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IIT Bombay Alumni Association – Greater New York Chapter

Annual Reunion 2015

United We Stand
Message from IITBAA-GNY President

Message from IITBHF President

Message from IITBAA Chairman

Message from the Director, IITB

I sacrificed my heath and Teenage to study at the IITs –
But, was it worth it?

Two feet or Not Two Feet?

Sequoia and the Banyan Tree
A fitting metaphor for businesses in the U.S. and India

Gay @ IITB: Out and About

India's Long Quest for Modernity

Dew and Frost have the same soul!

Incredible India!

Days in the city

Clean Drinking Water Project

2015 Youth Achievement Awards

Agenda for the Day

Note from the Editor

We present to you the 2015 issue of IIT Bombay Alumni Association – Greater New York Chapter’s annual GNY-Point magazine. This year we have tried to bring you a diverse set of stories written by alumni and non-alumni alike - ranging from personal topics like existential crises and the experience of being gay at IIT Bombay, to topics on businesses and Indian Economy. We believe there is something here for everyone to enjoy – young and old. As always, your feedback and comments are most welcome, as we strive to make this magazine better every year. Please don’t hesitate to write to nivvedan@iitbombay.org

IIT Bombay Alumni Association – Greater New York Chapter
United We Stand

Dear IITBAAGNY members and Friends:

On behalf of your Executive Committee, I am honored that all of you are here this Sunday morning for our Annual Reunion. The New York Chapter has a long and illustrious history. We are the earliest and the most active Chapter of IIT Bombay in the US. Yet, for years there was some confusion as to why we were an independent 501(c)(7) legal entity separate from IITBHF, the US alumni umbrella with a 501(c)(3) status in the US, under which all other regional chapters operated.

The Executive Committee of IITBAA-GNY in conjunction with an advisory group spent over 6 months earlier this year looking at the pros and cons of merging with IITBHF, and recommended a merger. In the democratic fashion that we have always operated in, we put the merger recommendation to a vote in early July, and by an overwhelming margin (60 – For and 2 – Against), you voted to dissolve our GNY Chapter’s separate legal entity and become part of IITBHF, with the clear agreement with IITBHF that the funds collected by us over the years would remain available to us entirely at our discretion, our social and other operations carried out within legal bounds to be independent and free of any interference from IITBHF. This is the reason, why I have headlined my message – United We Stand.

We have an exciting program this afternoon and I hope that you will enjoy it. Here are some of the events we have held in 2015, and plans for a few more:

1. Financial Planning Seminar held @ The Indian Consulate in NYC on April 16, 2015
2. IIT Gandhinagar Foundation Luncheon @ The Akbar Restaurant, Edison, NJ – May 16, 2015
3. Annual Family Picnic @ Liberty State Park, Jersey City, NJ on June 6, 2015
4. Annual Reunion @ The Hyatt Regency Hotel, Jersey City, NJ on October 4, 2015
5. Diwali Dhamaka Dinner & Entertainment @ Deewan Banquet Hall, Piscataway, NJ planned for October 24, 2015
6. IITB Alumna Women’s Forum and Mixer – planned for 4th Quarter 2015

We have also instituted a new program this year, the Youth Achievement Awards, to recognize the achievements of the high school going children of our alumni. The winners have been selected, and the awards will be handed out today.

On behalf of our Executive Committee, I thank our volunteers who have worked to organize this event, publish our acclaimed GNY-Point magazine and many other events.

Regards.

Ruyintan (Ron) E. Mehta

President, IITBAAGNY
From the President, IIT Bombay Heritage Foundation…

Greetings from IIT Bombay Heritage Foundation as you host your 11th annual reunion event!

IIT Bombay Alumni Association Greater New York Chapter (IITBAA GNY) has a long and distinguished history of being among the most active chapters in the US. The chapter has hosted large conferences, happy hours, professional events, summer picnics, and of course the annual banquet.

IIT Bombay Heritage Foundation (IITBHF) warmly welcomes the formal affiliation of IITBAA GNY with IITBHF. We are excited to work together to best serve the alumni in greater New York area and IIT Bombay. We look forward to supporting any new alumni or institute initiatives that IITBAA GNY would like to champion.

For IITBHF, the year 2015 was marked by growth in chapters, activity level of chapters, continued contributions by alumni to IIT Bombay and increased engagement with US industry & Universities in research collaborations and exchange programs. Chapter activities have reached a new high. This year we are on target to have over 50 events in 11 cities. Over 1,100 alumni around the US have participated in a chapter activity this year. We had 3 events focused only on women alumni.

Grassroots support from alumni like you have helped support many important initiatives at IIT Bombay like named Student Scholarships, Research & Teaching excellence awards, Hostel Alumni Team Stewardship, Young Faculty Award. The profile of students entering IIT has changed in recent years. Over half the students come from an economically disadvantaged background. This coupled with the increase in tuition fees (Rs. 90,000 per year) has led to an urgent and critical need for scholarships at IIT Bombay. There is a need for roughly 1200 scholarships. We want to ensure that no student is denied an IIT education for lack of financial resources. I would encourage you to help fund student scholarships at IIT Bombay.

IIT Bombay is facing many challenges as it strives to maintain high standards of excellence while more than doubling the students on campus. New infrastructure and faculty members are needed to support this rapid pace of growth and place in global standing. Our alma mater needs our support in every way we can – through monetary contributions, personal time, help with collaborations through industry and university contacts, etc. Please join your fellow alumni in building a global network of IIT Bombay alumni, students and faculty by participating regularly in IITBHF activities. Not only will you help your alma mater, but you will also help your own career and business prospects while renewing old friendships and making new ones. Please visit www.iitbombay.org to get more information and news from IIT Bombay and IIT Bombay Heritage Foundation.

Sandeep Pandya

President, IIT Bombay Heritage Foundation
From the Chairman of IIT Bombay Alumni Association…

Dear Alumni,

It is a great honour to pen this report as Chairman of the IIT Bombay Alumni Association. The Association has experienced another great year. Our membership crossed the 16,500 mark in the past fiscal year with 43,000 plus alumni all around the globe. In association with our partners IITBHF, today we have an effective presence in over 30 global chapters. Our landmark initiatives that impact the lives of students, mess workers, new faculty, retired faculty, staff and their families at IITB have thousands of beneficiaries today—a definite sign that we continue to grow and flourish, and are heading in the right direction. Like all other years, we have exceeded performance records in other areas of the Association as well.

We also continue widening the ambit of our activities. It gives me greatest pleasure to announce that preparations for the Global Business Forum (GBF) are in progress with full steam. Scheduled to be held in Goa from 16th-18th October, this annual, exclusive ‘by-invitation-only’ event will aid entrepreneurship, business and networking opportunities for the entire IIT Bombay community—faculty, students and alumni—across the globe by leveraging on the powerful IITB alumni network in an unprecedented way. As per our projection, around 1,500 attendees (including India’s top political decision makers as well as influential players in national/international business) will participate in this year’s Forum establishing a new tradition of bringing representatives from businesses, investors, trade delegations, academia and government on a single platform so that the association can effectively cater to the development objectives of the country, as well as, the evolving professional needs of all those constituting the IITB community.

Now a few highlights from the past year: This year’s first Board of Directors meeting was held on 29th August, 2015. We elected office-bearers, Executive Board members and made additions to the Advisory Board. We now have 9 elected Directors, 3 nominated Directors, 6 Executive Board members, 11 advisers, 1 permanent invitee. These 30 members represent all the decades for the 1st time spanning from the Class of 1969 to the current student graduating in 2016. For the 1st time, we have 3 alumnae on the Board to remind us that the gender disparity ratio in IITB is a thing of past. This fiscal year AA also added a new chapter-Kuwait taking the chapter count to 20 for India and RoW. The membership growth was healthy at, 2,000+ in 2014-15.

We also had the privilege of organizing five reunions this past year – Silver Jubilee Reunion Batch of 1989, the Ten Year Reunion of Class of 2004, the Ruby Reunion of Class of 1974 and the 50th (Golden Jubilee Reunion of the batch of IITB class of 1965. In addition, the class of 1969 also celebrated the Golden jubilee of their joining IIT Bombay. It also gives me great pleasure to convey that on the Institute Foundation Day, IIT Bombay honoured 19 of our exceptional alumni by bestowing them with the Distinguished Alumnus Awards (DAA) 2015 and the Young Alumni Achiever Awards (YAA) 2015.

In addition to celebrating the past, we made great strides in our various projects as well. The Financial Aid Program secured the partnership of Tata Motors Limited (TML). Our Bangalore Chapter’s flagship project The Village Knowledge Centre (VKC) added a new center. Mumbai chapter is all geared up for rural initiative with focus on rendering access to basic human necessities such as water, nutritious food, shelter, etc; access to infrastructure such as roads, electricity, telecommunications, education, medical facilities, etc, and access to modern livelihood options.

Overall, we have achieved good results. And, for this I would like to thank the members of the Association team for their dedication and hard work. I would also like to extend my gratitude to all of you who participate in our various programs and donate to IITB and IITBAA.

Dr. Deepak Patil

Chairman, IITBAA
From the Director of IIT Bombay…

September 14, 2015

Dear Alumnus,

Greetings from IIT Bombay to the Greater New York Chapter Alumni. I want to inform you about some of the exciting recent developments at the Institute.

Several new facilities have come up which include H15 and H16 to house 2000 students, the new IITB-Monash Research Academy Building and a new Students Gymkhana Building with squash courts and table tennis tables along with sheds for indoor volleyball, basketball and cricket nets.

Our faculty are engaged in outstanding research which is making a direct impact on industry and society. Our research contributions are being enhanced through the creation of new centres, examples include the Tata Centre for Technology and Design funded to the tune of Rs 94 crore over 5 years to focus on frugal engineering. The National Centre of Excellence for Technology for Internal Security started this year with funding of Rs 82 crore over 5 years from the Department of Electronics and Information Technology of the Government. We continue to establish new industry relationships, an example of which is the National Centre for Aerospace Innovation and Research supported by DST, Boeing and other industries, being run as a consortium.

On the academic front, I am happy to inform you that this year we started two new programmes: a bachelors programme in design leading to a B.Des. degree and an Executive MBA programme jointly with the Olin Business School of Washington University at St. Louis.

IIT Bombay alumni have been consistently generous over the last many years. More than 2300 of you have donated more than Rs 160 crores over the last several years. Many of you have volunteered your time to help the Institute. Your help in these different ways has contributed significantly towards IIT Bombay’s path to excellence - the Institute continues to be rated the top educational Institute of India.

I thank IITB-GNY for its leadership in alumni support particularly for student scholarships and student exchange programmes. I invite your continued support to the Institute.

With regards,

Sincerely,

Devang Khakhar
Director, IIT Bombay
I sacrificed my health and teenage years to study at the IITs

But, was it worth it?

In eighth standard, I volunteered to revise one of the Anglo-Indian battles for the class. Using the blackboard, I described the various players and events of the battle in great detail, making up for my faltering English with infectious enthusiasm.

Impressed, my class teacher asked me, “So what have you finally decided? Who do you want to be: a cardiologist, a historian or a scientist?” Those days I used to proudly proclaim that I wished to be a cardiologist, primarily because my doctor parents used to tell me that it was the hottest specialization in medicine. Excited by my teacher’s praise, I went to my father and told him about it. It brought a proud smile on his face and he said, “Tell her you want to become an IITian.”

The cram schools

Most of the initial 13 years of my life had been spent in Rajasthan’s Kota, the epicenter of the coaching tsunami that engulfed the rotten senior secondary science education system in India. That is not to say that our schools teach commerce or arts any better, but the science stream felt the most significant impact of coaching classes, at least initially. Kota pioneered the trend of training class 10 pass-outs for JEE, the Joint Entrance Examination, for admission to the prestigious Indian Institutes of Technology (IITs). A number of cities followed suit.

Obviously, these coaching classes had no space for experimental science or scientific curiosity or individuality

Students from distant parts of the country started flocking to Kota, a city earlier famous for its delectable kachoris, cotton sarees and excellent building limestone. Soon, these classes became the lifeline of the city’s new economy. Numerous science graduates (including many ex-IITians) became instructors in these coaching classes and earned fat salaries; renting out rooms to students became “a thing” in every other neighborhood; numerous hostels were built; and autowallas, mess-owners, street-food vendors—almost anyone and everyone you can think of—raked in a lot of moolah. With such a huge influx of students, the bigger and more reputed coaching classes started conducting entrance tests for themselves and believe it or not, new coaching classes opened up to prepare students for these considerably difficult tests.

These institutions cracked the code of the extremely competitive and difficult JEE and soon became like wish-granting factories for students willing to work hard; a large majority of whom consistently put in roughly ten to 12 hours a day.

Contrary to the popular belief, they did teach fundamentals of science quite well. They made students solve dozens of problems daily and provided them with a rich inventory of tricks and techniques that made the JEE tractable. At their peak, coaching classes in Kota accounted for a quarter of the JEE selections. Obviously, their model had no space for experimental science or scientific curiosity or individuality.

They merely filled the void created by our low quality education system to the extent that schools were forced to play second fiddle to them. A number of faux schools
came up that placed no restrictions on student attendance. Students visited these schools only to take exams and maybe to practice for lab experiments. Many students, miles away from their homes, away from the protective gaze of their parents, away from their much-needed guidance and supervision in the formative years, couldn’t handle the newfound independence. Many drifted away towards cyber cafes in the city, gaming and watching movies for hours at length, ultimately failing to achieve the goal that had brought them to the city. Many “repeated” or “dropped” a year, i.e. spent a year after class 12 solely preparing for the JEE, because they didn’t take or fare well in previous year’s JEE.

“I spent the worst years of my life in this room. It’s your turn now.”

Expectedly, the most unfortunate casualty of this system were these students’ precious teenage years, that led to a lot of them feeling “burnt out.” Later, that became a big reason for their poor performance in the IITs.

The worst years

I’ve spent four years of my life studying in coaching classes: Classes 9 and 10 for National Talent Search Examination (NTSE) and classes 11 and 12 for the JEE. When I look back today, I feel I didn’t lose much during the first two years because there was more to my life than just coaching classes. I went to school and studied English and Hindi, wrote poems, painted and participated in debates and extempore. The last two years were depressing, despite living at home with my parents. Any activity apart from attending the coaching class and self-study used to drown me in a sea of guilt. Thus, no more reading newspapers, no more watching TV for long hours, no more afternoon naps (sports, anyway, were never a part of my life).

Getting up from, and sitting down on, my study chair was the maximum amount of movement my body went through and as a result, the flab on my belly thickened manifold. At my worst, I weighed close to a quintal. Things moved pretty fast in the coaching class, so falling sick was never an option. And if I did, which I did numerous times (especially in class 12), catching up became a task in itself, partly because of my own flawed studying techniques. And yet, things were easier in class 11 because I managed to stay on top of things and was among the toppers in my class. Things became darker in class 12. Course content suddenly increased and so did competition, and I found it increasingly hard to cope up. With every drop in my rank, my confidence dwindled. My allergies decided to wreak havoc on me during the same period and I went in a downward spiral of low scores, enormous amounts of backlog, a substantially reduced enthusiasm for studies and a lax attitude.

Eventually I did manage to pass the JEE with a rank that was decent-ish, but nowhere close to what I expected of myself and others expected of me. In fact, after the results, one of my insensitive batch mates who had cracked the exam asked me, “Repeat karne ki to nahin soch raha na?” (You aren’t planning on repeating a year, are you?), a question for which I still despise him.

Having gone through these years, I could very clearly understand why one of our previous IITian tenants had scribbled this on his cupboard before vacating his room: “I spent the worst years of my life in this room. It’s your turn now.”

There were a few of these toiling, burnt out IITians in my family, too. One of them, my maternal cousin, had cleared the JEE in his first attempt but “dropped” a year and got himself enrolled in a leading coaching class in Kota in order to improve his AIR (All India Rank).

Parents and their myopia

It must have been impossible for my parents to stay insulated from this crazy atmosphere. So, when my father told me that he would want me to “become an IITian,” I wasn’t surprised. I am sure my brother, too, hadn’t been surprised. Both of us went through the same grind and eventually did manage to “become” IITians.

This myopia was characteristic to other parents of my parents’ generation. Most of them took these life-defining career decisions without giving much thought to their wards’ skills and interests. A lot of them wanted to send their kids to the IITs for bright future prospects that “Brand IIT” had come to symbolize. A father whom I met in IIT certainly falls into that category. He had come for the admission of his son and was already worried about his son’s placement: “Bhaiya iska meta mein hua hai, suna hai ki meta mein package achha nahin milta, galti to nahin kar de?” He wasn’t sure if he had made the right decision by opting for metallurgy (meta) department because he had heard that “salary packages” are comparatively lower in meta.

Then, there were parents who
believed they were sending their children to the best possible colleges in the country. Moreover, it was a pursuit of pride. “Brand IIT” brought with itself an undeniable sense of reputation for students, their parents, their uncles, their aunts, their teachers, their neighbors, their friends: basically everyone they had ever been related to. Students, like me, would eventually pay the price for their parents’ decisions.

What does my IITian tag actually mean?

I have an absurd habit of googling my colleagues and contemporaries whom I perceive better than myself. The goal is to analyze their academic and professional trajectory with the hope of finding some flaw or area where they lag in order to discredit them in my mind. This worthless exercise in self-indulgence massages my ego and provides me a momentary sense of relief, except when it backfires.

Last year, I wanted to discredit a colleague roughly as old as me who joined my company a couple of weeks later than I did. Unlike me, he was in the prestigious program for entrants, the only one in my office last year. The program entailed better salary and somewhat better work with more freedom. He specialized in arguably the hottest field in computer science and seemed to have a far better handle on the future. More than sufficient reasons to get jealous. I googled him and the only “flaw” I could find out was his mediocre undergraduate college as compared to “my” IIT.

On other occasions, this might have been enough to soothe me, but not this time, because this person, after his undergraduate degree, had completed a master’s degree by research from one of the IITs, had a number of quality publications and was all set to join the laboratory of his choice next year for PhD. And he was, at most, a year older.

And here I was, without a single publication, not in the prestigious program, with only two things to boast of: my IITian tag and my CPI, both of which didn’t mean a lot after I had landed my job. That day, I could only see a past and a present filled with failures and enormous amount of mediocrity. My imaginary future shimmering with uniqueness and success that had always enraptured me ceased to exist that disgruntling moment and I found myself caught in a flurry of existential questions: What did I really achieve so far? What does my IITian tag actually mean? What is it that I want to do with my life? And the most painful of them all — if my life had been so freaking ordinary so far, why should I hope for an extraordinary future? I remember weeping at the loss of the lie that was the edifice of my life.

I wasn’t facing these questions for the first time in my life. Many of these are in fact characteristic to 20-somethings of my generation as this article beautifully illustrates. Yet, I had observed that some of these questions were unique to my batch mates in IIT Bombay and hence seem more systemic than mere outliers. The last time I had suffered such a strong bout of existential void was roughly a year ago during campus placements.

A 20-minute job interview

I spent a lot of time in self-introspection during my second last semester at IIT and yet, I was so unclear about what kind of job I wanted immediately out of college that I ended up applying for and preparing (extremely half-heartedly) for every company I was eligible for. I also wasted some days preparing for and taking the Common Admission Test to the Indian Institutes of Management (IIMs) despite having no particular interest in getting an MBA straight out of college. By that time I had already secured deferred admission to the Indian School of Business through their Young Leaders Programme.

“Brand IIT” brought with itself an undeniable sense of reputation for students, their parents, their uncles, their aunts, their teachers, their neighbours, their friends.

My “diverse” profile got me shortlisted for some nine companies on day-1. These companies were from varied sectors: consulting, finance, FMCG, analytics and “core” electrical engineering. All of these were prestigious companies that paid well. My utter lack of focus made Dec 1, 2013 one of the most nightmarish experiences of my life, but one that taught me something about myself. From 8 in the morning till midnight, I had given 13 job interviews.

In my extreme desperation to get a job, I had pleaded and begged. I felt too ashamed to pick my
parents’ and brother’s calls as the towering expectations they had from me and I had from myself had been shattered. And yet, the one emotion I felt when I returned to my hostel by around 2 in the night was that of relief, for the ordeal was finally over. I was starving as I had eaten only a handful of biscuits the entire day. So, I went to our wonderful underground night canteen and ate a lot of extremely delicious and unhygienic food.

What did I really achieve so far? What is it that I want to do with my life?

It slowly began to sink in that I had failed to secure a job on the first day. Failed. The one question that troubled me the most that night was: What is it that I want to do? What am I going to do now? This lack of clarity must have been abundantly clear in my embarrassingly manufactured replies to interviewers’ most favorite questions: Why our industry? Why our company? Morning did bear better news as I woke up to find I had received an offer from the last interview of the day. There’s an interesting story about how I managed to give that 20-minute interview at around last midnight.

I was busy running from one room to another, one floor to another to give interviews for the companies that had shortlisted me, and the Taiwanese company that eventually took me had already finished interviewing all its candidates. One of my closest friends, who was a constant companion during slot-2 of the day, requested the company to wait for me for 15 minutes while I was being grilled by another company. The Taiwanese gentleman pointed towards his watch and told my friend: “15 minutes. Okay?” The interview that I was in meanwhile didn’t go well and I rushed for the final interview of the day and reached, sweat-drenched, to find a couple of interviewers sitting idle, waiting for me. Interestingly, I had applied for this company rather casually as I preferred many other firms over it. So, when they say that placements are random, they aren’t entirely wrong.

Was it all worth it?

Sometimes I feel I should have heeded the advice of my sweetly rotund class 9 biology teacher: “If you wish to become an IAS officer, why go to an IIT? I think you should do a B.A. as it would be more relevant to your preparation for UPSC exams.” In case you didn’t notice, within a year, my future goals had shifted from becoming a cardiologist to an IAS officer and yet it had already sunk in that I had to be an IITian first.

I recently looked up the 2009 cut-off scores for the prestigious colleges of Delhi University such as St. Stephen’s and SRCC and found out that I would have got into one of those places, had I applied, for my scores in board exams were quite good. Of course, I didn’t even know what “applying” to a college really meant back then. Heck, I didn’t even know that I was going to a “college” after 12th because my mental picture of college was only shaped by Karan Johar’s films and I was sure I wasn’t going to any of those places. I only knew that I was giving JEE to go to a place called IIT.

The reason why I feel that, is partly because I really enjoyed the HSS (humanities and social sciences) courses, I took in the institute. They ranged from creative writing to sociology and each one of them engaged me immensely, providing me with that thing called the joy of learning. I looked forward to attending classes, took initiative to find out more on what was being taught, interacted with the professors on a personal level and attended relevant seminars and lectures outside of curriculum (not just for the sandwiches and biscuits in the high tea that followed). Learning seemed fun and almost effortless and surprisingly, exams were fun, too.

In my extreme desperation to get a job, I had pleaded and begged.

I never felt that magic doing the compulsory core courses in my department. They seemed work. Now, that could also have been because of our mental association of compulsory and voluntary with work and play, respectively, and maybe because engineering courses tend to be more technically involved and demanding. But I did experience a toned down version of Csikszentmihalyian flow whenever I took an HSS course.

And then when I look at St. Stephen’s alumni, I feel I should be among them some day, in that illustrious ensemble of economists, historians, writers, journalists and politicians. It would be heretical and foolish to claim IIT alumni are in any way inferior, or even compare the two for that matter. I guess it’s to do with the fact that I associate myself more with the aforementioned professions.
I feel that deep down, the questions of development, economics, history, society, culture are closer to my heart as compared to questions of technology. That is not to say that I don’t enjoy working on problems of research in engineering. In fact, that’s what I have been doing for a living ever since I left college and it has been fairly interesting, despite the roller coaster that life immediately after IIT can be.

I feel that deep down, the questions of development, economics, history, society, culture are closer to my heart as compared to questions of technology.

But whenever I ask myself the question, “Is this what I would want to continue doing in my life and be known for when I die?”, and I ask myself that question a bit too frequently, I feel disconcerted and a little helpless. If and when I make a career switch, I will be joining the massive club of defector IITians who are unfairly despised for their choice to divorce their majors for dizzyingly varied career trajectories, not that it is going to prevent me in any way from making my decision. It’s “my choice” after all.

The opposing thought in my head about the choice of undergrad is that I’m probably far better off now than I would have been had I gone to any of those places. It’s more than just the fact that the grass is always greener on the other side of the fence. Whether we like it or not, quantitative skills have become increasingly valuable in today’s world and it’s not going to change any time soon. Further, a switch from engineering to other disciplines seems far more plausible. I haven’t heard of people going the other way round.

Finally, the unparalleled network that you inherit by virtue of being an IITian could be a reason enough to toil for JEE. Let me take a moment to explain the immense power of this network for my own sake, as it has taken me some time to fully appreciate it. I was an enthusiastic literary arts secretary of my hostel in my second year. Apart from widespread acclaim and an award, I have bagged multiple job offers from seniors who were impressed with my work during that period, and I am sure, that’s just the tip of the iceberg. It’s a classic example of seemingly insignificant things leading to disproportionately significant things in life.

IITs must do more

But I can’t help but feel that won’t it be better if we inherited this network by virtue of being in a university offering a wider range of courses (not just technology)? Won’t it make more sense for us to spend the crucial four-to-five years of life studying what interests us, something on which we could build further rather than starting afresh after graduation? Won’t it be better if the institute played a more active role in shaping our lives over and above its current role as a mere facilitator and as a crucible for smart students with diverse backgrounds?

Last year, I asked the director of IIT Bombay about the institute’s opinion on most undergrads taking up careers not even remotely related to their core fields of study. He replied that institute was fine as long as students continued to contribute to the society in a meaningful way. Although, it’s an admirably liberal and pragmatic position to take, it’s also a bit complacent one as it glosses over the issues we face.

We can’t be okay with so many of our students studying stuff they don’t care about.

When I say that the institute should do more for us, I basically raise the contentious question what should a college education do for us? There are no easy answers. However, I feel, our education should provide us some direction for our future, and despite everything, that didn’t really happen for me.

Today, as I eagerly await that elusive direction, I see myself as an older, more mature and less energetic version of the clueless 18-year old who entered IIT, confidently staring at a horizon full of possibilities — not because being IITian is my achievement, but because despite my qualms with my education, it has put me in an enviable position where I can afford to take big risks without the fear of failure.

I feel much lighter today with the loss of the burden of my lies and my expectations. Sky’s the limit as I continue to chart my trajectory and make sense of the life to come, a life that seems to begin now, after IIT. ■

This story first appeared on Insight, the student media body of IIT Bombay, followed by publication in Quartz. It is reproduced here with permission from Insight and the author.
Two Feet or Not Two Feet?

LINJEN PICHARDO NEOGI

The younger cousins bent down and touched my feet as their hands then quickly touched the middle of their foreheads and then made a swift move towards the center of their chests. It is very similar to the sign of the cross only there is no gesture for the Holy Spirit. All four of them did this, one by one, gracefully, naturally, and with no apprehension. It’s a common Indian etiquette. Delicate. Beautiful. Divine. Unfortunately, I didn’t always perceive it this way. The first time I was introduced to this common Indian gesture was through a conversation with my husband. He was lying down on our sofa as his legs and feet rested on my lap. “It’s a sign of respect for the elders,” he said. People are inculcated with this custom as kids. Many children are expected to greet their parents this way in the mornings, and before going to bed at night. “It’s the way I always greet my parents after not seeing them for so long.” He looked up at the ceiling as if regressing back to some secret memory he shared with them. I let him escape on his own. I’m not a fan of disturbing those in the middle of a thought or while recollecting a memory long forgotten. Sometimes we need to get lost in those memories, to preserve some sanity.

I looked at him admiring his high standards of decorum. “How do you greet your mother?” He asked as he got up and poured us some more wine. He returned. I guess he wasn’t that far away. “I give her a hug and a kiss.” There’s nothing really special about our hello as far as making a marked distinction between generations. We hug and kiss anyone and just about everyone. Parents, Grandparents, Siblings, Friends, even absolute strangers. It’s a co-ed thing as well. Men hug and kiss women and women in return hug and kiss men. There is no gender or age divide here when it comes to that at least. It’s a sign of affection more than respect. Perhaps affection and respect can be interchangeable in this case. I’m not sure. “Show me,” he says with his boy-like smirk. I walked towards the edge of our sofa where he stood ready to learn how people can invade other people’s space with such ease. I got on my toes (we’re talking about a man who is 6’1) and placed my cheek against his, put my lips together and kissed the air. “What’s the noise your lips just made?” he asked a bit dumbfounded but still with as much intrigue.

We went on for several minutes as he practiced his much awkward hug and kiss on me. “Here’s a tip,” I said trying hard not to laugh, “Be subtle when you stick out your butt. It’s a hug and a kiss. Not sex.” I took another sip of the Côtes du Rhône as we both remained standing, smiling. “I’m going to suck at this. I just know it.” “Well, why don’t you teach me how you touch people’s feet and then perhaps we can both suck together,” I said, trying to console him as he gets lost in what he perceived as a future flop. (His fear stems from several months ago, while meeting a friend of mine; he placed his wet lips right smack on her cheek. He felt disgusted and needless to say he was humiliated. My friend and I laughed it off as he wiped his mouth with the back of his hands.)

“What do you mean? Just touch the person’s feet,” he said as if this was not the obvious part to me. That much I understood. What puzzled me was how this is done? For all I knew, these people were going to swing their feet up in the

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air. Did they have to be seated first? If so, if there is a man and a woman who gets to have their feet touched first? Do I kneel down on both knees? Was it one foot at a time? Both feet simultaneously? Was it a brushing of the hands to the feet or was it my entire hand, meaning my fingers and palm wrapped around their feet for a certain duration which would then proceed by a nod from them letting me know, ok, times up, you may go now. I was very confused by this and no, I have never seen it in any movie either. So you can safely conclude I was sadly ignorant to the entire concept.

He was laughing by this point, those deep heartfelt chuckles. The one where your breath stops for sometime, your mouth is wide open, and your stomach hurts. I’m glad he found my questions amusing. “You’re a horrible teacher. Teachers are not supposed to laugh at their students. It can cause irreparable self-esteem issues.” I gave him a soft nudge with my elbow as he placed his hands on his stomach, “Ok. Ok,” catching his breath, “Let me show you. There really is nothing to it.” He bends down and barely touches my feet, as the same hand met his forehead and lastly his chest. “That’s it?” I asked somewhat perplexed. “You barely even touched my feet.” I felt cheated. I expected some high almighty ceremony, something of grandeur. If you sneezed, you would have missed it. “Yes that’s all there is to it. Now you give it a try.” I was looking at him nervously now. I looked down at his feet and then back up at him while his boy-like smirk gave me that extra vote of confidence. I bent down in haste, hand to the forehead, then chest and ta-da.

Steps 1, 2, and 3 were done. I did it.

– And although that may sound like a feat, I felt like an absolute idiot. When you take someone out of his or her comfort zone, it takes a while to acclimate. It takes time for the behavior engaged in to process in your mind and then there’s another step. Your mind then has to analyze the behavior. Is this normal? Can I actually touch people’s feet? I loathe feet. I associate feet with odor and sweat. In a nutshell, they disgust me, unless you’re my sister. She has the cutest feet in the world. “I don’t think I can do it,” I said with undisguised dread. Me touch feet? No way. He responds with calmness, “You don’t have to do anything you don’t want to.”

I wish we didn’t have to learn our lessons in retrospect, but damn what a great teacher Hindsight can be. If only though we had more foresight or at least applied it more often to our daily lives. Perhaps then we wouldn’t have to feel so crappy about ourselves when we flip through those dusty pages of our past.

I was in and out of sleep on the plane to Raipur and my conscience was digging through my memory until it reached the night we spoke about the first lesson in manners all children in India are taught. There was something unsettling for me as my thoughts took a long pause on that particular night. It was like a film I was watching in my mind. It was our last flight for the next couple of days. My husband was asleep next to me. The contours of his face reflected peace and I envied him for that. I have to take a fistful of Valium so I can duplicate that level of tranquility. I shifted my body weight from one butt cheek to another and stretched one leg across my husbands lap. I had traveler’s fatigue. I wanted to sleep in a bed and place my head against a pillow. I missed my sister as she had arrived on a much earlier flight than we. I was concerned about her too. She was feeling ill, and I desperately wanted to be by her side. Was it the big sister instinct that was troubling me?

We arrived at Raipur airport on time. It was evening and I was experiencing a mixture of emotions. Rarely does one ever experience just one emotion, right? First it was anxiety due to my phobia of flying, which the Valium tends to wane off a bit and then a combination of the following: mental and physical exhaustion, to immerse myself blindly into foreign land and customs. In addition, let us not forget I was an Indian bride and with that came a lot of responsibilities. I was accountable for the name of this family. I knew that much going in. I also knew I was going to be under microscopic lens for the next five days and I didn’t even know where to begin.

I was snapped out of my thoughts when I saw two figures waving frantically from afar. My husband and I looked at each other with a warm smile and we knew it was Maa and Baba. They were like two kids who caught a glimpse of Mr. and Mrs. Clause. We eagerly started waving our hands, with big smiles and as we started to get closer to them (yes it was a lengthy walk) I leaned in to my husband and whispered, “I’ll touch your parents feet.” He looked at me startled as the boy-like smile gradually forms across his lips. He squeezed my hand and picked up the pace. “Of course, you’ll have to take the lead,” I said jokingly as we both kneeled down to pay our respects.

Photo credits: Ana Fritsch
(www.luckypennyblog.com)
Gay @ IITB: Out and About

Editor’s Note
This story was written in 2011 when there was not much conversation on LGBTQ issues at IIT Bombay. The story was accompanied by the formation of Saathi, IIT Bombay’s LGBTQ resource group, the very first known campus LGBTQ group in India.

Conversation on LGBTQ issues at IIT Bombay has come a long way since then, evident from a candlelight march that nearly a hundred students participated in, protesting the December 2013 Indian Supreme Court ruling re-criminalizing homosexuality. Today, Saathi is very active on campus and holds many events and has a very prominent social media presence.

This story should be read in the context of the state of affairs in 2011, and is very instructive on how far IITB has progressed in the last 4 years, and how much more there is to go.

I graduated from IIT Bombay in 2011 with a B.Tech. in Engineering Physics. This is my story as a gay student at IITB.

The Pre-JEE Days
For most gay people, coming to terms with the fact that you are gay itself is a painful, long drawn-out procedure – I fully accepted myself for who I was only at the ripe age of 16. Being gay and closeted is an enormous burden, and can be a massive pain in the arse. It was like perpetually wearing a cloak of deceit, like my life was one huge lie.

Doing my 11th/12th at the famous St. Xavier’s College, one of Mumbai’s most liberal institutions, hiding my sexuality was no trivial matter, and put me under tremendous pressure in nearly all social interactions with my peers. Oh yes, she’s so hot, I’d often find myself saying just to make sure my terrible secret remained a secret. Pretending to be someone you are not as a full-time occupation was such a bloody nuisance, it sapped me of energy, and made sure a significant fraction of my social interactions were entirely superficial. I felt like a piece of sh*t every time I lied; nonetheless, lying was such an integral part of my life, such an essential protection mechanism that I forgave myself unflinchingly every time. My adolescence was no fun, a period of confusion, lies and deceit. Lying to my best friends, and lying to them so often, made me miserable.

Frustrated Freshie
Entering IIT as a freshie in 2007, I swore off the lies. Never again shall I pretend to find a girl attractive, I promised myself, something I have stuck to till date. But then another problem presented itself – I was certain that by the end of 4 years at IITB my secret would come out at some time or the other, and the possible reactions I might face filled me with dread and horror. I imagined former friends saying – You bastard! All these years you’ve been staring at us, thinking your unspeakably filthy gay thoughts!

And so I chose the path of aloofness. Under pretense of being a muggu and having no desire for human company, I sought refuge in the Institute library all through my freshie year, scrupulously avoiding nearly all social contact. I wanted to get a good CPI, flee this god-forsaken country (as I then considered it), and begin life afresh in the sanctuary of some liberal, tolerant western nation. (Thankfully, I was not entirely successful in this rather pointless endeavor: for instance, my love for the Literary Arts often drew me to participating in those events.)

Coming Out to Friends
But I couldn’t bear to keep this huge secret bottled up inside me indefinitely. In the summer vacations following my freshie year, acting on an impulse, I revealed the truth to a recently made friend from Insti. This act, my first “coming out”, as it is called, was tremendously liberating and I revealed the truth to a recently made friend from Insti. This act, my first “coming out”, as it is called, was tremendously liberating and I felt fantastically good. For the first time ever, I had a friend with whom there were no secrets to be kept: I could finally be myself! The following years, my sophie and thirdie years, saw me gradually come out to most of my closest friends, one by one. Each time it felt like a dream, each time I felt profoundly ecstatic. My second
and third years at IITB were happy ones, with my wonderful friends, a newfound passion for Physics and Maths, and a variety of extra-curricular activities. I even had my first crush – that’s right, on a guy. Being gay was no longer a handicap, social or otherwise, and I no longer felt the urge to periodically wallow in self-pity: I was content, happy, and perhaps even proud of my gay-ness.

The Wild Life

Yet I was discontent – although my friends were all wonderful and sympathetic, I craved the company of other people “like me”. During the summer after my third year, while doing my internship in the open, liberal German city of Munich, I made my first forays into the gay world, exploring several establishments in the city’s Gay District. I also mustered the courage to begin posting on the GayBombay mailing list (without an alias!), and got to know several wonderful, interesting people in the process.

My objective was to get people to at least talk about homosexuality. The first step towards understanding and acceptance is breaking the veil of silence. A few friends accused me of being overtly loud, and too reckless both for my, as well as the community’s good. The best retort would have been to quote Arundhati Roy, when, in response to similar allegations, she once declared, “I AM hysterical. I’m screaming from the bloody rooftops. And you and your smug little club are going ‘Shhhh… you’ll wake the neighbors!’ I want to wake the neighbors, that’s my whole point. I want everybody to open their eyes.”

My secret life was finally revealed to the general public during my vallf (with my consent), with my friends thoughtfully and symbolically having put up my rainbow Pride Flag up on the stage background. I felt a quaint, strange feeling of happiness and light-headedness: I was now officially out of the closet, and more so, IIT Bombay’s first openly gay student!

A Bed of Roses

Life as a gay person has been exceedingly easy for me. Nearly every single one of the people I came out to was understanding and sympathetic. (One of my friends, a self-proclaimed homophobe, took a couple of days to come to terms with my
homosexuality. All has been chummy between us thereafter.) I am extremely fortunate to come from a liberal, urban family. Although not yet out to my parents, it is a mere formality: I’m confident they won’t take very long to come to terms with the matter, and they definitely won’t disown/disinherit me.

An Appeal

Unfortunately, public awareness in India about homosexuality is abysmal, with the minds of most people chocked with myths and misconceptions. Ultimately it boils down to whose opinion you trust – that of the entire world’s scientific community or that of a random assortment of clueless babas, preachers, and self-proclaimed healers.

Contrary to what the Hon’ble Union Minister for Health, Shri Ghulam Nabi Azad may think, homosexuality is NOT a “disease”! Homosexuality is neither a matter of choice, nor can it be “cured”. Homosexuals are not out there to “convert” straight people: you either are gay or you’re not, or your somewhere in between (bisexual, perhaps). Nobody can change anyone’s sexual orientation, not even their own!

Section 377 was struck down by the Delhi High Court on 2 July 2009, finally acknowledging that homosexuality is indeed normal. The verdict notwithstanding, Indian society remains exceedingly cruel to homosexuals and other sexual minorities. All throughout the country – IITB being no exception – homosexuals face a tremendous amount of hostility, ostracism and discrimination. This is the case even among the “educated elite” of India: just a glance at the countless bitter, hate-filled comments one reads following any article about homosexuality on the internet sends shivers down my spine. Imagine what the case would be in more conservative sections of the Indian society!

A widespread misconception is that homosexuality is a western import. The truth is that there are and always have been gay people in India, it’s just that we’ve been, until recently, too bloody scared to reveal our sexuality to the cruel Indian society! Why on earth would anybody want to go through the ostracism, mental trauma and castigation that would inevitably ensue? Acceptance of homosexuality, however, is indeed a western import, as is acceptance of widow remarriage, abolition of sati, and countless other social reforms of the 19th and 20th centuries.

Many of us lead frustrated, unhappy lives, and never reach our full potential as human beings. This is a consequence primarily of society’s ignorance: the sheer pointlessness of all this suffering astounds me. According to most estimates, somewhere between 4 and 10% of the population is homosexual – this may include your best friends and loved ones. I beg all IITians, please help create an atmosphere where your friends do not have to undergo this terrible oppression! Lift the veil of silence and ignorance, and let there be free and frank discussions on the topic. (Try, at least occasionally, to use the word “gay” in a non-insulting fashion!)

Accept us for who we are, and then let’s all get on with our lives as usual, as healthy, productive members of society.

If You Are LGBT

The loneliness, confusion and unhappiness that you may be experiencing can often be quite overwhelming, and it is vital you find somebody to talk to, someone in whom you can confide your feelings. Ideally, your immediate family and your best friends should be the first to know. Unfortunately, it’s quite likely you come from an extremely conservative family. Also the 100% acceptance rate I had with my friends is not always guaranteed. If, however, there are people in your life who you are confident will have no issues, it is strongly recommended you come out to them ASAP: doing so will only strengthen your friendship and make you a much happier person. There also exist numerous faculty members at IITB with a progressive outlook towards sexual minorities.

And finally, but most importantly, you might like to join Saathi: a support group for Lesbian, Gay, Bisexual, Transgender and Queer (LGBTQ) people at IIT Bombay. The group is meant to be a safe space for people who’re still coming to terms with their sexuality and/or are confused. The principal aim of the group is to help people discover themselves in a comforting and a supporting environment along with people who’re in the same boat. We understand that many of you may not like to openly acknowledge your sexuality and/or are apprehensive about associating yourselves with people who’re open. We respect your concerns: you can be as anonymous as they want. No one will force you to reveal your identity or rush you into coming out to people. Please do check out www.saathi-iitb.org!

This story first appeared on Insight, IIT Bombay’s student media body, in 2011. Reproduced with permission from Insight and the author.
India’s Long Quest for Modernity

India is well known for its inefficient legal system with archaic laws that hobble its economy. While the country is trying to forge ahead by increasing its investment in infrastructure and curbing money laundering, far too many of its colonial-era laws do not make any sense.

While Prime Minister Narendra Modi has been started repealing out-of-date laws, he will need up the ante to keep his promise to axe 1,700 outdated laws. Reforming a glacial-paced judicial system, along with improving enforcement of existing laws will improve rule of law, which is now a faint notion instead of daily reality. India needs new legislation that is drafted clearly and rigorously.

Although foreign investment has been flowing into India recently, more reforms will increase this inflow enormously at a time when much of the world is in economic turmoil. The current government has tried to push through new legislation to attract foreign investment.

Yet protests have erupted against the Goods and Services Tax bill (GST) and the Land Acquisition Bill. The Indian National Congress, the ruling party for many decades, has taken a populist position and is opposing Modi even on the policies it once proposed. All eyes are on Modi to see if he will have the will to push through the legal reforms that India desperately needs to give its economy a fillip. If the prime minister fails to push through these legal reforms, his standing will suffer a damaging blow.

Another mammoth task lying in wait for Modi, as per a PricewaterhouseCoopers report, is educational reform. Indians on an average get only seven years of schooling. The same report goes on to point out that India “has the highest illiteracy rate—33%—of the world.” Changing this requires will, reforms and resources. A mix of a scientific education based on experiments and a liberal arts education modeled on critical thinking is what India needs today.

India is a land of obsolete and old laws. Why do laws from the 1800s continue to dictate life to this day? Which laws need to be repealed to benefit the country both economically and socially?

Atul Singh: The question “why” has a simple answer. India has long been an exceedingly conservative and cowardly country; add to that the continuing hangover of the British colonization. Anyone who speaks English in the proper accent is deemed to be intelligent and educated, while anyone who speaks the vernacular is considered a country bumpkin. This is the Indian mindset.

Surprisingly, there is still veneration for the legacy of the empire, even though it reduced the Indian economy from 24% to 2% of the world GDP [gross domestic product]. This colonization of the mind ensures that Indians continue with the system the British bequeathed them even when it is clear that it no longer works.

Indians pride themselves on being practical. This is often code for accepting the status quo. So, there is little questioning about the roots of the Indian system, even less discourse on changing laws that do not work and hardly any vision for new laws or systems that India needs to become a modern nation. The lack of cultural confidence and bravery permeates all aspects of society.

However, I am hopeful things will change once a new generation comes of age and demands more rights and better services. This will happen in the next 50 years. In the near-term, I do not see much change. The answer to which laws must go is simple too. Too many old laws on the books were signed into promulgation when India was still a part of the British Empire. A 1998 report commissioned by the government itself recommended the repeal of over 1,300 outdated laws. The country is still waiting with bated breath for its elected
leaders to act on the recommendation of the report.

Specific examples of obsolete laws include the 1861 Police Act. Contemporary Indian society cannot use a law that was drafted four years after what the British called the Sepoy Mutiny of 1857. The Indian Penal Code of 1860 is ridiculously outdated, and it is frightening that no one talks about reforming it. This piece of legislation was drafted by none other than Lord Thomas Babington McCauley, a man who also created the Indian education system to train natives to be Englishmen in taste and serve the British Empire. Another vintage piece of legislation is the Indian Telegraph Act of 1885, which ridiculously governs satellite phones and radio today.

Truth be told, India needs a complete legal overhaul. Yet it is important that the new legislation is drafted thoughtfully and rigorously. Otherwise, the remedy will be worse than the disease.

An example of this is the crude piece of legislation called The Indian Companies Act 2013, which was passed by the previous Congress government. It is poorly drafted and even contradictory in places. The act adds to India’s infamous red tape. Starting a company is difficult and closing it even more so. The act creates barriers to entry and exit, stifling business activity. This is a shame because Indians are entrepreneurial by nature, and this ghastly legislation is shooting the country in both its knees.

*India has struggled with the enforcement of laws and reforms. Why is it a problem to this day?*

**Singh**: There are many reasons here. As I previously mentioned, there are plenty of crazy laws that no one in their right minds is going to obey. In fact, if all the laws were actually implemented, India would come to a standstill. Yet this means that rule of law suffers. If a country has terrible legislation, then a culture of disregarding laws develops.

Let’s assume for a moment that laws became less insane. Then, someone would need to impose those laws. Right now, there are hardly any institutions upholding rule of law. The police is understaffed and underpaid. It is little surprise that most policemen tend to be corrupt. The police in many ways are the biggest criminal gang in the country. There are no trained prosecutors or a prosecuting service. There are few regulatory agencies with teeth that can prosecute wrongdoers and penalize them.

Finally, the Indian judiciary is in shambles. In an effective democracy, decisions must be reached in a timely manner. Cases in India drag on for decades and decisions are reached at snail pace. Millions of cases are pending, and people end up going to bosses of criminal syndicates instead of courts because that is cheaper, quicker and more effective.

India needs to do the following if it wants any semblance of rule of law:

1) It must simplify and rationalize its outmoded and irrelevant laws.

2) It has to create an enforcement mechanism that works. This involves reforming the police as well as creating civil prosecuting agencies and regulatory authorities with teeth.

3) It has to take laws seriously and combat the pervasive culture of corruption.

4) It has to reform its judicial system, as cases must be heard quickly and cheaply.

5) More transparency is essential. A very simple example would be the creation of an online national land registry system so that anyone can look up who owns the land along with its estimated market price.

6) Finally, recruit talented and skilled men and women into the government. Once they join, create a culture of competence at all levels.

**What is the role of the private sector while the government is in the tumultuous phase of passing reforms?**

**Singh**: The private sector has a pivotal role to play toward long-term reforms. Certain things will help everyone. A simple and transparent taxation regime would improve business climate by mitigating uncertainty and convoluted efforts at evasion. Better infrastructure would help everyone too.

Indian companies can often be very short-term. They cut corners, bribe and even intimidate. This might help them in the short-term, but it makes the business climate uncertain, hurting future potential. Indian companies have to realize that a reformed India would be in their interest as well. Otherwise, India’s demographic dividend will become a catastrophic curse. The environment in which these companies operate might become toxic and spill out into violence. So, being less selfish might actually help the private sector in more ways than one.

*The National Democratic Alliance (NDA) government has struggled to pass bills such as the land and GST bill. What must be done for these bills to get passed as soon as possible?*
Singh: There is a lot of drama in all realms of modern politics—even the US Congress is not immune to political spectacles. Each political party positions themselves as the one fighting for justice and against tyranny. The main problem with the NDA is that it does not have a majority in both houses of the parliament.

The NDA may be able to get the majority in the upper house of the parliament, but in the meantime, it will have to practice some quid pro quo to get the necessary votes. While the Congress Party is clearly trying to obstruct bills, the BJP [Bharatiya Janata Party] has been “playing politics” in the past as well. The BJP initially negotiated a nuclear deal with the US and then did a 180° to oppose it in parliament.

The BJP is new to power. It must find allies and spend more time to work on the legislative process. I am convinced the government is not focused enough on this process. Of course, it can try to keep winning elections and gain control of the upper house. Even then, it will have to spend time reading and drafting laws.

Now, let us look at bills. The GST is relatively straightforward, but the land bill is tricky as the latter can be used arbitrarily. If people are going to have their land taken away, then there better be a bona fide reason for it. So, safeguards along with accountability, transparency and a speedy judicial review are essential to ensure some sort of justice or at least prevent gross injustice.

The land acquisition bill is necessary for creating jobs in India. Hence, Modi and his team have to make a case for it. People have to be told that if they want better roads, then some of them will lose their land and houses in the process. The same holds true for any infrastructure project or even a defense one.

What reforms can be passed to improve India’s shoddy “ease of doing business” ranking?

Singh: With colonial-era laws, rampant corruption and red tape, it is little surprise that India is a terrible place to do business. This year, India has dropped two places to 142 out of 189 countries in the “ease of doing business” ranking. The World Bank places India at 158 on “starting a business,” 184 on “dealing with construction permits,” 156 on “paying taxes,” and 186 on “enforcing contracts.”

I have already answered this question earlier. The six reforms I mention would go a long way to make India a better place for business. I would add one more suggestion. Let us get rid of the Indian Administrative Service [IAS] and Indian Police Service [IPS], and professionalize the civil services. It is a joke that the system created by Macaulay and Jowett survives. Let us get rid of generalists with little subject matter expertise and even less decision-making ability. For instance, let us have people with experience in finance, an understanding of economics and familiarity with accounting sitting in the finance ministry instead of the bunch of jokers playing poker with India’s economy.

With the important Bihar elections coming up, there are many people complaining about the NDA’s pro-corporate stance. Is Modi pressured to pass more populist reforms to attain the votes in Bihar?

Singh: I would not like to use the term “pro-corporate.” Modi is under a lot of pressure to create jobs, and the expectations are sky-high. His bet is to try attracting companies to “Make in India,” but foreign companies are scared of the retroactive taxation policies employed by President Pranab Mukherjee during his time as finance minister. The use of retroactive taxation is a spectacularly stupid idea, and Mukherjee can claim the credit for single-handedly deterring foreign investment into the country.

The government has to make it easier for small and medium enterprises to do business. India’s challenges are huge and there needs to be urgent reforms. Sadly, Modi has not been bold enough. His economic team is weak, and Arun Jaitley is proving to be a poor finance minister. The team around him is also a touch lightweight with a fixation for McKinsey-style presentations instead of hardheaded major decisions.

For instance, Jaitley should get rid of Mukherjee’s idiotic retroactive tax law. Similarly, he could get rid of a number of outdated laws and regulations, many of which have been enumerated in numerous reports. The most terrible sections of the Companies Act of 2013 should be redrafted. As a lawyer, this is the least that Jaitley can do. But he has yet to even mention this issue. I have no choice but to give Jaitley a “C” grade for his performance as minister of finance. If Jaitley fails to outline a clear blueprint for the Indian economy, then all this talk about “Make in India” will remain little more than hot air.

This interview first appeared in Fair Observer as a part of The Interview series. A part of this interview has been reproduced with permission. The complete interview can be accessed on Fair Observer at:

As the old adage goes beauty is in the eyes of the beholder. However, certain physical phenomena violate the age-old wisdom. For example, who would not find dew drops on a flower to enhance its beauty even more than the flower itself? The present article I have tried to show the beauty of dew drops and frost crystals by taking macro photographs of condensate on various surfaces, flowers, leaves, plants, etc. Regardless of the surface the beauty of these nature’s wonders is always visible.

Basically, in very simple terms dew formation is condensation (nucleation and growth) of perfectly spherical water drops on a surface when relative humidity in the atmosphere is high and the surface cools below dew point due to infrared radiation. Though the nucleation of water drops appears to be at random and yet one finds a nice symmetrical pattern and alignment in the condensation of dewdrops. Frost on the other hand forms in solid state and grows in a hexagonal crystal structure shining like diamonds in sunlight. Both are chemically the same (hence I call it having the same “soul”), two hydrogen atom combined with one oxygen atom forming water which is so essential for the life to grow and sustain on our planet. The difference in the physical appearance is obviously due to the ambient temperature - dew forms if the ambient is above the freezing point while frost forms below the freezing point of water.

Dew

The photo on the left shows tiny kalanchoe (a succulent plant) buds with dewdrops. These buds are about ¼ inch in length and 1/8 inch in diameter, thus the dewdrops are very small less than 1mm diameter. This is a macro picture and is enlarged to show the dewdrops clearly. This photo and the following photographs were taken in early to mid morning hours since as the ambient temperature rises with the sun both dew and frost evaporate and disappear!

This photo shows tiny wild weed flowers and leaves with dewdrops. Dewdrops have also formed on web threads woven by very small spiders. The white flower is about ¼ in across which looks like a giant in comparison to very small dewdrops the web. The ambient humidity is very high, about 94% resulting in more dew condensation on the plants.

The above photo is that of a coriander (Dhaniya) flower. These flowers are very pretty and again very small. The whole flower cluster is not more than 1 to 1.5 in across with smaller flowers within the cluster. These flowers show beautiful dew drops condensed on them. Some drops are larger than the others indicating these nucleated much before the smaller drops.

This photo is that of a seedpod of a yellow dandelion flower (yes, the same one that we try to eradicate throughout the summer from our lawns). Tiny dew drops form wherever the conditions are right. You can see almost microscopic dew on very thin hair like seed.
stems. These drops grow with time until meeting the adjoining drop when they could become bigger by coalescence or stay the same if surface tension forces prevent their merger.

The above shows a pink mum flower that is totally engulfed by the dewdrops. The ambient temperature is about 40 F and 89% humidity. This is a larger flower, about 2 inches in diameter in full bloom.

**Frost**

As the ambient temperature drops below freezing point, the water in the atmosphere condenses or nucleates on the surfaces as ice crystals called frost (which is synonymous with “paala” in North India, when it extremely cold below the freezing point and frost falls, people say “kal raat ko paala pad gayaa”). The ice crystals have a hexagonal close-packed arrangement of water molecules. The close up macro photos of the frost crystals appear like diamonds from the sky that fell overnight. Here are a few photos of the frost.

The picture at the bottom-left shows frost on mum flowers. Unlike most of the plants these flowers are pretty resistant to the frost damage for the first few times and after that they die of cold. One can see needle like frost crystals growing on the mums.

The crystalline structure of these frost ice crystals is clearly seen in the above picture where frost has grown on a wooden table. The size of these crystals is about the size of rice or wheat grains, 1/8 to ¼ in. These really seem like diamonds fallen out of the sky. The photo also shows shadows of these tiny crystals on the table due to the sunlight from rising sun.

The next picture shows frost crystals formed on a red car body. It was extremely cold on this day, about 0F (-17C) with about 80% humidity. These crystals are somewhat larger about ¼ to 3/8 in. The crystals seem to grow almost in two dimension as seen from the top view looking like a needle while others growing at an angle or horizontally show hexagonal type structure.

The final picture below shows frost crystals growing on a dried fallen leaf (about 1 to 2 inches in size) on the ground. The temperature and humidity were 20F and 73% respectively.

Nature’s magic is available to see almost every day as seen from these photographs and one must enjoy it as often as possible!

This article first appeared on Fundamatics, and has been reproduced with permission from the author.
Incredible India!

Popularity. India is a destination for travelers seeking spiritual enlightenment, astonishing sights, or a nonchalant atmosphere conducive to practicing yoga and sipping chai. But the reputation for its universities and stout companies is soaring ever higher, and so trips to India will accordingly become business and education-oriented. What struck me first was the passion of the students in reaching career goals unparalleled to what I have seen elsewhere, spawning terrific determination. The Indian students I met had visions of what they wanted to achieve far into the future as well as several ambitious, but also realistic options in the short-term for how to lay the path. In comparison, many of my engineering peers in the United States are still not sure about the exact career they are interested in pursuing.

Living in another country before and growing up with multiple cultures in the same household made the transition relatively peaceful for me, as did hardly eating meat, loving Indian food, regularly being around people speaking other languages, previously learning other languages myself, being excited by the unknown, explaining and discussing differences among countries I know well, and knowing the side not for tourists in many countries before India. Curiosity in the target country naturally leads to one’s own research ahead of travel to be aware of expectations on both sides in addition to fostering future admiration for the idiosyncrasies of the host nation. This curiosity also balances out the widespread Kafkaesque bureaucratic frustration, waiting times, and any startling social manners upon arrival.

That being said, I learned a great deal of course. I learned to be self-reliant in gaining answers or rectifying situations where I knew I was not in the wrong, while also benefiting from numerous hospitable strangers. By needing to travel light I decided what possessions I could do without, and back home I now feel surrounded by a lot of basically useless material. Eating and touring together with other international students created a support network by going through the same process and events. Also, Indian students and professors became excellent contacts and are keen to avoid losing communication.

I became very comfortable forming new friendships merely sitting next to someone on a bus, and realized the importance of spending time with people at home. Most surprising to me was how the experience changed the way I look at travel, and how I will

About the Author

Jean-Dominique Bonnet is a third-year civil engineering student at the Cooper Union. He recently participated in an exchange program between IIT Bombay and the Cooper Union, and studied in India for a semester. His favorite activities are running, learning about other cultures, exploring, reading, studying languages, or almost anything outdoors. He has been on the move with his blend of a French and Mexican family since he was born in Pennsylvania, living in North Carolina and Sweden before coming to New York.
IIT Bombay Alumni Association – Greater New York Chapter

Annual Reunion 2015

travel in the future. Whereas before I felt I would certainly be happy moving to any country chosen by a dart thrown at a world map, I discovered my own values, needs, and wants which are crucial to narrowing the job search in carefully selecting where I would like to live locally and on a global scale.

I became very comfortable forming new friendships merely sitting next to someone on a bus, and realized the importance of spending time with people at home.

Having essentially no required text readings I suspect promoted more independent interest in the students, than having assigned or even recommended sections of books. In general, the material and procedure was all taught from class, so reviewing and doing more complicated assignments was left up to the student. Tardiness was apparently an issue for more students, but entrepreneurship is more commonly witnessed at IIT Bombay with its many start-ups, site visits, and applications of projects around the country whose example we could follow. As in other places, about half the students are glad to coast through class, but as for the other half of students, commitment to work certainly shows, and they achieve impressive feats in the extracurricular clubs they are passionate members of. Some facilities to conduct research demands some upkeep, but because of the large scale of the university unlike the Cooper Union, there are resources and an extended array of professional equipment for every subject to carry out studies and research in. My classes met in modern lecture halls and outstanding classrooms, and there are ample sporting facilities. To generalize the university is not easy to generalize the university is not easy with so many varied students, centers, and departments, but IIT Bombay and the Cooper Union share huge diversity, strong academic programs, and the promise of launching the next great minds.

In language differences, a clear majority of the exchange students spoke German and only one or two professors had a troublesome accent to decipher, but in fact because of finding it more difficult without my usual habit of speech I saw areas for improvement for me to communicate more effectively. The struggle and benefits of learning another language were yet again imparted to me, and I did learn to read Devanagari script and basic Hindi words. In addition, another lesson evidenced by the many English translations on signs and attempts by Indian citizens to practice English personally with me no matter the level they studied at was that with the zest shown by wanting to improve English, the people are not afraid to make mistakes as they try new things. Over an eye-opening five months, I was able to hike the tea-estates of Darjeeling, brave a couple of buses breaking down on the way to Mysore, stroll around the historic quarters of Kolkata, explore the group of monuments at Hampi, attend a Tibetan wedding in Gangtok, visit old friends in Delhi, meditate on the Dalai Lama’s spoken teachings in Dharamsala, hop amongst the many temples of Varanasi or tourist hotspots in Agra, partake in the Holi celebrations in Mathura and Vrindavan, relax on beaches up and down the coast of Goa, go on a safari in Kutch, and marvel at ancient caves at Ajanta and Ellora among other activities. Every day held a novel perspective on the far-reaching meaning of India.

My personal criticisms include handling headaches with banks, poor air quality inducing some occasional coughing fits, the irregular small rip-off (though the attempts are regular with rickshaws or shop stalls), and the constant
noise, which I later ironically discovered was more apparent in its absence because of my ears ringing. I became aware of gender inequality although it is not widespread in cities but not being female I found the only odd approach to me would be to ask for a photo or become Facebook friends, and even then solely by the most courageous onlookers The reality is that general issues like these are not specific to India and will not change just for me, and tourist-hungry salesmen will always be able to spot a new foreigner to pester from the end of the street before a chorus repeating the word “friend” and the same predictable finale of halving their named last price within ten seconds. I did not mind using a bucket for warm showers since for half of the duration it was more refreshing to forgo hot water, and I have been in similar situations in Mexico before. Booking trains, the act of getting into local trains in Mumbai, and entering IIT buses could be ameliorated though you can buy an inexpensive bicycle for a less dangerous on-campus commute.

A single semester at IIT Bombay taught me more than just specific classes I could not study at the Cooper Union.

Differences as simple as the weather revealed to me how much I missed the rain for instance, and these contrasting aspects of daily life would highlight how India was special in being so out of the ordinary in my view leading to much philosophizing in regards to questioning my ingrained cultural habits and expectations for my future if my attributes and way of thinking could be products of the environment I was raised in. Improvements to the program would be more subtle like perhaps a schedule or regular interval for meeting in the buddy-system IIT employs, improving the service at the university hospital, rethinking the rather disorganized Hindi class, offering a reliable internet connection (a rodent caused some Internet outage) or maybe even going wireless, common store and office hours, recycling at least on campus, and the creation of appointments with staff so that documentation and registering is not so convoluted.

It is easy to disparage the frequent lack of toilet paper, ubiquitous smog, and animals in traffic; however, these all come from the country having a completely different origin – though I could do without the HONK OK PLEASE signs’ encouragement to honk. Despite merely becoming a nation in its own right in the lifetime of some senior citizens today, the country has a continuous story that stretches farther back than most in the world, and certainly longer than that known of the United States. In the midst of this, India is still changing. The land of forts and markets has hundreds of millions of people using cell phones. From astrophysics to water purification, India seems to be growing an industry for everything, yielding an opportunity to learn professionally in another culture about whatever one desires and building a more significant impact where advances are continuously establishing themselves.

A single semester at IIT Bombay taught me more than just specific classes I could not study at the Cooper Union. By understanding firsthand about the transportation system, celebrations and diverse religions, political system, status of public health, competition in education, position of castes and royal families, gap between urban and rural life, rich history, dozens of local languages, young students’ outlook, foods, marriages, dances, music, and art I clearly was a student in more ways than one. I am exceptionally grateful to Mr. Ruyintan Mehta for sponsoring generous scholarships to students and supporting the collaboration between Indian Institute of Technology Bombay and the Cooper Union.
Days in the City

Bye Mumbai, Hello New York! I was off to the exchange program at Cooper Union for the Autumn semester of my third year in Electrical Engineering. Abhilash Singh, Akshay Joshi and Prakhar Jaju had accompanied me.

My journey started in New Jersey where the serene atmosphere, beautiful houses and the much longer days surprised me. Thanks to Mr. Ron Mehta and Mrs. Monica Mehta, I led the lavish American lifestyle for the first week of my stay. The initial interaction with the alumnus took a lot of getting used to calling them by their first name, especially because of the huge age difference. The concept of “respect” being associated even with the “first name” had always been alien to me.

Soon, my friends and I started exploring New York City by visiting the majestic Lady Liberty, paying homage at the 9/11 memorial and join the colorful multitude of people at the Times Square. It was very exciting to visit the places that we had only read about. But, being a tourist in a city is very different from living in the city.

On 26th August 2014, I moved to the Cooper Union dorms. The day brought back the memories of when I first moved into my IIT hostel. The parents at Cooper Union had similar anxieties as my parents did, 4 years ago. It had been an awesome journey at IITB, meeting people from all over India, and now, I anticipated meeting people from all over the world. I shared an apartment with girls from Spain and Philippines. People here seemed much more forthcoming about their ways of living. An agreement was signed among the people who lived in the apartment about bringing guests, the use of kitchen, times for taking a bath, turns for cleaning the apartment, etc. The idea of “baadme adjust kar lenge” (We’ll figure out and adjust later) didn’t seem to work around here.

“Orientation” is an essential beginning to college life. Interesting, I relived mine in a camp just outside the city. I came to know that most of the students had been accustomed to attending such “sports camps” since their high school and were well prepared for it. Living in the cabins, the harsh cold weather at night, water sports, American food – burgers, juices, lots of fruits - was a new experience for me. It came as a surprise to me that the school Deans also attended the camp and interacted with the students. In contrast, the Deans at IITB always have an aura of “authority” around them. Students around us had been quite friendly. But on the other hand, they were always concerned with the fact that I, being from a different country, may judge their lifestyle or actions.

Alas! The fun was over as soon as the classes began. It took some getting used to the really small classes, 30 students as opposed to 120 back in IIT. A minor concern about comprehending the American accent of professors did surface in a few courses but I soon got

About the Author
Sneha Goenka spent the Fall 2014 semester in the Cooper Union along with three other students, Abhilash Singh, Akshay Joshi and Prakhar Jaju, from IIT Bombay as a part of the Exchange Program between the Cooper Union and IIT Bombay. She is a fourth-year Electrical Engineering student.
used to them, thanks to the American TV shows I watched so frequently. People multitasked here, no time was kept aside for having a meal. It was often a part of the class hours. Coffee was an essential part of the early morning and the late night classes. I cannot help but mention how the class was interrupted each time someone sneezed and the entire class said “Bless You!” The classes were indeed very informal. One of my professors even brought his son to one of the classes. It was hilarious to see him say, “Stop eating the chalk. So coming back to the point, the Fourier transform...”

The courses here were much more engaging. The professors treated the students as future engineers. All the students were given opportunities to learn about the ongoing industrial standards in software, develop some work ethics through the group projects and acquire soft skills through presenting our work. It was a great relief to finally meet students who worked hard, and moved ahead as a class. Helping out other students was not seen as a threat to one’s own grades. Career fairs gave me a familiarity on how to interact with people in the industry.

This new world also came with a lot of times when I missed my home back in India. I thought about Indian food, speaking in Hindi, etc, only to have my alumni to the rescue. Other than the fact that this exchange program would not have been possible without them, they were family to me in the unknown world. Subodh uncle and Rani aunty had helped all four of us set a kitchen to cook Indian food with Prakhar as the MasterChef. Everyone said that Thanksgiving was a time we should spend with our family, and so I did with Subodh uncle’s family at his house in the Long Island. On a lighter note, I did not want to return back to my home back in India after that. I always looked forward to the occasional meals with Ron, Indian buffet with Sreedhar, dinner at Jignesh’s house and stimulating discussions at the GNY meetings with all the alumni. They taught me a lot. I felt as though I was still at IIT, although with a more skewed female to male ratio here.

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The four months shaped my life in a very different way

The city was really a dream to me. The energy around, saying “Good Morning” to strangers. $1 pizza, burritos, late night coffee, lively weekends at St.Marks place was nothing like anything I had imagined. I felt the sophistication of the midtown and uptown, craziness at the Times Square, peace at the central park and the change in culture as soon as I crossed the Brooklyn Bridge.

The four months shaped my life in a very different way and gave me an opportunity I had never imagined before. I totally agree with John Steinbeck’s words, “Once you lived in New York and made it your home, no place else is good enough.”
Clean Drinking Water Project

Water is an absolute necessity for human survival. In developed countries, the fact that the water is clean and safe, is often taken for granted. This is not always a guarantee that can be provided in the less fortunate regions of the world. Around the world, approximately one in nine people do not have access to safe water. Because of this, approximately 850,000 people die every year. These statistics are appalling considering the amount of clean water wasted while performing common, everyday tasks. As it is, water remains an irreplaceable commodity and human beings will continue to consume what is available to them, regardless of the quality.

Unclean Water

Unclean drinking water comprises of suspended particles, organic and inorganic impurities giving it foul odor and murky color. The bacterial contaminants can lead to a variety of diseases like cholera, typhoid, and severe diarrhea. Excess amounts of some minerals in water can lead to conditions like fluorosis with teeth and bone deformities (figure 1). All in all, the risk to human health is extremely prevalent when consuming contaminated water.

Burgula, Telangana State

Many villages in India have water sources consisting of the organic and inorganic substances depicted in Table 1 in large quantities. The village of Burgula in Mahbubnagar district of Telangana State of India is no different. It has a population of approximately 5000 residing in an estimated 1100 homes.

Most people work on agricultural lands as farmers and raising the livestock. Along with their own lives, much of the work they perform is predicated on the availability of water. According to an initial survey done in 2014 by students volunteering for Engineers Without Borders (EWB) - India, water in Burgula contained approximately 10 mg/L of fluoride. This primary contaminant has ignited long term issues related to fluorosis in many residents. Fluorosis causes weakening of the bones leading to eventual bowing of the legs and damage to tooth enamel. Along with this condition, several people experienced stomach pains and diarrhea because of bacterial contaminants. In December of 2014, a team of engineers from Wheels Global Foundation (WGF) visited the village and performed water analysis, confirming the findings of the EWB students. Subsequently, a clean drinking water plant was set up in Burgula.

Technology

The method used to filter the ground water uses a process called as reverse osmosis at its core. To understand the process of reverse osmosis, a brief explanation is provided. When a particle moves from an area of higher concentration to that of lower concentration, the movement is known as diffusion. For example, when someone

<table>
<thead>
<tr>
<th>Contaminant</th>
<th>Mg/L</th>
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<tbody>
<tr>
<td>Arsenic</td>
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<tr>
<td>Fluoride</td>
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<tr>
<td>Cadmium</td>
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<tr>
<td>Chromium</td>
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<td>Lead</td>
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<tr>
<td>Mercury</td>
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<tr>
<td>Nitrate</td>
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<tr>
<td>Iron</td>
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</tr>
<tr>
<td>Edrin</td>
<td>0.0002</td>
</tr>
<tr>
<td>Lindane</td>
<td>0.004</td>
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<tr>
<td>Methoxuchlor</td>
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<tr>
<td>Toxaphene</td>
<td>0.0005</td>
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<tr>
<td>Acetic Acid</td>
<td>0.01</td>
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<tr>
<td>Turbidity NTU</td>
<td>1 – 5</td>
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</tbody>
</table>
then reaches the reverse osmosis system. A high-pressure pump increases the pressure to approximately 100 psi in order to perform the reverse osmosis. This is the final step of filtration as about 98% of dissolved solids are prevented from passing the semi-permeable membrane. Two separate streams are then formed from this step. One is of “clean water” and the other is highly contaminated “reject water” which is drained out of the system. The stream of clean water then goes through ultraviolet radiation to kill the microbial organisms and ultimately enters the final storage tank as drinking water, ready for use. A panel is present indicating the following: the pressure inside the reverse osmosis system, the flow within the reverse osmosis system, the total dissolved solutes (TDS) of the water, the percentage of reject water, and the total running time of the pump and system. The panel also includes an automatic switch to turn off the pump should the pressure exceed the necessary levels.

In this scenario, the particles that comprise the odor have traveled from a state of higher concentration, the bottle, to a place of lower concentration, the air outside the bottle. Similarly, water moves across a semipermeable membrane in a container from lower to higher concentration of the solute by osmosis. Reverse osmosis occurs when higher solute (contaminated) water on one side of a semi-permeable membrane moves to lower solute concentration under pressure generated by a pump yielding clean drinking water.

A three-way partnership was developed between the villagers, Global Pragathi, and WGF. The villagers agreed to provide a shed for the design of a water plant. Unclean water is taken directly from the ground source, chlorinated, and collected in a storage tank. The tank is connected to a pressurized sand filter. The water travels through the sand filter where large and small turbid particles including rust are trapped. Turbidity

opens a bottle of cologne or perfume in a room, the people sense it without actively attempting to smell the contents of the bottle. In this scenario, the particles that comprise the odor have traveled from a state of higher concentration, the bottle, to a place of lower concentration, the air outside the bottle. Similarly, water moves across a semipermeable membrane in a container from lower to higher concentration of the solute by osmosis. Reverse osmosis occurs when higher solute (contaminated) water on one side of a semi-permeable membrane moves to lower solute concentration under pressure generated by a pump yielding clean drinking water.

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Impact

The primary goal of Global Pragathi is to provide preventive health care in impoverished communities. Because of this water plant, the residents now have access to palatable water produced at a relatively fast rate. This will prevent gastrointestinal bacterial infections and fluorosis, reducing the mortality rate. Additionally productivity of the residents will increase. To make this self-sustaining project cover the costs of manpower and maintenance, the water is made available at Rs. 2 for 20 liters (3.3 cents for 5 gallons). Also, at a cost of Rs. 8 for 20 liters (13.2 cents for 5 gallons) to cover the employment and transportation expenses, water is supplied to those who desire the delivery service. Through the revenues collected, three village youth have been provided employment. School children and the rural health center get water free of charge. Currently, approximately 50% of the water initially placed in the raw water storage tank is not effectively cleaned and is considered “reject water.” This reject water is currently being used to flush bathrooms in the school. Previously, some bathrooms were not in use due to the lack of water needed to flush the toilets. Another area of use being explored is the irrigation of certain crops in the field.

Simply providing the people with methods of purifying the water is not enough, however. Educating them on how to sustain the flow of clean water, repair any issues in this flow, and eventually establish further renditions of the supplied methods, is important. This idea is no different from the ancient proverb, “Give a man a fish and he eats for a day. Teach a man to fish and he can feed himself for life.” By learning how to create clean water, the villagers are able to expand upon existing knowledge. This allows them to not only help themselves in situations where the process malfunctions but also to eventually actively partake in the everlasting quest for newer methods that are all in all, better. It could result in the water becoming even cleaner, the purifying process becoming more efficient, and/or the technology becoming cheaper. Finally, it promotes social entrepreneurship. The successful implementation of a self-sustaining clean drinking water plant with all the benefits outlined above will serve as a great model for future endeavors.
In 2015, IIT Bombay Alumni Association - Greater New York Chapter established a new program to recognize the achievements of the high school going children of its alumni members. The initial program was expanded to include the children of all IIT alumni, not just IIT Bombay.

This program recognizes the achievement of high school children of IIT Alumni in academic, arts, sports, performing arts, innovation, extracurricular and/or public service areas.

Eligible students were requested to submit entries detailing their academic and non-academic achievements together with a short essay describing their achievements and the lessons learnt, what advice they would give to others, and unique learning perspective, if any, being a child of an IIT graduate.

Awards of $250 for each winner and $100 for each runner-up were given at the October 4, 2015 Annual Reunion event.

### 2015 Youth Achievement Award Winners

<table>
<thead>
<tr>
<th>Grades 11 - 12</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Sukhmani K Minhas</td>
<td>First Prize</td>
</tr>
<tr>
<td>Tarung G Bhimnathwala</td>
<td>Runner-up</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Grades 9-10</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Prianca A Nadkarni</td>
<td>First Prize</td>
</tr>
<tr>
<td>Aditya Mehrotra</td>
<td>Runner-up</td>
</tr>
<tr>
<td>Brahmteg S Minhas</td>
<td>Honorable Mention</td>
</tr>
</tbody>
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Board Certified Physician in Pain Medicine On Staff

SPECIALIZING IN THE TREATMENT OF:

◆ Arthritis
◆ Back Pain, Neck Pain & Facial Paralysis
◆ Shoulder Pain & Stiffness
◆ Pain & Stiffness in Hip, Knee, Ankle & Foot
◆ Pinched Nerves
◆ RSD Reflex Sympathetic Dystrophy
◆ Migraines

◆ Carpal Tunnel Syndrome
◆ Tingling & Numbness in Limbs
◆ Difficulty in Walking Due To Poor Circulation
◆ Paralysis & Weakness After Stroke
◆ Work Related Injuries
◆ Injuries After Car Accidents
◆ Swelling in the Limbs

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◆ Spinal Problems Like Scoliosis
◆ Burns
◆ Hand Injuries
◆ Surgery For Fractures
◆ Surgery For Cancer
◆ Osteoporosis

Botox Injections for Headaches & Muscle Spasms
Cerebral Palsy • Multiple Sclerosis
Muscular Dystrophy
Movement Disorders • Parkinsonism
Fibromyalgia & Chronic Fatigue Syndrome
Electromyographic Examination of Painful Muscles & Nerves
Bone Densitometry

Registered Physician For Medical Marijuana Program

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... INCLUDING AUTOMOBILE & WORKERS’ COMPENSATION, MEDICARE, HEALTH PLANS, UNION AND HMO PLANS ACCEPTED
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191 Palisade Ave., Jersey City
201-656-4324
Agenda for the Day

Registration & Networking 11.00AM
State of IITBAAGNY – Ron Mehta President 11.35AM
Youth Achievement Awards (YAA) – DC Agrawal, Shweta Bhandari, Mala Ganapathy 11.45AM
YAA Award Winners Essay Reading 11.50AM
Giving Back – Victor Menezes (Retd.) Sr. Vice Chairman Citigroup & DA IIT Bombay 12.05PM
Cooper Union Exchange Student @ IITB – Jean-Dominique Bonnet 12.15PM
Lunch Break & Networking 12.25PM
Fireside Chat with Q&A – Current Economic Conditions in India under Modi Government Panelists:
Arvind Sanger – Managing Partner – Geosphere Capital
Viral V. Acharya – CV Starr Professor of Economics – NYU Stern Business School
Navroz D. Udvadia – CEO – Falcon Edge Capital
Moderator:
Gagan Singh – Exec. Vice President & Chief Investment Officer – PNC Bank 1.10PM
Bharat Natyam Dance Performance – Prianca Nadkarni & Ananya Sankar 2.20PM
IIT Bombay – Status Update – Professor Ravi Sinha, Dean – ACR 2.35PM
Thanks & Closing Remarks – Kicha Ganapathy, Vice President IITBAAGNY 3.00PM

IITBAA-GNY Team

President
Ruyintan (Ron) Mehta ’70
Vice President
Kicha Ganapathy ’67
Treasurer
Raj Singh ’88
Trustees
DC Agrawal ’69
Nivvedan S. ’14
Advisory Board Members
Sivaram (Ram) Chelluri ’74
Subodh Batra ’72
Active Volunteers
Shweta Bhandari ’02
Sushil Bhatia ’66
Vinay Karle ’96
Uday Nadkarni ’78
Kumar Shah ’70
Suhani Shorewala ’14
Jignesh Patel ’92
Gagan Singh ’95
Jude Netto ’66
Maneck Master ’77
Sreedhar Kona ’97
Vikas Tipnis ’74
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Don’t forget to register for our upcoming event!

To register, please visit www.iitbgnychapter.org

Annual Picnic 2015

The IITBAA-GNY family at the annual picnic in Liberty State Park

June 6, 2015
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We celebrate the good work of IIT Bombay, and support its commitment to future generations of scholars and leaders.

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