

The Restriction Digest

G.S.A. Newsletter

a publication of the Graduate Student Association Johns Hopkins University School of Medicine

Volume 14 Number 1 September 2003

GSA Notes

By Krishna Juluri

A new school year has begun, and on behalf of the Graduate Student Association (GSA), I would like to welcome you all (back) to Johns Hopkins. I would like to use this opportunity to invite you to participate in the GSA and to update you on some of our most recent events. While this column is primarily directed towards incoming students, it is also written for those returning students who have heard of the GSA but have not yet had an opportunity to participate or are unclear as to its role.

So, who are we and what do we do? Simply put, the GSA represents the graduate student body at the medical campus, and acts as a liaison between the administration and the students, particularly in areas that affect student life. We are comprised of an executive council and representatives from each graduate program. We meet monthly to discuss and act on a variety of issues that have a direct impact on the student life at Hopkins. In addition, we also organize and sponsor a number of academic, social, and careerorientated activities, both on and off-campus.

We will kick off the fall semester with a happy hour on orientation day (August 28th, 3PM, PCTB Courtyard), to be followed the next week (September 5th, 4:30 PM – dark, PCTB Courtyard) by a cookout, picnic, and games. Be sure to attend as this is a great way to get to know your new classmates as well as the upperclassmen. We also plan to have multiple happy hours throughout the year (a major

The End (Graduation Speech May 2003)

By Derek Jantz

Every year, my lab is involved in a community outreach day in which we bring a group of inner city 5th graders to Hopkins and show them how fun and colorful and explosive science can be when done properly. I am, on these occasions, afforded the opportunity to explain to this group of youngsters, most of whom are not overly fond of school, why I have deemed it necessary to pursue my formal education well into the 21st grade. In doing so, I cannot help but put myself in their position and remember my perceptions of adulthood as an edu-phobic 5th grader myself. That was an age when being a scientist meant melting action figures in the sandbox and recombining their limbs to make super action figures. Playing doctor usually happened on a coffee table in the basement and was likely to get you into trouble. It was an age when even the most minor achievement would make my dad proud and make my mom cry.

I don't think I would have been surprised at that point to learn that I would be awarded my Ph.D. on a cloudy afternoon in May, 2003, a day approaching, but not yet reaching and, so, still an eternity away from, my 30th birthday. I'm quite certain, however, that I would have been extremely disappointed to learn that I had reached this point in my life and did not yet have a house or a family or a Ferrari or a helicopter or a light-saber. Back then, I had a dream of one day owning an enormous mansion next door to Mom so she could still do my laundry and put food

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Orientation Happy Hour

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Thursday, August 28 3pm PCTB Courtyard ***

Annual Fall Picnic

Friday, September 5 4:30pm-dark PCTB Couryard

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SAP Career Symposium and Panel Discussion

Thursday, September 25 5:00 - 6:30 pm West Lecture Hall, WBSB

Next deadline: October 15, 2003

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change for us as in the past we have had one or two major happy hour events during each semester). Also be on the lookout for our Wine Tasting Seminar. This has been a very popular event for the students in the past and we plan to have a very interesting variation on the theme this semester. We are also in the planning stages for several combined events with the GRO (our counterpart at the Homewood campus). Our most recent combined events included a social mixer at the Kiss Cafe which included a speed dating event and a bus trip to Six-Flags Baltimore/Washington DC. Both events were a resounding success with extremely positive feedback.

Beyond the fun and games, the GSA sponsors a number of lectureships throughout the year, bringing to the Hopkins community some of the world's most renowned scholars. These speakers are chosen by the students, recent speakers having included Dr. Paul Greengard from Rockefeller and Dr. Steven McKnight as our Pioneers in Science lecturers, and Dr. Claire Fraser from TIGR as our Alicia Showalter-Reynolds Memorial speaker. We plan to have three lectures again during the coming year. I also encourage you to take advantage of the careeroriented activities, primarily organized by Wendy Sanders of the Professional Development Office, and include resume/cover letter writing seminars, grant writing seminars, career panels featuring distinguished alumni, as well as a host of useful services. The GSA also provides funding towards students in the form of travel awards for meetings and funding for students groups, including the Jewish Students Association (JSA), the Hopkins Biotech Network (HBN), and the Chinese Student and Scholar Association (CSSA).

So by now you may be wondering how you can participate. The simplest way is to come to our events and our meetings. We meet every third Tuesday of the month at 3PM in Room 2-180a in the 1830 Building. We even provide free pizza and soda. Some recent hot topics have included parking, the new SEVIS system and health care. You can download the minutes for past meetings from our website to get an idea. You may even want to become a representative or officer. The key, however, is to participate. The GSA has much to offer each of you but to be effective we need to hear from you. Please feel free to email me or any of the individual officers or representatives or email to the GSA at gsa-g@jhmi.edu with any of your concerns or questions. I would also encourage you to visit our website at www.hopkinsmedicine.org/gsa. You can use this site as a central hub to student life at Hopkins. All of the information about the GSA including the officers and representatives, past minutes, and current hot topics of interest to students are on the page, as are useful guides such as the Mini-Survival Guide to Baltimore. You will also find links to the various student groups and to a message board where you can view sales and housing information.

Once again, welcome to Johns Hopkins and we look forward to working with you all.

Travels and Travails in the Tropics of Costa Rica By Soo Hee Lee

My plane lands in San José, the capital of Costa Rica, a day late. As such, instead of meeting my Spanish speaking travel companion at the airport, I must find my own way into the city to the Inca Real Hotel where Soraya has checked in the night before. This I think will be a simple ordeal, as I write down from my Lonely Planet Spanish book the phrases I think I will need to communicate with a taxi driver. However, once on our way, my taxi driver repeatedly asks me if I have a reservation. To which I consistently reply, "Si." He speaks no English. I speak very little Spanish. I try to explain how mi amiga, my friend, is meeting me there and that the reservation is in her name. He keeps pulling off the road and slowing down and getting back on again while he talks on his cell phone and turns to tell me the hotel cannot find my reservation. Having spoken to Soraya over the phone at three in the morning the previous night, I insist she is there already, in fact in room 25. The taxi driver keeps veering on and off the highway as he hands me a flyer for the Inca Hotel and points to the \$49.99 printed on the flyer, the cost for a night for two people. In the end he consigns himself to taking me to where I insist we go. We get to the hotel and I encounter similar difficulties with the hotel concierge until we figure out that we both speak English. Shortly thereafter, I find myself tucked in bed chatting away with Soraya who I am happy to see again after two years.

I realize one of the great things about this trip is the absence of jet lag. Costa Rica is on Central Mountain Time, meaning two hours later than our Eastern Standard Time. I can feel like I've slept in and still wake up early. The morning after I arrive, at the crack of dawn, we are on a bus to Puerto Jiménez. We head to the Bosque del Rio Tigre, a lodge on the edge of the Corcovado National Park in the Osa Peninsula (in the southwest corner of the country). June is the start of the rainy season but neither of us has brought umbrellas as we figure wetness is unavoidable. Despite Costa Rica's smallness—it is almost half the size of the state of Kentucky—the bus ride takes ten hours. San José is in a central valley surrounded by mountains, and as such we have to pass over them to get to the low lands. In the heights of the mountains, we experience the cool climate of the cloud forests. Waking from a nap, I am momentarily confused by the chill and think for a

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coloring in my milk to make it taste better. I envisioned Dad spending his retirement mowing MY lawn and watching football with the robot that I built to clean my room. My brother would get the little bedroom. But then, none of this has happened, a realization that is made all the more painful by the fact that all of my college friends who became engineers, programmers, or financial planners actually do have spouses and houses and helicopters. So, in these moments of intense imaginary introspection, I'm forced to ask myself whether or not it was all worth it. Whether the ends justified the means or if I even understand what the ends are. We came here to learn about the processes that make life possible, but have we done so at the great expense of living our own lives? It's a question that everyone must answer for him or herself. We all came here for different reasons and we all hit different bumps along the way. Some of us hit them twice. There were days when I know I said that grad school was the best period of indeterminate length in my life. There were also days when it was not altogether unlike Hell with longer hours and HIPPA training. In the end, some of us found what we were looking for, some did not. Some of us found that we were looking for the wrong things.

So was it worth it? I've consulted my inner-fifth grader. He isn't worried about publications or postdocs. He wants to

know where we're going to dinner after the ceremony and why I have to return my hood to the rental company when this is over. He only knows the world right now because all of time is stretched out in front of him. There are no regrets, no what ifs when everything in your imagination is still possible. He knows that the only certainties in life are that expensive shoes make you run faster and the Orioles will finish somewhere just under .500. He knows that the particular set of events and circumstances that got me to this moment is the only set of events and circumstances that I should concern myself with because the world is not likely to run out of families and light-sabers anytime in the foreseeable future. I am the same person that came to Baltimore, lo those many years ago, except that as of this day, I now get to spend the rest of my life saying "I'm not that kind of doctor" rather than explaining that accursed extra 's' in Johns Hopkins.

So we must move forward now with a childlike sense of possibility and try to understand life in addition to biology. We are the basement doctors and sandbox scientists playing grownup for the first time. We know that food coloring changes the visible emission spectrum of milk... and that that makes it taste better. So, for my part, I will say this: it was all worth it if somewhere in the audience I've made my dad proud and made my mom cry.

Need Help Getting Published?

JHU Libraries Offer New Tools for a New Publishing Era

*JHU membership in BioMed Central http://www.biomedcentral.com/inst/gateway/

- *A Web-based forum http://openaccess.jhu.edu
- *An authoring tool http://openaccess.jhmi.edu/authors_resource.cfm

Scholars and researchers both create and consume scholarly information. They add the true value to scholarly communication. Scholarly communication is now an international, multi-billion dollar business, and ongoing consolidation of the publishing industry is squeezing out competition.

-The Johns Hopkins Libraries spend over \$6.5 million annually on journal subscriptions. Increases in subscription rates have averaged over 10% since

the 1990s, and the bill for journals alone will increase 10.5% this year if the libraries only retain current subscriptions.

-Concerns about soaring journal costs and the diminished competition among commercial journal publishers have prompted the Johns Hopkins Libraries Scholarly Communications Group (SCG) to explore alternative forms of scholarly publishing and other initiatives that are shaping a new publishing

*JHU membership in BioMed Central, an independent publisher committed to immediate free access to peer-reviewed biomedical research. (http://www.biomedcentral.com/inst/gateway/). BioMed Central features:

- —Rapid peer review
- -Immediate publication
- —Open access
- —Retention of copyright by the author
- —Coverage by PubMed and indexing/archiving by other services
- -Ability to track how many people read your article

environment for scholars. We are pleased to announce:

- —With JHU membership, the \$500 publishing fee is waived for Johns Hopkins authors.
- *A Web-based forum to debate the issues, to promote the retention of intellectual

property rights for authors and their institutional sponsors and to showcase new services to foster competition in publishing. Visit us at http://openaccess.jhu.edu

- *An authoring tool (http://openaccess.jhmi.edu/authors_resource.cfm) to assist Hopkins authors in finding publishers that are cost competitive and who support the free exchange of information through author-friendly policies. Use this tool to find:
- —Data for highly rated journals, including cost to Hopkins,
- -Usage at Hopkins, and
- —Links to Instructions to Authors
- —Comments by other Hopkins authors on their publishing experience. See how authors rank their publishing experience, rank their experience with reviewer turn-around and quality, and whether they successfully negotiated the retention of some rights over the use of their articles.

A JHU Libraries initiative, the Johns Hopkins Scholarly Communications group is dedicated to fostering open access to quality information in support of learning.

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second that perhaps the bus is being air-conditioned. Our bus winds slowly through roads that reveal to us the beauty of the land. Looking down the ledge of the road we see far into the valleys with green mountains poking through white cumulus clouds against the distinct blue sky. Soraya tells me the cloud forests are disappearing due to global warming.

The bus driver uses two small honks to greet passing truckers, bus drivers, and people on the sides of the road. He also waves and shouts out his window on occasion. Either he knows everyone we pass along the way or this friendliness is a typical way of life for the Ticos (Costa Ricans). Our bus slows and after a while parks and the driver gets out, joining a crowd of Tico men standing around a landslide that covers a large portion of the road. Fallen trees are half-buried beneath a hill of toppled rocks and dirt. I get out too taking a look and as I get closer to the debris, several large rocks tumble down from the freshly revealed red-faced ledge above. I step back a bit and get excited enough to bring out my camera. I marvel at how no one seems distressed or perturbed by the apparent delay and lack of action. We spend some two hours waiting while the landslide is examined. Eventually, someone comes by with a saw and the offending tree branches are removed so that our bus can (barely) get by.

We arrive a day and a few hours late in Puerto Jiménez, where machine gun toting men guard the local bank (I see them with my own two eyes). We do not know if the taxi Liz from the lodge has promised us is still waiting. Soraya had phoned the town the day before and had left a message to be radioed in to the lodge about our delay. We get off the bus, backpacks in tow, and see no taxi. We walk away from the bus station to look for the Café Net Sol Liz had emailed us about from which we can radio in our arrival, but the townsfolk do not seem to know of the café. The local police we ask hail a passing truck and converse with the driver who tries his radio. They know of the lodge we are talking about, the one run by a Gringa and her Tico husband. We climb into the back of the open truck, sit down on the plastic padded wooden benches and hold on as we look out the back and watch the dust start up as we drive off in the direction of the Rio Tigre (Tiger River).

We pass through the town and watch as huts set amongst green with chickens and dogs at their sides, tan and brown cattle, and logging trucks pass us on our bumpy pot-hole ridden ride. The atmosphere is warm and humid—tropical. We can hear the bugs flying through the open air, some hitting the truck and others whizzing past our heads. As we approach the Rio Tigre, the truck slows and we see two figures with binoculars approach. The tall light-haired woman is Liz and the dark-haired man is Abraham, her husband. We had finally made it. They had been birding, as the nearby guava tree had flowered and it was an opportune time to watch the different species of humming birds amongst the white blossoms. We climb out of the back of the truck to introduce ourselves. We are tired from our journey and so we head to the lodge. I roll up my pant legs and in my Tivas step into the rocky beds of the Rio Tigre. We had come on the early bus so as not to have to cross the river in the dark. As the sun sets, we push through the cold river water coming up to our thighs, the surprisingly strong currents making progress slow. Liz shows us how to walk in the water by crossing our legs in the direction of the flow as we step forward. Out of the water, we climb a rocky little hill to the two-storied lodge. It is lovely, in its open-aired construction and polished wood softly gleaming in the string of holiday lights and candle flames. Dinner is sumptuous. Lorena, the Tico cook, has prepared for us large sautéed shrimp over rice and steamed local vegetables, with fresh baked bread and avocado salad. Our rooms with their half walls surround us in dense tropical foliage that is alive with sounds even in the darkness. I fall asleep to the cries of tink frogs, the hum of winged creatures against my mosquito netting, and the drumming sounds of rain.

We have four full days at the lodge. On our first full day, five minutes into our first hike, we see a dead gaudy leaf frog being devoured by a mob of tiny red ants. It is belly-up, its blue-ribbed sides barely visible. Abraham flips it over on a leaf so we can see its green back, bulging red eyes, and black dumb-bell shaped pupils. Along our walk we also see a black and green poison dart frog, about the size of a thumb, tucked in and quietly resting at the base of a tree. That was only the beginning. Over the course of the next few days we see an amazing array of birds, every-sized amphibians, monkeys (all four types—squirrel, capuchin, spider, and howler monkeys) swinging in tree branches above us, and a lone sloth. We listen to ruddy ground doves, reddish with pale gray heads, slender beaks and beady eyes cooing at each other. We see fourteen scarlet macaws sitting in pairs in a tree, flocks of parrots, swallows with split tails, and tiny humming birds with wings that beat so fast they become invisible. We see through our binoculars dark blue and deep orange bellied Baird's trogons, showing off their white tails, green kingfishers, a flock of emerald toucans suddenly taking off from a distant tree, a bicolored hawk attacking two toucanets, and a pale yellow bellied piratic flycatcher that Abraham tells us eats the eggs and young of other birds.

We keep our distance from the small puffy orange-collared manakin guarding a little fist-sized nest made of twigs while an arm-sized lizard waited below. We examine at length the red-legged honeycreeper with its light blue crown, darker azure body, and black markings around the eyes and wings. We easily spot male scarlet-rumped tanagers because their brilliant red behinds flash at us against their black bodies and silver bills. From the lodge, we watch stout salamanders and tiny lizards climb the walls, a bat rest upside down on the ceiling, a large gray-necked woodrail wander the vicinity like a chicken, and different sized Jesus-Christ Lizards run and stop and run again on their two hind-legs across the front lawn. We even catch the changing colors, from tan to green to blue, of a male lizard mating with a female of its kind. Abraham's wonderful eyes find for us an unusual alien looking owl and a potoo blending in with knobby tree branches. In the end we must have seen at least 50 different species of birds alone.

I am amazed by the leaf-cutter ants marching in endless lines on their well-worn paths, so worn it's grooved, with their perfect leafy green bits over their bodies. Abraham tells us that the ants take their harvests back to their burrow to grow fungus that the larvae consume. In the dark of night we find tree frogs sounding out their territories, eyes reflecting the light of our flashlights. Near water we see blue herons, boat-billed herons, and a bare-throated tiger heron. We root for Wild-Kingdom-action as a purple gallinule pecks at the grass two feet from a large caiman (crocodile) sunning itself, jaws with rows of pointy teeth swung open.

During our hikes, when we do not spot any birds, we examine the flora of the rain forest. So much life every so few steps! The sounds are constant. I can believe that Costa Rica boasts the highest bio-diversity (different species per area) in the world. I'm sad the rainforest that supports the majority of this biodiversity is disappearing. We hike through primary and secondary forests. Termite nests bulge from

tree trunks and monkey ladder vines snake upwards into the canopy. Everywhere I look something is growing on something else. The orchids and the moss and the vines grow on trees and even the giant ficus trees meld into other ficus trees. We find giant pods that have released its seeds, petal like shells with bright red insides that emit a pleasant aroma when crushed (good for muscle aches Abraham says), plant leaves the locals use to treat malaria, barks for hangovers, wild bananas, collard green like edibles, and little fern like plants everywhere that fold their leaves closed when touched or blown upon.

We see a number of lone morpho butterflies. The large mariposas have impressive 15 cm wingspans. The first one we see rests on a dead tree branch with its wings closed. The outer wings are dark with a spot on each wing to give the illusion of watching eyes. When a morpho flutters by in the air, zigzagging up and down in the seeming randomness of butterflies across the open trail into the green jungle, I am mesmerized by the shimmer of its brilliant blue inner wings. The iridescent cerulean is edged with velvety black. I notice tiny golden metallic beetles and beetles with gigantic jaws. At night, I watch from under the mosquito net of my bed soft spherical lights floating near the ceiling of my room. Lucky wasp nests have been built on the rafters of the lodge and I twice rescue bees that fly into my tamarindo juice.

I cannot forget the mosquitoes that love me more than I love them. We are emptying the water from our rubber boots and wringing out our socks. I am scratching my bites and asking if anyone else has them. Abraham thanks god (¡gracias dios!) for me and my sangre dulce (sweet blood) as when I am around no one else seems to get bitten. I so religiously apply my DEET (insect repellant) that Soraya starts calling me la princessa. I protest, saying I feel more like la victima and we all laugh. Abraham tells us, eyes twinkling, that we are having iguana for dinner.

The rain comes down in a roar, as deafening to the ears as it is cooling to the air. The drops come down big and heavy and make splattering sounds as they hit the rocky ground. I write, gently swinging in a hammock under the roof of the lodge, leg dangling, as the rain lets up and the brightness of the sun filters through the foliage diffusing its warmth into the moist air. I look up to watch Lorena's husband come across the river with their nursing baby. Small colorful butterflies flutter by. The sound of the swollen river is all that is left to remind us of the rain.

Teacher of the Year Advises Young Scientists

By Lai Hock Tay

Dr. Jeremy Nathans, M.D. Ph.D., who won the Teacherof-the-Year award for 2003, addressed a crowded auditorium of student researchers on the topic "Advice to Young Scientists".

Dr. Nathans shared with the students one of the important lessons he learned in graduate school and in fact also during his undergraduate days was that most experiments don't work. Everybody burst into laughter. He had one year of "nothing works" period in his graduate school. "In the long run, things would average out, you have to be accustomed to the ups and downs," said Nathans as he drew a wave of peaks and troughs on the board.

Students should try to do a few projects in parallel, he recommended. In this way, successes are more likely to offset failures. Moreover, it is always satisfying to be part of something bigger. He cited an example of a man who washes dishes everyday to earn a living. This man goes to church on Sundays. Why? He wants to be part of something bigger. To narrow down the scope of one's work, one can do "killer experiments" to eliminate projects that don't work and focus on those that work. If the data collected is promising at that point, act on them immediately. "Do not wait for 6 months before attending to them because by then, you will be busy with something else."

"Read widely. Pay attention to areas that you normally don't." He suggested reading the article on the opposite page to that one intends to read.

He believes that every student has a unique combination of skills that distinguishes him or her from others. One can be good in Math and programming while another can shine in molecular biology and genetics. "There is no need to look over your shoulder, every student will contribute to science in his or her unique ways", said Nathans.

Nathans did not stay in the same research area throughout his research life. One advice he gave to the students was to avoid overcrowded research areas. "If others in the same area can do the research as well as I do, then I am not needed in that area. I will go into an area where my contributions are needed", he said. "Also, you do not want to wake up every morning thinking that someone will discover and publish something before you."

He added that a good scientist should learn his fundamentals well. "Knowing the fundamentals is more important than knowing the latest scientific trends that you read from *Cell*. Nail down important concepts and they will be yours forever."

"It is important to be the first to publish", he noted. This lesson dated back to the days of Isaac Newton and his work on Calculus. "The first one to publish gets all the credit."

Next, he moved on to talk about the "Sociology of Scientists". He said, "Learn to handle difficult people, do not lose your cool in front of them, for who knows, the plasmid you need may be with them."

Scientists must make time for friends. "Science is a marathon, not a sprint. It's ok to run a gel tomorrow; go join your friends for a drink."

A scientist must be able to speak and write well. He strongly recommended Lubert Stryer's Biochemistry textbook as an exemplary book for scientific writing.

Finally, he advised that students should also consider careers outside the academia. There is a limit to the rate new faculty positions are made available, which is certainly exceeded by the rate at which Ph.D. students graduate.

Jeremy Nathans is the second of 3 children of Daniel Nathans, M.D., who was a 1978 recipient of the Nobel Prize in Medicine or Physiology, shared with his colleague Hamilton O. Smith, and Swiss microbiologist Werner Arber for the discovery and use of restriction enzymes, which are "biochemical scissors" to analyze DNA.

SAP Career Symposium and Panel Discussion

Graduate Students,

Have you ever wondered about what life will be like as a successful scientific researcher? Do you ever think "How does anyone do it? How does a successful scientist balance the demands of a scientific career and still maintain a personal life?" If so, you are invited to a **free and innovative symposium** addressing important professional and lifestyle issues.

Wendy Sanders from the Professional Development Office will moderate this symposium featuring a panel including **Drs. Jeff Corden, Carol Greider, Susan Michaelis, and Robert Siliciano.** This esteemed panel of presenters will discuss issues such as the strategies utilized to maintain a healthy relationship with a significant other, career transitions, and the stressors associated with conducting research in a highly competitive environment.

The symposium will be held on Thursday, September 25, 2003 from 5:00-6:30 pm in the West Lecture Hall of the Wood Basic Science Building (WBSB). A "meet and greet" reception featuring the panel presenters will follow from 6:30 to 7:00 pm with light refreshments to be provided. Please RSVP to Dr. Deborah Hillard, Student Assistance Program, (dhillard@jhu.edu), with the subject line of the e-mail reading: RSVP or call (410) 502-2745 by September 17, 2003 to reserve your space as seating is limited.

This event is being co-sponsored by the Student Assistance Program (SAP), the Professional Development Office (PDO), and the Graduate Student Association (GSA).

Illustrations to Swallow

By Tommy and Amanda Behr

"That has to be one of the most disgusting things I've ever seen!" I loudly claimed. My wife's drawing of the vasculature to the ileocolic junction made my stomach convulse. My face turned yellow—just like her drawings of stomach tissue. Unfortunately, my wife did not take kindly to my opinion. I noticed the muscles along the ridge of her cheek tighten and her back bristle; she spun and stormed from the room.

As a high school teacher I do not normally view medical procedures, drawings, or illustrations. However, my wife moonlights as a graduate student in the Art as Applied to Medicine program at Johns Hopkins University. She often brings home her schoolwork, so I should have known better than to make any disparaging comments about gruesome or sinister drawings. Who would have guessed that this particular piece—the very same work that churned my stomach—happened to be one of her favorite productions?

The Johns Hopkins Department of Art as Applied to Medicine is the oldest of its kind in the world. In fact, only six other Medical Illustration graduate programs exist in North America. The Hopkins program, initiated by Max Brodel, developed into a world leader in both the arena of medical art and the preparation of illustrators. Originally, the Hopkins program emphasized "traditional" media (i.e. watercolor, carbon dust, airbrush, pen and ink, etc.). While "traditional" techniques still comprise a large segment of graduate studies, the program now branches into cutting edge technologies. For example, students and illustrators now incorporate three-dimensional molecular illustrations using 3D software

such as 3D Studio Max. Much of their final artwork is produced digitally in imaging and multimedia software (Adobe Illustrator, Adobe Photoshop, and Macromedia Flash) after traditional preparation.

Johns Hopkins graduate students recently attended the Association of Medical Illustrators (AMI) 58th Annual Conference in New Orleans, Louisiana. Students participated in workshops, which spanned topics from proposal writing to copyright laws and infringements. Additionally, students submitted work to the AMI's Salon, a juried art competition. The following students received rewards for their submissions:

Joan M.K. Tycko (class of 04), Desert Survival of the Cactus. Certificate of Merit

Tiffany Slaybaugh (class of 04), A CT Derived Patient Ed.

Model Demonstrating An Osseointegrated Orbital Prosthesis. Certificate of Merit

Oscar R. Baeza (MD, class of 03), Laparoscopic Choleoystectomy: *Intraoperative Cholangiogra phy*, **Award of Excellence**

Alice Meredith Phillips (class of 03), *Techniques of Carpel Tunnel Surgery Plate 2 of 3*, **Cerificate of Merit**

Stephen Boyd (class of 04), Superior and Deep Palmar Arteries of the Hand, Certificate of Merit

Emily Green Shaw (class of 03), Precancerous Lesions of the Cervix: Detection, Diagnosis, and Management, Certificate of Merit

CONGRATULATIONS!



<u>Laughter is the Best Medicine</u> By Joe Ayoob

As graduate students each one of us must overcome obstacles to reach our goals of publication and graduation. Each one of us will have his or her own hurdles to leap and in doing so will learn a little about a certain process and a lot about ourselves. I would like to share some of my own personal revelations with you at this point of my graduate career.

This past December I had the distinct pleasure of ripping my Achilles tendon in half. It made quite a cool sound, like a muffled version of pulling the plunger out of a syringe barrel. First there was the slight "hissing" and then there was that terminal "pop". With all the grace that a now-one-legged, 250 pound graduate student could muster, I gently placed myself in a horizontal position; i.e. I fell like a ton of bricks. Surgery, recovery, cast, crutches, boots, canes, therapy, therapy, therapy later, and I'm almost as good as new.

That was one of the mountains I had to climb along this academic expedition called graduate school. So what did I learn from this process? Well, scientifically I found that *Drosophila* still mate and produce offspring even when you aren't around to sing Barry White songs to them. Personally, I found that sometimes it's pretty hard to concentrate when you're on oxycontin; but that's not necessarily a bad thing. Furthermore, using crutches on ice is almost as bad a combination as Disney on Ice, one should shower more than once in 2 weeks, and walking with a cane, albeit one that is orthopedic gray, makes you feel pretty bad-ass.

Moreover, the most important thing that I learned is that PowerPoint is a wonderful media not only for communication but also artistic expression. Above, I have tried feebly to describe my life-changing experience, but as with the many times I tried before, words just don't do it justice. Therefore, as I sat around in my apartment with foot propped up on a stack of journal articles I should have been reading, I took hand to mouse and tried to capture that event in pixels. How liberating it was to pour my emotions into my computer and "see" the event captured forever. The first time I "re-lived" it from my cathode-ray canvas, I cried like a little child; all the emotions, all the pain, all the anguish came back all at once just like when you blow a fart into the wind. The second time I still wept uncontrollably, really feeling sorry for myself, just like blowing a fart downwind and having someone else take the full brunt of it and feeling sorry for them (except in this case I was feeling sorry for myself and not the aforementioned flatulantee). Over time I started to find it quite amusing just like when you... well, you get the point.

To sum up this random rambling, please pick one of the following concluding statements.

- A. "If this helps just one person make it through their adversity, then my suffering was worth it."
- B. "That which doesn't kill you makes you stronger."
- C. "The Force will be with you, always."
- D. "Frankly my dear, I don't give a damn."
- E. "Getting a laugh at someone else's expense helps you forget about your own problems, and in time can help you to laugh at your own."

Please follow this link to the GSA/Restriction Digest website for the PowerPoint file: http://www.hopkins.medicine.org/gsa/newsletter

The Chinese Moon Festival Party is coming SOON!

Come and HAVE FUN!! This is a huge celebration with a performance show, karaoke contest, movie showings and dance party. Performances include dances, vocal songs, Beijing opera, Chinese poem recitals, and comic dialogue (talk-show style). We are recruiting more performers. Show your musical talent and win a prize by entering the karaoke contest. View the latest Chinese films at the movie showings. And dance away a beautiful night at the dance party.

WHEN: **7PM Sept. 7, 2003**

WHERE: a. Performance & Movie Show: Shriver Hall, Homewood Campus,

b. Dance Party: Glass Pavilion,Homewood Campus, JHUc. Karaoke Contest: E-level

Free admission!

The celebration is bilingual - both Chinese and English are official here!

We of the JHU&JHMI CSSA sincerely invite everyone to come!

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