



Robin J R Blatt, RN, MPH has over two decades of experience in genetics, biotechnology and health policy. She serves as an Adjunct Faculty Member at the Harvard School of Public Health where she teaches a course on contemporary issues and challenges in genetics and biotechnology to graduate students. She also is the Founder of Applied Biogenuity and works as a consultant to government agencies, research institutions, law firms and private and public companies involved in global strategic planning. She formerly worked in the public sector (1983-2005) where she served as the Director of the Massachusetts Genetics Program at the Massachusetts Department of Public Health. Among her many advisory positions, she serves as a Steering Committee Member of the Human Genome Epidemiology Network located at the Centers for Disease Control (CDC). In addition, she worked as a Member of the Massachusetts Medical Society Task Force on Genetics, and, as Member of the Whitehead Institute Task Force on Genetic Testing, Privacy and Public Policy. Ms. Blatt also is Founding Editor and Publisher of The Journal of BioLaw & Business ([www.biolawbusiness.com](http://www.biolawbusiness.com)) - an international quarterly journal established in 1997 to identify and address emerging legal, business, regulatory and policy matters pertaining to biotechnology and the life sciences.

# Collaborating towards a better understanding

Robin J R Blatt has always been intrigued by India and her people. As the first Eisenhower Fellow from the USA to visit India, she chose to examine "the strategic planning and implementation process of life science initiatives in Singapore and India". In her various interactions, she was impressed with the unique blend of entrepreneurial skills and social passion behind social health care initiatives. She shared her experiences with Viveka Roychowdhury.

### What is the history and purpose of the Eisenhower Fellowships?

The Eisenhower Fellowships were founded in 1953 as a tribute to Dwight D. Eisenhower as he assumed the US Presidency. Its purpose and design reflect his conviction that greater understanding among individuals fosters greater understanding among nations and contributes to peace and progress. The purpose of the Eisenhower Fellowships is to engage emerging leaders from around the globe to enhance their professional capabilities, broaden their contacts, deepen their perspectives, and unite them in a diverse, worldwide network where dialogue, understanding, and collaboration lead to a more prosperous, just, and peaceful world. To date, approximately 1600 Eisenhower Fellows from over 100 countries around the world have participated; however, there have only been 162 Eisenhower Fellows selected from the USA.

### Who is the Leadership of the Eisenhower Fellowships?

Former Secretary of State Henry A. Kissinger serves as Chairman. He will be succeeded by former Secretary of State Colin Powell in May 2006. John S.

Wolf, Former Assistant Secretary of State and Ambassador to Malaysia, serves as President.

### You are the Inaugural Eisenhower Fellow from the USA to India...Why did you choose India?

India is a nation that has always held much intrigue for me. The reason I chose India was to better my understanding of what life science and biomedical research is underway, what technological assets exist, how priorities are developed and balanced with other public health needs, how India is framing and executing domestic policies in the life sciences, and, in what ways can developments in the life sciences and biomedical technology within India, provide opportunities for collaboration and impact international relations. Simply put, I just wanted to meet the amazing individuals from India who were responsible for creating the change and innovation underway.

### What were the goals of your Eisenhower Fellowship?

As an Eisenhower Fellow, I proposed to examine the strategic planning and implementation process of life science initiatives in Singapore and India. My

program was designed to entail exploration of 1) government programs and policies that contribute to strong support and commitment in development of the life sciences industry and infrastructure; 2) scientific research and clinical initiatives in developing fields such as cell therapy and clinical trials management; 3) emerging business opportunities, including mechanisms to facilitate technology transfer, capital formation and syndicated financial investments in the sector; 4) strategies and methods for developing clusters, recruiting multinational life science companies for R&D and manufacturing, and developing workforce capacity; and 5) the creation of ethical, legal, regulatory and social infrastructure to facilitate integration of the life sciences into public health practices. My intent was to carefully construct a program to engage discussion of key leaders and entrepreneurs in an effort to gain a better understanding of the opportunities and challenges in developing the life sciences sector and fostering collaborations between government, academia and industry.

### **What did you do while in India?**

During my time in India I met with senior government leaders, business executives, investors, scientific researchers, lawyers, bio-ethicists, academics and individuals working in non-governmental organizations (NGOs). I was exposed to a range of views and spent days and nights attempting to understand the meaning of increased investment in 21st century science and technology in parts of the world where basic housing and unmet public health needs exist. I examined the power and potential of India to lead us in the new Life Sciences Knowledge Economy. I also explored issues pertaining to intellectual property rights and the role of the generics industry in promoting access to medicines and public health. In addition, I explored other areas of interest including trends in bio-prospecting and the preservation of indigenous biodiversity, the use of traditional knowledge in next

generation pharmaceutical production, fundamentals of ayurvedic medicine and spirituality, design and implementation of public health care and systems.

### **Can you describe some of your meetings?**

Colorful, hospitable ... and beyond all expectations! Every person I met with during my visit to India was most welcoming and impressive -- from Mumbai, New Dehli, Coimbatore, Bangalore to Cochin. I had the privilege of spending time with key officials such as Dr. R A Mashelkar, Director General at the Center for Scientific and Industrial Research and leading officials at the Department of Biotechnology. In addition, I met with Dr. Rita Mulhelkar, Head of Genetic Engineering at Tata Memorial Center and participated as a speaker at the National Seminar on Law and Biotechnology organized by Dr. Dhawan at the Tata Environmental Research Institute (TERI) School of Advanced Studies. I spent time with Shehnaz Vakharia (CliniRX Research Pvt Limited) learning about the tremendous opportunities for clinical trials in India. I also met leading health care providers at Amrita Institute of Medical Sciences and Narayana Hrudayalay Institute of Cardiac Sciences as well as key senior business executives from Biocon, Nicholas Piramal India Limited, Cipla, Ranbaxy Laboratories, Reliance Industries, Pfizer Limited, Novartis, GlaxoSmithKline and Wipro. These meetings were interspersed with visits to Organization of Pharmaceutical Producers of India (OPPI), the Biodiversity [India] Conservation, The Ayurvedic Trust, among many other fascinating experiences.

### **What were some highlights?**

I had the unique opportunity to meet a number of brilliant women, in both the biomedical sciences and business. I specially recall my meetings with Rajshree Pathy, Chairman and Managing Director of Rajshree Sugars and Chemicals Limited, and Ms. Kiran Mazumdar-Shaw, the Founder, Chairperson and Managing Director of

Biocon. Both ladies are entrepreneurs, who have made tremendous contributions to provide quality healthcare and health education for the betterment of Indian society.

Rajshree Pathy is responsible for introducing pure, organic branded sugar in India and setting up the sugar factory (and jobs) in Andipatti where there was no water and sugarcane cultivation. She has undertaken amazing projects that have aided villages and communities, created numerous jobs, and has provided tremendous economic development benefits within India today. One of the emerging areas she is pursuing relates to the use of bio-fuels such as ethanol. She is also involved with Aurveydic medicine.

Ms. Kiran Mazumdar-Shaw, established BioCare Pharmacies, through the Biocon Foundation, to provide the people of rural India with high quality medicines at discounted prices. Together, with Dr. Devi Shetty (see below), they created the Arogya Raksha Yojana Trust, a comprehensive healthcare program offering citizens of rural India affordable access to high quality healthcare provided by a network of hospitals and clinics supported by leading doctors and surgeons. This innovative program covers people against critical illnesses and surgeries and also entitles them to free or subsidized medical examinations and low cost medicines. Ms Mazumdar-Shaw views innovation as India's "strongest currency" and speaks of intellectual wealth, unlike conventional wealth, being ramped up quickly to enhance society, the economy, and to make a difference in the lives of individuals.

Additionally, I had the honor of meeting Dr. Devi Prasad Shetty, a charismatic visionary, humble cardiac surgeon and man with a huge heart, who founded Narayana Hrudayalaya in Bangalore. We discussed the public health crisis of heart disease among Indians. And, combining his entrepreneurial skills and social passion, Dr. Shetty described the telemedicine and telehealth programs

# Special Feature

and the charitable wing he established to provide financial assistance for those who are unable to afford cardiac surgery. Working in collaboration with Ms. Kiran Mazumdar-Shaw, he is also a founder of a statewide insurance program for the poor. In essence, Dr. Shetty has established a public health system and through his work he is giving life to many people who might not have been able to afford it otherwise.

## **What would you describe as a major impact of this experience?**

There is no doubt that decisions of a community or a nation are made by its people; as such, when examining the role of a country in any area it is essential to identify the individuals within who are responsible for shaping policies, facilitating change and making a difference. Significant community outreach efforts are underway by many of India's entrepreneurs; and the expression of individual and corporate social responsibility among the individuals I met was notable and inspiring.

## **Other findings?**

India is an awe-inspiring nation with tremendous diversity and talent, in all aspects. The experience of India tackles all senses and assumptions. Like the "Land of Oz," India is an experience of things not being as they seem. At first glance, India seems to be a chaotic and confused country. However, despite problems of poverty and poor infrastructure, tremendous vision, entrepreneurship and sense of social responsibility exists within India. One tends to think about India in terms of its poverty, which needs to be recognized and addressed; at the same time, it's important to realize that the pace of progress and potential of Indian science and technology is astounding. I was struck by the unusual blend of mission, passion, creativity and concern for the importance of sustainability and development of sustainable technologies. And while the majority of the people of India may be economically poor, there is tremendous

richness in knowledge and entrepreneurship, perhaps generated by a need to create new solutions to serious problems that exist.

I also think there is a significant need to for increased awareness, analysis and appreciation for the history and philosophy of India's generic drug companies and the systems in place to take care of it's people and those in developing nations who cannot afford the pharmaceuticals developed by multinational companies. Pharmaceutical pricing and affordability, in the context of intellectual property protection, is a major public health issue requiring further global dialogue and attention.

Biotechnology seems to be envisioned as a "technology of hope" for the potential of its promise and enabling technology that can be applied in the areas of health care, agriculture, industrial processing and environmental sustainability. At the same time, I sense there is clear recognition of the ethical, legal and social issues that face society today.

## **What do you think needs to be improved if India is to become a global leader in the life sciences?**

A major bottle-neck within India that impedes its growth is the poor infrastructure that exists. Clearly, infrastructure development to support R&D, and enhance workforce education and human resource generation is on the rise; however, improvements in the "hard" infrastructure (such as roads, utilities and other necessities) are critically needed. The "soft" infrastructure (such as knowledge, research capacities, etc) will only be enhanced by such advances.

## **Now that you are back in the USA, how do you envision moving forward and what role will India play in your future efforts?**

I feel compelled to participate in and nurture a new climate of collaboration with life science leaders and policy-makers both in India and the USA in order to catalyze new collaborations and to create positive change.

I expect to identify opportunities that will enable me to develop program for professional exchanges in the life sciences, both at the academic, business and policy levels. Further, I intend to launch a special segment in The Journal of BioLaw & Business ([www.biolawbusiness.com](http://www.biolawbusiness.com)) that focuses on the contributions of India to this emerging sector. I also intend to integrate the knowledge gained from this experience into my course "Genetics, Biotechnology and Public Health: Contemporary Issues and Challenges" at the Harvard School of Public Health. I expect to add a global twist to the curriculum and to encourage student-focused work in this area.

## **What drives you to move forward in this direction?**

The convergence of science, technology, law and business and integration of the life sciences into modern society is creating both unique opportunities and novel challenges. In recent years, life sciences has become one of the most rapidly developing areas of research and economic development - even in parts of the developing world where poverty and basic public health remain at the forefront of society. I believe that as the ability to understand and improve science and technology increase, so too does the need to carefully assess what change and infrastructure is required to meet the unique issues posed by this new era.

I began my Eisenhower Fellowship knowing that it would be a transformative experience though not necessarily knowing who I would meet, what to expect or where it would lead. In the end, I discovered and experienced much more than I could have ever imagined. It is already obvious that the course of my professional activities in the life sciences from now on will be strongly influenced by this unique experience; further, I anticipate and look forward to establishing ongoing professional relationships with the very special individuals with whom I met while traveling in India as an Eisenhower Fellow. ■