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GSA Notes

by GSA Co-VP Krishna Juluri

As we are getting closer to 2003, I would like to look back and comment briefly on my experiences in the GSA this past year as well as look a bit towards the future. This is now my second year as a GSA officer and I have had a rich and rewarding experience. I am particularly pleased with the attendance and new faces at GSA events. The GSA Fall Picnic was a blast (thanks to Marcel Estevez), despite the construction on the Homewood campus. We would especially like to thank Platypus Myth (Jason Hoffert, Ed Brignole, Dzung Nguyen, and Chris Farrell) for providing entertainment at one of their last performances at Johns Hopkins.

Platypus Myth at the GSA Picnic

We wish Jason and Dzung the best success in their post-doctoral endeavors. In early October we had our Pioneers in Science Lecture, in which we heard from Dr. Paul Greengard, from Rockefeller University, one of the three distinguished neuroscien-

Continued on page 4

Career Retrospective

by Derek Jantz

Hey all. Unless you're new here, you probably know how this works. This is part three of my semi-autobiographical account of grad school. If you missed the other two, the jokes are all the same so don't worry about it. This one grapples with the harsh realities of life at the bench. It then bleaches and flames them.

Episode III: TASTE OF CHINA STRIKES BACK

My fourth year began more or less like everybody else's—last place in the Baltimore regionals of the World's Strongest Man competition. My clearest memory of the day was the "tire pull" event—an aptly named contest that pits man against rubber in a power struggle the likes of which can only be found on late night cable. In essence, the event is not unlike grad school—a more or less fruitless struggle against an insurmountable force until time runs out and the judges set you free. The only real difference is that somebody actually wins the tire pull, and in my fourth year that somebody was a guy named "Herculon" who dragged his tire past mine like it was standing still. Which it was. Though I pulled with all of my strength, the resulting change in the tire's position was undetectable by all but the most sensitive instrumentation. I felt much like Isaac Newton must have when, chained to a tractor tire, he concluded that an object at rest tends to stay that way.

Continued on page 2

Upcoming GSA Meeting: Nov. 19

*** 517 PCTB ***

Meeting are held on the 3rd Tuesday of every month at 3PM

Upcoming Events

PDO sponsored event
Boston Consulting Group:
First Round Interviews
November 4

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PDO sponsored seminar
Dr. Fredric Abramson
"A View of the Biotechnology Career Mountain-Top, from a Valley Dweller"
November 7 @ 3PM
West Lecture Hall

****

Science Slide Slam
November 7 @ 4PM
Bodian Room

****

GSA Office Space Opening
November 11
2nd floor 1830 Bldg.

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Alicia Showalter Reynolds Memorial Lecture
Dr. Clare Fraser
December 4

Career Retrospective ***continued from page 1***

Unfortunately for our hero, the World's Strongest Man Association was decades behind in their laser-positioning equipment and I received, for the eighth event in a row, a score of 0. I considered making the argument that, *relative to Herculon's tire*, mine had moved a considerable distance. I recalled, however, my father's fateful words as he sent me off to my first day of junior high: "Son," he said, "whipping out quantum mechanics only makes the ass-kicking worse."

While my sub-par performance in the WSM competition no doubt comes as a surprise to those of you who know me (I am, after all, the second tallest guy in my lab), let me assure you that the Biophysics department's standards of physical fortitude fall considerably below those of the general population. As a consequence, I found myself repeatedly upstaged by a host of mongoloid behemoths, most of whom had never even attempted post-graduate study. Never one to give in easily, I resolved to try again the following year after a diet composed primarily of performance enhancing drugs. A quick search, however, revealed that Sigma's offering of controlled substances was woefully lacking and all those available on e-bay tended to kill brain-cells or shrink genitalia (both of which I hoped to find a use for one day). In the end, I decided to make something myself.

As luck would have it, I was also desperately in need of a thesis project. My project to *reconstitute human life from purified components* had been abandoned in its infancy when none of my lab-mates would volunteer to be incinerated for elemental analysis. Moreover, The prohibitive cost of portable lasers of sufficient wattage had all but ruled out experiment by sneak attack. The answer to both my thesis and tire problems was to simply create a super-drug that would allow my body to convert Double Chocolate Milanos into pound upon pound of tire-dragging muscle. I knew there was a thesis in that, and I knew that it was probably already written and lying around somewhere in Se Jin Lee's lab.

The gene is called "myostatin." It's nature's way of ensuring that most of us will never play in the NFL. Se Jin Lee had made quite a name for himself knocking out the gene in mice to produce the mouse equivalent of Ray Lewis, which, at least in temperament and IQ, is not unlike the human equivalent of Ray Lewis. I considered Se Jin to be a brilliant scientist with abysmal marketing skills. I mean...why the hell would mice want to be big? If you could knock out myostatin in your co-workers, however...there was money in that. My course of action was clear: I would start with the rotation students (producing the rotation student equivalent of Ray Lewis) and work my way up the ladder of seniority until reaching myself. The Derek equivalent of Ray Lewis would then be in an excellent position to graduate, take home the World's Strongest Man trophy, and fill holes in the Raven's secondary. Unfortunately, a quick back-of-the- envelope calculation revealed that knocking out every copy of a gene in an adult human would require, at the very least, a bigger envelope. Where genetics failed me, however, I knew that pharmacology would not. My myostatin inhibitor would be the biggest thing to hit the performance enhancement industry since German reunification. First things first, though, I needed a plasmid...

I knew that Se Jin probably wasn't going to give his myostatin clones to just anybody, so I put a good deal of effort into deciding what approach to take. In the end, I settled on the window because, of all the entrances to his lab, this one was the least likely to be booby-trapped. I could write volumes on the many harrowing adventures I survived the night I broke into the Lee lab—dodging boulders and poisoned arrows, fighting off Ray Lewis mice, betrayed by Tim, my trusty sidekick and roommate. Fortunately for all of you, the GSA considers me filler material and gets mad when I exceed my one page limit, so I'll get straight to the point. I awoke the next morning with a new roommate and stab wounds that none of the mice could explain in court. More importantly, I woke up with a freezer full of plasmids and no idea what to do with them. I called the one person who could help me.

Ted was the Clontech sales manager for the Mid-Atlantic region. He was also a Jedi master. He arrived at my bench with a stack of catalogs and a pipetman that, he claimed, had once belonged to my father. My father works in construction management and I should have grown suspicious immediately. They say that Jedis have a way with the weak-minded and in my fourth year I wasn't moving tires mentally. As we flipped through the many pages of Clontech's timesaving wonders, Ted explained to me the power of The Force. He told me how it surrounds all things and binds them, how it works faster in a centrifuge and elutes in high salt or low pH. He told me that Clontech had the answer to all of my research problems, and that they were cheaper by the case and cheaper still by the pallet. He took my order and handed me a bill with more digits than most West-Virginians. The secret, Ted explained, is in how you handle your accounting. He showed me how, by creating a series of fictitious "spin-off" labs to absorb debt, my expenditures could be hidden from the NIH until well after graduation. I was thus able to spend a sum roughly on par with the gross domestic product of Hawaii and push it off onto labs operated by the likes of Barney Rubble, Gomer Pyle, and Jon Lorsch.

The week that followed witnessed a turning point in my graduate career. Nov. 14th, 2000: my first day at the bench. Sitting on the otherwise vacant Formica that morning was the *Clontech plasmid mini-prep kit.* Their slogan: *One rinse to pool them all. One rinse to bind them. One rinse to elute them all and in your own tubes find them.* I opened the box with trepidation, fearful that a new world of intellectual challenges resided inside. A quick glance through the manual, however, alleviated my

Continued on page 3

Continued from page 2

worries. Here was a set of instructions so simple that a trained monkey could follow them. I was disappointed to find that Clontech had neglected to include a trained monkey in the box and made a note to mention the oversight to Sales Manager Ted. The mini-prep truly was a marvel of American frivolity. This was the fast food of science, and in my fourth year McBiochemistry was exactly what I was looking for. Pastel colored spin-columns were easy on the eye and Clontech's cryptic buffer nomenclature spared me from any temptation I might have to actually think about what I was doing. The manual promised "Up to 5ug of Sequencing Quality DNA in Only 30 Minutes." It was my first time, however, so I decided to do that optional wash with buffer PB. As a consequence, I was stuck in lab until the wee hours of the morning. As the midnight hour approached, I was driven from the lab by hunger. In retrospect, I should have just stopped at the vending machines, but then HindIII site is always AAGCTT. I chose, instead, to make the late night pilgrimage to Taste of China.

Hopkins' late-night culinary monopoly was elaborately decorated with all manner of wall-hangings, most of them ending in "conditional pass." I approached the counter intent on asking what exactly was meant by "biosafety level 3," but the stern look on the owner's face changed my mind. This man was the Martha Stewart of fast food, concocting all manner of quasi-Chinese entrees from common household items and backyard detritus. I ordered Sweet and Sour Chicken. The owner smiled with amusement—we both knew that he would give me whatever he had and charge me whatever he wanted to. I would then accept my meal graciously, thankful that this Robber Barron of Won Ton had seen fit to fly in the face of all known health codes to provide me with late night sustenance. I returned to lab clutching my dinner, a microbiology thesis encased in Styrofoam, and in my haste to eat neglected to autoclave it first. It was neither sweet nor sour, and if it was chicken it had lived an extremely unusual lifestyle. I had spent the previous three years working with genetically modified microbes of all types, but nothing could have prepared my immune system for the dangers lurking within that deep-fried flesh of unidentifiable phylogeny. As it turned out, the first experiment of my fourth year was also the last. With the first audible emission from my GI tract, I knew that the Colon Wars had begun.

Up next
Episode IV: RETURN OF THE MEDI (year 5)

Visit the GSAN website to view previous issues of the newsletter.

http://www.hopkinsmedicine.org/gsa/news.html

*A brush stroke of Starry Night**

From darkness and light I was born
From pigments and oil I was made
Across the canvas I danced.
I dance still.
Find me
In swirls and curves of stars and clouds
In outlines of mountains and houses
In folds of the cypress tree bridging sky and ground.

Black, blue, yellow, white
Into a pool of primary colors I dived
Pulled, pushed, chased, divided
No longer invisible
Like Classical works of old. I became
Identified,
Magnified,
Intensified.
The canvas
My three-dimensional world made two-dimensional
I swung from left to right, creating
An exhilarating sky
With swirls and curves of stars and clouds.

I was
When Vincent's emotions overflowed into the color palette
When the monster of madness lingered
When the shadow of death conquered
I was.

I am still
A witness of pride, greed, terror
When the world turns violent like swirls of clouds I created
I bring light,
Intense light -
Eternity in golden moon and ivory stars

And when the world turns peaceful
Like the village I created
Under the starry night
I am
Still.

**This Van Gogh's painting is, I believe, currently kept at the Museum of Modern Art in New York City.*

Van-Khue Ton

GSA Notes ***continued from page 1***

tists who won the Nobel Prize in 2000. We have several more events planned for the near future, including the Alicia Showalter-Reynolds Memorial Lecture, to be given on December 4th by Dr. Claire Fraser, the director of The Institute for Genomic Research (TIGR). Dr. Fraser led the teams that sequenced the genomes of numerous microbial organisms. We are also planning for the return of the highly popular wine tasting seminar to cap off a wonderful year. Looking even further ahead we have planned the GSA poster session / happy hour as well as several fun and exciting events for the next Graduate Student Appreciation Week in the spring.

Marcel Estevez and Dan Cohen grilling

As I mentioned before, I am extremely happy with the level of participation in the GSA by students this past year. There has been a steady increase in attendance at GSA functions and a very significant increase in participation at GSA meetings. I would encourage you all, in particular the first and second year students, to attend meetings (the third Tuesday of every month) and volunteer to help out at events. I am certain you will find this as rewarding as I have. Remember, your voice can only be heard if you are there to talk to us.

We have been working on a few things to try to increase our accessibility to the community. One of the most recent developments is the redesign of our web page (www.hopkinsmedicine.org/gsa), which is slated for completion in the very near future. The new page is intended to be a portal so students can access all of the resources the GSA has to offer and will be designed foremost with ease of use and accessibility in mind. Frequently visited topics such as taxes and parking information will be available on the front page, as well as a "hotbox" for the latest issues. The site will also feature a calendar for student events and links to the main science calendar. All of the information that is currently present has been updated (such as the GSA Mini-Survival Guide and the GRO Guide to Living in Baltimore) and links will be provided to a message board system that is available for housing and sales postings.

Students at the 2002 GSA Fall Picnic

Another development is the creation of a new GSA office. As you all may be aware, the 1830 Building is undergoing renovations, and several graduate program offices, including the Office of Graduate Student Affairs and Professional Development Office, are moving to the new space. The GSA will have its own office space in this new building as well, and for several hours each week, GSA officers will hold office hours. I encourage you to stop by to chat, give us suggestions, or to take advantage of the many resources the GSA has to offer. Ultimately, this organization is by and for you. The more you are involved, whether it be by participating in GSA events, by serving as a representative or officer, or simply by attending a meeting and voicing your opinions, the greater the impact we can have on **your** student life.

Please email us your thoughts at gsa-g@jhmi.edu.

The next deadline for newsletter submissions will be Jan. 24th. Contact a GSAN editor:

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