

NATURAL SELECTIONS

A Newsletter of The Rockefeller University Community Issue 6, July 2004

Science Inc.

By Ellen Howard and Mary Abraham

As a child, did you want to be a scientist when you grew up so you could cure diseases? Such an aspiration is actually a fairly recent phenomenon. The word scientist, the professionalization of science, and the creation of many of the institutions and structures so integral to the functioning of modern science only began around 150 years ago. Between 1830 and 1870 was a period of remarkable scientific development. In 1802, only 20 full-time scientific jobs existed in the USA, yet by 1880 there were 800 professional scientists. How and why did professional science begin, and how were the early scientific pioneers viewed by society?

In 1833, William Whewell coined the word scientist, a new derivative of the Latin word for knowledge. At a meeting of the British Association for the Advancement of Science, Whewell proposed that the name scientist could provide a collective identity to unite a chaotic ensemble of amateur researchers, known by various names including natural philosophers or men of science. Many of these people were upper class gentlemen for whom science was a hobby. However, it was an era in which many other fields such as law or medicine were turning professional. The idea of specialization and organized group endeavors was gaining popularity at the expense of the previous ideal of a solitary quest for wisdom. The whole concept of how to carry out science was undergoing a revolution.

Around the time that the word scientist entered the lexicon, many of the institutions and scientific support struc-

tures that we now take for granted first arose. In America in the 1830s and 40s, professional scientific journals were springing up, the Smithsonian was established, and local scientific associations were losing ground to national organizations, such as the American Association for the Advancement of Science (founded in 1848). Scientific meetings were becoming important. Scientific schools were founded at Harvard and Yale and, by 1850, many colleges started to offer science degrees as an alternative to the long established BA in humanities. By the 1890s, science PhDs were becoming commonplace. These developments in the USA closely mirrored changes in Europe, where Germany was the world leader in the professionalization of science.

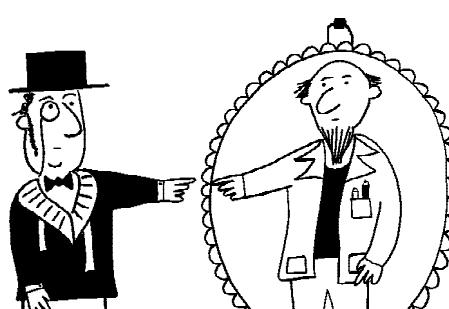
Science had suddenly come of age, but what was its reputation? Professional science found its home at the universities, many of which had a strongly religious identity. Initially, science had great intellectual prestige in the academic hierarchy, as it was considered to be a profound way to appreciate God's creation. The universities' Protestant ethos of open enquiry and independent thought provided a supportive environment for science to flourish. However, the religious entente soon eroded and, by the 1870s, scientists no longer framed their work within any spiritual

context and science emerged as a discipline separate from the realm of religion as a way to find truth. The public's response to the new organizations was losing ground to national professional scientists was mixed. Tension arose as the amateur gentleman scientists were superceded by the superceded by the professional breed. Another affront was the birth of jargon and, as science grew more specialized, scientists were beginning to speak their own language, which the 19th century public could not translate. The public was still keen to learn about the latest scientific marvels and so popular science emerged to fill this need. In 1845, publication of *Scientific American*, the oldest continuously published magazine in the USA. Public dialogue was not just to raise awareness, it was vital to determine funding. Yet even in those early days, there was public disillusionment when science failed to deliver on inflated promises and skepticism when scientists took credit for technological advances they had not aided.

What was the American perspective on science at that time? Naturally enough, in the recently founded American nation a debate arose about the democratic nature of this new profession. Was scientific power to rest in the hands of an elite, an unpalatable concept in the New World because of the negative associations of elitism left behind in Europe? How democratic should American science be - would

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Natural Selections Editorial Board:
Mary Abraham, Ian Berke, Alexandra Deaconescu, Paula Duque, Ellen Howard, Muriel Lainé, Martin Ligr, and Vasant Muralidharan.



PDA News

This column provides reminders and updates of PDA activities and services.

The current PDA representatives are Tirtha Das (Gaul lab), Asifa Haider (Krueger lab), Andreas Keller (Vosshall lab), José Morales (Auerbach lab), and Bill Netzer (Greengard lab). They will be the representatives for 2004-2005.



Tirtha Das
Postdoctoral Associate
Gaul Laboratory

In my two years at RU, I have greatly enjoyed participating in PDA activities. These events allowed me to establish meaningful personal and scientific associations and develop a sense of community. I share many of the concerns of my fellow postdocs. I feel that postdoctoral issues need to be addressed and actively worked on by postdocs themselves. I advocate free flow of opinions between postdocs and the PDA. This provides us, the representatives, the impetus as well as the ammunition to proactively deal with issues important to this community. I invite postdocs to get involved in all PDA activities. As social chair on the committee, I will ensure that wine and fun keep flowing.



Asifa Haider
Postdoctoral Associate
Krueger Laboratory

I came to the US about 6 years ago for my PhD and, since there are better research opportunities in the US than in Switzerland (country I grew up in), I decided to stay in NY for my postdoc. As a pharmacologist/pharmacist, I was attracted to the opportunity of conducting clinical research at RU in one of the country's largest research hospitals. Psoriasis is an excellent model to understand basic mechanisms of autoimmune diseases in humans and developing new therapies. I am trying to understand the disease as well as the individual responses of the patients to

drug treatment in the context of pharmacogenomics. Among other things, my motivation in becoming a scientist is to satisfy my curiosity about little things that might help me see a bigger picture. I believe that postdocs, students and research associates are the backbone of a scientific community and should be represented. I would like to continue my representation of the postdocs after spending almost a year with the old team. I hope I can continue with the same motivation and dedication as them. Besides our motto of making decisions as well as working as a team, my focus will be career development and better scientific interaction on campus.



Andreas Keller
Postdoctoral Fellow
Vosshall Laboratory

I was born in Nuremberg (Nürnberg), a small town in Southern Germany. I spent the next 29 years in even smaller, Southern German towns going to College in Erlangen and to Graduate School in Würzburg. I moved to New York to study the sense of smell in flies in 2002. Recently, I have been interested in the sense of smell in humans. I cannot remember why I decided to become a scientist, but I don't regret my choice. I came to The Rockefeller University because I wanted to work in Leslie Vosshall's lab. I wanted to be a PDA representative because I'm grateful I have the chance to work here, and I want to give something back to the university by supporting and helping postdocs.



José Morales
Postdoctoral Associate
Auerbach Laboratory

I am the PDA representative who has been at RU for the shortest time. I am native to the Bronx NY and educated in public schools and northeast educational institutions. I became a scientist because I was very impressed by all the life forms I saw with my little wooden microscope in a drop of puddle water from Bronx Park near my cousin's building. While I have visited various places

in Latin America, I have only lived or worked in the USA. I am working in Arleen Auerbach's lab on the genetics of Fanconi Anemia heterozygotes. I wanted to work on a project at the clinical and basic research interface on a DNA repair related issue. As the "new kid", I thought being a PDA rep would be a good opportunity to meet people. I now see postdoc organizations as the cutting edge of the US and global science workforce.



Bill Netzer
Research Associate
Greengard Laboratory

My passion for science developed in boyhood when, like many native New Yorkers, I was taken to The American Museum of Natural History. Although my interest never waned, it took some time for me to decide on a career in science. By the time that happened, I couldn't imagine spending my life doing anything but science. I came to RU because I wanted to work on Alzheimer's disease and felt that my experience in protein folding could be applied. I also wanted to become more fluent in the methods and concepts of signal transduction, hence the Greengard laboratory. I'm trying to understand the mechanisms of beta-amyloid production and how an otherwise physiological process is subverted to cause disease. I recently became a Research Associate (RA) and decided to become a representative to become better informed on issues concerning postdocs and RAs and to be in a position to inform others in similar situations, as well as to generate some new ideas.

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the US appetite for practicality triumph, or could abstract research with no immediate benefits be justified? In the 1830s, Tocqueville analyzed the effects of democracy on American society. He discerned a practical streak to American science, less sympathetic to abstract science than aristocratic cultures: "permanent inequality of conditions leads men to confine themselves to arrogant and sterile research of abstract truth; whilst the social condition and institutions of democracy prepare them to seek the immediate and useful practical results of the sciences." However, Tocqueville urged Americans to foster abstract research despite their inclinations toward more utilitarian goals. He was optimistic though that American science would blossom because of the value of cultivation of the mind in a democracy: "it becomes evident that the chief cause of disparity between the fortunes of men is the mind. Whatever tends to invigorate, to extend, or to adorn the mind, instantly rises to great value."

What was the scientific niche of The Rockefeller University at its foundation in 1901? Although scientific research was becoming more professional, similar progress had not been achieved in medical research. It was an era when medicine was held in very low esteem. However, in late 19th century Europe there were indications of genuine scientific methods, particularly in bacteriology, used to provide medical advances. The newly founded Pasteur and Koch Institutes sought to capitalize on these successes. But medical research was certainly not mainstream. When RU was founded, only five American universities had substantial medical research units and only three relevant journals existed. RU was innovative because it was the first US institution in which medical researchers could work full-time in their laboratory without the demands of medical teaching. One RU professor at the time wondered if he would be able to fill his day with just research alone! The medical research profes-

sional had been born.

By the time RU was founded, there had been much change in the scientific process, and scientists began to pay increasing attention to their public image. The sources of research funding were being redefined and the general public did not trust scientists alone to decide what science got funded and for how much. Science remained a hot topic and in popular magazines such as *The Saturday Evening Post* people read about how scientific research could lead to cures for diseases, or how it could help the country defend itself in time of war. Scientists also began to emerge as heroic literary characters. One such example is Sinclair Lewis' 1925 novel *Arrowsmith* set in the McGurk Institute, a thinly veiled portrayal of The Rockefeller University. To get an insider view of RU, Lewis consulted extensively with Dr. Paul de Kruif, a bacteriologist who had worked at Rockefeller. The central character Martin Arrowsmith may have been modelled on de Kruif and many characters in the novel were clearly based on people at Rockefeller. In the book, Lewis shows the difficulty faced by the idealistic scientist in searching for scientific truth. Thus, the world was given one of many vivid images of the noble scientist.

As time has passed, the pursuit of science continues to retain much of its initial prestige. Scientists play a major role in society with scientists advising world leaders, evening news reports generally containing at least one story on a new scientific breakthrough, scientists (whether good or evil) serving as major characters in films, and scientific data generally influencing legislative decisions. According to a study by the National Science Foundation, most Americans indicate at least a moderate interest in news about the latest scientific breakthrough, yet only 2% of the most closely followed news items are about science.

There is a definite perception of what a scientist is which has remained rather constant over the last 50 years. In 1957, Margaret Mead developed the Draw a Scientist Test (DAST) for children.

Children often depict scientists as men wearing glasses, a white lab coat, with lots of hair (especially facial hair). Even as children get older and learn more about science, these impressions are even more concrete for them. Children tend to picture scientists near laboratory equipment with notices of danger. Although these drawings tend to support the notion that scientists are slightly crazy, most surveys of adults and children show that the majority views scientists as "helping to solve challenging problems" and "dedicated people who work for the good of humanity." Only 25% of those surveyed believe that scientists are "odd and peculiar people." Interestingly, public confidence in the leadership of the scientific community is greater than that of the Supreme Court, education authorities, the press, and television. Only medical professionals are more trusted than scientists.

One could argue that over time, the definition and perception of the professional scientist has not changed much at all. Regardless of what vision pops into a person's head at the thought of a scientist - someone hairy or bald, male or female, crazy or normal - the core image is someone engaged in the admirable task of seeking knowledge. We owe much to the early pioneers who made such an impact on how the world views scientists today.

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India

By Vasant Muralidharan

One billion people and counting, 5,000 years of history, a little more than one third the size of the US, 17 official languages and around 800 dialects, 8 actively practiced religions, the birthplace of Hinduism, Buddhism, Jainism and Sikhism, world's largest democracy; these are a few dry facts about a country I call home, India or Bharat. Of course, there is much more to India than these facts.

India is a relatively young democracy, having gained independence from the British Empire in 1947. We got rid of the British in a uniquely Indian manner, through non-violent mass resistance and this in the face of extreme violence from the British. This struggle has been captured quite nicely in the movie, "Gandhi" directed, ironically enough, by one of Her Majesty's citizens, Richard Attenborough. India adopted its secular constitution, based partly on the British common law and the American constitution, in 1950. Today we are a very successful parliamentary democracy and we had elections recently with around 55% turnout, which is actually considered low for Indian elections. The best part about the recent Indian elections was the fact that all the analysts and pundits were proven wrong. Everyone had predicted the incumbents would have an easy and overwhelming victory, as the economy was growing and the Indian cricket team was winning for once! However, everyone forgot the large section of the population that has been, so far, left out of the current economic boom. The rural poor basically gave the incumbent party a swift kick in the behind as they had done nothing to improve their lot and the poor in India take their voting rights very seriously. That bodes well for the fledgling Indian democracy. India is one of the few former British colonies with a stable democracy since independence.

Living in the US, one thing that I miss is the insanely crowded cities of India. Though New York comes close, compared to Bombay, Madras, Calcutta or

Delhi, it still seems like a small town in the Midwest. Delhi, situated in North India is the capital and the political center of India. It has been the capital of the country since the Mughal times and is full of interesting Islamic archeological sites. And then there are cities like Varanasi (or Banares), on the banks of the Ganges River, a holy site for Hindus. Varanasi is the oldest continuously inhabited city in the world.

Bombay, situated on the northwest coast of India, is the commercial capital of India and the largest city in the country. It sprawls over 170 square miles with a population of about 18-20 million. Bombay became a city during the British times and was given to the British by the Portuguese, as dowry. It quickly became an important port thanks to a natural harbor. Bombay was originally 7 islands, which were joined (over three centuries) into one big island. Bombay is a true cosmopolitan city; you can find people from every corner of India. Bombay is sort of like New York and LA put together, since it is also where all the Bollywood movies are made. And boy, do they make movies! Over 800 are made every year and yes, most of them are some kind of musical love stories, with lots of song and dance (especially around trees). But they also make some really nice movies and provide a glimpse into the Indian culture and psyche. Of course, it's all a tad bit overdramatic and a bit removed from reality. However, they do portray the color, sentimentality, hospitality, motivations, religiosity, pride, traditionalism, contradictory nature, and modernism of the Indian people.

India is alive with numerous cultures, languages, and religions. There are 28 states, each of which has a unique language and culture. It feels like traveling to a new country every time you cross state boundaries. The geography also varies a lot from state to state. With the Himalayas in the North, the Ganges plains flanking the Himalayas, the Thar Desert in the Northwest, the tropical forests in the Northeast, the Konkan coast in the West (with the most amazing beaches and tropical forests), the

Coromandel Coast in the East and the Deccan plateau in between the two coasts. The best way to see all of this, if you ever happen to visit India, is to use the Indian Railways. It's the second largest rail network in the world and probably the cheapest. Indian Railways are the world's largest commercial employer, with more than 1.6 million employees on its payroll. The trains in India are a wonderful way to experience Indian culture too as the passengers come from all walks of life. It is as if the whole country has been squeezed into a rail car, literally and figuratively!



There are some really spectacular routes that the trains pass through. Like along the Konkan coast where the Western Ghats mountains abut the Arabian seaboard, a 760-km long route dotted with 2,000 bridges and 92 tunnels. The Konkan railway passes through some amazing beaches too, the most famous of them being in Goa, a very popular destination for Western tourists. The Palace on wheels tour is also quite breathtaking, passing through the desert state of Rajasthan and the plains of the state of Uttar Pradesh. You get to marvel at massive forts in the middle of the desert, the pink city of Jaipur, the oasis in Udaipur, the wild life reserve of Bharatpur and, of course, to top it off, the Taj Mahal.

The crowds in urban areas are a symbol of India, more so than the Taj Mahal. You feel alive in a sea of humanity. However, a large proportion of these crowds are people who live in dire poverty, something often mentioned in the Western media. Around 20-25% of Indians survive on a few dollars a day, that's 200 mil-

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lion people (same as the population of the US). The Indian economy opened up to the world only about 15 years ago. Since then, the economy has grown steadily. Though this has alleviated the poverty problem a bit, we still have a long way to go. Poverty is a complex problem and though much is said about it, precious little is done. Illiteracy and rapid population growth are also problems that need to be controlled as they are contributing factors to poverty. To tackle this problem, not only do we need good governance, but also a decent health care system and mechanisms in place to provide opportunities for people to improve their lives. When India joined the WTO, it caused a jump in rural poverty in India, because the government was forced to remove subsidies to farmers. I find it hypocritical that Western governments still subsidize their farmers and agri-business corporations, while undercutting subsistence farmers in India. And, on the other hand, there is much outrage about outsourcing of a few jobs to India.

The good part about a growing economy is that the future looks



bright. It provides hope that we might be able to tackle many of the problems plaguing India, on a much larger scale than has ever been possible. This is reflected in the science budget in India, now at \$1.5 billion or about 1% of the GDP. While the amount is small compared to money spent by the US or Western Europe, it is a step in the right direction and growing. Much of this money is being spent in the IT sector, as India is the world's largest exporter of software professionals. India has the second largest assembly of English-speaking scientific professionals in the world today, second only to the US and this number is growing. In the biomedical research area, the government still plays a big role, with most of the research being done in government run institutions, unlike in universities in the US. It is only in the past 15 years or so that the government has, slowly, freed

research activity from a lot of bureaucratic red tape, but a lot more needs to be done. Research in the private sector, while virtually absent in the first four decades after independence, is growing. Many multi-national pharma companies are setting up R&D facilities in India, taking advantage of the cheaper costs and the large number of professionals available. The public-private partnership is an area that has yet to take off and holds a lot of promise for the future.

India is a country on the verge of explosive growth. What has been achieved so far is amazing, but the best is yet to come. There are a lot of obstacles in the way, such as a corrupt government, regional conflicts, pressures on the environment, the growing divide between the rich and the poor, and a high rate of unemployment. But we also have a lot going for us; a stable democracy, a large and growing middle class, a free and independent press, decreasing illiteracy (primary education was made a basic right in the Indian constitution), and a growing economy that hasn't yet reached its full potential. It is certainly an exciting time to be a citizen of India.

New York State of Mind

How long have you been living in New York City? I have lived in NYC for almost three years now.

Where do you live? Scholar's Residence on 63rd St and York Avenue.

Which is your favorite neighborhood? The 'Museum Mile' on Fifth Ave where The Metropolitan Museum of Art, the Guggenheim Museum, etc. are located.

What do you think is the most overrated thing in the city? And underrated? Broadway musicals are overrated. They're targeted to tourists whose visit here MUST include a Broadway show as well as a look at Rockefeller Center. To attract the tourist audience, Broadway producers stage musicals that are familiar revivals



or feature well-known but not necessarily talented 'names'. The plays are not as bad – for example, the Broadway drama, "I Am My Own Wife." However, the best for tourists as well as residents is Off-Broadway and Off-Off Broadway plays. Off Broadway theatre, which is cheaper to attend and typically better than most Broadway productions, is underrated.

What do you miss most when you are out of town? Not needing a car to get around.

If you could change one thing about NYC, what would that be? The

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Country of Origin: USA
Photo By Zach Veilleux

economy - I'd turn back the clock to the Clinton administration.

Describe a perfect weekend in NYC. Sunshine in the mid 70s and low humidity. I'd spend the day at museums and Central Park and the evening at a great Off-Broadway play, followed by dinner at Barbetta or another superb Italian restaurant.

What is the most memorable experience you have had in NYC? 9/11 – my second day at work at Rockefeller.

If you could live anywhere else, where would that be? Paris.

Do you think of yourself as a New Yorker? Why? Yes, because in my hometown of Atlanta, my friends tell me that I act and look like a New Yorker.

Art and Science

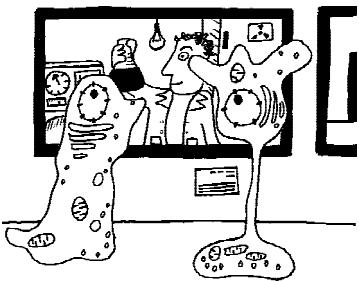
By Natalie de Souza

I am decompressing, these days, from a period of feverish activity in the lab. The sort of period that is familiar to every scientist at the bench, I imagine; when there is a talk to be given, say, or a competitor to be out-paced or occasionally, if you are one of the fortunate, when there is that mad desire to know. Sessions at the microscope until the insides of one's eyelids feel sandpapered. More hours counting nematode pseudovulvae – or fly bristles or, in a different way, radioactive decay – than one ever imagined were possible. An almost complete absence of thoughts unrelated to the experiments at hand. I enjoy these periods, though I can't sustain them very long. It's good, it is still very good, to occasionally tug on the dispersed nuclei of energy and attention that make life full and varied and indeed worthwhile, to feel them respond and reel them in, and to bring them to focus acutely on a single matter, a single infinitesimal piece of the world. But it's tough and tiring and, at least for the moment, it's over.

The best thing, as Bruce Chatwin put

it, though admittedly he wasn't talking about recovering from an intense time in the lab, is to walk. As I strolled many miles around the city one recent sunny morning, I found myself on the East Side, at 79th Street, in front of the Salander-O'Reilly galleries, where there was a showing of John Constable's cloudscapes. Thinking it would be pleasant to look at a picture or two, I went in, and was joyfully surprised at what a difference a cloud can make. The paintings are mainly studies of unidentified skies, though there are a few, and these include some of the best, that have smudges of land or water. There is an immediacy to them that suggests they were painted quickly, certainly in a single sitting, and almost all are dated specifically. It's strangely affecting to know that the wind blew so strong over Hampstead Heath at sunset on September 12, 1821 – it practically blows at you off the paper in the surge of the clouds – or that on August 9, 1823 there was such heavy weather at the same spot. Or even that the light was so tender on August 31, 1822, in some anonymous scrap of sky. They are almost photographic, these paintings, in the sense that they freeze that which is most fleeting, the play of light on water

vapor, the ineffable shifts of mood that come with changing refraction and diffraction through our swaddling layers of atmosphere. And it is mood, finally, that streams off each canvas. Constable is good when the day is pastel and joyful, but he is better in melancholy and masterful in foreboding and it was with a slight uneasy edge of this last that I went back out into an emphatically cloudless New York day.



The last time that I stood in front of pictures on a wall was at the International Center for Photography in Midtown. *The Art of Science*, now ended, was a small showing of variously high-tech images of cells, tissues and the body, submitted by four or five groups, including the Hemmati-Brivanlou lab at

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Rollerblading, anyone?

By Catharine Boothroyd

My first attempt at rollerblading was not glamorous. These heavy things with a single blade, four wheels, and a 'brake' in the back were just not like the metal key skates of my childhood! And to make matters worse, it was on one of my first dates with my (now) husband, a master of the sport. He was weaving in and out of cones, jumping over trash cans, and generally looking like the skates were an extension of his limbs, while I was flailing around and trying to remain upright. Once I mastered the upright and forward moving technique, I experienced Newton's First Law in a more personal way; the 'brake' on the back of my right skate was not living up to its name! Thank goodness for wrist guards and padding.



After much perseverance and a good lesson on stopping (the 'squat and scissor' technique), I'm proud to say I can at least keep up with my husband and even do some tricks! The city is full of places to skate; Central Park, Riverside Park, the Hudson River Park, and the East River Esplanade are just a few. If you don't own a pair, you can rent from Blades Board and Skate (several locations throughout the city, but the

closest is 120 West 72nd St. at Columbus Ave. 212 787-3911) for \$20 a day. If you're just starting out, you may want to head to the free Stopping Clinics in Central Park (East and West 72nd St. entrances, weekends from 12:30 - 5:30 pm). If you're a bit more experienced, you can join the weekend skate parties in Central Park by the Bandshell (or at least watch!). And if you're feeling really confident, there are several skate clubs throughout the city that sponsor group skates (e.g. Empire Skate Club - www.empireskate.org; Wednesday Night Skate - www.weskateny.org; Blade Night Manhattan - www.geocities.com/bladenightnyc). So strap on a pair of skates, and I hope to see you out there!

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Rockefeller. I spent some time in the room watching the responses of the people that came in, presumably more non-scientists than not. They tended to gravitate, as one might predict, to the colorful. Fluorescence microscopy, judiciously - by which I mean multicoloredly - executed, can of course produce pictures that are arresting. But I was satisfied that, by and large, the faintly bemused reactions of most people seemed more involved than just that. Because conceptual beauty, the whiff of a possibly greater insight into our own workings, is added to the mix, I think, micrographs generate an interest and a response that surpasses a merely aesthetic one. Though it's hard to imagine that any of this is done very analytically by most viewers, and certainly, not a single person I watched spent any time reading the explanatory technical notes on the side. People are interested, but in a puzzled, slightly lethargic way.

I was amused myself by functional MRI images comparing the brains of men and women as they go about an identical verbal task. The male brain lights up in only one hemisphere as he attempts to rhyme a nonsense word, while the female does so, consistently and reproducibly, in

both. Or perhaps it is the other way around, but the fundamental point stands. Men and women are different after all, I was happy to note.

All of this said, however, *The Art of Science* was not immune to the muddle and over-simplification that arise all too frequently when the Two Cultures meet. Take the statement, for instance, that the images of cells undergoing a stress response are particularly relevant in post-9/11 times. Although it could turn out to be true that there is a link between organismal emotional stress - the fear of a terrorist attack - and the cellular stress response, the reference to 9/11 was in my view an erroneous and trend-following conflation of two unrelated concepts, not a subtle assessment of future discoveries. It is too easy, this sort of error, too tempting to avoid. And then there was the curator's statement that posed what it called a fundamental question about new imaging technology, asking how the pixelization and digitization of the human body would change our view of ourselves. This, it seems to me, is a bit beside the point. It is trivially apparent to point out that a micro-

scope, digital or not, is a tool, and no different in this regard from the camera of a photographer or the brush of a painter or in fact the pen of a poet. It is a sharper tool, one might say, though this depends a very great deal on the nature of that which it intends to dissect. And it is this - what digital microscopy can tell us, the nature of it and the actual facts - that is where the collection has its meaning and its point. The nature of the tool, in this regard, is irrelevant. As Aldous Huxley puts it in his terrific 1963 book, *Literature and Science*, both the scientist and the poet attempt, each in their very different ways, "to give a purer sense to the language of the tribe," to find a means to describe the human more accurately, to understand him more completely.

The thought of Huxley brings me back to decompression, which I completed that day in his company. I read on the grass under a tree, a frequently necessary activity in the easiest of times, but especially when the hours in the lab have been long and the experiments flying fast.

Foul Play

By Donald Anas

Recently, the Rockefeller campus was abuzz with news of ducklings hatching in the area outside the Faculty Club. Members of the RU community made sure that the ducklings were well taken care of by placing a ramp from the fountain up to land so that the ducklings could go for a swim and return safely to terra firma when they were tired.

Something has gone awry however! The ducklings and their mother are missing. Shortly after their disappear-

ance, the Weiss Cafeteria menu board had some suspicious new menu items prompting unease amongst regular customers. I approached cafeteria management for an explanation. They told me it was entirely coincidental that the ducks' departure coincided with National Poultry Day, but that I should be careful, because people that like to ask too many questions often find themselves "sleeping with the ducks."

Bon Appetit everyone!

The Stepford Scientists

While my gel was running, I ironed all the labcoats and cleaned out the waterbaths.

I'm so happy, the extra experiments the reviewers want will make my paper so much better.



Parent-to-Parent: The Custom Conundrum

By Dr Mom

Someone has just complimented you on your infant's looks. Do you take the time to thank them or nervously smile and start making a series of 'spitting' gestures on the baby's head? Well, if you are from the South-Asian subcontinent, you will likely do the latter because you want to ward off any impending ill omen unintentionally aimed at your child. What you will also often do, exactly for this reason, is mark a nice black circle on the left or right of your child's forehead so its good looks can blossom unimpeded by people's appreciative glances.

Although some of these customs are indeed getting diluted with each 'internationally-minded' generation, we parents are often torn between which customs to keep and which to forgo. Take the issue with shaving birth-hair for instance. Many Asian cultures subscribe to the custom of shaving off an infant's hair within the first few months, if not weeks, of its life for reasons that primarily include marking an end to womb-hood and an entry into a new world. What a dilemma, then, if you have a winter baby blessed with a mat of thick hair on its head that shows no sign of falling off on its own?! Ah, the joys of being cultured. Keeps life ever so interesting.



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"It's my Atkins at South Beach diet!"

By Sean Taverna

Fourth Dimension

By Al Byon

While preparing the barbecue and fireworks for the holiday weekend - perhaps spare a thought for those members of our society who are being marginalized solely on the basis of their ethnicity. Those who are suffering isolation because they have the wrong name or practice different customs. Those who endure constant accusations of supporting the axis of evil, tyranny and perfidy.

Thankfully these outcasts see hope on the horizon at Rockefeller because of the installation of our first English President. Under the leadership of Sir Paul, many of the humiliating discriminations the British endure elsewhere in America will not be tolerated at Rockefeller. "Thank God someone will show us compassion at last," said a British RU postdoc, "No-one can imagine the agonies you suffer trying to make restaurant reservations in America if your name is Benedict."

One immediate point of concern is the issue of language - the linguistic segregation problem. Dr Nurse already has two translators as part of his entourage who ensure that he can easily communicate with the natives. The translators keep conversation running smoothly by helping with matters as diverse as the American equivalent of the word clingfilm (saran wrap), as well as explaining cultural references such as, "Who is Martha Stewart?"

Not everyone can be offered a translator, however the president is implementing changes known as "Operation Returning Civilization" in order to improve conditions at Rockefeller for those of English heritage. By September, all official documentation will have to be bilingual. All weather temperatures will have to be reported in both Centigrade and Fahrenheit. All dates on any university correspondence will have to be written out in full to avoid confusion since 5/8 is May 8th in America, but August 5th in Britain. Due to one such date mix-up, Dr Nurse missed a subcommittee meeting of the committee in charge of organizing his other committee meetings and anarchy almost ensued. Those who do not comply with the new regulations will be 're-educated' at Camp Anglophilia on Roosevelt Island.

The July 4th holiday seems secure for now, but plans are afoot for another university holiday to be added for fairness. July 30th was the date in 1966 when England won the soccer World Cup. Isn't that a holiday everyone can celebrate?



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