RESEARCH DAY 2016

MAY 12, 2016
Annenberg Center for the Performing Arts
8am – 6pm
RESEARCH DAY COMMITTEE 2016

Markus Blatz, Chair
Hyun (Michel) Koo, Chair

Henry Daniell
Dana T. Graves
Robert Ricciardi
Songtao Shi

STUDENT RESEARCH COMMITTEE

Kathleen Boesze-Battaglia, Chair
Catherine Campbell
Heliya Ziai

AADR TRAVEL AWARD JUDGES

Hydar Ali
Gary Cohen
Henry Daniell
Evlambia Hajishegallis
Jonathan Korostoff
Claire Mitchell
Anh Le
Bruce Shenker
Songtao Shi
It is our great pleasure to welcome alumni, faculty, staff, students and friends to Penn Dental Medicine Research Day 2016.

We invite you to join us in celebrating as this year, for the first time, faculty, students and research staff will showcase the entire PDM research prowess in a single venue. The program features two keynote speakers, faculty talks and over 120 posters. We look forward to a day of exchange and collaboration with colleagues across disciplines that highlights the quality, depth and diversity of the School’s research.

We warmly welcome our guest speakers, Dr. Thomas A. Wynn and Prof. Dr. Irena Sailer. Dr. Wynn, Senior Investigator and Chief, Immunopathogenesis Section of Laboratory and Parasitic Diseases of NIH/NIAID, will deliver the Joseph L. Rabinowitz Memorial Lecture, “Molecular and Immunological Mechanisms of Fibrosis.” Prof. Dr. Sailer joins us from the University of Geneva where she is the Head of the Division of Fixed Prosthodontics and Biomaterials. She brings a clinical research perspective to the discussion and will speak on “Veneered or Monolithic? New Concepts in Restorative Dentistry.” We are excited they are with us.

Another highlight of the day is the presentation of the 2016 Joseph and Josephine Rabinowitz Award for Excellence in Research by members of the Rabinowitz family. The Rabinowitz Award supports pilot research among Penn Dental Medicine faculty with an emphasis on interdisciplinary or interdepartmental collaborations. It was created and endowed in 1992 by the late Dr. Joseph Rabinowitz and his wife Josephine. Dr. Rabinowitz was a member of the School’s Biochemistry faculty for 29 years. The award was created to promote independent research among faculty. We welcome and thank the Rabinowitz family for joining us.

Research Day will once again award travel grants to attend the IADR/AADR/CADR General Session in San Francisco next March 2017. This program is a PDM initiative to advance ongoing research and leadership for students and research investigators at Penn Dental Medicine. Ten DMD students will be selected to receive the 2016 AADR travel award. In addition, six individuals representing Master of Science in Oral Biology (MSOB), Doctor of Science in Dentistry (DScD), Residents and Junior Investigators will be selected to receive a travel award. The number of awards for this group has tripled from the last two years through the support of Dentsply and Johnson & Johnson. We also want to recognize Nobel Biocare for sponsoring Research Day 2016.

Penn Dental Medicine continues to build as a leader in the generation of new knowledge and cultivation of the next generation of oral researchers. We hope Research Day will lead to new collaborations, new insights, and innovations for the promotion of oral health. Enjoy the day.

Denis F. Kinane, BDS, PhD
Morton Amsterdam Dean

Dana T. Graves, DDS, DMSc
Vice Dean for Research and Scholarship

Hyun (Michel) Koo, DDS, PhD
Co-Chair, Penn Dental Medicine Research Day 2016

Markus B. Blatz, DMD, PhD
Co-Chair, Penn Dental Medicine Research Day 2016
THE JOSEPH L. RABINOWITZ MEMORIAL LECTURE

THOMAS A. WYNN, PHD
Senior Investigator and Chief, Immunopathogenesis Section of the Laboratory of Parasitic Diseases, NIH/NIAID
Scientific Director, NIH Oxford-Cambridge Scholars Program

Dr. Wynn is a senior investigator and chief of the Immunopathogenesis Section of the Laboratory of Parasitic Diseases. He also serves as the scientific director of the NIH-Oxford-Cambridge Scholars program, a doctoral training program for outstanding science students committed to biomedical research, which annually supports more than 64 doctoral candidates at NIH, Oxford University, and Cambridge University. Dr. Wynn obtained his Ph.D. from the University of Wisconsin-Madison Medical School in the department of microbiology and immunology. His laboratory group uses in vivo model systems to study the immunological mechanisms of inflammation and fibrosis. He has published over 200 papers, reviews, and book chapters in many prestigious journals, including Nature, Nature Immunology, Journal of Experimental Medicine, Gastroenterology, Nature Reviews Immunology, Nature Medicine, and Annual Review of Immunology. He has made important contributions to our understanding of the role of IL-13, IL-17A, and macrophages in the pathogenesis of fibrosis in multiple organ systems and has developed clinically relevant models to test novel anti-fibrotic drugs. His group collaborates extensively with the pharmaceutical industry to accelerate the translation of basic science discoveries into novel treatments for patients. Dr. Wynn was elected to fellowship in the American Academy of Microbiology in 2013 and has received several prestigious awards, including the Bailey K. Ashford Medal from the American Society of Tropical Medicine and Hygiene, the Oswaldo Cruz Medal from the Oswaldo Cruz Foundation, and two Merit Awards from NIH. Dr. Wynn has organized several national and international scientific meetings, including three Keystone Symposia and the first Aegean conference on Tissue Repair, Regeneration, and Fibrosis.
Irena Sailer, Prof. Dr. med. dent.
Head of the Division of Fixed Prosthodontics and Occlusion
University of Geneva

Irena Sailer received her dental education and Dr. med. dent. degree from the Faculty of Medicine, University of Tübingen, Germany in 1997/1998. In 2003 Dr. Sailer received an Assistant Professorship at the Clinic of Fixed and Removable Prosthodontics and Dental Material Sciences in Zurich. From 2010 on she was an Associate Professor at the same clinic. In 2007, Dr. Sailer was a Visiting Scholar at the Department of Biomaterials and Biomimetics, Dental College, New York University, USA. Additionally, since 2009 she holds an Adjunct Associate Professorship at the Department of Preventive and Restorative Sciences, Robert Schattner Center, School of Dental Medicine, University of Pennsylvania, Philadelphia, USA.

Since September 2013, she is the Head of the Division of Fixed Prosthodontics and Biomaterials at the University of Geneva.

Irena Sailer is a Specialist for Prosthodontics (Swiss Society for Reconstructive Dentistry), and holds a specialization degree for Dental Implantology (WBA) of the Swiss Society for Dentistry. She is a Member of the Board of the Swiss Society of Reconstructive Dentistry and of the Swiss Leadership Team of the ITI (International Team for Implantology). Furthermore, Irena Sailer serves the Scientific Boards of the European Association of Osseointegration and the Swiss Society of Implantology.

Irena Sailer is an Active Member of the European Academy of Esthetic Dentistry and an Associate of the Greater New York Academy of Prosthodontics.
8.30 AM  Welcome
Denis F. Kinane, BDS, PhD, Morton Amsterdam Dean
Markus B. Blatz, DMD, PhD
Hyun (Michel) Koo, DDS, PhD
Chairs, Penn Dental Medicine Research Day

8:45 AM  Oral Delivery of Protein Drugs Bioencapsulated in Plant Cells – Clinical
Henry Daniell, PhD

9:10 AM  Epithelium regulates connective tissue wound healing mediated by FOXO1
Dana Graves, DDS, DMSc

9:35 AM  DEL-1 restrains osteoclastogenesis and inhibits inflammatory bone loss in nonhuman primates
George Hajishengallis, DDS, PhD

10:00 AM  Coffee-Break

10:15 AM  C. albicans and S. mutans: a synergistic cross-kingdom alliance involved in early childhood caries
Hyun (Michel) Koo, DDS, PhD

10:40 AM  Hybrid degradation pathways are necessary for the clearance of intracellular debris in the maintenance of visual function.
Kathleen Boesze-Battaglia, PhD

11:05 AM  Basis and consequences of Periodontal disease susceptibility
Denis Kinane, BDS, PhD

11:30 AM  JOSEPH L. RABINOWITZ MEMORIAL LECTURE
“Molecular and Immunological Mechanisms of Fibrosis”
Thomas A. Wynn, PhD, Senior Investigator and Chief, Immunopathogenesis Section of the Laboratory of Parasitic Diseases, NIWHNI/NIAID Scientific Director, NIH Oxford-Cambridge Scholars Program

12:30 PM  Presentation of the Joseph and Josephine Rabinowitz Award
Group Photo/Lunch

1:30 PM  Poster Presentation and Poster Competition

3:30 PM  CLINICAL RESEARCH KEYNOTE SPEAKER
“Veneered or Monolithic? New Concepts in Restorative Dentistry”
Irena Sailer, Prof. Dr. Med. Dent., Head of the Division of Fixed Prosthodontics and Occlusion, University of Geneva

4:30 – 6 PM  Award Ceremony/Reception
FACULTY AND JUNIOR INVESTIGATOR POSTERS

*Junior investigators include the following categories: MSOB students, DScD students, Residents, Postdocs, Research Associates and Junior Faculty.
P-1  LOSS OF MREG DEPENDENT LAP LEADS TO ALTERED INTRACELLULAR LIPID PROCESSING IN THE RPE

D. C. Alexander¹, A. Dhingra¹, W. C. Gordon², B. Jun², N. G. Bazan², K. Boesze-Battaglia¹, A. Bragin¹

¹University of Pennsylvania School of Dental Medicine, Biochemistry
²Louisiana State University Health, Neuroscience Center of Excellence

P-2  FOXO1 ROLE EXPRESSED BY CHONDROCYTES IN DIABETIC INDUCED IMPAIRED FRACTURE HEALING

M.A. Alharbi¹, C. Zhang², L. Yi³, J.D. Ryu³, S. Alsadun³, D.T. Graves²

¹University of Pennsylvania School of Dental Medicine, Endodontics
²University of Pennsylvania School of Dental Medicine, Periodontics
³University of Pennsylvania School of Dental Medicine

P-3  REGULATION OF CELL-CELL FUSION BY HSV GLYCOPROTEINS IN THE ABSENCE OF A GD RECEPTOR

D. Atanasiu, W.T. Saw, R. Eisenberg, G.H. Cohen

University of Pennsylvania School of Dental Medicine, Microbiology

P-4  EXPERIMENTAL E.FAECALIS BIOFILM MODELS FOR TESTING NOVEL ENDODONTIC TREATMENTS

S. Bukhari¹, G. Jouanny¹, B. Karabucak¹, M. Trope¹, H. Koo²

¹University of Pennsylvania School of Dental Medicine, Endodontics
²University of Pennsylvania School of Dental Medicine, Orthodontics

P-5  GLOBAL SENSING OF THE ANTIGENIC STRUCTURE OF HSV GD USING HIGH-THROUGHPUT SPRI

T.M. Cairns¹, N.T. Ditto², H. Lou¹, B.D. Brooke², R.J. Eisenberg¹, G.H. Cohen¹

¹University of Pennsylvania School of Dental Medicine, Microbiology
²Wasatch Microfluidics

P-6  PLANT-MADE BOOSTER VACCINE TO CONFER IMMUNITY AGAINST DIFFERENT POLIO VIRUS SEROTYPES

H.T. Chari¹, Y. Xiao¹, W.C. Weldon², S.M. Oberste², K. Chumakov³, H. Daniell¹

¹University of Pennsylvania School of Dental Medicine, Biochemistry
²Centers for Disease Control and Prevention
³U.S. Food and Drug Administration, Center for Biologics Evaluation and Research
P-7  ALLOGENEIC MSC TRANSPLANTATION RESCUES BMMSICS IN SYSTEMIC SCLEROSIS MICE VIA MIR-151-5 TRANSFER

C. CHEN1, D. Wang2, A. Moshaverinia3, D. Liu1, X. Kou1, W. Yu1, L. Sun2, S. Shi1
1University of Pennsylvania School of Dental Medicine, Anatomy and Cell Biology
2The Affiliated Drum Tower Hospital of Nanjing University Medical School, Rheumatology and Immunology
3University of California Los Angeles School of Dentistry, Division of Advanced Prosthodontics

P-8  ACYLATION IS REQUIRED FOR THE RTX TOXINS ACTIVITY AND BINDING TO CHOLESTEROL

A.K. Giannakakis, N. Balashova, E.T. Lally
University of Pennsylvania School of Dental Medicine, Pathology

P-9  SPATIO-TEMPORAL ANALYSIS OF MICROENVIRONMENTS AND BACTERIAL ACTIVITY WITHIN INTACT 3D-BIOFILM

G. Hwang1, Y. Liu1, D. Kim1, V. Sun1, J. Lemos2, H. Koo1
1University of Pennsylvania School of Dental Medicine, Orthodontics
2University of Florida, Oral Biology

P-10  FOXO1 ORGANIZES KERATINOCYTTE ACTIVITY TO REGULATE ANGIOGENESIS DURING WOUND HEALING

H.H. Jeon1, Q. Yu2, E. Spencer1, O. Stepanchenko1, D.T. Graves1
1University of Pennsylvania School of Dental Medicine, Orthodontics
2Shanghai Jiao Tong University School of Medicine, Orthodontics

P-11  EMT CONTRIBUTES TO THE ACQUISITION OF TUMOR STEM CELL-LIKE PROPERTIES IN AMELOBLASTOMA

C. Jiang, Q. Zhang, L.R. Carrasco, A.D. Le
University of Pennsylvania School of Dental Medicine, Oral & Maxillofacial Surgery/Pharmacology

P-12  CANDIDA ALBICANS PROMOTE STREPTOCOCCUS MUTANS MICROCOLONY DEVELOPMENT VIA MICROBIAL METABOLITES

D. Kim1, A. Sengupta2, B. –H. Lee3, A. Weljie2, H. Koo1
1University of Pennsylvania School of Dental Medicine, Orthodontics
2University of Pennsylvania School of Medicine, Systems Pharmacology and Translational Therapeutics
3Purdue University School of Agriculture, Food Science
**P-13 INHIBITION OF NF-KB SIGNALING IN MESENCHYMAL STEM CELLS IMPROVES DIABETIC FRACTURE HEALING**

K.I. Ko, D.T. Graves

*University of Pennsylvania School of Dental Medicine, Periodontics*

**P-14 FAS/FAP-1 MACHINERY CONTROLS IL-1RA/EXOSOME SECRETION IN MSCS TO ACCELERATE WOUND HEALING**

X. Kou1, X. Xu2, C. Chen1, T. Cai3, C. Giraudo4

1*University of Pennsylvania School of Dental Medicine, Anatomy and Cell Biology*
2*University of Southern California, Center for Craniofacial Molecular Biology*
3*National Institutes of Health, National Institute of Dental and Craniofacial Research*
4*University of Pennsylvania The Children’s Hospital of Philadelphia, Pathology and Laboratory Medicine*

**P-15 NOVEL TOOLS TO ENHANCE TRANSLATION OF PROTEIN DRUGS AND QUANTITATION**

K.C. Kwon1, H-T. Chan1, I.R. León2, R. Williams-Carrier3, A. Barkan3, H. Daniell1

1*University of Pennsylvania School of Dental Medicine, Biochemistry*
2*Novo Nordisk, Global Research*
3*University of Oregon, Institute of Molecular Biology*

**P-16 NOVEL TOPICAL LOW-COST DELIVERY FOR ORAL BIOFILM TREATMENT**

Y. Liu1, A.C. Kamesh2, H. Daniell2, H. Koo1

1*University of Pennsylvania School of Dental Medicine, Orthodontics, Divisions of Pediatric Dentistry and Community Oral Health, Biofilm Research Lab*
2*University of Pennsylvania School of Dental Medicine, Department of Biochemistry*

**P-17 TIME-DEPENDENT OSTEOGENIC RESPONSE OF HOFMSCS UNDER SEVERE HYPOXIC**

T.T. Omolehinwa, S.O. Akintoye

*University of Pennsylvania School of Dental Medicine, Oral Medicine*

**P-18 BONDING PERFORMANCE OF FLOWABLE COMPOSITES TO CAVITY-FLOOR DENTIN AFTER THERMO-MECHANICAL AGING**

F. Ozer, B. Yaman, A. Bashllari, M.B. Blatz

*University of Pennsylvania School of Dental Medicine, Preventive and Restorative Sciences*
P-19  METABOLIC ENGINEERING OF AN ADJUVANT VIA NUCLEAR/CHOROPLAST GENOMES IMPACTS OFF-TARGET PATHWAYS

E.K. Pasoreck1, J. Su1, I.S. Silverman2, S.J. Gosai2, B.D. Gregory2, J.S. Yuan2, H. Daniell1
1University of Pennsylvania School of Dental Medicine, Biochemistry
2University of Pennsylvania School of Arts and Sciences, Biology
3Texas A&M University, Plant Pathology and Microbiology

P-20  LIPOSOMAL BUPIVACAINE FOR POST-SURGICAL ANALGESIA AFTER IMPACTED THIRD MOLAR EXTRACTIONS

P.B. Patel, E.L. Chung, H.E. Giannakopoulos, L.R. Carrasco
University of Pennsylvania School of Dental Medicine, Oral & Maxillofacial Surgery/Pharmacology

P-21  RPE CELLS OXIDIZE FATTY ACID FROM INGESTED PHOTORECEPTOR OUTER SEGMENTS TO PRODUCE KETONE BODIES

J. Reyes-Reveles1, K. Boesze-Battaglia1, D. Alexander1, A. Dhingra1, A. Bragin1, N. J. Philp2
1University of Pennsylvania School of Dental Medicine, Biochemistry
2Thomas Jefferson University, Pathology Anatomy and Cell Biology

P-22  TEMPOROMANDIBULAR PROSTHETIC JOINT INFECTION: A TWENTY YEAR INSTITUTIONAL RETROSPECTIVE

R.A. Riegel, H. E. Giannakopoulos, P.D. Quinn, E.J. Granquist
University of Pennsylvania School of Dental Medicine, Oral & Maxillofacial Surgery/Pharmacology and Hospital of the University of Pennsylvania

P-23  STAT1, A CRITICAL TRANSCRIPTIONAL FACTOR FOR NEGATIVE REGULATION OF OSTEOCLASTOGENESIS BY MFGE8

J. Shin1, K. Hosur1, T. Chavakis2, G. Hajishengallis1
1University of Pennsylvania School of Dental Medicine, Microbiology
2Technische Universität Dresden, Germany

P-24  INNATE LYMPHOID CELLS IN LEUKOCYTE ADHESION DEFICIENCY-ASSOCIATED MUCOSAL INFLAMMATION

B. Wang1, T. Kajikawa1, X. Li1, N. Moutsopoulos2, T. Chavakis3, G. Hajishengallis1
1University of Pennsylvania School of Dental Medicine, Microbiology
2National Institute of Dental and Craniofacial Research, NIH, Bethesda, MD 20892, USA, Oral Immunity and Inflammation Unit
3Technische Universität Dresden, Clinical Pathobiochemistry and Institute for Clinical Chemistry and Laboratory Medicine
P-25  SALIVARY GLAND REGENERATION USING HUMAN ADULT EPITHELIAL STEM CELLS FROM THE DENTAL FOLLICLE

Q. Xu, A. Furuhashi, Q. Zhang, C. Jiang, A.D. Le
University of Pennsylvania School of Dental Medicine, Department of Oral & Maxillofacial Surgery/Pharmacology

P-26  CHRONIC HIGH DOSE ALCOHOL INDUCES OSTEOPENIA VIA ACTIVATION OF MTOR SIGNALING IN BMMSCS

Y. Liu¹, X. Kou¹, C. Chen¹, Yong Kim², Yi Liu³, Songtao Shi³
¹University of Pennsylvania School of Dental Medicine, Anatomy and Cell Biology
²UCLA School of Dentistry, Division of Oral Biology and Medicine
³Capital Medical University School of Stomatology, Periodontics

P-27  TREATMENT OF CHILDREN WITH JIA AND TMJ INVOLVEMENT WITH MINIMALLY INVASIVE SURGERY

J. Yu, B. Wang, S. Wang, F. Liu, H. Giannakopoulos
University of Pennsylvania School of Dental Medicine, Oral and Maxillofacial Surgery/Pharmacology

P-28  ORTHODONTIC TREATMENT MEDIATES DENTAL PULP MICROENVIRONMENT VIA IL17A

W. Yu¹, Y. Zhang², C. Jiang², W. He², Y. Yi², J. Wang², S. Shi³
¹University of Pennsylvania School of Dental Medicine, Anatomy and Cell Biology
²West China Hospital and School of Stomatology, Sichuan University, Orthodontics
SP-1
COMPREHENSIVE CARE IN PATIENTS WITH SICKLE CELL DISEASE
M. Breglio, S. Commito, J. Gluch, J. Lewis
1 University of Pennsylvania, School of Dental Medicine
2 University of Pennsylvania, School of Social Policy and Practice

SP-2
DEVELOPMENT OF DEL-1-SPECIFIC ELISA TO INVESTIGATE THE RELATIONSHIP BETWEEN DEL-1 AND PERIODONTITIS
C. Chang

SP-3
TEEN TALKS: PROVIDING HEALTH EDUCATION TO AT-RISK ADOLESCENTS
K. Goldman, B. McElroy, J. Gluch, J. Lewis, F. Torrisi
1 University of Pennsylvania School of Dental Medicine
2 University of Pennsylvania School of Dental Medicine, Community Oral Health
3 11th Street Family Health Services

SP-4
NASOTRIGEMINAL REFLEX IN THE EARLY DETECTION OF PARKINSON’S DISEASE
M. Gross

SP-5
PATTERSON SCHOOL CAMP: TEACHING KIDS TO TAKE CHARGE OF THEIR HEALTH
J. Gwo

SP-6
TARGETED DELIVERY OF PROTEIN WITH FUSION TAGS TO DIFFERENT HUMAN PERIODONTAL CELLS
M. Hayes

SP-7
FOOD FOR THOUGHT: ADDRESSING ISSUES OF HUNGER IN THE PHILADELPHIA COMMUNITY.
R. Ivins, S. Ali, K. Lenzl, J. Lewis, A. Stahl
1 University of Pennsylvania School of Dental Medicine
2 Drexel University College of Medicine
3 Thomas Jefferson University, College of Pharmacy
4 Temple University College of Public Health
5 Philadelphia College of Osteopathic Medicine

SP-8
CLINICIAN PERSPECTIVES REGARDING INTERNET-BASED INFORMATION ON BURNING MOUTH SYNDROME
E. Kim

SP-9
HEALTHY SMILES RUNNING MILES FOR HEALTHY LIFESTYLES
M. Koennecke

SP-10
THE TRANSFORMATION OF DENTAL MESENCHYMA CALLS INTO RETINAL EPITHELIAL CELLS
C. Lee

SP-11
THE EFFECTS OF ANTI-RETROVIRAL DRUGS ON NEURONS OF THE CENTRAL NERVOUS SYSTEM
R. Lee

SP-12
IN-VITRO GROWTH OF CHONDROCYTES ON ZIRCONIA VIA CO-CULTURING OF OSTEOBLASTS AND CHONDROCYTES
F. Li

SP-13
INFLUENCE OF SURFACE MODIFICATIONS ON BACTERIAL ADHERENCE TO IMPLANT ABUTMENT MATERIALS
Y. Mack

SP-14
CULTIVATING SEEDS OF HEALTH AND WELLNESS IN DIVERSE SOUTH PHILLY
K. Modii, E. Dalton, K. Weaver
1 University of Pennsylvania School of Dental Medicine
2 Thomas Jefferson University Sidney Kimmel Medical College
3 University of Pennsylvania School of Nursing
4 Aquinas Center

SP-15
EFFECTS OF SURFACE MODIFICATIONS ON FRACTURE STRENGTH OF MONOLITHIC ZIRCONIA AT VARIOUS THICKNESSES
A. Naden

SP-16
IKKβ KNOCKDOWN IN MSCS LEADS TO DEVELOPMENTAL ANOMALIES IN MSC-DERIVED TISSUES
A. T. Nguyen

SP-17
BEAUTY IS MORE THAN SKIN DEEP: A DAY OF PAMPERING AND WOMEN’S WELLNESS
M. Pandya, C. Baginski
1 University of Pennsylvania School of Dental Medicine
2 Sayre Health Center

SP-18
CHONDROGENIC DIFFERENTIATION OF STEM CELLS ON TITANIUM
S. Park

SP-19
INFECTION OF ORAL MESENCHYMAL STEM CELLS BY KSHV
R. Rosenblatt

SP-20
BEE HEALTHY
A. Robinson, K. Buckshire
1 University of Pennsylvania Perelman School of Medicine
2 University of Pennsylvania School of Dental Medicine
3 Earth’s Keepers, Inc.
SP-21
EFFECT OF THE ADDITION OF SURFACTANT TO BIOACTIVE CEMENTS AND COMPOSITE RESIN ON CRYSTAL FORMATION
O. Rotondi

SP-22
REGULATION OF KSHV RTA PROTEIN ABUNDANCE BY SELF-UBIQUITINATION
A. Sun

SP-23
HEALTH ADVOCACY AND OUTREACH AT PUBLIC CITIZENS FOR CHILDREN AND YOUTH
M. Vonderheide1, R. Johnson2
J. Gluch, C. Christian2
1University of Pennsylvania School of Dental Medicine
2University of Pennsylvania Perelman School of Medicine

SP-24
ROLE OF PHOSPHATIDYLINOSITOL 3-KINASE (PI3K) IN ORAL SQUAMOUS CELL CARCINOMA
H. Yi

SP-25
adolescent professional development through urban beautification and Environmentally sustainable projects
I. Zhang1, J. Mitchell2
J. I. Gluch, M. Hervada-Page2
1University of Pennsylvania School of Dental Medicine
2Thomas Jefferson University Sidney Kimmel Medical College

SP-28
TO INCREASE OR MAINTAIN? VERTICAL DIMENSION CONSIDERATIONS IN WEAR CASES
S. Chu

SP-29
TREATMENT PLANNING FOR UNILATERAL POSTERIOR MAXILLARY EDENTULISM WITH INADEQUATE INTEROCCLUSAL SPACE
M. Comfort

SP-30
FORCED ERUPTION FOR IMPLANT SITE DEVELOPMENT
D. Cuesta

SP-31
COSMETICS AND RESTORING VERTICAL DIMENSION OF OCCLUSION
R. Desai

SP-32
INTERDISCIPLINARY TREATMENT MANAGEMENT WITH PARTIAL LOSS OF POSTERIOR TEETH
A. Joy

SP-33
EFFICACY OF PANORAMIC RADIOGRAPHS IN DETECTING CYSTIC LESIONS OF IMPACTED THIRD MOLARS: A REVIEW
V. Katyal, A. Bianchi, L. Walla

SP-34
VIOLATING THE BIOLOGIC WIDTH
J. Kang

SP-35
VARIOUS OVERDENTURE TREATMENT OPTIONS FOR THE PARTIALLY DENTATE
D. Lee

SP-36
A CLINICAL CASE: THE ANTERIOR TWO-UNIT CANTILEVER BRIDGE
T. (Myung Eun) Min

SP-37
A CASE STUDY ON MINOR TOOTH MOVEMENT
M. Patel

SP-38
RESTORING ANTERIOR GUIDANCE
J. Pham

SP-39
RESTORING POSTERIOR OCCLUSION IN THE PARTIALLY DENTATE PATIENT
P. Planzos

SP-40
FEATHER EDGE PREPARATIONS AND MANAGING THE BIOLOGIC WIDTH IN THE ESTHETIC ZONE
J. Simpson

SP-41
MINOR TOOTH MOVEMENT IN THE RESTORATION OF GINGIVAL HEALTH AND ESTHETICS
B. Stein

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TRAUMATIC OCCLUSION IN THE CANINE
M. Tuchman

SP-43
SAVE A TOOTH PROJECT-FORCED ERUPTION ON A NON-RESTORABLE TOOTH
J. Zoga

SP-44
PUENTES DE SALUD–BUILDING BRIDGES FOR ORAL HEALTH
A. Arzouman, A. Caridad, N. Shen, J. Ye
M. Cummings
University of Pennsylvania School of Dental Medicine, Community Oral Health

CLINICAL HONORS

SP-26
TREATMENT PLANNING PARTIALLY EDENTULOUS PATIENT WITH SEVERE CHRONIC PERIODONTITIS
S. Y. Ahn

SP-27
FOUR UNIT ANTERIOR ESTHETICS CASE WITH FUNCTIONAL AND OCCLUSAL MANAGEMENT
Z. Chen

COMMUNITY HONORS

SP-44
PUENTES DE SALUD–BUILDING BRIDGES FOR ORAL HEALTH
A. Arzouman, A. Caridad, N. Shen, J. Ye
M. Cummings
University of Pennsylvania School of Dental Medicine, Community Oral Health
THE HOMELESS HEALTH INITIATIVE
A. Brand, S. Ghoham, M. Harley
J. Gluch1, M. Johnson2, K. Hudson2
1University of Pennsylvania School of Dental Medicine, Community Oral Health
2Children’s Hospital of Philadelphia

SP-46
A. PHILLIP RANDOLPH CAREER AND TECHNICAL SCHOOL ORAL HEALTH ACADEMY AT PENN DENTAL MEDICINE
B. Dubose-Williams
B. Crawford1, C. Fenster2
1University of Pennsylvania School of Dental Medicine, Diversity and Community Outreach
2Children’s Hospital of Philadelphia

EXPANSION OF DENTAL CARE FOR PEOPLE LIVING WITH HIV/AIDS AND THOSE AT HIGH RISK.
R. Duong, M. Chochocholik
J. Gluch1, X. R. Hexem2
1University of Pennsylvania School of Dental Medicine, Community Oral Health
2Philadelphia FIGHT

A TRANSITIONAL SANCTUARY FOR AT-RISK YOUTH: COVENANT HOUSE PHILADELPHIA
P. Barg
J. Gluch1, D. Reis2
1University of Pennsylvania School of Dental Medicine, Community Oral Health
2Covenant House Pennsylvania

ORAL HEALTH FOR INFANTS
K. Goldman, B. Kane
J. Gluch1, J. Williams2
1University of Pennsylvania School of Dental Medicine, Community Oral Health
2Hope Pregnancy Center

VIETNAMESE UNITED FOR HEALTH PROJECT
T. Hoang, G. Duong, W. Lam
J. Gluch1, N. K. Do2
1University of Pennsylvania School of Dental Medicine, Community Oral Health
2Vietnamese United for Health Organization

EDUCATIONAL PROGRAM ANALYSIS OF UNIVERSITY CITY HOSPITALITY COALITION
A. Ivanhoe, H. Chiarello
E. Witsch1
1University of Pennsylvania School of Dental Medicine, Community Oral Health

REACHING OUT TO THE UNDERSERVED KOREAN POPULATION OF WEST PHILADELPHIA
J. H. Kim, Y. J. Lee
Y. Kim1, M. Lee2, S. Harts3
1University of Pennsylvania School of Dental Medicine, Periodontics
2First Generation Church
3PASSI

INTERDISCIPLINARY HEALTHCARE THROUGH EDUCATION AND PREVENTION
M. Kim, D. Lee, Y. Rhee, T. Rubinstein
J. Gluch1, B. Work2
1University of Pennsylvania School of Dental Medicine, Community Oral Health
2University of Pennsylvania, Penn Medicine

INCREASING ORAL HEALTH AWARENESS IN LOCAL KOREAN CHURCH COMMUNITIES
M. S. Kim, J. Chang
J. Kim1, K. A. Lee2, S. K. Sim3
1University of Pennsylvania School of Dental Medicine, Endodontics
2Emmanuel Church
3Young-Sang Presbyterian Church

ORAL HEALTH AWARENESS PROGRAM AT PHILADELPHIA VETERAN’S HOUSE
N. Kim, T. Kim, J. Lee, E. Lin
B. Gallagher1
1Philadelphia Veteran’s House

STANDARDIZED ELECTRONIC SCREENING FORMS FOR COMMUNITY ORAL HEALTH SITES
K. Kitagaito, J. D. R. Ryu
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HEALTHY SMILES RUNNING MILES FOR HEALTHY LIFESTYLES
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GIVE KIDS A SMILE
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2Kids Smiles
3Healthy Newsworks

ORAL HYGIENE AND ORTHODONTIC EDUCATION PROGRAM
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LIFE: LIVING INDEPENDENTLY FOR ELDERS
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PRIMARY DENTAL CARE FOR CHILDREN IN WEST PHILADELPHIA SCHOOLS DISTRICT
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