. Prevalence – Causes – Possible Solutions. *Journal of Prosthodontics* 27:679-787.

Will, B.A., Peters, S.M., Eisig, S., Grbic, J.T., McKenzie, M.A., Yoon, A.J., Philipone, E.M. (2018) Gingival ulceration in a 63-year-old lung transplant recipient. *Oral Surgery, Oral Medicine, Oral Pathology, Oral Radiology* (in press).

Yang, W., Liu, L., Masugi, Y., Qian, Z.R., Nishihara, R., Keum, N., Wu, K., Smith-Warner, S., Ma, Y., Nowak, J.A., Momen-Heravi, F., Zhang, L., Bowden, M., Morikawa, T., Silva, A.D., Wang, M., Chan, A.T., Fuchs, C.S., Meyerhardt, J.A., Ng, K., Giovannucci, E., Ogino, S., Zhang, X. (2018) Calcium intake and risk of colorectal cancer according to expression status of calcium-sensing receptor (CASR). *Gut.* 67:1475-1483. doi: 10.1136/gutjnl-2017-314163.



Books

Bailit, H. and Formicola A. J. (2018) Advancing Dental Education in the 21st Century: A Collection of Articles Commissioned in Phase 1 of the Project and the Phase 2 Strategic Analysis and Recommendations. *Journal of Dental Education*. Bound Volume.

Book Chapters

Bobetsis, Y.A., Borgnakke, W.S., **Papapanou, P.N.** (2019) Periodontal infections and adverse pregnancy outcomes. In: *The Oral-Systemic Health Connection; A guide to patient care.* Glick, M, Editor. 2nd Edition, 2018, In press. Quintessence Publishing, USA.

Kang, M.K., Trabert, K., and Mehrazarin, S. (2018) Endo-Perio lesions: Pathogenesis, diagnosis, and treatment considerations. In: *Newman and Carranza's Clinical Periodontology* Editors: Newman, M., Takei, H., Klokkevold, P., and Carranza, F. Saunders, Philadelphia, PA, 13th Edition, pp 498-505.

New Faces in the Division

Postdoctoral Students

The Postdoctoral Periodontics class of 2021 started their 3-year program on July 1st. A few words about our five new residents who joined the Columbia family coming from different parts of the world:

Dr. Penny Agrafioti was born in Athens, Greece and received her DDS degree from the Dental School of the National and Kapodistrian University of Athens, Greece in 2015. In the years following her graduation, she has worked as a general dentist and as an assistant to a periodontist in Athens. She was also recruited by a newly-founded Greek biomaterials company to conduct *in vitro* research on new bovine and synthetic bone substitutes, before their launch on the market. Penny enjoys working out, watching TV shows, trying different cuisines and aspires to travel around the world.





Dr. Bana Al Haydar obtained her DDS from the University of Kalamoon, Syria in 2009 and received an MSc in Prosthodontics from the University of Aleppo in 2014. She then moved to Turkey with her family. There, she worked in non-profit organizations where she started community health programs serving Syrian refugees in both Syria and Turkey. She also cofounded a dental clinic in Southern Turkey which provided free dental care to refugees. Bana is interested in learning multidisciplinary approaches in management of complex cases. During her free time, she enjoys reading and exploring new international restaurants (she is a real foodie!).

New Faces in the Division (cont.)

Dr. Sung Min Lee obtained a Bachelor's degree from North Carolina State University and her DDS from NYU College of Dentistry. She then completed a GPR program at Hackensack University Medical Center in NJ. After several years of private practice and teaching at Hackensack Hospital, she maintained a strong commitment to lifelong learning and decided to dedicate her future career to specialize in Periodontics. She enjoys volunteering for dental outreach programs, hiking, traveling and playing tennis.





Dr. Teresa Yang grew up in St. Paul, Minnesota. Teresa spent one year at the NIDCR researching the effects of MT1-MMP at different stages of osteoprogenitor development before going to the University of Pennsylvania School of Dental Medicine, where she received her DMD in 2018. Teresa enjoys multiple forms of music (ask her about this), likes to try new foods, and is looking to continue her practice of Japanese swordsmanship during her time at CDM!

Dr. Shi Yin received her BDS from Guangxi Medical University. She worked as a postdoctoral research fellow at CUMC for two years, conducting research on islet cell transplantation to improve treatments for type I diabetes. Then, she obtained her Master's in Biotechnology at Georgetown University and worked on how the regulation of matriptase protease cascade becomes initiated in keratinocytes. She studied one year at New York University College of Dentistry, where she found her passion in Periodontics. Shi is excited about her journey in Periodontics at CDM, and enjoys ballet and traveling.



Faculty

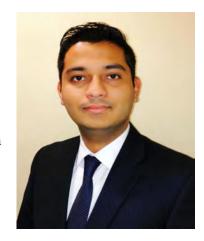


Dr. Flora Momen-Heravi joined the Division of Periodontics as a tenure-track Assistant Professor of Dental Medicine, immediately after her graduation with an MS degree from the CDM post-doctoral Periodontics program. Flora received her DDS from Tehran University of Medical Sciences in 2009 and moved to the USA in 2011 to carry out research and obtain specialty training. She spent several years at the Harvard Medical School and the University of Massachusetts Medical School doing basic research focusing on the role of miRNAs and extracellular vesicles/exosomes in the regulation of innate immunity and cellular cross-talk. This research resulted in a PhD in Molecular Biology/Biotechnology from the University of Westminster, UK. Flora is the author of more than 55 publications in the areas of basic, translational, and clinical research. She leads fundamental

New Faces in the Division (cont.)

and translational research projects focusing on the molecular basis and the role of innate immunity in head and neck cancer initiation and metastasis, and on the molecular mechanisms and immunological pathways involved in the pathogenesis of periodontal disease.

Dr. Jaffer A. Shariff joined the Division of Periodontics as an Instructor in Dental Medicine at CUMC after his graduation with an MS degree from the post-doctoral Periodontics program at CDM. Jaffer received his Bachelor of Dental Surgery degree from K.L.E Institute of Dental Sciences, Bangalore, India in 2010. He obtained a Master in Public Health (MPH) in Epidemiology from Tulane University School of Public Health and Tropical Medicine in 2012, followed by a certificate in Dental Public Health (DPH) from CDM in 2014. Jaffer became Board certified in Dental Public Health in 2018. Jaffer's diverse areas of interest include the epidemiology of periodontal diseases, marijuana and opioid use, and population oral health; data science and bioinformatics, including machine learning and decision-making programming; and digital dentistry.



Postdoctoral Research Scientists



Dr. Sunil Kumar Dubey joined the Division as a Postdoctoral Research Scientist in Dr. Momen-Heravi's laboratory. He obtained his Ph.D. from the International Centre for Genetic Engineering and Biotechnology (ICGEB) in India where he studied the role of *Aedes aegypti* miRNAs and host factors in chikungunya virus replication. Sunil enjoys listening to music and studying world politics in his free time.

Dr. Kranthi Kiran Kishore Tanagala joined the Division as a Postdoctoral Research Scientist in Dr. Momen-Heravi's laboratory. He was born in Kurnool, AP, India and received his Ph.D. from Annamalai University, India. He received the Indian Council of Medical Research-Postdoctoral Research Fellowship, and joined as a postdoctoral fellow at the National Institute of Nutrition, Hyderabad, India. Kranthi is investigating the molecular basis for the functions of non-coding RNAs, and the immune regulation in periodontal disease and head and neck cancer pathogenesis.



Honors & Awards

Student Honors and Awards

As is customary, at the June 2018 graduation dinner, the *Melvin Morris Awards* were presented to the 3rd year post-doctoral students who excelled in their studies. This year, **Dr. Flora Momen-Heravi** was the recipient of both the Excellence in Periodontics Award and the Excellence in Research Award.

Dr. Muhammad Raza received the *Murray Schwarz Scholarship*, recognizing exceptional academic performance after completion of the first year of the residency program, and **Drs. Gila Lerman** and **Jennifer Kotsikonas** received the *Kenneth L. Siegel Scholarship* that recognizes exceptional performance after the second year of studies.

Dr. Penny Agrafioti received the 2018 **Columbia University Nichoplas Scholarship,** awarded to a student in any discipline at Columbia who is of Greek descent and has completed College or University studies in Greece.

Jeewon Garcia-So (PhD student in Dr. Yiping Han's laboratory) won the 2018 Marija Chouinard Award for an Outstanding Research Presentation at the Institute of Human Nutrition Annual Retreat. This award is given to two graduate students or postdoctoral fellows each year.

Dr. Shebli Mehrazarin was selected as a scholar and lecturer for the Visiting Professor Leadership Development Project, which is intended to raise institutional awareness of contemporary issues in dentistry. The award included a scholarship. Dr. Mehrazarin also received the 2018 Scholar Award from BioHorizons and the Center for Advanced Dental Education.

Faculty Honors, Awards and Leadership Accomplishments

Dr. Julie Connolly served as Vice President of the New York Academy of Dentistry and Member of the Ethics Council of the New York State Dental Association for the 2018-2019 period.



Dr. Allan J. Formicola received the 2018 American College of Dentists' William John Gies Award, the highest award bestowed upon a ACD Fellow. Named after William J. Gies, who was instrumental in shaping the College and the entire dental profession, this award has been given since 1940 and recognizes Fellows who have made truly unique and exceptional contributions to advancing the profession and its service to the society.

Dr. Gary Greenstein received the 2018 American Academy of Periodontology Gold Medal Award, the highest honor bestowed by the American Academy of Periodontology to any of its members in recognition of outstanding service and contributions to the field of Periodontology. When announcing the Award, the AAP emphasized that "Dr. Greenstein's robust publishing portfolio has provided comprehensive insight to the intricacies of patient care—from implant dentistry to local drug delivery".

Dr. Greenstein (right) receiving the Gold Medal by the AAP President Dr. Steven R. Daniel, at the October AAP meeting in Vancouver, Canada



Honors & Awards (cont.)

Dr. Moritz Kebschull was appointed as full Professor/Chair of Restorative Dentistry at the University of Birmingham, UK. In addition, he received a Master's in Business Administration from the Ecole Supérieure de Commerce de Paris (ESP Europe). He also oversaw the publication of the first S3-level clinical guidelines in periodontology for the German Society of Periodontology, and is one of the organizers of the upcoming guideline workshops of the European Federation of Periodontology.

Dr. Evie Lalla completed the CUMC Leadership & Management Course for Women Faculty. In addition, she contributed, as a member of a Group of Scientific Experts, to the development of the 2018 "Perio & Diabetes" Project by the European Federation of Periodontology.





Dr. Eric Linden was appointed to serve on the American Academy of Periodontology Research Submissions Committee (2018-2019), and as co-chair of the Academy of Laser Dentistry (ALD) Committee for University and Academics (2018-2019). He was also appointed to the Board of Directors of the American Laser Study Club (ALSC).

On July 1, 2018, **Dr. Dennis Mitchell** was promoted to Professor of Dental Medicine (in Community Health and Periodontics) at the Columbia University Medical Center; he also serves as Senior Associate Dean for Diversity at CDM and as Vice Provost for Faculty Diversity and Inclusion at Columbia University. Dr. Mitchell was appointed to serve as a member of the Board of Directors of the National Association of Diversity Officers in Higher Education in March 2018, and received the Leadership Award for African-Americans in Medicine from the Harlem Fine Arts in February 2018.

Dr. Flora Momen-Heravi received multiple awards and recognitions in 2018: the Dr. D. Walter Cohen Teaching Award from the American Academy of Periodontology Foundation, Chicago, Illinois; a Second Prize at the 6th China-ASEAN Forum on Dentistry, College of Stomatology, Guangxi Medical University, Nanning, Guangxi, China; the Society of Leukocyte Biology Travel Award by the Society of Leukocyte Biology, Bethesda, Maryland; The Osteology Foundation Education Grant, Ann Arbor, Michigan; the IADR Periodontal Research Group Past Presidents' Travel Award, at the International Association of Dental Research, London, UK; and the Volpe Prize Travel Award, by the Ohio State University, Columbus, Ohio.



Dr. Momen-Heravi (middle) receives her IADR Travel Award at the London IADR meeting by the AADR President and Colgate-Palmolive Chief Dental Officer Dr. Maria Ryan, and the Past President of the IADR Periodontal Research Group Dr. Papapanou

Honors & Awards (cont.)

Dr. Harvey Nisselson was re-elected Editor of the New Jersey Dental Association for his 29th annual term (2018-2019).

Dr. David Pitman was elected President of the New York Academy of Dentistry for the 2018-2019 period.

Dr. Panos N. Papapanou was the keynote speaker of the International Association of Dental Research Periodontal Research Group, at the 96th IADR meeting in London, England, UK. At the 104th American Academy of Periodontology Annual Meeting in Vancouver, BC, Canada, he received a Special Citation by the American Academy of Periodontology, in recognition of his leadership role as the Co-chair of the 2017 World Workshop for the Classification of Periodontal Diseases and Conditions. In October 2018, he was appointed for a two-year period to one of the two Co-chair positions of the Columbia University Irving Medical Center Committee of Appointments and Promotions. The latter evaluates all tenure nominations and tenured promotions across the Medical Center.

Dr. Elena Sanz-Miralles was promoted to Assistant Professor of Dental Medicine (Periodontics) at the Columbia University Medical Center in July. She completed the Fellowship at the Academy for Academic Leadership (AAL) Institute for Teaching and Learning in the Health Professions under a grant from the American Academy of Periodontology in August 2018..

Dr. Mara Roxana Rubinstein served as mentor for two Horace Mann School students, Jeren Wei and Richard Han, who won 1st prize at the New York City Science & Engineering Fair in March 2018.

Dr. Dennis Tarnow received the Isaiah Lew Memorial Research Award from the American Academy of Implant Dentistry in September 2018.

Dr. Dana L. Wolf was appointed as Associate Dean for Predoctoral Academic Affairs at the College of Dental Medicine, on July 1, 2018. In addition, she was selected to be a Fellow in the 2018-2019 class of the ADEA Leadership Institute.

New Research Grants

Dr. Yiping Han

- Implication of *Fusobacterium nucleatum* in Barrett's esophagus and esophageal adenocarcinoma. Barrett's Esophagus Translational Research Network (Bitnet) Pilot Grant Award. \$40,000, May 2018.
- Pilot study to validate blood biomarkers for early detection of colorectal cancer. Columbia Technology Ventures Validation Fund. \$35,000, March 2018.

Dr. Philip Kang

- Treatment of Peri-implantitis: Clinical Comparison Between Conventional Treatment versus Biolase I Plus Laser. Funding agreement for investigator-initiated study with Biolase, INC. \$29,778 and donation of brand new equipment, January 2018.
- Clinical Outcomes: Non-surgical Scaling and Root Planing vs. Er:YAG Laser. Funding agreement for investigator-initiated study with J. Morita MFG, CORP. \$50,000, March 2018.

Dr. Dana L. Wolf

• Development of an Online Faculty Calibration Tool. Columbia University Office of the Provost RFP on Large-Scale Teaching & Learning Grant. \$7,500, June 2018.

Presentations by Divisional Faculty and Residents

Dr. Julie Connolly

- Mt. Sinai Hospital, New York, NY, "Ethical Considerations in Dentistry Today"; March and December 2018.
- Wyckoff Hospital, New York, NY, "Ethical Considerations in Dentistry Today"; July 2018
- Lincoln Hospital, New York, NY, "Ethical Considerations in Dentistry Today"; November 2018.
- Greater New York Dental Meeting, New York, NY, Essay, "Soft Tissue Grafting Options for Gingival Recession"; November 2018.

Dr. Michel M. Dard

- Straumann Implant Dentistry Symposium: Start your Journey, Montreal, Canada, "Methods in Preclinical and Clinical Research"; May 2018.
- Seminar of the West China School of Stomatology Sichuan University, Chengdu, China, "Biological and Clinical Performances of Dental Implants"; June 2018.
- Innovation and Sustainability in Implant Dentistry International Bodensee Symposium, Konstanz, Germany, "Translational Dental Medicine"; July 2018.
- HKIDEAS 2018, Hong Kong, "Biological and Clinical Performance of Dental Implants"; August 2018
- VII Straumann International Education Week, Tel Aviv, Israel, "Biological and Clinical Performance of Dental Implants"; October 2018.

Dr. Paul Fletcher

• American Academy of Periodontology Annual Meeting, Vancouver, British Columbia, "Therapeutic Options and Protocols for the Treatment of Peri-implant Disease"; October 2018.

Dr. John t. Grbic

• Osteoporosis Foundation of New Mexico, Albuquerque, New Mexico, "The Epidemiology, Pathogenesis, and Management of Osteonecrosis of the Jaw"; October 2018.

Dr. Yiping W. Han

- Cold Spring Harbor Laboratory. Cold Spring Harbor, NY, "Fusobacterium nucleatum in colorectal cancer"; February 2018.
- BETRNet Webinar Series, "Fusobacterium nucleatum in colorectal and esophageal cancer"; May 2018.
- The 14th Biennial Congress of the Anaerobe Society of the Americas, Las Vegas, NV. "Fusobacterium nucleatum causes adverse pregnancy outcomes via hematogenous transmission"; July 2018.
- Webinar Presentation to Canaan Partners, Westport, CT. "Fusobacterium nucleatum in colorectal cancer, and component X"; July 2018.
- 1st International Conference on Oral Mucosal Immunity and Microbiome. Chania, Greece. "Fusobacterium nucleatum in placental inflammation: mechanism and therapy"; September 2018.
- University of Alabama Microbiome Symposium. Birmingham, AL. "Mechanistic insights of *Fusobacterium nucleatum* in colorectal cancer"; November 2018.
- Horace Mann School Career Lecture Series, Bronx, NY, "Microbiology in the oral cavity and beyond"; November 2018.
- CUIMC Department of Microbiology & Immunology Faculty Science. "Mechanistic insights of *Fusobacterium nucleatum* in colorectal cancer: a 'two-hit' model;" November 2018.

Dr. Philip Kang

- Spanish American Medical and Dental Society of New York, Memorial Sloan Kettering Center and Columbia University College of Dental Medicine, Fort Lee, New Jersey. "Dental Implant Complications"; October 2017.
- International Implant Course for Japanese Group, The ColumbiaDoctors Office, New York, NY. "Current Trends in Periodontics and Dental Implantology"; December 2017.
- Columbia University College of Dental Medicine, New York, NY. "Comprehensive Implantology Continuum, Part 1, Dental Implant Complications"; January 2018.

Presentations (cont.)

- 1st International Conference for Future Dentistry, Seoul National University School of Dentistry, Seoul, South Korea, "Precision Dental Medicine: Columbia's Vision"; June 2018.
- Columbia University College of Dental Medicine, New York, NY. "Comprehensive Implant Continuum, Dental Implant Complications"; October 2018.
- Columbia University College of Dental Medicine, New York, NY. "Comprehensive Implant Continuum, Guided Bone Regeneration"; October 2018.
- Columbia University College of Dental Medicine, New York, NY. "Essential Surgeries to Grow your Dental Practice, Atraumatic Extractions and Socket/Ridge Preservation"; October 2018.
- Columbia University College of Dental Medicine, New York, NY. "Essential Surgeries to Grow Your Dental Practice, Implant Surgery for the General Practitioner"; November 2018.
- Columbia University College of Dental Medicine, New York, NY. "Continuing Education Course Series for Vietnamese Dentists, Surgical Complications of Dental Implant Therapy"; November 2018.

Dr. Moritz Kebschull

- European Federation of Periodontology Triennial Meeting, Europerio 9, Amsterdam, Netherlands. "Peri-Implantitis Lessons from -omics Studies"; June 2018.
- International Academy of Periodontology Research Conference, Giessen, Germany. "Implant-omics"; October 2018.

Dr. Evie Lalla

- American Association for Dental Research (AADR) Annual Meeting, Fort Lauderdale, FL. Small group session at the "Faculty Development Workshop: Mentoring Mentors and Mentees": "Developing an academic career & how to maximize the relationship with your mentor(s)"; March 2018.
- European Federation of Periodontology Triennial Meeting, Europerio 9, Amsterdam, Netherlands. "Reconsidering the role of the oral health care team: screening for diabetes risk"; June 2018.

Dr. Eric Linden

• The Restorative Dental Study Club of Cambridge, Hyatt Regency on Cambridge, MA, "Lasers for the Treatment of Periodontal Disease and Peri-Implantitis"; April 2018.

Dr. Shebli Mehrazarin

Columbia University Visiting Professor Program, New York, NY, "Predoctoral and Postdoctoral Specialty
Training as a Critical Means of Addressing the Needs of the Diverse and Ever-Growing Geriatric Population";
November 2018.

Dr. Fatemeh Momen-Heravi

- Metropolitan Symposium, Columbia University College of Dental Medicine, New York, NY. "Classification of Implant Failure Using Machine Learning Approach"; March 2018.
- Volpe Competition, Ohio State University, Columbus, Ohio. "Identification of Functional Networks and Pathway Dynamics in Pathogenesis of Periodontal Disease"; April 2018.
- International Association of Dental Research (IADR), London, UK. "RNA-Sequencing Reveals Pathway Dynamics and Molecular Perturbations in Periodontal Disease"; July 2018.
- 6th China-ASEAN Forum on Dentistry, Nanning, Guangxi, China, "Oral Squamous Cell Carcinoma-Derived Exosomes Induce a Pro-inflammatory and Protumorigenic Milieu via Modulating Monocyte/ Macrophages"; August 2018.

Dr. Elena Sanz-Miralles

• Greater New York Dental Meeting (GNYDM), New York, NY, "Association between Periodontitis and Cardiovascular Disease"; November 2018.

Presentations (cont.)

Dr. Panos N. Papapanou

- Spanish Society of Periodontology Meeting, Sevilla, Spain, "A new classification of periodontal diseases;" April 2018.
- Spanish Society of Periodontology Meeting, Sevilla, Spain, "Does periodontal therapy improve metabolic control in diabetes?"; April 2018.
- European Research Group in Oral Biology, Geneva, Switzerland. "Contemporary epidemiologic studies in periodontitis: are we there yet?"; April 2018.
- European Federation of Periodontology Triennial Meeting, Europerio 9, Amsterdam, Netherlands. "The world workshop on the classification of periodontal and peri-implant diseases and conditions"; June 2018.
- International Association of Dental Research Annual Meeting, London, UK, Keynote Address: "Periodontitis epidemiology: Lessons learned and unlearned"; July 2018.
- University of Berne, Berne, Switzerland, "Gingival tissue transcriptomes in the study of periodontitis pathobiology"; October 2018.
- International Academy of Periodontology Research Conference, Giessen, Germany, "Genetics, epigenetics and individual risk: Summary and key educational and research directions"; October 2018.
- American Academy of Periodontology 104th Annual Meeting, Vancouver, British Columbia, Canada. "The new classification of periodontal diseases and conditions"; October 2018

Dr. Dennis Tarnow

- Peninsula Dental Society, Atlantic Beach, Long Island, NY, "Controversies and Innovations in Implant Dentistry"; January 2018.
- Seattle Study Club National Meeting, Palm Springs, CA, "Interdisciplinary Management of Difficult Esthetic Cases"; January 2018.
- Dental X-P World Meeting, Miami, FL, "One Surgery One Time for Immediate Socket Management"; February 2018.
- American Academy of Periodontics, San Francisco, CA, "When to Extract or Save a Tooth"; and "Think Tank with the Experts"; March 2018.
- Detroit Vedder Society, Detroit, MI, "Innovations and Controversies in Implant Dentistry. Where Are We Today?"; March 2018.
- Ontario Dental Society, Toronto, Canada, "Immediate Vs. Delayed treatment of Sockets"; April 2018
- Western Society of Periodontics, San Diego, CA, "Interdisciplinary Management of Esthetic Problem Cases"; April 2018.
- Lisbon Implant Society, Lisbon, Portugal, "Innovations in Implant Dentistry"; April 2018.
- Southern Implants World Meeting, Hermanns, South Africa, "Immediate vs. Delayed Treatment with Multiple Implant Systems"; April 2018.
- American Academy of Endodontics, Denver, Colorado, "When to Save or Extract Teeth and Place an Implant"; April 2018.
- Egyptian Implant Society, Cairo, Egypt, "Innovations in Implant Dentistry. Where Are We Today?"; May 2018.
- Bogota Implant Society, Bogota, Colombia, "Innovations in Implant Dentistry, May 2018.
- Academy of General Dentistry, New Orleans, LA, Keynote Speaker, "The Future of Implant Dentistry"; June 2018.
- Dominican Implant Society, Santo Domingo, Dominican Republic, "Management of Difficult Implant Cases in the Esthetic Zone"; June 2018.
- UCLAN University, Cypress, "Innovations and Controversies in Implant Dentistry"; July 2018.
- IDEA Academy, San Francisco, CA, "Four Days of Innovations and Controversies in Implant Dentistry"; July 2018.
- Indian Implant Society, Mumbai, India, "Immediate Vs. Delayed Management of Extraction Sockets"; August 2018.

Presentations (cont.)

- Spear World Meeting, Phoenix, AZ, "Immediate Vs. Delayed Socket Management in the Esthetic Zone"; September 2018.
- Bozeman Dental Society, Bozeman, Montana, "Innovations and Controversies in Implant Dentistry"; September 2018.
- Chinese Implant Continuum, Shanghai, China, "Think Tank about Implants"; September 2018.
- Houston Implant Society, Houston, TX, "Controversies in Socket Management"; October 2018.
- Mexico Implant Group, Mexico City, Mexico, "Management of Esthetic Problem Cases"; October 2018.
- Megagen World Meeting, Las Vegas, NV, "Use of Platform Switched implants in Immediate Sockets"; October 2018.
- Moscow Implant Society, Moscow, Russia, "Two-Day Meeting of Innovation and Controversies in Implant Dentistry'; October 2018.
- New Jersey Oral Surgeon Society, Iselin, NJ, "Interdisciplinary Management of Esthetic Problems"; November 2018.
- Dental Clinic Club of Philadelphia, Philadelphia, PA, "Innovations and Controversies in Implant Dentistry"; November 2018.
- Greater New York Academy of Prosthodontics, Javits Center, New York, NY, "Conventional vs. Digital Dentistry"; December 2018.

Events

Six residents graduated from our Post-Doctoral Periodontics Program last June, earning either a Certificate in Periodontics (Drs. Bryan Noh and Noam Salzburg) or a Masters of Science degree (Drs. Ramy Habib, Khashayar K. Changi, Flora Momen-Heravi and Jaffer Sharrif). As mentioned above, Flora and Jaffer have been appointed at faculty positions at CDM. Bryan is doing his military service in South Korea, and Noam, Ramy, and KC are working in private practice. We wish them all the best, and hope that they continue to keep in touch with our Division and the College.



The 2018 class at the Graduation Ceremony in the Low Library, with Drs. Kang and Papapanou

Events (cont.)



Dr. Khashayar K. Changi addressing the audience on behalf of his class at the Low Library ceremony.

View of the University Commencement (and our Periodontics students) from the faculty dais.



After 31 years of dedicated service at CDM, our Senior Staff Associate Romanita Celenti is retiring at the end of December. Romi, a valuable colleague and a mother figure for scores of residents and research scientists, has been at the heart of the Laboratory of the Division of Periodontics all these years. We will miss Romi and wish her well in the next phase of her life!



Romi (second from left) with Drs. Sanz-Miralles, Papapanou, Burkett and Chen at her farewell lunch.

Events (cont.)

Dr. Paul Rosen, Clinical Professor of Periodontics, University of Maryland School of Dentistry and Clinical Professor of Periodontics & Oral Implantology at Temple University School of Dentistry, presented a seminar titled "Current issues in periodontics and implants" on January 17.

This year the **Metropolitan Periodontal Forum** was hosted by the Division of Periodontics on March 12. The participating programs included postgraduate periodontics programs from Columbia, Rutgers, and New York University. Columbia's presenters and titles included **Dr. Fatemeh Momen-Heravi** (PGY3), "Classification of implant failure using machine learning approach" and **Dr. Jaffer Shariff** (PGY3), "Antidepressant use and rate of early implant failure"

On April 10, **Dr. Yong-Han Koo** ('01), Diplomate, American Board of Oral and Maxillofacial Surgery and Lecturer, Harvard School of Dental Medicine, presented a seminar titled "4D Guided Implantology in the Atrophic Edentulous Zones: The Art and Science."

On May 25th, **Dr. James Beck**, Professor at the Department of Dental Ecology at the University of North Carolina at Chapel hill, presented the **29th Annual Benjamin Tenebaum Memorial Lecture** titled "Improving the periodontal disease classification for precision oral health".





Left: Dr. James Beck receives the Benjamin Tenenbaum Memorial Lecture plaque by Dr. Papapanou. Right: Dr. Jaffer Shariff receiving the Award for best poster at the post-doctoral category by Dean Christian Stohler and Dr. Carol Kunzel at the Birnberg Research Day.

Professor **Ku Young**, Professor and Chairman, Department of Periodontology, School of Dentistry, Seoul National University, presented a lecture titled "Can GBR and GTR coexist?" on July 3.

The Inaugural Ivy-League Periodontics Symposium took place on October 13. Initiated by Dr. Philip Kang and hosted by the Division of Periodontics, the "Ivy Symposium" participants included residents and faculty from the Periodontics Postdoctoral Programs at Columbia, Harvard, and UPenn. Residents from each program presented their clinical cases and research projects with subsequent discussions from the attendees. Dr. Jennifer Kotsikonas (PGY3) presented on "Diagnosing and Managing Anatomic Variations of the Maxillary Sinus" and Dr. Daniela Gurpegui (PGY3) presented a "Review of Transcrestal Sinus Elevation Techniques: Case Report on Osseodensification." Dr. Panos N. Papapanou gave a presentation on the new classification system for periodontal and peri-implant diseases and conditions.

Dr. Arnold Weisgold, Adjunct Professor of Periodontics, University of Pennsylvania School of Dental Medicine, presented a seminar titled "Does Occlusion Matter?" on November 27.

Events (cont.)





Left: Dr. Kang and Perio residents at the Fall NESP meeting. Right: Dr. Ku Young with residents and Dr. Kang at his seminar.



At our Holiday Party earlier this month, post-doctoral students, staff and faculty joined to celebrate and exchange good wishes!