

Natural Selections

A NEWSLETTER OF THE ROCKEFELLER UNIVERSITY COMMUNITY

The State of Biomedical Research: An Interview with Paul Nurse

RUDY BELLANI

This month, *Natural Selections* presents an interview with Sir Paul Nurse about his recently published *Cell* Op-Ed article, *US Biomedical Research under Siege* (January 13, 2006). The article outlines his views on the state of biomedical research in the US and proposes possible solutions for some of the threats and problems.

Natural Selections (NS): How did you get involved in writing this piece?

Paul Nurse (PN): I got involved because *Cell* approached me to say they were starting a new editorial series, and asked if I could write one. I thought it would be good to take on what was bothering me about biomedical research at the present time in the United States. Because I have worked most of my life in the UK, perhaps I could bring different perspectives to that issue—on how to fund research and make funding decisions, and the political implications of these. We've got to speak out about these issues because they are extremely important, and I think the US is in danger of losing its scientific eminence.

NS: What is the impact you hope the piece will have?

PN: There is nothing in it very different from what has been said by other people. It's light on background information because I wanted to focus on the general principles and ideas and offer some solutions. I'm hoping the article will stimulate interest among working scientists. If it is thought useful, I might try to reformat it for the general public.

NS: One pressure on science that you mention is the dwindling funds—there will be fewer grants funded. What impact do you think these developments will have on the university?

PN: Rockefeller University is extremely strong and well-placed to deal with dwindling funds, better than nearly any other institution in the US. That doesn't mean I am not worried about the funding situation; I am worried about it, and we have to do

things to correct it. There are two reasons why we are well placed. First, we have a fantastic faculty who are of the highest quality, and they will continue to be able to compete very effectively for support from the federal governmental agencies. Secondly,



photo courtesy of the president's office

we are more financially independent than most. We have a strong endowment, and we have an excellent development department and highly supportive trustees and donors, so we can cushion reductions from our own resources. Our resources are not infinite and we've had troubles in recent years to balance our budget, but even so, we are wealthier than most other institutions. For those reasons we will weather this storm.

I look upon the present situation as an opportunity for RU as well as a threat. We have a very extensive recruitment search under way at the moment, and most universities across the country will be worried about taking people on in these funding circumstances. I think we can take people on, and we should be able to get the best because we will be able to give them a good deal and I don't think many institutions will be able to do this.

NS: Another point that you bring up in

your paper is that the seesaw-like increase and then stagnation of scientific funding has an impact on young scientists.

PN: I really believe that, and I'm angry about it. If we enlarge the research community, we generate more young people as principal investigators who need to create their own groups. If the funding is then turned off, we risk damaging a whole generation of younger scientists. That is a serious issue. We have to have a much longer-term and better-structured view of how we fund science. I have made some suggestions about how we might do that, because it's not good enough to have a 'stop-go' policy. Maybe it makes sense to think about having smaller groups of scientists who work in collaboration with others, leading to an increase in the number of principal investigators, and a better career structure that is more flexible. I'm not sure that these are the answers, but I am sure that we should be thinking about various alternatives, and I don't think we are doing that sufficiently at the moment. What we need is a wider national or even worldwide debate on some of these issues.

NS: Do you think science would be more effective if principal investigators could be more active research members of the lab?

PN: I do believe that. We pull out our scientists too quickly, at too young an age from being active researchers and turn them into grant-writing machines. Again, at Rockefeller, the workload for our faculty is relatively low in that they don't need to teach very much, and they have good resources and support. Even so, I have to put lots of pressure on them to raise money, and I'd prefer not to have to do that. If a lab consists of twenty or more people the lab head is going to spend a lot of time raising money for those people. I think we should also recognize that you can be successful with smaller groups. Sometimes people think that a bigger group is the mark of success. It isn't—what matters is the quality of work

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that you produce. Rod MacKinnon, one of our greatest scientists, is a good example.

NS: Could you speak a little bit about the UK grant funding system?

PN: My own experience is a little unusual because I spent half my research life in an intramural system where I had internal research funds, like working at NIH in Bethesda, and half my life in universities, writing grants. In the intramural system my lab was reviewed every five years by an external committee. Looking back on what has been achieved is a more reliable marker for what you might achieve in the future, rather than some story you invent about what you're going to do in the next five years—when you will probably end up doing nothing like what you anticipate. The granting system for most people in the UK operates in response mode, but it is significantly less bureaucratic than the US system: grant applications are shorter, you don't have to include the same level of detail, you don't have to go through constant rewrites. The workload associated with the process is less, both for the person applying for the grant and for the person reviewing it. We don't often consider why are we asking for 25 pages of single-spaced material for a project grant of \$200-250K per annum. In my view, a proposal like this can be described in five pages. I'm sure we can reduce the workload to 50% of the current level in the US and be just as effective. I feel that very strongly.

NS: Some critics could say that by funding individuals similarly to how Howard Hughes Medical Institute does—based on what they've done recently—would be entrenching the 'old guard,' a development which would be bad for scientific progress.

PN: It depends on whether the 'old guard' is still active and producing well. If you are an active researcher, then you deserve to be supported; if not, you die by the sword. People who are young and coming into the system or who have been unproductive have to be assessed in a different way, with more focus on the future. When people write projects up for grant applications they often do not follow through on those projects, so all that is being assessed is grant-writing ability. Moreover, a committee will assess your grant application, and committees don't like things that are odd or strange. So, even good odd ideas will not be supported if you don't have strong supporters on the committee.

NS: You talked about the societal pressures on science, and you particularly

mentioned both stem cells and creationism. Could you first talk about the threat or pressure that you think creationism puts on science and why should we care?

PN: We should care about creationism because the idea that 'creationism is science' undermines what science is. I do not mind if creationism is discussed in a religious context. In other words, if intelligent design is compared with the creation of the world in seven days, as in Genesis—that's fine for discussion from a religious perspective, but it is not science. To pretend that creationism and intelligent design are science is very wrong; it undermines what science is, and it undermines our entire scientific activity.

NS: And with stem cells?

PN: The point about the stem cells issue is it gives rise to a complicated ethical debate, and there are strong feelings about these matters. It is a debate that has been hijacked by individuals with particular views who are enforcing their will on others. For example, we can use NIH funds to work on stem cells that were created before 2001. What sort of ethical argument is that? If it was ethical before 2001, why not afterwards?—it just makes no sense. As a biologist, I do not think that the fertilized egg is yet a human being. I'm not saying it is easy to define when an egg becomes a human being, but what we do know is that abortion is legal in this country and that the limit for abortion is much later—and here we have all this debate about a group of cells only a few days post-fertilization—I don't think it makes sense. Also, I don't think the debate about this has been very good because it has been dominated and hijacked by people who have extreme views. It is not the way to have sensible discussions about complex scientific and societal issues. The debate has to be much broader-based, much less hysterical, and it really has to consider the issues in a calmer manner, and this is not what we have seen with the development of the present legislation.

NS: If stem cell science is progressing elsewhere, do you believe we are sabotaging ourselves by pausing science while having these debates in the end, because their therapeutic rise here in the US is inevitable?

PN: In the end, if there is value for stem cell research in developing new therapies—and of course we don't know that yet, because at the moment there is only promising potential—then this will ultimately happen in

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the US. However, the US, which is still the engine room of biomedical research for the world, will have lost an opportunity, both therapeutically and commercially. Also, this attitude will slow things down for the world because the US is so good at science: if the US commits resources, this will drive development forward more rapidly. So at present the world is losing an opportunity, as well as the US.

NS: How should young and aspiring scientists get involved? Should we ruminate on these topics or is there room for action?

PN: There is room for action. My main objective is to encourage young scientists to think about these issues. We should always be thinking about where science and society meet, and graduate students and postdocs should be thinking about these things too. I would like to see, in the RU context, a community more energetically discussing these issues. Some of these issues are being discussed by the Pugwash Society. That is stage one—to get people engaged. I support more grassroots dialogue with the public about scientific issues and the public's concerns about science. At RU, graduate students and postdocs should think more about these issues with more discussions, meetings, and seminars. These are things that as scientists we all have a responsibility to think about. ☉

Do Atheists Have (Bio)Ethics?: An Interview with Michel Onfray

BERTRAND MOLLEREAU

Michel Onfray, Doctor of Philosophy (a Ph.D. in the literal sense), is a French philosopher born in 1959, and founder of l'Université populaire de Caen¹. He is the author of many critically and publicly acclaimed titles. In his latest book, *Traité d'Athéologie* (A *Treatise on Atheology*)², soon to be translated into English³, Michel Onfray goes to war against religion. Onfray's views are provocative, and they generated an intense debate in France. A response to his book has even been published entitled "*L'Anti-Traité d'Atheologie*" (*The Anti-Treatise on Atheology*)⁴. Michel Onfray has an atheistic point of view on current sensitive bioethics issues; this is why *Natural Selections* interviewed him.

Natural Selections [NS]: What is the definition of an atheist?

Michel Onfray [MO]: I would like to stick to the etymologic definition: The atheist denies the existence of God. To go further the atheist says, "what you call God can be reduced to the sum of your weaknesses that you transfigure into a superpower in front of which you kneel." I am limited, I don't know everything, I am mortal, I can't be everywhere, I am subject to time and aging, while God is the opposite of all that: unlimited, omniscient, immortal, omnipresent, omnipotent, eternal. He represents the sum of the negation of our weaknesses, and therefore is the expression of an absolute power. According to this definition there are only a few atheists. We often confuse the polytheist who affirms the plurality of gods (Epicurus), the agnostic who concludes to neither its existence or inexistence (Protagoras), the pantheist for whom God is assimilated in nature (Spinoza), the fideist who believes his country's religion because it comes from his country (Montaigne), the deist for whom God is the supreme being but is careless about the rest of the world, and the true atheist who is defined above. Those confusions are common philosophical mistakes. The atheist denies the existence of God, and believes that morals are more efficient when they go from man to man rather than making a detour through an irrational heaven.

NS: It seems that there is a need for a new word to define the atheist in positive terms. Did you come up with any?

MO: We can use without difficulty the word atheist. Even if it is negatively defined

by its privative prefix, it conveys clearly what it represents: the radical immanence of all reality.

NS: Do atheists have ethics? If we take as an example the bioethics laws, most of them originate from the debate between science and religious morality. Nobody intervenes in these debates to give an "atheist voice." What would be the basis for an atheist's ethics?

MO: Atheism is neither immoralism nor amorality; it is another moral system that supposes that the rules of all inter-subjectivity should follow a contract between the actors of the relationship. To call for God's mediation for an ethics question is always the occasion not to hear a hypothetical God, but rather his supposed voice authorized by a member of the clergy. An atheist's morals remain to be shaped. I have proposed my own in *La Sculpture de Soi* (*Self Sculpture*): "une morale esthétique" ("esthetic morals")⁵, because I believe esthetics, in particular contemporary esthetics, is an excellent opportunity to give up the theological model for the foundation of a moral system.

NS: Scientists are often considered to be atheists playing with nature's laws. One very sensitive topic is embryonic stem cell research. Despite the therapeutic promise that stem cell research might hold, a major objection that has been raised by some people is that it involves the destruction of a life to save a life. What is your view on the scientific progress to cure humankind? Are we going too far?

MO: Bioethics is stagnant because more or less openly or not, it obeys dominant Judeo-Christian ethical laws. Ethic committees often gather Christians, Jews, Protestants, and Freemasons, in general closely following Kant's philosophy (i.e. religious individuals who speak the language of German idealism...). They refer to philosophical authorities (Levinas, Jonas, Habermas) pronouncing that it is urgent to wait...but if one does not move forward, one moves backward. We are missing the revolution of transgenesis, the only one able to lead us out of the Hippocratic medicine in which we still are! This is to say how held back science is...therefore we are not going too far; we remain stagnant and are being delayed.

NS: The use of GMOS (genetically modified organisms) in agriculture may in-

crease production and promote a pesticide-free agriculture. Do you think food containing GMOs is dangerous? Do you eat GMO food?

MO: I am against the principle of precaution which says that because the worst is possible, always declares that it is certain, and prefers doing nothing to taking the risk. If our ancestors had followed this conceptual, intellectual, and mental nonsense, we would have never invented the airplane because of crashes, the train because of derailment, electricity because of electric shocks, the car because of accidents—and even the first human being because of...its pending death! Unless a substance has been proven dangerous, its use is defensible. I am in favor of the use of GMOs—but not their current liberal use. In the name of a bad political reason one can discredit an excellent scientific discovery, potentially important for the evolution of civilizations. Yes, I do eat food containing GMOs...

NS: In your book (A Treatise on Atheology), you argue that religion has delayed the progression of science throughout the ages. Why is that?

MO: Take a simple look at the history of the relationship between science and religion! This is distressing, pathetic: how did we manage to reach such a level of technology despite two thousand years of severe, violent, perfidious, permanent, deliberated, concerted constraints from the Roman Catholic Church? The Vatican has supported the hatred of all science displayed by Saint Paul, and has persecuted all the discoverers of scientific truth—Galileo was the tip of the iceberg.

NS: The Kansas State Board of Education voted on November 8, 2005 on how the theory of evolution should be taught in school. The 6-4 vote was a victory for advocates of intelligent design. Unlike creation science, which uses the Bible as a guide, intelligent design claims to use scientific methods to demonstrate the existence of God. Some places in the US are using pre-Darwinian science standards in their education curriculum. What is the situation in France? The church seems to be more clearly separated from the state than in the US. Is France heading toward an atheist society?

MO: France is not heading toward the

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proclamation of an atheist Republic, but laicism (in very bad shape lately) has permitted us to avoid catastrophes. We are still teaching Darwin in classes, and creationism is seen as what it really is: the pathetic mental agitation of bigots that science contradicts, and who refuse science or invent pseudo-scientists who give their religious beliefs a scientific appearance with vocabulary and methods borrowed from science.

NS: Religion did not always reject science. For example, the monk Gregor Mendel discovered the existence of the laws of heredity. What type of research is encouraged by religion?

MO: None, I am afraid...nowadays, religion cannot take control, it has no way of inflicting or condemning, neither can it lead or stimulate research. As it has no means for intolerance, thank God, it displays tolerance.

NS: Many contemporary believers in God, sometimes scientists, reconcile their religious beliefs and science. They do not literally follow the book of God, but instead believe that God created the universe, which would be difficult to disprove. In your ideal society is there space for this type of belief?

MO: Why would someone of reason like to, in spite of everything, at any price, incorporate magic thoughts? I am amazed by this permanent desire to invite myths, fables, or magic that one day was thrown out of the window!

NS: How is it possible to replace the community-gathering role of religion, and escape the isolation of the atheist?

MO: By activating a real democratization of philosophical practice. By grabbing from the cast of professional philosophers this great activity that Greeks and Romans, I remind you, were practicing not amongst themselves at the university, but on the Agora and on the Forum. ☉

This interview was conducted in French.

References:

- 1- <http://perso.wanadoo.fr/michel.onfray/accueilonfray.htm>
- 2- *Traité d'Athéologie*. Michel Onfray. Grasset edition, January 2005.
- 3- <http://frenchpubagency.com/?fuseaction=title.main&ean=9782246648017>
- 4 http://www.amazon.fr/exec/obidos/ASIN/2750901650/qid=1138221121/sr=2-1/ref=sr_2_11_1/403-3809638-0150026

PDA Activities Update: Spring 2006

1. Postdoc Conference Reimbursement Award

Attending scientific conferences regularly is a crucial component of the postdoc training experience. The PDA discovered that due to lack of lab and/or personal funds, many RU postdocs were unable to attend scientific meetings. Postdocs in their third to fifth year who have not attended any conference during their time at Rockefeller may apply for a grant from the conference travel fund (which has a total budget of \$1,500), set up jointly by the PDA and the Dean's Office. Due to the potentially large number of applicants and the small size of this initial fund, a lottery system will be used to award one or two grants. The PDA and the Dean's office are looking to increase this fund so that more applicants can benefit from this grant. Application forms are available in the Dean's office for the March 31 lottery deadline.

2. Mentoring of Postdocs Through discussions with the Dean's Office and Human Resources, the PDA has emphasized the need to enhance the mentoring of postdocs. The PDA is developing a 'Best Mentoring Practices' handbook that will serve as a guide to both mentors and postdocs in providing the best training experience to RU postdocs. The PDA and the Dean's office are finalizing a one-page document that summarizes the objective and scope of this handbook. Subsequent elaboration of this document into a handbook will help develop more comprehensive guidelines for proper postdoc mentoring.

3. Careers Symposium Friday March 24 is the date for this year's Tri-Institutional careers symposium, co-sponsored and organized by the PDA in conjunction with our colleagues at Weill Medical College and Memorial Sloan-Kettering. The symposium is an all-day event taking place at Weill Medical College, and will feature speakers from a wide range of careers including academia, the pharmaceutical and biotech industries, science writing, science policy, law, and fi-

nance. The 2005 symposium was hugely popular, and we expect this year's program to be similarly successful.

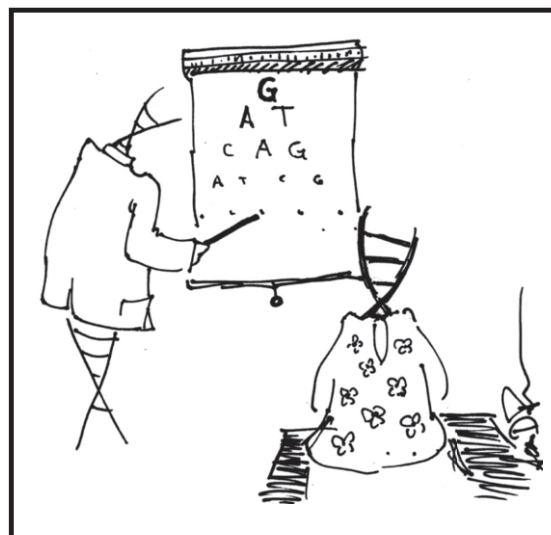
4. Annual Poster Session with Award

In an attempt to improve scientific interactions among postdocs and other members of the Rockefeller community, the Annual Poster Session that is held in conjunction with the student recruitment (March 3 and 10; 1:00–3:30 p.m.; 17th floor of Weiss) will include a postdoc poster competition. The postdoc participants will be judged by a panel of postdocs and faculty, and the top three posters will be awarded prizes, with a first prize of \$1,000 and the opportunity to present a seminar in the Monday lecture series.

5. Scientific Retreats The PDA polled the postdoctoral community in the fall to determine the interest level in holding a Rockefeller University retreat for postdocs. Out of 88 respondents, 94% would attend a retreat and 78% would prefer a campus-wide (i.e. not topic specific) postdoctoral retreat. Given the high interest level, the PDA is currently discussing with the administration the possibility of holding a retreat for Rockefeller postdocs and research associates that may be held as soon as this summer. ☉

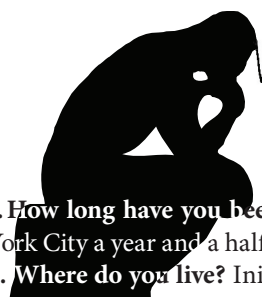
Please contact pda@rockefeller.edu if you have comments or questions.

ACADEMIA NUTS



cartoon by Sean Taverna

“U?”



New York State of Mind

This month, *Natural Selections* features **Nikolaos Chronis**, Postdoctoral Associate in the Bargmann Lab
Country of Origin: Greece

1. How long have you been living in New York? I moved to New York City a year and a half ago. It almost feels like it was yesterday...

2. Where do you live? Initially I lived a few months in Queens. At the moment I live in Manhattan.

3. Which is your favorite neighborhood? It's a tough choice. My favorite neighborhood is definitely the Village, around Bleecker Street and NYU. This neighborhood is great. There are lots of nice cafés, restaurants, Off-Broadway theaters, and bars. But what I think makes a neighborhood special is the people that live there and the Village is full of young artists, college students, and, in general, open-minded, creative people that are full of energy.

4. What do you think is the most overrated thing in the city? And underrated? I think the Meatpacking District is becoming very popular and very trendy, and I really do not understand the reason why. It does not resemble the atmosphere and the romanticism of the old city as it ought to...Queens, Brooklyn, and Hoboken have great neighborhoods and great places to go to that most New Yorkers are not aware of because they get stuck in Manhattan.

5. What do you miss most when you are out of town? It might sound awkward for such a big city like New York, but what I find extremely exciting is how easy it is to meet and hang out with people from so many different backgrounds. I find that everyone has their own story to tell you. The cultural diversity of New York is a unique phenomenon that I really miss when I am away.

6. If you could change one thing about NYC, what would that be? New York City is expensive, and it seems that most young people work for paying the bills. It's a pity that many people cannot take full advantage of what New York City has to offer. Some type of rent control might alleviate the problem, although it might not sound realistic...

7. Describe a perfect weekend in NYC. Every weekend in New

York City can be different. That is the perfect weekend! You can start your Saturday morning at the Guggenheim Museum, and end up at 3 a.m. dancing Tango from the 30s. Life in "the city that never sleeps" is dynamic and full of surprises, and that is what makes each weekend a different and perfect one...

8. What is the most memorable experience you have had in NYC?

So many nice moments, I do not know where to start... but let me describe to you the only bad experience that I had that is definitely memorable. I was in a bar one night and suddenly a poor half-naked guy—he may have been an immigrant—was pushed violently out of the bar. In the next moment the bouncers started hitting him really badly. He started bleeding from the nose and everybody was watching without doing anything. The cops came ten minutes later, and instead of arresting the bouncers they handcuffed and arrested the poor guy that was still bleeding...Again, nobody did anything...

9. If you could live anywhere else, where would that be? When I was younger, I was thinking of three cities that I wanted to live in: San Francisco, New York City, and Paris. So far, I got lucky and I have experienced the first two, but Paris still remains...

10. Do you think of yourself as a New Yorker? Why? I definitely think of myself as a New Yorker. I grew up in a big city and I enjoy the fast track and energy that big cities have. It satisfies all my social and cultural needs. ☺



Classical Music in NYC: February Highlights

FRED ROSS

In February, The Metropolitan is doing mostly smaller Romantic operas (*Samson et Dalila*, by Saint-Saëns, *Roméo et Juliette* by Gounod), but they are also trotting out two of the great Verdi warhorses: *Rigoletto* and *La Traviata*. It's cliché, I know, but these are eternally popular for a reason. *Rigoletto* has five performances in February, and *La Traviata* has six. See Wikipedia for plot synopses. The New York City Opera Company is still closed.

It's a light month at the Met, but Carnegie Hall has more than you could possibly hear. Begin with the Orpheus Chamber Orchestra on the 4th. Orpheus was the first of the orchestras to rid themselves of a conductor, but their precision and their musicality are as fine as anything the great symphonies of Berlin, Vienna, or Chicago have produced. I

suggest two different paths (though I will be desperately trying to follow both).

The first is Carnegie Hall's impromptu Mozart festival—the amount of music verges on the absurd (this year is the 250th anniversary of his birth). Here is the list of concerts: Staatskapelle Berlin with Daniel Barenboim and Radu Lupu (Feb 11–12); Daniel Barenboim and Radu Lupu (Feb 20); Cappella Andrea Barca and Andras Schiff (Feb 21, 23, and 25). So what can be heard at these concerts? The first two each consist of two symphonies and a piano concerto. Then on the 20th, the two pianists return to play Mozart for piano, four hands (two people at the keyboard at once). The last three performances consist of two Mozart piano concerti each, and a horn concerto in the first, a symphony in the second, and the *Sinfonia concertante*

in the third. Oh, and every piano concerto in this series is different. We'll hear numbers 14, 15, 12, 17, 18, and 19. I shan't try to write anything useful on the music itself, it's just too much.

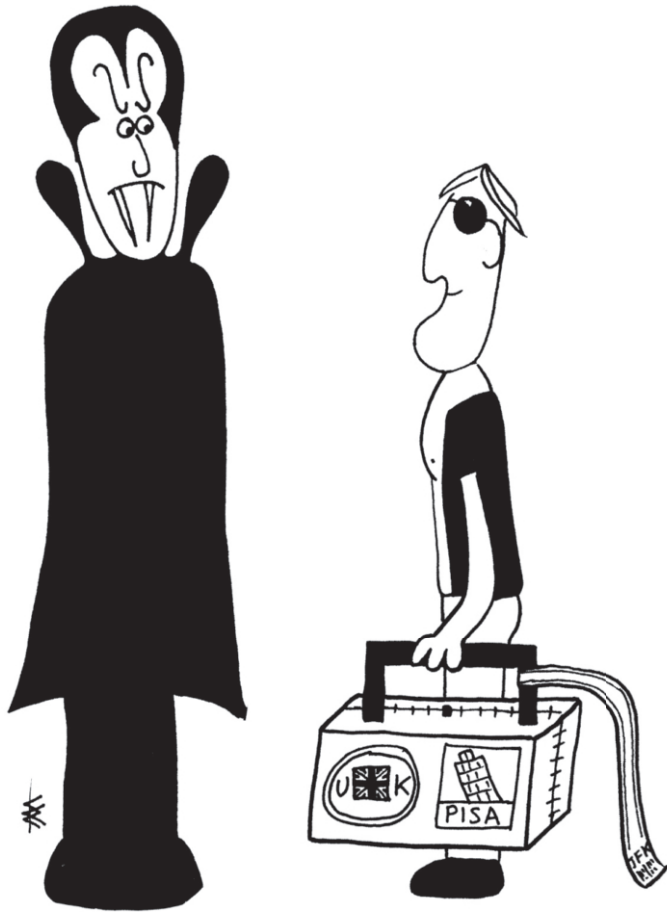
The other path this month still has a little Mozart; we cannot escape him. It starts with one of the great pianists of our time, Richard Goode, with Dawn Upshaw singing a number of early Italian songs, and then Schoenberg's *The Book of the Hanging Gardens* on the evening of the 12th. This promises to be a fascinating juxtaposition: Schoenberg, while extremely dissonant, took a lot of guidance from the late Renaissance and early Baroque. On the 19th we can enjoy violin, clarinet, and piano at Carnegie Hall in a conglomeration of music headed by Biber's

continued on page 8

Mudbloods

MAURIZIO PELLEGRINO

I have never thought that the operations of a blood center could be so complex. Let's imagine the New York Blood Center for example: you serve 200 hospitals in New York and New Jersey, only by yourself; and every day you must be able to handle 2,000 donations on average. With ups and downs due to holidays and school breaks, blood shortage always being a threat, and frozen blood that takes about 24 hours to thaw (not a feasible resource in case of emergency), it is a



real nightmare to face. In addition, you need to screen every donation you receive for nasty bugs such as HIV, hepatitis C and B, syphilis, and many more. And you have the tough job of convincing people to open their veins as well: 5% of eligible donors give blood in the USA, while only 2% donate in New York.

But I found out that being a donor could be tough as well. Let's have a look at the FDA criteria for an acceptable donation. Most of them refer, quite obviously, to the fact that only healthy people should donate blood. No donations allowed if you don't feel well, if you are taking drugs, or have an infection, if you have any symptoms of SARS, if you are pregnant, and so on.

Though some questions are...how shall I say it?...peculiar: "From 1980 through 1996 did you spend time that adds up to three months or more in the United Kingdom?"

And on the same line: "From 1980 to the present did you spend time that adds up to five years or more in Europe?"

From the Old World myself, this was the first time that someone made me realize that my blood is somehow contaminated. I am quite happy with it, but apparently not everyone thinks it is good. However, since the manner of transmission of spongiform encephalitis is still not clear, and Europe is a "continent at risk," I do understand and share the fears of the FDA.

But let's go on:

"Female donors: In the past 12 months have you had sexual contact with a male who has ever had sexual contact with another male?" Well, if you do, know that you are deferred for 12 months from the date of last "contact."

"Male Donors: From 1977 to the present have you had sexual contact with another male, even ONCE?" If you have, know that you are deferred indefinitely.

From these sentences, it seems that if a male had a single sexual experience in 1977 with another male, he is banned from any blood center, while his happy wife could donate blood after a period of abstinence (with her husband at least) of only one year. In contrast, it appears that if either a man or a woman has behavior which risks contacting sexually transmitted diseases, such as changing partners on a regular and frequent basis, it is possible to donate blood.

Preventing subgroups of the population that are at risk for blood transmissible diseases is a necessity and a moral obligation for the FDA and blood centers, but some of the requirements seem to be a holdover of the 70s; however, several centers have asked the FDA to change or reword some of them.

Since not everybody can donate blood, hope relies upon those who are willing to share a part of themselves with the community. ☉

Thanks to the New York Blood Center (<http://www.nybloodcenter.org/index.jsp>) for the statistical information.

Contemporary A Cappella Music in NYC: Exploring the Possibilities of the Human Voice

TARI SUPRAPTO

New York City is known as one of the major cultural hubs in the world, especially when it comes to music. John Lennon of The Beatles lived here, and CBGB's was a place where many famous musicians made their debut. There is a dazzling array of jazz performances at clubs like the Village Vanguard and the Blue Note to intimate small bars. As another music-related article in this issue of *Natural Selections* points out, there is a virtually endless selection of classical offerings that includes the Philharmonic, major artists at Carnegie Hall, and opera. Around the holidays and in the late spring, there are a number of choirs that give concerts, which showcase both well-known repertoire and often debut original works by new composers.

There is an underground music scene that does not get mentioned in major publications such as *The New York Times*, *New York* magazine, or *Time Out New York*, which is contemporary *a cappella*. The term *a cappella* literally means "of the

church” or “in the style of the church” and it refers to the singing of hymns or chants during the first thousand years of Christianity where there was no instrumental accompaniment. In today’s definition, *a cappella* means “without instruments.” There are certainly a wide variety of *a cappella* Gregorian chants, madrigals, art songs, folk music, and gospel, but there are now vocal ensembles that sing pop, rock, and/or jazz without any instruments at all. Many of these groups now imitate instruments with their voices, including bass and percussion, to the point where you can hardly believe there isn’t a band on stage. Just imagine Outkast’s “Hey Ya,” Queen’s “Bohemian Rhapsody,” or Roy Orbison’s “Pretty Woman” performed without instruments. This is what is currently defined as contemporary *a cappella* music today.

A large number of high schools, colleges, and universities in the U.S. have contemporary *a cappella* groups, which are usually extracurricular activities (the classical choral programs are usually offered by the institution’s Music department). The college groups are often an entry point for most of today’s singers, and there is in fact a worldwide competition called the International Championship of Collegiate *A Cappella* (also known as ICCA; see www.varsityvocals.com) whose finals are always held in New York City, either at Carnegie Hall or Lincoln Center. This year it will be on April 29 at Alice Tully Hall; tickets are \$25–\$50 each.

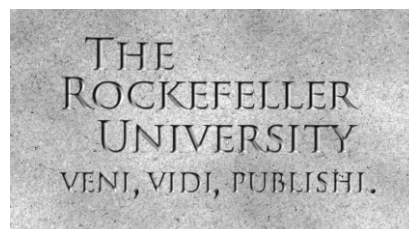
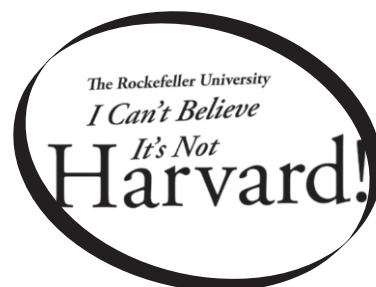
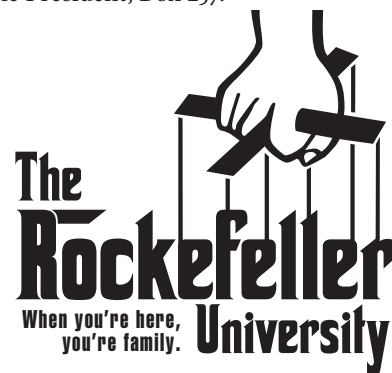
Many of these college singers fall in love with contemporary *a cappella*, and after they graduate, a good number of them form new groups and some even choose to do so as a full-time profession. The majority, however, tend to perform at the semi-professional level, where the members have full-time jobs but devote their free time to singing and performing for a modest fee or admission charge. The website www.casa.org is devoted to contemporary *a cappella*.

New York City has a large number of post-college contemporary *a cappella* groups, and they perform regularly at bars and small clubs. They often post announcements on the Vocal Area Network website (www.van.org), and there is a very active Yahoo Group that you can join to see who is performing, looking for new members, and often there are people forming new groups. A professional group called Toxic Audio had an Off-Broadway show for several months last year (www.toxicaudio.com) and another professional group called Blue Jupiter relocated to New York City from Nashville (www.bluejupiter.com).

There are many other contemporary *a cappella* groups across the country, and there is a major annual competition at this level called The Harmony Sweepstakes *A Cappella* Festival (www.harmony-sweepstakes.com), which has local regional contests to select the finalists. The winner of the competition gets free microphones and an opportunity to record an album. The New York Regional this year will be held on February 26 at Symphony Space (West 95th Street and Broadway); tickets are \$25 each. It is always an entertaining show and is a great introduction to this little-known world! ☉

Logorrhea

With a change in the university logo currently under discussion, *Natural Selections* presents some ideas for public consideration. Please cast your vote and send your ballot to the Office of The President, Box 257. ☉



Provided you stay for the entire duration of the lecture and subsequent Q & A session. Only one cookie per customer. Smokers are not eligible to receive cookies. Those in possession of illegal cookie stockpiles shall be subject to side effects including obesity, diabetes, tooth decay, heart disease...



The Rockefeller Film Series

LUKASZ KOWALIK

After an energetic start to this year's series with *Kung Fu Hustle*, two very different films are being offered in February as a part of The Rockefeller University Film Series.

Wong Kar-wai's *2046* (shown February 13) is a follow-up to his earlier feature, *In the Mood for Love*, which enjoyed a warm reception at our Film Series last year. Tony Leung again plays Chow Mo-Wan, the unfulfilled lover from *Mood* who now seems a completely different person: not a gentle, virtuous admirer, but a brilliant Casanova, dropping references to his "lost love," seducing and discarding a sequence of beautiful women. Starring as his lovers are some of the best-known Asian actresses, such as Gong Li (*Raise the Red Lantern*), Faye Wong (*Chungking Express*), and Ziyi Zhang (*Crouching Tiger, Hidden Dragon* and *Memoirs of a Geisha*), who plays Bai Ling, Chow's neighbor—a stylish escort who falls in love with him. Her intense performance is central to the movie, which also involves a parallel story taking place in the year 2046, the subject of the short stories that Chow writes to support himself when not being preoccupied with the ladies. *2046* is vintage Wong Kar-wai, very satisfying visually and emotionally with its dazzling colors and shapes, hairpin turns of emotion, and a narrative that is poetic, rather than action-driven. There was hardly a better choice for an ambitious, beautiful, pre-Valentine's Day film.

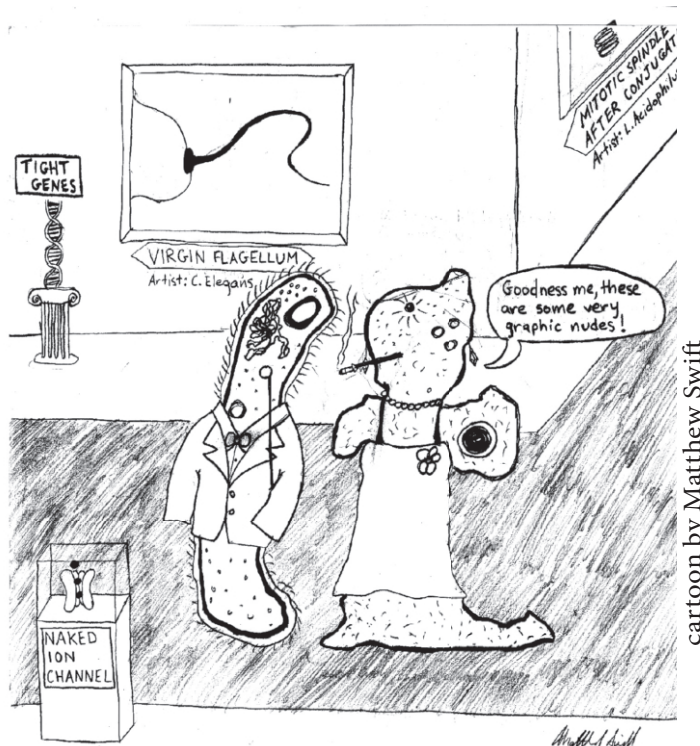
On February 27, we will watch Spike Lee's *Do the Right Thing*, which was prompted by a brutal killing of a young black man in Howard Beach. It unfolds during the hottest day of summer in Brooklyn's Bed-Stuy, with Sal's Pizzeria as its centerpiece. Sal (Danny Aiello), who is Italian, and his two sons Pino (John Turturro) and Vito (Richard Edson) run the joint in a mostly black neighborhood. Spike Lee appears as Mookie, Sal's delivery man. While Sal and Pino value the relationship they have built with their customers, Vito despises the neighborhood and its inhabitants. Tempers, that might have been kept in check on a cooler day, get red hot when a small incident started by a disagreement between Vito and Buggin Out (Giancarlo Esposito) erupts into savage violence. The movie opens with quotes from both Martin Luther King and Malcolm X, and subsequently explores the contradiction between tolerance and non-violence on one hand, and opposition to injustice on the other. It is flammable, emotional, and does not offer easy answers—but it does offer honest, angry entertainment. A must for any New Yorker.

All screenings are in Caspary Auditorium on Monday nights at 8 p.m. Admission is free, no tickets or reservations are required. Guests and family members are welcome. ☉

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cartoon by Matthew Swift

CELL CULTURE

'Classical Music in NYC' from page 5

Passacaglia for Solo Violin. A *passacaglia* is a Baroque dance form, with a classic four-note descending bass line repeated again and again with different variations above it. The Biber Passacaglia starts this motif, then proceeds to build variations on top of it on the same violin, without letting it lapse. It's a tricky piece, by one of the renowned violin virtuosi of the Baroque. The 21st has a second concert, which unfortunately overlaps with the Mozart I mentioned above. A young tenor, Philippe Castagner, is singing Schubert's beloved (and massive) song cycle *Die schöne Müllerin* in one of Carnegie Hall's smaller chambers. On the 22nd, Joshua Bell is playing at Carnegie Hall. He's best known for playing the violin parts in film music, such as in *The Red Violin*, and certainly worth hearing, especially when he's playing Mozart, Beethoven, and Ysaÿe. Ysaÿe is not a common name anymore, but in his day he was called "the magic violinist." Advanced violin students inevitably spend time with his six sonatas for solo violin, which pioneered a new style of writing for the instrument. The 24th sees the Takács Quartet playing Schubert, Bartok, and (of course) Mozart. Then on the 25th, we have another conflict with the Mozart track, this consisting of a piece by Varèse, and two pieces by Messiaen, a 20th century French composer who incorporated influences as diverse as Gregorian chant and birdsong.

Finally, when the Mozart festival is over, we have two more concerts before the month ends. On the 26th there is Les Violons du Roy, a Baroque group specializing in dance music. This is fun stuff, and if you haven't heard historical performance groups before, it's probably a good place to start. On the 27th, Alfred Brendel, an old name in the piano world, is playing a solo recital of Mozart (of course), Schubert, and Haydn.

Be forewarned for next month: the Vienna Philharmonic is playing on March 3, 4, and 5 at Carnegie Hall. ☉