

# 2005 – 2023 ACP Education Foundation Research Fellowships

#### **2023 Fellowship Awardees**

• Reverse scan body: A Novel Technique for Capturing and Verifying Full-Arch Digital Implant Impressions: In-Vitro Study.

Principal Investigator: Ahmed A. Elsayyad, BDS, MSc School: University of British Columbia (2026)

• Influence of a photosensitizer loading on the physicochemical and antimicrobial properties of a denture resin for additive manufacturing

Principal Investigator: Amr Farrag, BDS School: University of British Columbia (2025)

• Repairability of a 3D printed resin: Effects of surface treatment and the type of repair resin on the shear bond strength.

Principal Investigator: Andreas Onisiforou, DMD School: University of Michigan (2025)

• Stability of Angled Multi-unit Abutments in Complete-Arch Fixed Implant-Supported Prostheses

Principal Investigator: Mevadee Pibulniyom, DDS

School: University of Washington (2025)

• Effects of Rapid Sintering Protocols on Colorimetric and Optical Properties of Dental Zirconia with Different Yttria Concentrations

Principal Investigator: Zidu Zeng, DMD School: University of Pennsylvania (2025)

 Retention of Milled vs 3D Printed Zirconia of Three Different Intaglio Surface Roughness bonded to Pretreated Ti-base Abutments: In-vitro Study.

Principal Investigator: Rama N. Al-Rashdan, BDS

School: University of Michigan (2024)

• Effect of Angulation of Multi-Unit Abutments on the Accuracy of Photogrammetric Imaging

Principal Investigator: Abdul Andejani, BDS School: University of Illinois At Chicago (2024)

• The Effects of Anodization and Surface Instrumentation on the Titanium Surface

Principal Investigator: Wei-qing Liu, DMD

School: Indiana University (2025)

Wettability of Saliva Substitutes on CAD/CAM Denture Base Materials

Principal Investigator: Paul Mikhail, DMD School: University of Manitoba (2024)

• Effect of artificial aging and immersion in common beverages on the optical properties of 3D printed zirconia

Principal Investigator: Athanasios Rigos, DDS

School: Texas A&M University (2025)

• Comparison of Surface Characteristics of Denture Base Resin Materials with Two Different Surface Treatment Protocols

Principal Investigator: Hesham K. Alouthah, BDS

School: Indiana University (2023)

 Trueness and Precision of Economical Smartphone-Based Virtual Facebow Records: A Comparison Between Smartphone Results and Industrial 3D Scanner Results

Principal Investigator: Robert J. Ault, DDS School: University of Michigan (2023)

 Bond Strength of Titanium Copings to Implant-Supported Fixed-Detachable Dental Prostheses

Principal Investigator: Sieu Yien (Ashley) Chiam, DDS

School: University of Washington (2023)

In-Vitro Analysis of Two-body Wear of 3-Dimensional-Printed Occlusal Splint Materials
 Against Different Antagonists of Fixed Prosthodontic Restorative Materials

Principal Investigator: Bhavinkumar Balendrakumar Patel, BDS

School: University of Michigan (2023)

• The Effect of Different Screw Angulations on the Fracture Resistance of Implant Zirconia Single Crowns Made on Two Different Implant Platforms

Principal Investigator: Chitipat Siriwattayacharoen, DDS

School: Texas A&M University (2023)

 Evaluation of repair strength of conventional, milled, and printed PMMA provisional crown materials with different surface treatments and repair resins

Principal Investigator: Bright JeSuk Chang, DMD School: University of Alabama At Birmingham (2022)

• The effects of additive manufacturing technologies and finish line designs on the accuracy and dimensional stability of 3D-printed dies

Principal Investigator: Yi-Cheng Lai, DDS

School: Indiana University (2022)

 Adherence of Candida albicans to digitally and conventionally fabricated acrylic resin denture bases

Principal Investigator: William E. Linder, DMD School: University of North Carolina (2022)

• Effect of Arginine-Glycine-Aspartic Acid Peptide Coating on the Adhesion of Co-cultured Fibroblasts and Epithelial Cells to Custom Abutment Materials

Principal Investigator: Philip Mui, DMD School: University of Maryland (2023)

• Effects of Screw-Channel Angulation and Titanium-base connection on the Fracture Resistance of Anterior Zirconia Implant Abutments

Principal Investigator: Chen Xuan Wei, DDS, PhD

School: University of Michigan (2022)

 Dimensional Changes of Zirconia Copings Under Different Preparation Designs and Sintering Protocols

Principal Investigator: Walaa Magdy Ahmed, BDS, MSc

School: University of British Columbia (2019)

• In-vitro Analysis of Fracture Strength CAD Milled vs Printed Denture Bases with Bonded Denture Tooth

Principal Investigator: Brittany A. Kane, DMD

School: University of California, Los Angeles (2021)

 Bacterial diversity and attachment of silver-coated titanium using ALD technology, In vivo study

Principal Investigator: Meghan M. Koennecke, DMD School: University of Illinois At Chicago (2021)

• In Vitro Evaluation of Candida albicans Adherence and Denture Disinfection Techniques on CADCAM Printed, Milled and Heat-Cured PMMA Polymers

Principal Investigator: Mohammad Amir Koujan, DDS, MS School: University of Alabama At Birmingham (2020)

• Microbiome Characterization of Extra-Oral Implant and Soft Tissue in Direct Contact with Maxillofacial Prostheses

> Principal Investigator: Jun Soo Shin, DDS School: University of Illinois At Chicago (2021)

 CAD/CAM Quality Assurance: Additive Manufacturing of Dies for Assessment of Fit of Full Coverage Restorations

Principal Investigator: Neil Griseto, BDentSc. School: UT Health San Antonio (2019)

 Assessment of 3D Facial Scan Integration in 3D Digital Work Flow using Radiographic Markers and Iterative Closest Point Algorithm

Principal Investigator: Mohamed Elshewy, BDS, MS School: Marquette University (2020)

• miR-133a and miR-135a as a Novel Target for Bone Regeneration

Principal Investigator: Santvana Vyas, DDS

School: New York University (2019)

 Effect of Nano Ceramic Coating on Color Acceptability and Perceptibility of Polymethylmethacrylate: In Vitro and Clinical Study

Principal Investigator: Laura Koo Min Chee, DMD School: University of Illinois at Chicago (2019)

• Determining the Perceptibility and Acceptability Threshold of the Relative Translucency Parameter for Porcelain Crowns

Principal Investigator: Yale Cho, DMD

School: University of Illinois at Chicago (2020)

• Oral Microbiome Changes Associated with Fixed Dental Prosthodontic Restoration

Principal Investigator: Sarah Kay Youny Lee, DDS

School: University of North Carolina (2018)

Dynamic Virtual Articulation: Trueness and Precision

Principal Investigator: Michael R. Hsu, DDS

School: University of Maryland (2020)

• An in vitro Study of Osteoblasts Response to Surface-Modified Titanium and PEEK

Principal Investigator: Maryam Gheisarifar, DDS

School: Marquette University (2019)

 Effect of Accelerated Aging on the Mechanical and Optical Properties of the New Translucent Zirconia

Principal Investigator: Amir H. Nejat, DDS, MS School: Louisiana State University (2020)

• Influence of Abutment Material, Ceramic Thickness and Luting Cement on the Color of Lithium Disilicate

Principal Investigator: *Diana Cuesta, DMD* School: *University of Illinois at Chicago (2019)* 

• Fungal and Bacterial Pathogen Biofilm Formation on Anatomical Denture Base Materials

Principal Investigator: Dr. Angela Gullard School: University of Tennessee (2019)

• Dimensional Stability of CAD/CAM Patterns

Principal Investigator: Dr. Shane S. Byun School: University of Maryland (2020)

• Evaluation of marginal discrepancies of monolithic zirconia crowns under the influence of different preparation designs and sintering techniques

Principal Investigator: Dr. Walaa Ahmed School: University of British Columbia (2018)

• Effects of CAD/CAM Acrylic on Human Gingival Fibroblast Differentiation, Proliferation, and Attachment

Principal Investigator: Dr. David W. Chen School: University of Maryland (2019)

• Assessment of the internal fit and marginal integrity of interim crowns with different manufacturing methods

Principal Investigator: Dr. Chin Chun (Jean) Peng

School: University of Washington (2018)

 Fracture Resistance of Pressed and Milled Lithium Disilicate Complete Coverage Restorations Following Endodontic Access Preparation

Principal Investigator: Dr. Petrina Gerogianni

School: University of Texas Health Science Center at San Antonio (2017)

• Effect of Chairside Surface Treatments on Subsurface Damage in Monolithic Zirconia

Principal Investigator: Dr. Kan Wongkamhaeng

School: University of Iowa (2016)

• Split mouth comparison of one versus two stage guided maxillary implant placement for over dentures with patient satisfaction evaluations

Principal Investigator: Dr. Kimberly K. Schlam School: University of North Carolina (2017)

• Comparative assessment of two denture fabrication techniques: conventional vs. digital

Principal Investigator: Dr. Wissanee Jia-mahasap

School: University of Iowa (2017)

Adherence of Microorganisms to Acrylic Resins

Principal Investigator: Dr. Malek R. AlShehri, BDS

School: University of Maryland (2018)

• Effect of drug-eluting nanoparticles on pulpal inflammation

Principal Investigator: Dr. Seung Kee Choi

School: University of Maryland, Baltimore, School of Dentistry (2017)

• The potential of fibroblast growth factor 18 for bone regeneration

Principal Investigator: Dr. Siamak Najafi-Abrandabadi School: New York University, College of Dentistry (2016)

 The use of topical subgingival application of simvastatin gel in the treatment of peri-implant mucositis: a pilot study

Principal Investigator: Dr. Ahmed Mahrous

School: University of Iowa, College of Dentistry (2016)

Molecular Assessment of Peri-Implant Tissue at Bone vs. Tissue Level Implants

Principal Investigator: Dr. Anthony P. Gragg

School: University of North Carolina, School of Dentistry (2016)

 The effect of a novel implant surface incorporated with an osteogenic peptide on gene expression and osseointegration

Principal Investigator: Dr. Loreta Geneviciute

School: New York University College of Dentistry (2017)

• The Fabrication of an Acrylic Repositioning Stent for use during Intensity Modulated Radiation Therapy (IMRT): a feasibility study.

Principal Investigator: Dr. Vincent S. Lee

School: University of British Columbia, Department of Oral Health Sciences (2016)

• Examination of Initial Wound Healing and Osseointegration of Trabecular Metal Implants (Porous Tantalum Metal Implants) between Healthy and Diabetic Subjects

Principal Investigator: Dr. Christian Brenes

School: University of North Carolina School of Dentistry (2014)

Antibacterial Assays of Porphyromonas gingivalis on Novel Silver Embedded Titania
 Nanotube Surface for Dental Implants

Principal Investigator: Dr. Amy S. Au

School: University of Illinois at Chicago College of Dentistry (2015)

The effect of stromal cell-derived factor 1 on bone regeneration in vivo

Principal Investigator: Dr. Gabriela Carranza

School: New York University College of Dentistry (2014)

• Antibiotic use in conjunction with immediate implant placement to replace teeth with apical pathology associated with endodontic origin

Principal Investigator: Dr. Bashir Hosseini

School: University of North Carolina School of Dentistry

• The potential of stem cell homing chemokine for bone regeneration

Principal Investigator: Dr. Jeremy D. Kay

School: New York University College of Dentistry (2015)

• Flexural Strength/modulus, and fracture toughness of Lava Ultimate vs eMax CAD/CAM

Principal Investigator: Dr. Ian D. Thornton School: University of British Columbia (2014)

 Engineered Injectable Biodegradable Scaffold as a Carrier for PDL (PDLSCs) and Gingival Mesanchymal Stem Cells (GMSCs) for Applications in Periodontal Tissue Regeneration

Principle Investigator: Dr. Alireza Moshaverinia

School: University of Southern California Herman Ostrow School of Dentistry (2012)

• The effect of novel implant surfaces on gene expression and osseointegration

Principle Investigator: Dr. Sanjay Karunagaran School: New York University School of Dentistry

• Influence of Preparation Design on Lithium Disilicate Anterior Restorations

Principle Investigator: Dr. Carlos Castro

School: New York University College of Dentistry (2012)

• Retrieval torque and fatigue failure of cement-retained IPS e.max Press® crowns

Principle Investigator: Dr. Amalie Lomartire

School: Montefiore Medical Center / Albert Einstein College of Medicine (2013)

 A novel device for measuring patient compliance with oral appliances in the treatment of obstructive sleep apnea

Principle Investigator: Dr. Yves K. Smith

School: University of Texas Health Science Center at San Antonio (2012)

• Influence of Implant Angulations on the Fracture Resistance of Zirconia Abutments

Principle Investigator: Dr. Shreedevi Thulasidas

School: University of Alabama at Birmingham School of Dentistry (2013)

• Prosthetic Complications With an Implant Supported Fixed Denture – The UNC Protocol

Principle Investigator: Dr. Bryan M. Limmer

School: University of North Carolina at Chapel Hill (2012)

• Immediate placement and loading of dental implants into infected sites with and without antibiotic prophylaxis: an exploratory study

Principle Investigator: Dr. Edward J. Givens, Jr.

School: University of North Carolina at Chapel Hill (2012)

• The effect of a bioactive collagen membrane carrying PDGF on bone regeneration

Principle Investigator: Dr. Terry Y. Lin

School: New York University College of Dentistry (2011)

Cell-sheet Engineered Implant: A novel cell therapy for enhancing osseointegration

Principle Investigator: Dr. Rajita Kodalie Kanuru

School: University of California Los Angeles School of Dentistry

• A Comparison of Active and Passive Motion Therapy in Radiation-Induced Trismus Patients

Principle Investigator: Dr. Richard C. Cardoso

School: University of Texas MD Anderson Cancer Center (2011)

• Effects of Processing Conditions on Mechanical and Physical Properties of Y-TZP Zirconia Subjected to Low Temperature Degradation

Principal Investigator: Aws ArRajaie

School: Boston University

• Evaluation of Denture Plaque for the Presence of Pneumonia-Associated Pathogens in an Ambulatory Patient Population

Principal Investigator: Dr. Bethany Kronberg

School: Loma Linda University (2010)

• A Prospective Clinical Study of Fixed Four-Implant Supported Prostheses in Endentulous Maxilla: Treatment Efficacy and 12 Months Implant Survival Rate after Prosthesis Delivery

Principal Investigator: Dr. Oliver C. Pin-Harry School: University of North Carolina (2011)

• Variables in the Etiology of Porcelain Veneer Fracture in All-Ceramic Single Unit Crowns

Principal Investigator: Dr. Thomas P. Suranyi School: University of North Carolina (2011)

• Effect on Abutment Wall Modification on the Retention of Cement-Retained, Implant Supported Crowns

Principal Investigator: Dr. Kian Meng Tan

School: University of Maryland, Baltimore (2010)

 The Effect of Denture Cleansing Solutions on the Retention of Pink Locator Attachments after Multiple Pulls; an In Vitro Study

Principal Investigator: Dr. Wenguang K. You School: University of Maryland, Baltimore (2010)

 Low Temperature Degradation Effects on the Flexural Strength, Structure, and Hardness of Zirconia Based CAD/CAM Dental Restorations

Principal Investigator: Tariq Fadel Alghazzawi School: University of Alabama at Birmingham

• Analysis of Saliva in Patients with Denture Stomatitis: An Exploratory Study

Principal Investigator: Dr. Sandra K. Al-Tarawneh

School: University of North Carolina at Chapel Hill (2012)

In Vitro Microleakage of Dual-Cure Composite Core Materials

Principal Investigator: Dr. Jennifer L. Fritz

School: University of Iowa, College of Dentistry (2009)

 Neural Crest Contributions to Dental Pulp Stem Cells and Craniofacial Structures: Alveolar Process, Tongue and Temporomandibular Joint

Principal Investigator: Dr. Vinay Jain

School: University of Tennessee Health Science Center (2010)

Dimensional Stability of Stereolithographic Surgical Guides on Exposure to Light,
 Temperature, Moisture and Autoclaving: A Pilot Study

Principal Investigator: Dr. Irfan S. Kachwala

School: University of Medicine and Dentistry of New Jersey (2010)

• The Effect of Angulation on the Retentive Values of Locator Attachments; An In Vitro Study

Principal Investigator: Dr. Richard A. Wilson

School: University of Maryland, Baltimore (2010)

 A Crossover Study between Two Oral Appliances for the Treatment of Obstructive Sleep Apnea

Principal Investigator: Dr. Bradley M. Bishop

School: University of Texas Health Science Center, San Antonio (2009)

 Analysis of Post-Fatigue Reverse-Torque Values at the Abutment/Implant Interface for a Unitarian Implant Design

Principal Investigator: Dr. Paul M. Cashman

School: University of Iowa (2009)

• Relationship between Clinical Periodontal Biotype and Labial Plate Thickness; A Pilot Study

Principal Investigator: Ryan Cook

School: University of Texas Health Science Center, San Antonio (2010)

Bonding Characteristics of Acrylic Denture Teeth to Denture Base Resins

Principal Investigator: Madelyn L. Fletcher-Stark

School: University of Washington School of Dentistry (2009)

 Inhibition of Candida Albicans Biofilm Formation on Denture Acrylic Resin Surfaces by Amine Oxide and Candida Albicans Interaction with Human Monocytes

Principal Investigator: Dr. Jonathan M. Hart

School: University of Tennessee Health Sciences Center (2009)

 Preliminary In Vivo Investigation of the Biodegradability of a Novel Elastomer Material for Bone Regeneration

Principal Investigator: Dr. Theodoros M. Kapos

School: Harvard University School of Dental Medicine (2008)

 Effect of Denture Cleansing Solutions on the Retention of Pink Locator Attachments, an In Vitro Study

Principal Investigator: Dr. Caroline Nguyen School: University of Maryland (2009)

Role of cp Titanium Surface Topography in Peri-Implant Osteoclastogenesis Rat Model

Principal Investigator: Dr. Ghadeer N. Thalji

School: University of North Carolina School of Dentistry (2009)

 Proposal for a 1-Year Prospective Clinical Trial on the Implant Survival with Immediately-Loaded 2-Implant Locator Attachment Retained Mandibular Overdentures

Principal Investigator: Dr. Jmi Lilinoe Bassett Bassett

School: University of Illinois at Chicago (2008)

 A Comparative Study of the Accuracy of Plastic Impression Transfer Copings for Single Implant Restorations

Principal Investigator: Dr. Monica A. Fernandez

School: Indiana University School of Dentistry (2009)

Effect of Attachment Number on Retention Characteristics in Overdentures

Principal Investigator: Dr. Chin-chuan Fu

School: University of Alabama at Birmingham (2007)

• Does Vitamin D Deficiency Contribute to Abnormal Synthesis of Cementlinelayer on Titanium Implant, and Thus Negatively Affect the Implant Osseoinegration?

Principal Investigator: Dr. James A. Kelly

School: University of California, Los Angeles (2007)

• Evaluation of Obstructive Sleep Apnea Patients' Oral Appliance Titration Protocols

Principal Investigator: Dr. Paul M. McLornan

School: University of Texas Health Science Center, San Antonio (2007)

Enhancing Dental Implant Osseoinegration vie Non-Viral Gene Delivery

Principal Investigator: Tarek Sharkas

School: University of Pittsburgh (2009)

• Genetic Markers for Accelerated Bone Loss of Edentulous Jaws

Principal Investigator: Jaijam Suwanwela

School: University of California Los Angeles, School of Dentistry (2009)

 Molecular Analysis of Edentulous Oral Mucosa Formation in Type 2 Diabetes Mice – Preliminary Data

Principal Investigator: Dr. Seiichi Yamano

School: Harvard University School of Dental Medicine (2007)

Effect of Surface Modification of Denture Base Resins on the Adhesion of Candida Albicans

Principal Investigator: Ryan Bissett

School: Harvard University School of Dental Medicine

 A Comparative Study of Three-Implant Supported Fixed Dentures and Two-Implant Retained Overdentures in Edentulous Mandible: A Pilot Study of Treatment Efficacy and Patient Satisfaction

Principal Investigator: Dr. Kuang-Han Chang

School: University of North Carolina School of Dentistry

• The Effect of Primers and Surface Characteristics on the Adhesion of Silicone Elastomers to Polyurethane

Principal Investigator: Dr. Paul P. Chang

School: University of Texas Health Science Center, San Antonio (2008)

 The Change in Retentive Values of Locator Attachments and Hader Clips Over Multiple Pulls

Principal Investigator: Dr. Elizabetha Evtimovska School: University of Maryland, Baltimore (2007)

Molecular Analysis of Edentulous Oral Mucosa Formation in Type 2 Diabetes Mice

Principal Investigator: Dr. Seiichi Yamano

School: Harvard University School of Dental Medicine (2007)

Characteristics of Retention between Prefabricated and Custom Cast Attachments

Principal Investigator: Dr. Chin-chuan Fu

School: University of Alabama at Birmingham (2007)

• Comparison of Denture Base Adaptation Using Three Different Processing Techniques

Principal Investigator: Dr. Jin Ha Joung

School: University of Connecticut Health Center (2006)

• Do Collagen Gels Enhance Osteoblast Adhesion and Differentialation?

Principal Investigator: Matt Miller

School: University of Iowa

Microbiota of the Edentulous

Principal Investigator: Dr. Amit Sachedo

School: Harvard University (2007)

• Effect of Cross-sectional Design on Fiber-reinforced Composite Fixed-detachable Denture Cantilever Failure

Principal Investigator: Kevin Scott

School: University of Oregon Health Sciences Center