

The podcast **Story Collider** came to campus in February, and five science faculty - including biology's **Andy McCall** and **Heather Rhodes** - told their "true, personal stories about science" in front of a live audience. Andy talked about how he looked to science in a time of uncertainty in his life... only to find more uncertainty. Heather spoke of the ways in which she leaned on her scientific knowledge when trying to cope with her newborn daughter's medical diagnosis. Their stories aren't publicly available yet, but please enjoy Associate Provost Allison Williams' powerful story about being a woman in science [here](#).

*Stories  
Connect  
People*



## Alumni in Healthcare: A Panel Discussion

Wednesday, March 28, 7-8 pm, Talbot 210

Please join us for a moderated discussion followed by student Q&A



**Tiffani Dorn '12**  
Physician Assistant  
ProMedica Physicians  
Group

After studying Biology and music at Denison, Tiffani went on to complete her Master's degree in Physician Assistant Studies from Ohio Dominican University.



**Claire Kopko '08**  
Physical Therapist  
Nationwide Children's  
Hospital

Claire majored in Biology and played on the Varsity Softball team. She went on to complete her Doctorate of Physical Therapy from Chatham University.



**Kristen Maciel '14**  
Nurse  
Nationwide Children's  
Hospital

Kristen, a Biology Major, completed an Accelerated Nursing BSN from Duquesne University and is enrolled in the Pediatric Nurse Practitioner program at Wright State.

Proud to welcome bioalumni **Tiffani Lumbatis Dorn '12**, **Claire Kopko '08**, and **Kristen Maciel '14** back for a panel discussion with our students! 30 students were in attendance and the Q&A was found to be extremely helpful! We look forward to partnering more with Sara Stasko with the Knowlton Center in the future for continued successful biology career panels.



## Buzz-worthy news!!

### Pollinator Project

The pollinator project at the Solar Array at the **Denison Biological Reserve** is an exciting opportunity for Denison to collaborate with several partner organizations to plan and implement the planting of vegetation in and around the solar array to promote success of native pollinators. These partner organizations include the US Fish and Wildlife Service, the Licking County Soil and Water Conservation District, Third Sun Solar & American Electric Power (AEP), Pheasants Forever, and the OSU Bee Lab. Inside the solar array, the project will plant low growing native flowering plants and grasses that won't block the panels as the panels rotate to follow the sun. Outside the array's fence, we will plant different wildflower seed mixes in different areas. This will let us see how different mixes perform and let visitors compare the mixes (we'll have signs to designate the different planting sites). Students in some of our classes may also use these sites for research projects, possibly comparing pollinator, plant, or insect diversity among the sites.

An additional pollinator area is underdevelopment in the oldfield habitats east and south of the Polly Anderson Field Station. This project is a collaboration between Denison and US Fish & Wildlife. These oldfield sites had become overgrown with some non-native vegetation and due to the presence of plants like multi-flora rose (with its thorns), these sites were hard for students to use for ecology projects. So far the vegetation in these sites has been cut back and we anticipate doing multiple cycles of dramatically cutting back the vegetation (to control invasives) before seeding the site in Fall 2018 or Spring 2019. The Fish & Wildlife Service has a strong interest in helping landowners develop/reclaim habitats to benefit pollinators (<https://www.fws.gov/pollinators/Index.html>), so they will be assisting the biology department with the process of planning and implementing the seeding of these sites.

Just what the *BioBuzz* has been waiting for!!



If you have an update to share with other biology alumni or if you wish to be removed from the *BioBuzz* Newsletter mailing list, please let us know at [biology@denison.edu](mailto:biology@denison.edu).

#### DID YOU KNOW?

We have a Facebook group!

Search for Denison Biology Alumni

& Faculty and ask to join!



We say farewell to PJ Torres and wish him well in his new tenure track position at Queens University of Charlotte!







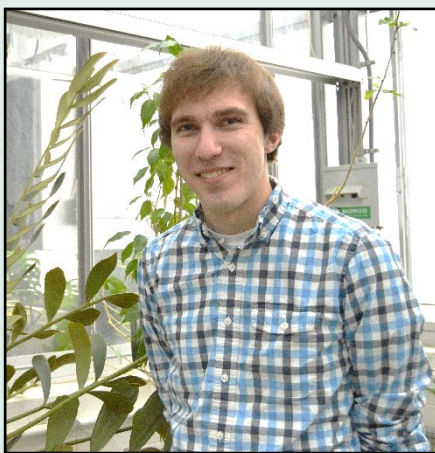
## Meet our 2018 Senior Fellows



Click here for bios!



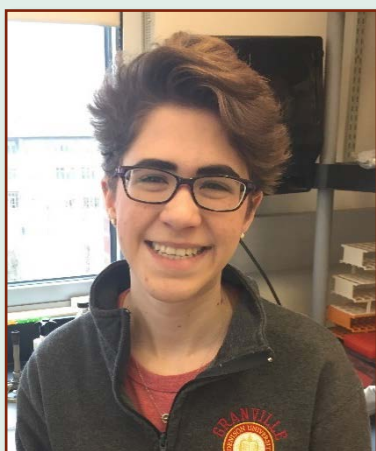
Haley Fiegel



Philip Hurst



Elizabeth Postema



LauraAnn Schmidberger



Zach Schmidt



Xingyi Ceginna Shi



Jianing Jenny Zhang

### Biology Department Student Awards

- Research
- Service
- Academic
- Margaret Ann Watkin

Click for descriptions of each award and its recipient



Biology Fellows were awarded at the 2018 Academic Awards Convocation in April! The new Provost's Award for Academic Excellence was given to **Elizabeth Postema** and **Haley Fiegel** was awarded The President's Medal!







The Denison Scientific Association talk series is a popular feature in the sciences. Our own **Cristina Caldari** spoke in March!

## Ayana Hinton Received Tenure!

Ayana Hinton joined Denison's Biology Department in 2010. Her courses at Denison include Molecular Biology and Unicellular Life, Eukaryotic Cell Biology, General Microbiology and other courses in the biology department. Hinton received her bachelor's from University of Michigan and her doctorate from the Wayne State University School of Medicine. Her research focuses on the role of acid pumps in cancer metastasis using human breast cancer cells as a model system and assembly of these pumps using *S. cerevisiae* as a model system. Hinton is interested in the way proteins interact and how those interactions play a role in promoting normal cellular function and how those interactions contribute to disease.



Denison Scientific Association



**Dr. Cristina Caldari-Torres**  
Department of Biology

Talk begins at 4:30 p.m.  
in Olin 114.  
Refreshments served at  
4:15 p.m.



Picture credit: [https://1balance.nl/2018/01/13/zwemband\\_diabetes\\_tips/](https://1balance.nl/2018/01/13/zwemband_diabetes_tips/)

Wednesday, March 28, 2018  
4:30 p.m. – Olin 114

## Inflammation and the obese state: getting to the belly of the issue

Adipose tissue has historically been considered an energy storage tissue, but recent evidence suggests that it may also be a major endocrine organ involved in regulating immune function. Inflammatory molecules produced by adipose tissue can result in a state of low grade inflammation (meta-inflammation) that has been implicated in the development of metabolic disorders like insulin resistance, type 2 diabetes, and metabolic syndrome, as well as more malignant conditions like cancer and cardiovascular disease. This talk will focus on the changes occurring in adipose tissue during obesity that lead to the release of inflammatory factors, as well as nutritional interventions to reduce meta-inflammation, specifically the role of anti-inflammatory omega-3 fatty acids.



## TIME TO LASSO A NEW LAB SPECIALIST!

**Hannah Roodhouse '16** will move on after working with us for the past 2 years! We are looking to fill this position. All the best to Hannah!

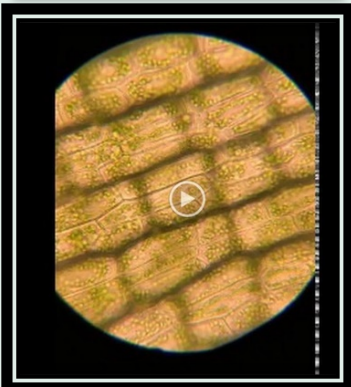
Click and Check it out!



## And speaking of Hannah...

She took a time lapse video of an elodea leaf taken with our new smart phone microscope adapters. This 23 second video spans about five minutes but allows you to see how much the small green chloroplasts move around the cytoplasm within leaf cells.

Thank you to **Leon C. & Grace Smith Greene** Endowed Academic Venture Fund in the Biological Sciences for funding to help us make these types of purchases to enhance learning for the biology major!



## Tom Schultz and the Wonderful, Fabulous, Very Good Australian Dream Vacation

For the first part of my sabbatical I went into the field, far afield. My wife, Janet, and I spent 45 days in Australia travelling from the north end to the south to sample the unique ecology and wildlife this amazing country has to offer. First, we went to the hot and humid Northern Territory, where I got to see the termite mounds<sup>1</sup> that I have mentioned so often in classes. The "Top End", as it is called, is a sparsely populated chunk of the outback with flooded roads and beautiful waterfalls that you can't swim under because of the saltwater crocodiles. It is also where we had our best opportunity to learn about aboriginal culture, both past and present.

From there we moved over to the Cape York Peninsula in Queensland, an area of tropical savannahs, wetlands, and rainforest that is one of the most biologically diverse places on Earth. It was fascinating to compare the rainforest there to those I had seen in Central America. Other than the many eucalyptus species, one big difference were the large conifers left over from Gondwanaland. Botany in Australia is crazy weird. In the "Wet Tropics" we saw numerous cool birds and bugs, and had close encounters with tree kangaroos and a cassowary. And it was a thrill to see hundreds of flying foxes leave their daytime roosts and fly in formation like the flying monkeys in the Wizard of Oz.<sup>4</sup>

After a brief stay in Brisbane to see koalas<sup>5</sup> at a sanctuary and "in the bush", we flew to the island of Tasmania at the far south end of the continent. The ocean was an amazing Royal Blue color and we needed our fleece jackets for the first time. Kangaroos, wallabies<sup>7</sup>, and wombats were abundant, and I finally saw the two egg-laying mammals that piqued my interest in biology way back in 1st grade. At dusk we watched a platypus paddle around in a stream behind the Tassie Tiger Bar in the tiny village of Mole Creek, and at Cradle Mountain we encountered a totally oblivious echidna<sup>8</sup> poking around for ants and beetles at the side of the road. Tasmania is a wildlife lovers' paradise, but like on the mainland, many of the smaller marsupials and birds are under threat from exotic species like dogs, cats and foxes.

Finally, we wrapped up our expedition with a few days in Gippsland, in Victoria east of Melbourne. Highlights were beautiful empty beaches, lots of parrots, a 6-foot long lizard, and emus<sup>9</sup>, which completed my photographic album of the "Big 5" of Australian wildlife. The trip to Australia was a dream vacation for this biologist and I have Janet to thank for managing all the logistics. I now look forward to sharing our experiences and some newly acquired knowledge in my Animal Behavior class next Fall.



1



4



5

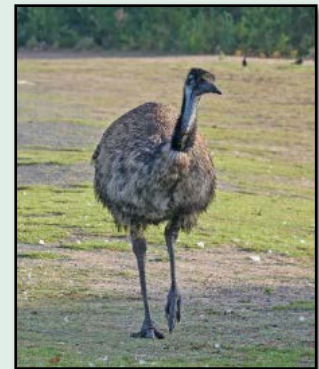


5

7



8



9