Department of Biomedical Sciences Newsletter Spring/Summer Update 2017



Mentor-Mentee Relationship Continues After High School

Eric Sheffield and Jinah Bak's mentor and mentee relationship started when Bak was still in high school through a mentoring program that matches pre-med students from GVSU and MSU's College of Human Medicine. However, when the eight-week program ended, Sheffield, a pre-med and Biomedical Sciences student, asked Bak—who had been accepted into Grand Valley—If she would like to continue to keep in contact.



Part of the reason Sheffield reached out was

his own experiences getting settled at Grand Valley. "When I first started college, I didn't know anyone on campus, and no one in my family is in medicine, so I had lots of questions about what steps to take," Sheffield said. Because of this, he wanted to make sure that Bak had a warm welcome when beginning her college career.

For her part, Bak said she has found having Sheffield as a contact very helpful. "It's been nice having Eric to talk to and answer questions," she said. They had the chance to meet multiple times since Bak has started Grand Valley. And she is a member of GV's Pre-Med club, which Sheffield was president of.

You can read more about Sheffield and Bak at GV Now's December 7 article.

Sheffield has been a member of <u>Dr. Chris Reed's</u> lab and graduated in April; he was accepted through the early assurance program into MSU CHM and will start next fall.

In Memory of Dr. Steven Hecht

Before joining Grand Valley, **Steven Hecht** received his B.S. from Emporia State University in Kansas that he said was very much like GVSU in its focus on liberal education. From there, Steve worked for several years—including a couple of years doing development work in Thailand—before he went on to receive his Ph.D. in Microbiology and Molecular Biology from Tufts University School of Medicine in Boston, MA. After completing his Ph.D., he did

postdoctoral work at Colorado State University, College of Veterinary Medicine and then taught at Northeast Louisiana University in Monroe, LA before finally joining Grand Valley in 1999.

During Steve's time at Grand Valley, he enjoyed teaching 15 different courses—though he admitted to favoring the hands-on-nature of the microbiology laboratory (BMS 213). His research focus at the university was investigating viruses of bacteria (bacteriophage). In particular, Steve and his undergraduate students were working in collaboration with Prof. Tony Nieuwkoop, also in Biomedical Sciences, to see if they could develop phage therapy for bees. Today's bees facing a great deal of pressure from bacterial disease, Steve hoped to find viruses to target bacteria and benefit bees that could help these pollinators that humans rely so heavily upon for our agriculture.

Outside of teaching and research, Steve Hecht was also involved in a number of other ways across Grand Valley. He was the faculty advisor for a student group (Universities Allied for Essential Medicine) whose main concern is providing affordable medicines to the world. Steve was a member on personnel committee that helps in determining faculty promotion and tenure. Steve also devoted much of his time to effectively advising and mentoring students. Some of Steve's best advice to students was "get engaged in your classes. Even the painful ones. It is a choice that can change your life. Especially courses outside your major, as they can help you with your whole life approach. I still remember lessons I learned in my college poetry and literature classes, as well as developmental psychology."

When Steve was not at the university investigating virology topics and teaching microbiology, he was keeping up with the latest technology and console games. Steve was an active communicator of science as well in social media with over 1,700 followers on Twitter. Steve enjoyed hiking and birding in his free time.

The Biomedical Sciences Department chair, <u>Daniel Bergman</u> said of Steve Hecht, "he was the consummate teacher, always working to improve his craft. Steve was just an overall outstanding teacher that students respected immensely. He truly cared about his students and their success. Faculty and staff also had the utmost respect for Steve and personally whenever I needed advice or guidance I would go directly to Steve. He was a voice of wisdom for me and the Biomedical Sciences Department. He will be profoundly missed by all."

<u>Prof. Aaron Baxter</u> in BMS said, "Steve was always available to anyone that needed him and was truly a great friend." A thought echoed by many in the BMS Department.

Laker Effect – Adnan Oman

Biomedical Sciences student **Adnan Oman** was recently profiled as part of
Grand Valley's **#GVLakerEffect**—a
university campaign that focuses on the
collective impact of the campus
community—and was featured on the
homepage of the university website.



You can watch the video interview where Adnan talks about studying in the department and volunteering as a GVSU student at GVSU's YouTube channel.

New Visiting Professor

<u>Dr. Mattew Bruder</u> joined the BMS department as a visiting professor in January 2017. He earned his M.D from St. Matthew's University School of Medicine in Florida.

Blast from the Past

<u>Dr. Tim Strickler</u> shared this "blast from the past" from the Seidman House's digital collection showing a GVSU physiology lab: "The "older" professor in the physiology lab is **Dorothy (Dot) Merrill** who retired in the early 90's. She always signed her notes with a '."



Dr. Sheldon Kopperl also shared some memories of Ms. Merrill: "Dot was quite the personality. She was active at St. Mark's Episcopal Church downtown for most of her GR years and sung in the choir almost until the day she died a few years ago. She always took Good Friday afternoon off to attend services (until the mid-8o's GF was a GVSU holiday, disguised after the school switched to the semester system in 1980 by the term "Spring Holiday." That disappeared after the unions (of clerical and maintenance

staff) agreed to give it up in exchange for a total shutdown between Christmas and New Year's Day.) She lived in a mobile home north of I-96 off of Fruitport Road. The only time she ever got mad at me was when I referred to her residence (in conversation among faculty) as "in a trailer park." I actually took her (now) BMS 290 class for credit in the early

1980's since my chemistry background had no Physiology in it. She was a great, but nonnense (but had a sense of humor) teacher."

Congratulations to the Graduates of Distinction – 2017!

Congratulations to the Biomedical Sciences Graduates of Distinction for the 2017 year! We wish you all the best in your future plans!

Graduates of Distinction: Daniel Beachnau, Christian Boze, Morgan Crofoot, Samantha Danko, Rachel Eaton, Jessica Fifelski, Glenn Fitkin, Nicole Goward, John Grofvert, Michael Hudson, Cassidy Kraker, William Kutsche, Audra Langlois, Erin Leach, Kirk Luca, Jessica Maupin, Christopher May, Maxwell Phillips, Ashley Robinson, Collin Schlosser, Eric Sheffield, Johanna Squires, Stephanie Tanis, Samantha Tonks, Kelly VandeMerkt, Calvin Woodard, and Audrey Yeiter.





Duke Tanaka Jr. Anatomy Scholarship - 2017

Congratulations to **Tashkant Kaur** and **Courtney Ingles**, this year's recipients of the Duke Tanaka Jr. Anatomy Scholarship!

The Duke Tanaka Jr. Anatomy Scholarship honors students entering their Senior year at Grand Valley who have demonstrated a passion for anatomy and biomedical sciences and have maintained a solid academic record.



Erin Leach



Samantha MacKay

Excellence in Discipline - 2017

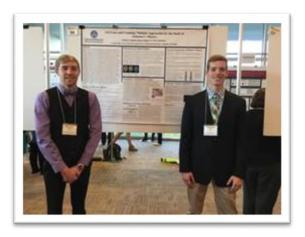
Congratulations to **Erin Leach**, the recipient of the BMS Excellence in Discipline - Undergraduate award!
And congratulations to **Samantha MacKay**, the recipient of the Excellence in Discipline - Graduate award!

Beckman Scholars Program

Dr. Cyndie Thompson is the BMS representative of the Beckman Scholars Program. The purpose of the Beckman Scholars Program is to provide exceptionally talented, full-time undergraduate students with a meaningful undergraduate research opportunity, while funding the scholars during their award term in order to preclude the need to seek additional employment. The amount of funding for the 2016 Beckman Scholars Program per student is \$26,000; \$21,000 specifically for the Scholar (as stipend and a travel and supply fund) and \$5,000 for the Scholar's Mentor. The 2016 program will support students during Summer 2016 through the end of Summer 2017. The Beckman Scholars stipend will support the students to perform part time research (ten hours per week) during the academic year, and full time research for each of the two summers (ten 40-hour weeks per summer).

West Michigan Regional Undergraduate Science Research Conference

The annual West Michigan Regional Undergraduate Science (WMRUGS) Research Conference took place November 5, 2016. The conference allows undergraduate students the opportunity to present their research to professionals in the science field. And this year's conference included a keynote speaker, research posters presented by undergraduates, and research talks by undergraduate and graduate students from local, regional colleges—including students from Grand Valley's Biomedical Sciences



Undergraduates **Michael Hudson** and **Zach Harper** that work in the lab of <u>John</u> <u>Capodilupo</u>.

Department. Recruiters were also on hand to discuss graduate school programs with interested students.

Winner of the 2nd Annual 3-Minute Thesis Competition

Congratulations to **Samantha MacKay**, a graduate student in the Masters of Biomedical Sciences program at Grand Valley State University in <u>Dr. Dan Bergman's</u> lab, for winning the second annual GVSU 3-Minute Thesis Competition! MacKay placed first in the overall competition and also won the "People's Choice" category.



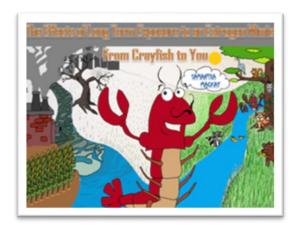
In the 3-Minute Thesis Competition, or 3MT, graduate students are allowed just three minutes and a single slide to share their research—often to those outside of their field. This format challenges students to find a balance with their research between detail and broad picture and also allows them the chance to share their work with a broader community.

MacKay's presentation was titled, "The Effects of Long Term Exposure to an Estrogen Mimic: From Crayfish to You," and her motivation for the project came from her interest in investigating the effects of chronic

nonlyphenol exposure. In particular, she focused on the effects of levels of nonlyphenol at current EPA levels that may not be limited to lab conditions and animal models. "Investigating these effects allows us to understand the future ramifications of current

standards on entire ecosystems and human health," MacKay said.

As winner of the GVSU 3MT competition, Samantha received a \$500 cash prize and traveled to Indianapolis to compete in the Midwest Association of Graduate Schools regional competition. For the People's Choice award, Samantha received a gift bag of Grand Valley "swag." Congratulations to Samantha on her success!



Science Olympiad

Science Olympiad was held on Saturday, March 18, 2017 at GVSU. BMS hosted the Anatomy and Physiology event for middle school students. The event supervisors included <u>Dawn</u> <u>Richiert</u>, <u>Mary Fournier</u>, and <u>John Capodilupo</u>. <u>David Linn</u>, <u>Dan VanderKooy</u>, and <u>Santanu</u> <u>De</u> helped with scoring exams. Three students and one parent also volunteered to help monitor the event.

Certified Healthy Department Award

The Biomedical Sciences Department was one of the departments President Thomas J. Haas and the Health and Wellness team formally recognized on January 31st, 2017 as a **Certified Healthy Department**. The program aims to support the value of health across the campus community. Departments can apply to receive the Certified Healthy designation each fall.



Distinguished Early Career Scholar Award

The Faculty Awards Convocation honors faculty for major milestones, years of service along with awards presented for University excellence in the areas of teaching, scholarship, service, and advising. Melissa Tallman, Assistant Professor of Biomedical Sciences, was awarded the Distinguished Early-Career Scholar Award. The Distinguished Early Career Scholar Award honors remarkable investigators at Grand Valley State University who began their independent scholarship within the past six years. These scholars demonstrate mastery in their field and show significant potential for continued success. The award recipients have made major contributions to theory, research and creative practice, and they have earned national recognition for their outstanding achievements.

April 2017 Commencement Marshalls Announced

Dean Antczak was happy to announce four faculty members who will proudly lead the lines of our students. Amorak Huey (WRT), Melissa Tallman (BMS), Mayra Fortes Gonzalez (MLL), and Andrew Lantz (CHM) will perform these ceremonial duties on April 29, 2017.

Huey recently received an NEA grant supporting his writing; Tallman received a Distinguished Early Career Scholar Award;



L to R: Fortes Gonzalez, **Tallman**, Antczak, Lantz, Huey

Four Awards Earned at the Graduate Student Celebration

At the Graduate Student Celebration, **Samantha MacKay** and <u>Dr. Dan Bergman</u> were awarded for their accomplishments in 2016-17. Samantha Mackay was awarded the "Outstanding Masters Thesis Award," Award for Excellence in Service to

Community/Profession," and the "Award for Best 3 Minute Thesis
Presentation." Dr. Dan Bergman was awarded the "Faculty Mentor of the Year Award" by the Graduate Student Association.

For the Outstanding Master's Thesis Award nominees must have successfully completed the defense of their thesis. Student work must be of publishable quality, or of research on a topic of exceptional significance to the profession



or discipline. Final manuscripts are expected to demonstrate excellence in design, analysis, and discussion, and should stand above the work of all other students in the given semester. For the Award for Excellence in Service to Community/Profession nominees should have demonstrated outstanding service and leadership to the community and profession (beyond the GVSU campus). Any faculty or staff member who has observed this student's performance may lend their support to the nomination. Letters should address the ways in which the student's service has benefited the community and/or the profession.

The Faculty Mentor Award is given to a faculty or staff member who exemplifies a deep commitment to fostering the professional and personal development of graduate students. They have invested in the potential of students and went beyond the general advising role.

The Graduate Dean's Citations for Academic Excellence were created to recognize outstanding academic achievement of graduate students. Awards are given to students who have completed their program or are very close to completion. The Graduate School began awarding the Dean's Citations in the Spring of 2006 at the first-ever Graduate Student Celebration. The ceremony is devoted exclusively to recognition of the academic excellence of graduate students during their studies at Grand Valley State University. The Graduate Student Association (GSA) co-hosts this event, which includes a reception and awards presentation.

Science on Tap

Three instructors from the Biomedical Sciences Department gave talks at Science on Tap, a monthly event that mixes science with casual conversation. Science on Tap is held the second Thursday of each month at 8 pm at the SpeakEZ Lounge in Grand Rapids.

Dr. Dan Bergman gave a presentation titled "Makin Sense out of Senses" where he talked about how the senses that make up our perceptions of the world work and how they vary from one another. In particular, he focused on how our sensory systems give us insight into the world by acquiring stimuli and allowing our brain to process that stimulation into information that colors our sensations and perceptions—but that those systems can vary from one person to another and thus our perceptions may vary from one another. In his talk, Bergman conducted a variety of interactive demonstrations that revealed how each of our senses individually differ and what those differences mean.





Dr. Bergman presenting his talk "Making Sense out of Senses" at the SpeakEZ Lounge.

Dr. Kathryn Haley gave a talk titled "Plagues and Human History" that ranged from the Black Death that ravaged 14th century Europe to the modern AIDS epidemic. In her talk she analyzed the molecular arsenal deployed by the various disease outbreaks through human history and how they helped ensure the spread of the diseases and the demise of their hosts. She also focused on the important role these outbreaks have played in shaping human history and how they have propelled the medicine we are using today forward.

<u>Dr. Chris Pearl's</u> Science on Tap presentation was titled "Misconceptions about Conception" and addressed the multitude of advice and rumors surrounding conception—for example, the advice that men should wear boxers instead of brief when trying to conceive. His talk explained the complex biological processes involved in conception. And he shared his

research on male fertility and whether those claims and advice can be supported by reproductive science or whether they are just myths.

Student Summer Scholars

Students in the labs of Martin Burg, Ruijie Liu, Chris Pearl, Derek Thomas, Merritt Taylor, Dave Linn, and Dave Kurjiaka were award Student Summer Scholars grants for this summer. The Student Summer Scholars (S3) program and Modified Student Summer Scholars (MS3) program, administered by the Office of Undergraduate Research and Scholarship (OURS), provides funds for a student and faculty mentor to devote time to a research and/or creative project during the spring/summer semester. Generally, S3 and MS3 grants provide a student stipend, faculty stipend, and a small budget for supplies.

Faculty News and Publications

- Aaron Baxter, Jarek Kozal, <u>Dawn Richiert</u>, and <u>Josh Stickney</u> were all awarded the 10-year service award for continuous service to Grand Valley.
- <u>Jarek Kozal</u>, Anatomy and Physiology Lab Supervisor and Instructor, was awarded the Grand Valley State University Service to Community Award.
- The following BMS faculty volunteered and helped at the Michigan State University Early Assurance Program Mock Interviews: <u>Laura Stroik</u>, <u>Cynthia Thompson</u>, <u>John</u> <u>Capodilupo</u>, <u>Melissa Tallman</u>, <u>Deb Burg</u>.
- <u>Deborah Lown</u>, associate professor of biomedical sciences, and Lisa Sisson, assistant professor of hospitality and tourism management, gave a presentation, "Healthy Food Policy at Food Pantries: Evaluation of Impact on Nutrition Environment," at the Academy of Nutrition and Dietetics Food and Nutrition Conference in Boston, Massachusetts.
- Martin Burg published a paper in *Trends in Genetics* entitled "The GEP: Crowd-Sourcing Big Data Analysis with Undergraduates."
- <u>Carmen Nochera</u> published a paper in Foods that was entitled "Preparation of a Breadfruit Flour Bar."
- <u>Eric Ramsson</u> published a paper in *BioTechniques* entitled "A pipette-based calibration system for fast-scan cyclic voltammetry with fast response times."
- <u>Eric Ramsson</u> had a presentation "Real-time characterization of DMP 543-mediated elevations in acetylcholine release in porcine retina" at the Society for Neuroscience Annual Meeting, in San Diego CA.
- <u>Dr. Merritt Taylor</u> received a grant from The Campbell Foundation. His grant was entitled "Novel Mechanism for Dopaminergic Neurogenesis."
- **Dr. Martin Burg,** professor of BMS, gave a presentation with a graduate student "Identification of Hdc Gene of Drosophila melanogaster generated through

Transposon-excision mutagenesis," at the Society for Neuroscience Conference in San Diego, CA

Former and Current Student News

- Samantha MacKay, a Masters in <u>Dan Bergman's</u> lab, was selected by The Crustacean Society as the best oral presentation on the theme of Crustacea at SICB 2017 meeting in New Orleans. The New Orleans SICB meeting had 2341 registered attendees and 1971 abstracts submitted. Her presentation was, "Chronic Effects of Nonylphenol on Reproductive Behavior and Development of Crayfish."
- Travis Garvin's research proposal: "The Relationship between Feeding Type and Temporomandibular Joint Morphology in Superfamily Musteloidea" was awarded a Presidential Research Grant for his work in Melissa Tallman's lab.
- Ashley Ewert, an advisee of <u>Dawn Richiert</u>, will attend Des Moines University College
 of Osteopathic medicine this fall.
- **Madeline Phelps** informed **John Capodilupo** that she will be attending the Pharmacy program at the Ohio State University this fall.
- Caroline Poirier, a student in <u>Martin Burg's</u> lab, was selected for a Perrigo Fellowship at the University of Michigan for the summer.
- David Thom, advisee of <u>Chris Reed</u>, was admitted to Rosalind Franklin School of Podiatry for this fall.
- MaKenzie Tremp, a former advisee of Shel Kopperl, was awarded the inaugural recipient of the American University of the Caribbean School of Medicine's Alumni Heritage Scholarship. Ms. Tremp, a graduate of Grand Valley State University with a Bachelor of Science degree in biomedical sciences, gained recognition for her mission trip in China and clinical work as a certified nurse's assistant. "If you would have asked me at age three what I wanted to be when I grew up, I would have told you 'a baby doctor," she said. "In May, I will officially be on my way."

Interesting and Significant Items to Share

The <u>BMS Department</u> would love to hear what you have been doing since leaving **Grand Valley** (i.e. internships, professional school matriculation, employment, etc...). Please send us your news, announcements, and photos to <u>biomeddept@gvsu.edu</u> or share on social media at our <u>Facebook</u>, <u>Twitter</u> or <u>LinkedIn</u> pages. You can also send <u>Dr. Dan Bergman</u>, Chair and Associate Professor, a message at <u>mbergmand@gvsu.edu</u>.