BCDB Claims Awards at the 11th Annual DSAC Symposium
By Kevin Morris

Once a year graduate students from every program within the Graduate Division of Biological and Biomedical Sciences (GDBBS) convene to competitively showcase their graduate work in an event known as the Annual DSAC Graduate Student Symposium. The Annual DSAC Graduate Student Symposium is a student-led research symposium organized by the Division Student Advisory Committee (DSAC). This year marked the 11th installment of this event and per usual the level of research was superb.

In addition to serving as a forum for students to share their work, the symposium also creates an additional training environment where students are challenged to effectively communicate their work. The symposium spans an entire day filled with poster and oral presentations. Additionally, there is even an image competition. Students elect to participate in the symposium by submitting abstracts or images. The DSAC students then evaluate the abstracts and the students with the highest caliber abstracts are selected to give talks. Students not selected to give talks participate in one of the poster sessions. Post-docs and Faculty from across the Division volunteer to judge the talk and poster sessions and Emory’s own Integrated Cellular Imaging Core judges the submitted images.

This year, the BCDB program kept its track record of having students earn awards for their work. Shea Cadwell, a 4th year student in the Kowalczyk lab won 2nd prize for her talk titled Cadherin Endocytosis, Adhesion, and Cytoskeletal Linkage Cooperatively Regulate Cell Migration. Ana Monteiro, an MD/PhD student in the Parkos lab and Amanda York, a 3rd year student in the Zhang lab placed 2nd and 3rd respectively for their image submissions.

The symposium concluded with a keynote address. This year we were fortunate enough to host Adam M. Katz, a policy and advocacy specialist from Research!America as our keynote speaker. With current issues concerning government funding, this keynote was a welcomed presentation. Adam Katz informed the audience on the state of government funding and the importance of science advocacy.

All in all, the symposium was an undisputed success. The success of the symposium is owed to the student participants and the DSAC students that organize the event. Whether you are a student presenter or spectator, the benefits of the symposium are undeniable. Being able to listen to and engage in all the tremendous research that goes on at Emory is a true treat that we will continue to look forward to each year.

The Director’s Corner
By Rick Kahn

So I was just told that it is time for another Director’s Corner. This was interesting timing because Megan caught me as I left my office after talking to Keith about graduate school and program issues. In addition, earlier today I was reading a number of columns in the Chronicle of Higher Education (CHE) that came out today so I was already thinking about the state of things relevant to our program. So here is a bit of my stream-of-consciousness take on things.

One article in the CHE (http://chronicle.com/blogs/conversation/2014/01/09/on-writing-in-grad-school?cid=cr&utm_source=cr&utm_medium=en) from a Communications student bemoans the fact that writing is not a bigger part of his graduate school experience. He writes: “I have never been taught to read a journal article.” And later, “I have never given others comments on their writing within the format of a course. Our final
papers go directly to our instructors, and in most cases we never see one another’s work.” And later still, “When we write, we’re doing our job. We are a community whose livelihood depends on how we arrange words on paper. Why are we not talking about this duty? Why are we not spending most of our time talking about this duty? Why are we not breathlessly recounting strategies that worked this time around and suggesting them to others? Why, instead, do we pass each other in the hallway with a sympathetic smile as we retreat into our quiet, lonely spaces?” As I read that article I was thinking: Really? In Communications???

We should all be very proud of the fact that in BCDB we have created an environment that is quite different. As second year students work through their grants in the grants class they get lots of input, both formally through coursework and outside it, on their writing, their ideas, and their grants. And later as these grants from the course get modified for submission to funding agencies and students gain an appreciation for all the extraneous information/forms needed to satisfy and excite reviewers, there has emerged an active and very supportive network of sharing grants and reviews to aid each other in what works and what doesn’t. And in many cases: “what the hell are they asking for and why do they want to know that...?” And students from all years get feedback during and after their yearly seminar, which I know first-hand has led to important changes in research directions and interpretations. As a result of feedback becoming a shared and positive experience in our program we are now faced with newer challenges, such as convincing reviewers that such well-written student grants are really written by a student (!). This is a real issue. But one I am much more comfortable with than those voiced by our friend in a Communications program.

I believe the BCDB program is years ahead of the norm in its designing into our core curriculum: critical thinking skills, (scientific) writing, public speaking, and also professional skills that range from how to read a paper to how to apply for postdoctoral positions. This is not an accident but instead has been the result of a critical mass of people (students and faculty members) who have thought about the issues and come up with their best ideas and had the temerity and will to then implement them, despite the added time and energies required to run a 10-hour per week discussion based class or a writing class that requires extensive re-writing and feedback from a (seemingly) east of thousands. And students are taught how to read a journal article! More important, they are taught not to fear critical input. And that well reasoned, and clearly explained science is not easy and only comes after a lot of hard work, multiple drafts, and refinement that is tremendously benefited by others reading and critiquing the work. When you find such colleagues, willing to give you that needed critique that makes you and your work better, cherish them; and don’t forget to return the favor. Thus, a culture is born and nurtured.

I end on a lighter note, with an article in the CHE about a website that lists one sentence summaries of theses (lolmythesis.com/). This is not to be missed and rivals “What Should We Call Graduate School” (http://whatshouldwecallgradschool.tumblr.com/) in its ability to capture snippets of life in graduate school.

Emory University: We’re Kind of a Big Deal
By Jadiel Wasson

Warning! This article may induce an overwhelming sense of pride and esteem for Emory University.

In talking with numerous people across the country about Emory University, they all have the same consensus that Emory University is a great institution and one of the top up-and-coming research institutions. This leads us to the question of what defines a top research institution? How does Emory fit into this context? In short, what makes us great?

In the quest for the answers to these questions, answers come in many different forms. One of the more prevalent forms is the rankings that are bestowed upon each university that gives a relative measure of that university amongst its peers. Various external entities that aim to measure institutions in a comprehensive manner identify defining characteristics that they attribute to a top research institution with each entity having its own list of factors that result in an informative view of each school. Within the realm of rankings, you will find that Emory performs consistently in a variety of measures at a very high level. Starting with the big picture, Emory is ranked in the top 100 universities worldwide. An honor that is especially humbling is that Emory is ranked in the top 50 for scientific performance, once again worldwide. To be recognized at the international level is in of itself a huge honor.

Adding to this distinction is the fact the Emory is also in the top 20 of research institutions that receive NIH research grant funding receiving over $500 million to aid in the scientific excellence that is performed here. Other factors that enhance a universities ability to perform at the highest level include the environment in which the university operates. Emory boast over two million square feet of space, which is the equivalent to about 35 football fields, dedicated to research endeavors. In addition to this great amount of space is a number of talented professionals that contribute to the great atmosphere at Emory including 13 Georgia Research Alliance Eminent Scholars, 12 members of the American Academy of Arts and Sciences, 30 members of the American Association for the Advancement of Science, 1 Howard Hughes Medical Institute investigator,
2 Howard Hughes professors, and 5 members of the National Academy of Sciences. Emory is also partners with a number of other institutions including the Centers of Disease Control and the Atlanta Clinical and Translational Science Institute. Networks such as the Emerging Leaders Network and Georgia Bio contribute the cross-talk between Emory and industry.

All of these factors add to the training environment and the level of research that is performed here. But a research institution is not only what it produces and the environment it operates in; it is also how it impacts the environment that it operates in and what contributions it is making to society as a whole. Emory enjoys providing quality care for not only those who are a part of its community (top 20 in health services provided), but it also plays a role in protecting the environment which it is a part of being named the top green school in the country. In addition, Emory University continues to drive conversation in the sphere of science policy. Groups comprised of students and Emory researchers such as the Political Scientists continue to ask the hard questions and push involvement in government policies regarding research. Taken together, even though all of these qualities add to the essence of greatness that envelops Emory University. Stay proud!!

Seminars: Review and Preview
By Alicia Cutler

On January 23rd the second installment of the three part BCMB Training Grant Seminar Series featured Dr. Heidi Hamm from Vanderbilt University. She presented an academic seminar as well as a more personal mentoring seminar. The academic seminar focused on newly identified roles for the βγ subunits in synapses. The advancements made by the Hamm lab in characterizing the role of the βγ subunits in regulating exocytosis could present novel targets for the treatment of neurological and psychiatric disorders. The mentoring session encompassed a range of topics including the importance of science advocacy and promoting women in science Dr. Hamm encouraged students to make an effort to move outside their comfort zones to advocate for science by sending letters to Representatives and Senators and talking with their aids in the local offices.

The first Training Grant Seminar this year, “An Introduction to Industry”, featured a panel of scientists employed in industry, several of whom are BCDB alumni. Each scientist presented on their career path and current responsibilities. Speakers represented diverse careers available in industry including portfolio and translational science, brewery scientist, lab head, and project manager, vice president of research, brewery scientist, lab head, and industry post-doctoral fellow. Highlights from the presentations included anecdotes about working in a brewery, founding a start-up company with lab equipment gleaned from dumpster diving, and coordinating pharmaceutical projects carried out in multiple countries. The presentations were followed by a Question/Answer session that highlighted the importance of recognizing and taking advantage of opportunities as they present themselves. Students were reminded that receiving a Ph.D. from the BCDB program is excellent preparation and not to be intimidated when planning the next steps in their career plan.

The final seminar in the series will be held on April 4th with special guest Lynn Marquis director of the Coalition of Life Sciences (CLS). The CLS is an advocacy organization that represents various professional life science associations including the American Society for Biochemistry and Molecular Biology, the Society for Neuroscience, the Genetics Society of America, and the American Society for Cell Biology. Ms. Marquis will address the current state of science policy and advocacy, how students and faculty can get involved in science advocacy, as well as potential careers in science policy. Following the format of other BCMB Training Grant seminars, there will be a large seminar, a smaller more interactive discussion, opportunities for students to meet one-on-one with the speaker, and a Happy Hour reception.

Upcoming Special Seminars:

Neurological Disorders Seminar Series
Cell Biology Dept.
Whitehead 400 at 4pm
• Perter Wenner: Feb 19
• Shannon Gourley: Feb 26
• Andrew Escayg: Mar 5
• Kerry Ressler: TBD

Hamilton Holmes Annual Lecture
Diversity and Inclusion: One Woman’s Experience”
Medical Education Building Auditorium at 5pm
• Sheryl Heron: Mar 19

BCMB Training Grant Seminar
BCDB Program and Dept. of Cell Biology
Seminar: Whitehead Auditorium at 10am
Pathways to Advocacy Discussion: Whitehead 400 at 3pm
• Lynn Marquis: Apr 4
BCDB Establishes “Individual Development Plan” Program
By Larry Boise

BCDB has implemented an Individual Development Plan (IDP) for students starting in 2014. An IDP is a structured planning tool that is designed to help students assess their skills and interests. These assessments are utilized to aid a student in setting short-term goals to improve their efficiency and productivity as well as long-term goals for career planning. Different forms of IDPs have been used for postdocs for several years and studies have suggested that they may improve the postdoctoral experience and are associated with better outcomes.

Thus, we as a program believe that incorporating this type of planning tool will be useful for graduate students as well. Rick charged a task force including students (Paul Donlin-Asp, Chelsea Ruppersburg, Josh Francis, Alicia Cutler, Eric Hoffer, Emily Rye and Callie Wiggins) and faculty (Anita Corbett, Ichiro Matsusura, Bill Kelly and Larry Boise) to determine the best approach for implementing an IDP for BCDB students. The task force found that different tools would work best at different points in a student’s development. Therefore, the BCDB IDP utilizes two different approaches.

Firstly, one of the BCDB Professional Workshops will be dedicated to IDPs. During the IDP workshop, students will go over the online IDP that is available through the AAAS, myIDP (http://myidp.sciencecareers.org). This is a comprehensive tool which provides assessments of skills, interests and values as a means to help set goals as well as consider career options. First and second year students are required to attend these workshops, however the myIDP is something that can be used throughout your graduate career. Once our students have passed their qualifying exam, the second part of the BCDB IDP will begin. This will involve your dissertation committees, as students will be required to fill out and present three slides to initiate discussions regarding your current progress, short term goals and long term goals. The templates for these slides are being distributed to the students and are ready to use. While use of the slides is not required until June 1st, we strongly encourage students who having committee meetings before then to start using the slides. If you have additional questions feel free to contact Dr. Larry Boise, lboise@emory.edu.

BCDB Holiday Party Recap
By Katie Williams

‘Twas two weeks before Christmas, when all through the hall
BCDB students were stirring, finishing experiments big and small
Their toys for tots gifts were wrapped and topped with pretty bow
And their handcrafted poems were ready for the big show

As the clock struck 4, the students sprinted to the holiday bash
Where they devoured the holiday treats and depleted the beer stash
When everyone was full, the sound of sleigh bells began to fill the air
And before anyone could blink, Dr. Keith Claus was there
He shouted Ho, Ho and Ho and began to pass out the presents
And the students were excited to reveal their gift’s contents
But first they had to wait for the poem about them to be read
While visions of potential toys danced through their head

The poems describing the gift choices were clever and entertaining
And the toys were generous donations that needy children would be obtaining
So another wonderful BCDB holiday party is in the book
And to next year’s great party we will all look
New Year, New Atlanta
By Megan Allen

The New Year is bringing some exciting changes to our area. While the greater Atlanta area has increasingly been heralded as a food and culture hub of the Southeast, our ever-growing city has some big upcoming plans in store, earning Atlanta a spot on the New York Times list of top 50 global travel destinations in 2014: [http://www.nytimes.com/interactive/2014/01/10/travel/2014-places-to-go.html?id=0].

A facelift to Atlanta’s classic downtown area is among the changes already underway this year. One exciting addition, set to open in May adjacent to Centennial Olympic Park, will be the sustainably built and LEED-certified National Center for Civil and Human Rights. The center’s website describes the concept: “The space will feature a civil rights gallery, a human rights gallery, and flexible spaces for events, field trips, broadcasts, public gatherings and a retail space designed by the award winning, cross-disciplinary architecture and design firm Rockwell Group. Permanent exhibitions will include The Morehouse College Martin Luther King, Jr. Papers Collection. Other installations and experiences will change frequently, addressing the human rights issues in the headlines.” The opening of this space highlights not only Atlanta’s Civil Rights legacy but its promising future.

Another upcoming attraction, set to open in the fall of 2014, is the College Football Hall of Fame. A state of the art building near Centennial Park will house plenty for eager college football fans including a wealth of exhibits, a full-size indoor football field, and a multi-purpose event space.

One of the most exciting additions to downtown Atlanta in the upcoming years will kick-off sometime in mid-2014. The Atlanta Streetcar represents a modern attempt to tackle some of Atlanta’s transportation issues. Many may have already noticed streetcar tracks in place around popular areas of downtown. The Atlanta Streetcar website, [http://www.theatlantastreetcar.com/], describes the project as a way to “provide a safe, convenient way to travel along a corridor that includes the historic Sweet Auburn District, the campus of Georgia State University, downtown Atlanta, and Centennial Olympic Park. Providing last mile connectivity to MARTA and other transit services, the Atlanta Streetcar is a major component in the evolution of Atlanta as a hub for commerce and connectivity in the 21st century.” The first route map can also be found at this website.

And last but not least, those who have come to appreciate Emory Point, the recent food and shopping additions to Clifton Road, have an exciting surprise in store. Emory Point phase II, whose construction can already be seen across from phase I, is set to provide even more housing, restaurants, and shopping. Although specific dates and businesses have not been released, I’m sure the new construction will provide a delicious selection of lunch spots for both the CDC and Emory.

In summary, it is exciting that Atlanta has received recognition from the New York Times for the innovation and building projects we will see in the upcoming year. Here’s hoping the new attractions will provide an exciting addition for tourists, community members, and to Atlanta’s cultural scene.

New “Broadening Experiences in Scientific Training” Program
By Dawn Barnes

Emory University was one of the first 10 institutions to receive an NIH BEST award. The BEST program aims to prepare pre-doctoral and postdoctoral scientists for career alternatives to the traditional R01 university, tenure-track faculty positions.

NIH conducted a study and found that only 43% of PhDs in the biomedical sciences go on to become faculty; additionally, only 23% are tenure-track faculty. The majority of PhDs are utilizing their skills in alternative careers; however, traditional training best prepares individuals in the skills of their PI advisors. NIH has recognized how additional training can strengthen the biomedical workforce by preparing individuals for the skills they would need beyond academic research. To address this need, NIH has funded 5-year pilot programs to pay for the development of career guidance resources and mentors in a breadth of STEM fields. The program also aims to change the culture of training by better equipping faculty to prepare their students for the career choice that is the best fit for each individual.

The initial 10 pilot universities have designed their BEST programs to optimize university strengths and meet the interests of their students and postdocs. Each university has a different design and BEST program leaders communicate monthly to learn from each other. The funds for this program are non-renewable. The goal is to establish career guidance programs a university will dedicate funds to maintain. Emory University, Laney Graduate School, and the Office of Postdoctoral Education are very excited about addressing the needs of their students and postdoctorate fellows. Emory has chosen to begin with a focus on the following alternative career paths ([http://gs.emory.edu/sites/best/tracks.html#track3]):

1. Law and Business: entrepreneurship and consulting
2. Communications: scientific writing, journalism, public policy and outreach
3. STEM Education
4. Technology Transfer and Intellectual Property
5. Research: non-tenure track, governmental, and contract research organ-

(Continued on page 6)
(Continued from page 5)

6. Industrial Science: biotechnology, pharmaceutical.

The joint Emory/Georgia Tech BEST program is divided into two years. In the first year, students are exposed to a breadth of careers in the biomedical sciences. The time commitment is around 2 hours/week. In the second year, students become focused within one of six specialties and gain experience through an internship. The internship is designed to take 6-8 hours/week and be in addition to their traditional course and research load. The NIH BEST funds are intended to be spent on the resources to develop the career mentorship program; students are not paid for their internships with BEST funds; however, students can receive up to $1000 in professional development funds to pay for program-related courses or parking.

BCDB doctoral students are welcome to apply for the program once they complete their qualifying exams. The first cohort will begin March 2014. The second cohort will begin in September 2014. For more information and to apply, please visit http://gs.emory.edu/sites/best/apply.html.

Things to do Around Atlanta
By Skye Comstra

Date night done right

- Joystick Gamebar: Grab a roll of quarters, a cocktail, and challenge your date to a few rounds of Donkey Kong, Mortal Kombat, or any of the many retro arcade games at Joystick. http://joystickgamebar.com/
- Wall Crawler Rock Gym: Stone Summit might be the biggest rock-climbing wall in the country, but the Wall Crawler gym in Candler Park offers $6 passes on Friday night with a Student ID. http://www.wallcrawlerclimbing.com/
- Shakespeare Tavern: If long hours in the lab have you forgetting how to put words together, let the actors at Shakespeare Tavern refresh your memory. This spring they’ll be performing Much Ado About Nothing, The Taming of the Shrew, Romeo & Juliet, and Macbeth. http://www.shakespearetavern.com/index.php

So many ways to drink beers outdoors

- Sweetwater’s 17th Anniversary Party, February 23rd: Sweetwater is pulling out all the stops for their 17th Anniversary Party: food trucks, live music, and on top of their regular lineup of beers, they’ll have 17 unique offerings you haven’t tried yet. http://sweetwaterbrew.com/events/sweetwaters-17th-birthday-party/
- Suwanee American Craft Beer Fest, March 15th: Want to celebrate St. Patrick’s Day with lots of drunken strangers but don’t want to drive all the way to Savannah? Put on your best green and make the much shorter trek to the ‘burbs for the Suwanee Beer Fest! http://suwaneebeefest.com/
- Georgia Craft Beer Fest, March 22nd: New festival alert! Have you noticed the recent surge in brewery openings? It turns out we’re up to 20 local breweries, and the Georgia Craft Beer Fest is your chance to try all of their offerings in one place. Plus, proceeds will support the Georgia Craft Brewer’s Guild, which mean even more beer to come! http://gacraftbeerfest.com/
- East Atlanta Beer Fest, May 18th: What’s better than day drinking in the EAV? Hitting up Delia’s Chicken Sausage stand afterwards -if you haven’t been, you’re missing out. http://www.eastatlantabeerfest.com/
- Westside/Home Park: New American Pub

Festivals & Fiestas

- Taste and Brews at the Atlanta Food Truck Park, March 8th: A ticket to Taste and Brews at the Atlanta Food Truck Park will get you 5 food tastings from some of ATL’s favorite food trucks, as well as plenty of beer. http://www.tasteandbrews.com/
- Dogwood Festival, April 11-13th: Spend an afternoon checking out

Restaurant Openings

- St. Cecilia Buckhead: Fancy Seafood http://stceciliaatl.com/
Congratulations to BCDB Students With External Funding!

BCDB students receive excellent training in grantsmanship which is evident given the number of students with external funding. Keep up the good work everyone!

Barron, Danny – NCI NRSA  
Bauer, Nick – NCI NRSA  
Donlin-Asp, Paul – NINDS NRSA  
Cadwell, Shae – AHA  
Calderon, Brenda – BCDB TG  
Comstra, Skye – BCDB TG  
Cutler, Alicia – BCDB TG  
Hunter, Emily – BCDB TG  
Lewis, Josh – BCDB TG  
Loya, Travis – BCDB TG  
Morris, Kevin – BCDB TG  
Nanes, Ben – NHLBI NRSA & ARCS  
Omotade, Julia – BCDB TG  
Randolph, Matthew – NIDCD NRSA  
Rha, Jen – NICHD NRSA  
Schureck, Marc – NIGMS NRSA  
Whitlock, Jared – BCDB TG  
Wigington, Callie – NCI NRSA  
Williams, Katie – NIMH NRSA  
York, Amanda – BCDB TG
Roses reflect a light frequency at one end of the visible electromagnetic spectrum.
Violets reflect a light frequency at the other end of the visible electromagnetic spectrum.
Sugar is C12H22O11.
And you release the endorphins in my brain.