

AAO Resident Scholar Award

This award was first awarded at the 2004 AAO Annual Session

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In 2003, GAC International Inc./Dentsply and the AAO created the Resident Clinician Scholars Program. Charles Schultz, general manager of GAC International Inc., stated at the time that this program is an attempt to identify and reward young orthodontists who are at the fore front of forging the future of their profession. The first Resident Clinician Scholars Program was held at the 2004 Annual Session. Today the Charley Schultz Resident Scholar Award Program offers an opportunity to graduate orthodontic students and orthodontic residents to present clinical research and basic science research at the AAO Annual Session. The participants presentations are judged on originality, relevance, research design validity, the results and conclusions of the research and the overall presentation by the resident.

After the 2019 Annual Session, GAC/Dentsply dropped their sponsorship of the award and the AAO took over the sponsorship of the program.

The Council on Scientific Affairs manages the AAO Resident Scholar Award program for the AAO.

Year	Category	Place	First Name	Last Name	University	Title of Research
2019	Basic Science	1	Spencer	Crouch	University of Michigan	Local vs. Systemic Effects of TNAP on Osteoblast Differentiation and Bone Formation
2019	Basic Science	2	Niloufar	Azami	University of Connecticut	The Effects of Raloxifene on Bone Remodeling and Orthodontic Relapse
2019	Basic Science	3	Divakar	Karant	University of Kentucky	Developing and Evaluating Scaffold for Alveolar Bone Regeneration
2019	Clinical	1	Noha	Orabi	Case Western Reserve University	Pharyngeal Airway Volumetric Changes after Orthodontic Extraction: a Systematic Review with Meta-Analysis
2019	Clinical	2	Mary	Lanier Zaytoun	University of North Carolina - Chapel Hill	Machine Learning Algorithms: A New Approach to the Extraction Decision
2019	Clinical	3	Mason	Borth	University of Texas - Houston	Impact of Resin Composite Type on Invisalign Attachment Wear
2019	Clinical	3	Boshi	Zhang	University of California, Los Angeles	Objective and Subjective Airway Improvement via Treatment with Maxillary Skeletal Expander
2018	Basic Science	1	Chenshuang	Li	University of California, Los Angeles	Neurexin Superfamily Member Cntnap4 is a Specific Receptor of Nell-1 for Osteogenesis
2018	Basic Science	2	Kathleen	Martin	University of British Columbia	Tracing the Cellular Origins of Mesenchymal Derivatives in Craniofacial Development
2018	Basic Science	3	Yina	Li	University of North Carolina - Chapel Hill	The Role of Autophagy during Orthodontic Tooth Movement (OTM)
2018	Clinical	1	Catherine	Kubera	Tri-Service Orthodontic Residency Program	Preferred Occlusal Cant for Patients with Orbital Dystopia
2018	Clinical	2	James	Bloom	Maimonides Medical Center	Accuracy of Dental Stone Models Cast from 3D Printed Flexible Polymer Shells

2018	Clinical	3	Clint	Wire	University of Iowa	Adolescent Skeletal and Dental Changes with Rapid Maxillary Expansion (RME)
2018	Clinical	3	Alissa Maria	Varella	Rajiv Gandhi University	Low Level Laser Therapy (LLLT) Increases Interleukin-1 β (IL-1 β) in GCF and Enhances the Rate of Orthodontic Tooth Movement (OTM)
2017	Basic Science	1	Alyssa	Emory-Carter	University of Florida	Proteomic Characterization of Exosomes Released by Osteoclasts and Odontoclasts
2017	Basic Science	2	Xi	Chen	University of Michigan	Maturation of Dental Pulp Stem Cell-Derived Blood Vessels
2017	Basic Science	3	Sudha	Gudhimella	University of Kentucky	Skeletal Anchorage in a Rat Model of Orthodontic Tooth Movement (OTM)
2017	Clinical	1	Christina	Jackson	University of North Carolina - Chapel Hill	Accuracy and Performance of Novel 3D Metal Printed Orthodontic Brackets
2017	Clinical	2	Meenakshi	Vishwanath	University of Connecticut	Force-System of V-Bends: A Three Dimensional Analysis of Wire Size and Activation
2017	Clinical	3	Victoria	Duong	Roseman University of Health Sciences	A Quantitative Assessment of the Costs Associated with Orthodontic Collection Practices
2017	Clinical	3	Hazem	Eimar	University of Alberta	Obstructive Sleep Apnea is Associated with Reduced Mandibular Cortical Thickness in Children
2016	Basic Science	1	Negin	Katebi	Harvard School of Dental Medicine	Anthrax Receptor 1 and Its Role in Craniofacial Growth and Development
2016	Basic Science	2	Lauren	Van Gemert	Texas A&M University Baylor College of Dentistry	Osseous Boundaries of the Regional Acceleratory Phenomenon with Micro-osteoperforations (MOPs)
2016	Basic Science	3	Huiyan	Guan	State University of New York, Buffalo	A Nano-scaffold with BMP2 Genetically Engineered Stem Cells Promotes Vascularized Bone Formation
2016	Clinical	1	Melissa	Alfonso	University of Florida	Orthodontic Tooth Movement with Aligners Using the AcceleDent $\text{\textcircled{R}}$ Aura Device in Adults
2016	Clinical	2	Doreen	Ng	University of Sydney	The Effect of Low-Level Laser Therapy on Orthodontic Root Resorption and Pain
2016	Clinical	3	Tingxi	Wu	University of California, Los Angeles	Managing Orthodontic Bracket Induced Plaque Formation and Associated Oral Diseases
2015	Basic Science	1	Omer	Fleissig	Hebrew University, Jerusalem, Israel	The Role of Natural Killer Cells in Orthodontic Tooth Movement
2015	Basic Science	2	Jonathan	Francis	University of Kentucky	Screw Diameter and Orthodontic Loading Influence Adjacent Bone Response
2015	Basic Science	3	Heather	Hendricks	University of North Carolina, Chapel Hill	Investigating the Etiology and Pathogenesis of Primary Failure of Eruption (PFE)
2015	Clinical	1	Soleil	Roberts	University of Washington	Midfacial and Dental Changes Associated with Nasal Positive Airway Pressure in Children with Sleep-Disordered Breathing

2015	Clinical	2	Shailesh	Bhandari	Dr. NTR University of Health Sciences, India	Evaluation of Rate of Space Closure in Piezocision Assisted Orthodontic Tooth Movement
2015	Clinical	3	Kevin Chien-Hsun	Lee	University of British Columbia	Incidence Study of Malocclusions in Children with Obstructive Sleep Apnea
2014	Basic Science	1	Nicole	Cheng	University of California, Los Angeles	Optimal timing of bisphosphonate treatment on alveolar cleft bone grafting
2014	Basic Science	2	Rebecca	Chen	Harvard University	Genetic deactivation of TGF- β 1 signaling attenuates articular cartilage degeneration in mature joints
2014	Basic Science	3	Richard	Uhlir	University of North Carolina - Chapel Hill	Biomechanical characterization of the periodontal ligament: Orthodontic tooth movement
2014	Clinical	1	Cole	Weaver	University of Iowa	Candidate gene analyses of 3D dental phenotypes in patients with malocclusion
2014	Clinical	2	Neha	Patel	University of Florida	Effect of aligner material and duration on orthodontic tooth movement
2014	Clinical	3	Ahmed	Ghoneima	Indiana University - Purdue University	Assessment of the reliability of dental measurements using the OrthoMechanics Sequential Analyzer
2013	Basic Science	1	Noor	Obaisi	University of Illinois - Chicago	Determination of the Transformation Temperature Ranges (TTR) of Orthodontic Nickel-Titanium Archwires
2013	Basic Science	2	Christopher	Murphy	University of Connecticut	Effect of Corticision and Force Magnitude on Tooth Movement
2013	Basic Science	3	Edgardo	Toro	University of Florida	Orthodontic Tooth Movement is Reduced by a Bisphosphonate Derivative of Enoxacin
2013	Clinical	1	Grant	Collins	Mayo Clinic	Accuracy of Magnetic Resonance Imaging in Orthodontics: Cephalometric Measurements Using MRI Compared to Traditional Radiographs
2013	Clinical	2	Carolina	Morsani Mordente	Pontificia Universidade Catolica de Minas Gerais	Rapid Maxillary Expansion in Cleft Patients: A Comparison Between Four Expanders
2013	Clinical	3	Megan	LeCornu	University of North Carolina - Chapel Hill	Three-Dimensional Treatment Outcomes in Class II Patients Treated Using Herbst: Pilot Study
2012	Basic Science	1	George	Abichaker	University of Southern California	CMV induces stage-dependent differences in tooth dysmorphogenesis and enamel defects
2012	Basic Science	2	David	Mouritsen	University of Alabama	Automatic Segmentation of Teeth in Digital Dental Models
2012	Basic Science	3	Ayman	Al Dayeh	University of Washington	In vivo growth of the nasal septal cartilage and nasofrontal suture
2012	Clinical	1	Collin	Kraus	Baylor College of Dentistry	Bony Adaptation to Slow Buccal Expansion With Light-to-Moderate, Continuous Forces
2012	Clinical	2	Emily	Singer	University of Toronto	Burden of Care of Infant Orthopedics for Improving Nasolabial Esthetics in CUCLP

2012	Clinical	3	Crystal	Cox	University of North Carolina - Chapel Hill	In Vivo Evaluation of Force Decay Properties of NiTi Closed Coil Springs and Comparison with Matched In Vitro Analysis
2011	Basic Science	1	Yunyan	Shen	Columbia University	Amelogenin-mediated Osteo/Odontogenesis: Signaling Pathway and Therapeutic Potential
2011	Basic Science	2	Haitao	Li	University of Illinois - Chicago	Numb Expression during Tooth Development: Possible Role in Ameloblast Biology
2011	Basic Science	3	Alfonso	Navarrete	University of Washington	Botox Effects on Bite Force, Mastication and Incisor Eruption in Rabbits
2011	Clinical	1	Anas	Al Najjar	Stony Brook University	Children and Adult Radiation Risks with a CBCT
2011	Clinical	2	Chuen Chie	Chiang	University of Southern Nevada	Establishing Norms of 3D Upper Airway in the Child and Adolescent
2011	Clinical	3	Joanie	Roy	University of Toronto	Dental Anxiety in Current and Future Orthodontic Patients
2010	Basic Science	1	Edmund	Khoo	New York University	Cytokine expression, bone remodeling and tooth movement in response to osteoperforation
2010	Basic Science	2	Thyagaseely	Premaraj	University of Nebraska	Mechanical strain, PGE2 and beta-catenin signaling interactions in periodontal ligament cells
2010	Basic Science	3	Shalin	Shah	University of Pennsylvania	Type III collagen-deficient mice exhibit altered craniofacial and skeletal development
2010	Clinical	1	Sean	Marcy	University of Toronto	Perceptions of plastic surgeons, orthodontists and laypersons to altered facial balance
2010	Clinical	2	Jonathan	Chiang	University of Illinois - Chicago	Study of facial esthetics in the Southwest native American population
2010	Clinical	3	Justin	Olsen	University of Oklahoma	Buccal plate changes following rapid versus slow palatal expansion: CBCT evaluation
2009	Basic Science	1	Joshua	Davis	Temple University	Polycaprolactone composite nanofibers as a functional periodontal ligament (PDL) scaffold
2009	Basic Science	2	Laeticia	Nassif	American University of Beirut	Calvarial bone integration by bone marrow stromal cells seeded in Chitosan-sponges
2009	Basic Science	3	Vo Danh	Nguyen	University of Florida	Increased vertical dimension (VDO) effects on masseter muscle phenotype during maturation
2009	Clinical	1	Anthony	Paventy	University of Oklahoma	Nonextraction treatment using the Damon system: a CBCT evaluation
2009	Clinical	2	Pradip	Shetye	St. Barnabas Hospital	Cephalometric evaluation of midface position and stability following LeFort III advancement
2009	Clinical	3	Tiffany	Louie	University of California - San Francisco	Clinical assessment of early demineralization using polarized sensitive-optical coherence tomography (PS-OCT)

2008	Basic Science	1	Zongyang	Sun	University of Washington	Early phase healing of a pig mandibular distraction osteogenesis (DO) site
2008	Basic Science	2	Rodrigo	Viecelli	Indiana University	Orthodontic mechanotransduction and the role of the P2X7 receptor
2008	Basic Science	3	Benita	Wong	University of California - San Francisco	Neural crest cells in the development of avian trigeminal nerve
2008	Clinical	1	Bryan	Vibeto	Mayo School of Graduate Medical Education	The missing maxillary lateral incisor: the acceptance of canine substitution
2008	Clinical	2	Kory	McHenry	Nova Southeastern University	Evaluation of vanilloid receptor for preemptive analgesia
2008	Clinical	3	Salem	Al-Qabandi	Harvard School of Dental medicine	The use of CBCT in the evaluation of dental and skeletal transverse dimension
2007	Basic Science	1	Supaporn	Suttamanatwong	University of Minnesota	Regulation of matrix Gla protein by parathyroid hormone in osteoblasts
2007	Basic Science	2	Yu-Ching	Lai	University of Rochester Eastman Dental Center	TMJ arthritis in mouse with craniomandibular dysfunction and pain
2007	Basic Science	3	Ezz Dean	Azzeh	Harvard University	The role of VEGF-A in cartilage formation
2007	Clinical	1	Rahul	Renjen	Montefiore Medical Center	Root and pulp response after intentional injury from mini-screw placement
2007	Clinical	2	Dustin	Tipton	University of Oklahoma	Soft tissue changes attributed to rapid palatal expansion
2007	Clinical	3	Christopher	Holahan	Mayo Clinic	Does osteoporosis affect the survival rate of dental implants
2006	Basic Science	1	Jae Hyun	Park	New York University	Zn-CaP material as potential anti-bacterial and mineralizing coating for orthodontic brackets
2006	Basic Science	2	Jean-David	Sebaoun	Boston University	Trabecular bone modeling and RAP following selective
2006	Basic Science	3	Matthew	Dunn	University of Michigan	Local delivery of osteoprotegerin for orthodontic anchorage
2006	Clinical	1	Laura	Balducci	University of Illinois - Chicago	Biological markers for evaluation of root resorption
2006	Clinical	2	Susan	Tsang	University of Manitoba	Profile changes in surgically treated Class II patients
2006	Clinical	3	Eric	Haney	University of California - San Francisco	Impacted cuspids: 2D versus 3D imaging
2005	Basic Science	1	Marsha	Beattie	University of Michigan	Heritable dentin defects: clinical and genetic perspectives in a family
2005	Basic Science	2	Luciana	Van Westen	University of Iowa	The genetic basis of craniofrontonasal dysplasia
2005	Basic Science	3	Maria	Karpov	University of Pennsylvania	In vitro bone remodeling on experimental sol-gel-derived bioactive glasses
2005	Clinical	1	Nanci Lara	Oliveira	University of Illinois - Chicago	The nasal cavity and the maxillary arch after rapid palatal expansion

2005	Clinical	2	Jacqueline	Palaisa	West Virginia University	Evaluation of nasal cavity changes after rapid palatal expansion using conventional tomography
2005	Clinical	3	Christopher	Maulik	University of Connecticut	A dynamic smile analysis in young adults
2004	Basic Science	1	Scott	MacGregor	University of Toronto	
2004	Basic Science	2	Stephen	Tjoa	University of Pennsylvania	
2004	Basic Science	3	Sean	Holliday	University of Illinois - Chicago	
2004	Clinical	1	Daniel	Bercowski	University of Puerto Rico	
2004	Clinical	2	Jay	Harris	Medical College of Georgia	
2004	Clinical	3	James	Paschal, Jr.	Rochester Eastman Dental Center	

NOTE: 2004 titles were not listed in the OnSite Program or the Book of Abstracts

