



The G. S. A. NEWSLETTER

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Johns Hopkins University School of Medicine*

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**Please stop! I'm bored:
Thanks from the Teacher of
the Year**
By Jon Lorsch

Aurora assures me that the Teacher of the Year designation this year is neither a mistake nor an early April Fools joke and thus I thought I should follow in Pierre Coulombe's rather large footsteps and write a note of appreciation. I do so with some trepidation, however, because I know that one false statement and verbal incineration at the hands of Derek Jantz will be my certain fate.

One force that drives many scientists onwards is the occasional recognition by one's peers. The pleasure derived from such recognition is increased several orders of magnitude when those peers also happen to be one's students. This award is certainly one of the highlights of my career so far and I am deeply honored and grateful.

My favorite comment from the evaluations I received for the Enzymes lectures in Biochemistry and Cell Biology was "He makes a boring subject seem interesting." This is high praise, but I would like to take this opportunity to set the

Continued on page 4

Daycare for Graduate Students

So you want to have a baby? Or have you just started graduate school and need daycare for your child? Here's the good news... after 13 years of work by a committee of caring, motivated faculty, Johns Hopkins Medical School now has a childcare center near campus. The center, located in the old Church Home Office Building (98 North Broadway), opened in September 2001. The center is run by Bright Horizons Family Solutions, a private company that negotiates contracts with large companies to operate child-care centers.

Ready to run and sign your child up? Wait! For an infant, the cost of weekly child-care is \$250.00/week, \$13,000 for the entire year whether your child is present or not. That's 65% of your stipend BEFORE taxes! Previously, financial assistance was only available, on the basis of need, for faculty and staff. That left grad students, post-docs and med students, a group of people most in need of assistance, with no choice but to pay full price or look for less expensive daycare elsewhere. However, recent events have helped to ensure that daycare at Johns Hopkins can be a possibility for those who may not be able to afford the full price.

Continued on page 4

**Upcoming
GSA Meeting:**

April 16th

*** 517 PCTB ***

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

**Upcoming
GSA Events**

**Australian
Wine Tasting**
Thursday, April 18th
6-7:30pm
9th floor cafeteria
School of Public
Health

**GSA Poster session
and Happy Hour**
Thursday, April 25th

(See page 3 for more information)

**Pioneers in Science
Lecture Series**
Dr. Steven McNight
Professor and Chairman,
Biochemistry,
UT Southwestern
Medical Center

May 1st, 3pm
WBSB East Lecture Hall

How to win the Nobel Prize

By Dan Gorelick

Every year, biomedical science is allocated fifteen minutes of fame. The first ten minutes appear in October, when the winner of the Nobel Prize in Physiology or Medicine (Medicine, for short) is announced. The remaining five minutes come in December, when the Nobel is awarded. The Prize in Medicine brings momentary public fame and eternal scientific fame to its recipients. But Dr. Anita Aperia, a member of the Nobel Assembly for the last 15 years, views this as a byproduct. “The Prize goes to a discovery, a paradigm shift. It’s not the same as a lifetime achievement.” Its real product is to provide good PR for science. It generates lots of publicity outside of science, and this brings key biomedical discoveries to the attention of the general public.

The Prize in Medicine is awarded by the 50-member Nobel Assembly, composed entirely of professors at the Karolinska Institutet, Sweden’s leading medical university. Five members of the Assembly are chosen to serve on the Nobel Committee, the working body of the Assembly. The Committee solicits nominations, in the strictest confidence, from members of the Assembly, members of the Royal Swedish Academy of Sciences, previous Nobel laureates in Medicine, professors at medical schools in Scandinavia and from at least six other medical schools around the world. According to their charter, the Committee is free to solicit nominations from “practitioners of natural sciences whom the Assembly may otherwise see fit to approach.” Ask a Hopkins professor if they have been asked to nominate somebody for a Nobel in Medicine, and you are likely to get no answer. The Committee does not release the identity of nominees.

Nominations must be received by February 1. The Committee then evaluates the nominees and prepares recommendations for the Assembly. The evaluations come in three flavors. The least comprehensive evaluation is for nominees not likely to win. The next level up is a preparative evaluation, a one-page summary of somebody who might win in the future. The most intense scrutiny is reserved for candidates who receive an in-depth evaluation.

Dr. Aperia stresses that it often takes time to realize the magnitude of a discovery. NGF was discov-

ered in the 1950s, but Rita Levi-Montalcini didn’t receive the Prize until 1986. In 1977 Richard Roberts and Phillip Sharp independently discovered that RNA is spliced before it is translated. They weren’t awarded the Prize until 1993. According to Dr. Aperia, winners are generally evaluated at the in-depth level at least ten times before they receive the Prize. Famous exceptions include Watson and Crick (discovery in 1953, Prize in 1962) and Joshua Lederberg (discovery around 1947, Prize in 1958). Both Lederberg and Watson were under 35 when they won, another notable exception. For more Nobel trivia, consider that Lederberg received the Prize alongside his graduate school mentor, Edward Tatum, and that Lederberg is the only Medicine winner named Joshua. Although Dr. Aperia stresses that the Assembly pays no heed to the race or sex of the candidate, since the Medicine Prize was established in 1901, only six women have won. The first was Gerty Cori in 1947. The most recent was Christiane Nusslein-Volhard in 1995.

The Medicine Noble can be shared, in a single year, by a maximum of three people. When I asked Dr. Aperia if this caused much of a problem, she replied that it is much more problematic for the Physics Prize than for Medicine. But what about awarding a Medicine Prize for the sequencing of the human genome, a feat accomplished by dozens of consortium leaders worldwide? “Sequencing the entire human genome was not unexpected. It’s not a discovery.” In other words, it’s not a paradigm shift and it doesn’t change our way of thinking. In fact, the intellectual shoulder of the human genome projects, the method of DNA sequencing developed by Frederick Sanger, was awarded a Chemistry Prize in 1980. Why would the Assembly award a Prize for taking a discovery and executing it on a larger scale? “But it could win,” Dr. Aperia is quick to qualify. By the way, Frederick Sanger is the only person to win two Nobels in the same category. He also won the 1958 Chemistry Prize for developing a method for sequencing proteins, a method he used to sequence insulin.

The Nobel has weathered its share of controversy. Even after giving a discovery time to mature, it is impossible to say for certain whether this discovery will have long-lasting scientific implications, or whether it will turn out to be less valid. According to Dr. Aperia, there haven’t been many undeserving winners—though she is quick to mention the most infamous Medicine Prize. In 1949 Portuguese surgeon Egas Moniz won for his “discovery of the therapeutic value of lobotomy in certain psychoses.” At the time, lobotomy was considered the best treatment

for many psychiatric disorders. In 1952, the first neuroleptic drug, chlorpromazine, was introduced to treat schizophrenia. Lobotomy, and its personality-altering side effects, was quickly shelved. The discovery and application of neuroleptics never won a Nobel. A discovery directly related to mental illness would not receive a Medicine Prize until 2000, when Arvid Carlsson's discovery that dopamine is a neurotransmitter was recognized, among other things, for demonstrating "the mode of action of drugs used for the treatment of schizophrenia." Moniz, ironically, also invented cerebral angiography, a common technique used to visualize blood vessels in the brain. This contribution never received a Nobel.

According to Dr. Aperia, the Prize is completely independent of a winner's personal character—although the winners usually turn out to be great career role models for young scientists. This is one of the features Dr. Aperia likes most about the Prize. Students come to the official Nobel lectures (given in Sweden in conjunction with the award ceremony) to learn how great scientists approach science. That the Nobel Foundation promotes education is evidenced by the Nobel e-museum, an on-line compendium of winner's biographies and Prize citations. Recent laureate lectures can also be viewed on-line. Does Dr. Aperia have a favorite winner? "No. And if I did, I wouldn't tell you."

What about future winners? "Could be anybody, in any field." Since 1962, more than half of the people who received the Lasker award won a Nobel Prize. Count on the discoverers of the ubiquitin system of regulated protein degradation, 2000 Lasker winners Aaron Ciechanover, Avram Hershko, and Alexander Varshavsky to be high in the running. Closer to home, the last two Hopkins professors who received the Lasker were Vernon Mountcastle, in 1983, and Solomon Snyder, in 1978. Neither has won the Nobel. Yet.

For more information, check out www.nobel.se.

The GSA offers travel awards for scientific meetings. For more information contact Aurora Kerscher, fe@jhmi.edu

6th Annual GSA Poster Session and Happy Hour

**Thursday, April 25th
1-4pm,
Turner Concourse**

Abstracts due April 12th

**Please submit abstracts to
gsa-g@jhmi.edu
(include name, year of study,
and poster title)**

Claudia's Kids Foundation Fundraiser May 5th, 3-8pm at Bohager's in Fells Point

Claudia's Kids Foundation, a group that raises money to help families of severely disabled children pay for things like special toys, wheelchairs, and ramps, is hosting a fundraiser. Live music will include Platypus Myth, made up of JHU grad students, and Wild Type, made up of cancer scientists including Bert Vogelstein, Ken Kinzler, Pat Morin and Bob Casero. They also plan on having cheap beer, a DJ, auctions, and Baltimore's biggest pinata. Tickets are \$20.00 and all ticket sales directly benefit the foundation. Check out Claudia's Kids at www.geocities.com/claudiaskids.

Teacher of the Year from page 1

record straight. Enzyme kinetics is really, really interesting and even a dullard such as me cannot drone it into something boring. So it was the subject, not me, that held your interest. No, honestly, enzyme kinetics really is interesting. No I mean it. Really. Trust me on this.

Since I have your attention, I would also like to offer some advice for those graduate students who will be organizing retreats next year. A perennial problem at retreats is getting long-winded faculty members such as me to stop talking when their time is up. Timers, bells, airhorns and projectiles are all inadequate. The organizers of the IgNobel Prizes faced a similar dilemma for acceptance speeches. After many failed experiments they finally hit upon a flawless technique: Miss Sweetie-poo. Miss Sweetie-poo is an eight year old girl, dressed, oddly

enough, as an eight year old girl, who approaches the podium when the speaker's time has expired and says, repeatedly, "Please stop. I'm bored." until the speaker relents. The vision of Miss Sweetie-poo saying this to some of our colleagues is too sweet not to make into a reality. (Do the thought experiment yourself and you'll see what I mean).

I would now like to turn to a brief exposition on my route into science indicating along the way the lessons I have learned and how you can apply them to your lives. I started as a farm boy in Iowa where I worked until 2 in the morning, only to rise again at 1AM, an hour before I went to bed, to milk the cows...

"Please stop. I'm bored."

Daycare from page 1

New Fund Makes Family Center More Affordable

By Christine White, Assistant Dean for Medicine

The Johns Hopkins Family Center (our childcare center) opened in September 2001, offering a much needed service to the young families of students, residents, postdoctoral fellows, faculty and staff. But, even as the doors were opening at the Johns Hopkins Family Center, there was one more gap to fill in making daycare accessible to the entire medical community. The University's assistance program for childcare support awards funds based on financial need for full time faculty and staff employees. Consequently, the School of Medicine saw the necessity of extending additional childcare

support based on financial need to our house staff, postdoctoral fellows and students.

Our community immediately rallied and an honorary committee, made up of the school's departmental directors, Center Director, Division Director and The Johns Hopkins Medical and Surgical Association, was put in place. The Johns Hopkins Family Center Gift Fund is designed to assist post-doctoral fellows, housestaff and students with their day-care requirements. In the establishment of this Fund, the School of Medicine and the Medical and Surgical Association stepped up 'to the plate' and contributed lead gifts to give us a jump-start. This leadership support will be supplemented by a general solicitation of the Hopkins medicine community.

According to Jeremy Berg, Ph.D., the development of a high quality, affordable childcare service for this population is the fulfillment of several years of discussion and planning. "Students, fellows, and house officers with families have to perform challenging balancing acts with regard to time and money", Dr. Berg stated recently. "On-site childcare and the new scholarship program should provide some new tools to help them meet these challenges." For further information about Bright Horizons, call the Family Center at 410-614-4111 or log on to www.jhu.edu/~1hr1/worklife/ctrFAQs.html.

Information regarding how to apply for financial assistance will be available soon.

The pen is mightier than the pipet...

Please send any poems, short stories, creative writing, essays, photos, or black and white art to the *GSA Newsletter*!

Submissions for the next issue will be due **May 3, 2002**

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* To view a list of departmental contributors and honorary committee members, please visit the GSA newsletter website at: www.med.jhu.edu/gsa/news.html