NIDDK

Alaskan high school student wins top award at national conference for UAA-based medical research

This summer, eight Alaskan high school students successfully completed biomedical research projects at the University of Alaska Anchorage (UAA) as part of the National Institutes of Health's (NIH), National Institute of Diabetes & Digestive & Kidney Diseases', National High School Student Summer Research Apprentice Program. Three of the students won prestigious awards, including the premier award, at the program's National Conference in Washington D.C.

Juan Aparicio from South Anchorage High School, mentored by UAA's Dr. Ian van Tets, received the conference's top award – for outstanding research in the senior category. Fabio Coartney from Lathrop H.S., mentored by UAA's Dr. Mary Ellen Gordian and Sofia Infante from East Anchorage H.S., mentored by Dr. Ian van Tets, both won honorable mentions in the junior category. Alaska was also represented by Jorjana Alakayak (Mt. Edgecumbe H.S., mentor Dr. Cindy Knall, UAA), Kathleen Choi (Mt. Edgecumbe H.S., David Robinson, UAA), Don Young Chon (East Anchorage H.S., Kalb Stevenson, UAA), Sally May Enriquez (Juneau-Douglas H.S., Dr. Eric Murphy, UAA) and Kathelyn Larson (Mt. Edgecumbe H.S., Dr. Timothy Hinterberger, UAA). The results of all eight students' projects will be published later this year as short scientific papers in the peer-reviewed medical journal "Ethnicity and Disease".

The aim of the student apprentice program is to facilitate the entry of talented students from under-represented backgrounds into medical and medical research careers. At UAA it is conducted under the auspices of the <u>Alaska WWAMI Biomedical Program</u>. By successfully completing the program, all eight students are now eligible for paid summer research internships with NIH's high school and undergraduate research programs, as well as additional support measures throughout their pre-medical and medical studies.

Students lived on the UAA campus for six weeks while they completed their projects with mentors from a wide range of UAA Departments (Biological Sciences, Biomedical Sciences, Psychology) and Institutes (Institute of Social and Economic Research, ISER) before going to Washington D.C. to present their results at this national conference organized by the NIH for all of the students who took part in this program across the U.S.



Fabio Coartney, NIDDK student, setting a benzene monitor as part of his study of traffic effects on air quality with Dr. Mary Ellen Gordian.



Fabio Coartney, NIDDK student, monitoring particulate matter as part of his study of traffic effects on air quality with Dr. Mary Ellen Gordian.

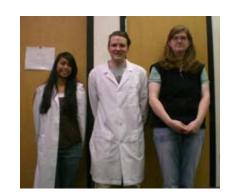


Don Young Chon, NIDDK student, measuring bone length in Dr. Ian van Tets' laboratoryas part of his study of disuse osteoporosis.



An NIDDK student collecting samples for urinalysis for a study on links between alcohol use and diabetes with Dr. Ian van Tets.



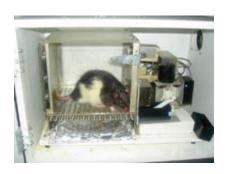


Sally May Enriquez, NIDDK student, conducting alcohol self-administration experiments with rats in Dr. Eric Murphy's laboratory.

Sally May Enriquez, NIDDK student, Dr. Eric Murphy, and undergraduate researcher Sarah Roberson (left to right).



The spectrophotometer used by NIDDK students, Juan Aparicio and Sofia Infante, to measure glucose concentrations as part of their studies on the physiological effects of alcohol use with Dr. Ian van Tets.



A rat self-administering alcohol as part of an NIDDK experiment in Dr. Eric Murphy's laboratory.



Dr. Ian van Tets and Dr. Eric Murphy (back row) served as faculty mentors for Fung Fung Lim (NIDDK undergraduate program), Juan Aparicio and Sofia Infante.

Ethnicity and Disease published six UAA papers in the Sept 2007 supplement.

NIH NIDDK Student Research Apprentices: Juan Aparicio, Don Young Chon, Fung-Fung Lim, Lorena Nay, Josh Proper & Rhondel Venner

UAA Mentors: Jennifer Burns (2 students), Robert Furilla, Jocelyn Krebs, Keri Lestyk, David Robinson, Vanessa von Biela, Kalb Stevenson & Ian van Tets (2 students).

Aparicio J., Lestyk K., and J. Burns 2007. Acid-buffering Capacity and Myoglobin Content in Hooded and Harp Seals. Ethnicity and Disease 17 (Suppl. 5): 48-49

Chon D.Y. and R. Furilla 2007. The Effect of Strong Ions When Added to Whole Blood or Isolated Plasma. Ethnicity and Disease 17 (Suppl. 5): 28-29.

Lim F-F and I.G. van Tets 2007. Do rats that Frequently Drink Alcohol Deposit Fats in a Way that Increases Their Risk of Type II Diabetes? Ethnicity and Disease 17 (Suppl. 5): 30-32

Nay L., Stevenson, K. and I.G. van Tets 2007. Seasonal Changes in the Reproductive Organs and Body Condition of Northern Redbacked Voles (Clethrionomys rutilus). Ethnicity and Disease 17 (Suppl. 5): 58-60

Proper J., von Biela V.R., and J. Burns 2007. Determining the Pattern of Cementum Annuli and Relationship to Reproduction in Male Sea Otters. Ethnicity and Disease 17 (Suppl. 5): 45-47

Venner R., Robinson D. and J.E. Krebs. 2007. Generation of a cDNA Library for a High-Copy Suppressor Screen to Identify Genes that Code for Proteins that Interact with Histone H2a during DNA Repair. Ethnicity and Disease 17 (Suppl. 5): 37-38.