

Center for Alaska Native Health Research

Summary of activities in 2009 of the Center for Alaska Native Health Research (CANHR), a Center of Biomedical Research Excellence (COBRE) program at the University of Alaska Fairbanks.

All four COBRE-funded research projects are continuing to make progress toward their goals.

- The “Yup’ik Perceptions of Body Weight and Diabetes: Cultural Pathways to Prevention” project presented two abstracts at the American Public Health Association annual meeting in Philadelphia. Abstracts were based on data collected from Yup’ik adults and youth to understand the role of socio-environmental factors on body weight and diet. This data will serve as preliminary data for an NIH proposal submission in 2010.
- The project to “Develop a Novel Set of Diet Pattern Biomarkers, Based on Stable Isotope Ratios” collected dietary and biological specimen data from 70 participants for a validation study of dietary biomarkers specific to the Yup’ik Eskimo population. Two papers were published in the American Journal of Clinical Nutrition describing initial findings based on nitrogen isotope ratios in blood and hair, and their ability to predict intake of long-chain polyunsaturated fatty acids. Analyses from 3 additional isotopes in blood, fingernail, and longitudinal hair samples are underway.
- The “Contaminants and Nutrients in Alaskan Subsistence Foods: Striking a Balance” analyzed samples collected in 2008 for heavy metals and other elements (mercury, lead, cadmium, selenium, arsenic and copper), organochlorine contaminants and fatty acids. During the summer, an additional 254 raw and processed samples were collected for a total of 445 samples over 2 years- primarily fish and plants. Plans for 2010 are to continue to process and analyze the samples, report findings back to the community and to discuss the potential for future sampling, concentrating on marine mammals and reindeer. This data will serve as preliminary data for an NIH proposal submission in 2010.
- The “Yup’ik Experiences of Stress and Coping: Intervention via Cultural Understanding” project focus groups were used to adapt a structured interview and daily diary protocol to fit Yup’ik communities’ experiences. The team then conducted interviews and diaries about stress and coping in two Yup’ik communities. Results will be used to work with Yup’ik communities to develop a program to reduce stress and prevent depression. The team is writing an NIMH R34 intervention planning grant, and is meeting with communities to present preliminary results and obtain community guidance for interpretation, intervention development and grant-writing.
- CANHR submitted several ARRA proposals in June and was awarded three administrative supplements as a result. One funded a science educator from rural Alaska to help bridge the language gap between Western scientific terminology and Yup’ik. Another will fund the creation of a database that will include results from four biomedical research studies in rural Alaska with the goal of providing stronger and more reliable evidence on which to base decisions about health interventions for an Eskimo group. The third will provide workforce development that will lead to an expansion of trained personnel at different academic levels, all of which are essential to the conduct of health disparities research.

- CANHR received a subaward from the Harvard University Medical School, as part of a nine-institution consortium, to build and implement a Federated National Informatics network that will allow any investigator across America to discover research resources that are presently invisible. This project, "Networking Research Resources Across America," is being funded by the National Center for Research Resources, National Institutes of Health.
- CANHR also received a subaward from Oklahoma State University to participate in an NSF-funded project called "From Their Perspective: Alaskan Native Grandparents' Roles, Strengths, and Needs."
- We have two new research faculty: Dr. Ellen Lopez is a new investigator in Public Health Research and Dr. Monica Skewes is our new Intervention Specialist.

Mohatt, G.V., Klejka, J., Boyer, B.B., Luick, B.R., Lardon, C., Plaetke, R., Wolsko, C., Hopkins, S.E., Dondanville, M., Herron, J., Ruppert, E., Bersamin, A., Orr, E.M., and the CANHR Research Team (2007). The Center for Alaska Native Health Research Study: A community-based participatory research study of obesity and chronic disease-related protective and risk factors. *International Journal of Circumpolar Health*, 66 (1): 8-18.