



natural sciences

AT PARKLAND COLLEGE

Spring 2017 Newsletter

Letter from the Chair

What a semester it has been!

Our national political climate is highly polarized, our state is nearing two years without having passed a budget and we held a strongly contested Board of Trustees election from which there is ongoing indecision and deep concern. But against this challenging background, we remain a remarkably cohesive, collegial group of scientists and educators. The initiatives and programs outlined in this Newsletter strike me as a celebration of what can be achieved when a group of dedicated professionals, working hard, remain focused on what can be achieved in the circumstances presented with all the tools available to them. The fact that this is only a sampling, not by any means a complete list, of the stories of successful efforts on the part of our faculty is truly humbling. I remain deeply honored to serve as your Chair. Thank you all for your astounding efforts on behalf of Parkland, the Natural Sciences Department and our students.

This summer holds the possibility of some changes for us: 1) L-242, currently a frequent chemistry classroom with good facilities for demonstrations, may be taken over by Health Professions. If so, we will be moving into X-225 where the intention is to duplicate (and perhaps even improve) the facilities. 2) Cindy Smith in the Division Office is working to coordinate content from us for presentation on the new public facing website to be found at www.parkland.edu. It is not certain when this new public face will be released, but I'm hoping to provide Cindy with text suitable for lots of our areas and initiatives soon. (Please see the minutes from the last Department Council meeting for specific topics we need to have covered.) The hope is to have, and maintain, a robust website showing our Department, Division, and College in a consistent, informative and intuitive way for all users.

Please continue to communicate with me about your professional needs, wants, and concerns. Enjoy the rest of the Newsletter (great one Britt, thanks!) and have a great summer!

Scott

Department Initiatives

The SciCommons

Written by Dave Wilson

It's been interesting watching the evolution of an idea that sprang to life just a week or two before the fall semester ended. A lot of effort and thought has gone into the location, ancillaries, internet and phone hookups, candy offerings, and many other details.

For those of you that haven't noticed, several of your colleagues have been spending one or 2 office hours a week in the commons area on the first floor of the L-wing. The location was under much discussion and debate, but I think we stumbled on the best possible spot – at least for now.

At times the area is quiet, and other times it is a stir with much tutoring. During quiet times faculty can be seen browsing, emailing, grading, or spontaneously networking with colleagues who happened to be roaming down the hallway. During active times there can be several students being tutored on the intricacies of aqueous equilibria by Manny. And, I've seen faculty using this area outside of their normal office hours as student demand dictates.

We hope to garner even more support from faculty, both full-time and part-time. There were about 10 full-time faculty who volunteered, but I would like to especially acknowledge our part-timers. In no particular order, Mindy Tidrick, Amy Nicely, Kim Bode, Tiffany Gibson, and Fatemah Hermes (I hope I didn't leave anyone out) all staffed at least 1 office hour a week in the SciCommons. Thank you all for letting our students know that they are our priority! Collectively, the SciCommons has been staffed over 20 hours every week! Maybe we can get to 25 hours during the fall semester?

We still don't really know the full effect of this new endeavor. There will be four questions on the course evaluation forms this semester asking for feedback from students about the utility and perceptions of the SciCommons. And, we have some anecdotal evidence from students about its value. For example, one student commented that she wasn't sure at the beginning of the semester if it would be useful, but once she came and started meeting with classmates and instructors, she started coming more frequently. I see her down there several times a week. Another commented about the importance of seeing her classmates there and that was motivating for her to study there.

Instructors have shared some interesting reflections with me. Erik commented that he has been tutoring some chemistry students (chemistry seems to be the most common topic discussed in the SciCommons). He recalls some of this high school chemistry but has had to brush up quickly in order to assist students. Val is frequently seen playing the role of the pied piper as she comes down right after her class on Friday with a troop of students in tow eager to learn more.

I suspect that the impact of the SciCommons is greater than we imagine. A lot of students who don't use the area certainly know it is there and see faculty who are willing to assist students outside of normal class time. This certainly has benefits we will may never fully appreciate.



Department Initiatives

Illinois Science Olympiad – Parkland Regional Tournament

Written by Amy Nicely

On Saturday, March 4, Parkland hosted its seventh annual Illinois Science Olympiad Regional tournament. This year there were a total of 24 teams from 17 area schools that participated. We were pleased to welcome Judah Christian School and Mt Pulaski High School as first-time participants.

The tournament consists of 23 events for middle school teams and 23 events for high school teams. The topics for the events span all scientific disciplines including biology, chemistry, earth science, physics and engineering. Awards are given to the top finishers in each event, and the teams with the highest overall scores move on to the next level of competition. The Science Olympiad program includes Regional, State and National tournaments. The Division B (middle school) teams that advanced to the state tournament were St. Matthew and Glenn Raymond, while Mahomet Seymour, Centennial, and University Laboratory High all advanced from Division C (high school). These teams will be competing at the University of Illinois on April 29.

The new events featured at the tournament this year included Ecology, Fast Facts, Helicopters, Hovercraft, Materials Science, Microbe Mission, Optics, Remote Sensing, Rocks & Minerals, Towers, and Wright Stuff. Students from the Parkland Science Club took responsibility for planning and running Fast Facts, which is a Scattergories-type event.

We were pleased to see an increase in marketing, press, and social media coverage of the tournament this year. You can view over 75 photos of the events and awards ceremony on our new Facebook page: <https://www.facebook.com/PC.ScienceOlympiad/> Please visit the page and follow the posted links to the Parkland blog, the official Parkland news release about the tournament results, and an article in the Prospectus News.

Of course an event of this size couldn't be possible without the assistance of many volunteers – about 100 overall! I want to give special thanks to Erik Johnson (Parkland Astronomy faculty), my tournament co-director. Thank you also to everyone who volunteered time in any capacity (planning/running events, volunteering for day-of support at headquarters/hospitality/scoring, encouraging your students to volunteer, etc.). We couldn't do it without you!

i S O Illinois Science Olympiad

Illinois Science Olympiad – Parkland Regional Tournament

Saturday March 4, 2017

Dr. Ramage distributing 1st-place medals



Medals for the top finishers in each event and trophies for the state-advancing teams



PARKLAND COLLEGE COBRAS

St. Matthew students celebrating their 1st-place finish in the B division



Glenn Raymond coach Troy Simpson shows off the team shirt, with an 80's theme to celebrate the 30 years their school has been participating in Science Olympiad.



Representatives from the Mahomet-Seymour team accepting their 1st place trophy for the C division



Engaging Students Outside the Classroom



Written by Erik Johnson

The club changed our meeting location and time this semester to accommodate the schedules of our officers. Student Life has nice conference rooms, but I don't have as much access to the stuff in my classroom. Having meetings at noon means we can do solar observing instead when we can see the Sun!

Club members expressed an interest in going to Fermilab this semester, so we scheduled a trip for April 2. Fermilab has free Ask-A-Scientist tours on the first Sunday of the month. April still has lots of conflicts for students, so we only had six students attend the trip along with chemistry faculty members Kristy Jeans and Sheryl Drake. I think I'll schedule the trip in February next year.

I've always enjoyed the aesthetic of Fermilab. The students enjoyed the bison that live on site as we drove in. The main building, Wilson Hall, was hosting an art gallery filled with submissions from employees. The 2 km-diameter moat above the Tevatron is quite a sight, and I took care to point out that the lab's first director (who also designed Wilson Hall) designed the power lines to look like pi.

We scheduled a dark sky observing trip in February that was canceled, which is similar to the poor luck we've had with the classes' observing sessions. We've had some solar observing sessions, but the Sun is approaching the minimum of its sunspot cycle so there aren't many sunspots to see. A big spot will pass over the Sun on August 21, though. Make your plans for the eclipse!



Engaging Students Outside the Classroom



Written by Britt Carlson

The Parkland Science Club (PSC) had a great semester including volunteering at the IL Science Olympiad regional tournament, hosting a transfer panel, hosting 4 invited talks, a trip to UIUC's Institute for Genomic Biology, and many hands-on activities (making candles, designing marshmallow cannons, playing a record with a sewing pin, making ice cream, and isolating DNA from wheat germ). We also collaborated with the Parkland Sustainability Club for one of the speakers during Earth Week.

As co-advisors, Mike Retzer and I send a hearty Thank You! to all for supporting PSC through purchasing our club shirts (green shirts shown in the photo below – email me if you'd like one (\$20/each)), coming to or hosting events, and giving students extra credit for attending talks.

We love having an active and engaged club, so please continue to send students our way!

PSC partnered with the Sustainability Club to bring a sustainability science-themed speaker to campus during the Sustainability Club's Earth Week activities. Ron Revord, a UIUC Crop Science PhD student talked to PSC about his research in sustainable agroforestry and breeding hazelnuts or resistance to a fungal pathogen.



UIUC Plant Biology graduate students Lorena, Chris, and Sarah came to PSC to talk about their journeys to and experiences in graduate school.

Department Assessment

Laboratory Skills Assessment Survey Findings

Written by Dave Wilson

I knew this was going to be a challenging instrument to write based on past experience writing lab assessments. Assessing for skills using a written instrument leads to a lot of head scratching. And just when you think it is perfect, the results show you some deficiencies that were staring you in the face all along.

We are about half way through phase II of our six-year, three-phase assessment cycle. The department committee has been working on revising the new instrument based on your feedback at the assessment meeting in January during prep week. I just wanted to share a little bit about our findings.

- Students don't have a clue what a BED (banana equivalent dose) is. I hope all of you are ashamed for letting our students down.
- Instructors in our department don't agree on significant figures. This fact was illustrated quite clearly during the January meeting. Curtis, we will talk to Scott about getting you a suitable sub to present that topic to your students the next time you need to teach it.
- Precision and accuracy are easy to define, but difficult to assess precisely (or is that accurately?) in the context of a survey question.
- There are a scary number of our students who think you can measure mass with a glass cylinder object. Or do these students actually know something we don't?
- Students nailed the question about using a telescope to visualize objects at a long distance. Apparently, Erik's incessant reminders about the next eclipse just goes to show that repetition is the key to learning new information.
- The worst performing concept? If you calculate density using water displacement for the volume and forget to subtract out the initial volume of water, you will get an answer that is too low. When the denominator gets bigger, the result gets smaller!
- Too many students are using pencils in their laboratory notebooks.
- Students' attention spans are much shorter than yours if you are still reading this article.
- Students apparently understand that heating things causes them to expand, even though the goal of the heating may have been to kill microbes.
- Students don't get dependent and independent variables. Of course, who does, really? Isn't time dependent on the amount of sleep you've had? Huh, Erik?!

Laboratory Skills Assessment Survey Findings

- Manny bought a new house out in the country recently so he could establish the strangest zoo on the planet. And it has way too many birds!
- Did you know that 10% of 10% is 0.01%? Well, over 20% of our students think so.
- Three out of 4 students know that an arrow pointing from a “solid” to a “liquid” means something is melting. I now feel justified for spending an entire week on that topic. Just imagine how deeply my students appreciate that scientific concept.
- Too many students apparently think that a large value on a column graph should be interpreted as “height from the ground” no matter how the Y axis is labeled.
- A horizontal line is linear. Think about it...
- Students don't have a clue about the terms “linear relationship” versus “exponential relationship”. Who can we blame for this? Maybe Scott, since he doesn't teach any more.
- A lot of our students will look for any meaning in a graph. And that tendency increases exponentially as the complexity of the graph increases. To the point where you can convince them that organic foods cause autism (I'm not so sure they aren't correct about that point).

- Nobody really knows why we wear goggles in the lab. Maybe we ought to just disband the Laboratory Safety Committee. I know all our lives would be more fulfilling if we did so.
- Wearing gloves that cover your elbows will protect your fingers from hot glass when you pick it up.
- A quarter of our students feel that you should never smell chemicals in the laboratory. Why doesn't the Laboratory Safety Committee get on this now and require that goggles and nose plugs always be worn in the lab?!

That's just a smattering of the enlightening information we have learned from this survey. I will be in touch soon about the distribution of the survey for this spring. My current rough estimate is that it will be ready around May 1 and students will have the last two weeks of classes to complete it. Please make sure as many of your students complete it as possible so we can get the most accurate reflection of our student body as we possibly can.



<https://www.uline.com/Product/ProductDetailRootItem?modelnumber=S-21080>

Special Programs

My Personal Journey to Internationalize My Curriculum

Written by Toni Marie Burkhalter



During a morning boot camp a few years ago, I was speaking with Jody Littleton and she lovingly challenged me to think about how my classes could be different and possibly even better through adding more cultural reflection. Often when teaching in the quantitative sciences, it is easy to overlook the power that infusing curriculum with an international perspective can have on student learning. I have fallen prey to the mindset that I just need to “get through the material as presented in the book and on the Course Information Sheet”. After ruminating on the topic, I realized that I may be able to BETTER teach specific topics if I created well thought out assessments with a global outlook. She and I continued the conversation and several Parkland faculty partnered with Joliet Junior College to travel to China a month ago (March 2017). It was a trip of a lifetime and really opened my eyes what may have been missing from my teaching. The trip gave me itchy feet with respect to my desire to travel outside of the

US for my professional development. How can I teach about unique nutritional deficiencies, different modes of physical activity in the world, living quarters’ impact on health, medical training, and more if I only have a book for reference? Once abroad, I quickly found that my perspectives on China prior to my trip were missing critical pieces of information; once I was personally exposed, it allowed me to form a holistic picture of the Chinese culture and better compare it to the US as well as other countries I have visited.

WHAT DID I LEARN DURING MY VISIT?

While in China, I learned that many of the topics I studied prior to my trip were “mostly correct” but visiting clarified many misconceptions, gave me a new appreciation, and allowed me to better understand the full picture.

I was shocked to see how quickly China is becoming Westernized...to the point that McDonald’s delivers in many cities in China. At the train station waiting for the bullet train, there were two KFC restaurants as well as a McDonald’s in one moderate sized train station.



My Personal Journey to Internationalize My Curriculum



At the farmer's market, we saw many choices that we don't see in the United States. Lamb intestine, cow stomach, chicken feet, and more were sitting out for purchase from morning until evening with patrons bringing them home to cook for dinner. When we were invited to eat with the Nanjing Technical School faculty and deans, we were able to sample more of the local fair...including duck heads (a native delicacy). In case you were wondering, you eat duck heads like an oyster.



Most places we ate at served food "family style" with a turntable in the center. Plates were significantly smaller than in the US. Additionally, because everyone is sharing, I didn't want to take more food than would be socially appropriate. So, it encouraged me to eat more modest portions than I am accustomed. I also learned that rice is often not served in China if the host would like to impress you with the quality of food offered. Rice is not the food of the rich. The rich eat a meat and fish based diet with significantly fewer vegetables than China has historically consumed. In turn, there is a marked rise in obesity, heart disease and type II diabetes.



Even on good days, the smog in some locations of China would impede my ability to see the sun...and possibly impede my ability to synthesize enough vitamin D to meet my nutritional needs without supplementation/fortification.

Toilets in China are often similar to the stalls you see in the image reference (image from http://www.telegraph.co.uk/content/dam/Travel/leadAssets/31/69/china-loo_3169407a-large.jpg on 4/17/2017).



We discussed that women would realistically need to retain the ability to perform a deep squat if they were to use a public toilet. However, it seemed of little concern as many older individuals in China had a greater range of motion than we see in the US. Possibly due to the toilets?

My Personal Journey to Internationalize My Curriculum

When we visited the local park at 10am during the weekday, we noted that there were many people engaged in exercise...dance, tai chi, fencing, badminton, etc. The retired people in China do not retire to the couch. They get out during the day to enjoy other's company as well as keep active physically and mentally.



HOW HAS MY CURRICULUM CHANGED?

- In BIO 120 (the fundamentals of nutrition), each module students have the opportunity to present a module specific cultural comparison between China and the US. During the digestive system module, students discussed the incidence of specific GI disorders in China relative to the US. For example, a student researched and found that there is a higher incidence of lactose intolerance/maldigestion in China due to both environmental and genetic factors.
- In KIN 288 (exercise physiology) the class is finding peer reviewed journal articles comparing topics such as air quality impact on VO₂max, changes in childhood obesity rates in response to Westernization, as well as the selection and training of Olympic hopefuls in China.
- In all of my classes students have the option of creating a video focusing on the cultural comparison between China and the US. We are partnering with PCETV studios and many of the videos will become available on YouTube by the middle of May.

Overall, it was surreal to visit China...a once of a lifetime opportunity. I was constantly taking pictures, speaking with locals, and absorbing all of the nuances I could. The Parkland faculty who were able to participate in this grant echo my sentiments and we will be collectively presenting in September. We look forward to sharing more of our perspectives at that time.

Special Honors

Mike Retzer earns the 2017 ICCTA Outstanding Part-Time Faculty Award

Written by Derrick Baker

Michael Retzer, Part-time Biology Faculty, has been selected by the Parkland College Professional Development Subcommittee for Faculty as the recipient of our 2017 ICCTA Outstanding Part-Time Faculty Award!

Michael is recognized by students and colleagues as someone who cares deeply about educating and being student-centered in all of his teaching. He is described as responsible, self-motivated, creative, and he contributes significantly more than would normally be expected of a part-time faculty member. He personalizes the curriculum in his courses to ensure that his students are receiving the best instruction possible. A former student says that Michael is the definition of a great professor, "Dr. Mike honestly is one of the best professors I have had at Parkland and I am so glad I took Bio 101 with him. I could not have asked for a better semester!" His colleagues report that he has never balked at facing a new challenge, and thoroughly prepares for any new endeavor.

Michael is not only a great teacher, but also an active participant in the Parkland community. He has dedicated a lot of energy to the Sustainable Campus Committee, on which he served as co-chair,

promoting sustainable practices and establishing a tall grass prairie on campus. His students helped to create that site and continue to assist in maintaining it. Michael is also a co-sponsor of the Parkland Science Club, helping students develop service projects on campus and in the community. He is recognized as a generous colleague who is willing to put the needs of students and the department ahead of his own preferences.

Michael has been active with the American Society of Ichthyologists and Herpetologists, and reviews journals devoted to biology. He is admired for being straightforward and caring, and for being respectful and attentive to students and colleagues alike.

On behalf of the PCA Professional Development Subcommittee for Faculty, please join me in recognizing and celebrating Michael's inspiring commitment to excellence as one of Parkland's outstanding, award-winning faculty.

Congratulations, Michael!



Mike with his wife, Karen, in 2015.

Special Programs

New IDEAS Grant for Part-time Faculty Professional Development

Written by Christina Beatty

Attention Part-Time Faculty!

The Professional Development Subcommittee for Faculty received IDEAS grant funds to compensate part-time faculty for professional development (i.e. attending CETL sessions and even for off-campus conferences or workshops). This would go above the reimbursement for certification and travel mentioned in the PTFO contract. Keep your eye out for more information coming this summer and fall. It'll be on a first-come, first-served basis. Ask Christina Beatty (cbeatty@parkland.edu) if you have questions.



NSF BIO REU Meeting in Arlington, VA

Written by C. Britt Carlson



I attended an NSF BIO REU meeting in Arlington, VA over March 30-April 1. This was a meeting for all principle investigators (PIs) of NSF BIO REU grants. It couldn't have come at a better time for me. The Parkland-UIUC REU, PRECS, is starting this summer and there is so much to do and so much to learn. This meeting had new PIs, like me, and PIs of programs that had been running for 20+ yrs. I found everyone to be really engaged and passionate about their programs. They were also very open and willing to exchange ideas/give advice.

Most of the PIs were from research universities, but several were from research institutes like the Smithsonian or the Chicago Botanical Garden. I was the only PI from a community college. In fact, I think PRECS might be the first NSF BIO REU with a community college as a PI/co-PI. However, there were many programs that were actively trying to recruit community college students. It was interesting, to say the least!

I came back to IL full of ideas and am already starting to implement them – expectations documents for students and for research mentors, a discussion of what it

means “to be a scientist,” and how to track students after the program ends.

I'm sure this 1st summer will still be full of bumps in the road, but I'm excited to start!



Britt with her husband, Nate, visiting the Washington memorial (and the cherry blossoms) after the NSF meeting.

Science in the Community

March for Science

Written by Heidi Leuszler



On April 22, 2017, many major events happened in Champaign. There were Earth Day celebrations, the Illinois Marathon, and a youth-led March for Science. From the mission statement for the local March, “The March for

Science: Champaign-Urbana is a sister march of the March for Science in Washington D.C. We march to support ethical research practices in scientific communities. We march to support people that work and participate in and around science communities. We march to support science for the benefit of all people. We march to keep scientific findings available to the public. We march to protect our food, water, environment, and communities through science-backed policy.”

I participated in the planning committee and was extremely impressed at how the focus of the local march was about intersectionality and making science accessible to all. There were many committees within the planning committee: diversity, publicity, environmental impact, safety, and post-march planning, to name a few. The organizers of each committee were not all scientists, but all were supportive of science. It was an honor to be part of the group.

The March went flawlessly. About 2200 people were present, and they represented C-U, local communities, and the region. I

spoke with one family that came from DeKalb to march in Champaign!

There were two speakers: May Berenbaum, Entomologist at UIUC, and Saba Manetti-Tesfaye, a 14-yr old high school student who supports activism through science and art. The march itself was short, and took roughly an hour, and then the crowd gathered inside the Orpheum Children’s Science Museum for more speakers: Amy Betzelberger, Plant Biologist at UIUC; Shane Campbell-Staton, Evolutionary Biologist; Rochelle Gutierrez, Mathematics Education Scientist; Erfan Mohammadi, Chemical Engineer Graduate Student; Julie Pryde, Public Health Administrator. They spoke with great passion about the need to support and rely on scientific data in all of their fields. Mr. Mohammadi also talked about the ramifications of immigration bans on the future of science in our country. Many students who were planning on staying in the USA are considering other countries to begin their labs and research. Ms. Pryde discussed the story of HIV and the role that science played in managing that transmissible infection.

There were both activists and just scientists that feel threatened by the alternative fact rhetoric of our current administration, and the threats to cut major funding of agencies and departments that focus on science (EPA, NASA, DOE, NIH, etc.). My favorite sign was, “You know things are bad if the introverts have to come out of the lab.”



New Faces



Molly Woloszyn



Current position?	Adjunct instructor for ESC 101 - online (Introduction to Weather)
What has been the biggest challenge with working at Parkland College?	The biggest challenge has probably been learning the Cobra system. I've never worked at Parkland or taught an online course before, so it's taken some time to learn the system. But it's definitely gotten easier throughout the semester through just having more experience and using the help provided by Lori Wendt, Julie Angel, and my mom (see below)!
What has been the greatest perk about working at Parkland?	I was born and raised in Champaign, so it's been rewarding to teach at my hometown community college. Also, my mom (Carolyn Ragsdale (Surgical Technology)) has worked at Parkland since 1989, so it's nice to share this with her too!
What one thing do you hope to accomplish at Parkland College?	I hope that my students (Introduction to Weather course) walk away with a new appreciation and breadth of knowledge about the atmosphere and weather systems. It'd be great if they became more interested in weather as a potential career path, but even if they are just more aware of the weather around them, how it's happening and how to be safe when faced with severe weather, I'd be very happy with that!
Where were you before Parkland College?	I have actually worked full-time at the University of Illinois as an Extension Climatologist since 2011 and I am still in that position today. I was really interested in teaching online in addition to my full-time job because I've always enjoyed teaching, especially about weather!
If money, time, gravity, and the space-time continuum were no object what one thing would you love to do?	Since money and time are no issue, I'd love to have the ability to take a few week vacation every year to new places throughout the world with my family. It'd be really nice if air travel to faraway places like Fiji could magically be made into a one-hour flight though - since I wouldn't want to do that long of a flight, especially if our kids were coming! ☺
Anything else you'd like to share?	Outside of my full-time job and part-time work at Parkland, I am married to Ben and we have two energetic, funny, and sweet kiddos - Annie (4) and Zach (2).

New Faces



Heidi Bjerke

Current position?	Astronomy Instructor (on-line)
What has been the biggest challenge with working at Parkland College?	Not getting to know my students as well as I normally do.
What has been the greatest perk about working at Parkland?	Teaching online because it fits well with my schedule. I also really enjoy working with learners of all ages and love being able to teach astronomy.
Where were you before Parkland College?	I teach science at Jefferson Middle School during the day and will be the new STEM teacher there this fall.
If money, time, gravity, and the space-time continuum were no object what one thing would you love to do?	I would visit every NASA facility, visit Star City in Russia, be a space tourist or astronaut, and own a small farm with alpacas, sheep, miniature goats and donkeys.
Anything else you'd like to share?	I spend my spare time going to classes with my dogs, Winston and Willow. They are both Old English Sheepdogs. Winston is 4 years old and is a therapy dog. Willow is just over 1 year old and we attend agility, hoops, and treibball classes.

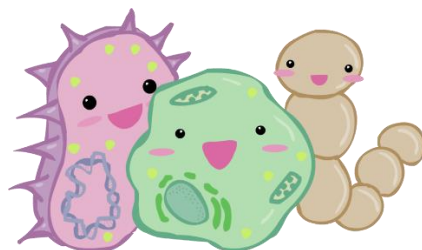


New Faces



Marcus Lawson

Current position?	Part-Time Instructor BIO123 (Microbiology)
What has been the biggest challenge with working at Parkland College?	Familiarizing myself with the excellent learning technology used at Parkland College.
What has been the greatest perk about working at Parkland?	I enjoy the class size at Parkland as it allows me to interact with students during lecture/lab.
What one thing do you hope to accomplish at Parkland College?	Continuously improve my teaching philosophy. I have gained a wealth of feedback thus far.
Where were you before Parkland College?	I work at the University of Illinois conducting research.
If money, time, gravity, and the space-time continuum were no object what one thing would you love to do?	I would love to travel the world with my family so that we could observe and appreciate the diverse cultures of our planet.
Anything else you'd like to share?	Teaching at Parkland has been tremendously rewarding and I am honored to be a part of the community.



<https://tinyurl.com/mnqo3ch>

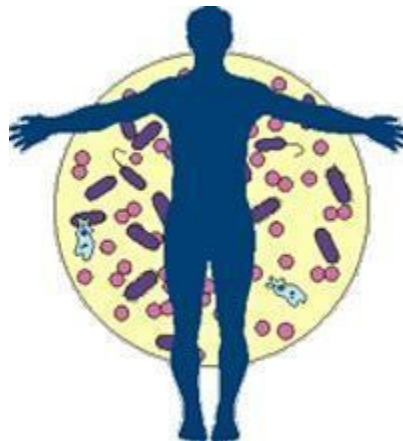
New Faces



Fatemah Hermes

My name is Fatemah Hermes and I currently teach a section of BIO 123 (Microbiology). Parkland is a wonderful place to teach! The students are smart and fun and the other faculty and administrative staff are extremely supportive. During my time at Parkland I hope to accomplish three things. First, I want the students who take my class to enjoy microbiology (and science/biology in general) and recognize it in their daily lives. Second, I want my students to be able to express their thoughts in beautiful writing. And, third, I want to become a better more creative instructor.

I have an interesting story to share from my first semester here at Parkland. Sometime in the middle of the semester I asked my students to write a short paragraph about the topic that they found most interesting in the course up to that point. I was hoping to get responses describing the unusual microbes that we studied, such as the bacteria that grow at temperature and pH extremes, the ones that are photosynthetic, the ones that form biofilms, or the beneficial bacteria that live in and on us and our plants. Or, responses about horizontal gene transfer (which is one way that microbes exchange genetic information), cloning (which is a lab technique used to express foreign proteins inside microbes), or even about the use of enzymes (some of which come from microbes) in everyday products such as detergents and meat tenderizers. Most of the responses I got, however, were about the techniques used to limit microbial growth! I learned from this that I should try harder to deliver the idea to my students that the majority of microbes are not harmful, but on the contrary are useful and extremely important to our well-being.



From the Planetarium

William M. Staerkel Planetarium News

Written by Dave Leake

ECLIPSE PLANS SHAPING UP

The Planetarium is teaming up with the CU Astronomical Society and the Twin City Amateur Astronomers (Bloomington-Normal) to offer eclipse programming from Camp Ondessonk, near Ozark, IL, not far from the centerline. The camp is about a 3.5 hr drive to the south. The link is that Dave's brother-in-law used to be the camp director. Anyone can join but advance registration is required. Fees include primitive lodging and all meals. Note: there won't be any programming at the Staerkel Planetarium on the day of the eclipse (August 21). For more information, go to www.cuas.org or <https://ondessonk.com/event/2017-great-american-eclipse-event/>.

The planetarium sponsoring or partnering with others to offer many workshops and talks for teachers and the general public. This includes:

- May 24 – Champaign Public Library, 9-2pm
- June 7 – Market at the Square, 7-noon
- June 26 – Unit #4 schools workshop (at the planetarium), 9-11am (partnered with UIUC)
- July 11 - Unit #4 schools workshop (at the planetarium), 9-11am (partnered with UIUC)
- July 18 – Sadorus Community Center, 9am
- July 20 - Unit #4 schools workshop (at the planetarium), 1-3pm (partnered with UIUC)
- July 22 – Middle Fork Forest Preserve, 8pm
- August 1 – Urbana Free Library, 6:30pm
- August 16 – Urbana Schools In-Service

SUMMER MATINEES RETURN

The planetarium will once again offer public matinees on Tuesday afternoon and Thursday morning beginning June 6. And the line-up this summer includes a new show called “The Little Star That Could.” “Little Star” is a program that we ran in the early 1990s as a slide-based program. It has now been updated and converted to full-dome digital format. “Little Star” shows that being average can be very special! Stars larger or smaller than the Sun would make it very difficult for life to form on a planet. See “Little Star That Could” in June Tuesdays at 1pm and Thursdays at 10am.

SEE “SEEING!”

Another new show will premiere in June, this one being Friday nights at 8pm. “Seeing” is a full-dome program by the Carl Zeiss company that is subtitled “A Photon's Journey Across Space, Time, and Mind.” The show follows a photon's journey across the galaxy to a young stargazer's eyes. The photon continues into the eye as we learn the structures of the eye and their function before taking a ride along the optic nerve. The show is narrated by Neil deGrasse Tyson

“WORLD OF SCIENCE” INPUT

The planetarium enjoyed a wonderful “World of Science” lecture series in the last academic year with each talk either being a sell-out or close to it! We added a talk on tornado chasing and another on the August eclipse. In June, Dave Leake will begin work on the 2017-2018 series. Would any of YOU be interested in giving a public talk in the planetarium? The goal is to incorporate as many of the sciences as possible and not focus on just astronomy and space science. Do you know of a good speaker who may join our series or maybe a hot topic in your particular field? Email Dave at dleake@parkland.edu.



Snapshots in Time



Planetarium director Dave Leake has always been a baseball fan. He got to relive some of his childhood memories when his son, Dan, began playing. In high school, Dave began doing the public address announcing for Centennial High School baseball. Once he had to do 16 games in four days (which also included scoreboard and between-innings music) for a Junior American Legion tournament. When Dan made Parkland's baseball team as a walk-on pitcher, Dave began doing the PA work for Parkland baseball. Here is shown in the press box with Brian Schutte, Parkland admissions advisor and the voice of Cobrasports.net. Dan has graduated but Dave still loves doing the games on weekends, "I can't afford the major league games anymore, but you get to watch some great college baseball and enjoy the people you meet. Getting to know the guys is a blast.



Sheryl Drake's largest (okay, only) nephew had his 1st visit to the 2nd largest planetarium in Illinois.

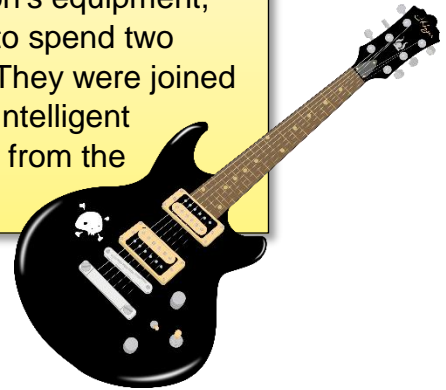


Nat. Sci.: the golden treasure at the end of the rainbow. A rainbow over the L-wing

Snapshots in Time



Of all the seats available at the Virginia Theatre for the Peter Frampton "Raw" Concert, Janine Prillaman and Julie Angel ended up unknowingly purchasing seats right next to each other! The first concert was interrupted by an electronic malfunction in Frampton's equipment, so had to be rescheduled. So they got to spend two evenings together for the price of one. They were joined by their husbands and Janine's sweet, intelligent granddaughter, Stella, who was visiting from the Chicago area on her spring break.



From the Fermi Lab:

Jelly Bean Universe

Figure out the exact number of jelly beans in this jar, and you might win the Nobel Prize! Like the jelly beans in this jar, the universe is mostly dark: about 95 percent consists of dark matter and dark energy. Scientists are still trying to figure out what it is made of and how it affected the evolution of the universe. Only about five percent of the universe—including the stars, the planets and us—is made of familiar atomic matter. That's the same proportion as the colored jelly beans in this jar.