

WINTER 2020

the

# SECOND MESSENGER

St. Olaf Biology Alumni Newsletter



"Three Amigos" by Alex Oberg '21  
Natural Lands Winter photo contest winner 2019

## Your Gift, Your Way

Thank you, Biology Alumni, for your gifts to the St. Olaf Fund! Many of you have designated your donation to specifically support the Biology Department. We are so grateful! Every year, your generous donations enable the Biology Department to provide for extra things like student travel to conferences and the annual Senior Banquet. If you haven't already, will you consider visiting [stolaf.edu/giving](http://stolaf.edu/giving) and designate your gift to the "Biology Department?" If you are celebrating a reunion this year, your gift will be counted in your class gift as well. Thank you for your consideration!

## Fall 2019 Bio Alumni Panel

This Fall, we enjoyed collaborating with the Piper Center for Vocation and Career to present the seminar *What can I do with a Biology Major (Besides healthcare...)?* Our presenters were a panel of Biology Alumni who shared their career journeys to a lecture room full of students and faculty! It was wonderful to see the impact of former students igniting within current students new perspectives and/or resolve to pursue their own careers beyond the Hill. We extend a special thank you to our panelists: Aila Crumley ('09), Amara Balhorn ('16), Rachel Pain ('13), Sabina Vadnais ('17), Rachel Saunders ('13), Bryn Thompson ('09), Nels Thompson ('14), Mike Neufeld ('14), Emily Hoopman ('18), Jerlie Jensen ('17) and Laura Hurtado ('18).

*"It was reassuring to hear from the Bio Alumni panelists that although they had not followed the healthcare route, they all were pursuing fulfilling careers using their Biology degree."*

~Edwin Le '21





# St. Olaf Biology Alum Targets Gun Violence and Injury Prevention



**Kristen Mueller, MD ('05)** is currently an Assistant Professor in Emergency Medicine at Washington University in the St. Louis School of Medicine. She is also the co-director of emergency medicine resident research at Washington University School of Medicine and a Faculty Scholar in the Institute of Public Health. After graduation from Olaf and completing a one-year Emerging Infectious Disease Laboratory Training Fellowship at the

Centers for Disease Control and Prevention, she attended medical school at the Medical College of Wisconsin and completed her emergency medicine residency training at Washington University School of Medicine.

In her current work, Dr. Mueller is an active member of the Washington University Gun Violence Initiative and is engaged in research on firearm violence and injury prevention. Dr. Mueller is the physician liaison to the newly launched St. Louis Area Hospital-Based Violence Intervention Program, Life Outside Violence. She was recently awarded a 2-year career development grant by the Emergency Medicine Foundation in partnership with American



*Parkland march against gun violence, Philadelphia 2018*

Foundation for Firearm Injury Reduction in Medicine (AFFIRM) to study firearm injuries and recidivism at St. Louis Level One trauma hospitals. Additionally, Dr. Mueller recently completed a quality improvement program on Counseling on Access to Lethal Means (CALM) to address access to firearms and other lethal means at times of suicidal crisis in emergency department patients.

She would like to give a big thank you to everyone in the St. Olaf biology department who helped put her on this path, especially professor emeritus Ted Johnson for reinforcing ideas on research methods in the biology semester in Australia (as well as feeding her love of travel), Dr. Kim Kandl for advising her, and Dr. Jean Porterfield for helping her complete her first real research project during the summer before senior year. She would also like to highlight how her liberal arts humanities and Spanish training at Olaf has given her the oratorical and writing skills needed to share this work.

## Bird-Building Collision Research



**Abbie Anderson ('99)** received her MSc in Conservation Biology with a minor in Museum Studies from the University of Minnesota in December 2018.

This fall, three peer-reviewed publications hit the press sharing findings from research Anderson co-conducted on bird-building collisions found at [PLoS ONE](#), [Biological Conservation](#), and in *Wildlife Biology* (not yet available online or in print). For more on how Abbie's passion for science collides with her love of art, visit her website: [abigailwoods.com](http://abigailwoods.com).

## Fulbright Scholarship Awarded

(from [St. Olaf News](#))

**Shannon Moore ('19)** will spend her Fulbright year conducting research in Norway. At the University of Tromsø, she will investigate the efficiency of a red fox culling program that is designed to allow endangered arctic fox to thrive. Moore hopes to host town hall meetings where she and her colleagues will discuss their research and establish two-way communication with locals to effectively implement potential future management strategies. After completing her Fulbright, she plans to Earn a master's degree in conservation biology emphasizing Arctic ecosystems and then pursue a Ph.D. with the goal of developing, implementing, and continuously monitoring conservation strategies in Arctic ecosystems.



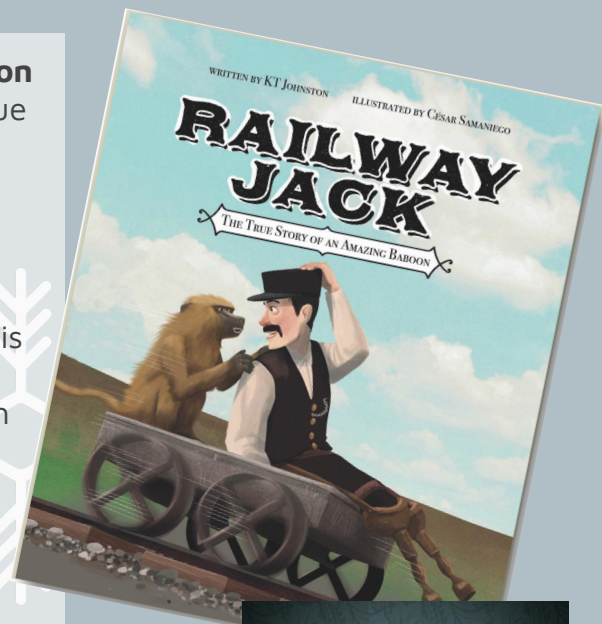
Writing as KT Johnston, **1983** classmate **Kathie (Soland) Johnston** has just published her first picture book, "RAILWAY JACK: The True Story of an Amazing Baboon," with children's book publisher Capstone. This is a true story about a man, his baboon service animal, and their great friendship.

Jim was a South African railway inspector in the late 1800s who lost his legs in an accident. Struggling to perform his tasks with his disability but desperate to keep his job, Jim discovered a brilliant solution, a baboon named Jack. Jim trained Jack to help him both at home and with his railyard duties. But when the railway authorities discovered a monkey on the job, Jack and Jim had to convince everyone they could do the work.

JACK is content-rich narrative nonfiction for any age, readers in upper elementary, and English language learners. It is an inspiring story of problem-solving and living with a disability in times before there were services and apparatuses to assist.

KT has another picture book coming in 2021 from the same publisher; also a true story, this one is about early therapy animals. For more on KT's work, visit her [website](#).

KT will be signing copies of JACK outside the bookstore on reunion weekend - please stop by to say hello!



## Biology Alumni among 2019 Alumni Award Winners (from [St Olaf News](#))

**Jerry Appledoorn ('67), Douglas Tate ('70), Robert Gehringer ('71), and John Mittelstaedt ('81)** have made significant contributions in developing and sustaining St. Olaf's Peruvian Medical Experience, a life-changing experiential learning opportunity for students who are planning careers in health care.

These four service-minded medical professionals have shared their expertise in the health sciences and mentored scores of St. Olaf students. Through their involvement with the Peruvian Medical Experience, they have assisted students in vocational discernment while guiding them in providing basic medical and dental care to impoverished Peruvian communities. They've engaged students in service learning to understand how poverty and culture interact with medical access and care, and continue to support students in their career development.

Their own careers reflect their compassion and commitment to serving others, from participation in international medical service work to the founding of nonprofit organizations focused on health care for underserved populations.

See their interview [here](#).





# Prairies and Pizza: Faculty, staff & families head to Weaver Dunes Research Station

Submitted by Professor Steve Freedberg

On one temperate afternoon this Fall, Biology Faculty, Staff, and their families trekked down to The Weaver Dunes Field Station in Kellogg to relax, catch owls, and learn about the resources at the station. The day began with a few short hikes to see some of the places where St. Olaf has had ongoing and past research projects, as well as some sites that could be used in the future. These included a series of wetlands flanking a large snapping turtle nesting habitat where Oles monitor turtle nests and observe hatchling behavior through radio telemetry. We visited the Weaver Bottoms, a backwater habitat of the Mississippi River that tens of thousands of waterfowl frequent every year. We learned about the abundant aquatic life that can be studied in the area as an Eagle danced in front of the reds and yellows of an autumnal backdrop. Our series of hikes ended with a trip to a retired windmill that sits at the confluence of restored and native prairies. It was a picturesque conclusion to an afternoon of hiking that had whet our appetites for a flame-grilled feast back at the station.

Dinner afforded an opportunity for the families to kick back, mingle, and catch up after a hectic start to the semester. The early highlight of our get-together was when Professor Demas unveiled his semi-portable pizza oven, from which he produced a series of gluten-filled masterpieces that delighted the palates of all who partook. As the evening moved on, we set up a series of mist nets to attempt to catch migrating saw-whet owls as part of an ongoing research project that St. Olaf has been contributing to each Spring and Fall for ten years. We were lucky to catch six owls, which we measured, banded, and photographed before releasing them into the welcoming night sky. Several of the families slept over at the station and were treated to cornfields painted with foraging swans and cranes on their drive away from the station.

(Continued on page 6)



Professor Freedberg with two of the Saw-whet owls netted this Fall.

## A career devoted to conservation biology

(from [St. Olaf News](#))

After graduating from St. Olaf College, Kyle Flesness ('09) worked with a wide range of research organizations devoted to wildlife conservation. He has worked with 35 endangered species in six countries around the world, from the Caribbean to Africa. He ended up in Colorado, where he is now an environmental manager for the Federal Emergency Management Agency (FEMA) region in Denver.

"It's extremely rewarding to work in conservation biology," he says. "I've gotten to work with many species, and now I'm working at more of a policy level to protect the species and their habitats across six states in our region, which is about 500,000 square miles."

Flesness says his day-to-day work focuses on making sure that the 95 species that are threatened and endangered in his six-state region are not negatively impacted by an FEMA-funded action.

See Kyle's interview [here](#)

*"The lessons I learned at St. Olaf about community and communication I think are responsible for getting me where I am today."*





## St. Olaf Biology Alumni Updates

**Jennifer Schaefer ('02), Trevor Keyler ('07) and Clark Cotton ('00)** (in photos L-R) all taught Human Anatomy and Physiology fall semester for the College of St. Benedict and St. John's University. Jen also taught Neurobiology and Clark taught Animal Physiology.

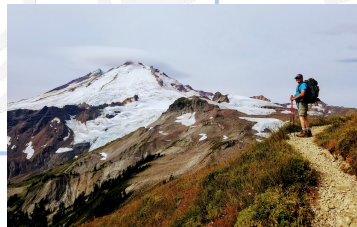


**Will Amundson ('08)** started a new job in September as an assistant professor of medicine and pulmonary and critical care physician at the University of Minnesota.

**Karla Wetley's ('13)** first author paper regarding microwave ablation of renal cell carcinoma was recently chosen for presentation at the Society of Abdominal Radiology's annual meeting in Maui, Hawaii. In addition, her co-authored presentation on pediatric abdominal ultrasound received a certificate of merit at the annual Radiological Society of North America.

I am about to start my third semester at Colorado State University in a Master's program at Colorado State University. My program is Civil Engineering with a focus on Water and International Development. The research for my master's thesis consists of improving the accuracy of instruments used to

**David Sauter ('78)** has been working in a large veterinarian group practice in the NW corner of the State of Washington. His practice is about three miles south of the Canadian border.



measure the flow rate in rivers in rural agricultural settings. I am happy to say I've been able to use my

biology degree to understand the important ways in which the constituent parts of an ecosystem are interconnected, with water being the lifeblood that flows through it all. I've attached a picture of me conducting some field work in southeastern Colorado, summer of 2019. Besides my academic commitments I've been able to cultivate interests in trail running, cooking, and learning the ukulele in order to stay busy. Life is a blessing!

At the end of August 2019, I retired! My first fantastic career was 17 years as a Public Health Nutritionist (the majority of the time with the St. Paul-Ramsey County WIC Program). My second career (the one I retired from) was working at the elementary school across the street from my house for the last 23 years. I loved what I did in the Media Center and the students were so much fun, but I'm loving retirement even more. I now enjoy time with friends and family (ages four months to 91 years old and everything in between). ~**Kay Erickson '79**

~**Joe Pugh ('18)**

## St. Olaf Biology Alumni Updates, cont.

**Sarah Bond ('19)** is currently employed by the Centers for Disease Control and Prevention as a public health associate assigned to the Chicago Department of Public Health. She works in the HIV/STI Bureau supporting prevention and intervention activities.



In March of 2019, I stepped away from a 31 year career in nature centers and environmental education to finish up my dissertation research. I received my EdD in Heritage Leadership from the University of Missouri, St. Louis in December of 2019 and I'm currently working on putting the new degree to work in support of the development and training of the next generation of leaders in environmental education and heritage interpretation! ~**Tom Moffatt ('88)**

I'm working at the University of Missouri - Columbia as a Lab Assistant in a Crop Physiology Lab. I'm working on a collaborative project with fourteen other labs across the US collecting data on how different types of Switchgrass behave in different environments to better understand their evolution and develop the best biofuel. ~**Nisha Albert ('19)**



**Paul White ('86)**  
I'm raising my young daughters (10 & 12) and continuing my work in the renewable energy space. New focus on decarbonization policy in conjunction with several NGO's.

I am a proud member of the class of **1977**--I have so many fond memories of my years on "the hill", my biology classes and professors, and the many friends I made during my four years at St. Olaf College. I retired from the Ohio State University Agricultural Technical Institute in Wooster on July 1, 2015 after serving as the Coordinator of the Greenhouse Production and Management Program for 29 years. I now am an Associate Professor Emeritus with Ohio State University. I am a member of the Gardeners of Greater Cleveland (GoGC), and I was installed as one of the Board members at the December meeting with my official duties starting this month. That being said, I have served as a liaison between the OSU Wooster campus and the Men's Garden Clubs of America/The Gardeners of America (GoGC is affiliated with these two national clubs) to move the national garden club's headquarters from Johnston, IA to the Wooster OSU campus, which will happen this month. This will be a "win-win" situation for all parties involved. ~**Robert McMahon**



## Prairies and Pizza (cont. from p. 4)

The Weaver Dunes Field Station was established at the Weaver Dunes Scientific and Natural Area outside of Wabasha, Minnesota through a unique partnership with The Nature Conservancy. A 1.5-hour drive from campus, the field station is leased under a renewable contract that started in 2008 and serves as a place to house students and faculty for overnight field research and class trips. Located on over 800 acres of preserved and restored habitat, Weaver Dunes is one of the Midwest's most valuable natural resources. The meeting of the dunes, oak savannas, and wetlands provides a rare and diverse sampling of wildlife for students and faculty to study.

The partnership gives St. Olaf researchers the chance to design and carry out studies from a central location on the preserve, offering the opportunity for intensive field research in an extraordinary natural environment protected from outside disturbances. The facilities serve as a place to hold class discussions, prepare meals, and as a launching pad for field excursions. The site has been used as a home base from which several undergraduate students have studied vertebrate population biology throughout Weaver Dunes and southeast Minnesota, and six papers stemming from this work have been published. The station has housed students from several courses and is used extensively for Vertebrate Biology for semester-long class projects each spring.

*The meeting of the dunes, oak savannas, and wetlands provides a rare and diverse sampling of wildlife for students and faculty to study.*

