The 5th Annual BCDB Retreat

Dawn Barnes

The 2013 BCDB retreat was held at Twin Rivers Resort, in Demorest, GA. We were introduced to the first year students with a game of Two Truths and a Lie… or sometimes just Three Lies. This year the professional focus was on the advancement to post-doctoral positions. Our two alumni, Dr. Beth Bowman and Dr. Maria Chacon, shared their insights about the application process, choosing a new laboratory, and their novel post-doctoral experiences. During Rick’s power hour, students opened up about the unexpected challenges they experienced in graduate school beyond the academic element, and how they were able to learn and grow through them.

In the afternoon students and faculty were given free time and the opportunity to either take on a hike Tallulah Gorge or go tubing down the Chattahoochee River, but both parties were able to take advantage of playing in the water. Upon returning, semi-flammable beverages were consumed and stories were shared until dinner. In the evening, apples battled apples, corn hole bags were thrown, cups were flipped, and dance challenges were made. No pictures were taken during this period because “What Happens At BCDB Retreat, Stays At BCDB Retreat.”

Graduate School Exchange Opportunities

Matthew Randolph

The BCDB program is participating in a graduate exchange program this semester. Rieke Fischer, a student from Free University in Berlin, Germany, is enrolled in the first year BCDB courses for the current semester. To our knowledge, Rieke is the first exchange student to have entered the BCDB program. In fact, many of us did not know that such programs existed in graduate school. To find out more about graduate exchange programs, I interviewed Rieke concerning her experience studying abroad for a semester.

Rieke is currently in a Masters program at Free University and she wanted to do an exchange program as part of her studies. She contacted the International Office at her university and submitted an application. The application process included interviews, letters of recommendation, and obtaining visas. The program was very excited to discover that Rieke was studying biology and particularly interested in developmental biology. Apparently, many students from the liberal arts apply for the graduate exchange programs, but very few from biomedical fields.

(Continued on page 2)
Nick Seyfried is the newest member of the BCDB executive committee. He is taking over the role of Curriculum Coordinator, which most recently was filled by Ken Moberg. Nick described his current responsibilities as two-fold: complete re-crediting the courses that has been on-going as part of Emory’s re-accreditation and facilitating with courses that the BCDB program requires for its students in years 1-2.

As has been mentioned in a previous newsletter issue, in order to comply with the Southern Association of Colleges and Schools (SACS) accreditation requirements, all of the programs in the Laney Graduate School are re-evaluating their course credit assignments and the number of credits required for candidacy and graduation. In the BCDB program these courses include Foundations, Beginning and Advanced Seminars, Grant Writing, and Statistics. Nick’s work in updating the course credits is important in maintaining the graduate school accreditation which grants validity to the degrees it awards. The credit changes are planned to take effect in the fall of 2014, but are not anticipated to cause any changes in course requirements or length of time to candidacy or graduation for any of our students.

The BCMB (Biochemistry, Cell, & Molecular Biology) training grant is an important funding source for selected students in the BCDB graduate program and it is up for renewal this year. Part of being a competitive applicant for the renewal is actively implementing training opportunities to broaden student awareness of career opportunities, ethical issues, and many other aspects of becoming a well-trained professional. These activities are increasingly encouraged by the NIH and have become a critical component in maintaining NIH support in the last few years. Nick is responsible for helping to organize these additional courses as part of his responsibility as Curriculum Coordinator. He is currently jointly overseeing the ethics seminars with Judy Friedovich-Keil.

Nick is excited to be a part of the executive committee. He is most looking forward to working with other members of the faculty and seeing senior faculty model leadership, as well as working with the student representatives on the committee. He has been impressed by how the executive committee always has the students’ interests first.

In addition to being excited about being more involved in the development of students’ careers as a member of the executive committee, Nick is looking forward to Halloween. He will brave the cold weather dressed as a pirate to go trick-or-treating with his two children Riley (age 3) and Flynn (10 months).

Welcome to the executive committee Nick, we look forward to seeing your pirate costume this Halloween.
“Cabin Fever,” starring Jack Nicholson, who goes crazy due to cabin fever as the caretaker of a hotel in the middle of nowhere during the winter season. I won’t spoil the ending… well I wouldn’t be able to because I was too scared to stay and watch the movie to the end!! While sitting on the edge of our seats, freaked out, we all enjoyed plenty of beverages, food, snacks, and candy. Thanks to everyone who came out to both events this fall, and to the organizers who did a great job putting together two fun-filled social events. The purpose of the Social Committee is to organize events for BCDB faculty and students to mingle and socialize in a relaxed environment. Some of the best science discussions happen over a couple of beers! In fact, Jen Colucci brought to our attention earlier this year that despite popular concern, beer is actually healthy for you (of course, in small quantities)! Therefore, these events are meant to allow everyone to de-stress and enjoy life, even as a graduate student or a tenure-track professor. If you are interested in getting involved please let us know! You can contact any one of us, or all of us: Megan Allen, Dawn Barnes, Jen Colucci, Paul Donlin-Asp, Mariana Mandler, and Emily Rye.

Meet the First Years: What molecule or cell type are you like? By Laura Newman

Rieke Fischer
“I’m ES cells because they’re awesome.”

Lydia Benitez
“Like a cone cell, I transmit the signals and elicit responses in others to make life more colorful.”

Jarred Whitlock
“I’m Pfu polymerase because I try to be proficient and check for my own mistakes, I like solving puzzles (translating in a sense), and I work well under a lot of "heat."

Lindsay Knapp
“GFP can be used to answer a lot of questions in a variety of research areas. Just like I have a lot of interests within science. But GFP and other fluorescence proteins can be used to make cool looking art and although I'm not artistic I like non-science stuff too. Plus green is my favorite color.”

Travis Loya
“I’m ubiquitin because I’m all over the place.”

Mark Yulis
“I am most like SUMO-1 because I like to interact with others in many different contexts.”
The current state of research funding has been altered by the devastating cuts to life-saving biomedical research brought on by the sequester. The sequester requires the National Institutes of Health (NIH) to cut $1.55 billion from its annual budget. As Emory is in part supported by federal funding, the sequester will cause Emory to lose almost $18 million in research funding. Reducing research budgets will delay short-term research progress and eventually discourage young scientists from pursuing a career dependent on federal funding. With the loss of research funds, the sequester is also affecting the number of graduate and postdoctoral positions. It has been estimated that 1 in 10 graduate student training positions and 1 in 5 postdoctoral positions have been lost due to the sequester’s impact on science funding. With reduced scientific funding, the research world will risk losing a generation of young scientists altogether.

In order to learn more about the role that young scientists can play in advocating for science policy, three fellow BCDB graduate students Chelsey Chandler, Amanda York, and Julia Omotade took a trip to Washington DC.

**Interviewer:** How did you find out about the opportunity to go to Washington DC?

**Amanda:** Dr. Chas Easley from the Cell Biology Department told us about the Coalition for the Life Sciences and the Hill Day that they organize twice a year. Chas has participated in the Hill Day before and was looking for more participants from Emory. Chas approached Julia, Chelsey, and myself to see if we were interested.

**Interviewer:** What was the overall point of the trip?

**Julia:** The overall point of the trip was to meet with Senators and Representatives and educate them about the dire need to sustain and increase scientific funding. We relayed our experiences as graduate students that are living with the very tangible, day-to-day consequences of a shrinking scientific budget. We wanted to convey how government actions such as the sequester really discourage bright minds from joining biomedical research for the fear that they will not be able to find a job when they finish their training and cause American-trained scientists to leave the United States and take jobs in foreign countries. We also wanted to stress how the sequester reduces the productivity and collaboration within biomedical research thereby delaying discoveries, innovative research, and ultimately cures to diseases.

**Interviewer:** What were some of the major things you learned during the trip?

**Amanda:** During the trip I was able to see the inner workings of Congress and how they work (or lack of haha) on a daily basis. It was also great to get some hands on experience with scientific advocacy.

**Julia:** I learned that our representatives are extremely open to listening. It really just takes effort on our part to educate the public about the scientific issues that we care about. I also learned that representatives do not often hear complaints or testimonies about the importance of scientific funding. This made me realize that we are responsible for conveying the importance of this issue and advocating for science.

**Interviewer:** How did the trip change your outlook on science advocacy?

**Julia:** This trip really inspired me to want to get involved. The most important thing that I took away from this trip was the realization that no role in advocacy is too small. The simple task of writing a letter to your representative, educating non-science peers about the importance of funding, or writing an op-ed piece all help to bring the severity of scientific funding crisis to the forefront.

Whether you are a graduate student, faculty member, or post doc, the impact governmental decisions have on scientific funding affects us all. Communicating the value of scientific research to people outside of the science community is extremely important and a greater effort to advocate for science research should be put forth. In order to facilitate this process, Julia and Amanda on behalf of the BCMB Training Grant students decided to ask Lynn Marquis, the director of the Coalition for Life Sciences, to come and speak at the Spring BCMB Seminar. This event will help to educate all Emory students on the state of scientific funding and give us a venue to ask questions and get involved.

**Recent Graduates**

Andrew Bankston  
Anna Bankston  
Beth Bowman  
Chris Hwang  
Jenn Jackson  
Ana Monteiro

**GDDBS Award Recipients**

Crys Fagan  
**BCDB Scholar of the Year**

Larry Boise  
**Faculty Mentor Award**
Be honest, how often have you brutally cursed at your computer while trying to create that perfect image for your next paper. “If only they could see what I see on my gel!” Finally, the laborious task of building publication quality figures has been untangled and set into a logical step-by-step guide. If you haven’t seen it yet, I suggest you take the time to go through this wonderful resource by Ben Nanes (4th year, Kowalczyk Lab).

For Ben, the reason behind creating such a resource was simple: “When I was putting together figures for my paper, I ended up spending quite a bit of time trying to figure out how to meet the journal’s production requirements while giving my data the clearest presentation possible. Through a fair amount of trial and error, I came up with a workflow that is efficient and flexible enough to meet the requirements of many different journals. Hopefully others will find it useful as well.”

The online guide “How to Create Publication-Quality Figures, A step-by-step guide (using free software!” is available at: http://userwww.service.emory.edu/~bnanes/figures/. On the website you can find detailed technical instructions to help with such common issues as file formatting, resolution, image compression, and figure layouts. The guide uses straightforward language to give pointers and tips, as well as some theory behind formatting issues.

Using this resource tackles some common set-backs that we all experience when building our figure list. Often, we have an idea of what type of journal we want to submit to, without knowing the exactly where we will submit our paper until many figures have been built and the story is more complete. Although it is true that each journal has a long and specific list of rules for constructing figures, Ben has provided the framework to build publication quality images that will satisfy the stipulations of most of these journals. Another scary obstacle—expensive software—is side-stepped in this guide. Ben references the use of completely free software throughout his instructions. Many of these programs, such as ImageJ, may already be familiar to you or used by your lab. The good news: anyone can download the tools found in Ben’s guide for free.

The end result is a user-friendly resource that every student (and faculty member) in BCDB could benefit from reading. At least bookmark the page, so you know you have one more resource to turn to late at night when shouting profanities at your PC. And if you want to hear more about this topic from Ben, he will be giving a presentation about this topic at the next Integrated Cellular Imaging Data Club on November 7th at 4pm in SOM 153A.

Stretching your Graduate School Budget

We all attend seminars to advance our understanding of research topics both inside and outside of our fields. Additionally, many seminars often provide food to attendees which can help stretch our limited graduate school budgets. Refer to the chart below for a list of popular seminars attended by BCDB students and the food options that they serve. If you plan your week right, you can get a few free meals every week.

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<th>Monday</th>
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<th>Wednesday</th>
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<tr>
<td>12:00pm Weekly: BCDB Methods (Pizza)</td>
<td>10:00am Weekly: Pathology Seminar (Bagels, Pastries, Coffee &amp; Sometimes a Full Breakfast)</td>
<td>4:00pm Weekly: Cell Biology Seminar (Cookies &amp; Coffee)</td>
<td>9:00am Weekly: Physiology Seminar (Bagels &amp; Coffee)</td>
<td>12:00pm Weekly: BCDB JC, Ethics or PW (Pizza)</td>
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<td>6:00pm 2nd Week: Cell Biology B&amp;G (Full Dinner)</td>
<td>12:00pm Weekly: Pharmacology Seminar (Cookies &amp; Coffee)</td>
<td>6:00pm 2nd Week: RNA Club (Pizza &amp; Beer)</td>
<td>12:00pm Weekly: Biochemistry Seminar (Cookies &amp; Coffee)</td>
<td>12:00pm Weekly: Neuroscience Seminar (Snacks &amp; Soda)</td>
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<td>4:00pm Weekly: Biology Seminar (Cookies &amp; Coffee)</td>
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<td>12:00pm 1st Week: Optogenetics Club (Pizza)</td>
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<td>12:00pm 3rd Week: Chromatin Club (Snacks &amp; Beer)</td>
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<td>4:00pm 1st Week: Imaging Club (Cookies &amp; Coffee)</td>
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You've made it!! After years of hard work you finally have gotten into graduate school. Your are on your way to pursuing your ultimate goals and dreams that you’ve had in mind if not since you were annoying your parents with 5-year-old questions of life, then since undergrad expanded your mind to the possibilities of science. But wait…is this how it’s supposed to be? You might have found that you have underestimated exactly how taxing the process would be. You are not alone. Everyone experiences the same overwhelming feelings. Even though you are still a student, the amount of responsibilities you have taken on since undergrad have multiplied exponentially. Not only are you dealing with the high demands of school and lab, but bills, debt, family responsibilities, work-life balance, deciding your future directions and the unforgiving quarter-life crisis are all hitting you at once. You may find yourself feeling like you’re drowning but it is important to realize that you do not have to deal with these issues on your own. In addition to the great support system the BCDB program has, Emory also offers services to help you through these trying times. The Emory Counseling Center is dedicated to providing a variety of services that help you navigate through school and life stresses. There are seminars on stress management and also classes that teach you different coping mechanisms for stress. If you just need to talk it out, group therapy sessions are offered that allow you to discuss life and school issues with other students that are going through similar experiences. The counseling center will also facilitate any desire to pursue ongoing help through thorough evaluation and referrals to other counselors that will be better suited to address all of your concerns. One great resource that is offered is a ten-minute questionnaire that evaluates your level of stress and emotional distress. This will give you an idea of your current stress levels and open the door to a variety of solutions. These are just a few options of many to help you deal with the stresses of life while in graduate school but you may find that pursuing outside activities can also help you deal (see below). Whatever you may decide, just remember there is never a lack of resources to help you through!!

IM Sports: Are you Ready?

A great way to relieve grad school stress and add to your work-life balance is to participate in an organized sport. Emory has numerous intramural sports that graduate students can participate in from soccer and flag football to softball and volleyball. Whether you miss the feel of competition or you just need an outlet, IM sports provide a fun environment to let your inner-athlete shine. You get to interact and make friends with students from different programs all while getting your daily exercise. Chances are that you know someone who is involved in an IM sport or someone who is interested in participating in one. You can even start up a team yourself. Just visit the Emory Intramural Sports website to look at all the different opportunities available and put your game face on!!

Things to do Around Atlanta this Fall

Atlanta’s Latest Brewery is Open for Business

Three Taverns brewery opened in Decatur mid-month and is receiving rave reviews. They’re open for tours and tastings M-F 5:30-7:30pm and Saturday 1-3pm. $12 admission-121 New Street Decatur, GA

www.threetavernsbrewery.com

Restaurant Openings

Kimball House-Decatur
Kimball House opened last month in the old Decatur train depot under the guidance of the group behind Brick Store Pub and Leon’s Full Service. The oyster service and cocktails are a hit!

www.cargocollective.com/kimballhouse

(Continued on page 7)
Sobban-Emory

This self-described Korean Southern diner replaced Kitch’n 155 earlier this month. They’re open for dinner and lunch and have a late night menu from 10pm-1am on Fridays and Saturdays.
www.facebook.com/humblemeal

Ink & Elm-Emory Village

Ink & Elm is the newest in the ever-rotating array of Emory Village restaurants. From the CLATL rundown, the name “…pays homage to Frederick Law Olmsted, the renowned 19th-century landscape architect whose ink drawings gave rise to Druid Hills, the elegant elm-lined neighborhood in which Emory is located”. It features three sections: a low-key tavern open all day, a lounge serving small plates and a raw bar menu, and a more formal dining room open for dinner.
www.inkandelmatlanta.com/index

Bantam Pub-Old 4th Ward

These tiny O4W spot is serving up lunch, dinner and weekend brunch. With a great patio and grad student-friendly prices, you can’t go wrong.
https://www.facebook.com/pages/Bantam-Pub/281818565234686

Folk Art-Inman Park

Wisteria’s chef is behind this breakfast and lunch spot, which also has a full bar in case you’re looking for a new place for boozy brunching.
www.folkartrestaurant.com

Get Moving

Summer running is brutal in the A, which is probably why some of the city’s best races are coming up in the next few months. Whether you’re a veteran runner seeking a challenge or a newbie looking for your first race, there are some great options coming up.

- December 7: Atlanta Beltline Eastside 10K
  http://beltline.org/events/atlanta-beltline-eastside-10k-2/

- December 14: Monday Night Brewing 10K/10 Miler
  http://mondaynightbrewing.com/2013/09/10/westside-10k10-miler-on-december-14/

- December 21: Christmas 5k
  http://www.rungeorgia.com/vahichristmas.html

Taste of Fall

Megan Allen

Don’t be frightened…expand your palate this fall with new flavors!

Classic
Samuel Adams
Octoberfest

“The beer is sweet and has a touch of caramel in it, it is heavy, and very malty”
Read more:
http://entertainment.time.com/2013/10/08/season-suds-rating-11-fall-beers/8riz2j1wfg92/

Best Name
Magic Hat Séance

“The beer itself is dark and tastes sort of like drinking a properly-poured Guinness and eating berries at the same time”
Read more:
http://entertainment.time.com/2013/10/08/season-suds-rating-11-fall-beers/8riz2j1wfg92/

Great Taste
Sierra Nevada Flipside

“Probably the best of the lot—a red IPA that is dark, bitter but not sour, and still somehow sweet.”
Read more:
http://entertainment.time.com/2013/10/08/season-suds-rating-11-fall-beers/8riz2j1wfg92/

Fruity
Samuel Smith’s Organic Cider

“The sweetness is pleasantly backed up and balanced with a wee bit of tartness and acidity which I find absolutely necessary in a drinkable cider”
Read more:

Local
Terrapin Pumpkinfest

“Expect a pumpkin pie nose followed by a strong malt backbone, low hop bitterness and authentic fall taste, all wrapped in a light-bodied beer.”
Read more:
http://terrapinbeer.com/home/seasonal-sessions/pumpkin-fest/
At Random by Ryan Mason

After they were done slowly cutting off the top of his head, they reached into his skull and began spooning his brains into an adjacent bowl.

Pumpkin Horror Stories

Due to the U.S. Government Shutdown, this comic is currently unavailable.

(Comics have nothing to do with politics, but neither should science or research!)

www.phdcomics.com

Most scientists regarded the new streamlined peer-review process as ‘quite an improvement.’

Retreat Pictures by Dawn Barnes & Josh Lewis