

Natural Selections

A NEWSLETTER OF THE ROCKEFELLER UNIVERSITY COMMUNITY

TURKEY VULTURES: Finding Beauty in an Unlikely Creature

JEANNE GARBARINO



About to take flight. Credit: Jeanne Garbarino



The heraldic pose. Credit: Jeanne Garbarino

The tiny hamlet of Lake Carmel in Putnam County, NY, located within the upper bounds of commuting distance to New York City, has seen quite a population surge. Many former city dwellers, including my parents, have been drawn to its more natural environment and affordable real estate (compared to neighboring towns in Westchester County). Despite the McMansion complexes popping up in every direction, wildlife is surprisingly bustling. But perhaps the most spectacular group that has newly settled within the patchy forests surrounding the 200-acre man-made lake is the ever graceful and often eerie *Cathartes aura* (subspecies *septentrionalis*), also known as the Eastern Turkey Vulture.

While turkey vultures are not uncommon in these parts—in fact, these birds are the most common type of New World vulture—they have only been around the shores of Lake Carmel for about three years. When they first started appearing regularly, often basking in the sun while sitting on one of the lifeguard chairs, their numbers ranged from about four to six. However, with each passing year, their flock has grown and as of one Saturday morning in mid-May, I counted seventeen birds in one sitting. Because they roost in large community groups, the residents of Lake Carmel regularly come across ten or more turkey vultures perched together on the fences around the lake. And, although these gentle birds of prey have become an everyday sight, they still take your breath away each time.

Driving around the lake has now become slightly more exciting since you never know if these stunningly peculiar figures will appear. Even my kids squeal “tourkeee boltsures!” whenever we happen to catch them just lounging around. Although I consider myself to be a biologist, birds never really made it onto my radar. Now, after seeing these turkey vultures from such a close vantage point, I want to know more. When

researching these creatures, I learned some very interesting facts about their biology and behavior. For instance, the turkey vultures’ sense of smell is very well developed, allowing them to precisely locate carrion, or dead animals. Even though they are social animals, turkey vultures typically forage alone, returning to their gang after a solitary meal. But, perhaps the most interesting fact about turkey vulture behavior involves their poop. More specifically, turkey vultures will defecate on their own legs, taking advantage of the evaporation of water contained in their feces, as a means to cool down on hot summer days.

Though it seems as if many species are on the decline due to the exponentially growing human population and associated industrialization, turkey vultures’ numbers are actually increasing. This is probably due, in part, to the strict adherence of, and heavy fines stipulated by, the Migratory Bird Act of 1918—which makes it illegal to kill, harm, or possess turkey vultures in the United States. While they don’t necessarily conjure up feelings of awe within the general population, especially given the reputation of vultures as spooky characters, I am falling in love with these giant birds. Their majestic presence and the seemingly effortless way in which they glide through the air is, in my opinion, a sight for sore eyes. I’m thankful that I get to see them often and encourage you to be on the lookout if you ever happen to venture beyond the city limits. ◉

References:

The Cornell Lab of Ornithology: All About Birds (http://www.allaboutbirds.org/guide/Turkey_Vulture/lifehistory)

Turkey Vulture Society: Turkey Vulture Facts, Maps, and Statistics (yes, this society does exist; <http://vulturesociety.homestead.com/TV-Facts.html>)

Vox Clamantis in Urbe

Stealing from the Poor to Feed the Rich or The Shame of Occupational Licensing

JACOB OPPENHEIM

Interior designers in Florida, hair braiders in Utah, and barbers everywhere: these professions seem like straightforward service industry jobs that can be picked up by anyone and whose quality metric is essentially taste. Yet in the United States, and increasingly in Europe, they share a commonality with doctors, lawyers, and dentists—jobs that require immense amounts of training, where the provider can inflict serious, lasting harm if improperly trained. In a bit of law worthy of Kafka, all of these professions have arduous and expensive training and licensing requirements. These obligations, framed in the language of consumer protection, serve only to inflate the wages of current practitioners while keeping new entrants out of the market. In short, they are the most regressive feature of American society, harming the poor while remaining hidden from much of society.

The rationale for occupational licensing is one of harms. A bad doctor could kill you. A terrible lawyer could land you in jail. This logic can be extended further: it seems likely that the harms of having a terrible plumber, namely broken pipes and massive damage to one's home, likely outweigh any costs of licensing (but more on that later). The common approach to solving these problems of asymmetric harms from bad service is a regime of licensing. We require doctors to go to medical school, pass their boards, and, if they wish to practice a specialty, undergo additional years of training. Lawyers complete specialized education and must pass similarly rigorous examinations. While these safeguards are imperfect, they have brought safety and quality to the medical, legal, and other professions.

The attempt to extend this logic to jobs such as cutting hair falls flat for idealistic and economic reasons. It is commonly argued that licensing for hairdressers ensures that any barber one sees will be adequately trained and a reasonable service will be received in return for payment. While appealing on theoretical grounds, this argument has little to do with how people behave in reality. Ask yourself, do you really look for the licenses and certifications on the wall when you walk into a barbershop? Do you seriously think that the harms of a bad haircut are dire enough that they warrant government intrusion into the hairdressers' market? A barber known for bad haircuts will rapidly go out of business, especially given the amazing ability of the Internet to foster information sharing across vast distances—both geographical and social. Whereas in the past, as an ignorant consumer, you might possibly stumble under the razor of an incompetent barber, in this day of merchant ratings that pop up next to search results, online maps and omnipresent social networking Web sites, do we seriously doubt the ability of the market to determine the value of a service practitioner? What determines the quality of a haircut? Such value-judgments are intensely subjective. One man's bad hair day is another's coif. In addition, what if I just need shorter hair and value a lower price more than the quality of cut? In a licensing regime, I am barred from doing so, unless I subvert the law by paying one of my friends to cut my hair for me. This system is completely unnecessary and inflicts significant damages on the poor while privileging current occupants. Yet, in defiance of all logic, it is growing.

It is not only hairdressers who are subject to licensing requirements. Hundreds of low-skill service sector jobs, where the quality metric is essentially subjective, are licensed across the country. It is estimated that 38 percent of American workers are licensed in some way

or another. The list is long and continues to grow. Recently an African hair braider in Utah with twenty-three years of experience was told to stop practicing without a license lest she be subject to legal sanction. Interior designers in Florida have won onerous licensing requirements for new practitioners. Even the supposedly free market Republican

Party, in deeply conservative states like Utah, refuses to repeal any such licensing requirements. A recent hearing in Florida is laughable in its graphic descriptions of the harms of bad interior design.

Who decides what the licensing requirements should be and how many licenses should be granted? Not the government and not the consumer. Rather, the legislature empowers a board of current professionals to set the rules. These boards have no incentive to make requirements simple, transparent, or even logical. They benefit by limiting the amount of competition, allowing them to charge higher prices in a complete contradiction of the interests of society at large. Bloated licensing bureaucracies have sprung up like weeds. In some professions, two years of training are required, followed by an expensive examination. That is, if the number of licenses hasn't been limited by fiat.

This system is astoundingly regressive. Current professionals rent seek* at the cost of their potential competitors and consumers. Needless licensing requirements are concentrated in sectors that employ poor and working class people, usually without much education. These people cannot afford to spend two years not working to train, especially when the training program costs thousands of dollars per year. Experienced professionals cannot bring their skills across state lines, let alone international borders, in a world of omnipresent licensing. Immigrants are thus doubly disadvantaged. Policymakers recognize the stupidity and perniciousness of the entire system when looking at foreign countries. Microfinance loans are frequently used to set up hair-braiding and -dressing parlors. The poor in countries like Brazil can pull themselves out of poverty through service sector work, especially when the merit is taste and the base skills aren't too demanding. Unfortunately, we in the United States have decided that the poor are best left where they are, mired in poverty, without the ability to apply their skills and better their lives. There is only one word that can describe such a system: shame. ☉

Reference:

http://www.economist.com/node/18678963?story_id=18678963

* "Rent seeking" is the use of social or political machinations to gain income from position rather than from production of or addition of value to a good.

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Natural Selections Interviews Willow Weilan Hai Chang, Gallery Director, China Institute

BERNIE LANGS

Founded in 1926, the China Institute's mission is to "advance a deeper understanding of China through programs in education, culture, business, and art, in the belief that cross-cultural understanding strengthens our global community." Since the Institute is located at 125 East 65th Street (between Park and Lexington Avenues), close to The Rockefeller University, I've viewed a number of fantastic exhibitions at its gallery over the years, including those featuring scroll paintings, bronze vessels, an emperor's memorabilia, and the legacy of Confucius. The current exhibition (through June 12) is "Along the Yangtze River: Regional Cultures of the Bronze Age from Hunan." The long-time gallery director is Willow Weilan Hai Chang. Fortunately, she agreed to answer questions from *Natural Selections*. Last year, *The New York Times* wrote a lengthy article on Ms. Hai Chang, exploring her remarkable life.

Natural Selections: *You had what can be described as an extraordinary childhood in China, which appeared to include hard labor. When you were chosen to study archaeology at Nanjing University, it must have been quite a life change for you. Would you see that as your life's turning point? I would also be interested in how you would compare the excitement of an archaeological excavation to that of putting all the pieces together for an exhibition as a museum curator.*

Willow Weilan Hai Chang: Yes, when I was accepted into the prominent Nanjing University (among the top ten in the country), it was my life's turning point, though maybe at that time, I did not realize it in clear vision. My life certainly changed after I got into the university, and studying archaeology was another new thing to me, since my childhood's formal (or informal) education never touched on this aspect; all the knowledge, skills, fieldwork, and hands-on practices were very exciting to me. I loved it. The excavation could be very labor-intensive and I needed to survive through the hard living conditions. However, when we found something worthy, it was the happiest moment. The excitement, in fact, is similar to doing an exhibition. First, the most exciting moment for me is based on many years of study, with the knowledge and the insight of how to link objects within a cultural, historical, or artistic context, to define a perspective to put together a show. All the art materials are there, and everyone knows about these objects; but how to make them into a show, people may do differently. It is true, after many

tumblings in my mind, once everything comes together, suddenly, a clearer vision is shining in my head, or in my mind, which is the most exciting moment for me. Then, selecting the artwork is also very exciting, kind of like another excavation, but in a much better working condition, just needing to go to the museums and their storage rooms. And finally, when I see that people appreciate and enjoy the exhibition, I also feel very excited and happy.

NS: *Since the actual gallery space at the Institute is small, is it difficult to pick only a minimum selection for each exhibition? On the other hand, so many of your exhibitions seem to have more than a fair share of extraordinary pieces, if not masterpieces.*

WWHC: Yes, it is our disadvantage, or perhaps advantage, with the limited space, which we need to keep in mind when making selections. However, the advantage is that because of the space, we are more focused, and a lot of the visitors like this intimate environment, which naturally forces them to concentrate and remember something interesting. With limited quantities, we always try to get the best pieces we can.

NS: *I attended a lecture series many years ago by James C.Y. Wyatt of the Asian Art department at The Metropolitan Museum of Art (The Met) and his slides of Chinese ritual bronzes made a deep impression on me. He spoke of the great importance the bronzes have had historically in China and he conjured up a very spiritual air. When I visited the current show on these bronzes at the China Institute, your selection of the bronzes from the Hunan Provincial Museum's collection had an immediacy that I never felt looking at those in The Met's collection. How are such pieces viewed in China? I've heard that Japan designates "National Masterpieces." Is there any such concept in modern day China?*

WWHC: I guess Mr. Wyatt introduced those bronzes that are mainly from central China (along the Yellow River area) where the Ritual of Zhou system formed and was established. The bronzes were mainly used either to state social status or for ceremonial usage. Yes, it is true the bronzes in the China Institute Gallery give a different feeling since they are from the south (the Yangtze River area). They try to adopt central China's style but have strong local taste, which must be based on their customs and habits. The locals tried to imitate the central styles, but local bronzes did invent some new forms;

for instance, the bronze decorations of the big bell, called "Nao," developed more patterns with meaningful concepts (which we only can guess now). Examples in the bronze patterns include human faces, tigers, horses, frogs, or snakes. As the first exhibition in either the US or even in China to introduce Southern style bronzes, it is natural that you feel the difference compared to the ones you see at The Met, which are mainly from the Yellow River area or are in that style. As far as the issue of a national treasure goes, in China, we also rate artworks based on their rarity and condition to determine if they qualify as a national treasure.

NS: *I read several books of Oswald Siren's multi-volume series on the history of Chinese painting. The development of the themes in Chinese landscape painting appears to have been so slow and incremental over centuries, yet once you study them, you can see the marks of different periods. You oversaw the publication of the catalog for the exhibition on seventeenth century paintings. What would you say is your favorite period of painting?*

WWHC: I appreciate that you've noticed the evolution of Chinese landscape painting. I have curated two painting exhibitions and I've been responsible for the publications, *Passion for the Mountains: Seventeenth Century Landscape Paintings from the Nanjing Museum* and *The Last Emperor's Collection: Masterpieces of Painting and Calligraphy from the Liaoning Provincial Museum*. If you're asking about art media, I love calligraphy and painting. If you're asking about historical period, I love the Six Dynasties (third century to sixth century), a period without the central dominant control, but with so many warlords, and divisions along the Yangtze River into Southern dynasties and Northern dynasties. Yet, in this political and social chaos, art and literature boomed. The art in landscape paintings really started in this period, and in particular, the forms, aesthetic judgment, and standards of the Literati style. Thus, the foundations were laid for later Chinese art and culture, and these milestones are not only revered by the Chinese, but are also viewed with the highest regard by neighboring countries like Japan and Korea. So, Six Dynasties, an era with innovation, individualism, and creation, is my favorite period. In 2015, the China Institute Gallery will introduce the art and customs of the fascinating Six Dynasties, mainly using the materials through the last few decades' excavations. I will be curating and producing this exhibition, as

well as its publication.

NS: When I visit the Institute's gallery, I almost always catch a glimpse of you engaging patrons in interesting discussions. Is this something you enjoy doing?

WWHC: How come you almost always catch those moments? I do not often give the gallery lectures, but it is one of my responsibili-

ties to introduce the exhibitions to our patrons. I am very grateful for their support, which enables us to share the essence of Chinese civilization with the world. I usually enjoy more of the creative part and the study part of the project, but I am happy to see people enjoy the exhibitions. If my talk can enlighten them, I will be happier.

NS: Are there any other comments you would make about living here in New York as compared to living in China?

WWHC: I love New York, having been here for the longest time in my life, longer than I had been in any other cities in China. I love its richness in art and culture, its energy, and its openness to embrace almost everything. ☉

Natural Confections: Blood Orange Olive Oil Cake

CARLY GELFOND

Stop me if you've heard something like this before: a nondescript cardboard box, roughly the weight of a medium-sized mammal, containing more blood oranges than would be needed to feed a parched grade-school soccer team at half-time, arrives on one's desk at work.

Okay—if you're an acquaintance of mine, then yes, this would probably ring a bell because just such a package arrived for me on a frigid weekday morning this past winter. If you work in my office, you might recall a day you saw blood oranges rolling around atop a number of desks—those of the semi-reluctant colleagues I was able to pawn a few off on. Or perhaps you glanced into an office in passing just in time to see an orange soar through the air as the office's occupant momentarily succeeded in a spontaneous act of juggling. (Okay, the juggler was I and if the passerby was you, let's just agree to forget that, shall we?)

Or perhaps if you're an acquaintance of mine, you would remember last year, right around early spring, when another such box arrived for me, though maybe five pounds heavier, and bearing a similar weight in kumquats.

Honestly, I'm sorry, but I've just never been able to get that into citrus. It's healthy, I know, but there has always been something about it that just feels so insubstantial to me, so un-food-like. When this latest package arrived, I dialed my aunt's number in San Diego.

"Did you send me a gopher's weight in blood oranges?"

"What?" she said.

"A huge box of fruit I've never liked is sitting on my desk right now," I said.

"Oh, that," she said.

"Yes, that." (By way of explanation: My aunt is a transplanted New Yorker who relocated out West several years ago when my uncle retired. She is the somewhat stupefied owner of a lovely home in southern California with a big yard dotted with various kinds of citrus trees, all bearing fruit that might cost upwards of four dollars a pound at Gristedes.)

"Well, if you don't like them, give them away to people in your office," she said.

"I did. But what about the other forty?" I said.

"You're creative, you'll figure something out," she said.

Maybe she was right. Okay, so I may not love blood oranges but I do love a good culinary challenge. I went off in search of an interesting recipe. I thought I would try to keep things healthy and do some sort of fruit salad, but when I mentioned this to my colleagues, the idea was met with widespread protest. "But can't you make some sort of cake out of them?" the colleagues begged. "Something with butter?" (Okay, fine. I'm the one who wanted the cake. What? I was raised by a dad who would stop at the hardware store like clockwork every Sunday, not to buy tools but because he knew Sunday was the day they gave out free donuts.)

Well, a hearty thank you must go out to my favorite food blogger, Deb at SmittenKitchen.com, for steering me (unknowingly, but if she's Googling herself and comes across this article, "Hi Deb!") in the direction of a fabu-

lous solution: Melissa Clarke's Blood Orange Olive Oil Cake. This recipe succeeds in transforming something relatively unexciting (except for the name of its carnage-invoking color) into something delicious and complex, while still retaining a healthful element in its use of olive oil in place of butter. The result is a cake that is so unique in flavor and so unarguably food-like, you won't even mind having had to sacrifice your juggling balls to make it.

Blood Orange Olive Oil Cake

Adapted (barely) from SmittenKitchen.com (in turn, adapted from Melissa Clark's *A Good Appetite: Secrets of the Cake Stand*)

Ingredients:

Butter for greasing pan

3 medium or 4 small blood oranges (Now, I realize it's taken me awhile to get this recipe in print, so regular oranges should be an adequate substitute should seasonal availability prevent you from getting the blood ones.)

1 cup sugar

Scant 1/2 cup plain yogurt (I used low-fat Greek)

3 large eggs

2/3 cup extra virgin olive oil, any kind

1 3/4 cups all-purpose flour

1 1/2 teaspoons baking powder

1/4 teaspoon baking soda

1/4 teaspoon salt

Whipped cream, for serving (optional)

Preheat oven to 350 degrees. Butter a 9-by-5-inch loaf pan. Grate zest from 2 oranges (or 3, if oranges are small) and place in a bowl with the sugar. Using your fingers, rub ingredients together until orange zest is evenly distributed in sugar.

Supreme an orange by cutting off the bottom and top so fruit is exposed and orange can stand upright on a cutting board. Cut away peel and pith (the white stuff), following curve of fruit with your knife. Cut orange segments out of their connective membranes as best you can and let them fall into a bowl. Repeat with another orange (and a third, if oranges are small). Break up segments with your fingers to about 1/4-inch pieces.

Halve remaining orange and squeeze juice into a measuring cup; you will have about 1/4 cup. Add yogurt to juice until you have 2/3 cup liquid altogether. Pour mixture into bowl with sugar and whisk well. Whisk in eggs and olive oil.

In another bowl, whisk together flour, baking powder, baking soda and salt. Gently stir dry ingredients into wet ones. Fold in pieces of orange segments. Pour batter into prepared pan.

Bake cake for 50 to 55 minutes, or until it is golden and a knife inserted into center comes out clean. Cool on a rack for 5 minutes, then unmold and cool to room temperature right-side up. Serve with whipped cream. ☉



This Month Natural Selections interviews Jan Breslow, Professor, Head of the Laboratory of Biochemical Genetics and Metabolism.
Country/State of origin: United States, NY

New York State of Mind

1. How long have you been living in the New York area? This is my second time around living in New York. I lived in NY for the first 20 years of my life. I was away for 20 years and now I have been back for 28 years. I started at Rockefeller January 1984.

2. Where do you live? Scarsdale, NY.

3. Which is your favorite neighborhood? Lincoln Center. I love the restaurants and have a subscription to the ballet and opera. There is so much art and culture going on around there, it's wonderful.

4. What do you think is the most overrated thing in the city? And underrated? *The New York Times* is the most overrated thing in the city. It's the only thing I don't like about New York. I think the friendliness of New Yorkers is underrated. People are more friendly and willing to help strangers than the typical caricature of the average New Yorker lets on.

5. What do you miss most when you are out of town? The art and music scene. It's the best in the world. In the same week you are able to go to numerous fabulous performances rather than having to wait every few years for a traveling company to come to town. When I left New York that was something I missed.

6. If you could change one thing about

NYC, what would that be? More activities or development should be done with the waterfront. The city is very beautiful with all these great views, but there isn't much being done to take advantage of the waterfront. For example, Chelsea Piers is this great activity space right on the water but it doesn't actually use the water in any way. It would be nice to see more events on the water.

7. Describe a perfect weekend in NYC. Seeing my grandchildren. Both of my sons live in NYC so the perfect weekend would involve seeing my three grandchildren. Aside from that, I would go to the opera on a Saturday afternoon, have a nice dinner somewhere and walk around the parks: Central park, Riverside Park, or Washington Square park. There are so many museums and libraries. On a perfect weekend, my wife and I would probably go to visit a museum on Sunday. Also, in Chelsea, there are all these art galleries you can walk around and visit. I could also spend an afternoon visiting all the galleries.

8. What is the most memorable experience you have had in NYC? I've spent so many years in the city, to choose one memory as the most memorable is too difficult. My most recent memorable NYC experience however was probably in 2005 when I vis-

ited the mayor's office. I received a Science and Technology award from the city and I got to meet Mayor Bloomberg and see the "bull pen" where he works. They all work on this one large open floor and his desk is in the middle of it all. It's very open and he sits amongst all his employees. He turned what used to be the mayor's office into a display room for city projects.

9. If you could live anywhere else, where would that be? I would not live any place else. I have no interest in moving.

10. Do you think of yourself as a New Yorker? Yes. I have lived here most of my life; I went to New York City public schools and attended Columbia University for college. I was born just a mile away from here (RU) at a hospital that used to be across the street from Bloomingdale's. I definitely consider myself a New Yorker. ◉



Sodium Thiopental

AILEEN MARSHALL

The anesthetic sodium thiopental has been in the news recently because there is a shortage of it in this country. This has brought some media attention because it is the first in a three-drug protocol for capital punishment. It seems that there are no longer any American manufacturers, and manufacturers in other countries will only export it if they are guaranteed that it won't be used in lethal injections. The Food and Drug Administration (FDA) has declined to approve importation, and the Drug Enforcement Agency (DEA) is investigating whether current prison supplies were obtained legally. It turns out that the protocol to use this drug is very old, and there is not much data available on whether or not the dosage works as intended—to put the prisoner to sleep. Unfortunately, the drug happens to also be used by anesthesiologists in certain kinds of patients who cannot take the usual anesthetics.

Sodium thiopental is an anesthetic that is given first in the three-drug protocol for lethal injection, before pancuronium bromide and potassium chloride. It is supposed to induce sleep. Pancuronium bromide is used to induce muscle paralysis. Potassium

chloride is used last to cause cardiac arrest. This protocol was first developed by an anesthesiologist in the 1930s as an alternative to electrocution or cyanide gas. The protocol was based on his experience and has been used ever since. A *PLoS Medicine* (Public Library of Science) 2007:4(4) study sought to find data on executions in prisons around the country that employed the use of sodium thiopental. From the limited data available, it was found that time of death varied from five to forty-five minutes, and that there were eyewitness accounts of problematic executions, with some prisoners' eyes open, mouths moving, or seizures occurring until time of death. Furthermore, the dosage of sodium thiopental varied from 0.1 to 2 times LD50 (lethal dose). It was concluded that the sodium thiopental may not always have induced a surgical plane of anesthesia and some prisoners may have died from respiratory arrest from the pancuronium chloride, rather than from cardiac arrest from the potassium chloride.

Sodium thiopental is FDA-approved for veterinary use in this country, as well as for use by anesthesiologists for those patients who can't take the usual anesthetics, such as geriatric and obstet-

ric patients, and those with certain cardiac and neurological conditions. The inability to obtain this drug could cause problems in the treatment of these patients.

Some prisons have been scrambling to come up with alternatives to sodium thiopental since it looks like this drug won't be available after current supplies are used up. Oklahoma has tried pentobarbital, a more readily available drug that is sometimes used to treat epilepsy. The states of Ohio and Texas have followed suit, and several other states are considering the switch. The problem is that changing the protocol involves a bit of legal red tape to get through, and it can delay the process for several months or longer. Though pentobarbital is widely used in veterinary medicine, its analgesic effects in humans are not well-defined. It is a sedative often used in epilepsy and it is manufactured in this country.

The issue surrounding the shortage of sodium thiopental all started when the Italian government refused to allow Hospira, Inc. (the sole US manufacturer of Pentothal® or sodium thiopental) to export thiopental unless the company could guarantee the government that it would not be used in lethal injections. Since Hospira, Inc. couldn't make that promise, it decided to get out of that market. No other American company makes this drug. Of the thirty-five states with capital punishment, sodium thio-

pental is used in thirty-four of them. Prisons in California, Arizona, Georgia, Arkansas and Tennessee have subsequently tried to procure the drug from an English firm, but this firm's legality was questionable. (The firm's address was the same as that of a driving school in a dodgy London neighborhood.) It was at this point that the DEA stepped in to investigate whether the importation of sodium thiopental was being carried out according to US law. Sodium thiopental is a controlled substance and it is thus the responsibility of the DEA to regulate its importation and sale. The agency has confiscated Georgia's supply and has also been investigating in Kentucky and Tennessee. Separately, the state of Nebraska had tried to obtain thiopental from an Indian source, but India also objected to the potential use of the drug for capital punishment; they subsequently declined to sell.

The problem comes down to the fact that there is no way for manufacturers to control the end destination of the drug, and how it will be used when it gets there. In cases where prisons and hospitals have asked the FDA for help in obtaining the drug, the FDA stated that this was outside their mission and that they "could not approve a drug for harm." In the meantime, prisons have been buying the drug from other prisons and hospitals in the United States (but they are still required to register the purchase with the DEA). ◉

PDA Corner: Summary of Meeting with Marc Tessier-Lavigne

ISABEL KURTH AND AAKANKSHA SINGHVI

The Postdoctoral Association (PDA) recently met with President Marc Tessier-Lavigne and members of the Dean's office, Sidney Strickland and Emily Harms. Our first meeting with the new president had two main goals: the first was to inform the new president about the work and scope of the PDA and the second, to discuss some of the most important issues faced by postdocs on campus.

Over the past year, we have been receiving many emails from people who run into problems with housing, benefits, childcare, health insurance, and other issues. We hear a lot of complaints: the rents are too high, there are no retirement plans, and newborns won't get into the Child and Family Center (CFC) for two years because waitlists are so long. All of these issues are important, and we are doing our best to help individuals find solutions and mediate with the administration. When it came to planning our meeting with Dr. Tessier-Lavigne, we realized that if we wanted to make an impact that would help the majority of postdocs, we couldn't bombard him with all of these separate problems. As different as these issues are, they all have one underlying theme in common: an increasing financial hardship for the people concerned. We therefore sought to address the disparate concerns of all post-

docs by requesting a reevaluation of postdoc stipends at RU. This issue has been on our minds for a long time, but in light of the difficult financial situation in recent years, the PDA knew that it had not been an option for negotiations. However, we felt it imperative to raise this issue with Dr. Tessier-Lavigne up-front, so that he would understand the myriad difficulties that postdocs today encounter in New York City over the course of four to five years.

During the Town Hall meeting, Dr. Tessier-Lavigne had already mentioned that the University would implement a 3 percent salary increase for all employees, and a 4.4 percent increase for all students. That was great news, but according to our math, not as effective as we would like to request. The last time Rockefeller postdocs received an increase in their stipends was in 2005-06, when former President Paul Nurse introduced the concept of salary brackets, which assured that everyone would get paid a set minimum wage, relative to the year of postdoc training that they were in. That was a big step then, but no change has been made to postdoc stipends since. This might not seem so surprising, but when looked at in the context of everything else that has changed during this time period, we realized that the overall financial situation of postdocs did

change quite dramatically:

1. Over the past six years, there was an 11.3 percent urban inflation rate. This means that in order to make up for the inflation loss, current salaries would need to be set at approximately \$46K (vs. \$41K currently) for the first year and \$56K (vs. \$50K) for maximum earners.

2. Rents have increased 3 percent each year. This has been on top of an effective general rent increase due to the loss of the housing subsidy that was phased out several years ago. While the PDA understands that this subsidy needed to be stopped to keep Rockefeller compliant with IRS laws, we think that the effect of its loss on our earning power needs to be addressed.

3. Rockefeller does not provide a retirement plan, which is even more critical since a 403(b) retirement plan is not open to postdoctoral fellows, leaving many without a pension plan of any kind.

Thus, overall, life as a postdoc has become more and more challenging financially, in particular in one of the most expensive cities in the country. Moreover, postdocs' tenures have increased in recent times due to many factors, including the economy.

Our initial encounter with Dr. Tessier-Lavigne was engaging, friendly, and positive. The president was keenly interested in

RUArt No. 3: *Homage to Piranesi*

When walking past the Abby, in the direction of the CRC, it is hard not to notice the chaotically organized brass sculpture gracing the lawn. The *Homage to Piranesi* was the work of American sculptor and painter, Herbert Ferber (1906-1991). This former Columbia University dental student-turned-artist is known for his hollow metallic renderings depicting forces in conflict. Herber has been featured in a number of prominent museums, including the Whitney Museum of American Art (NYC), the Cantor Art Center (Palo Alto), and the Dallas Museum of Art. Representing Ferber's caged works, the copper and brass *Homage to Piranesi* is on extended loan from the MoMA. ◉

understanding the situation of postdocs on campus and the role of the PDA. He seemed to approve of how scientifically and socially involved our organization was. Dr. Tessier-Lavigne was not aware that we run a monthly Tri-Institutional seminar series, organize the PDA retreat, host two annual campus-wide parties, fund travel fellowships, and support the Biotech Forum and *Natural Selections*, as well as plan inter-lab BBQs and sporting events. He smiled when he asked if we support hockey games, too.

We came to the meeting prepared, as we had conducted some research into the economics of the salary issue, inflation rates, and purchasing power, etc. to support our arguments. We found the president very open to the conversation and he engaged us in following our analyses. He agreed that over the past ten to twenty years, student and postdoc training has become longer and longer. A postdoc position is not a transition period to a more lucrative job anymore, but for most of us it is a substantial period of our professional careers. We ended this part of our discussion with the understanding that Dr. Tessier-Lavigne will evaluate this issue in depth with various administrative people. We are looking forward to reconvening in July to follow up on this important conversation. While the president is seeking input for the next meeting, we are seeking the same. Please don't hesitate to contact us if you have any additional comments or ideas that you would like us to bring up.

Aside from the salary negotiations, we also discussed the constant problem of the CFC waitlist. Since October of last year, we have been working with Human Resources and the CFC Director to address this issue, but have not yet reached a conclusion. However, everyone involved—the PDA, Human Resources, and the CFC—is concerned about this issue, and all of us have brought it up to Dr. Tessier-Lavigne. The main problem is that waitlists for infant and toddler care are unacceptably long (a twelve- to twenty-four-month wait). Because postdocs fall into an age bracket that makes them the primary requestors for infant and toddler care, they are the most affected by these waits. Postdocs also fall into a financial bracket in which they cannot afford many other options. The best solution would be an expansion of the CFC, but we were always told that this is not a possibility due to both financial reasons and space limitations. The University is undergoing renovation right now, so we raised this point with Dr. Tessier-Lavigne again and asked him to look into the matter. We also brought up a few ideas, including a “day room,” an apartment for instance, which would be provided by the University, where parents can organize childcare or nannies themselves. Dr. Strickland also mentioned that, about twenty years ago, parents operated a collective kind of enterprise to take care of one another's children. Apparently, that worked beautifully, as people seemed to



feel they could trust one another within this community. However, this is a more temporary option. We hope to keep the conversation going so that we can find sustainable long-term solutions. In this PDA initiative, we cannot emphasize enough the need for the support and involvement of parents to make our ideas a reality. All that the PDA can do is to mediate and help put ideas into action.

An unexpected turn in the discussion came when Dr. Tessier-Lavigne inquired about how many of us in the PDA were planning to pursue academic careers. Out of the five of us, two wanted to pursue jobs in academia; two were undecided; and one definitely wanted to leave academia and go into business. These ratios pretty much reflect the situation of postdocs in general. In the United States, approximately 70 percent of postdocs don't pursue academic careers. Unlike a traditional academic institution that emphasizes careers in basic and translational research, our president was very open—and even eager—to trying to find ways to support postdocs who want to pursue non-academic careers. He asked, “How do we serve these people well?” We brainstormed about a few ideas, including expanding the biotech workshops, introducing teaching classes, or connecting people to institutions and individuals who might help them in the next steps. He asked us to come up with several proposals, which we will explore during our next meeting. Again, please e-mail us if you have any ideas or suggestions of programs or workshops that we can build to help make the transition from postdoc to non-academic careers easier.

The atmosphere at Rockefeller is definitely breathing some fresh air with the new president. The PDA looks forward to staying engaged with Dr. Tessier-Lavigne and with the administration to explore new possibilities that will ultimately help all of us. ◉

Academic Research Titles at The Rockefeller University

In April 2011, *Natural Selections* enlisted the help of Maria Lazzaro, Director of Immigration and Academic Appointments in the Human Resources Department at RU, to compile a list of the University's researchers, broken down by gender. In our April issue, *Natural Selections* staff writer Jeanne Garbarino reported on the Town Hall Meeting given by President Marc Tessier-Lavigne in March. The president stressed his commitment to finding ways to make RU more attractive to female researchers, and to identifying obstacles that currently stand in the way of moving towards a more balanced gender breakdown. Because you can't monitor change without knowing your starting point, we at *Natural Selections* have decided to provide just that. We hope you will follow the University's progress on this issue along with us. With thanks to Ms. Lazzaro. ☺

	Male	Female	
Heads of Lab	63	9	
Postdocs	184	140	
Research Associates	58	43	
Senior Research Associates	17	20	
Research Assistant Professors	9	3	
Research Associate Professors	3	8	
Associate Professors in lab	2	0	
Instructors in Clinical Investigation	6	9	
Assistant Professors of Clinical Investigation	0	1	
Associate Professors of Clinical Investigation	0	1	
Fellows in Physics and Biology	2	2	
Neuroscience Fellows	2	0	
Visiting Students	17	12	
Foreign Research Interns	5	6	
Visiting Faculty	8	4	
Visiting Fellows (Visiting Postdocs)	21	13	
Total	397	271	668
Total Percentages	59%	41%	

Life on a Roll



Untitled by Sharon Radisch (<http://www.srphotographs.com>)

