The Restriction Digest

GSA Newsletter
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Johns Hopkins University School of Medicine

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Features of this Issue:

Love in India

Association for India's Development (AID)

By Nishikant Deshmukh

Monsoon in India not only spawns life on the land but also spawns frequent road trips by many into mountains and forests of India to witness the flora and fauna in the country side. As a kid these features were readily available near the home in the city where I lived, but as I grew up they started shrinking and collapsing. When I was about to come to Hopkins and about to leave my motherland, I decided to go on a long road trip into the tribal areas and plant trees. I was joined by around ten friends in this mission and our usual vehicle full with bags and tents was now full of trees.

On my arrival at Hopkins I found the expected Indian graduate student association which helped me with my accommodation. In the welcome event I saw power-point presentation of Association for India's Development (AID). Initially I thought it to be just another NGO working in India and I did not pay much attention to it for almost a year. I was registered on the mailing list and I used to ignore most of the emails. But the event of 26/11 Mumbai attacks affected most Indian students across Hopkins who were away from home. Most of them were crying, organized candle light vigils and some of us watched the movie 'Swades' which always reminds us of India

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Hopkins Experiences

From visiting students

Edit by Joshua Wang

One of the key features of an education at Johns Hopkins is in its international flavor. If you haven't noticed, our graduate student population reflects a multitude of nationalities, education background and culture. All this adds vibrancy to the intellectual environment we are so proud of! This issue, we talk to 3 different visiting international students who are here on either clinical or research electives and had them share their overall experience at Hopkins

The first thing I did when I received notification that I was going to do a 2 month research elective at Johns Hopkins was to search the internet. I had left all the searching until after the application was approved so I could keep my disappointment to a minimum in the event of an unsuccessful application. Unlike the concrete jungle that is New York, the tropical paradise in Hawaii, I was mildly taken aback as I struggled at the description for Baltimore.

"The homicide rate in Baltimore is nearly seven times the national rate, six times the rate of New York City, and three times the rate of Los Angeles." -Wikipedia

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Love in India

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and the problem it faces. Just a casual Google search on the word 'Swades' brought me to a link which disclosed that the movie is actually based on the work of Association for India's Development founders Aravinda Pillalamarri and Ravi Kuchimanchi, a couple who went back to India to start a pedal power project to electrify village schools in Narmada Valley, India. I was awe struck that this organizations chapter is actually present at Hopkins and I decided to get actively involved in the chapters work.

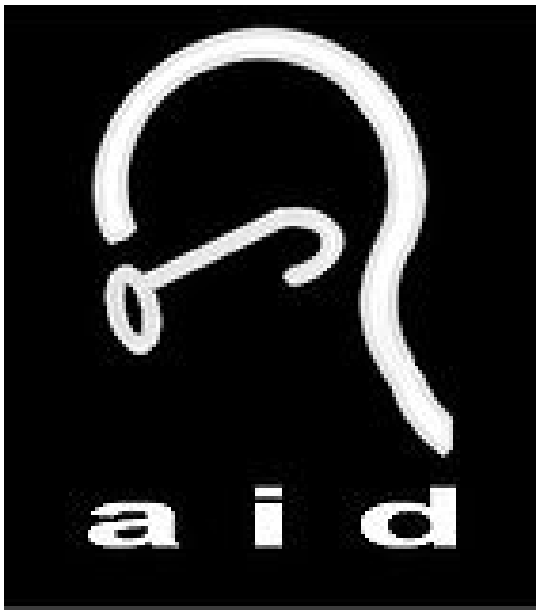
The most impressive aspect of AID is its media shyness for its achievements. I realized AID is a silent movement in the backdrop of India slowly and steadily working towards its goals. It reminded me of life of Gandhi in his final days when whole India was celebrating Independence from British rule but Gandhi was totally in the background, fasting to stop communal riots, since he knew that Independence is just a step and more needs to be done. AID follows the same principal of working relentlessly across India and in the remotest part where no one dares to enter. The biggest gift of AID to India is the right to Information (RTI) Act which for the first time after 60 years of Independence gave Indians right to question the government on its policy and decisions. Year 2010 rocked India with unearthing of billions of dollars of corruption, thanks to RTI.

The advantage of AID is that it has funded more than 800 times to around 500 different projects across India and across all known sector of social development. Be it corruption, womens rights, tribal rights, organic farming or children education, there is something that everyone can contribute to and also learn. Projects supported by AID also qualifies for Clinton Global Initiative (CGI) where you can work on a project of your choice and present it at the CGI conference. AID also has internship programs where one can work in NGO's and different projects and also get a nice resume. Volunteer has to cover their own charges but AID certifies these internships and can be helpful for your research. It is also an opportunity to explore local culture if you are traveling in India. Just tell us the location and we will let you know if there is a project nearby.

In December 2010, I visited a tribal youth empowerment project in India. A youth in their early twenties are selected from each village and given training on RTI and other government schemes. The advantage is that the village now knows various government schemes for Tribal empowerment which otherwise goes into pocket of corrupt officials. I noticed from the documents from earlier site visits, that they were clueless about protecting the forest and generating employment. I immediately called one of the AID volunteer S Srinivasan who had earlier visited Hopkins and given talk on zero waste management. I requested him to visit the project with me. He was in Gandhinagar working on electricity generation from Bio Gas plants and he immediately came to my city. We visited the project and he guided them on an AID project of Vellore Hill restoration where he is restoring forest on 139 hills around the city of Vellore, India. Such is the power of AID that different projects can be connected with each other and information shared for effective transfer of knowledge.

The strength of AID is its volunteers than the money it generates. AID consists of leading scientists, engineers, environmentalists, doctors, social scientist, writers etc who with their intellect are guiding change in India. AID volunteer base contains substantial number of non Indians and is a huge network of professionals. AID JHU volunteers actively participate in local Baltimore volunteering opportunities and are also party animals. We organize various concerts, movie screenings, food sales, calendar sales, gaming events, potlucks, outings and much more. Please visit www.aidjhu.org for more information about projects, site visits and latest news.

About the Author Nishikant Deshmukh is a PhD student in Computer Science at Johns Hopkins University and his research area is medical imaging and robotics. You may contact him at nishikant@jhu.edu



Hopkins Experiences

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Johns Hopkins Hospital, a world-class institution, sounded out of place in Baltimore, initially. After about a month here, though, Baltimore did not turn out half as bad as the media portrayed. Friendly security around every corner has made me feel as safe as anywhere else in the world. I also enjoyed how I can ask for directions easily without feeling like I was harassing anyone. With its easy access to other cities, weekend trips to Philly, DC or New York is also readily achievable. Although it may be slightly unsafe to walk alone at night, shuttle buses on campus run till late and it certainly beats walking in the wintery cold!

My elective here reaffirmed what I imagined of Johns Hopkins – the world's best hospital with excellent teaching and research facilities. Most of all, strategically positioned to do what all hospitals should aim to do – serving the underserved.

- Cheng Huimei, Final year medical student from the University of Western Australia , Perth, Australia

Hello everyone! Since January 2011, I have been doing a neurosurgery elective at Johns Hopkins Hospital. It is my great pleasure to share my experience here with you. At Neurosurgery, there are 4 main departments- vascular/functional, spine, tumor and pediatric. All of them are really sophisticated and terrific departments. While training at these departments, I have learned about a lot of procedures from very basic surgeries like bone flap implantation, epidural hematoma evacuation and VP shunt to complicated surgeries like vestibular schwannoma, skull-base tumor, multiple aneurysm clipping and sacral amputation. Every Resident and Attending physician has been incredibly helpful and has taught me a lot.

The system here differs a lot from that of Japan. I was completely surprised to see that even PGY-2 neurosurgical residents are allowed to operate on patients - of course under the supervision of the attending. This rarely occurs in Japan. In most cases, what they can do in Japan is just opening and closing while the main surgery will be done by attending or fellows. This is one of the reasons why I think the program here is outstanding. Another thing is the work-life balance of neurosurgeons. In the USA, they can go home around 7 p.m. if they are not on-call which occurs almost once per week. However in Japan, there is no PA who helps residents and they cannot get back home so early. They might even have to take calls twice or three times per week, although it depends on the program they are in. However, there are positive things about a medical residency in Japan. One of the great things about a Japanese residency is the numerous opportunities to practice microsurgical techniques, which is one of the reasons we Japanese are generally good at delicate techniques like the anastomosis of tiny vessels or peripheral nerves. Consequently, I really enjoyed the difference between both systems and I now understand the advantages and the disadvantages we have in the Japanese model of medical residency. Overall, this elective has been extraordinarily great! I hope everyone reading my column will have excellent experience here in Baltimore. Thank you!

- Wataru Ishida, Final year medical student from the University of Tokyo ,Tokyo, Japan

Upon clearing my fourth year of medical school in Pakistan, I applied for a research elective at Johns Hopkins in Ophthalmology with the Department of Ocular Vasculogenesis and Angiogenesis. Because they are a leader in this field, when accepted, I was extremely thrilled.

My time at Hopkins was eye-opening (pun not intended) in many aspects. When I arrived at Baltimore City, it was snowing and I never saw snow before! On the next day, during my laboratory induction, I was introduced to numerous different cutting edge technologies that I have never seen or even heard of! This made me slightly apprehensive. Fortunately, my professor and his team were very helpful in teaching me different techniques as well as operating those wonderful machines and experiments. As time went by, I became more familiar with the experiments and was capable of independent work. One interesting incident that stuck with me was when my mentor had ordered some mice for my project. Did you know that

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Hopkins Experiences

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while a single experimental mouse costs around $100 in this country, in Pakistan, that same $100 could allow 3 meals for a whole month for a family!

As my time was a short 8 weeks, I tried to make the most of it by attending morning meetings at the Wilmer Eye Institute daily even though it was not mandatory. I also attended ophthalmology clinics with permission of my professor on weekends. In this way, I became familiar with both research and clinical work. My hard work paid off when I was able to publish my own project under the supervision of my professor and his team.Apart from work, living at Reed Hall, the on-campus student accommodation provided me the opportunity to meet with people from different countries and cultures. I made lots of new friends and we did many social activities like playing in the snow, exploring Fells point and the Inner Harbor. I also tried out many recommended restaurant, pubs and many more.

Overall, this experience was unforgettable. I loved every moment I spent here at Johns Hopkins and I hope that I can return someday. Thank you for asking me to share my experience as they have allowed me to relive beautiful memories.

- Vikash , Chandka Medical College Larkana, Larkana City, Sindh Pakistan

-Christmas Tree in Boston by Christina Randall

GSA Travel Award Recipients Series

Boston Bound for the MRS Conference and Cheers

By Christina Randall

Each fall the Materials Research Society hosts a week long conference in Boston, MA and due to the generosity of the GSA and my advisor, Dr. Gracias, I was able to attend and present two abstracts and a 'Science as Art' entry. I was both anxious and excited as I boarded the plane at a time when most graduate students would still be hazily waking up over their first cup of coffee. I had never been to Boston before and was looking forward to trying to balance my time between nervously preparing for each of my talks and seeing the sights.

I arrived at the conference with enough time to settle into my hotel room, get registered and practice my first talk "Fabrication and Applications of 3D Nanoporous Membranes" before I tackled my map of the conference to find out where I would be presenting in a few hours. I am very thankful that I arrived when I did. The MRS conference is huge! There were approximately 50 symposia spread throughout two buildings and covering multiple floors. After meandering around a bit and finding the free coffee (a joyful moment to all graduate students), I found the grand ballroom. Yep, my first talk was in the grand ballroom that seated 150+ people. It wasn't subdivided into sections like the other conference rooms I had passed, it was one long, open space filled with row upon row of chairs. Luckily, one of my coworkers came by to watch my presentation and was able to keep me adequately distracted from my nerves prior to going on stage.

It turns out that my nerves were unfounded. MRS is setup in such a way that there is a prompter of your slides down in the audience of the big conference rooms, so you appear to be looking out into the crowd at all times (nice trick). Also, with 50 different symposia to choose from, the room was not completely full and all of the attendees asked insightful questions and gave positive feedback. Still, I was relieved when it was over and looked forward to exploring the exhibition hall where free schwag abounds as vendors promote their latest technologies and going through the technical program to map out what presentations I would attend.

The next day was filled with attending interesting presentations, reading posters, submitting my 'Science as Art' entry entitled "Foraging for Funding" and practicing my final presentation. My coworkers and I also attended a few of the networking events and had the opportunity to meet one of the editors for ACS before heading out to explore a bit of Boston. Since we only had one night out, to make the most of it, we stopped by Cheers on our way down to Faneuil Hall Marketplace where we walked along the city streets taking in the local sights and sounds before grabbing dinner. The marketplace was decorated for Christmas and there was a huge tree in the middle of the square, one of the flyers said it was over 80 ft tall, not sure if that was true but it was magnificent. Lastly, I had to stop off at a pub and drink a Guinness, as Boston is pretty much as close to Ireland as you can get in the U.S.

My final full day at the conference consisted of attending more interesting presentations and more free coffee before presenting on "Self-folding Micropatterned Polymeric Polyhedra". This time I presented in a smaller conference room, but it was full. There were easily 50 people in attendance and no special prompters to help maintain eye contact. For some reason, the closeness of the room seemed to make it a bit more nerve racking, but I made it through the talk and answered the questions to the best of my ability. Several researchers came up to me after the talk to exchange contact information and complimented both the talk and the research, which helped to set me at ease. Also, I was done. I could now relax and enjoy the rest of the conference without the stress of public speaking. I helped my coworkers with their talks, networked and enjoyed the remainder of my trip. Two months later and I am now working on a review paper for Trends in Biotechnology that was solicited as a direct result of my presentations at MRS. This conference while enormous in size and stressful, was a worthwhile networking and confidence building event that helped to expose both my self and my research group to leaders in the field of materials, nanotechnology and the biomedical applications of both.

-Boston Skyline by Christina Randall

GSA Travel Award Recipients Series

50th The American Society For Cell Biology

By Nesrin Hasan

The American Society For Cell Biology(ASCB)'s 50th annual meeting was held in Philadelphia in December 2010. I was able to attend the ASCB's annual meeting using the travel award from GSA. It is a very huge meeting attended by thousands of scientists. The lectures, poster sessions and exhibitor showcases were held during the day, followed by special symposia in the evenings.
The lecture sessions were divided into diverse topics such as chromosome dynamics, cellular quality control, membrane trafficking, development, cancer, stem cells, lipid dynamics, etc. The lectures were given at the same time in several huge halls. The meeting required extensive planning regarding the lectures I wanted to attend and posters I wanted to have a look at.

The first evening the keynote symposium was given by the Timothy J. Mitchison about the ways a basic scientist can contribute to improving cancer chemotherapy. The special lecture on the second day was about the mechanism by which the ER is shaped and it was presented by Tom Rapoport. The symposia on the third day was given by Stuart Kornfeld, James K. Rothman, and Randy W. Schekman. Stuart Kornfeld presented his work on protein glycosylation and its roles in cell biology. James K. Rothman talked about the cell-free reconstitution of vesicle transport and the discovery of the budding and fusion machinery. Randy W. Schekman talked about genetic and biochemical dissection of the secretory pathway. The symposia lectures were very informative.

Additionally, there were roundtable discussions with famous scientists about topics including career choices, publishing a paper and discussing experimental problems.
I learnt a lot about new techniques and the recent developments in the cell biology field. It was nice to see how all the fields of cell biology are connected. For example we have studied endocytosis/exocytosis and motor proteins as separate lectures, but this meeting shows you how everything is linked together.

There was a huge exhibitor hall too, featuring suppliers, publishing groups, non-profit organizations, and research centers. I learnt about the recent products and even I could get some free samples.
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50th ASCB

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There were several workshops offered for networking and job opportunities. The roundtable discussions included topics such as: careers beyond academia, managing a lab, setting up a first laboratory, career opportunities outside US, family-career balance, etc. There were several boards where job advertisements and CV's of job seeking attendees were posted.

If you plan to get input for your poster, this is not the right meeting. There are hundreds of posters around and the seminars are also being held at the same time, so not that many people will stop by. So, overall it is not a meeting where you can get lots of input for your research, but it gives you the chance to learn about the recent developments and techniques. It is meeting that should be attended at least once during graduate school.

Overall, I would say that this meeting should be attended during your first years of you graduate study, so you can learn about new techniques which can help you with your project. Also, by listening to so many diverse lectures you broaden you horizon, so you can look at your project from a different angle. It is nice if you can attend it before graduation for networking and looking for job opportunities.

Biomedical Scholar Association

By April Clayton

The Biomedical Scholars Association (BSA) is a tri-school organization that supports minority graduate students and post-docs academically, professionally, and socially in the SOM, SPH, and SON. As a group, we celebrate diversity; participation in BSA is open to everyone.

As a member of the Biomedical Scholars Association you can enjoy:

a. Friendship and Networking
b. Community Involvement and Service
c. Other membership perks include mock orals, the Big and Lil Sib Program, and recognition at the Mile stone Celebration in May 2011

Membership requirements are:

a. Attend at minimum 2 BSA Events for this academic year
b.Participate in BSA committees:
i.Historian/Scrapbooking
ii.Programming Events
iii.Public Relations
iv.Junior Biomedical Scholars Program/ Community Service
v.Social Events
c. NO DUES needed!

Biomedical Scholars Association's Spring 2011 Events:

March

-7th (Monday)-2nd Annual Women in Science Tea with the Hopkins Biotech Network and Greater Baltimore Chapter of the Association for Women in Science (AWIS); School of Medicine Broadway Research Building Pre-function Area; 2-4 pm
-10th (Thursday)-General Body Meeting; School of Medicine 1830 Building Room 2-108; 5-6 pm

April

-14th (Thursday)-General Body Meeting and 2011-2012 Elections; School of Medicine 1830 Building Room 2-108; 5-6 pm
-28th (Thursday)-The 3rd Dr. James E. K. Hildreth Annual Lecture featuring Dr. Lisa Cooper, M.D., M.P.H, Professor of Medicine (SOM), Professor in Epidemiology, Health Policy and Management, and Health, Behavior, and Society (SPH), and the Director of the Hopkins Center to Eliminate Cardiovascular Disparities; Feinstone Hall (SPH); 3:30-5:30 pm

May

-12th (Thursday)-General Body Meeting; School of Nursing Carpenter Room; 5-6 pm

-20th (Friday)-The 3rd Annual Milestone Celebration; Charles Commons Banquet Hall; 5-7 pm

June

-Fun Social Event-Determined by YOU! Past events have included Game Nights and Camping.

Got ideas? Join the Social Events Committee
Have Questions? Email bsa@jhmi.edu.
Visit our Website: Biomedical Scholars Association
Facebook: Search-Biomedical Scholars Association

How Negative Body Image Can Cause and Influence Eating Disorders

By Johns Hopkins Student Assistance Program

What is body image?

Body image is how people perceive their physical appearance. It involves how one sees or pictures themselves, the beliefs they hold about their physical appearance, and how they feel others perceive them. Those who have a poor body image perceive their body as being unattractive or even repulsive to others, while those with a good body image accept their body as it is and are not concerned with how others perceive them.

Studies show that negative body image is an issue for both women and men, although body image issues are more common among women. While women tend to perceive an unrealistic thinness as the ideal body image, men tend to perceive an unrealistic muscle mass and higher weight as the ideal.

People with negative body image have a greater likelihood of developing an eating disorder and are more likely to suffer from feelings of depression, isolation, low self-esteem, and obsessions with weight loss.

Body image and eating disorders – who is at risk?

According to the National Association of Anorexia Nervosa and Associated Disorders (NAAD), eating disorders – including anorexia nervosa, bulimia nervosa and binge eating disorder – affect up to 5 million Americans every year. While eating disorders typically affect females, males make up as much as 25 percent of the total population of people with eating disorders.

Studies have shown that body dissatisfaction is strongly related to the development of eating disorders; other factors such as being excessively preoccupied with one's outward physical appearance or minimizing one's feelings and emotions, may also put an individual at risk. Additional factors include unhealthy dieting and untreated mental health issues.

Research also suggests that there may be a genetic and biological predisposition to Anorexia, Bulimia and Compulsive Overeating, but it is important to remember that for each individual, there is likely a wide variety of reasons for developing an eating disorder. Further factors identified by researchers for developing an eating disorder include:

- *societal and family pressures*
- *psychological problems*
- *physical and emotional separation from family*
- *requirements for high academic performance*
- *beginning or ending a significant relationship*
- *childhood abuse*

Can eating disorders be cured?

If you currently have or think you may be developing an eating disorder, it is important to seek the assistance of a trained professional. Eating Disorders are serious and complex illnesses, but with early diagnosis and intervention, you can recover from an eating disorder and live a full and healthy life.

There may be the desire to self treat, but self treatment is not a substitute for medical and mental health intervention and may result, according to the Eating Disorder Foundation, in repeated failures that add to the frustration and despair.

It is important to recognize that eating disorders have little or nothing to do with food or weight. More often, food is used as a way to keep from experiencing unwanted or difficult emotions and feelings.

Developing a healthy body image

Though body image is the perception of how we think and feel about our physical appearance, it is influenced greatly by societal messages. We live in a society that is obsessed with looks and weight, but that does not mean that one must passively accept the negative messages we receive about our bodies. The following, adapted from the Boston Women's Health Book Collective, suggests ways to build a better body image:

1. Find your "set point," a weight where your body feels comfortable and will fight to remain. Accept weight variations throughout the life cycle.

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Negative Bogy Image V.S. Eating disorder

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2. Most of us judge each of our body parts individually – my thighs are too fat, my breasts too droopy. Strive to experience your body as a whole, rather than as separate parts that need improvement.
3. Instead of trying to conform to the rigid beauty ideal promoted in the media, experiment with finding a style or look that expresses something about yourself and feels good to you.
4. When you exercise, pay attention to the rhythms and sensations you experience as you move. While exercise is often promoted as a way to lose weight and achieve an idealized body shape, it also helps us feel good in our bodies, which in turn can help us accept and celebrate how we look.
5. Reject the imposed ideals that womanhood must be suppressed. If you have a curvy body, embrace your curves as symbols of power and pride.
6. Notice how much time you spend worrying about your looks instead of being aware of what is going on inside of you or around you. Try practicing mindfulness, a technique used in meditation and yoga.
7. If you have an image of perfection in your head to which you are constantly comparing yourself, get rid of it. Where is it written that our bodies should be free of lines or marks or scars? Such bodies do not exist in real life.

Seek assistance

The Johns Hopkins Student Assistance Program (JHSAP) is committed to assisting students in managing the challenges they face during their academic careers. JHSAP provides support to students in dealing with personal, academic, and relationship problems.

If you are concerned that you have a negative body image or that you may be exhibiting unhealthy eating habits, you may benefit from more individualized services. Contact the Johns Hopkins Student Assistance Program (JHSAP) at 443-287-7000 or visit our website for more information: www.jhsap.org.

Johns Hopkins
Student Assistance Program

SUDOKU

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Submit for Regestion Digest!!

The next deadline will be April 17th.

All forms of submissions are welcomed: articles, creative writing, pictures, cartoons strips, upcoming events, or anything else you might come up with.

Please e-mail your submissions to any of the editors:

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SUDOKU SOLUTION

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