

Nanook Innovations



September 2017

Building a Culture of Innovation at UAF and Beyond

As part of Alaska Startup Week in July, a group from a wide range of backgrounds was convened in the [Decision Theater North](#) on UAF campus to identify and develop concrete tasks for fostering a culture of innovation at UAF and in the community.

Participants included representatives from education, research, student groups, entrepreneurs, and innovators from Alaska universities, economic development organizations, and the private sector.



Meeting participants came from a wide range of backgrounds. Photo by Amanda Byrd/OIPC

The ideas during the meeting that generated the most interest were: 1) provide structure that encourages innovation; and 2) develop industry relationships.

The group then developed each of these ideas further:

Provide Structure that Encourages Innovation: Development of this idea focused on providing a structure to increase communication about technical problems by individuals from different disciplines, with different levels of experience (e.g., students and professionals), and with different backgrounds (e.g., private and public sector).

Attendees discussed developing a dedicated location or a rotating regular event. Details were discussed such as how to recruit a wide variety of participants. The group discussed the need to include individuals with liberal arts backgrounds rather than just science and engineering.

Develop Industry Relationships: Industry relationships were seen as a way of achieving disruptive innovation in many forms while also producing many ancillary benefits. Development of this idea focused on what is needed to achieve greater industry collaboration and how to meet those needs. The group identified needs to bolster communication with industry about what

industry needs and what UAF can do as well as a point person for building trust and fostering relationships.

A suggestion for developing industry relationships included a program that reaches across campuses and beyond academia to develop proposals that meet industry needs.

Thank you to all of the attendees for their valuable time and very helpful input.

Attendees also expressed an interest in reconvening to further develop these ideas. If you are interested in participating in future meetings, please contact [Mark Billingsley](#) at 907-474-2626.

List of Attendees

1. Sarah Stanley, UAF English Department
2. Nigel Sharp, UAA Entrepreneur in Residence
3. Daisy Huang, UAF ACEP/Mechanical Engineering
4. Bill Schnabel, UAF Institute of Northern Engineering
5. Adithaya Akheramka, UAF Active and Innovative Minds (AIM) student club, Petroleum Engineering graduate student
6. Ky Holland, Alaska Pacific University professor, serial entrepreneur
7. Gwen Holdmann, OIPC and ACEP
8. Nate Bauer, UA Press
9. George Roe, ACEP
10. Scott Bell, UAF Associate Vice Chancellor, Nanook Tech Ventures
11. Janice Dawe, UAF School of Natural Resources and Extension
12. Peter Webley, UAF GI, V-ADAPT
13. Denise Thorsen, Alaska Space Grant/Electrical Engineering
14. Tom Vrba, UAF Alaska EPSCoR
15. Rosemary Madnick, UAF Office of Grants and Contracts
16. Pips Veazey, UAF Alaska EPSCoR
17. Dayne Broderson, UAF GINA
18. Mark Billingsley, UAF OIPC
19. Juliet Shepherd, Fairbanks Economic Development Corporation
20. Amanda Byrd, OIPC and ACEP
21. Maya Salganek, UAF Film & Theatre/FRAME
22. Adam Krynicki, Small Business Development Center (Fairbanks office)
23. John Collins, Launch Alaska Advisor
24. Julia Casey, UAA Center for Economic Development
25. Lance Ahern, Small Business Development Center (Anchorage office)

Listening Session Scheduled

OIPC will hold a Listening Session at 3:30 pm on Thursday, September 28th, 2017 in the Elvey Globe Room.

Listening Sessions are designed to welcome UAF faculty, staff, and students into an environment where they have the opportunity to openly voice comments, suggestions and any concerns they may have regarding the units housed under the Office of the Vice Chancellor for Research (VCR).

The VCR office houses the following units:

Office of Research Integrity (ORI)
Office of Intellectual Property and Commercialization (OIPC)
Animal Resources Center (ARC)

More details about the Listening Sessions will be available soon.

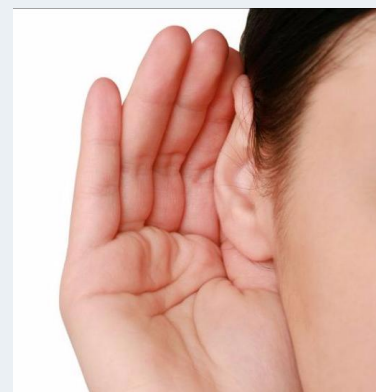


Image from modigtledarskap.se

OIPC Ambassadors

OIPC has developed an Innovation Ambassador program at UAF to foster innovation and creativity.

Our ambassadors are innovators themselves. They have been selected to represent their UAF departments to encourage and foster students, staff and researchers to develop their research into marketable products.

If you see either of our Ambassadors at an event around campus, take the opportunity to introduce yourself and learn more. They, too, will be looking for you - UAF's brightest minds with the next ideas that will help shape our world.

The 2017/18 Ambassadors are:

Rajive Ganguli

Dr. Rajive Ganguli is a Professor of Mining Engineering and Director, Mineral Industry Research Laboratory at UAF.

Ganguli was admitted to the Alaska Innovators Hall of Fame in 2017 for his work on a dynamic mill simulator that is intended to train mill operators at a mine site.

Through his private consulting and university research, Ganguli has developed software products for systems engineering and process optimization applications for mining companies in Alaska and elsewhere. He holds a patent for an algorithm for physical segregation of coal. Dr. Ganguli is a strong believer that even research conducted in academic environments can have practical applications.



Contact Dr. Ganguli at rganguli@alaska.edu

Peter Webley

Dr. Peter Webley is an Associate Research Professor of Remote Sensing at the Geophysical Institute, UAF.

Webley is a sought-after expert on natural hazards events, is committed to supporting and developing entrepreneurs and innovators at UAF, UA, and across Alaska.

He was one of seven inductees to the Alaska Innovators Hall of Fame in 2017 for his expertise and work in volcanic hazard mapping and assessment, developing UAF's first start-up company from IP, V-ADAPT, Inc., and as a patent holder for a new method of validating the accuracy of particle-cloud-forecasting transport and dispersion models.



Dr. Webley is excited to engage with faculty, staff, and students at UAF in developing and commercializing their innovative research.

Contact Dr. Webley at pwwebley@alaska.edu

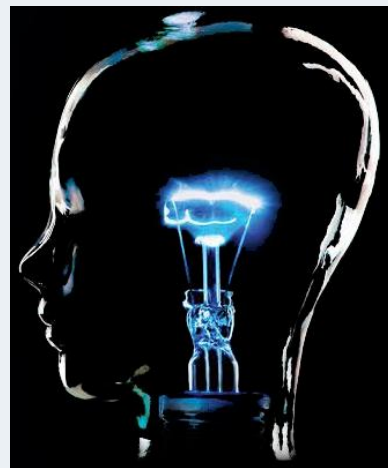
About OIPC

OIPC champions broad practical application of UAF research for public benefit. This is achieved primarily through the commercialization of UAF technology. The office supports UAF faculty, staff, and student inventors by working with them to protect their intellectual property and then pursuing commercialization.

OIPC protects UAF technology through patents and copyrights and then licenses the technology to existing and startup companies.

Extensions of this core mission include:

- Promoting IP commercialization and innovation through presentations in classes and to university administrators and community members.
- Helps faculty, staff, and students develop plans for avoiding potential conflicts of interest that could arise when starting a business to commercialize their technology.
- Hosts educational lectures that are open to the community. OIPC
- Facilitates collaboration with industry and other research institutes through execution of non-disclosure agreements.



Do you have an invention? Have you developed a technology that could benefit the public? Do you want to pursue commercial opportunities? Are you interested in whether your work can be patented or copyrighted? Just want to understand the difference between a patent and copyright protection? Contact us at 474-2605 or uaf-oipc@alaska.edu.

Innovation Spotlight - Dr Robert Coker

Just a month before joining UAF in 2013, Robert "Trey" Coker used his innovative research to start a small business.

The idea for the company, Essential Blends, arose through journal papers that he and his collaborators were publishing in the biomedical literature. While noteworthy in an academic sense, the benefits of their work was not getting to the people that needed it.

Coker's company promotes the development of condition-specific nutrition. One of the nutrition products helps treat alcohol use disorders where a fat that accumulates on the liver leads to a decrease in liver function, and a second product helps maintain independence in the elderly through preservation of skeletal muscle.



Dr Robert Coker has used his biomedical research to start a business using SBIR and STTR grants. Photo Amanda Byrd/OIPC

Helping sick people has been one of Coker's main research goals, and translating science is one of

Coker's greatest passions. He feels the only way the public values scientific innovation is when they understand how it can benefit them or their family/friends. If the innovator has not done a good job decoding the scientific jargon, then they miss the point.

Coker says, "This is why innovation and commercialization is so important because it allows researchers to translate science so that they value and appreciate the information."

When Coker and his Essential Blend business partners evaluated start-up funding options they included angel investments among other options. They decided to pursue federally funded [Small Business Innovative Research](#) (SBIR) and [Small Business Technology Transfer](#) (STTR) grants. These funding options provide a source of funding without diluting the ownership of the company. This gives the company owners more control of their company and keeps their eye on the target.

Many [federal agencies](#) including NIH, USDA, NSF, DOE, and many more have SBIRs and STTRs and they are a great way to promote innovation and commercialization, even outside the typical academic setting.

Coker has tried to build a reputation with innovation and commercialization at UAF by partnering with Essential Blends, which he is a minority partner, to create products that can developed and promoted exclusively through UAF.

Through Essential Blends, Coker has eyed the strength of the new program in Veterinary Medicine, and made an intellectual property disclosure with UAF titled [MyoCanine](#) that is a canine food product that helps maintain skeletal muscle while reducing fat in obese animals.

His research is not confined to classic clinical laboratory settings, and Coker has started to look at surrogate models of military operations in cold environments using extreme events like the Yukon Arctic Ultra 430 mile billed as the longest and coldest ultra in the world. Coker collaborates with the Center for Space Medicine in Berlin Germany to help understand the importance of nutrient delivery during the physiological scenarios in the Arctic. This research in a dynamic field setting is directly translatable to military operations.

Coker is currently using Magnetic Resonance Imaging/Spectroscopy (MRI/MRS) technology to measure beneficial alterations in liver metabolism linked to nutrient supplementation in metabolic disease. Also, he using this technology to evaluate potentially detrimental reductions in the skeletal muscle of wildland firefighters over the course of an increasingly long fire season in Alaska.

For more information on this or any other of Dr Coker's research, visit http://people.iab.uaf.edu/robert_coker

Notes

Invent Alaska Competition

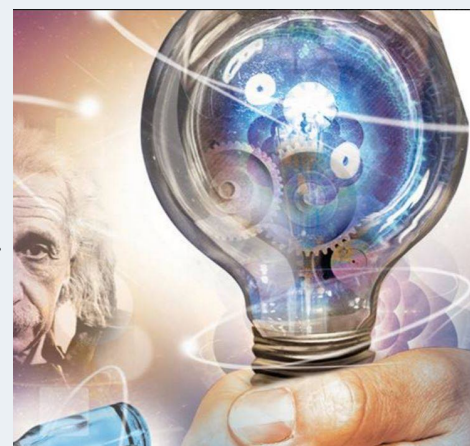
The Invent Alaska Competition, hosted by the Vice Chancellor for Research, is open to all UAF students, staff and faculty.

Submit your invention disclosures NOW through April 27, 2018.

Do you have a technology that you would like to commercialize? Enter the Invent Alaska Competition for your chance to win!

Awards for technology disclosure submissions include:

- 1st, 2nd, and 3rd place cash prizes



- Student prize category

Competition participants are encouraged to meet with Mark Billingsley prior to submitting disclosures.

Contact Mark Billingsley at 474-2626 for more details.

Hackathon

September 8-10, 2017

Fairbanks, Alaska

Fairbanks Hackathon is a competition to motivate computer programmers, developers, designers, coders, and other tech-savvy creative-types to share their best ideas, create something amazing for a chance to win a grand prize! Hackathon participants will spend a weekend brainstorming new ideas, learning from peers, and finding solutions to interesting "puzzles", using data sets, in an innovative group setting.

Find more information [here](#).

Startup Weekend Fairbanks

September 22-24, 2017

Fairbanks, Alaska

Startup Weekends are 54 hour, weekend-long, hands-on experiences where entrepreneurs and aspiring entrepreneurs (Developers, Designers, Techies, Nerds, Students, Lawyers, Investors, Marketers, and Engineers, etc.) come together to share ideas, form teams, in a risk-free environment, to build products and launch startup businesses. Startup Weekends begin with open-mic 60-second pitches that result in the formation of small teams around the best, most viable concepts. Teams spend Saturday and Sunday learning and focusing on to get to customer development, validating their ideas and maybe even building prototypes with the help of experienced mentors. On Sunday, teams demo their products or share about their services and receive valuable feedback from a panel of business experts.



startupweekend™
Powered by Google for Entrepreneurs



Find out more [here](#).

Launch Alaska

[Launch Alaska's](#) Accelerator is seeking companies in the energy and arctic tech business sectors. Accelerators provide advice, guidance, and various forms of support for businesses in the start-up phase.

The Launch Alaska Accelerator is a 120-day process to assist new, vibrant, innovative companies to help solve some of Alaska's intractable problems - from high energy costs to food insecurity, from climate change to unemployment.



The 2018 [Cohort application](#) online application period closes September 17, 2017.

Arctic Innovations Competition

The UAF School of Management's annual [Arctic Innovations Competition](#) deadline is September 22, 2017.



Submit your idea at <http://arcticinno.com/>. The competition awards entries based on their novel design, market opportunity, solution to unmet needs, feasibility, value, and presentation. The competition has categories for adults, teenagers, and younger children. Cash prizes are awarded in excess of \$30,000. No prototype, business plan, or entry fee is required.

Office of Intellectual Property and Commercialization

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STAY CONNECTED

