

The Restriction Digest

G.S.A. Newsletter

apublication of the
Graduate Student Association
Johns Hopkins University School of Medicine

Volume 15

Number 3

March 2005

<u>Did You Know That 2005 Is The Year of The Rooster?</u>

It's also the year of the Johns Hopkins Medical and Surgical Association Biennial Meeting and School of Medicine Reunion Weekend! Mark your calendars now for June 3-4. It promises to be a fun-filled and education-filled weekend.

The theme of this year's Biennial Meeting is Living Large: The Obesity Epidemic in America. There will be symposia on Friday and Saturday addressing this topic. Additionally, there are over 20 departments presenting academic programs concurrently on Friday morning, including the History of Medicine, the Institute for Basic Biomedical Sciences and the Institute of Genetic Medicine. There will be an exhibit of original Netter art illustrations on display throughout the weekend, as well as portrait and award presentations, a showing of the Emmy-winning HBO movie "Something the Lord Made," and an update by the Dean and CEO of Johns Hopkins Medicine, Edward D. Miller.

Registration is complimentary for all graduate students, although pre-registration is required. To

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GSA Events

March Madness Happy Hour

Thursday March 17, 3-6 pm Student Lounge WBSB ground floor

Wine Tasting
Late March

Outdoor Event Late March/Early April

More details on these events to follow

Congratulations to Dr. Rachel Green, GSA's 2005 Teacher of the Year!

Haiku by Anonymous

Jeremy Nathans complements biology wearing suspenders

At the Movies

Editor's Note: We have found it necessary, for various reasons, to replace the column "The Importance of Being Ernest" by Ernest Dowson. One of the reasons is the sad news of Ernest's recent passing. We will miss Ernest, his wry smile and his sardonic sense of humor. He was eccentric, aloof, and more than a little dissolute, but he was a good man. We would like to say that we'll miss, too, Ernest's many years of contributions to this Digest. But we can't honestly say that. Instead, we offer this new, more informative and on-topic Arts column by Adele Foltinowicz. Addie was born in Poland, but spent her childhood in England. She is now a student of genetics. We hope you like her column as much as we do.

Since I very much prefer the big screen to the two-hybrid screen, I've briefly reviewed four movies this month. If you can read through it all, there's even a fabulous contest at the end! So here goes.

"Million Dollar Baby"

I'm glad this film wasn't made in Britain, where I grew up. Would *you* want to see something called "Million Pound Baby?" Who would change the diapers? It would be a medical freak-show movie, leaning either to B-horror or to something stupidly comedic.

Not that I have any clue why it was called "Million Dollar Baby." Did director-slash-actor Clint Eastwood want to make that much money from it? You tell me.

Since you've probably heard about this movie every day for the past year-and-a-half, I'll keep my remarks brief. A thirtysomething woman of, shall we

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register for the Biennial Meeting, visit either one of our new websites. The website for the Medical and Surgical Association is www.hopkinsmedicine.org/jhmsa and the website for the School of Medicine Development and Alumni Relations Office is www.alumni.jhu.edu/medicine. Either site will direct you to the CME website where the registration form can be found in PDF format. Follow the directions as noted for complimentary registrants.

Finally, we have one request. If you are interested in giving tours of the East Baltimore Campus on Friday or Saturday afternoon during Biennial Weekend, please contact Sheri Kurman at 410-516-0098 or skurman1@jhmi.edu. This could be a wonderful networking opportunity!

Travel Essay

by Seyun Kim Department of Biological Chemistry

With GSA funding, I attended the 8th Gordon Research Conference (GRC) on Intermediate Filaments from the 8th to the 13th of August 2004. First of all, I would like to introduce the historical background of GRC. The world-renowned GRC was initially seeded in 1931 by the efforts of Dr. Neil E. Gordon, a member of the Hopkins chemistry faculty. Dr. Gordon was interested in bringing scientists at the frontier of specific areas to discuss in depth the advances in that field. The format of GRC which can be described as fruitful discussions over several days in an isolated place has been successfully adopted in many areas of the scientific community. To satisfy the needs for reviewing and directing the future of intermediate filament research, GRC-Intermediate Filaments (GRC-IF) has been held biannually since 1990 in Oxford (UK) or Rhode Island (USA). GRC-IF in 2004 offered me the first chance to join the intermediate filament community and visit Queens College, UK.

Approximately 100 scientists, from graduate students to professors, shared updated data and hypotheses for five days. In comparison to other large group conferences, GRC-IF provided more opportunities to understand the recent progress of

IF biology and develop contacts within IF field. The program consisted of nine seminar sessions covering structure, function, regulation, and diseases of intermediate filaments. At the beginning of each session, there was a seminar featuring invited experts lacking an IF background, but who provided information pertinent to the IF community. For example, in a session entitled "New Horizon in IF Studies", Dr. Aeron Ciechanover of the Israel Institute of Technology, a 2004 Nobel Prize laureate, introduced the mechanistic insights of the ubiquitination system and the significance of protein turnover. Following IF speakers then presented their recent studies on the post-translational modification and the assembly process of IF networks, and properties of new bacterial IF proteins, promoting productive debates on the physiological role of those findings and future direction.

The highlight of the GRC was the poster session. Each afternoon, three hours were allotted for presenting thirty-two posters. I presented a poster identifying 14-3-3 sigma as a keratin 17(K17)-binding protein, and showed a proteomic method for screening for keratin-binding proteins by using a cell-permeable crosslinker. In the history of keratin studies, the highly insoluble property of keratins was useful for purifying keratins from cells, but strong detergents inevitably resulted in the loss of keratin-binding proteins. To circumvent that problem, I performed a crosslinker-based immunoprecipitation screen and discovered a novel K17binding protein, 14-3-3 sigma, a multifunctional signaling scaffold. In further studies using K17-null keratinocytes, I observed that the loss of K17 decreased the cytosolic localization of 14-3-3 and increased the nuclear localization. My studies suggest that keratin 17 may regulate the shuttling of 14-3-3 between the nucleus and cytosol, and affect the function of 14-3-3 in modulating cell signaling. There was much interest in my poster and unique technique for the screening of IF-binding proteins. A question most frequently asked from people was the significance of the interaction between K17 and 14-3-3, which I am currently investigating.

Despite the rigorous schedule of the GRC-IF, I managed to find time to enjoy the historic places in Oxford University. Satisfied with my experience at the conference, I returned home invigorated by the lively scientific discussions and eager to come back to my lab bench.

say, rural disposition, arrives in the big city and seeks out Frankie Dunn, an old-school boxing trainer (Eastwood). Maggie, played by Hilary Swank, is determined to become a champion, and she insists Eastwood is the only trainer for her. Maggie is maybe ten years too old to start training and too obstinate to be very malleable. But her persistence and the aid of Frankie's associate Eddie Dupris, a former boxer played by Morgan Freeman, convince Frankie to take her on. Maggie's, persistence, I say, but that word is too weak. Maggie is a PI's dream: singlemindedly focused on her career goal to the exclusion of all else. She's the kind of person who, as a graduate student, would use an unexpected inheritance to buy a thermocycler and some jugs of absolute ethanol for the lab. There is no evidence she has ever had a romantic interest. She lives abstemiously in a tiny apartment and gives all her money to her distant family. Boxing is everything.

Years of training turn into unexpected success, and then SPOILER ALERT: IF YOU HAVEN'T SEEN THE MOVIE AND WANT TO, SKIP DOWN A FEW PARAGRAPHS. And then, as I was saying, disaster strikes. Maggie is injured massively. She will never box again. Nor will she ever get out of bed. The viewers are compelled to ponder life itself. What does it mean when one's goals, vocation and avocation are all ripped away? When freedom exists only behind one's own eyelids? When the ceiling is the only view and all but one's best friend have gone away?

Maggie wants to die, and Frankie can help her. He is a boxing trainer, and one of the best cut men in the business. He has access to lethal drugs. But he is also a Catholic and a man with overwhelming guilt from some unknown deed in his past. Should he follow his conscience or the advice of his priest?

Don't see this movie because of the media attention. See it because I'm recommending it. "Baby" is replete with understated humor and sprinkled with an austere majesty. There is excellent acting throughout. And there is an eerie absence of sexuality, except for the priest's longing looks after his female parishioners. This is refreshing since we all get too much sex in real life for me to find it interesting in movies. Now Playing

"The Barbarian Invasions"

The terminal cancer of an absentee father (Remy Girard) draws a son (Sebastien, Stephane Rousseau) back to his Montreal home. In Remy's last days, the fabulously wealthy Sebastien bribes a socialist health-care system into giving Remy a standard of care unknown in Canada, and to bring his father's ultra-leftist friends and former lovers from all corners of the globe. They celebrate the intellectual fads of the late 20th century, and reminisce about their enjoyment of life together, meals, wine, drugs, orgies and all. And then it all ends.

Should you see this movie? Why not? It's in French, but if your French isn't as good as mine, or for you Francophobes, there are also subtitles. A lot of the jokes are lost on

scientists like me who lack a full background in the liberal arts, but a philosopher friend of mine assures me it's a regular knee-slapper for those in the know.

Recently released on DVD

"The Sea Inside"

Based on a true story. A man, Ramon Sampedro, wanted to die, which is not surprising since he lived in Spain. The only problem was his paralysis, which kept him from employing one of the many well-worked-out protocols in his bedside book of standard suicide operating procedures. He petitioned the government for decades to let him use the lethal services of a willing medical practitioner, but to no avail. Finally, early in 1998 and after achieving international fame as a right-to-die activist, Sampedro drank cyanide. He was aided in his passing by 10 individuals, none of whom contributed sufficiently to the process to be charged with murder.

You've heard of team science. One person finds the gene, another does some cell culture, someone isolates a protein and sends it for NMR by yet another specialist, and so on. Well, this was team suicide. Not only did it work well in real life. Everybody wanted to be on the team! Sympathizers in Spain embarked on a letter-writing campaign to the police, the government, and newspapers, claiming that they, too, took part in the event. A regular party, indeed.

"The Sea Inside" is from Alejandro Amenabar. (Remember "The Others?") The description of a quadriplegic's life and his desire to die is fairly powerful, but I'm not sure film is the appropriate forum for telling the story. Plus, it's always better when more than one person dies in a movie. I was bored. My boyfriend was even worse, and eventually he started nibbling on my...well, I didn't even get to watch the whole thing. A book would have been better. And in fact Mr. Sampedro did write one, entitled "Letters from Hell."

"Constantine"

Speaking of Hell, here we have Keanu Reaves as John Constantine, a suicide-come-back-from-hell exorcist, enforcing a terrestrial détente between Heaven and Hell. With a law enforcer (Rachel Weisz), John moves in and out of hell and various planes of existence, attempting to quell a dangerous supernatural uprising while struggling with the side-effects of his smoking habit. The violence of Constantine and his few allies, hated and misunderstood by all others, protects humanity from some nasty-looking monsters with bad manners. Peter Stormare is a positively lovable Lucifer, although his son looks like Gollum.

Let's be frank: the critics gave *Constantine* some infernal treatment. They savaged it from the front and back: too long, full of plot inconsistencies, reliant on special effects, etc. Most critics feebly managed to compare Keanu Reaves's character to Neo from the Matrix and sophomorically observed that John Constantine wears a dark tie and suit, just like (how shocking!) Neo's nemesis, Mr. Smith. So to find out for myself, I did something most of the critics didn't: I

Travel Essay By Kathryn Tifft

This fall I attended the Dynamic Organization of Nuclear Function Meeting at Cold Spring Harbor for the first time. In comparison to annual American Society for Cell Biology Meetings, the other scientific meetings I have attended, I found the experience extraordinarily intense, intimate, and enlightening.

Since there was not a lot of free time (and not a lot to do even if there was...), there was a lot of science packed into each day. Four days were crammed with two poster sessions and about seventy talks! I appreciated the narrow focus of the meeting since I was not only greatly interested in most of the topics, but familiar enough with the background information to fully absorb most presentations. The research covered was either directly relevant to my research or contributed to the general context in which I think about my projects. Most of the data presented at the talks was unpublished and some only weeks old as noted by several speakers. The poster sessions were not overwhelming marathons through hundreds of posters so that it was possible to thoroughly investigate all the posters of interest and engage in stimulating discussions with several presenters.

In addition to increasing and maintaining my general knowledge in the field, the meeting directly benefited my current and future research. I received very specific and helpful suggestions from people intimately familiar with the field who stopped by my poster. I had a chance to discuss progress on current lab projects with a Japanese collaborator and a colleague at NIH, which led to the exchange of several key reagents and a joint lab meeting (respectively). Much to my surprise, I encountered my teaching assistant from organic chemistry in college at his poster directly related to topics studied in our lab. In addition to reminiscing about college and expressing our astonishment at the paths we have taken to such similar research interests, we exchanged ideas and subsequently reagents.

The most remarkable aspect of the meeting for me was the opportunity to interact with people outside of the context of research presentations. I was delighted to put faces and, more importantly and interestingly, personalities with the names on all the papers in my filing drawer. The elements of the meeting that fostered interactions between attendees fall into the categories eating, drinking, and sleeping. Meals, held

in the campus cafeteria, reminded me of endless meals in college dining halls with an assortment of people congregating at a table stimulating interesting discussions. The accommodations promoted communication- I stayed in a mansion on an estate several miles from campus and met several other people on the van ride back and forth while others stayed in a cabin with a main room perfect for socializing during breaks. Social events sponsored by the meeting including happy hours, a lobster dinner, and a dance party were enjoyable, but I also took advantage of the campus bar- a terrific place to casually socialize. In fact, the first evening I found myself sitting in the bar having drinks surrounded by several leaders in our field. The myriad stories I heard that night, mostly about pranks and other crazy science-related stunts, kept me laughing constantly and convinced me that scientists are a little crazy... Although each meeting at Cold Spring Harbor is probably a bit different, I highly recommend checking one out- it was like a week of summer camp for science geeks!

SAP CORNER

How to Beat Procrastination

Deborah Hillard, Psy.D Student Assistance Program

- "I know I should do it, but I just can't seem to get started."
- "What a drag! I wish I didn't have to do this research paper."
- "Just one more TV show then I'll get going."

Sound familiar? Almost all of us procrastinate some of the time about some things. We all have our list of things we try to avoid doing (term papers, the laundry, studying for an exam, etc.). Putting off doing tasks we do not like is normal, but if procrastination gets out of hand, we end up wasting a lot of valuable time and energy.

Here are some suggestions on how to beat procrastination:

- 1. Recognize when you are procrastinating: often we doodle, dawdle, daydream or otherwise side-track ourselves without realizing it. Become aware of your favorite procrastination tactics and learn to catch yourself as soon as you wander off.
- 2. Break inertia: do some small things to get your task started (e.g., write the first sentence of the paper). Then pace yourself. You'll probably find it's much easier to keep rolling along at a comfortable clip.
- 3. Divide your project into small, manageable pieces: take one step at a time and don't worry about reaching the ultimate goal. Make use of small chunks of time. Writing a few lines of that paper before dinner may inspire you to return to the paper later.
- 4. Set reachable sub-goals that are specific: for instance, "Read 20 pages of Chapter 5 by 8:00 tonight," rather than "Do some studying later." This helps you gain a sense of accomplishment from having reached your goal.
- 5. Don't sabotage yourself: set up your environment with as few distractions as possible. Face it, getting down to an unpleasant task is tough enough without giving yourself easy excuses to procrastinate. Arrange your workspace just the way you like it, and work at times when you have peak energy.
- 6. Reward your non-procrastinating behavior: give yourself a little something special as a reward for achieving your goal.
- 7. Enjoy your freedom: when you complete an unpleasant task, take a moment to feel how nice it is to have it over and done with. No more nagging yourself to do the job, no more feeling like there's a weight on your shoulders. ENJOY!

For more information about this topic, please feel free to contact the Student Assistance Program (SAP) at (410) 955-1220 or visit our website at www.jhu.edu/sap.

Are you the type to save a life?

Type for Life, the 6th annual marrow registration drive, will take place March 7-11, 2005. This event, organized by students of the Johns Hopkins Schools of Medicine, Nursing, and Public Health, provides FREE convenient registration with the National Marrow Donor Program. Registration, which takes about 20 minutes, involves completing a short health questionnaire and a simple finger stick to obtain a drop of blood. The blood sample, which is drawn

by professional Hopkins phlebotomists, is then used for a blood test called a "tissue type." Your participation in the marrow registration drive will provide all patients nationwide with a better chance of finding a bone marrow or stem cell donor.

Registering with Type for Life is only the first step towards becoming a donor. After the March drive, your tissue type is entered anonymously into a national database that is searched daily by thousands of patients needing a marrow transplant. If your type matches a patient's type, you can consider donating to save a life! At no time is there any cost to you, and new donation procedures are safer and more convenient than ever. The donation of your healthy marrow can cure many diseases including leukemia, breast cancer and other tumors, and many fatal blood diseases. All are encouraged to participate, and there is a special need for non-Caucasian individuals to register. Join us in the fight to save lives through marrow donation. Mark your calendar to register with Type for Life at the most convenient time and place listed below.

Are you the type to save a life? Come find out:

March 7

Johns Hopkins Hospital, Broadway Corridor, 8am-5pm

March 8

School of Nursing, Carpenter Room, 8am-5pm

March 9

School of Public Health, Anna Baetjer Room, 8am-5pm

March 10

School of Medicine, PCTB 113, 8am-5pm

March 11

Johns Hopkins Hospital, Broadway Corridor, 8am-5pm

Questions are welcomed at jenny@jhmi.edu, 410-502-7716 or visit www.typeforlife.org. Those typed previously may update contact information at 410-955-6347. Registration requires your driver's license and the address and phone number of two alternate contacts not living with you.

Help Type for Life provide FREE registration for all volunteers with your tax-deductible donation. Checks payable to JHU with "Type for Life" in the memo may be mailed to:

Type for Life c/o Ryan Foxworthy 615 N. Wolfe St., Suite E1002 Baltimore, MD 21287

actually watched the whole movie.

Turns out, it wasn't so bad. There was a plot, character development, even a dash of fair-to-middling acting. Not by Mr. Reaves. When some cold water touches Constantine's bare feet, he utters his line in hilariously Neoistic fashion, "Whoa......Cold!" But the much-vaunted plot inconsistencies were non-existent. This movie, like so many before, has simply fallen victim to the film critics' marginal intelligence levels and inability to concentrate for more than an hour. Plus, they all sit in the screening room and look around to see who's there: "Oh my God, there's that guy I screwed back in the 80's; damn, there's that stupid cow from the Sun who's always trying to get my number; hmm...who's the new guy over there in the horn-rims? Nice hair!"

But back to the movie: go see it. It has some really interesting theological speculation. Not too high-minded, mind you, but entertaining. Kind of like that movie with Ben Affleck and his lover Matt Damon, um, what was it called? *Doctrine*? The one with Alanis Morissette (isn't it ironic?) as God. Anyway, like *Doctrine* but more somber, with more smoking and drinking and, sadly, no Chris Rock.

The only drawback to Constantine was how I had to vomit several times when one of my least-favorite actors was on screen. If my face were as ugly or my ass as wide as Tilda Swinton's, I wouldn't care to flaunt them before the entire movie-going world. (Ready to retch? My most nauseating Swinton movie moment is when she and her out-of-allgodly-proportion derriere ride and probably crush poor little Lenny DiCaprio and his even littler Lenny in *The Beach*.) Not that Swinton has no talent. In a recent interview, Swinton made Paris Hilton look like an international relations scholar. That's no small feat. Swinton compared her character in the film, a vengeful angel Gabriel, with United States foreign policy. Like Gabriel, the US is doing evil in the name of good, sez Swinton. She considers herself and the filmmakers incredibly brave to deal such a valiant stroke against US imperial might. Hey, Tilds...It's just a movie! Now Playing. See it now or wait for the DVD.

And now for the CONTEST!! They say that Jesus saves souls and redeems them for valuable prizes. If you can answer the following questions and send them to me at the email account below, you could make like JC and redeem a prize in our first Four-Hybrid Movie Screen Trivia Contest!

- 1) What theme unites the four movies reviewed above?
- 2) What is the amusingly Pythonesque name of a disabled rights advocacy group that has protested several of these films?
- 3) Which of the above makes the most extensive reference to Hopkins? Describe that reference.

Send your answers to me at: adelefoltinowicz@hotmail.com
Winners will be announced in the next Digest.

Upcoming PDO Events:

Panel Discussion: "Living by the Pen, Not the Pipette"

Interested in a career in scientific writing/editing? Please join us:

Thursday March 10

3 - 4 p.m.

1830 Building Room 2-108

Brown Bag Lunch: Welcome Lunch for Geoff Witham, new Program Coordinator for the PDO

Friday March 18 12 p.m. 1830 Building, Room 2-108

The Professional Development Office invites you to meet our new Program Coordinator, Geoff Witham. Geoff will be in charge of career development, including resume writing, interviewing skills, networking, etc. Geoff will present a humorous lunchtime seminar entitled: "How to Shoot Yourself in the Foot: The Top Ten Ways to Ensure You Won't Get the Job." Geoff will focus on how to avoid very common errors that doom cover letters, resumes and interviews. Please join us — and feel free to bring your career related questions, along with your lunch! The PDO will provide dessert and drinks.

Looking Ahead: Mark Your Calendars!

Career Fair

Monday, April 25 10 a.m. – 3 p.m.

Turner Concourse

For submission information contact an editor:

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

Next Deadline: May 15, 2005