



Mission Statement: The Alaska Biomedical Learning and Student Training (BLaST) program has an over-arching aim to enhance capacity for undergraduate biomedical research training and efficacy for both engaging students from diverse, especially rural Alaskan, backgrounds and preparing students for biomedical research careers.

In the News



BLaST Graduate Mentoring Research Assistant (GMRA) Carla Frare (l) and her undergraduate mentee, past BLaST URE Mackenzie Jenkins, with their poster at the 2017 Congress World Sleep Conference in Prague, Czech Republic, Oct. 7-11, 2017. (photo provided by C. Frare)



Ilisagvik College science faculty Linda Nicholas-Figueroa (l) with her undergraduate student Olive Kanayurak (m) past URE, and BLaST Laboratory Research and Teaching Technician (LRTT) Joanna Green presenting at the Society for the Advancement of Chicanos/Hispanics and Native Americans in Science 2017 Annual Conference in Salt Lake City, UT, Oct. 18 – 21. (photo by L. Gildehaus)



University of Alaska Fairbanks Chancellor Dan White (l), with Alaska Governor Bill Walker and his wife (m), BLaST Reporting & Outreach Coordinator Amy Topkok, and BLaST Advisory Committee member Vice Chancellor Evon Peter of College of Rural and Community Development (r) at the Alaska Federation of Natives (AFN) Conference Banquet where connections and networking commenced on Statewide issues, Oct. 21. (photo provided by A. Topkok)



Above: Biomedical Science 214 class led by Dr. Ellen Lopez (l - front) and LRTT Lori Gildehaus (r - front) focuses on scholars learning foundations of biomedical and professional development skills needed for research in scientific fields. (Fall 2017)

Pictured right: Scholar Kendrick Hautala (l) collecting samples from and vaccinating reindeer with his mentor Cristina Hansen (Faculty Pilot Project awardee- not pictured), along with George Aguiar (m), owner of the reindeer farm Archipelago Farms in Fairbanks, AK, Oct. 28. (photo provided by C. Hansen)



Above: At the Sept 26th Research Mixer photo booth, undergraduates (l to r) Cheyenna Schafer, Betsy Lokken, Scholar Ana Fiore Carrasco, & Kiana Mitchell (past URE) pose with fun signs as interested researchers. (photo by BLaST)

BLaST FUNDING OPPORTUNITIES

Graduate Mentoring Research Assistantships – opens Dec. 4th, due Feb. 5, 2018

Scholarships for Undergraduates – opens Dec. 11th, due Feb. 11, 2018

Travel Awards for those furthering research in the biomedical and One Health fields – ongoing and due one month before travel is to be scheduled.

Check our website for more information!

Conference Attendees in November: BLaST participants attended the Annual Biomedical Research Conference for Minority Students (ABRCMS) in Phoenix, AZ Nov. 1-4 2017: URE Rachel Alexander, past URE Agnero Niagne, Scholars Jonilee Polanco, Mark Anthony Velasco, Tandi Marth, and Ana Fiore Carrasco, and two BLaST LRTTs, Theresa Vertigan and Natalia Podlutskaaya.

Sign up for our BLaST Listserve on our website <http://alaska.edu/blast/>

Undergraduate Research in Alaska

Faculty Pilot Projects (FPPs) at BLaST help generate research at an institutional level and can involve undergraduates and community members in Alaska to learn about what it takes to be active in biomedical research.



Photo credit: J. Philip

Sled Dog Care in Northern and Interior Alaska:

Jacques Philip (pictured left in red) focuses on rural Interior Alaska through his goal to explore the impact of the Frank Atlla Youth and Sled Dog Care-Mushing

Program (FAYSDP) in the community of Huslia. Through FAYSDP, middle and high school students learn dog care and handling, as well as mushing skills from teachers, kennel owners, Elders, and volunteers. The project utilizes digital storytelling, involving multimedia elements such as images, photos, music, voice-over and video, allowing participants to create, reflect on, and succinctly share a personal story in an engaging way. At the UAF campus with Inna Rivkin (l), **undergraduate research assistants** Janessa Newman (middle right) and Joe Bifelt (r) **are engaged in every step, encouraging them to work with communities in Alaska in a positive and healthy process.**

Research may reveal how rabies induces frenzied behavior -

BLaST PI Karsten Hueffer (featured in the UAF Cornerstone): Scientists may finally understand how the rabies virus can drastically change its host's behavior to help spread the disease, which kills about 59,000 people annually. A new study published in the journal *Scientific Reports* shows how a small piece of the rabies virus can bind to and inhibit certain receptors in the brain that play a crucial role in regulating the behavior of ...



Photo credit: JR Ancheta – UAF

For the full article, please visit: <https://news.uaf.edu/research-may-reveal-how-rabies-induces-specific-behavior/>. Research such as Karsten's **enable undergraduate researchers to participate and learn** about the techniques required to do such work.

Virtual Reality and Fitness:

Josh Lupinek, a faculty at the School of Management, is working with current BLaST LRTTs and partner campuses, by traveling to Nome (including Northwest Rural Campus), Utqiagvik (including Ilisagvik Tribal



Photo credit: JR Ancheta – UAF

College), and Dillingham–Bristol Bay Rural Campus in the next 6 – 8 months. He will present a virtual reality (VR) fitness research demonstration that will introduce the kinesiology side of One Health and how it can be “fun”. An open lab after the presentation will allow attendees to experience the VR fitness technology equipment. This initiative will serve also as outreach for future grant proposals offering community buy-in, participant recruitment, and **encourage future rural student researchers** to think outside the box of traditional biomedical research in Alaska. Josh states, “Ideally, this will spark interest for some to attend UAF one day or be a part of this line of rural public health research.”

What is the difference between the Coordination Evaluation Center (CEC) and EvaluLogic?

I'm glad you asked! BLaST, a BUILD program, is part of a national collaborative through which the Diversity Program Consortium (DPC), in partnership with the NIH, will develop, implement, and evaluate innovative approaches to research training and mentoring. **Main goals include engaging individuals from diverse backgrounds and helping them prepare for and succeed in biomedical research careers.** The CEC provides operations and data coordination and support, and conducts a longitudinal evaluation, in support of the BUILD and NRMN programs. **EvaluLogic** (Paul Cotter, Principal) focuses on site-specific evaluation of the BLaST program. In addition to these surveys, BLaST also needs annual reports from participants. The information gathered from these reports is included in the required interim and annual reports. **Thank you for completing the surveys and reports!** We hope your responses will help to secure another five years of funding so we can continue to offer undergraduate mentored experiences.

BLaST Events/ Announcements/ Conferences

CONFERENCES & OPEN EVENTS

Student Engagement Center is open Mon – Friday
8am – 5pm – a good place to study!
UAF Finals week Dec 11-15
Residence Halls close 12noon Sunday Dec 17

UAF Offices closed Dec 23 –Jan 2 Holiday Hard closure; Jan 3 – 5 Limited UAF offices open

BLaST EVENTS

Monthly Mentoring Dec. 5 Goal Setting and Evaluation 174 AHRB
One Health Seminars: New time for Spring 2018: Mondays 4 -5pm –at Murie Auditorium. Seminar series start again Jan 22.
BLaST Annual Reports: DUE Dec. 17, 2017
Pre-Med Society Weekly club Meetings Thurs. 12:45-1:45pm 301 Murie

