### **OBESITY AS A RISK FACTOR FOR DIABETES AND HYPERTENSION IN ADOLESCENTS**

Student Researcher: Amelia Allen, Cass Technical High School Mentor: Melanie Hanna–Johnson MD, Internal Medicine, Wayne State University, Detroit, Michigan

## Association between Microalbuminuria and hsCRP with Waist Circumference Independently in Adolescent Children

Student Researcher: Teni Ayo-Ariyo, King/Drew Magnet High School Mentor: Dr. Gangadarshni Chandramohan, Dept. of Endocrinology, Charles Drew University

### Texture of $T_1\rho$ and T2 in Enzymatically Degraded Articular Cartilage

Student Researcher: Kimberly Loo, Piedmont Hills High School, San Jose, CA Mentors: Carmen Taylor, Gabrielle Blumenkrantz, Ryan Doan, Sharmila Majumdar, PhD, Musculoskeletal and Quantitative

Imaging Research Group, Department of Radiology, University of California, San Francisco, San Francisco, CA

### ALCOHOL SELF-ADMINISTRATION IN RATS AS A FUNCTION OF FLAVOR VARIETY

Student Researcher: Andres Mallipudi, South Anchorage High School, Anchorage, Alaska Mentors: Jennifer LaCasse, BA, Eric S. Murphy, PhD, Department of Psychology, University of Alaska Anchorage, Anchorage, Alaska

### Addressing Health Disparities Using Photovoice

Student Researcher: Quinton Miles, Mattie T. Blount High School Mentors: Errol D. Crook, MD, Rachel D Foreman, MA, University of South Alabama Center for Healthy Communities and Department of Internal Medicine, Mobile, Alabama

#### ANTIOXIDANT POTENTIAL OF MARINE PRODUCTS IN FREE RADICAL SCAVENGING ASSAY

Student Researcher: Kealoha Kramer, Kamehameha Schools Hawai'i Campus Mentors: Eun-Jung Park, PhD, John M. Pezzuto, PhD, College of Pharmacy, University of Hawaii at Hilo, Hawaii **NATURALLY OCCURRING INHIBITORS OF RAS/RAF-1 INTERACTION IDENTIFIED BY THE YEAST TWO-HYBRID SYSTEM** David Menino, Annie Mar, Sarot Cheenpracha, Leng Chee Chang, Department of Pharmaceutical Sciences, College of Pharmacy, University of Hawaii Hilo, Hawaii Coy Choke Ho, School of Science and Technology, University of Malaysia, Sabah, Kota Kinabalu, Sabah, Malaysia

# TOTAL ANTIOXIDANT CAPACITIES IN THE BRAIN TISSUES OF RATS EXPOSED TO HIV PROTEINS AND METHAMPHETAMINE

Sabrina Lynn Samonte, Wanyu Liu, Marla J Berry, Jun Panee, Dept. of Cell and Molecular Biology, John A Burns School of Medicine, University of Hawaii at Manoa, Honolulu, HI

**THE IMPORTANCE OF TRAFFICKING PATHWAYS INVOLVED IN CELL INTOXICATION USING IMMUNOTOXIN LMB2** Student Researcher: Sherika Campbell, Brooklyn Friends School, Brooklyn, NY Mentors: Lori L. Tortorella, Nina Pipalia, Frederick R. Maxfield, Department of Biochemistry, Weill Medical College of Cornell University, New York, NY

HPSO4 IS A U-BOX E3 UBIQUITIN LIGASE GENETICALLY ASSOCIATED WITH DNA REPAIR Student Researcher: Richard A. Chiang, Saratoga High School, Saratoga, CA Mentor: Brian Scottoline, MD, PhD, Stanford University, School of Medicine, Division of Oncology, Stanford, California

## GONADOTROPIN-INHIBITORY HORMONE, GNIH, AND GONADOTROPIN-RELEASING HORMONE, GNRH, ACTIVITY IN THE BRAIN OF THE NORTHERN RED-BACK VOLE, *Myodes rutilus*

Student Researcher: Jonathan Anahonak, Port Graham Elementary/High School, Port Graham, Alaska Mentors: Kalb Stevenson, Inst. of Arctic Biology, Department of Biology and Wildlife, University of Alaska Fairbanks, Fairbanks, Alaska and Dr. Ian van Tets Department of Biological Sciences, University of Alaska Anchorage, Anchorage, Alaska

#### HABITUATION TO FLAVORED FOODS AND BODY MASS INDEX IN DWARF HAMSTERS (PHODOPUS CAMBELLI)

Student Researcher: Emily Nosce, Ben Eielson High School, Eielson Air Force Base, Alaska Mentors: Gwen Lupfer-Johnson, and Jennifer LaCasse, Department of Psychology, University of Alaska Anchorage, Anchorage, Alaska EXAMINING COMMUNITY VIOLENCE AMONG SOUTHEAST ASIAN ADOLESCENTS

Student Researcher: Vi Le Mentor: Eric Torres, University of California, San Francisco

# INDIVIDUAL DIFFERENCES IN THE INNATE AND ADAPTIVE IMMUNE SYSTEMS OF DIFFERING RAT PHENOTYPES EXPOSED TO NICOTINE AND SALINE

Student Researcher: Leila Rogers, Palm Beach Central High School Mentor: Dr. Vijaya Iragavarapu, Florida Atlantic University, Boca Raton, Florida

### DIAGNOSTIC TESTING IN EPISODIC CUSHING'S SYNDROME

Marbella Eboni Allen, Dominguez High School Dr. Theodore Friedman, Department of Internal Medicine, Division of Endocrinology

INHIBITION OF WEST NILE VIRUS REPLICATION BY BREFELDIN A IN HUMAN EMBRYONIC KIDNEY CELLS (HEK293) Student Researcher: Fredalyn Alcaide, NIH Step up Program

**OTHER PARTICIPATING STUDENTS:** Oralia Arroyo Chijoke Nze Imogene William