April 20-21 2017
SULLIVAN CONFERENCE CENTER
UNIVERSITY OF HAWAI’I CANCER CENTER

BIOMEDICAL SCIENCES AND HEALTH DISPARITIES RESEARCH SYMPOSIUM

PRESENTED BY
LIST OF POSTERS 2017
Biomedical Sciences and Health Disparities Symposium
April 20-21, 2016
John A. Burns School of Medicine

Key to Abbreviations
ANAT-Anatomy, Biochemistry and Physiology
BDMC-Biostatistics and Data Management Core
CCR-Center for Cardiovascular Research
CMB-Cell and Molecular Biology
DRB-Developmental and Reproductive Biology
HPU-Hawaii Pacific University
IBR-Institute for Biogenesis Research
KCC-Kapiolani Community College
LCC-Leeward Community College
NHH-Native Hawaiian Health
PBRC-Pacific Biosciences Research Center
PH-Public Health Sciences
QMC-Queen’s Center for Biomedical Research
TRMD-Tropical Medicine, Medical Microbiology and Pharmacology
UHCC-University of Hawai’i Cancer Center
UHMC-University of Hawai’i Maui College
WCC-Windward Community College

Presenters       Sponsor       Department

Faculty

Ji-Young An, PhD  Claudio Nigg   PH
Abstract: A predictive model of risk factors for adolescent suicide applying decision tree analysis of social media data
(Co-authors: Juyoung Song, PhD, Taemin Song, PhD Fernando Martin-Sanchez, PhD, Claudio R. Nigg, PhD)

Hong-Ru Chen, MD      IBR/OB/GYN
Abstract: Pregnancy risk assessment of commonly prescribed blood pressure medications using mammalian stem cell test
(Co-author: Yusuke Marikawa, PhD)

Andrea H. Hermosura, PhD     NHH
Abstract: Utilizing the community-based participatory research approach to develop a non-technical skills training program to reduce racial and ethnic disparities in surgical outcomes
(Co-author: Todd Seto, MD)

Mukesh Kumar, PhD TRMD
Abstract: Zika Virus-associated microcephaly in Hawaii
(Co-authors: Marian Melish and Vivek R. Nerurkar)

Eunjung Lim, PhD CIM
Abstract: Racial and ethnic disparity in mental health service utilization among Hawaii Medicaid population
(Co-authors: Krupa Gandhi, MPH, Chathura Siriwardhana, PhD, James Davis, PhD, &John J Chen, PhD)
Alika K. Maunakea, PhD  
Abstract: Delay in the developmental trajectory of intragenic DNA methylation underlies altered pre-mRNA splicing in autism spectrum disorders  
(Co-authors: Michael J. Corley, Alina PS Pang, Annette Lum-Jones, Dongmei Li, Vedbar Khadka, Robert J. Blanchard, D. Caroline Blanchard)

Lucia A. Seale  
Abstract: Metabolomics profiling of the liver of the selenocysteine lyase knockout mouse  
(Co-authors: Herena Ha, Ashley N. Ogawa-Wong, Ann C. Hashimoto, Wei Jia, Guoxiang Xie, Marla J. Berry)

MEDICAL FELLOWS

Eleanor R. Hastings, MD  Kamal Masaki  Geriatrics  
Abstract: Late-life handgrip strength predicts incident stroke: The Kuakini Honolulu Heart Program  
(Co-Authors: Randi Chen, MS; G. Webster Ross, MD; Robert Abbott, PhD; Helen Petrovitch, MD; Aida Wen, MD; Cody Takenaka, MD; Bruce Tamura, MD; Kamal Masaki, MD)

Angel Kirkham, MD  Kamal Masaki  Geriatrics  
Abstract: Slow gait speed as a predictor of mortality in elderly Japanese-American men: The Kuakini Honolulu Heart Program  
(Co-authors: Randi Chen, MS; Bradley Willcox, MD; Samina Ahsan, MD; Karen Lubimir, MD; Pia Lorenzo, MD)

Corey J. Lum, DO  Todd Seto/Ralph Shohet  CCR/Medicine  
Abstract: The cost-benefit balance of statins in Hawai‘i: A Moving Target  
(Co-authors: Kazuma Nakagawa, M.D., Ralph V. Shohet, M.D., Todd B. Seto, M.D., M.P.H., and Deborah A. Taira, Sc.D.)

Saiud Hasib Sana, MD  Kamal Masaki  Geriatrics  
Abstract: Development and evaluation of a quality assurance and process improvement curriculum using the INTERACT program.  
(Co-Authors: Aida Wen, MD; Cody Takenaka, MD; Peter Fish, MD; James Templeman, MD; Ishrat Jahan, MD; Angel Kirkham, MD; Eleanor Hastings, MD; Seabrook Mow, MD; Kamal Masaki, MD)

Ryan Schlueter, DO  Burlingame, Janet,  OB/GYN  
Abstract: Title: Correlation of maternal weight gain intervals and risk of stillbirth in term pregnancy  
(Co-Authors: Hyeong Jun Ahn, So Yong Choi, Janet Burlingame)

Ryan Schlueter, DO  Lana Garmire,  OB/GYN  
Abstract: Title: Metabolomics analysis of umbilical cord blood associated with maternal obesity: pilot results  
(Co-authors: Garmire L, Benny P, Al-Akwaaa F, Gurary A)

Jonathan L. Sladky, MD  Andrew Nichols  Sports/Family Medicine  
Abstract Title: Screening for atlantoaxial instability in down syndrome: current practices and opinions of academic primary care sports medicine specialist physicians  
(Co-authors: James R. Templeman, MD, Kamal Masaki, MD)  
Geriatrics

James R. Templeman, MD  Kamal Masaki  Geriatrics
Abstract: Low ankle-brachial index and risk of cognitive decline in elderly Japanese-American men: The Kuakini Honolulu-Asia Aging Study

(Co-Authors: Randi Chen, MS; Robert Abbott, PhD; G. Webster Ross, MD; Helen Petrovitch, MD; Lenore Launer, PhD; Michiko Inaba, MD, PhD; Lauren Okamoto, MD; Matthew Uechi, MD; Kamal Masaki, MD)

Kelly S. Yamasato, MD  G. Bryant-Greenwood OB/GYN

Abstract: Human relaxins (RLNH1, RLNH2), their Receptor (RXFP1), and fetoplacental growth.

(Co-authors: Pai-Jong Stacy Tsai, James Davis, Sandra Y. Yamamoto, Gillian D. Bryant-Greenwood)

RESIDENTS

Nobuhiro Ariyoshi, MD  Gehan Devendra, Internal Medicine

Abstract: Clinical prediction rule for drug-resistant organisms in hospitalized patients with pneumonia

(Co-authors: Ivy Melgarejo, MD, Dominic Chow MD, Masayuki Nogi MD)

Nishal Brahmbhatt, MD  Kamal Masaki, Internal Medicine

Abstract: Evaluating the effect of a wellness curriculum on overall resident well-being and burnout.

(Co-Authors: Nani Morgan MD, Michael Tom MD, Kamal Masaki MD)

Therese Posas-Mendoza, MD  Robert Hong/Diane Tran Internal Medicine

Abstract: Evaluating the effect of a wellness curriculum on overall resident well-being and burnout. University of Hawaii Internal Medicine Residency Program

(Co-Authors: Nani Morgan MD, Michael Tom MD, Kamal Masaki MD)

Faye Tachibana, MD  Jonathan Dworkin, Medicine

Abstract: A rare case of eysipelothrix rhusiopathiae aortic bioprosthetic valve endocarditis

(Co-authors: Nattawat Klomjit, MD, Jonathan Dworkin, MD)

Tanawan Riangwiwat, MD  Medicine

Abstract: Neuroendocrine tumor: A rare cause of refractory hypokalemia.

(Co-authors: Nattawat Klomjit, MD, Ma Clarisse Toledo Santos, MD)

MEDICAL STUDENTS

Justin Cheng, MS  Fereydoun Don Parsa Surgery

Abstract: Humanized murine model for excisional wound healing with improved analysis of healing using K14 transgenic mice


Jayden M. Galamgam  Takashi Matsui Medicine

Abstract: Calcium-mediated effects of cardiomyocyte cell-to-cell death in an in vitro model of ischemia-reperfusion injury

(Co-authors: Yuichi Baba MD, Dustyn Uchiyama BS, and Takashi Matsui MD PhD)

Trudy Hong  Scott Lozanoff Anatomy

Abstract: Use of augmented reality tools in anatomy education

(Co-authors: Kaori Tamura, Jesse Thompson, Beth K. Lozanoff, Steven Labrash, Takashi Matsui, Scott Lozanoff)
Abstract: Live in-office video recording of pediatric cast care instructions: Caregiver satisfaction and lessons learned; study performed at The Mary Savio Medical Plaza in association with Hawaii Pacific Health

(Co-authors: Byron Izuka M.D, Nick Scarcella M.D, Christina Wu)

William G. Lee Takashi Matsui ANAT
Abstract: Histological assay reveals unique fibrotic changes in the septum of hypertrophic cadaveric hearts

(Co-authors: Yuichi Baba, MD, Briana K. Shimada, BA, Jason K. Higa, PhD, Ari AuWinitzky, MSc, Scott Lozanoff, PhD, and Takashi Matsui, MD, PhD)

Amy Li Kamal Masaki Geriatrics Medicine
Abstract: Elucidating the role of FUS and its interaction with the tau tubulin kinases 1 and 2 (TTBK1/2) in neurodegenerative diseases

(Co-authors: Laura M. Taylor, Brian C. Kraemer)

Carlthan Ling Sumodh Kalathil Medicine
Abstract: Comparative analysis of risk factors in hepatocellular carcinoma patients with variable degree of liver fibrosis

(Co-authors: Linda Wong, Eunjung Lim, John Chen)

Kiyonari Noguchi Takashi Matsui ANAT/CCR
Abstract: mTOR deletion impairs cardiomyocyte contraction and calcium handling

(Co-author: Briana Shimada, BA)

Michele S. Saruwatari Justin Young Primary Care/Sports Medicine
Abstract: Survey of current attitudes and practices of serum ferritin monitoring in collegiate athletes by primary care sports medicine fellowship program directors

(Co-authors: Justin Young, MD; Andrew Nichols, MD)

Justin D. Shortell Kamal Masaki Geriatric Medicine
Abstract: Relationship between sociodemographic factors and Graves’ Orbitopathy – work done at University of North Carolina School of Medicine

(Co-authors: Ashley Oskardmay, Jeff Laux PhD, Y. Claire Yang PhD, David Chesnutt MD)

Jamie Takayesu Kamal Masaki Geriatric Medicine
Abstract: Outcomes of stereotactic body radiation therapy for primary hepatocellular carcinoma

(Co-authors: Jeffrey Burkeen MD, Daniel Simpson MD, Jona Hattangadi-Gluth MD)

Nash Witten Joseph Humphry Family Medicine
Abstract: The role of technology enabled care in a remote Hawaiian community: Lānai

(Co-author: Joseph Humphry, MD)

Jonathan Woo Takashi Matsui ANAT/CCR
Abstract: Cell-to-cell propagated clustering of dead cells in cardiomyocytes exposed to an iron-dependent trigger of cell death

(Co-authors: Yuichi Baba MD, Takashi Matsui, MD, PhD)
POST-DOCTORAL FELLOWS

Fadhl Alakwaa      Lana Garmine      CC/OB/GYN/MBBE
Abstract: Deep Learning predicts breast cancer estrogen receptor status from metabolomics data

Komal Arora       Robert Nichols      CMB
Abstract: Transcriptome profile of nicotinic receptor-linked beta amyloid neurotoxicity
(Co-authors: Mahdi Belcaid and Robert A. Nichols)

Yuichi Baba       Takashi Matsui        ANAT
Abstract: Protective effects of mTOR against ferroptosis, a form of iron-dependent regulated cell death, in Cardiomyocytes
(Co-authors: Briana K. Shimada, Kate M. Horiuchi, Jason K. Higa, Tomohiro Suhara)

Paula Benny       Lana Garmine       UHCC/Epidemiology
Abstract: Differential epigenetic profile analysis in cord blood stem cells from offspring of obese and normal weight mothers in a multi-ethnic cohort
(Co-authors: R. Schlueter, F. Al-Akwaa, Alex Gurary, Annette Lum - Jones, Karolina Peplowska, M. Tiirikainen, L. Garmire)

Sung-Min Kim      Yukiko Yamazaki    ANAT/IBR
Abstract: Retinoic acid-mediated ERK signaling regulates meiotic initiation in cultured primordial germ cells
(Co-authors: Toshifumi Yokoyama, Ferhat Ulu, Yukiko Yamazaki)

Kumardeep Chaudhary  Lana Garmine  UHCC
Abstract: Deep Learning based multi-omics integration robustly predicts survival in liver cancer
(Co-authors: Olivier Poirion, Liangqun Lu and Lana X Garmire)

Sara McCurdy       William Boisvert     CCR
Abstract: CD98hc deficiency impairs macrophage proliferation and reduces atherosclerosis development

Kathryn Schunke    Ralph Shohet       CCR
Abstract: A novel inhibitor of HIF action
(Co-authors: Karen H. Chang, Chad B. Walton, Ralph V. Shohet)

Allison L. Williams   Ralph Shohet      CCR
Abstract: Ischemic heart injury leads to HIF1-dependent differential splicing of CaMK2g
(Co-Authors: Chad B. Walton, Abigail Avelar, Blake Pinell and Ralph V. Shohet)

RESEARCH ASSOCIATES

Catherine C. Chao      Kore Liow     HI Pacific Neuroscience
Abstract: Age of patients does not affect the choice of anti-epileptic drug for patients with Epilepsy

Karen H.F. Chang   Pamela Tauchi-Nishi  QMC
Abstract: Intraoperative H+E and Diff-Quik stained squash and touch preparation cytology of brain lesions: A 20-Year Retrospective Analysis
Krupa Gandhi  John Chen  CIM
Abstract: Racial disparities in health service utilization among Medicare fee-for-service beneficiaries adjusting for multiple chronic conditions.
(Co-authors: Eunjung Lim, PhD; James Davis, PhD; John J. Chen, PhD)

Mylien J. S. Ibarra  Yukiko Yamazaki  ANAT/IBR
Abstract: The effects of amino acids on preimplantation development of In vitro fertilized oocyte in mice
(Co-authors: Yukiko Yamazaki, Ph.D. Co-Investigator: Sung-Min Kim, Ph.D)

ZoeAnn A. Kon  Pamela Tauchi-Nishi  QMC/Pahtology
Abstract: Urinecytology and UroVysion fluorescence In-Situ hybridization of renal cell carcinoma.
(Co-authors) Rasleen Saluja, MD, Sayuri Wada, Pamela Tauchi-Nishi, MD

Matt Ohtani  Pamela Tauchi-Nishi  Pathology
Abstract: Primary hrHPV screening: The efficacy of hrHPV screening vs. cotesting utilizing the SurePath Pap/Aptima assay HPV platform
(Co-authors: Andy Cuniberti CT (ASCP), Pamela Tauchi-Nishi MD)

Eun-young Park  Lishomwa Ndhlouv TRMD
Abstract: Quantifying CCR2 and CCR5 expression in human adipose tissue with real-time PCR
(Co-authors: Ivo SahBandar, Michelle D’antoni, Glen Chew, Lishomwa Ndhlouvu.)

Alec M. Sheppard  Kore Liow  HI Pacific Neuroscience St. Francis
Abstract: Does insurance status of patients affect the choice of anti-epileptic drugs for epileptic patients?
(Co-authors: Catherine Chao, Alec Sheppard, Sean Awakuni, Dr. Rhea Alarin, Dr. Renee Del Carmen, Dr. Barbara Pitts, Dr. Kore Liow)

Sayuri Suzuki  Andrea Fleig  QMC/Cell Signaling Lab
Abstract: The kinase domain of TRPM7 channel limits cellular calcium release by regulating heterotrimeric G-proteins
(Co-authors: Annette Lis, Carsten Schmitz, Reinhold Penner, Andrea Fleig)

Elizabeth Tallett  Jane Onoye  Psychiatry
Abstract: Perinatal health issues in Hawai‘i: A needs assessment, University of Hawai‘i at Mānoa
(Co-Authors: Mika Thompson, BS, Jane Onoye, PhD)

Mika Thompson  Jane Onoye  Psychiatry
Abstract: Examination of maternal alcohol use and related risk factors from a perinatal support services program
(Co-Authors: Jane M. Onoye, Emma Pascal, Donald Hayes, Elizabeth Tallett, BA)

**GRADUATE STUDENTS**

Mapuana  CK Antonio  Kathryn Braun  PH
Abstract: A study of the psychometric properties of a resilience construct in a Native Hawaiian sample
Abstract: *A novel role of Schlafen4 in West Nile virus replication and pathogenesis*
(Co-authors: Keeton K. Krause, Lauren Ching, Vivek R. Nerurkar and Mukesh Kumar)

Abstract: *Juvenile Shank3b deficient mice present with behavioral phenotype consistent with autism spectrum disorders*
(Co-authors: Michael J. Corley, Tiffany Eulalio, Ka’ahukane Leite-ahyo, Alina P.S. Pang, Alika Maunakea, Monika A. Ward)

Abstract: *Identification and characterization of the association of circulating biomarkers for diagnosis of Kawasaki Disease*
(Co-author: Vivek Nerurkar)

Abstract: *Pan-cancer analysis of expressed single nucleotide variants in long intergenic non-coding RNA*  
(Co-author: Lana Garmire)

Abstract: *Modeling the impacts of varying levels of placental glucose transport in on fetal growth and offspring health*  
(Co-authors: Joel Marh, Ilko Stoychev, Haide Razavy, Kainalu Matthews, Vivien Klein)

Abstract: *Epigenetic regulation of human polyomavirus JC replication*  
(Co-authors: Nelson Lazaga, Priscilla Seabourn and Vivek R. Nerurkar)

Abstract: *N-Terminal fragment and active core sequence of beta amyloid protects against beta amyloid-induced oxidative stress, apoptosis and memory impairment*  
(Co-authors: N Alfulaij, K Arora and RA Nichols)

Abstract: *The exocyst complex in insulin stimulated glucose uptake in mouse skeletal muscle cells*  
(Co-authors: Toshifumi Yokoyama, Ferhat Ulu, Yukiko Yamazaki)

Abstract: *Structural and functional studies of selenoprotein K*  
(Co-authors: Michael Marciel, FuKun W. Hoffmann, Peter R. Hoffmann)

Abstract: *RRas regulation of a key vascular permeability signaling pathway*  
(Co-authors: Pavlos Anastasiadis, Lisa Wolter, John Allen, and Michelle Matter)
Abstract: Role of selenoprotein M in hypothalamic Endoplasmic Reticulum (ER) Stress, leptin signaling and calcium regulation
(Co-authors: Matthew W. Pitts, Marla Berry)

Herena Y. Ha Lucia A. Seale CMB
Abstract: Expression and activity of enzymes of selenium metabolism in the selenoprotein P knockout mouse
(Co-Authors: Ann C. Hashimoto, Marla J. Berry)

Sijia Huang Lana Garmine UHCC/Epidemiology
Abstract: Novel personalized pathway-based approach reveals key pathways in predicting breast cancer diagnosis and prognosis
(Co-authors: Nicole Chong, Cameron Yee, Nathan E Lewis, Herbert Yu, Guoxiang Xie)

Malina J. Ivey Michelle Tallquist CCR/CMB
Abstract: Platelet derived growth factor receptor alpha signaling regulates fibroblast maintenance and activation
(Co-author: Michelle Tallquist)

Charnelle B. Julian Oliver Le Saux CMB/MBBE
Abstract: Induced calcification in Abcc6−/− mice changes the expression of genes downstream in the Abcc6 pathway
(Co-authors: Viola Pomozi, Janna Zoll)

Keeton K. Krause Mukesh Kumar TRMD
Abstract: A guinea pig model of Zika virus infection
(Mukesh Kumar, Francine Azouz, Eileen Nakano, and Vivek R. Nerurkar)

Jill T. Kuwabara Michelle Tallquist CMB/CCR
Abstract: Cardiac fibroblast depletion leads to vascular alterations via extracellular matrix regulation
(Co-author: Michelle Tallquist)

Nelson Lazaga Vivek Nerurkar TRMD
Abstract: In vitro rearrangement of urine-derived archetype JC virus

Aileen S. W. Li Yusuke Marikawa ANAT
Abstract: Identification of Chst7, a new regulator of gastrulation, using stem cell-based in vitro morphogenesis model
(Co-author: Yusuke Marikawa)

Chloe A. Liu William Boisvert MBBE/CCR
Abstract: The role of IL-1R8 in modulating atherosclerotic macrophage inflammation
(Co-authors: Sara McCurdy, William Boisvert)

Michael P. Marciel Peter Hoffmann CMB
Abstract: The role of selenoprotein K in progression of metastasis of melanoma
(Co-authors: Pascal Kilicaslan, Andrew Pham, Katie Lee, FuKun Hoffmann, Peter Hoffmann)
Liana O. Medina       Axel Lehrer       TRMD
Abstract: Defining correlates of protection in nonhuman primates vaccinated with a recombinant subunit Ebola Vaccine
(Co-authors: Madhuri Namekar, Teri Ann S. Wong, Michael M. Lieberman, Alexandra Gurary, Thomas W. Geisbert, Axel T. Lehrer)

Kenji O. Mfuh         Vivek Nerurkar    TRMD
Abstract: Infectious etiologies of febrile illnesses in Cameroon
(Co-authors: Olivia A. Achonduh-Atijegbe, Mbakop Calixt, Rose G. Leke, Diane W. Taylor and Vivek. Nerurkar)

Robert W. Oda         Bruce Shiramizu   MBBE/TRMD
Abstract: Blood brain barrier integrity compromised by peripheral blood mononuclear cells from HIV-Seropositive individuals
(Co-authors: Joanna Kettlewell, Nancy Hanks, Cecilia Shikuma, Bruce Shiramizu)

Ashley N. Ogawa-Wong  Marla Berry       CMB
Abstract: The effects of castration and testosterone on selenocysteine lyase dependent energy metabolism
(Co-authors: Ann C. Hashimoto, Lucia A. Seale)

Egle A. Oetega        Monika Ward       ANAT/IBR
Abstract: Alterations of sex determination pathway in males with limited Y chromosome gene contribution.
(Co-authors: Mayumi Fernandez, Quinci Salvador, Monika A. Ward)

Jourdan K. Posner     Sandra Chang      TRMD
Abstract: Human B cell subset maturation and activation in response to PRR ligands
(Co-author: Sandra Chang)

Bethany J. Sanstrum   Nicholas G. James CMB
Abstract: Pharmacological inhibition of LRRK2 kinase activity results in altered spatial organization and protein stability.
(Co-authors: Brandee Goo, Nicholas James)

David N. Siemann      Saguna Verma      TRMD
Abstract: Human Sertoli cells and macrophages sustain productive Zika virus infection and generate robust immune responses: Implications on the integrity of an in vitro blood-testis barrier model
(Co-authors: Daniel Strange, Payal Maharaj)

Daniel P. Strange     Saguna Verma      TRMD
Abstract: Transcriptome analysis of primary human Sertoli cells infected with Zika virus reveals unique host-pathogen interaction
(Co-authors: David N. Siemann, Richard Green, Michael Gale Jr)

Daniel P. Strange     Saguna Verma      TRMD
Abstract: Ebola virus glycoprotein induces an innate immune response in vivo via TLR4
(Co-authors: Chih-Yun Lai, Teri Ann S. Wong, Axel T. Lehrer)

Ruth M. Taketa       Robert Nichols      CMB
Abstract: The effects of an N-terminal fragment and core sequence within beta amyloid on MAPK-linked toxicity pathway
Samuel Tassi Yunga  Diane W. Taylor  TRMD
Abstract: *Fetal origins of increased susceptibility to malaria during the first year of life: the amount of exposure to Plasmodium falciparum in utero is crucial.*
(Co-authors: Samuel Tassi Yunga, Genevieve G.A. Fouda, Naveen Bobbili, Grace Sama, Jean Bopda, Jude D. Bigoga, Rose G.F. Leke, Diane W. Taylor)

Albert To  Axel T. Lehrer  TRMD
Abstract: *Development of a recombinant Zika virus vaccine based on insect cell expressed subunits*
(Co-authors: Liana Medina, Kenji Mfuh, Teri Ann Wong, Madhuri Namekar, Elizabeth Nakano, Mukesh Kamar, Vivek Nerurkar, Axel Lehrer)

Albert To  Axel T. Lehrer  TRMD
Abstract: *Defining a multivalent vaccine against hemorrhagic fever viruses based on insect cell expressed recombinant subunits*
(Teri-Ann S. Wong, Madhuri Namekar, and Dr. Michael M. Lieberman)

Michelle H. Tong  Claudio Nigg  PH
Abstract: *Spectrum of drug usage in Hawai῾i.*
(Co-author: Emilee H. Turner)

Daniel J. Torres  Frederick Bellinger  CMB
Abstract: *Role of selenosysteine P in dopaminergic transmission and modulation by methamphetamine*
(Co-authors: Stephanie M. Barayuga, Rachel H.L.H. Rueli, Catherine C. Chao, David M. Hedges, Nathan D. Schilaty, Jordan T. Yorgason, Marilou A. Andres, Scott C. Steffensen and Frederick P. Bellinger)

Alanna C. Tseng  Pakieli Kaufusi  MBBE/TRMD
Abstract: *WNV NS2B regulates the intracellular localization of multifunctional NS3 protein in initiating viral replication*
(Co-authors: Pakieli Kaufusi, Vivek Nerurkar)

Emilee H. Turner  Claudio Nigg  PH/Psychology
Abstract: *Recent rates of prescription drug abuse in Hawai῾i*
(Co-author: Michelle Tong)

Jasmine M. Tyson  Wei-Kung Wang  TRMD
Abstract: *Expression and purification of premembrane protein of dengue virus and Zika virus in drosophila cells*
(Co-author: Wen-Yang Tsai)

Ross Villiger  Unhee Lim  CMB/UHCC
Abstract: *Association of sex-hormone binding globulin (SHBG) with hepatic adiposity in multiethnic postmenopausal women*
(Co-authors: Adrian Franke, Loic Le Marchand, Unhee Lim)

Erica L. Warkus  Yusuke Marikawa  ANAT/DRB
Abstract: *A morphology-based assay to identify potential teratogens in vitro*
(Co-author: Yusuke Marikawa)
Jonathan K. T. Yap        William Boisvert        CMB
Abstract: Over-expression of citotriosidase modulates atherosclerosis-related macrophage function
(Co-authors: William Boisvert, Shiro Kitamoto, Sara McCurdy, Jan Garo, Whitney Regan, Martin Alcala)

Han Ha Youn        Wei-Kung Wang        TRMD
Abstract: Expression and purification of non-structural protein 1 (NS1) of dengue virus and Zika virus in drosophila cells
(Co-author: Wen-Yang Tsai)

Xun Zhu        Lana Garmire        MBBE/UHCC
Abstract: Granatum: A graphical single-cell RNA-seq analysis pipeline for genomics scientists
(Co-author: Lana Garmine)

UNDERGRADUATES

Jovikka C. Antallan        John Berestecky        KCC/Biotechnology
Abstract: Isolation and characterization of mouse antibody V-Regions
(Co-authors: John Berestecky, Alan Garcia, Matthew Tuthill)

Samantha L. Avina, & Mohammed Mansour F. David Horgen        HPU
Abstract: Scaling-up undergraduate research experiences: Extraction and purification of isomalygamide A, malygamide B, and majusculamide A from Hawaiian cyanobacterium
(Co-author: F. David Horgan)

Jonathan Botticelli        Lisa Kaluna        UH Hilo/Pharmacy
Abstract: Quantification of Angiostrongylus cantonensis in Parmarion martensi and Veronicella cubensis of east Hawai‘i Island
(Co-authors: Lisa Kaluna, Kathleen Howe, Michael Severino, Robert McHugh and Susan Jarvi)

Andrea Cadelina        Dick Teshima        Med Technology
Abstract: Degenerative changes in blood cell morphology as EDTA samples age
(Co-authors: Wang Lio, Jennifer Lum, Amber Tarango, Youneun Choi, Nikolas Butrick, Dick Y. Teshima)

Andrew Chang        Katalin Csizsar        Medicine
Abstract: Anti-inflammatory cellular targets of ‘Uhaloa, a native Hawaiian medicinal plant
(Co-authors: Maria Petelo, Lindsey Watanabe, Kimberli Kahaleua, Rozalia Laczko, Katalin Csizsar)

Milly L. Chang        Leticia Colmenares        WCC/Natural Sciences
Abstract: Isolation, identification, and antioxidant activity of Coronarin D, Coronarin D Methyl Ether, and Coronarin E in Hedychium coronarium
(Co-authors: Erin Pender, Traci Aiwohi, and Leticia Colmenares)

Lisa Cheng        John Berestecky        KCC/Microbiology
Abstract: High throughput approach to compare the adherence phenotype of two distinct morphologies of Campylobacter jejuni
(Co-authors: Meihui He, John Berestecky)
Mason K. Chock  Sharad P. Marahatta  Kauai CC/Math&Science
Abstract: Effects of sunn hemp (Crotalaria juncea) amendment on nematode community structure in breadfruit (Artocarpus altilis) producing systems
(Co-author: Sharadchandra P. Marahatta)

Christopher D.H. Chow  Susana Helm  PH/Psychitry
Abstract: Promoting Access to Mental Health Resources among Hawai‘i’s Health Professionals,
(Co-authors: Susana Helm, Judy Chung, and Erika Jang)

Celeste K. L. Cravalho & Dyloon Goodson Gideon Berger  HPU/Natural& Computational Sciences
Abstract: Semi-synthetic modification of TRPM7 modulator, waixenicin A & Synthesis of complex ring systems using oximes ether tethers in intramolecular Diels Alder reactions
(Co-authors: David Horgan, Gideon Berger)

Nghi T. Dam  John Berestecky  KCC/Microbiology
Abstract: Sequencing of monoclonal antibody binding sites directed against bacterial pathogens
(Co-authors: John Berestecky, Matthew Tuthill, Alan Garcia, Brien Haun)

Crystal DaSalla  Sue Jarvi  UH Hilo/Pharmacy
Abstract: Documentation of multiple stages of Angiostrongylus cantonensis in wild rats (Rattus sp.)
(Co-authors: Susan Jarvi, Stefano Quarta, Steven Jacquier, Kathleen Howe, Deniz Bicakci, Robert McHugh, Noelle Lovesey, Kirsten Snook)

Donovan D. Delgado  Nicholas James  CMB/Psychology
Abstract: Characterizing the efficacy of LRRK2 kinase inhibitors in live SH-SY5Y dopaminergic-like cells for novel Parkinson’s disease therapeutics
(Co-authors: Bethany Sanstrum, Brandee M Goo, Diana Holden, Nicholas James)

John Carlo Doronio  Richard Allen/Peter Fisher  UHMC
Abstract: Separation of acetylated and non-acetylated Beta-endorphins by Reversed-Phase High Performance Liquid Chromatography (RP-HPLC)
(Co-authors: Paige E. Herrin, Rachel M. Marsh)

Norma-Jean Driscoll  Kabi Neupane/Helmut Kae  LCC/Math & Science
Abstract: Microbial Diversity Found in Sumida Watercress Farm and Waimalu Stream
(Co-author: Keisha Rivera)

Tiana L. Elisara  Vivek Nerurkar  TRMD
Abstract: Comparison of commercially available Zika Virus serodiagnostic assays
(Co-authors: Lauren Ching, Mukesh Kumar, Joshua Astern)

Michael D. Faundo  Axel Lehrer  TRMD
Abstract: Expression of recombinant glycoproteins of a recently identified mole-borne Hantavirus using stably transformed insect cells
(Co-authors: Richard Yanagihara, Albert To, Axel T. Lehrer)

Dallas Freitas  Dana-Lynn Ko’omoa-Lang  UH Hilo/Pharmacy
Abstract: Aberrant calcium signaling in neuroblastoma
(Co-author: Dana-Lynn Ko’omoa-Lang)

Mayumi Fernandez  Monika Ward  ANAT/IBR
Abstract: Partial feminization of testes from mature males lacking Y chromosome genes originate from impairment in sex determination during fetal development  
(Co-authors: Eglė A. Ortega, Monika A. Ward)

Michael Fernandez  Diane Taylor  TRMD  
Abstract: Molecular characterization of Hepatitis C Virus in Yaoundé, Cameroon.  
(Co-authors: Yukie Lloyd-Sato, Kenji Obadiah Mfuh, Vivek R. Nerurkar, Richard Njouom)

Gabrielle Gonzales & Brooke Pereda  F. David Horgen  HPU  
Abstract: Scaling-up undergraduate research experiences: Extraction and purification of interruptins A and B from Cyclosorus interruptus for submission to the National Institutes of Health Small Molecule Repository  
(Co-author: F. David Horgen)

Gabrielle K. Gregorio  Axel Lehrer/Lishomwa Ndhlou TRMD  
Abstract: Cloning, expression and purification of Marburg virus VP40 and Sudan virus VP40  
(Co-authors: Albert To, Madhuri Namekar, Teri Wong, Liana Medina, Lishomwa Ndhlou, Axel Lehrer)

Rachel A. Gristock  Aaron Jacobs  UH Hilo/Pharmacy  
Abstract: Role of c-Myc in regulation of MAP kinase signaling and apoptosis.  
(Co-author: Christina Wales)

Jeannie Ho  Keith S. K. Fong  ANAT  
Abstract: Regulating TET enzymes to promote the expression of Grhl2 in preventing cranial neural tube defects  
(Co-author: Keith S. K. Fong)

Diana Z. Y. Holden  Nicholas James  CMB/Chemistry  
Abstract: LRRK2 kinase inhibitors as a potential drug therapy for Parkinson’s disease  
(Co-authors: Bethany J. Sanstrum, Brandee M.S.S. Goo, Nicholas G. James)

Yuko Imaizumi  Linda Connelly  UH Hilo/Pharmacy  
Abstract: Investigating how macrophages and adipocytes influence breast cancer metastasis using the chick embryo model  
(Co-authors: Kayuri Kadoya, Stephanie Tsang Mui Chung, Ashleigh Renaud and Linda Connelly)

Brendan S. Ito  Yongli Chen  HPU/Natural Sciences  
Abstract: Ethosuximide and Normethsuximide potentiates α1β3γ2 GABAA Receptors (GABAARs) and alleviates pentylenetetrazol (PTZ)-mediated inhibition in a pharmacological model of absence seizures  
(Co-authors: Akimasa Iijima, Yongli Chen)

Kirk S. Johnson  John Berestecky  KCC  
Abstract: Cloning Keratinase,  
(Co-authors: John Berestecky, Matthew Tuthill, Alan Garcia)

Gowoon Jung  Joanne Yew  PBRC  
Abstract: Relationship between fatty acid signatures and gut microbiome in Hawaiian Drosophila  
(Co-author: Joanne Yew)
Abstract: Quantification of Myeloma Antibody $V_L$ Expression through Real-Time Polymerase Chain Reaction
(Co-authors: John Berestecky, Matthew Tuthill, Alan Garcia)

Abstract: PCR amplification of the genome of a strain of maize chlorotic mottle virus from Hawai’i and sequencing of its genome
(Co-authors: Alain Castro, Kabi Neupane)

Abstract: Hybrid Compounds as Potential Therapeutics for Neurodegenerative Diseases
(Co-authors: Andrew Burgoyne, Daniela Guendisch)

Abstract: Establishing a protocol and fluorescent assay to characterize stably transfected PC12 cells with FGFR1c.
(Co-Authors: Bethany J. Sanstrum, Brandee M.S.S. Goo, Nicholas G. James)

Abstract: Production of recombinant endophilin A3 (176-347) protein for subsequent NMR analysis
(Co-authors: Melissa Boldridge, Lei Wang)

Abstract: Antioxidant Activities of Gingers: Hedychium greenii & Etlingera hieroglyphica
(Co-authors: Norman Bezona, Tom Null)

Abstract: Selenoprotein K is crucial for Melanoma Cell Growth and Migration
(Co-authors: Michael Marciel, FuKun W. Hoffmann, Peter R. Hoffmann)

Abstract: Evaluation of protein kinase and antibacterial properties of sSelected hawaiian medicinal plants
(Co-authors: Sasha Kovacs, Mengke Zhang, Leng Chee Chang)

Abstract: Infection level of Angiostrongylus cantonensis in wild-caught rats on Hawaii Island.
(Co-authors: Susan Jarvi, Stefano Quarta, Steven Jacquier, Kathleen Howe, Deniz Bicakci, Robert McHugh, Crystal DaSalla, Kirsten Snook)

Abstract: Effects of sunn hemp and pigeon pea on corn germination and nematodes
(Co-author: Sharadchandra Marahatta)

Abstract: Characterization of opioid receptors in the fetal membrane
(Co-author: Clair Wright)
Abstract: Monoclonal antibody production against Zika virus envelope protein
(Co-authors: Brien Haun, Teri Wong, Alan Garcia, Daniel Strange, Dr. John Berestecky, Dr. Axel T. Lehrer, Albert To, Liana Medina)

Analisa S. Mikami Matthew Tuthill KCC
Abstract: Expressing and purifying Campylobacter jejuni antigens from Escherichia coli for monoclonal antibody production
(Co-authors: D. Aquino, C. Allen, A. Garcia, and J. Loristo)

Jake Miller Kabi Neupane WCC
Abstract: Effect of macadamia nut cake on gut microbial diversity in broiler Chickens
(Co-authors: Darcie Inouye, Sudhir Yadav, and Rajesh Jha)

Polly Miller & Marc Balintag F. David Horgen HPU
Abstract: Scaling-up undergraduate research experiences: Extraction and purification of bioactive cyanobacterial metabolites laxaphycins B and B3 for the National Institute of Health’s Small Molecule repository
(Co-author: F. David Horgen)

Jacob Morton John Berestecky KCC
Abstract: Gene Expression Analysis of Campylobacter jejuni in the presence of Eukaryotic Cells
(Co-author: Daniel Laspisa)

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Abstract: Characterization of collector urchin (Tripneustes gratilla) coelomocyte plasma membrane bound glycans using enzyme-linked lectin binding assay.
(Co-author: Allison Beale)

Torbjoern N. Nielsen Monika Ward ANAT/IBR
Abstract: Histological quantitative assessment of Y chromosome gene content effects on testicular germ cell proliferation and differentiation
(Co-authors: Victor A. Ruthig, Jonathan M. Riel, Yasuhiro Yamauchi, Monika A. Ward)

Michele E. Osurman Hongwei Li WCC
Abstract: Effects of Tradescantia zebrina on cell proliferation and inflammatory response in human monocyctic Cells
(Co-author: Hongwei Li)

Justin G. Padron W. Steve Ward ANAT/IBR
Abstract: Mapping DNA break sites induced by sperm chromatin fragmentation
(Co-author: Ryuei Sato)

Andrew T. Pham Peter Hoffmann CMB
Abstract: The role of selenoprotein K in progression and metastasis of melanoma
(Co-authors: Michael Marciel, Pascal Kilicaslan, FuKun W. Hoffmann, Peter R. Hoffmann)

Kevin P. Pham Olivier Le Saux CMB
Abstract: In vitro study of an ABCC6-initiated molecular pathway inhibiting soft tissue calcification.
(Co-authors: Viola Pomozi, Bianca Calio, Olivier Le Saux)
Ashleigh C. Renaud          Linda Connelly          UH Hilo/Pharmacy
Abstract: Role of osteoprotegerin production in colon cancer cell proliferation
(Co-authors: Stephanie Tsang Mui Chung, Linda Connelly)

Kara L. Riggsbee          John Berestecky          CMB
Abstract: An efficient technique to determine functional variable region cDNA sequences of monoclonal antibodies
(Co-Author: Brien Haun)

Adriel Robidoux          Sally Irwin          UHMC
Abstract: The effects of food preservatives; sodium sulfite and sodium bisulfite on four species of beneficial gut bacteria
(Co-authors: Peter Fisher, Emily Graham, Ashley Malek)

Patrick Rosaneli          Lei Wang          HPU/Chemistry
Abstract: Expression and purification of the dynamin (503-870) protein
(Co-author: Lei Wang)

Quinci N. Salvador          Monika Ward          ANAT/IBR
Abstract: Disparities of testicular interstitium in male mice with limited Y chromosome genes
(Co-authors: Eglė A. Ortega, Victor A. Ruthig, Torbjoern Nielsen, Monika A. Ward)

Sarah Seaba          James Turkson          Chaminade
Abstract: Investigating the effects of STAT3 inhibiting compound in breast cancer cell phenotype In Vitro
(Co-authors: Peibin Yue, James Turkson)

Anjelica C. Silva          Susana Helm          KCC/Psychiatry
Abstract: Ethnocultural measures as predictors of youth substance use
(Co-authors: Susana Helm, Scott Okamoto)

Cassaundra A. Song          Michael Weichhaus          Chaminade
Abstract: The effect of substrate availability on breast cancer
(Co-authors: Kahealani Uehara, Colin Andres-Paguirigan)

Victoria J. Soto          Zoia Stoytcheva          CMB/ANAT/PH
Abstract: Regulation of the selenoproteins by miRNAs
(Co-author: Peggy Su)

Natalie T. Subia          Dulal Borthakur          MBBE
Abstract: Improving the catalytic properties of mimosinase and rhizomimosinase by domain shuffling mutagenesis
(Co-author: Dulal Borthakur)

Laarni Sumibcay          Vivek Nerurkar          TRMD
Abstract: Minority Health and Health Disparities International Research Training (MHIRT) Program at the University of Hawaii at Manoa
(Co-authors: Vivek R. Nerurkar, Laarni Sumibcay and Diane W. Taylor)

Cory X. Y. Sutton          Deborah Taira          UH Hilo/Pharmacy
Abstract: Concurrent and persistent adherence to anti-diabetic, anti-hypertensive, and cholesterol lowering medications
related to health care utilization and total health care costs among patients with diabetes
(Co-authors: Deborah Taira)

Lindlelyn L. Tabula Helmut Kae LCC
Abstract: Bacteriophages isolated from Hawaiian soil
(Co-author: Katie Jenkins)

Ruth Taketa Robert Nichols CMB
Abstract: The Effects of an N-Terminal Fragment and Core Sequence within Beta Amyloid on MAPK-Linked Toxicity Pathway
(Co-authors: Kelly Forest, Robert Nichols)

Bradley J. I. Thomas Diane Taylor TRMD
Abstract: Determining prevalence of cross-reactive antibodies to VAR2CSA in US pregnant women.
(Co-authors: Yukie Lloyd-Sato, Diane W. Taylor)

Bruce L Torres Fisher Lisa Kaluna Hilo CC/UH Hilo/ Pharmacy
Abstract: Evaluating the effectiveness of rainwater catchment filtration systems to prevent passage of early larval stages of Angiostrongylus cantonensis
(Co-authors: Lisa M. Kaluna, Kathleen Howe, and Susan Jarvi)

Cherry Y. E. W. Yamane Susana Helm PH
Abstract: Ho’omana as a protective factor against substance use among native hawaiian youth,
(Co-Authors: Susana Helm, Kanoelani Davis, Raissa Tanqueco, Terrence Guanio, Na Haumana)

Kevin E. Vergara Helmut Kae LCC
Abstract: Bacteriophage isolation and identification from environmental samples within oahu
(Co-authors: Carley Sizemore, Helmut Kae)

Yio Yu Nicholas James CMB/Microbiology
Abstract: Establishing a protocol to functionally label Arc with a FlAsH tag
(Co-authors: Brandee M.S.S. Goo, Barbara Barylko, Bethany J. Sanstrum, Joseph P. Albanesi, Nicholas G. James)