Sciency Summer Reading

Book Review by Katie Williams:
The Emperor of All Maladies: A Biography of Cancer
By Siddhartha Mukherjee

During Mukherjee’s advanced training in Medical Oncology, he decided to record his experiences with patients. However as he progressed, this humble project morphed into a Pulitzer prize-winning biography of cancer. The story tracks the evolution of cancer theory, research, diagnosis and treatment as cancer went from being a rare disease to one of the leading causes of death throughout the world. The book focuses on two people that greatly influenced the history of cancer, Sidney Farber, the father of modern chemotherapy, and Mary Lasker, a New York socialite and philanthropist. Farber and Lasker were instrumental in changing the public’s perception of cancer and in increasing funding for cancer research.

I highly recommend this book to anyone with the slightest interest in cancer. Mukherjee delivers a great read that presents the history of this devastating disease intertwined with his personal accounts as a physician.

Book Review by Jadiel Wasson:
The Eighth Day of Creation
By Horace Freeland Judson

In a time of fast paced discovery and an ever changing scientific culture, it is easy to forget where it all began. The Eighth Day of Creation gives a comprehensive history of scientific breakthroughs in the molecular biology field. The beauty of the book is that it not only tells you about scientific breakthroughs but also about the atmosphere in which these insights were made. It is this perspective that allows the reader to fully appreciate the process behind some of the landmark discoveries in molecular biology. What we as scientists often feel but cannot express, Judson makes palpable through his whimsical style of writing. My favorite line so far is how Judson describes the uncertainty of scientific discovery: “…when a man is in the black cave of unknowing, groping for the contours of the rock and the slope of the floor, listening for the echo of his steps, brushing away false clues as insistent as cobwebs, to recognize that an important discovery is taking shape.” Anyone from the most experienced scientist to a novice can take away a renewed appreciation for scientific discovery. I recommend this book not only as a refresher on the history of molecular biology, but also as a great read to give you a renewed sense of power and appreciation for your chosen path!

Book Review by Laura Newman:
The Immortal Life of Henrietta Lacks
By Rebecca Skloot

Prior to coming to Emory, I knew little about cell culture (as I’m sure anyone in my lab can tell you). Now I fix, lyse, and poison cells on a daily basis, but I still knew little about where my cells came from, which is why I picked up The Immortal Life of Henrietta Lacks. The book has two main story lines. It tells the story of Henrietta Lack’s life, death, and how her family has coped with the fact that a part of her is still alive. It also explains how her cells were cultured and mass produced, and how that led to modern tissue culture and the issues that it faces today.

I did gain a greater appreciation for the woman behind HeLa and how instrumental they have been to modern medicine and science. However, what stuck with me the most about this book was how it presented the many ethical issues surrounding HeLa. Normally, I don’t particularly enjoy discussing arbitrary ethical scenarios (If two people were trapped on an island…). This book did a great job of presenting ethical issues that arose naturally from the story of the Lacks family, and provided the background and depth to give their struggles real meaning. I highly recommend this book to any scientist – even if you only read about HeLa cells and never get a chance to contaminate them.

Book Review by Matthew Randolph:
Mutants: On Genetic Variety and the Human Body
By Armand Marie Leroi

This summer, while on the plane to your next meeting or just relaxing next to the centrifuge, I would suggest reading Armand Marie Leroi’s book, Mutants. Envision a scientific book about historical individuals with unusual mutant phenotypes. Leroi crafts a piece of literature about the individuals themselves, the peculiar mutations they possessed, how they affected the world and science, and the current scientific insights behind their anomalies. If you are interested in learning more about some of humanity’s unusual mutations but within a historical and political context, I would recommend this book. When I am reading it I often think, "Victor Faundez could have written this book: history, individuals, politics, and science all rolled into one." Enjoy!
Dear Rick Kahn,

This is in response to your Director’s Corner appearing in the spring 2012 newsletter. Specifically, this response is in regards to statements of confusion and shock allegedly made in the membrane trafficking mini-course by first year students. While comments bearing some semblance to those mentioned were in fact made, they were taken out of context and presented in such a way that, some first years, feel did not accurately reflect the original statements. To which we reply “Oh Rick Kahn!”

-Paul, Chelsey, Amanda, Julie, Eric, Josh 1 & Josh 2

The Importance of Scientific Travel

Katie Williams

Science and traveling often go hand in hand. Whether it’s visiting another University to present a seminar or attending a conference, scientists travel to exchange knowledge and ideas. Many BCDB students are recognizing the importance of traveling as they attend conferences, visit collaborating labs, take an intensive scientific course, etc. These invaluable experiences allow students opportunities to receive feedback from colleagues both in and outside their field, strengthen their presentation and communication skills, learn from experts, become proficient with new techniques, develop collaborations and network.

Of these experiences, attending conferences is often the most common, with many BCDB students trying to attend at least one each year. For example, Callie Wigington, a rising fifth year BCDB student, has attended the Annual RNA Society conference for the past two years. She won travel awards both years, the Boroughs Wellcome International Travel Award for the 2011 Japan meeting and an RNA Society Travel Fellowship for the 2012 Ann Arbor Meeting. When asked about her experiences she stated “My favorite part of the meetings was getting to see the breadth of research in my field. It's easy for me to get really honed in on my specific area of RNA processing and forget that people all over the world are solving incredibly complex questions! It's nice to break out of your tiny field for a week and get a peek into what everyone else is working on. As someone who is starting to plan out what I would like to work on post-graduate school, it was really exciting to see all of the new areas of research and to see which direction the field is heading in.” In addition to learning about the latest and greatest research at conferences, students often present a talk and/or a poster. Rasagnya Viswanadha, a rising fifth year BCDB student, has won travel awards to attend the annual American Society for Cell Biology conference for the past two years. She presented a poster at both meetings and said “I loved the experience firstly because I interacted with experts in my field, who asked me very specific questions and suggested exact experiments to perform to test my hypothesis. Secondly, through this interaction I was able to build a rapport with them, get to know them personally, which is critical since they may be future prospects for my post-doctoral training.”

Another great way to network is to form collaborations and some BCDB students, including Laura Newman and Dawn Barnes, both rising third year students, are even given the opportunity to visit collaborating labs in order to learn new experimental techniques. Laura has visited the lab of Dr. Rick Tarleton at the University of Georgia in order to use an instrument that measures glycolysis and respiration simultaneously in living cells, and measures characteristics of the electron transport chain. And, Dawn won an NSF East Asia Pacific Summer Institutes grant to fund her trip to Japan in order to learn protein biochemistry and... (Continued on page 3)
structural biology from her collaborator, Dr. Yuichiro Maeda at Nagoya University. These collaborations will no doubt strengthen the thesis research of these two students.

Additionally, some students are given the option of taking an intensive scientific course. Beth Bowman, a rising fifth year BCDB student, attended the Eukaryotic Gene Regulation course at Cold Spring Harbor Laboratory. She said “The atmosphere of the course itself was the perfect mix of intense learning with laid-back fun. There were 18 students and 4 instructors with daily invited speakers. The course was 3 weeks long, so we all became very close.” And, when asked what advice she would give to BCDB students thinking about attending a course like this, she stated “DO IT!!! While I was nervous about it at first, going to this course was the BEST thing I have ever done for my scientific career. Of course I learned a lot of techniques and scientific information, but mostly, I became more confident in myself and my future career.”

It is clear that sharing knowledge and ideas is critical for scientific progress. Traveling, including attending conferences, visiting collaborating labs and taking scientific courses, is a key method used to disperse this information. Additionally, these experiences provide opportunities for students to hone skills that are required for successful scientists. Therefore, seize every opportunity for scientific travel offered to you because you will not regret it.
Summer is here! As we’re moving into Georgia’s three months of sauna-style outdoor weather, you might not want to leave Whitehead or Rollins. But if you do, there are always exciting ways to enjoy Georgia’s ample summertime sunshine.

The Atlanta Street Food Festival, 7/14/12, free
Don’t be sketched out by meals on wheels! Food trucks are one of the best places to get a deliciously greasy and local meal. Atlanta’s top ten food trucks will be at the Atlanta Street Food Festival in July along with music from some of Atlanta’s local bands. Stop by Piedmont Park for what is sure to be a delicious outing!

The Atlanta Summer Arts Festival, 7/22/12, free
For the token Georgia Festival, attend the summer arts festival at Greenbriar Mall this summer. There will be arts, music, snacks, and fun. Hopefully, like every good southern festival, there will be fried pickles, funnel cakes, and bluegrass music. If not, you should complain.

Music Midtown, 9/22/12, $55 for one day ticket
If you were a young teenager like me when Music Midtown was cool and your parents wouldn’t let you travel to Atlanta for the fun, now’s your chance to be one of the cool kids. Atlanta’s classic music festival has made a comeback recently and now’s the time to get your tickets. Pearl Jam and The Foo Fighters are headlining but you can check out the rest of the schedule at http://musicmidtown.com/.

Speakeasy Cocktail festival, 9/1/12 $25 for one day pass
If you’ve been thinking of bootlegging liquor lately or putting on a fringy flapper dress, get your 20’s itch out at the speakeasy cocktail festival. Held at the Georgia World Congress Center, this amazing event will host cocktail competitions, car shows, and gambling events (I’m not sure what this means but the website made it sound spicy).

Fourth of July 2012, prices vary
Good luck to all those running the Peachtree Road Race this Fourth of July. For those of you not running downtown in 90 degree heat or working on our nation’s birthday, there are fireworks displays at Stone Mountain (night of 7/3 and 7/4), Lenox Mall (night of 7/4), and a parade and fireworks display in downtown Decatur (night of 7/4).

Braves games, multiple dates, $7 and up
Come out and see Atlanta’s once amazing and now mediocre professional baseball team. For grade-A tailgating, I’d buy a parking pass online (you won’t find legitimate parking under $10 anyway) to the green lot and snatch a spot near the trees. This will give you ample time to eat, drink, and practice your tomahawk chop. Even if you hate baseball because of how boring it typically is, you’ll enjoy the atmosphere and being outside. Insider note: if you cat-call the players in the outfield (aka J-Hey) you might even get a practice ball thrown to you. The rising third-years have proof of this. Stop by my lab to see for yourself!

Fox Coca Cola Music Festival, multiple dates, $10 for movie ticket
Every summer, the Fox runs new and classic movies on its big screen. Nothing really beats seeing a movie in the enchanting theater. Before each movie, you will be greeted by organ music and a classic cartoon. Among this summer’s choices are the Avengers and The Princess Bride. Be sure to get there early for parking and pre-movie activities. Bring a snack or you’ll spend your savings (if you have some while in grad school) on the expensive popcorn and drinks.


Congratulations!!!

Robert Rankin: New DSAC President
Julie Fritz: New DSAC Student Representative
Shea Cadwell: New BCDB Student Representative
# Summer Concerts!!!!
Great concerts are coming to Atlanta in July and August
Check out [www.thrillcall.com](http://www.thrillcall.com) for more concert information!

*In bold are some of Mariana’s favorites*

<table>
<thead>
<tr>
<th>Philips Arena</th>
<th>Chastain Park Amphitheater</th>
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<tr>
<td>Coldplay- July 2\textsuperscript{nd}</td>
<td>Sarah McLachlan- July 3\textsuperscript{rd}</td>
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<td>Aerosmith- July 26\textsuperscript{th}</td>
<td>Gin Blossoms, Lit, Everclear, Sugar Ray, Marcy Playground, Summerland- July 13\textsuperscript{th}</td>
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<td>Enrique Iglesias, Wisin y Yandel, Jennifer Lopez- August 29\textsuperscript{th}</td>
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<td><strong>The Masquerade</strong></td>
<td>The Four Top, The Temptations- July 21\textsuperscript{st}</td>
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<td>Reel Big Fish, Suburban Legends- July 6\textsuperscript{th}</td>
<td>Joe Cocker, Huey Lewis and the News- July 25\textsuperscript{th}</td>
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<td><strong>Gwinnet Civic and Cultural Center</strong></td>
<td>Seal, Macy Gray- July 28\textsuperscript{th}</td>
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<td>Flo Rida, B.o.b., Cee Lo- July 5\textsuperscript{th}</td>
<td>Barry Manilow- Sunday July 29\textsuperscript{th}</td>
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<td><strong>The Tabernacle</strong></td>
<td><strong>Pitbull- July 31\textsuperscript{st}</strong></td>
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<td>Collective Soul- July 7\textsuperscript{th}</td>
<td>moe., Allman Brothers Band- August 1\textsuperscript{st}</td>
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<td><strong>Aarons Amphitheatre</strong></td>
<td>Incubus, Linkin Park- August 19\textsuperscript{th}</td>
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<td>Kiss, Motley Crue- July 24\textsuperscript{th}</td>
<td>B.B. King, Tedeschi Trucks Band- August 26\textsuperscript{th}</td>
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<td>Wiz Khalifa, Mac Miller- July 25\textsuperscript{th}</td>
<td><strong>Verizon Wireless Amphitheater</strong></td>
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<td>Jason Mraz, Christina Perri- August 18\textsuperscript{th}</td>
<td>Crosby, Stills, and Nash- July 14\textsuperscript{th}</td>
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<td><strong>Phish- August 25\textsuperscript{th}</strong></td>
<td><strong>Yes, Procul Harum- July 31\textsuperscript{st}</strong></td>
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<td><strong>Variety Playhouse</strong></td>
<td>The Fray, Kelly Clarkson- August 8\textsuperscript{th}</td>
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<td>Paula Cole- July 20\textsuperscript{th}</td>
<td>Sugarland, Dave Stewart- August 23\textsuperscript{rd}</td>
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<td>My Morning Jacket, Band of Horses- August 24\textsuperscript{th}</td>
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<td><strong>Fabulous Fox Theatre</strong></td>
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<td>B-52’s- July 21\textsuperscript{st}</td>
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<td><strong>Nicki Minaj- July 22\textsuperscript{nd}</strong></td>
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<td>Old Crow Medicine Show- August 25\textsuperscript{th}</td>
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**The Lagging Edge**

Newsletter Committee:
Megan Allen, Mariana Mandler, Laura Newman, Matthew Randolph, Jadiel Wasson, Katie Williams

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**Notable Quote**
“Common sense is the collection of prejudices acquired by age 18.”
Albert Einstein

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**Q:** What does DNA stand for?
**A:** National Dyslexics Association

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**HOLIDAY!**

**How a normal person celebrates:**
Woo hoo! No work today!

**How a grad student celebrates:**
Woo hoo! Free parking today!

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**I THROW MY TELESCOPE IN THE AIR SOMETIMES**

**SINGING AYYYYYYYYO**

**I’M GALILEO**

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Front Page Header:
Photo by Sara Stahley