Welcome class of 2019!

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Faculty in Focus:
Translational Research
From the Directors

We are releasing this newsletter after a successful 2019 and welcoming 2020 with excitement. In this newsletter, we highlight our student’s interviews and achievements this year, an interview with our faculty and Ovarian cancer expert Dr. Rebecca Arend, and colorful photographs from our student’s extra-curricular activities.

During this semester, 5 Cancer Biology students (Asmi Chakraborty, Robert Brent Jones, Sam Fehling, Kaity Dorsett, Nick Eustace) successfully graduated. As the cycle continues, we recruited eight highly talented new students. These students join our program from various part of the USA and the world, making it a diverse group of students. We share some of the thoughts from these students in the newsletter.

We also had a wonderful O’Neal comprehensive cancer center retreat in October. Outstanding cancer researchers presented their exciting work at this meeting themed Cancer genomics and Immunotherapy. CANB students presented many posters at this annual conference and won the awards in many categories. Congratulations to all of them! Many students published their research work and reviews during this semester. CANB theme and UAB GBS is proud of these accomplishments. Other exciting news to end the year is that O’Neal Comprehensive Cancer Center will be led by Dr. Barry Sleckman, M.D., Ph.D., currently Associate Director, Meyer Cancer Center; Professor of Pathology and Laboratory Medicine; and Professor of Microbiology and Immunology at Weill Cornell Medical College. Dr. Sleckman studies the response to genomic DNA damage in mammalian cells.

Cancer Biology theme is getting ready for a new recruitment season. We hope to attract and recruit the best talent from across the country and world to maintain UAB-CANB theme as the best and a sought after program in the USA. CANB team and members would like to wish you and your family and friends wonderful Holidays and Happy New Year. Hope you enjoy this issue of The Hallmarks of Cancer Biology Newsletter.

Lalita Shevde-Samant, Ph.D. & Soory Varambally, Ph.D.
Dr. Rebecca Arend

by Rachael Orlandella, questions adapted from Samuel Febling

Where are you from?
I grew up in New Orleans and moved to New York to attend Columbia University for undergrad, and then went on to teach AP Biology for four years at Washington Irvine High School. I stayed in New York to complete my medical degree at Albert Einstein College of Medicine where I first became interested in Gynecologic Oncology. I completed my residency training in OB/GYN at Columbia University and began my Gynecologic Oncology fellowship here at UAB in 2012. Since completing my fellowship in 2015, I have stayed in Birmingham and joined the Division of Gynecologic Oncology as faculty, as well as the O’Neil Comprehensive Cancer Center as an Associate Scientist.

What interested you in UAB?
What really drew me to UAB was the fact that it had the academic prestige of any other university and had a sense of comradery and authenticity that I have rarely seen in other places. Initially, I was drawn to UAB because of its phenomenal clinical reputation in my area, which is gyn oncology. Although, as a former AP Biology teacher and having worked in the lab in medical school where Taxol was invented, I have always been a scientist at heart (in addition to a clinician, which was my first dream). UAB has given me the opportunity to develop my skills as both a clinician and translational scientist. My research at UAB is truly bench to bedside as I am able to do basic science research in my lab, work with companies to develop that research into clinical trials and be able to offer these trials to my patients. Additionally, UAB has given me amazing opportunities for collaboration with other phenomenal scientists who are doing groundbreaking work. As a young investigator, I have received invaluable mentorship by scientists and clinicians here at UAB.

What are your current research interests?
My research in Gynecologic Oncology started when I was a medical student. Prior to fellowship, I did research in hormonal and molecular pathways associated with uterine carcinosarcoma. As a fellow, I worked under the mentorship of Dr. Donald Buchsbaum, a senior scientist in the UAB Cancer Center, and Drs Michael Straughn and Ronald Alvarez, two translational scientists who assisted me in my research on ovarian cancer, specifically relating to chemoresistance, cancer stem cells, specifically the Wnt pathway and molecularly targeted therapy. Further funding in the area of the Wnt pathway, has allowed me to be the Principal Investigator of my own lab with 75% protected research time while also spending one half-day in clinic and in the OR. This diversity allows me to develop clinical trials that require fresh tissue from cancer patients and treat these patients on trials that I have helped to develop and/or design. I have been worked with several drug companies in an effort to develop clinical trials with agents that target portions of the Wnt pathway, specifically Porcupine (enzyme necessary for the secretion of WNT) inhibitors. I am currently the National Principal Investigator of a phase II clinical trial using a Wnt modulator in combination with weekly taxol for recurrent endometrial and ovarian cancer. I was awarded the American Cancer Society’s Institutional Research Grant for junior faculty to fund my research on the Wnt pathway. My on-going projects include personalized medicine, targeting the Wnt pathway, and immunotherapy in ovarian cancer patients. I have started a gynecologic oncology tissue bank at UAB and have well characterized DNA samples from women treated at UAB with ovarian cancer.

Where will your research take you next?
I currently mentor the first-year Gynecologic Oncology fellow while they are spending their one year in the lab. In addition, I have a graduate student working on further development of 3D models to use human tissue to study ovarian cancer. Most of my basic science work focuses on how modulation of the Wnt/B-catenin pathway affects the immunogenicity of tumors. In parallel with my lab work, I am in the process of developing several clinical trials for both ovarian cancer patients and patients with gynecologic carcinosarcomas that combine targeted therapy with immunotherapy.

Are you interested in taking students?
I currently have a graduate student working in my lab and have mentored several graduate students in the past, including MD/PhD students. I have had many medical students in the past work on various projects in my lab, and I always welcome students to work with my lab in ongoing and novel projects in some capacity or another.

Do you have any advice for current and future students?
I think that students should take their time to find and develop what they are passionate about in order to feel fulfilled in their work. Coming into your career will be challenging no matter what, but it will be much easier to give it your all if what you are working towards is something that you truly care about and that drives you. Your drive will be evident in your work and your research if you take the time to develop it. Shoot for the stars, learn to say “no” sometimes, be authentic and honest, and never let anyone tell you your dreams aren’t possible.

Have there been any pleasant surprises about living in Birmingham? What do you do when you aren’t in lab?
There have been many pleasant surprises about living in Birmingham – I love the restaurants and the great food, I love the local breweries. I absolutely love my house, my neighborhood, the hills, the greenery, and all the amazing people and friends that I have met here. Living only in New Orleans and Manhattan for 20 years in each place, I never in a million years thought I would stay in Birmingham, but I absolutely love this place!

What would be your ideal vacation?
My ideal vacation would be to repeat one that I did with my brother when I graduated from college – which was take all of our belongings for 6 weeks, including our tents, strap them to our bikes, fly into Florence, Italy, ride our bikes across the coast of Sardinia and then back to end up in Rome. But this time I want to do it with my amazing husband and my four precious children. It better include horseback riding, some dancing/live music, amazing wine and great food!
# First year focus

*Interview by Katherine Ankenbauer*

<table>
<thead>
<tr>
<th>Name</th>
<th>Hometown</th>
<th>Undergraduate Institution</th>
<th>Interested in UAB</th>
<th>What do you plan on doing after completing your Ph.D?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Atul Kumar</td>
<td>Jamshedpur, India</td>
<td>Amity University, India</td>
<td>Different themes and collaboration among them</td>
<td>Carry forward my research into a more specific manner to deal with real life problems by finding solutions and I hope it will be implemented to treat and cure cancer.</td>
</tr>
<tr>
<td>Sarah Scott</td>
<td>Cookeville, Tennessee</td>
<td>Here at UAB</td>
<td>The Pediatric Surgery translational research, Cancer biology program, and lots of opportunities for collaborations.</td>
<td>Not completely sure yet—probably academia</td>
</tr>
<tr>
<td>Raoud Marayati</td>
<td>Aleppo, Syria</td>
<td>University of Central Florida</td>
<td>The collaborative environment and the Cancer Biology Theme</td>
<td>Going back to surgical residency, then doing a pediatric Surgery fellowship.</td>
</tr>
<tr>
<td>Chanelle Hunter</td>
<td>Jacksonville, Florida</td>
<td>UCLA</td>
<td>Wide spectrum of faculty involved in glioblastoma research, the size of the UAB hospital, and collaborative nature of faculty at UAB</td>
<td>Academic or industry research</td>
</tr>
<tr>
<td>Christine Carico</td>
<td>Los Altos, California</td>
<td>School of Pharmacy, Tanta University</td>
<td>The great interest in combining basic and clinical research in UAB to bridge the gap between them.</td>
<td>Pursuing a residency in Neurology or Neurosurgery</td>
</tr>
<tr>
<td>Amr Rafat</td>
<td>KZ, Egypt</td>
<td>University of South Alabama</td>
<td></td>
<td>I haven't decided yet. But most likely, I will pursue an academic position.</td>
</tr>
<tr>
<td>Brendon Herring</td>
<td>Mobile, Alabama</td>
<td>Dillard University</td>
<td></td>
<td>Finishing my MD and establishing a career in academic medicine.</td>
</tr>
<tr>
<td>Ashlee E. Williams</td>
<td>Monroe, Louisiana</td>
<td></td>
<td></td>
<td>Patent law or possibly going into industry.</td>
</tr>
</tbody>
</table>

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**Where is your hometown?**

- Atul Kumar: Jamshedpur, India
- Sarah Scott: Cookeville, Tennessee
- Raoud Marayati: Aleppo, Syria
- Chanelle Hunter: Jacksonville, Florida
- Christine Carico: Los Altos, California
- Amr Rafat: KZ, Egypt
- Brendon Herring: Mobile, Alabama
- Ashlee E. Williams: Monroe, Louisiana

**Where did you attend undergraduate?**

- Amity University, India
- Here at UAB
- University of Central Florida
- UCLA
- School of Pharmacy, Tanta University
- University of South Alabama
- Dillard University

**What interested you in UAB?**

- The cancer biology program and the CCC
- The Pediatric Surgery translational research, Cancer biology program, and lots of opportunities for collaborations.
- The collaborative environment and the Cancer Biology Theme
- Wide spectrum of faculty involved in glioblastoma research, the size of the UAB hospital, and collaborative nature of faculty at UAB
- The great interest in combining basic and clinical research in UAB to bridge the gap between them.
- The potential to expand my research career
- The Comprehensive Cancer Center

**What do you plan on doing after completing your Ph.D?**

- Carry forward my research into more specific manner to deal with real life problems by finding solutions and I hope it will be implemented to treat and cure cancer.
- Not completely sure yet—probably academia
- Going back to surgical residency, then doing a pediatric Surgery fellowship.
- Academic or industry research
- Pursuing a residency in Neurology or Neurosurgery
- I haven't decided yet. But most likely, I will pursue an academic position.
- Finishing my MD and establishing a career in academic medicine.
- Patent law or possibly going into industry.
**Can you give a short explanation of your undergraduate research experience?**

<table>
<thead>
<tr>
<th>Atul Kumar</th>
<th>Sarah Scott</th>
<th>Raoud Marayati</th>
<th>Chanelle Hunter</th>
<th>Christine Carico</th>
<th>Amr Rafat</th>
<th>Brendon Herring</th>
<th>Ashlee E. Williams</th>
</tr>
</thead>
</table>
| I worked in a pharmaceutical company for the drug development and formulation side. Before that, my masters thesis was based on optical coherence tomography and in-vitro imaging of animal tissue to decipher the different tissue layer using Titanium Dioxide as a contrast agent. | I studied the role of Hedgehog signaling in tumor formation and metastasis in the bone microenvironment. | Worked on identifying differentially expressed genes in metastatic pancreatic ductal adenocarcinoma that promote or suppress invas ion and metastasis. Also worked on evaluating the dynamic changes in kinome activity and identifying novel resistance mechanisms in response to targeted kinase inhibitors. | I previously worked in several different cancer biology laboratories. A common theme in many of the labs in which I have worked is understanding tumorigenesis of and developing novel therapeutics or therapeutic strategies for malignant astrocytomas (namely glioblastomas). | I worked on investigating biomarkers in leukemia, studying the dynamics and localization of many transcripts in the P granules in C. elegans. Studying the kinetics of West Nile and Zika virus RNA dependent RNA polymerase. | My favorite was a project where I used a panel of different primers that I designed to be species-specific to various shark species in the Gulf of Mexico to determine which shark species was the specific aggressor towards red snapper, to help the government mitigate their impact on the Gulf ecosystem. | I completed a year long post-bacc program. While there, I worked on a project that aimed to determine the effects of PCB126 on the bones of male and female rats. |}

**What did you want to be when you grew up?**

<table>
<thead>
<tr>
<th>Scientist/Actor (like Amy Farrah Fowler from BIG BANG THEORY)</th>
<th>A doctor.</th>
<th>An architectural engineer.</th>
<th>Neurosurgeon</th>
<th>When I was a child, my dream was to become a pharmacist like my dad.</th>
<th>An oncologist!</th>
<th>A lawyer/pharmacist</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lauterbrunnen, Switzerland</td>
<td>The Galápagos Islands</td>
<td>Barbados</td>
<td>Bali</td>
<td>Switzerland and Maldives</td>
<td>I'd go to Germany. I've been there before, but I loved it that much!</td>
<td>Venezuela</td>
</tr>
</tbody>
</table>

**If you could travel anywhere, where would it be?**

<table>
<thead>
<tr>
<th>Writing poems, sketching, cooking, hiking</th>
<th>Reading, hiking, weight lifting</th>
<th>Going on small hikes with my dog, DIY crafting, gardening.</th>
<th>Baking, crocheting, taking classes at the gym, and binge watching Netflix</th>
<th>Lifting weights, running, playing with my dog, and going to concerts</th>
<th>Hiking and playing soccer</th>
<th>Camping and hiking, with everything on your back. I spend a lot of time outdoors!</th>
<th>I really enjoy fishing.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lauterbrunnen, Switzerland</td>
<td>The Galápagos Islands</td>
<td>Barbados</td>
<td>Bali</td>
<td>Switzerland and Maldives</td>
<td>I'd go to Germany. I've been there before, but I loved it that much!</td>
<td>Venezuela</td>
<td></td>
</tr>
</tbody>
</table>

**Do you have any hobbies?**
<table>
<thead>
<tr>
<th>Name</th>
<th>Fun Fact</th>
<th>Favorite Starbucks Drink</th>
<th>Favorite music/movie/book, etc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Atul Kumar</td>
<td>I can act, mimic, and I am really really very funny, if you are my friend you will come to know.</td>
<td>Mocha cookie crumble frappuccino</td>
<td>Arijit Singh/wake up sid/You can win</td>
</tr>
<tr>
<td>Sarah Scott</td>
<td>I'm terrible at fun fact questions</td>
<td>Mocha</td>
<td>My favorite book is the hobbit, but I have mixed feelings about the movies</td>
</tr>
<tr>
<td>Raoud Marayati</td>
<td>I learned English as a third language after Arabic and French. I'm one-quarter Armenian. I once attempted to become a lefty and used my left-hand for writing for almost a month!</td>
<td>Double shot espresso</td>
<td>All pop music, country, and Beck/The Lion King/The Kite Runner by Khaled Hosseini</td>
</tr>
<tr>
<td>Chanelle Hunter</td>
<td>I have a kitten that loves to play fetch!</td>
<td>Green Tea Frappuccino</td>
<td>Favorite movie: The Emperor's New Groove; Favorite book: Holes; Favorite Music: Too many favorites to choose just one!</td>
</tr>
<tr>
<td>Christine Carico</td>
<td>I'm a metalhead.</td>
<td>Plain latte</td>
<td>Favorite music = metalcore</td>
</tr>
<tr>
<td>Amr Rafat</td>
<td>I am an anime nerd, I really enjoy watching anime and reading manga.</td>
<td>Mocha Frappuccino</td>
<td>I listen to a wide variety of music, but I think my fav music is Indie rock. My fav movie is LOTR and my fav book is &quot;The Blind Watchmaker&quot;.</td>
</tr>
<tr>
<td>Brendon Herring</td>
<td>I've jumped out of airplanes/helicopters 14 times for the Army. I wouldn't recommend it.</td>
<td>Iced Matcha latte. Extra scoop. Every time!</td>
<td>This is always changing! Grey and Mofro are my favorite band. I really liked The Departed for movies, and my favorite book is A Day in the Life of Ivan Denisovich, by Alexander Solzhenitsyn.</td>
</tr>
<tr>
<td>Ashlee E. Williams</td>
<td>I have a twin brother.</td>
<td>Vanilla Bean Frappe</td>
<td>Kendrick Lamar (anything).</td>
</tr>
</tbody>
</table>

Welcome to Cancer Biology at UAB! We can’t wait to see what you do!
Cancer Biology represents at the GBS Symposium

by Nikita Bhalerao

The GBSO/JHS symposium held at The Hilton on August 16th, 2019 was a grand success this year. Over 200 abstracts from both the students and faculty were submitted, with 130 posters presented and about 300 people attended the symposium. The keynote speaker Dr. M. Celeste Simon, Professor at University of Pennsylvania, delivered a very enlightening talk about Hypoxia, Metabolism and Tumor Progression. Two cancer biology students, Katherine Ankenbauer and Shelly Nason were awarded 3rd place for rotation poster presentation and oral talks, for their work on tumor glycosylation in ovarian cancer progression and neuroendocrine targets of diabetes and obesity respectively. Following cancer biology students presented their posters or oral talks at the symposium:

<table>
<thead>
<tr>
<th>Student Name</th>
<th>Poster Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Katherine Ankenbauer</td>
<td>The glycosyltransferase ST6Gal-I confers resistance against natural killer cell mediated cytotoxicity</td>
</tr>
<tr>
<td>Nikita Bhalerao</td>
<td>Glycosyltransferase ST6Gal-I modulates the tumor microenvironment by inducing ligands for Siglecs on the immune cells and potentially dampens the immune response during PDAC</td>
</tr>
<tr>
<td>Reginald Brown</td>
<td>Tissue-specific Cas9 zebrafish models to study tumorigenesis</td>
</tr>
<tr>
<td>Cyntanna Hawkins</td>
<td>Inhibition of Acid Ceramidase by B13 as a Treatment for Glioblastoma</td>
</tr>
<tr>
<td>Yun Lu</td>
<td>[18F]-FLT PET/CT to Evaluate the Accuracy of FUCCI-IVIS Cell Cycle Sensor Method in Assessing Cancer Cell Proliferation in Vivo</td>
</tr>
<tr>
<td>Raoud Marayati</td>
<td>PIM3 kinase promotes tumor metastasis in hepatoblastoma</td>
</tr>
<tr>
<td>Mateus Mota</td>
<td>Merlin Tumor Suppressor Loss Induces Redox Imbalance in Breast Cancer</td>
</tr>
<tr>
<td>Tiara Napier</td>
<td>89Zr-panitumumab, a radiolabeled EGFR antibody, for imaging ameloblastomas in vivo</td>
</tr>
<tr>
<td>Shelly Nason</td>
<td>Glucagon regulates energy balance via FGF21 signaling in the brain</td>
</tr>
<tr>
<td>Rachael Orlandella</td>
<td>Increased prevalence of dysregulated T cell immunity with obesity impairs immunotherapeutic efficacy in renal cancer</td>
</tr>
<tr>
<td>Adrienne Samani</td>
<td>The Role of ST6GAL-I in Cancer Stem Cell Quiescence</td>
</tr>
</tbody>
</table>
This year, the O’Neal Comprehensive Cancer Center held its 21st Annual Research Retreat on Friday, October 11th at The Club, Inc. More than 500 faculty, Postdoctoral fellows and student trainees were in attendance, and three renowned keynote speakers were featured: Dmitry Gabrilovich, MD, PhD, David Solit, MD, and Stephen Schoenberger, PhD. Hailing from the Wistar Institute in Philadelphia, Professor Gabrilovich described regulation of immune response and tumor progression by myeloid-derived suppressor cells. Dr. Solit, Geoffrey Beene Chair for Cancer Research at Memorial Sloan-Kettering, spoke on the importance of harnessing genomics to identify specific therapeutic targets for each cancer patient. Finally, Dr. Schoenberger, Professor at the La Jolla Institute for Immunology, discussed regulation of cellular immune responses with neoantigens.

Out of the 168 presenting authors, two of our own Cancer Biology theme members, Raoud Marayati (Clinical Fellow/Resident Trainee Category – 1st place) and Kaitlyn Dorsett (Tandra Chaudhuri Award for Excellence in Women’s Cancer Research – Winner) received awards for their posters. Raoud’s poster was on PIM3 kinase’s promotion of tumor growth and metastasis in hepatoblastoma, and Kaitlyn’s poster was on Sox2 as a driver of cancer stem cell traits in ovarian cancer. Special thanks go out to Drs. Troy Randall and Sooryanarayana Varambally, CANB theme co-director for organizing this year’s events. Additional thanks go to the statisticians, competition judges, the event planning and assistance team, UAB Health System Marketing, and the featured exhibitor, Pfizer Oncology. We hope to see everyone back next year for another exciting retreat!
# Words of wisdom from our graduating students

*by Sweta Patel*

<table>
<thead>
<tr>
<th>Student</th>
<th>Mentor</th>
<th>Project Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asmi Chakraborty</td>
<td>Dr. Susan Bellis</td>
<td>Role of ST6Gal-I in PDAC progression and chemoresistance</td>
</tr>
<tr>
<td>Kaitlyn Dorsett</td>
<td>Dr. Susan Bellis</td>
<td>Regulation of ST6Gal-I in cancer: Sox2 identified as novel driver of ST6Gal-I expression</td>
</tr>
<tr>
<td>Samuel Fehling</td>
<td>Dr. Karina Yoon</td>
<td>BET Bromodomain Inhibition as an Approach for Treatment of Cholangiocarcinoma</td>
</tr>
</tbody>
</table>

## How would you describe your doctoral experience in one word?

<table>
<thead>
<tr>
<th>Rewarding</th>
<th>Rewarding</th>
<th>Perseverance</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>How has your experience at UAB been?</strong></td>
<td><strong>What has been the best part of your PhD?</strong></td>
<td><strong>What did you find most difficult while pursuing your PhD?</strong></td>
</tr>
<tr>
<td>It was a great experience. I not only learnt a lot and grew as a scientist but made some great friends and found amazing mentors.</td>
<td>My mentor Dr. Susan Bellis. She is the reason I stayed, and she is the reason I am still in science. I needed a mentor like her who always expected the best from her students but at the same time was extremely supportive. I am very grateful to her.</td>
<td>Coping with failed experiments and constantly feeling like I did not belong and would not make it. This feeling is still there but I cope with it better. Being part of mental health awareness and availing the services available was very helpful.</td>
</tr>
<tr>
<td>Wonderful! The faculty and staff, the GBS office, and throughout campus are so collaborative. I was fortunate to be involved in recruitment events, newsletter meetings, journal clubs, and GSG, where I made so many friends. I love this city and UAB, and this University will always hold a special place in my heart.</td>
<td>The friendships I have made with those in my lab and my department. We all struggle at points in our PhD. Having someone to reach out to and talk with, in my mind, truly helps.</td>
<td>It was most challenging when the science wasn’t working. It’s easier to make it through that weekend or late night in the lab when it results in publishable data. But these were also the times I found out how much support I had, and how to preserve through challenges.</td>
</tr>
<tr>
<td>Asmi Chakraborty</td>
<td>Kaitlyn Dorsett</td>
<td>Samuel Fehling</td>
</tr>
<tr>
<td>-----------------</td>
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</tr>
<tr>
<td><strong>If you had to go back 5 years, what would be the one thing you would want to change?</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>There are definitely things that I could have done better, but I feel it all added to my learning process. I would probably say I wish I was less doubtful of my decisions. Nonetheless, I think over time you get comfortable taking risks and being wrong, and embracing it as an inevitable process in science.</td>
<td>I know everyone says it, and they tell you it from the get-go; if I could go back, I would read more. It is so important to understand how your science fits in to the greater body of literature. I think chance favors the prepared, and in science, being prepared means KNOW THE LITERATURE!</td>
<td>If I could go back to any point in my graduate school career, I would tell myself to take an extra weekend or two off each year for myself. Sometimes I lost my focus and forgot why I wanted to be in this program and why in the first place. I think getting away for a little bit and clearing my head would have helped.</td>
</tr>
</tbody>
</table>

| **Who is your role model in the field of science and why?** | | |
| My mentor! Dr. Bellis. I also really look up to some upcoming as well as established PIs on twitter, like Dr. Heemstra and Dr. Mahala. The scientists I follow are intelligent and conducting paradigm shifting studies, but they are also true mentors. I look up to that. I feel very lucky to have been able to observe how my mentor balanced work and mentorship. | My undergraduate mentor, Dr. Melanie Styers. I come from a family of medical doctors, and always thought I would become one as well. When I joined her program, I fell in love with the ability to figure something out for myself; to generate my own hypotheses and test them. When I was trying to decide between graduate and medical school, she encouraged me to pursue what would make me happy, and I’m so glad she did. | My father, an MD. He first indulged my curiosity and fostered my love for science. Though he works long hours, he spent time building things ranging from wood working projects and soldering electronics to non-Newtonian fluids and computers with me as a child. He taught me that “there’s got to be a way.” For the longest time, I thought he was just being stubborn. I still do, but he is right. There is always a way. |

| **What are your future plans? Or what is your career goal?** | | |
| I would love to stay in academia and pursue independent research. However, it is a long road but if it works out it will be worth it. | My dream job would be in outreach and education. But for now, I am searching for a scientific writing position to gain experience in the field. | My long-term plan is to find a position in the U.S. Government, but I would first like to gain experience in industry. |

| **Any advice for your juniors?** | | |
| “PhD, is not a sprint it’s a marathon” is something I used to hear a lot and it has turned out to be true. It’s a long process and you need to pace yourself. It is so easy to get burnt out if you don’t. There will always be long days but take care of your self! Choose a mentor who supports you as a person and roots for your success. This is so important! Additionally, try and help others who are struggling. Good luck! | Be kind. Graduate school is very challenging, and we all feel the pressure. So, when you have that opportunity to say something nice or encouraging to your lab-mate, boss, or person you pass in the hallway, do it. You never know how much it may mean to them. | Persevere. Sometimes things work the first time. Most of the time they don’t. Remember that you are not defined by your failures. It just means you found another way it won’t work. Choose to persevere. “There’s got to be a way.” |
Farewell, Alyssa!

Interview by Rachael Orlandella

This fall, Alyssa Zasada (our former Admissions, Events, and Communications Manager in the GBS office) left UAB to be closer to family. She will be missed!

RO: Can you tell me a little bit about yourself before you came to UAB?
AZ: I majored in political science and sociology in college at University of Wisconsin-Milwaukee, but I was always more interested in helping out with extracurricular activities! So I went to University of Georgia for graduate school and got my Masters in Education.

RO: What made you want to come work at UAB and the GBS program?
AZ: It was a unique opportunity to work with students that are so engaged in their work. Many graduate programs have an umbrella program but there was just something special about GBS!

RO: How long have you been working here?
AZ: Two years!

RO: Other than managing recruitment like a rockstar, what are your other responsibilities?
AZ: I help organize events, symposiums, the brown-bag lunch with the dean, and I work with the admissions committees and help with the whole onboarding process for new students. I also send out internal newsletters, flyers, and manage our Instagram and Twitter.

RO: When you aren’t working, what do you like to do in your spare time?
AZ: I play the cello and the ukulele, I am part of a meditation group, and I take care of my dog.

RO: What has been your favorite thing about working with GBS?
AZ: I’ve made a lot of random fun memories, like the CANB jeopardy at your new student welcome where I teamed up with all of the PI’s, or doing the “Pie your PI” event. One Halloween I dressed up as a dragon and threw candy at the first years in class!

RO: What will you miss the most?
AZ: I’ll miss the unique way students are supportive of each other, like starting their own outreach for mental health or F-31 writing workshops. I’ll also miss this city. It’s technically a big city, but it’s easy to make it feel smaller and the people here are great.

RO: What are you most proud of in your time here?
AZ: I was the first person in this new position, so I’m proud of the organization of this role. I also think the office has a more welcoming atmosphere now!

RO: What was the most difficult part of your job?
AZ: Figuring out how to combine all 8 different themes into one cohesive unit when we transitioned from a “theme-based” office to a “team-based” office.

RO: Do you have any advice for your successor?
AZ: Get to know the students! Students make the job worth it!

RO: Where are you headed next?
AZ: Back to Wisconsin to be closer to my family.

RO: Crunchy or creamy peanut butter?
AZ: Crunchy.

RO: Would you rather fight one horse-sized duck or 100 duck-sized horses?
AZ: One horse-sized duck. Even though it’s big, you can figure out something.

RO: Do you have any final remarks or advice for GBS students?
AZ: Welcome the new person in the GBS office! And continue to build each other up!
When we’re not in lab...

*Photos submitted by CANB students!*

Members of the Samant labs (left) and the Norian lab (right) got into the Halloween spirit this year!

This December, CANB students attended our annual “Winter Meeting” for awesome food, holiday music, and a White Elephant gift exchange!

Some of our own CANB students participated in the annual Susan Komen of North Central Alabama Race for the Cure event this year!
Awards and Accolades

by Shelly Nason

Our New Publications

- Fehling SC, Miller AL, Garcia PL, Vance RB, Yoon KJ. The combination of BET and PARP inhibitors is synergistic in models of cholangiocarcinoma. Cancer Letters. 2019 October. PMID: 31605774

New Graduates

- Congratulations to Asmi Chakraborty, Robert Brent Jones, Sam Fehling, Kaitly Dorsett, Nick Eustace for graduating this semester!

New PhD Candidates

- Raoud Marayati, Sajina Gc, Nick Anderson, Dominique Hinshaw, Rachael Guenter successfully passed their qualifying exams to advance towards candidacy this semester.

Awards and Honors

- Kaitlyn Dorsett received first place for her poster presentation in the Tandra Chaudhuri category (Women's related cancers) at the OCCC retreat
- Dominique Hinshaw was awarded an Immunology T32 training grant.
- Rachael Orlandella was awarded a T32 in the Cancer Prevention and Control Training Program
- Raoud Marayati received the Resident Research Scholar Award from the Society of University Surgeons (SUS) and the Basic Science Research Award at the UAB Department of General Surgery Research Day.

Now You All Can find cancer Targets using “UALCAN” at http://ualcan.path.uab.edu

UAB Pathology and O’Neal Comprehensive Cancer Center based web-portal