

FALL 2012

COLUMBIA

MAGAZINE

Solitary Man

The Inner Life of Paul Auster



YOUR COLUMBIA CONNECTION.

The perfect midtown location:

- Network with Columbia alumni
- Attend exciting events and programs
- Dine with a client
- Conduct business meetings
- Take advantage of overnight rooms
and so much more.



COLUMBIA
UNIVERSITY
CLUB

NEW YORK

**APPLY FOR
MEMBERSHIP TODAY!**

15 WEST 43 STREET
NEW YORK, NY 10036
TEL: 212.719.0380

*in residence at The Princeton Club
of New York*

www.columbiacub.org



DEPARTMENTS

- 3 **Letters**
- 10 **College Walk**
For a raft of Columbia newcomers, it's sink or swim . . . The long, long, long-range forecast . . . Robots and saucers and Martians, oh my! . . . Election Day fiesta . . . "The Deal": a poem
- 44 **News**
Columbia acquires Frank Lloyd Wright papers . . . New data-crunching institute planned . . . Sree Sreenivasan named chief digital officer . . . Safwan Masri leads Global Centers . . . Mailman School revamps its curriculum
- 50 **Explorations**
- 52 **Newsmakers**
- 54 **Reviews**
- 62 **Classifieds**
- 64 **Finals**

FEATURES

- 16 **The Solitude of Invention**
By Stacey Kors
Home alone with the novelist who calls himself Paul Auster.
- 24 **The Brain Trust**
By David J. Craig
Columbia's Mind, Brain, and Behavior Initiative is probing the final frontier: the space between our ears.
- 32 **Tennessee Rose**
By Paul Hond
Country-music artist Laura Cantrell is going back to the roots — her own.
- 40 **Walking the Walk**
After ten years on the job, President Lee C. Bollinger talks about Columbia's future.

24



IN THIS ISSUE



David Denby '65CC, '66JRN is a film critic and staff writer at the *New Yorker*. He is the author of *Great Books*, an account of his second journey through Columbia's Core Curriculum. His latest book, *Do the Movies Have a Future?*, is a collection of essays and film criticism. >> [Page 58](#)



Karen Green '97GSAS has worked at Butler Library since 2002 as the ancient and medieval history and religion librarian. She created the Columbia graphic-novel collection in 2005 and since then has championed the use of comics in academic research and teaching. >> [Page 12](#)



Michael Shadlen is a professor of neuroscience at the College of Physicians and Surgeons and an investigator with the Howard Hughes Medical Institute. Shadlen studies the computational processes used by the brain to formulate thoughts. >> [Page 24](#)



Jeffrey Skinner '78SOA teaches creative writing at the University of Louisville. His poems have appeared in the *New Yorker*, the *Atlantic*, *DoubleTake*, and the *Paris Review*. Skinner's book *The 6.5 Practices of Moderately Successful Poets* was a *New York Times* editors' choice this summer. >> [Page 14](#)

LAURA SKINNER



Charles Zuker teaches in the Department of Neuroscience and the Department of Biochemistry and Molecular Biophysics at the College of Physicians and Surgeons. He is an investigator with the Howard Hughes Medical Institute. His research focuses on the neurological mechanisms underlying human sensory experience. >> [Page 24](#)

COLUMBIA

MAGAZINE

Executive Vice President for University
Development and Alumni Relations
Fred Van Sickle

Publisher
Tim McGowan

Chief Editorial Adviser
Jerry Kisslinger '79CC, '82GSAS

Editor in Chief
Michael B. Shavelson

Managing Editor
Rebecca Shapiro

Senior Editor
David J. Craig

Associate Editor
Paul Hond

Copy Chief
Joshua J. Friedman '08JRN

Contributing Editor
Eric McHenry

Art Director
Eson Chan

Assistant to the Editor
Nicole Brown

Editorial Assistants
Emelyn Lih '11CC, Samantha McCann '12SIPA

Mailing Address
Columbia Magazine
Columbia Alumni Center
622 W. 113th Street, MC 4521
New York, NY 10025
Tel. 212-851-4155
Fax 212-851-1950
magazine@columbia.edu
www.magazine.columbia.edu

Address and Archive Assistance
assistmag@columbia.edu
212-851-4155

To update your address online, visit
alumni.columbia.edu/directory,
or call 1-877-854-ALUM (2586).

Advertising:
Publisher's Representative
Bruce Ellerstein
917-226-7716

To download our advertising brochure or
submit a classified advertisement online,
visit www.magazine.columbia.edu/advertise.

Columbia Magazine is published for
alumni and friends of Columbia by the
Office of Alumni and Development.

© 2012 by the Trustees of Columbia University
in the City of New York



letters

FRACK ATTACK

I am appalled. Your summer cover article (“The Gas Menagerie,” Summer 2012) is hype, devoid of fact, and you should be ashamed to publish it.

Fracking has been an effective technique for sixty or seventy years without adverse environmental consequences. It has brought the US an increase in reserves and a decrease in energy costs that can pull the US out of economic stagnation. Despite what you read, fracking has been done in a largely safe and environmentally secure manner. To promote Josh Fox and his views is equivalent to promoting Mark Rudd.

Columbia taught me science, but *Columbia Magazine* is ignoring it. Columbia teaches journalism and unbiased reporting, but you are ignoring it. In the 1960s, when Columbia was tainted as part of the military-industrial complex, I supported the University. Now that Columbia ignores science and truth for left-wing government funding, I cannot support it. I trust that other formerly loyal alumni supporters will also cut contributions until you eliminate the bias. If you teach this crap, how do you expect the next generation to survive?

Peter Rugg '69CC, '70SEAS

Founder and CEO, MacArthur Energy
New York, NY

It is appropriate for an alumni periodical like *Columbia Magazine* to celebrate alumnus Josh Fox; “The Gas Menagerie” honors him for his film *Gasland*, which has received fame and awards for its treatment of the environmental risks of fracking for natural gas. While it is understandable that his own opposition to fracking would be included, it is not appropriate for *Columbia Magazine* to weigh in and make the story into a polemic.

Our committee, New Yorkers for Jobs and Energy Independence, composed of committed but reasoning environmentalists, made a balanced case for fracking to the New York Department of Environmental Conservation. The Urban Design Lab’s 2009 “Hancock and the Marcellus Shale,” which the article highlights, is seriously out of date. We used more current information, such as the 2011 MIT and Penn State studies and the Department of Environmental Conservation 2011 request for comments. Obsolete facts lead to incorrect conclusions.

An example of an obsolete argument comes from law professor Susan Kraham: “The Pennsylvania Department of Environmental Protection has been wholly captured by the natural-gas industry. I don’t think there’s any question about that.” If there had

ever been any inadequate regulation by the DEP, the advocacy by them of Act 13 — a new law that substantially increases regulatory control — demonstrates the incorrectness of her argument.

The article’s imbalance is illustrated by the lack of comment by *Columbia Magazine* on Fox’s gross misstatement concerning the casement of fracked wells. He is quoted as stating that the casement consists of “cement to protect the groundwater.” The reality is that casements are made of multiple layers of steel and cement, the cement’s purpose being to hold the steel in place, a critical safety feature.

R. N. Bhargava '66GSAS

Ossining, NY

Thank you for highlighting the world-changing work of Josh Fox. I am a seventeen-year resident of Wayne County, Pennsylvania. Four years ago, I had no strong feelings about natural-gas development, but after being offered \$444,000 plus royalties for a lease on my farm, I began to study the industry carefully. Frankly, I was seeking justification to take the funds. But after talking with families who suffered the terrifying effects of methane releases into their homes, after discovering that Cabot Oil & Gas released three loads of

LETTERS

chemicals into a nearby wetlands habitat in 2009, after studying the culture of natural-gas wastewater disposal, I can report that Josh Fox, if anything, is underestimating the enormity of the crisis and the corrosive impact that this crisis is having on public trust in government.

Based on Fox's work, I know that he has put his life on the line to defend the hundreds of thousands of fracking victims who are being frightened out of their homes, who are watching their children succumb to potentially fatal asthma attacks, who travel narrow rural roads while dodging nonstop convoys of trucks, and who are experiencing the introduction of extreme fear into their communities. From 2006 to 2010 I served as a member of my local planning commission and as a member of the steering committee that prepared a multi-municipal comprehensive plan for my region. The totality of these experiences has convinced me that this industry functions in many ways as an organized-crime unit, on a pay-to-pollute basis. I have not, and will not, lease my farm. Sadly, though, this idyllic, historic, circa 1860 farm is surrounded by fracking leases and will likely become a sweet memory. Now is our only chance to change the future.

Sally S. Moretti '85GS
Starrucca, PA

I was distressed to see that your article on fracking dealt with the story of a filmmaker with no technical expertise on an environmental subject, which requires more knowledge than tree hugging. I graduated with an MS in mechanical engineering in 1963 and find the global-warming theory and all the other unprovable social/political myths to be an Al Gore joke on our country. Your publishing this type of article puts you in the same category. Shame on you.

Bob Getty '63SEAS
Venice, FL

I found Paul Hond's cover article on Josh Fox's anti-fracking campaign to be enlightening, although perhaps not in the

way the author intended. After Fox runs through the long list of alleged environmental dangers posed by hydraulic fracturing — including aquifer and groundwater contamination, increased seismic activity, and excessive consumption of scarce water resources — it becomes clear that his main problem is not with fracking but rather with drilling for natural gas and any other fossil fuels. Fox's obsession with greenhouse oblivion seems to justify using fracking as a wedge environmental issue in the pursuit of a broader green agenda.

The main reason why energy-industry advocates shadow Fox at his public appearances is to counter the misinformation he spreads before it takes root in the public's mind. Rather than debating the experts on the issue of environmental safety and potential water contamination caused by fracking, Fox sits on panels with educators and actors, speaks at local public libraries, and lectures to college and high-school students. Most of the constituencies that he targets in his anti-fracking campaign are younger, less knowledgeable of the exploration and production business, and more open to making the leap from a ban on natural-gas fracking to a ban on all drilling and production.

The sooner the general public understands *Gasland* for what it is — the environmental equivalent of *Reefer Madness* — the better. The people of New York, Ohio, and Pennsylvania should be given the freedom to decide whether the economic benefits of oil and gas development outweigh the attendant infrastructure strains and quality-of-life costs, without the distraction of environmental fear mongering. It is time for a rational discussion of US energy policy and security that both promotes the safe exploitation of the country's natural endowment of hydrocarbons and forces new renewable and alternative sources of energy to stand on their own economic feet.

Paul H. Tice '83CC
Managing Director and
Energy Portfolio Manager, BlackRock
Short Hills, NJ

Josh Fox strikes me as one amazingly ironic zealot. If he is even modestly opposed to the vast petrochemical industry, he would do as others have done, which is to utterly eschew the use of petrochemical products, which not only include natural gas for heating and cooking but also the gasoline used to propel his automobile, oil, coal, and petroleum-derived plastics. If every person were to avoid the deadly plague inflicted on us by the petrochemical industry, the motivation for fracking would disappear and we could live happily ever after, riding our bicycles through the haze of wood smoke across the deforested landscape.

David Arbogast '75GSAPP
Davenport, IA

I was extremely upset by the degree of bias Paul Hond exhibited in his article. Hond interviewed the usual batch of journalists and lawyers, who always sensationalize the issue rather than working from the facts. This kind of emotional presentation always leads to polarization and court battles, rather than to a solution of our major problem of energy independence.

Wind and solar energy may seem to be helpful, but once a complete technical and financial analysis is done, the capital requirements are prohibitive, especially when the required backup-generation capacity is taken into account (most people want electricity all the time, not just when the wind or sun is available).

I am disappointed that your editorial staff published such a slanted article instead of choosing to pursue the kind of balanced dialogue that could lay the groundwork for everyone to work together toward a safe, environmentally sound use of our extensive natural-gas resources.

Michael Clark '61CC, '62SEAS
Reno, NV

I spent a working career in the energy industry. I was disappointed that the Summer 2012 issue devoted ten pages plus the cover to the campaign of Josh Fox against fracking for natural-gas production. Paul

Hond's article contained a great deal of bias, conjecture, and exaggeration. It appears Josh Fox is attempting to emulate Michael Moore. Renewable energy will continue to make inroads into the overall energy requirements. However, we must realistically accept that fossil fuels will be with us for a long time and the hydrocarbons they contain will be needed to provide our transportation fuels and chemical raw-material requirements. Natural gas is the cleanest of the fossil fuels, the alternatives being petroleum or coal.

The approach should be not to condemn all fracking but to regulate it so that it can be carried out safely. I question whether either Josh Fox or Paul Hond has the technical background to pass judgment. I wish Hond and *Columbia Magazine* had presented a more balanced picture. Did you consider soliciting an industry comment?

E. Scott Glover '54CC, '55SEAS
Punta Gorda, FL

Fracking is a tragedy to those living close to Kenneth Hahn Park, in Los Angeles. Josh Fox should tell his critics, to paraphrase Marie Antoinette, "Let them drink bottled water."

James Quinn '48SEAS
Rancho Palos Verdes, CA

"Rape, plunder, pillage . . . that's what mining's all about." The inflammatory first words of Columbia professor Malcolm T. Wane's Introduction to Mining class certainly got our attention. That was 1972, and I still remember it verbatim forty years later. The point is that inflammatory rhetoric gets people's attention, and they tend to remember it whether it is true or not.

Well stimulation, or fracking, has been implemented for decades across hundreds of thousands of wells without incident. Producing hydrocarbons in a safe, environmentally friendly manner is the standard for all operators in the United States. Over the past twenty years, American ingenuity has developed the ability to find and produce hydrocarbons in areas where previ-

Explore the World, Columbia!

Enjoy exclusive access to the world's most compelling travel destinations through the CAA Travel Study Program.

Journey to Antarctica

December 29, 2012–
January 11, 2013



Egypt and the Eternal Nile

March 13–29, 2013



Discovering Eastern Europe

June 11–27, 2013



For more information about these or other trips, visit alumni.columbia.edu/travel or call 866-325-8664.

Plus...

Mystical India
January 6–23, 2013

Tahiti and French Polynesia
February 21–March 3, 2013

Machu Picchu to the Galapagos
February 26–March 12, 2013

North Africa's Mediterranean Coast
April 11–21, 2013

Trade Routes of Coastal Iberia
April 12–20, 2013

...and more.

Learn more. Stay connected.
alumni.columbia.edu

COLUMBIA alumni | 
ASSOCIATION

LETTERS

ously it was not technically possible. This advancement is referred to as the “unconventional revolution,” and it is on par with the Internet revolution.

The United States is now referred to as the Saudi Arabia of natural gas. Think about that for a moment. Several years ago we were dependent on shipments of liquefied natural gas, and now we have the option to export it. Cars, trucks, and trains that are currently dependent on gasoline and diesel can now run on natural gas, a true game changer.

At the start of the Internet revolution some people fought tooth and nail against the changes and dangers it would bring. Ultimately, the value added to society was too great to be suppressed, and the world has accepted the Internet. We are at that same point in time for the same reasons.

Columbia’s foundational principles are the right and duty to question everything and to pursue the never-ending quest for knowledge and truth. We encourage you to continue that quest, learning more about natural gas and the truth about the unconventional revolution.

David Yard ’76 SEAS

Senior Reservoir Engineer-Eastern Division
Chesapeake Energy Corporation
Oklahoma City, OK

Eric Stabinski ’01SEAS, ’11SEAS

District Petrophysicist
Chesapeake Energy Corporation

Matthew Hatami ’09BUS

Asset Manager
Chesapeake Energy Corporation

A statement by Josh Fox in the article “The Gas Menagerie” is badly misleading in regard to any attempt to formulate a national energy policy. Fox says, “We also know that renewable energy can run the state [of New York],” but unless he is somehow including a large nuclear component, that is simply out of touch with present reality. The readers of *Columbia Magazine* would be well served to view *Switch*, a docu-

mentary film on the world’s growing energy needs and the search for alternative sources presented by Scott Tinker of the Bureau of Economic Geology, in Austin, Texas.

James D. Lowell ’58GSAS

Denver, CO

I’M VERKLINT

I very much enjoyed Eric Kandel’s article on Gustav Klimt and neurology (“Your Brain on Klimt,” Summer 2012).

In *Judith I*, is Judith’s face that of a woman with myasthenia gravis, with bilateral ptosis of the upper eyelids, arching forehead in an attempt to lift the eyelids, impassive face, and open, horizontal mouth (myasthenic snarl)?

In *Danäe*, in the lower left-hand corner, there are spermlike objects, including flagellae, which merge with the gold coins. The horizontal rectangle may just be a phallic symbol. Between the two rows of ova, lower right, are what appear to be blastocysts, early embryonic structures.

Sperm, eggs, and blastocysts also appeared in Klimt’s painting *Medicine*, for the ceiling of the Great Hall of the University of Vienna, destroyed by the SS in 1945.

Charles B. Brill ’61PS

Philadelphia, PA

“As I talk to you and you listen to me, the cells in my brain are having a direct effect on the cells in your brain. What’s more, the effect could be long-lasting. So don’t talk to strangers. It can produce completely unwanted effects on your synapses.” Thus spoke University Professor Eric Kandel in the December 1983 *Columbia Magazine*.

At the time, I thought this was an astonishing comment and concept, and in fact, I memorized it to display my erudition and wit at dinner parties over the years — always, of course, giving Kandel credit.

Kandel said many other astonishing things in the article, “The Secret Mind of the Brain,” by Meg Lavigne (now Dooley), then managing editor of *Columbia*. But as I read Kandel’s startling and wonderful article in the Summer 2012 issue, what



came to mind (still with some regret) is that Kandel simply hated the illustration of himself on the cover of the 1983 issue. He let me know that, and my brain was sorely affected — it lost quite a lot of sleep for a few days. I had thought this was such an important story that I had stretched our meager budget to commission the painting from a young graduate of the Pratt Institute, Justin Novak.

Silly me. If I could only have summoned Klimt! I must admit that I still like the illustration. But now I’m even more abashed to learn that Kandel can also speak with authority on art, so what can I say? Perhaps this: when dinner-party conversations have deteriorated to questions such as, “If you could own any original painting in the world, what would it be?” I’ve always replied, “Klimt’s *Portrait of Adele Bloch-Bauer*.” So I guess my brain is still “remarkably plastic” and “changing its performance and even its strategies as a result of experience,” as Kandel said in the earlier article. Thank you for expanding my brain, professor.

Ceil Cleveland
Durham, NC

Ceil Cleveland is a former editor of Columbia Magazine. — Ed.

INFERIORITY COMPLEXES

I enjoyed Norman Birnbaum's review of *Berlin 1961: Kennedy, Khrushchev, and the Most Dangerous Place on Earth*, by Frederick Kempe, and his discussion of John F. Kennedy's failed negotiations with Soviet leader Nikita Khrushchev ("Up Against the Wall," Spring 2012). It reminded me of when I took Econ 101 at the College in the early 1970s, about a decade after the events recounted in the review.

Like everyone, we used Paul Samuelson's textbook, *Economics*. In his book, Samuelson asserted that socialism produces a higher economic growth rate than capitalism. Why, then, he asked rhetorically, don't we adopt socialism? His feeble answer: it doesn't match our individualistic ethic.

I think Samuelson expressed the liberal consensus of his time. Thus, when Kennedy negotiated with Khrushchev, in his own mind he was the weaker party, the representative of an inferior and doomed economic system. His lack of success is not surprising.

Happily, I overcame Columbia's efforts to miseducate me in economics. I read the great free-market economists: Hayek, Friedman, and Ludwig von Mises, who gave a lecture around that time titled "Why Socialism Always Fails." These are the economists who (directly or indirectly) educated President Ronald Reagan. He went into his far more successful negotiations with the Soviets believing that they, not he, represented an inferior and doomed economic system.

Taras Wolansky '74CC
Jersey City, NJ

REVISING EISENHOWER

In his review of Jean Edward Smith's *Eisenhower in War and Peace* ("Gentle in Manner, Strong in Deed," Summer 2012), Christopher Caldwell's passing reference to the "narcissist MacArthur" calls to mind the snide remarks that the two principal American generals of World War II made about one another.

In a 1934 fitness report on Eisenhower, then his senior aide, MacArthur said: "This is the best officer in the army. When the next war comes, he should go right to the

top." But during that next war, when Ike's popularity rivaled his own, he said that Ike was "the best clerk I ever had." Ike, for his part, said that he had studied dramatics under MacArthur for nine years.

Petty jealousies aside, we should not forget that these men were soldiers and, brilliant organizer and strategist though he was, Ike was a rear-echelon general who never saw combat, while the twice-gassed MacArthur was the most decorated American officer of World War I, often leading the men of the Rainbow Division over the top, unarmed, without a helmet, and carrying only a swagger stick.

General George S. Patton, who served with MacArthur and knew something of such matters, said that MacArthur was "the bravest man I ever met."

Frank Salvidio '56GS
West Springfield, MA

The interesting review of *Eisenhower in War and Peace* in the Summer 2012 issue criticizes as "unjust" the statement by Arthur Schlesinger Jr. that, with the departure from office by President Eisenhower, "We have awakened as from a trance."

I well remember the time, and the Schlesinger comment is neither just nor unjust, but merely apt. Calling the comment unjust overlooks the fact that Eisenhower during the last several years of his administration was old and sickly, and that he was hospitalized for what at the time was a certain sign of frailty — heart problems. The comment also overlooks Schlesinger's implicit comparison, which was between the palpable fatigue of Eisenhower and the intellectual and physical vitality and the wit of the effervescent John Kennedy. Eisenhower by then gave every indication of treading water to the extent he could; Kennedy and his team

WHAT GOES BEST WITH YOUR IVY LEAGUE DEGREE? AN IVY LEAGUE MBA FROM JOHNSON.

Expand your network — and your opportunities — with an MBA from Johnson at Cornell University. Our collaborative learning experience goes far beyond mere cooperation. It creates bonds that are forged under the pressures of solving real issues for real businesses — from innovative startups to Fortune 500 companies. Combine the strengths of others into solutions that work — for you and your business. Learn more or register for an admissions event at johnson.cornell.edu.



JOHNSON
Cornell University

Discover the strength of many.

Amardeep Virk '13; Two-Year
MBA, Strategic Marketing



Scan to learn more about the
uniquely powerful education
experience at Johnson.



Two-Year MBA • Accelerated MBA • Cornell-Queen's Executive MBA • Cornell Executive MBA

by comparison seemed dervishes. Whatever one might put down as the strengths and weaknesses of the two, the change in administrations changed the mood of the nation.

Robert L. Kehr '69LAW
Los Angeles, CA

Christopher Caldwell credits President Eisenhower with being “decisive enough to desegregate Little Rock’s schools with federal troops in 1957.”

I recall that Eisenhower was no such courageous integrationist. As Taylor Branch points out in his 1988 Pulitzer Prize-winning *Parting the Waters: America in the King Years, 1954–63*, Eisenhower tried to avoid enforcement of the Supreme Court’s *Brown v. Board of Education* decision until Arkansas governor Orval Faubus’s flagrant defiance pressed him into an open confrontation. “No longer denying the crisis,” Branch writes, Eisenhower “convinced himself that Little Rock was not an issue of racial integration but of insurrection, like Shays’s Rebellion.”

Three years earlier, while the *Brown* case was actively being considered by the Supreme Court, Eisenhower had invited Chief Justice Earl Warren to an unusual White House dinner whose guests included John W. Davis, the counsel for the segregation states. In his posthumously published memoirs, Warren for the first time revealed a conversation he had with the president.

“The President,” Warren wrote, “took me by the arm, and, as we walked along, speaking of the southern states in the segregation cases, he said, ‘These are not bad people. All they are concerned about is to see that their sweet little girls are not required to sit in school alongside some big overgrown Negroes.’”

I submit that it was the nine courageous black students who braved the mobs, insults, and repeated attacks who desegregated Little Rock Central High School, not a demonstrably racist president forced against his will to finally enforce a Supreme Court decision he disagreed with.

William B. Branch '58SOA
New Rochelle, NY

WHERE THE CLASSICS LIVE

It was a great pleasure reading about the accomplishment of Gac Filipaj, who earned a degree in classics, with honors, while holding a full-time job as a janitor at Columbia (“An honorable life,” *News*, Summer 2012). His story is inspiring, as are the values he illuminates by his own life.

It was nearly equally gratifying to learn that classics even survives as a discipline at such a politically au courant place as Columbia. What could be more retro, more quintessentially white European male than classics, the very *fons et origo* of the detested Western civilization?

Good for Mr. Filipaj for embracing it while it still exists!

Mindy Dallas '89GS
Bronx, NY

DIVERSITY = DISCRIMINATION?

Does President Bollinger seriously believe that the Columbia faculty discriminates against women and members of racial minorities when it uses its expert judgment to hire the very best faculty available? (“University announces new effort to increase faculty diversity,” *News*, Summer 2012.) If not, why is he spending \$30 million to change the racial composition of the faculty? Clearly he is trying to “persuade” the faculty to hire candidates it would not otherwise hire when using its own independent judgment. Why then is he spending University funds to lower the quality of the faculty as judged by that very same faculty?

His stated rationale is to build a faculty that “more closely reflects the composition of the national pool of qualified candidates.” Statistically speaking, what reason is there to expect that any single university will reflect that composition? More important, what benefit will accrue to the university by meeting this statistical goal other than making the administration feel morally superior?

Much of the \$30 million will be spent outbidding other institutions for the small pool of qualified members of racial minorities. As Bobbie Berkowitz, dean of the School of Nursing, is quoted as saying,

“The competition to recruit these individuals [racial minorities] can be formidable. Now, having this money . . . we’re going to be in a better position.” The net effect will be two transfers. First, in this beggar-thy-neighbor approach, candidates who are members of racial minorities will be enticed to come to Columbia, thereby transferring them away from other deserving institutions that do not have \$30 million to compete successfully in the auction. Second, money will be transferred from paying for the University’s pressing needs and into the higher salaries of these favored candidates in order to entice them to Columbia.

The remainder of the \$30 million will go to junior faculty, support for doctoral students, and internships for undergraduates. These funds will be awarded only to members of favored groups; others (e.g., Irish-Americans, Jewish Americans) need not apply. Is this fair? Legal? Just?

At a time when Americans are increasingly moving toward racial fairness and several states (including Bollinger’s former state of Michigan) have legally banned the use of affirmative action and racial preferences in college admissions, why is Columbia moving backward toward heavily funding and implementing a racially discriminatory policy?

Gerald Zuriff '64CC
Cambridge, MA

TINKER TAYLER

In an otherwise very informative article about Josh Fox’s battle against the insidious practice of fracking (“The Gas Menagerie,” Summer 2012), you misspelled the name of Columbia Shakespeare scholar Edward Tayler. As he himself put it in a style sheet handed out for his undergraduate Shakespeare lectures, “Tailor is a maker of clothes; Tayler is a teacher of Shakespeare; Taylor might be just about anybody.”

And Edward W. Tayler, as most people who took his course will testify, is not just anybody.

Kyle Freeman '79GSAS
San Francisco, CA

YOU CAN CHANGE LIVES THAT CHANGE THE WORLD



WHAT IS GIVING DAY?

On **October 24**, for **24 hours**, the entire Columbia community will join together to celebrate and give back to Columbia.

WHY GIVE TO COLUMBIA?

Think of it as giving *through* Columbia, rather than giving to Columbia. Your donations can support a wide breadth of world-changing initiatives, including scientific research, student scholarships, art programs, community organizations, athletics programs, and much more. By giving through Columbia, you enable the research, students, and programs that make up Columbia's powerful and diverse community.

WHY GIVE ON GIVING DAY?

On Giving Day, your donation will go further through generous matching opportunities. The largest is a \$250,000 challenge, portions of which will be awarded to schools and programs based on a percentage of total dollars raised. In addition, five cash prizes, starting at \$50,000, will be awarded to the top five schools with the greatest percentage of alumni contributing on Giving Day. Finally, your donation could be selected to win one of six \$5,000 prizes that will go to the school or program to which you donated.

Spread the Giving Day message, motivate fellow alumni, and raise the bar for participation at your school and across Columbia.

HOW TO GET INVOLVED

Give

On **October 24**, make a donation to your school or program of choice at givingday.columbia.edu.

Join

Join us for live discussions with President Lee Bollinger, Nobel Laureate Eric Kandel, and other Columbians making an impact. Tweet your questions during these live events and include [#columbiagivingday](https://twitter.com/columbiagivingday) to participate in the conversation.

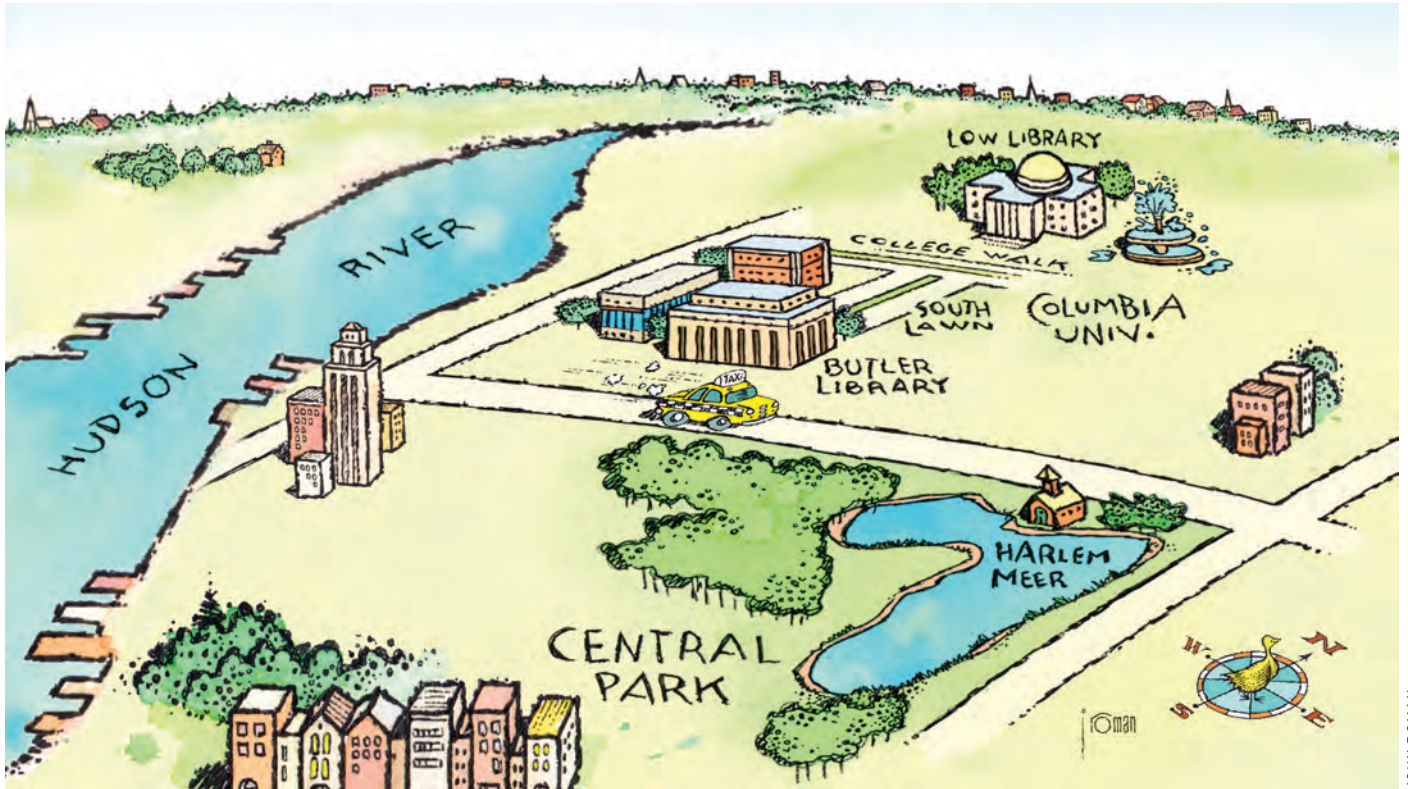
Share

Share the news of your gift and tell your network about Columbia's contributions to the world.

Your donation makes a difference.

givingday.columbia.edu

COLLEGE WALK



JOHN ROMAN

Freshman Orientation

The moment that Edwin Justiniano heard the sounds in the flower bed alongside Butler Library, he flew into action: he set down the old computer he'd just unloaded from a cart on the brick walkway between Butler and Lerner Hall, hurried to the outdoor bulletin board a few feet away, and took out his phone.

Taped to the board was a flier with a phone number at the bottom. The flier told of a young family who, seeking safe passage, was threatened by drains and grates and cars. "The entire family will start making its way to water by foot," it read. "Given our distance from a suitable body of water . . ." It was signed "Jennifer (wildlife rehabilitator)."

Justiniano knew the bulletin board well: as a Columbia groundskeeper, it was his job to prune it every day of its clutter. But there was one flier he'd made sure to leave up. He dialed the number.

It was seven thirty on a muggy July morning, and Justiniano, fifty-two, was working on Clean + Go Green, Columbia's biannual recycling program (the other event is in December). The program, run by Facilities and the offices of Environmental Stewardship and Environmental Health and Safety, invites the community to drop off unwanted computers, furniture, electronics, and books at collection stations around campus.

The green shrubs rustled. A fuzzy little black-and-yellow bird waddled out onto the low stone ledge. Another followed. And another.

"Hello?" came a woman's voice.

And another. And another.

"Jennifer?" Justiniano said, as Columbia's duck population increased by a significant factor. "They're leaving the nest!"

Jennifer Chong '98CC, a Butler Library help-desk consultant, was at home in Queens, eating breakfast. She knew from

experience that the situation called for a trained hand. She rushed to the subway.

The ducklings, meanwhile, had toddled from the undergrowth onto the bordering stone ledge. Ana Goncalves, a Facilities cleaner, arrived with a flat piece of cardboard to keep the chicks — there were eight of them now, small and bumblebee-colored, moving around on the ledge like wind-up toys — from hopping off. One particularly bold duckling, rebuffed again and again by the cardboard, kept heading resolutely for the precipice. "She was the bad apple," Justiniano said later. "She wanted to jump down and split." Goncalves had a similar impression. "He was crazy — anything to get out of that place!"

Susan Hamson, University archivist and housemate to three cats, had been following the duck saga for days — she'd checked on the mother the night before — and had brought her freshly bleached pet carrier that morning. Hamson observed the antics of

the renegade chick and saw a need for discipline. She picked the duckling up — so soft, so light! — and deposited it into the carrier. But the mother, whom Justiniano had seen for weeks hanging around campus fountains, stuck to her nest: one egg had failed to hatch, and she wasn't ready to leave it.

To complicate matters, a crowd had formed. People on their way to recycling stations or taking campus tours stopped to have a look. While Goncalves tried to corral the ducklings into two boxes, Justiniano attempted to lure the mother duck from her nest by placing a chick close by. The mother peeped out, withdrew, peeped out some more, withdrew. Finally, she emerged, fretted her wings, lifted up in a ponderous arc, and landed on South Lawn. The chicks scattered again and, perhaps intending to follow Goncalves, leapt off the low wall and onto a brick surface less soft and wet than instinct might have led them to expect.

By the time Chong arrived, she later said, things were “a little chaotic.” A coworker retrieved a second pet carrier and a bird net that Chong had been keeping in her office in Butler. Someone else handed her a blue beach towel that she hoped to throw over the mother to immobilize her. Helen Bielak, who works in the Office of Environmental Stewardship, was strolling alongside Lerner when she saw “a trail of ducklings on the walkway, heading toward Journalism.” Bielak and Elorine Scott, a Butler security officer, helped gather the chicks and place

them in the pet carrier that held their unruly sibling. But the mother was harder game. She flapped over the heads of her pursuers and landed behind them, rising and falling, wanting to stay near her young but avoid capture herself.

The frantic bird then fluttered to a recess in the Lerner exterior: a tight spot. Chong placed the duckling-filled pet carrier on the ground near the wall and set the other carrier beside it, door open. “The mother and ducklings were quacking at each other,” said Chong. “They were communicating. The mother couldn't see the ducklings, but she heard them.” It was only when the other humans left and calm descended that Chong was able to drape the net over the bewildered creature, pick her up, and put her in the empty carrier.

Chong grabbed the bird-stuffed cases, caught a cab, and chaperoned the family to the Harlem Meer, a pond at the northeast corner of Central Park. There, at the brim of the pond, Chong opened the ducklings' cage.

The tiny birds, confused, huddled around their mother's carrier. Chong picked them up one by one and plopped them into the water. They stayed near the edge, floating. Chong then released the mother, who glided right in. The babies formed a line behind their mother, and the whole party paddled toward the middle of the pond. Chong counted the chicks — there were seven. Seven? Chong saw with alarm that one of the ducklings had been left behind.

It was still at the pond's edge, struggling to get back on land. Odd duck! Chong knew it would die without its mother, who was getting farther and farther away. As a New York State wildlife rehabilitator, Chong tended mostly to pigeons that were sick or injured or orphaned. She had also helped squirrels, sparrows, starlings, opossums, and gulls. But never had she done anything like this.

She went over to the duckling, scooped it up, cocked her arm, and hurled the young fowl as far as she could over the pond. *Quaaaaack*. Plunk. Splash. The duckling, halfway between Chong and the mother, bobbed there in the water.

The mother heard the sounds. She turned and swam toward her straggler. Chong watched from the grass as mother and duckling reunited. “The mother touched her bill to bill,” she said.

Chong headed back to campus. She would be a little late for work.

Two days later, Justiniano was unloading more recycled computers by Lerner Hall in ninety-degree heat. These were the final hours of Clean + Go Green. Now, the program could count new life among the salvaged.

Justiniano, as he retold the story, walked over to the flower bed where the nest had been. He moved aside some leaves to reveal, in the undergrowth, delicate shards of white eggshells.

“It was a beautiful thing,” he said. “A beautiful thing.” — *Paul Hond*

Stormy Someday

On a summer day that was overcast and 76°F, with 0.1 inches of rain, Columbia's International Research Institute for Climate and Society (IRI) held its monthly long-range forecast briefing. Inside the swooping Monell Building on the Lamont campus in Palisades, New York,

the IRI staff read the scientific data (ocean temperatures, jet streams, historical trends) to help governments and nonprofits prepare for climate-related cataclysms — heavy rain, floods, and drought. Once a month, the IRI lets followers know what to expect for the next 120 days. Maybe.

At the July briefing, about twenty people filled a conference room just large enough to hold them. The walls were bare but for a pair of world maps, and with the exposed ducts and naked-wood rafters above, the room resembled the rental office in a ski lodge. Presenters and guests were casually

dressed, strongly favoring short-sleeve, plaid button-downs and khaki pants. If the first presenter, the research scientist and drought specialist Bradfield Lyon, hadn't been delivering a climate briefing, he could have been selling time-shares.

"We're looking at above-average conditions in the east central Pacific," he began, pointing to maps covered in splotches of yellow, blue, and red. "An El Niño may be on the way. We'll see."

The day before, Lisa Goddard, the director of the institute, had outlined the limitations of predicting the weather months in advance. "Our goal is to be reliable," she said. "The information we put out is probabilistic, so we're not going to say that next season it's going to be three degrees warmer than it was at this time last year. But we'll say that the probability of it being warmer is this much."

IRI feeds data from government satellites, ships, and weather stations into its own computer models to project likely out-

comes. Then groups like Oxfam and the International Red Cross and Red Crescent Movement take that information and use it to allocate resources in their relief efforts.

Over the course of the hourlong briefing, the two presenters — first Lyon, then Shuhua Li, a senior staff associate — discussed drought conditions in the United States (bad, but not as bad as you've heard), sea-surface temperatures (SSTs), and the likelihood of above- or below-normal precipitation around the globe over the next three months (North Africa is in for a dry spell. Maybe).

Still, a layperson hoping to come away with a better idea of whether to plan an outdoor wedding in September might have left disappointed. "For SST anomalies, it looks like over the eastern Pacific, only weak or borderline El Niño-like patterns develop," Li said in one of the more plain-English pronouncements of the afternoon. A typical slide title: "Time Series of 4 Skill Scores for Precipitation (Lead 1)." At no point did anyone utter the phrase "partly cloudy."

An hour after it started, the presentation wound down. "Basically, we have a below-normal forecast for North Atlantic tropical cyclones," said Li, "and for the western north Pacific, we have just slightly above-normal forecasts for a tropical cyclone."

One attendee had a final question. "It looks like the only place you have there with a high probability of something abnormal is the Guinea-coast region, below Senegal," he said. "Is there some local sea-surface temperature anomaly associated with that? It's very local, isn't it?"

"Yes," said Li, "it's very localized."

"It's a bit suspicious," said the guest. "I think it's worth checking."

Daniel Osgood, the lead scientist on IRI's Financial Instruments Sector Team, volunteered a simpler way to predict the weather in Africa.

"With Kenya, it's easy," he said. "We travel there to talk about drought, and anywhere we travel, it always rains."

— Douglas Quenqua

Space Avengers

On stack level 1, in the bowels of Butler, graphic-novel librarian Karen Green '97GSAS rips open a box of magazines that await classification and binding. She pulls out a November 1989 issue of *Amazing Stories*, with a cover illustration of a dour Albert Einstein clutching his fiddle while an anonymous galaxy hovers in the background. "Awesome!" she says.

Green dips into the box again, extracting another issue, this one with short fiction by Ray Bradbury, Harlan Ellison and Samuel R. Delany, Theodore Sturgeon and Richard Matheson. "November 1968," she murmurs, glancing at the jet-packed, space-suited astronaut hovering at the bottom of the cover. "That's the month I turned ten."

Even beyond the marquee names of Isaac Asimov '39GS, '41GSAS and Robert Silverberg '56CC, Columbia can claim its share of figures in science fiction and fantasy. Among them are anthologist Groff Conklin '27CC; writer Roger Zelazny '62GSAS; book editor Liz Gorinsky '03CC; and publisher Ian Ballantine '38CC, who with his wife, Betty, founded Ballantine Books, which became a leading science-fiction publisher in the 1950s. This summer, Betty Ballantine donated a trove of books and papers to the Rare Book and Manuscript Library.

The magazines that Green is now processing were donated in July by Fred Lerner '66CC, '81LS — a collection of two thousand or so copies of such titles as the *Magazine of*

Fantasy & Science Fiction, *Astounding Science Fiction*, and, of course, *Amazing Stories*. Lerner, as an undergraduate, had founded the Columbia University Science Fantasy Society (CUSFS), which in the 1970s morphed into today's Columbia University Science Fiction Society, with an identical acronym affectionately pronounced "cuss-fuss."

"In my high school, almost no one I knew read science fiction," says fantasy author Pauline J. Alama '86BC. "Meeting the people in the club was like meeting the people of my tribe."

Since its inception, CUSFS has hosted mini-conventions; produced a newsletter of reviews, essays, and fiction called *CUSFuSsing* (with that peculiar capitalization); screened movies like *Metropolis* and *Blade Runner*;



CLIFF CRAMP

held birthday parties for hobbit extraordinaire Bilbo Baggins; and conducted virgin sacrifices to Cthulhu, a creation of H. P. Lovecraft (“It typically involved wrestling in a pool filled with fake blood,” recalls former CUSFS president Eugene Myers ’00CC).

At the heart of CUSFS is its lending library, which once comprised some thirteen thousand books and magazines and still includes such noncirculating treasures as a signed copy of Asimov’s *Second Foundation* and an 1887 edition of Jules Verne’s *Twenty Thousand Leagues Under the Sea*. Acquisitions have always been eagerly sought; in January 1979, CUSFS took a road trip to the Alexandria, Virginia, home of George Leonard ’39CC, ’41LAW to pick up 1,500 books and magazines for deposit in their headquarters in Ferris Booth Hall.

But the library became a casualty when Lerner Hall replaced Booth in 1999. In the new student center, CUSFS was shoe-horned into a shared room with the Philolexian Society and could not house all its volumes, approximately 75 percent of which were consigned to storage. Attempts to donate some of the excess volumes to Butler failed. “There was no interest,” says former CUSFS president Noah Fulmor ’99CC, “because they said they had rarer volumes that they had no room for.” After being stashed in various places on and near campus for years, the overage was sold and donated, with the last three thousand volumes going to the Housing Works Bookstore Cafe this summer.

“Any student library is going to have a problem because it will have turnover and

will be run on the honor system — which often doesn’t work well,” says Lerner, who is an information scientist at the Vermont headquarters of the National Center for Posttraumatic Stress Disorder. “My take is that a student science-fiction library shouldn’t seek to be a definitive collection but rather a recreational resource.”

Meanwhile, volumes on robots, aliens, and intergalactic space travel that might once have ended up with CUSFS continue to flow into Butler. Lerner has sent eighteen boxes so far, he says, with “much more to go.”

It was Karen Green, Columbia’s librarian for ancient and medieval history and religion, who laid the groundwork for Lerner’s haul. In 2005, Green parlayed her interest in comics into an additional role as Butler’s first graphic-novel librarian. The new collection signaled that the University was receptive to nonconventional literary genres and formats.

Green sees Butler’s role for science fiction primarily as one of preservation. Calling science fiction an ideal medium “in which to process society’s fears and anxieties,” she harks back to Ray Bradbury’s dystopian masterpiece *Fahrenheit 451*, in which books have been outlawed and citizens endlessly watch interactive floor-to-ceiling TVs.

“Many things Bradbury described are now part of the landscape,” she says. “As a librarian, I’m seeing less print and more electronic journals. But we’re doing what we can.”

— Thomas Vinciguerra ’85CC, ’86JRN, ’90GSAS

Burgers and Ballots

When Americans go to the polls in November, it won’t be for the booze. That’s so 1874. But if you’re Donald P. Green, a professor of political science at Columbia, you might look at those nineteenth-century elections, in which balloting was a raucous

activity often accompanied by live music and free-flowing whiskey, and ponder the connection between a party atmosphere and a voter turnout rate that regularly approached 80 percent. Then, because you’re a social scientist, you might conduct an experiment.

That’s what Green did during elections in 2005: he hosted family-friendly events that attracted around one hundred people in New Haven, Connecticut, and another hundred in Hooksett, New Hampshire, with hamburgers and cotton candy instead of public balloting and Old Forester. It

was, as he admits, “a professor’s attempt to throw a party,” but the festivals drew on the notion that what gets voters to the polls is “connection — the feeling of being invited to the election.”

With the 2012 presidential election likely to be close, Republicans and Democrats will be making efforts to mobilize voters by, among other things, knocking on doors in crucial districts. That’s a testament to two of Green’s contributions to his field: the principle that the more personal a campaign contact, the more cost-effective in increasing turnout; and the idea that political scientists, like other social scientists, can test their hypotheses through experiments.

That principle took some time to develop. In the 1990s, Green and Alan S. Gerber, then colleagues in Yale’s political-science department, were separately studying the effects of campaign spending on elections: specifically, how many campaign dollars did it take to produce a vote? But both researchers were frustrated by their own methodology.

“The problem was that incumbents who were vulnerable raised and spent more than those who weren’t vulnerable,” Green says from his Hudson Valley home office,

surrounded by stacks of books and articles about campaigns and elections around the world. “Candidates who spent the most performed the worst — so it almost seemed as though the money hurt them.”

Challengers presented a different conundrum: did they do well because they spent a lot, or was the spending a marker for attributes like experience or charisma that attract both votes and money?

“That’s where we were in 1998,” Green says. “We would grouse about the fact that, short of a randomized experiment, we might never know the answer. And then we said, ‘Maybe we should *do* a randomized experiment.’”

That insight led to a groundbreaking study of voter mobilization in New Haven, a seminal 2004 book (with a second edition in 2008) titled *Get Out the Vote: How to Increase Voter Turnout*, and a new sub-field of political science that applies scientific methodology to research questions. The latest Gerber-Green collaboration is *Field Experiments: Design, Analysis, and Interpretation*, published in May.

“The buyer’s illusion is that something that’s really, really cheap is going to be cost-effective,” says Green.

Not so.

The New Haven study and subsequent experiments, using control groups and other groups of voters that received different combinations of campaign “interventions,” found that door-to-door canvassing is particularly effective. So are volunteer calls. Direct mail has a minor effect. Commercial phone banks are a waste of money.

And those dreaded robocalls? “I have not seen any evidence suggesting that robocalls of any conventional sort are effective at mobilizing or persuading,” Green says.

Green notes that attempts in recent years to make voting easier through such innovations as early voting and Election Day registration did not cause turnout to “immediately surge.” By the same token, he does not believe that requiring ID to vote will be “much of an impediment” to turnout. That’s because “the problem is not the cost of voting,” Green says, “but the motivation to vote.”

Motivation? As supplied by hamburgers and cotton candy?

“Our parties were not the greatest parties,” Green says. “But they still managed to bump up turnout.”

— Julia M. Klein

The Deal

The younger man is trying to sell some project to the older man. The younger man’s hands move over & above the maquette, chopping the air here & there in discreet emphasis. His eyebrows lift to serious angle at crucial moments of the pitch. The older man mostly listens but when he does speak the younger man tilts his head & leans in, squinting to read all the older man does not say.

I can’t tell if the sale is made or not — smiles & handshakes follow, but would in either case. Of course my father pops back into life at just that moment, walking in the restaurant door with his oiled athletic grace, smiling like he has a new joke to tell. But he ignores my presence & sits down in my chair, in me. Too obvious, dad, I say. Besides — like I’ve tried to tell you my entire life — poetry & business don’t mix.

— Jeffrey Skinner ’78SOA

Skinner’s new book of poems, Glaciology, will be published in 2013.

VISION·SMELL
HEARING·TASTE·TOUCH
PAIN·MOVEMENT·AGING·STROKE
CEREBRAL TRAUMA·PARKINSON'S·ALS
SPINAL CORD INJURY·SMA·EPILEPSY
HUNTINGTON'S·MULTIPLE SCLEROSIS
MUSCULAR DYSTROPHY·TOURETTE'S
ALZHEIMER'S·DEMENTIA·DEPRESSION
SCHIZOPHRENIA·ADDICTION
ASPERGER'S·BIPOLAR·ANXIETY·AUTISM
REASONING·EMOTION·MEMORY
BEHAVIOR·DECISION MAKING
CONSCIOUSNESS
INTELLIGENCE

 COLUMBIA UNIVERSITY
Mind Brain Behavior Initiative

Columbia University Brain Month

OCTOBER 2012 alumni.columbia.edu/brainmonth

How can personality and creativity emerge from the three-pound organ called the brain?

What happens when disease strikes the brain, and what scientific discoveries are changing outcomes?

Discover the relationship between our brains, our minds, our emotions, and our behavior as the world's top neuroscientists unravel the brain's deep mysteries and their connection to diseases of the nervous system.

Celebrating Columbia University's groundbreaking Mind Brain Behavior Initiative and the Jerome L. Greene Science Center, now under construction, Brain Month brings neuroscience out of the lab, offering insight into how the brain affects every aspect of humanity—and what that understanding can tell us about ourselves, our world, and our future.

Registration is required for all events. Visit alumni.columbia.edu/brainmonth to register.

For more information, e-mail mbbi@columbia.edu or call 212.851.7893.

Explore the Frontiers of the Mind: The Deliberating Brain

Monday, October 1
6 – 7:30 p.m.
The Carlyle

Featuring:

■ **Michael N. Shadlen**, professor of neuroscience, Columbia University, and investigator, Howard Hughes Medical Institute

CAA Alumni Leaders Panel: Understanding Our Brains, Understanding Ourselves

Friday, October 12
6 – 7:30 p.m.
New-York Historical Society

Moderator:

■ **Jonathan Weiner**
P: '11CC, Maxwell M. Geffen Professor of Medical and Scientific Journalism, Columbia University Graduate School of Journalism, Pulitzer Prize winner (*The Beak of the Finch*)

Featuring:

■ **Richard Axel** '67CC, 2004 Nobel laureate; University Professor and investigator, Howard Hughes Medical Institute; co-director of the Mind Brain Behavior Institute

■ **Lise Eliot** '87PS, '91PS, associate professor of neuroscience, Chicago Medical School of Rosalind Franklin University; author of *Pink Brain, Blue Brain*

■ **Neil Schneider** '90PS, '93PS, '94PS, assistant professor, Department of Neurology, College of Physicians and Surgeons of Columbia University

■ **Leslie Vosshall** '87CC, investigator, Howard Hughes Medical Institute; Robin Chemers Neustein Professor and head, Laboratory of Neurogenetics and Behavior, Rockefeller University

■ With special viewing of images from *Portraits of the Mind*, with **Carl Schoonover** '08GSAS, '11GSAS, and reception with the Columbia Alumni Arts League.

We Are What We Remember: Memory and the Biological Basis of Individuality

Frontiers of Science
Core Course Lecture

Thursday, October 18
4:30 – 6 p.m.
Miller Theatre

Featuring:

■ 2000 Nobel laureate and Fred Kavli Professor **Eric Kandel**, co-director of the Mind Brain Behavior Initiative. Only open to undergraduate students in Frontiers of Science.

Food, Taste, and the Brain

Guggenheim
Museum's "Works & Process" Series

Saturday, October 20
7:30 – 10 p.m.
Guggenheim Museum

Featuring:

■ **Charles Zuker**, professor of biochemistry and biophysics, Columbia University

Followed by private viewing of "Picasso Black and White" exhibition. For tickets, visit www.worksandprocess.org.

Live Web Chat with Eric Kandel

Wednesday, October 24
Noon – 1 p.m.

Participate in a live conversation with Dr. Kandel on Columbia Giving Day, the first all-campus event promoting annual giving to change lives that change the world.

2012 Canada Gairdner International Award and Awardees Lecture

Thursday, October 25
1 p.m.
University of Toronto

Featuring:

■ **Thomas Jessell**, 2012 Canada Gairdner Laureate and co-director of the Mind Brain Behavior Initiative

New Insights into the Brain

Friday, October 26
9 a.m.
University of Toronto

Featuring:

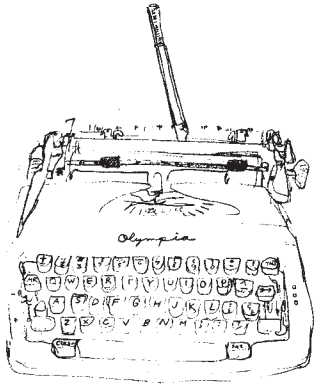
■ **Eric Kandel**, 1987 Canada Gairdner Laureate
For more information visit www.gairdner.org.

Café Science: Singing in the Brain

Monday, October 29
6 – 8 p.m.
Craftbar New York

Featuring:

■ **Sarah Woolley**, associate professor of psychology, Columbia University and
■ **Jill Sobule**, singer/songwriter



The
Solitude
of
Invention

By Stacey Kors

Paul Auster, one of America's most enigmatic literary figures, has opened up about his life in a new memoir.

Now he opens his front door.

Paintings by Sam Messer

(Messer has been painting and drawing Paul Auster, and Auster's Olympia typewriter, for many years.)





PAUL AUSTER (THAT IS NOT MY REAL NAME)

*My name is Paul Auster,
that is not my real name,*
oil on canvas, 68" × 66", 1998

Facing page: *Typewriter Study #1,*
pencil on paper, 14" × 17", 1997

“IT HAPPENED

RIGHT THERE,
IN THAT CHAIR.”

Paul Auster points to one of the upholstered Parsons chairs surrounding the Bordeaux-colored dining table in his Brooklyn brownstone. Staring blankly, he adds, “I wouldn’t wish that on anyone.”

The chair is where Auster ’69CC, ’70GSAS suffered his first panic attack, soon after his mother died suddenly in 2002. “I didn’t see my father’s corpse, but I saw my mother’s corpse. It’s a horrible thing to see your parent dead, especially your mother, because your body began inside her body. You started in that person. It’s a very, very traumatic business.”

The death of his mother is one of the experiences that Auster recounts in his latest work, *Winter Journal*, a memoir of the sixty-five-year-old writer’s life, from childhood to the present day. *Winter Journal* also explores what it means to be human and to live inside our bodies, with their curious collection of yawns, coughs, and sneezes. What it’s like to feel the ache of physical desire and the relief of urination; to abandon yourself to sports as a boy, and to girls as an adolescent; to walk aimlessly through snowy city streets and run recklessly down the baseline of a spring-green ball field; to endure searing pain and express soaring joy; to know love and know loss; to grow up; to grow old. It’s the story of Paul Auster, but Paul Auster as everyman, which he emphasizes by writing in the second person.

“Writing in the first person would have been too exclusionary,” says Auster, who speaks in a velvety baritone with a slight nap, perhaps from the Dutch Schimmelpenninck cigarillos that he chain-smokes throughout the day. “I see that my experiences are so similar to everyone else’s, because we all have bodies, after all. Something always goes wrong with our bodies. Or right with our bodies. First person would have been pushing people away. Third would have been too distant. So second seemed just right, where I could address myself as an intimate stranger or an intimate other. But then the ‘you’ has this rebound effect on the reader, who gets sucked in, and is experiencing it in a different way than a first- or third-person text.”

Auster sits in a deco-style club chair on the parlor floor of his century-old Park Slope home, smoking as he talks. The brownstone is in pristine condition, the original, ornately carved woodwork and intricate inlaid wood floors balanced by a minimalist, Scandinavian-modern aesthetic, which he attributes to his wife, the writer Siri Hustvedt ’86GSAS. Along with a display of family photos are the artifacts of literary success, including two of the numerous paintings created by artist Sam Messer of Auster’s manual Olympia typewriter, which he continues to use in lieu of a computer, and a bronze sculpture on the side table beside his chair.

“That’s my Asturias Prize,” says Auster. “It’s the biggest literary prize I’ve won. It’s sort of like the Spanish version of the Nobel Prize. They give awards in the arts, sciences, and humanities — all these wonderful people getting things.” A little uncomfortable about having it so prominently displayed, he adds, “It’s one of the last things Miró did. I don’t know where to put it, so we have it here, because it’s Miró.”

Before the awards ceremony in 2006, which was attended by Spain’s queen and crown prince and broadcast live on Spanish-language TV stations around the world, Auster was looking over his acceptance speech in his hotel room when he put his glasses on the bed and sat on them.

“Can you imagine? One of the stems was broken off, so I had to give this speech in front of, I don’t know, a hundred million people, like this.” He closes one of the earpieces and puts the glasses on, balancing them on his nose. “Fortunately, the glasses didn’t fall off.

“My biggest moment,” he says with a laugh, “and I sat on my glasses.”

Given the scale of his success — his novels have been translated into forty-three languages — Auster’s sense of humor is surprisingly self-effacing. Readers familiar with his bleak tales of human suffering, loss, and failed attempts at redemption may marvel that he has one at all. (Even in his one attempt at a comic novel, *Brooklyn Follies*, a devastating hammer blow in the final paragraph obliterates the potentially happy ending.) His dust-jacket photos through the years seem only to confirm this image: Byronically handsome, with a strong, square jaw and penetrating gray-green eyes, Auster stares out soberly from his books, the embodiment of the brooding artist.

In person, however, Auster is warm and gracious, as keen to discuss baseball, his lifelong passion, as his writing. His darkly attractive looks have mellowed with time: his once thick, black hair thinning and silvery gray, the sharp cheekbones softened, the long, angular face fuller and rounder. Tall and broad, he shows a barely perceptible stoop to his shoulders that appears to be not so much a product of age as a slight shyness or self-consciousness in his physical person.

Taking a puff on his cigarillo, he glances again at the Asturias.

“It’s been a strange trajectory, I can tell you.”

IT STARTED IN NEWARK AND SOUTH ORANGE, WHERE AUSTER had a middle-class suburban upbringing, liked by his peers and excelling at school and sports. His family life, however, was difficult: his parents were unhappily married until their divorce during his senior year of high school, his father an almost entirely absent



The Whole Story, oil on canvas, 36" × 30", 2001

figure from his life; his younger sister was diagnosed with schizophrenia in her teens. From a young age, Auster took to baseball as a physical outlet and writing as an emotional one, creating both fiction and poetry. He continued to pursue both genres rigorously while attending Columbia, first as an undergraduate and then as a master's student in comparative literature. At twenty-three, he decided to drop fiction altogether and concentrate exclusively on poetry.

"At a certain moment I said to myself, 'I'm not getting anywhere. I just can't finish anything I start,'" he says. "I think it was probably a lack of confidence and a lack of a fixed aesthetic. But as I got older, I figured it out. Or at least I was able to do something with it. And finish."

After Columbia, Auster spent a few months working on an Esso oil tanker to fund a temporary move to Paris, and lived in France for the next three years, where he wrote and translated poetry and worked for a movie producer, revising treatments and preparing script synopses. (While still in school, and on a junior-year-abroad program in Paris in 1967, Auster, a cinephile, had dreamed of breaking into the industry, even writing numerous script synopses for silent movies. But, he says, "I realized that my personality was wrong. I couldn't talk in front of people. I was so shy. I thought, how can I direct movies if I can't talk to people? So I more or less gave up the idea." A quarter of a century later, Auster would write and codirect his first movie, *Smoke*, starring Harvey Keitel and William Hurt, with three more to follow.)

At twenty-three, he decided to drop fiction altogether and concentrate exclusively on poetry.

In 1974, at the age of twenty-seven, Auster returned to New York with nine dollars to his name and two slim volumes of poetry to his credit. ("I had no idea how to earn my living.") The next few years proved an intense struggle to gain financial footing. He married his college girlfriend, the writer and translator Lydia Davis; after she became pregnant with their son Daniel, they moved from their beloved New York City to a rural, ramshackle house in more affordable Dutchess County. Auster continued to write poetry, publishing a few more collections and chapbooks, but he spent most of his time trying to figure out how to make money. He shopped around a pseudonymous baseball murder mystery, *Squeeze Play*. He created a card game, which he illustrates in his 1997 memoir *Hand to Mouth*, that mimicked the play of a baseball game. Soon, the financial struggles evolved into marital ones, and he stopped writing poetry altogether.

"I didn't abandon poetry," says Auster. "It abandoned me. I just came to a wall." Auster remains proud of his poetry, and for good reason: spare and deeply lyrical, it has a romantic intensity reminiscent of the twentieth-century Italian poet Eugenio Montale. Consider, for instance, Auster's poem "Still Life":

Snowfall. And in the nethermost
lode of whiteness,
a memory
that adds your steps
to the lost.

Endlessly,
I would have walked with you.

"It holds up," he says. "But I haven't written a poem since early 1979, half a lifetime ago. Except for family occasions — birthdays, weddings, anniversaries. I write silly rhyming poems for those."

As Auster's world was crumbling — bereft of money, marriage, and muse — he was invited by a friend to a modern-dance rehearsal. Watching the dancers interact, the powerful movement of their bodies, was a life-altering experience, a "scalding, epiphanic moment of clarity that pushed you through a crack in the universe and allowed you to start writing again," as he recalls in *Winter Journal*.

"That dance performance unblocked me," Auster says. "And then when I started writing again, it was prose. I found a new way to do it, a new approach altogether. I was liberated. It all became possible."

The thirty-one-year-old Auster went home after the performance and immediately began to write, and continued to do so solidly for three weeks, working on a text that he describes as being "of no defin-



“I’m fascinated by the artificiality of books,”
Auster explains.

able genre, neither a poem nor a prose narrative,” trying to explain all that he saw and felt during that dance performance. It was as he was finishing this piece, an eight-page work entitled *White Spaces*, that his father died of a heart attack while making love with his girlfriend.

“He died young, just one year older than I am now,” Auster says. “I wasn’t close to my father, who was an opaque person. He wasn’t unkind — I mean, he didn’t have any malicious thoughts toward me, just a kind of vague indifference, whereas my mother was very engaged with me from the beginning. Which is why I never really felt compelled to write about her with the urgency that I felt that I had to write about my father, who for me was literally vanishing.”

The resulting work was his first published book of prose. *The Invention of Solitude* is more than a biography of Auster’s father; it is also a haunting, meditative account of the darkest and most unsettled period in Auster’s life as he was experiencing it: the end of his marriage; the loss of his absent father; the separation from his own young son; the lack of money and a plan for the future; the gnawing emptiness. While not written expressly in narrative form, the second of the book’s two parts, entitled “The Book of Memory,” contains narrative elements; it is also written in the third person.

“I didn’t like it in the first person: something was wrong. I realized that I had to step back from myself, otherwise, I couldn’t do it. I was too close. By stepping back into the third, I think I was able to see things more clearly.”

The Invention of Solitude was the beginning of Auster’s move back toward storytelling. The ideas explored in “The Book of Memory” — loss and suffering, isolation and connection, chance and coincidence — would become the dominant themes in almost all of his subsequent work.

“I have always thought of that book,” he says, “as the foundation for everything that followed.”

When writing returned, Auster’s fortunes shifted. An unexpected inheritance from his father allowed him to avoid a desk job and continue on his path to becoming a novelist. Two years later, in 1981, he was introduced at a reading to a young writer and Columbia doctoral candidate, Siri Hustvedt. “I had this amazing experience of falling in love with somebody in about an hour,” he says, “and just jumping in blindly. Here we are, thirty-one years later, still together.

“To me,” he suddenly adds, “Siri is one of the greatest geniuses on the planet. She’s the smartest person I’ve ever known. Period.”

Auster’s first published fiction came in 1985: *City of Glass*, the first of three suspenseful, noir-style novellas with interconnected themes, that were later published together as *The New York Trilogy*. A postmodern, existential mystery, *City of Glass* is about a writer of second-rate detective novels, Daniel Quinn, who gets a

series of calls looking for an actual detective. Bored and isolated, he decides to take on the detective’s persona, and soon finds himself implicated in a real mystery.

What makes *City of Glass* extraordinary is its exploration of identity through metafiction: Quinn writes his detective novels under a pseudonym, William Wilson; the frantic, repeated caller is looking for a detective named Paul Auster; and Quinn, after taking on Auster’s persona, meets the real Paul Auster, who is also a writer and not a detective.

“I’m fascinated by the artificiality of books,” Auster explains. “Everybody knows that when you pick up a novel, it’s something made up by somebody. Yet somehow we reify it. Somehow the protocol is that you’re not supposed to tamper with the rules. I was just curious to see what would happen if you take the name from the cover of the book and you put it inside the book.”

Auster is quick to point out that placing himself in the novel was not meant as a postmodern ploy, and had nothing to do with ego. “The Auster in the book is very similar to me in many ways,” he acknowledges, “the outward circumstances of his life more or less tallied with mine at the time. But I think of him as a rather foolish, even ridiculous, character. Everything he says is the opposite of what I think. I just was trying to make fun of myself.”

With the publication of *City of Glass*, Auster gained a cult of postmodern groupies; some fans retraced the protagonist’s travels around Manhattan, hoping to solve the mystery, and some years later, the book was turned into a popular graphic novel. When the other books in the trilogy, *Ghosts* and *The Locked Room*, were published, literary scholars also began to take notice. Auster was quickly establishing himself as a new and inventive voice in postmodern American literature.

NEARLY THIRTY YEARS AND MORE THAN A DOZEN NOVELS LATER, it’s hard to think of another contemporary American writer whose work generates more discussion and curiosity. “I must have over forty books about myself in the house,” says Auster, with more puzzlement than pride. “And I know that there are dissertations being written all the time. It’s rather extraordinary. There’s even a woman at the University of Copenhagen who’s setting up some Center for Paul Auster Studies. It’s all so strange that I can’t get my head around all of this.”

Academics theorize endlessly about Auster and his literary motivations, labeling him everything from a New York Jewish hunger artist to a clever semiotician whose every decision — down to the color of the notebook his protagonists choose to write in — is fraught with symbolism. Auster dismisses most of this as academic overanalyzing, usually with a hidden agenda.

“I was absolutely burned out from
the experience. I haven’t been able to
write any fiction since.”

“So many of these people have a point of view, a position, and are trying to articulate this position by using me as an example. But I myself, living within myself, never try to put labels on what I do. I just follow my nose.

“I’m a man of contradictions, you know; I can’t say any one thing about myself. Yes,” he says with a laugh, “I’m the hunger artist who likes to eat.”

Like every writer, Auster has his detractors; his, however, are unusually vicious. In 2009, with the publication of his novel *Invisible*, Auster received two particularly blistering, high-profile condemnations. In the *New Yorker*, James Wood began his lengthy critique with a parody of Auster’s writing that gave it as much stylistic credit as a dime-store thriller, and a bad one. Wood then mercilessly dissected what he viewed as Auster’s jumble of repetitive themes, implausible coincidences, hackneyed phrases, and lack of irony. The result, concluded Wood, is often “the worst of both worlds: fake realism and shallow skepticism.” In the *New Statesman*, critic Leo Robson bemoaned Auster’s predictability, going so far as to create a checklist of Austerian tropes: “Dead child? Check. A book-within-a-book? Check. Dying or widowed narrator? Double-check.”

In general, Auster doesn’t bother responding to his critics. “I know there are people who hate what I do and people who love what I do,” he says. But he wants readers to understand that his work is more straightforward than often perceived.

“I’m not trying to manipulate anything,” he says. “I’m just trying to represent the world as I’ve experienced it. That’s what my books are: a representation of what I feel about the world and how I’ve observed the mechanics of reality, which are very befuddling. The unforeseen is crashing in on us all the time. One minute you’re walking along the street, and the next minute a car hits you. I mean, my daughter, Sophie, was hit by a car a couple of months ago. She’s fine, but she could have just as easily been killed. These things happen every day in real life. So why shouldn’t novels have them?”

“I think what critics forget is that I started as a poet,” he says, “and I still feel that I’m a poet. I don’t feel that I’m writing novels in the way other people are writing novels. I think of myself more as a poet-storyteller than a novelist.”

While not a justification for the shortcomings in his novels that have been pointed out by critics — no matter how unusual his approach, the end result remains a novel — it does help to explain the wildly divergent opinions about his fiction, the curious inconsistency of his language, and why millions of readers the world over have such a powerful, almost visceral, response to his work.

Through the years, the majority of complaints about Auster’s books have concerned the basic building blocks of a novel’s structure, such as plot and character development, and clichéd language, especially in dialogue. (Would a Swiss history professor, however sinister, ever say, “Your ass will be so cooked, you won’t be able to sit down again for the rest of your life”?) His protagonists rarely come with much backstory, their scant biographies largely lifted from Auster’s own life: they study at Columbia, travel to Paris, write poetry or fiction, obsess over baseball, and bear scars from dysfunctional families. He rarely offers more than a sketch of their physical appearance. And yet, we know their inner lives so well: their thoughts, their desires, their struggles, their solitude and suffering. We may not know where they came from, but we want to know where they’re headed.

Auster writes novels that have the emotional immediacy and resonance of a good poem. They are works of the moment, of present feeling and personal action. His language sometimes can feel forced and shopworn, even corny at times, when his characters are interacting with the outside world; but it is, like his poetry of old, spare and lyrical when he gets inside those characters’ heads and loses himself in the more impressionistic music of thought.

Take the opening of *Man in the Dark* (2008):

I am alone in the dark, turning the world around in my head as I struggle through another bout of insomnia, another white night in the great American wilderness.

Or these lines from *Moon Palace* (1989):

I had jumped off the edge, and then, at the very last moment, something reached out and caught me in midair. That something is what I define as love. It is the one thing that can stop a man from falling, powerful enough to negate the laws of gravity.

Over the three decades that Auster has been publishing fiction, his style and approach have evolved, moving away from labyrinthine plots to more straightforward storytelling. In his last few novels, there has also been a marked shift in his voice and an expansion of his methods. “I’ve opened up,” Auster says. “I’m using run-on sentences now, in ways that I never did before. I find it’s very propulsive, and especially good for capturing thinking, the internal monologue.”

Not only are the protagonists in these recent works more developed, but there are also more of them telling their stories: while several of Auster’s earlier novels split into double narration, *Invisible*, from 2009, has three separate narrators, and *Sunset Park*, his most recent novel, from 2010, has six.

“It was the story of all these people,” says Auster of *Sunset Park*, about a group of twenty-somethings squatting in an abandoned home during the financial and housing crisis of 2008. “We were living in an enormous cultural and societal crisis — the whole country was being booted out of their homes. So I knew I had to write a book with many voices in it. I think it’s also the only time I’ve written a book consciously about now, with a capital N, without any sort of time lag. The events of the book were only about two or three months old as I was writing it. It was very galvanizing.”

The rapid switching of storytellers in *Sunset Park* affords less room for filler; there remain some heavy-handed touches — one character takes photos of the personal possessions left behind in foreclosed homes he’s hired to clean, another runs a “hospital for broken things” — but it is one of the most fully realized of Auster’s novels.

“I’ve never written anything more quickly,” he says. “I wrote that book in such a condensed period — it only took me about four months, maybe five. I was absolutely burned out from the experience. I haven’t been able to write any fiction since.”

Instead, Auster is at work on another autobiographical book, which he won’t discuss until it’s nearer to completion. (“I don’t want to jinx it.”) After that, he’s hoping he’ll be ready to tackle fiction again. “I have ideas kicking around; I just haven’t felt ready.”

IN *WINTER JOURNAL*, AUSTER MUSES ON HIS PROFESSION:

No doubt you are a flawed and wounded person, a man who has carried a wound in him from the very beginning (why else would you have spent the whole of your adult life bleeding words onto a page?), and the benefits you derive from alcohol and tobacco serve as crutches to keep your crippled self upright and moving through the world.

“Most people wouldn’t want to be a writer, and for good reason,” Auster says, an early evening glass of white wine now accompanying the steady supply of cigarillos. “I mean, who wants to be shut up like that? People like to be with other people. To connect.”

The phone rings, and Auster jumps to answer it, apologetically, hoping it will be his wife. She left for London only that morning, but it’s clear that he already misses her. Instead it’s Auster’s agent, calling with an offer for a reading somewhere in Europe. (“Tell them I’m sorry, and that I wish I could, but there are so many requests.”) On the table, next to the Asturias Award, lies a literary



EDWARD R. BROIDA COLLECTION / COURTESY OF NIELSEN GALLERY

Pink Olympia, oil on canvas, 64" × 78", 2001

publication with a cover photo of Siri, the woman Auster extols in his memoir.

“Oh, I had even more about her,” he admits, after returning from the call, “but I had to cut it back.”

The phone rings again a short time later, and Auster’s voice changes, taking on a softer, sweeter tone. “Hi, baby,” he says. “How’s it going?” It’s not Siri after all, but Auster’s twenty-five-year-old daughter Sophie, checking in. “Siri left this morning,” he tells her. “But I’m here all week, so stop by anytime.” Sophie, a singer, has a new album coming out, and just finished the photo shoot. Auster is eager to play her music for a guest.

He walks across the room to the media console and puts on an upbeat, South American-style tune, which he listens to with a small smile and obvious pride, wondering aloud if it is a tango. He follows it with a romantic ballad. Sophie’s sultry voice is full of heartache as she pines for her absent love. Auster sits silently, gazing straight ahead, his eyes glistening.

When the song ends, he sits still for a moment, then jumps from his chair and moves toward the stereo.

“Let’s hear one more.” 🍷

Stacey Kors is a freelance arts writer. Her work has been published in Gramophone, the New York Times, the Financial Times, the Boston Globe, and the San Francisco Chronicle.





THE
BRAIN

By David J. Craig

TRUST

Columbia's Mind, Brain, and Behavior Initiative is assembling the best thinkers in the world to study the most complex object in the known universe. How far can this neurological dream team go?

Michael Shadlen is the latest to arrive. He has come from the University of Washington, after running his own laboratory there for seventeen years. Over the summer he packed up his lab equipment, put his family's Seattle home on the market, and moved to New York City. He has come for a job in a Columbia research program that is still taking shape, in a new laboratory that won't exist until 2016.

"It's no fun from a logistical standpoint, because my team will have to move twice," says Shadlen, one of the world's top neuroscientists. "But I knew from the first phone call that I wanted in."

He is in very good company. Larry Abbott, a prominent theoretical neuroscientist who is a wizard at analyzing enormous data sets, came to Columbia from Brandeis in 2005. Stefano Fusi, another leading theoretician, was recruited from ETH Zürich in 2007. Charles Zuker, a biochemist who discovered how the brain perceives taste, arrived from the University of California, San Diego, in 2009. Tom Maniatis, a pioneer of genetic

cloning who studies how DNA guides brain development, was plucked from Harvard the next year. Mark Churchland, a young theoretical neuroscientist who has shown that groups of brain cells will sometimes work together like members of a musical ensemble, tapping out rhythmic signals that are meaningful only when combined, left Stanford for Columbia in 2011.

What has drawn them here is the Columbia University Mind, Brain, and Behavior Initiative (MBBI), a new program intended to solve mysteries such as these: How do the electrical impulses of brain cells turn into thoughts? How do these thoughts give rise to all manner of human experience — love, compassion, anger, jealousy?

"The truth is that we are just beginning to study how the brain functions at that level," says Eric Kandel, an eminent Columbia neuroscientist and one of MBBI's three codirectors.

Today, most of what is known about the brain involves the molecular composition and functioning of its individual cells, or neurons. The decoding of the human genome

Illustrations by Mark Steele

has enabled scientists to look deep inside brain cells and identify molecules involved in Alzheimer's disease and some addictive disorders. At the gross anatomical level, researchers are using new scanning technology to identify areas of the brain where emotions get processed, which may one day help doctors diagnose and treat mood disorders like depression. But ask any neuroscientist how the hundred billion neurons in your brain coordinate their activities to help you read, speak, or decide what to eat, and you'll likely get a shrug.

"Addressing these questions is going to be the greatest intellectual challenge of the twenty-first century," says Kandel. "It will have a huge benefit, not only for improving disease treatments, but also for advancing our knowledge of human nature."

Kandel and fellow codirectors Thomas Jessell and Richard Axel '67CC have in recent years overseen the hiring of more than a dozen prominent brain scientists. In the next few years, they hope to hire twenty more. Among the enticements they are offering recruits is laboratory space in an elegant new glass building, the Jerome L. Greene Science Center, which is scheduled to open in 2016 on Columbia's new seventeen-acre campus in Manhattanville. What is unusual about their

"Back in school, I thought I'd wind up smuggling medical supplies to rebels in the hills of South America one day," says Shadlen, now a professor of neuroscience at the College of Physicians and Surgeons. "But along the way I got distracted by more cerebral concerns, like, *how the heck does this gray blob between my ears make me who I am?*"

That curiosity has brought Shadlen to one of the most vexing questions in brain science: how do neurons talk to each other by varying the rates at which they fire electrical signals? To keep this problem as manageable as possible, Shadlen has restricted himself over the past two decades to studying a small group of neurons that serve as a way station for visual data, in hopes of making sense of the mathematical language they speak.

"Neurons talk to each other in groups," he says. "And every member of a group is saying something based on the signals it has received from thousands of other neurons. It's quite complicated."

To isolate one set of messages, Shadlen monitors the brain activity of subjects performing cognitive tasks, like identifying which way clusters of dots are moving on a computer screen. After recording the neurons' firing rates, he then analyzes the data with software, like a cryptographer trying to decipher a strange new code.

Several of Shadlen's breakthroughs trace back to an observation that he and his postdoctoral adviser, Stanford's William Newsome, made together in 1994: that neurons in a part of the brain called the association cortex, which is where sensory information gets integrated into our thoughts, are capable of assessing information for several seconds before reacting to it. "A neuron that simply delivers information into your brain or carries motor instructions back out will pass along its message more or less immediately," says Shadlen. "But we saw that the neurons involved in forming your thoughts would wait for a second or two first, as if they were evaluating the information they had received."

Shadlen has since shown that neurons in this part of the brain *do* evaluate the information they receive, in order to determine the data's significance to thoughts you are experiencing at the moment. To do so, they use a mathematical tool called a "diffusion-to-bound" form of sequential analysis. Here's how it works: if you were asked which way dots were moving on a computer screen — say, to the right or to the left — neurons in your association cortex would assess the firing rates of other groups of neurons that are sensitive to rightward and to leftward motion. And they would take their time doing the comparison, gathering at least a few milliseconds'



Michael Shadlen has discovered how brain cells speak to each other by varying the rates of their electrical signals.

recruitment effort is that they are not only trying to lure the world's best neuroscientists to their program, but also physicists, mathematicians, astronomers, engineers, biologists, and psychologists — anybody with fresh ideas to bring to the table.

Roots of contemplation

Shadlen, a youthful fifty-three-year-old with a broad smile, is disarmingly gentle-natured. Like many neuroscientists today, he is fluent in a variety of disciplines — applied mathematics, computer science, physics, and electrical engineering, to name a few — but his broad interests seem to have brought him to the field, rather than the other way around. He was inspired to study the brain, he says, by reading French philosopher Maurice Merleau-Ponty's writings on perception. He was twenty-two when he published his first paper, in the *New Physician*, an account of the troubling conditions he had witnessed that spring in a camp for El Salvadorian refugees in Honduras.

worth of data before calling the contest, to guard against error. Only when the difference between the firing rates of the two groups of neurons hits a precise statistical threshold would your brain form a conscious thought, such as, *those dots are moving to the left*.

“It is awe-inspiring to see this happen in the laboratory,” says Shadlen. “I believe this is nothing less than the roots of contemplation, of deliberation, of thought itself. These brain cells are exhibiting what I call a freedom from immediacy, in the sense that, rather than responding reflexively to information, they’re ruminating on it.”

Shadlen suspects that this mechanism operates in the brains of most animals, apart from those with the very simplest nervous systems. He hypothesizes that the “neural time integrator,” as he calls it, is duplicated throughout the brains of highly evolved organisms, even in areas responsible for complex functions like memory, language, emotion, and reason. “When this mechanism gets repeated, in layer upon layer of circuitry,” he says, “it eventually produces all different forms of cognition.”

Shadlen doesn’t know this for sure. The only neurons he has observed doing math are those involved in perceiving visual information. That’s because scientists who came before him were able to map the brain circuits for vision in unusual detail, making these circuits the easiest in the brain to monitor. Shadlen has devised clever ways to work around this limitation, though, such as by conducting experiments in which subjects play visual games that require them to keep a running tally of the likelihood that picking certain colors or shapes will bring rewards; the brain circuits for vision thus are made a testing ground for probabilistic reasoning.

“You can see the brain cells updating the probabilities over time, which strongly suggests that this phenomenon isn’t relegated to simple perception, but is a substrate for cognition more generally,” he says.

The idea that the brain uses statistical algorithms to formulate thoughts is not new. The English mathematician Thomas Bayes suggested as much 250 years ago, and scientists and philosophers have since wheeled out the notion periodically. Until now, though, no scientist had ever provided solid evidence for how it might work. Shadlen is regarded by his colleagues as the first to do so, and his work raises a classic philosophical question related to Descartes’s mind-body problem: if scientists can show that our thoughts are the result of pure computation, does this mean we lack free will?

Shadlen is clearly moved by this question, and he has written several papers aimed at philosophers to help them explore the implications of his work. In an essay



published in *Frontiers in Neuroscience* in April, Shadlen and coauthor Adina Roskies, a Dartmouth philosopher, argue that his findings ought not diminish our sense of free will or moral responsibility. For starters, they say, scientists are still a long way from explaining how our most distinctly human traits, like self-awareness and moral thought, come about.

“Like nearly all neuroscientists, we accept physicalism,” they write. “All matters mental are caused by brains. But we leave open the possibility of emergent phenomena: properties that arise from simpler causes but which are not explained away by them.”

In his laboratory, meanwhile, Shadlen is trying to determine if the integrator may ever break down and what the ramifications are. He suspects that this happens



quite commonly and that it contributes to a range of disorders that include schizophrenia, Alzheimer's, and some forms of autism.

"Every neurologist has seen the symptoms, which include a general state of confusion," says Shadlen. "I think it's related to the deterioration of the integrator."

Shadlen came to Columbia, he says, to collaborate with other top neuroscientists who might help him answer questions such as these: What would cause a person's integrator to break? Are there genetic defects or chemical imbalances involved? Is this mechanism controlled by one part of the brain? Or is it, like consciousness itself, a phenomenon that involves the interaction of lots of brain areas? Can a broken integrator be fixed?

"I need to work alongside people who study the brain at its genetic, molecular, and cellular levels to make sure the principles my team has discovered find their way to the bedside," he says. "That's why I'm here."

Laws of attraction

Columbia's neuroscience program has always been strong. For many years, however, its reputation was defined by a small number of scientists, including Eric Kandel, eighty-two, a Nobel Prize winner whose research on memory and learning made him, in the eyes of many people, the most important neuroscientist of the twentieth century;

Richard Axel, sixty-six, who won a Nobel Prize in 2004 for decoding how the brain perceives smell; and Tom Jessell, sixty-one, a Kavli Prize winner whose work on the assembly of motor-neuron circuits is now a cornerstone of almost all efforts to find stem-cell treatments for neurodegenerative diseases like Lou Gehrig's.

The program started to expand in the late 1990s. "It had become obvious we had some gaps to fill," says Jessell, "and the University started to invest in making ours a more well-rounded community."

The first area that Jessell and his colleagues sought to strengthen was cognitive neuroscience, which involves the study of how our most complex thoughts are rooted in brain physiology. This is the type of work that Shadlen does, and his arrival here was preceded by the recruitment of two other leading cognitive neuroscientists, Mickey Goldberg and Daniel Salzman, in 2001. Both are moving to the Greene Science Center.

The next step was to hire some theoretical neuroscientists. Often trained as physicists, mathematicians, or computer scientists, these expert number crunchers build computer models to predict how brain circuits will behave in different circumstances. In doing so, they are able to help other neuroscientists design appropriate experiments and interpret their data. This is especially helpful to the cognitive neuroscientists, whose work

involves analyzing the interactions among neurons in the brain's most complicated regions, such as the association cortex. In this part of the brain, circuits carrying information related to our senses, memories, and emotions all interact and feed back against each other, making any data collected there very difficult to parse.

Shadlen says the prospect of collaborating with Columbia theoreticians Larry Abbott and Stefano Fusi was a major reason he came here. Abbott and Fusi today are developing ways to pick out signals from some of the noisiest data sets, including those drawn from brain circuits that, in a truly bewildering feat called multiplexing, are able to transmit two messages simultaneously.

"So far, I've been able to weed through this stuff," says Shadlen. "But eventually I want to do experiments where I'm looking at numerous brain circuits as they interact so that I can see how a subject's thoughts about visual data are being influenced by, say, memories or auditory information. That's where I'm really going to need those guys."

Let's think bigger

It became apparent that the University would need to build a new home for its growing neuroscience program more than ten years ago. The original idea was to create a rather small center on the medical campus, a home only for "card-carrying neuroscientists," as Jessell puts it. But after Lee C. Bollinger became president in 2002, the plan evolved into something much grander. Jessell recalls being invited, along with Kandel, to Bollinger's home for breakfast a couple of years later, and listening to Bollinger describe his vision for making brain research an intellectual lynchpin for Columbia's twenty-first-century campus.

"Now, rather than simply building a new science facility, we're talking about creating a space for some truly exciting interdisciplinary work, where neuroscientists would be able to interact not just with other scientists but with people in the humanities, business, and the arts, you name it," says Jessell. "It made sense that this should happen closer to the Morningside campus."

Plans for the Greene Science Center were publicly announced — along with a lead gift of \$250 million from the late Dawn Greene and the Jerome L. Greene Foundation — in March 2006. Renzo Piano, an Italian architect known for his ingenuity in letting natural light into buildings, was commissioned to design a facility with spacious interiors and meeting areas to promote interactions among the one thousand people who will be working there. The building's construction is now well underway, its gigantic steel columns rising from the

ground on a plot where a parking lot, a gas station, and a warehouse once stood.

"Neuroscientists want to have lots of other people around them, because our work is so complicated we can't possibly solve every challenge on our own," says Jessell. "Working with chemists, we could come up with new ways of tracking molecules in the brain. With engineers, we could invent new microscopes. We need psychologists and social scientists, meanwhile, to tell us which questions are the most important to ask about the brain and human behavior."

When the Greene Science Center is fully occupied, approximately two-thirds of its sixty-five labs will be run by neuroscience faculty, with the remainder being run by professors from departments in the Faculty of Arts and Sciences or the engineering school. A handful of researchers from the Morningside campus are already working on MBBi-related projects, including biomedical engineer and brain-imaging expert Elizabeth Hillman and cognitive psychologists Daphna Shohamy and Sarah Woolley.

The Mind, Brain, and Behavior Initiative will also offer a temporary home for scholars in any field — whether law, art history, economics, or public health — to come and work alongside neuroscientists for stays that could range from a few weeks to a couple of years. This is expected to be a popular sabbatical option for

Brain-scanning technology has revealed that sociopaths tend to have anatomical abnormalities that make them feel less empathy. Should they be held to different standards of legal and moral accountability?



scholars, because neuroscientists today are making rapid progress in describing how brain activity guides human behavior. New brain-scanning technology, for instance, has revealed that people clinically defined as sociopaths tend to have anatomical abnormalities that make them feel less empathy. Legal scholars have taken a keen interest, in part because defense lawyers are now regularly submitting their clients' brain scans as evidence in trials, arguing that people with these physical traits should be held to different standards of legal and moral accountability.

"Clearly, this is an area where neuroscientists need to be working closely with lawyers," says Kandel. "We first need to figure out which types of anatomical evidence

should be considered valid in the courtroom. Then, as we develop therapies to help sociopaths feel more empathy, courts might consider those options when handing out judgments, especially when dealing with adolescents or teenagers who are still developing psychologically.”

Other new areas for interdisciplinary research include the nascent field of neuroaesthetics, in which art historians and brain scientists are studying how our responses to art and music are rooted in brain physiology; and neuroeconomics, which attempts to understand how people make decisions of all types, including, but not

limited to, traditional economic decisions like investing. Neuroeconomics is a particularly vibrant area of research now, since many economists believe that brain science may be able to explain why people frequently act irrationally and against their own best interests.

“Studies have shown that people will sometimes overestimate their own abilities, fail to plan for the future, or rely too much on others to look out for their interests,” says Alessandra Casella, a Columbia economist. “But we have no unified theory to explain why people act in these ways. The hope among economists is that by working with neuroscientists we’ll identify brain mechanisms that reveal why people make good decisions in some circumstances and bad decisions in others. That’s a long way off, but it’s the Holy Grail.”

To make sure the Greene Science Center’s environment is conducive to collaborations of this sort, Jessell says, all the neuroscientists being recruited for the program have one thing in common: they are all intellectually adventurous, expansive thinkers.

“We’re not hiring people who are going to hole themselves up in their laboratories,” he says. “They need to come ready to debate, to engage with people outside their world, and to collaborate on this gigantic canvas we are all staring at together.”

Taste and transcendence

On a July afternoon, Charles Zuker sat slouched in a cushiony leather chair in his office at Columbia’s medical campus. He looked stylish and relaxed, his tall and slender frame draped in a loose-fitting cotton shirt and designer blue jeans, sandals on his feet and a pair of reading glasses atop his head.

“You want to know why I’d leave Southern California, right?” he asks with a wide grin. “I’ll tell you why: because I believe in magic. And when you take the craziest, most wildly ambitious and brilliant minds in neuroscience and stick them all together in one building and let them go nuts, that’s what is going to happen.”

Zuker is MBBI’s most prominent recruit aside from Shadlen, and like his new colleague, he is gregarious, funny, and inclined to discussing big philosophical issues related to the brain. But whereas Shadlen has a touch of the earnest and eager schoolboy, Zuker is all cool, calm, and sun-tanned charisma. He drives a Porsche Twin Turbo, and if you saw him pulling onto campus, you might guess he was somebody famous you should recognize. Shortly before coming to Columbia from UC–San Diego three years ago, he built himself a waterfront home that appeared on the cover of *Dream Homes San Diego* magazine.



“It had a pool with an infinity edge, which means the water pours off one side like a waterfall,” says Zuker. “Beyond the pool was the ocean. Incredible sensation, that — swimming over the sea. But it was only a home. My soul had to come here.”

Zuker, fifty-four, was raised in Arica, Chile, the grandson of Polish and Russian Jews who fled Europe before the Holocaust. He entered college at age fifteen and earned his doctorate from MIT at twenty-three. He has since discovered nearly everything that is known about our perception of taste. He’s isolated the genes that encode our taste cells, the receptors upon those cells, the chemical pathways that lead up to the brain, and the specific brain areas that are responsible for our subjective experiences of flavors. In collaboration with researchers at Harvard and the Monell Chemical Senses Center, Zuker has described these mechanisms for all five basic tastes: sweet, sour, bitter, salty, and “umami,” the savory sensation that comes from eating protein.

“Saltiness we nailed just recently,” says Zuker, whose name is the German word for sugar. “It is the trickiest taste to study, because we respond to salt very differently depending on the amount — a little bit is nice, while a lot is gross.”

Studying taste, Zuker believes, could reveal a lot about the human condition. That’s because taste, among all of our senses, is the only one that we respond to in ways that are largely determined by our genes. That is, we all innately like sweetness and are repulsed by sourness, bitterness, and excessive saltiness.

“Sweet is sustenance and bitter is toxic, and for most of our history the way to stay alive was to trust your tongue,” says Zuker. “By contrast, our responses to different smells are almost entirely socially learned, if you can believe it.”

This raises fascinating questions: Why do we like bitter foods like coffee, beer, and olives? Sour lemons and tamarind? Rotten-tasting cheeses like Limburger and pungent fish dishes like hákarl? Zuker suspects it may be for the same reason we like riding roller coasters, bungee jumping, or swimming next to waterfalls: we get a thrill from doing things that our bodies tell us, instinctively, are bad for us.

“There’s something undeniably powerful going on here,” he says. “What is it? Why do we enjoy living on the edge? Why does it make us feel connected to something larger than ourselves? This is what I’m after: I want to understand how we *think* about sensation.”

Zuker hopes to collaborate with Shadlen to explore these types of questions. “Today, most of us are still studying the brain’s periphery, which is where sensory

signals go in and motor signals come out,” he says. “But Mike is venturing deep into the great in-between area, which is where our conscious thoughts are forming. That’s the real wilderness. Just about everybody wants to team up with him.”

Shadlen, in turn, hopes that by working with scientists who are experts on the brain’s chemical composition, such as Zuker, he will contribute to the development of entirely new types of drug treatments for schizophrenia and other mental illnesses. A shortcoming of nearly all existing medications, he says, is that they alter the levels of chemicals found throughout the brain and therefore result in myriad side effects. A solid understanding of the

“Why do we enjoy living on the edge? Why does it make us feel connected to something larger than ourselves? This is what I’m after: I want to understand how we *think* about sensation.”

— Charles Zuker



brain’s neural time integrator, Shadlen says, could reveal drug targets that are more specific to the original source of psychiatric disorders.

Despite all the talk of collaboration, neither Shadlen nor Zuker is expecting MBBI to be a love fest.

“There was a time, five or ten years ago, when I probably would have told you that a lot of the scientists who have just become my Columbia colleagues suffered from a sort of molecular hubris, in that they thought that everything you needed to know about the brain could be learned by studying its smallest constituent parts,” says Shadlen. “There’s still some distance between us. We’ve begun finding some common ground because we all realize that the big challenge now is to bring together our puzzle pieces and figure out how they fit together. But we’ll be having some very candid conversations moving forward. I’m expecting the gloves to come off.”

Zuker, when asked his impressions of Shadlen’s neural time integrator, pauses.

“Am I convinced that Mike is pursuing the right questions?” Zuker says. “I’m not sure. But I’ll tell you this: I believe in him as a scientist. I admire his logic and discipline. And our goals are the same: neither of us is satisfied with proteins, genes, circuits — this stuff. We want consciousness, free will, self-awareness. We want drugs that get at the roots of mental illness rather than glossing over the symptoms. We want it all. The whole damn thing.”






TENNESSEE BY PAUL HOND

ROSE

THE RETURN OF SINGER LAURA CANTRELL

On the way to Nashville to see her, you remember the first time. It was a Sunday afternoon in November 2000. You were in Mondo Kim's on St. Mark's, that multilevel CD and video store with the torn movie posters and underground-punk vibration, and your pal, who grew up on Loretta Lynn and Hank Williams in a chicken town below the Mason-Dixon, was thumbing through the slender country-music section, when somewhere between Bobby Bare and Johnny Cash she got stopped cold.

She pulled out the CD and stared. The cover showed a slim, fair-haired woman, early thirties, standing straight, hands on hips, leveling her gaze at the camera through a window. The glass had a long, slanted crack. Title: *Not the Tremblin' Kind*. Artist: Laura Cantrell.

Your pal, intrigued by the image, bought the disc. A mistake, you thought. You believed yourself broad-minded, no snob, no square, just a subscriber to Duke Ellington's dictum, "There are simply two 

PHOTOGRAPHS BY RAYON RICHARDS 

kinds of music, good music and the other kind.” And having glanced once or twice at Country Music Television, with its cowboy hats and satin sheets, and surfed the glossy, tepid waves of commercial country radio, you had your doubts.

Back at your apartment, you slid the disc into the machine. What happened? Guitars bloomed, your ears unlocked, and a strange nectar poured in — a voice so sweet and clear, so vulnerable, so pretty and plain, so finely threaded with golden hairs of whiskey and dime-store fabric and acoustic strings, that you were caught. This was the girl next door, no, the woman in the room, singing in your ear about strong hearts and busted-up hearts and beds of sorrow and churches off the interstate. And the songs, so tuneful and bright, so smartly crafted, with more hooks than a dress rack, and the band, so tight, so swingin’, the pedal steel and trembling mandolins, the ringing Byrds guitars. Each song, it seemed, told a piece of your story.

Who was she? A Southerner, that was evident, but from where, exactly, and in what context? The music was both homespun and urbane — the ambiguity threw you. Alabama? Georgia? Kentucky? You picked up the CD case for clues, and read that it was recorded in — *Brooklyn*? Wires sputtered. And the backing musicians — the names evoked not the Smoky Mountains so much as Klezmer Night at the Knitting Factory. You weren’t sure why you should be shocked — you perceived, hazily, that it all made perfect sense — but you felt embarrassed, blindsided. Cantrell wasn’t from Butcher Holler, apparently. Did it matter? Duke wouldn’t think so.

“This is *good*,” you said. “It’s got this — quality.” There were many factors that went into this quality, and you were about to try to name them, but your pal spoke first.

“It sounds like home,” she said.

Remember how you looked at her, startled, as if she’d just brought down the bird of truth with the most casual shot? Yet it would take you years to understand what she really meant.

THIS OLD HOUSE

(Thursday, July 12, 2012, 1:00 p.m.)

The rain falls hard in Music City. It washes the bricks and Gothic windows of the Ryman Auditorium, grand old home of the Opry, sets

the honky-tonk neon of Lower Broad glistening as bar bands serve up Merle and Dolly, scrubs the white limestone porticos of the capitol on the hill, swells the snaking Cumberland River, lashes the 808-foot-tall, diamond-shaped mast of WSM AM 650 (“The Legend”), and drips from the eaves of a small brick house in South Nashville, behind whose front window Laura Cantrell ’89CC, in jeans, a white blouse, and glasses, stands on the carpet, at a crossroads.

“I think the solo’s so long we should figure out how to split it up,” says engineer Mark Nev-ers, seated at his Sphere Eclipse mixing console.

Cantrell agrees. “It might be worth listening to that fiddle part,” she says to the other man in the room, Mark Spencer, a burly, Brooklyn-based guitarist in a flannel shirt and scuffed leather boots. “Why don’t you keep refining the dreamy stuff and then we can talk about the solo separately?”

The song is “Starry Skies,” another Cantrell tune you can’t get out of your head. The singer is here at Beech House Recording making her fifth album in twelve years (a pace she considers slow, but which agrees with the curated character of her work), and her first proper Laura Cantrell album since *Humming by the Flowered Vine* in 2005.

“The drum approach was more Phil Spector-ish,” Cantrell tells Spencer. “We decided that even though the vibe of the original rhythm track was kind of light, it was solid enough that you could build on top of it.”

This project is a defining one for Cantrell. A favorite of critics, freeform-radio heads, and country-music epicures, Cantrell (pronounced *Can-trull*) is breaking a songwriting silence that can be traced to 2006, when she gave birth to a daughter and redirected her energies. The change put the singer in a meditative mood that resulted in *Trains and Boats and Planes* (2008), a departure-and-transition-themed EP of covers that includes the Bacharach-David title number and a reworking of New Order’s “Love Vigilantes,” which Cantrell distills to something like a Civil War dirge. Last year, she released a tribute to the singer Kitty Wells, the Queen of Country Music. *Kitty Wells Dresses* contains selections from Wells’s vast catalog, including 1952’s “It Wasn’t God Who Made Honky Tonk Angels,” the first chart-topping country song by a solo woman artist.

“The new album is an attempt to reconnect with the audience, to remind people who I am.”



BEech HOUSE RECORDING PHOTOS BY KRISTINA KRUG

“You could bust out of the melody if you feel like you’ve got somewhere to go,” Cantrell tells Spencer. “I feel there’s a lot of shimmy kind of following-the-melody in all the other instrumentation.”

“It really does need to rise up over the rest of it,” Nevers says.

Cantrell says, “I don’t follow guitar real well, so —”

“Me neither,” says Spencer, and everyone laughs.

As Spencer tries out some ideas, Cantrell goes through the tidy kitchen (Nevers lives here with his wife and kids) to the back room for a break. It’s a chamber of retro dreams: vintage guitars on the wall, a Lloyd’s AM/FM radio, gargoyle statuettes, photos of Air Force planes in formation (Nevers’s father was a fighter pilot in Vietnam), a drum kit, a Wurlitzer Funmaker organ with lollipop-colored touch tones, an old Vox amp. One guitar is labeled with the words *This Machine Kills Commies*, an elbow to Woody Guthrie. Pretty good.

“The new album is an attempt to reconnect with the audience, to remind people who I am,” Cantrell says. The record, which the singer plans to release in early 2013, will contain more Cantrell originals than any previous album. But there’s another hook. “This is the first time,” she says, “that I’ve really made music in Nashville.”

Normally, people go to Nashville to become country stars, or, like Kitty Wells, they are born there and stay put. Cantrell turned that around. A native Nashvillian, she left to attend Columbia in 1985 and has lived in New York since. The anonymity that the big city afforded an alternative country artist seemed preferable to the Nashville glitz and glare. You won’t see Cantrell on a Music City billboard, yet almost any of her songs sound as though they should be hits, or *are* hits in a parallel universe made of record players and pop intelligence, which is maybe what her friend Michael Cerveris, the Tony Award-winning actor and musician, means when he says, “The first time you hear her, you think, ‘If I haven’t heard these melodies before, I should have,’” or what Elvis Costello meant when he said, “If Kitty Wells made *Rubber Soul*, it would sound like Laura Cantrell.”

You could say it was Wells who got Cantrell looking homeward. In 2008 and 2009, the Country Music Hall of Fame staged a Kitty Wells

exhibit — the first single-artist exhibit of a female member of the Hall — and asked Cantrell to perform as part of the closing ceremonies. Cantrell had worked at the Hall as a tour guide the summer before college, an experience that stoked her interest in the history of the distinctive musical traditions that fall under the banner. For the Wells gig, Cantrell pulled together local players, “young musicians who have chosen to learn the craft of country music,” and after the show, she thought, “I’ve got this band in Nashville, they know all these Kitty Wells tunes, maybe we should go over to Beech House and document it.”

As a Tennessee girl who decamped for New York long ago, she says, making that Kitty Wells record in Nashville was invigorating. “There was a certain pride between the musicians in the room, a reverence for the old style of country music, and shared references that wouldn’t have been as palpable in New York or anywhere else. The record gave me an opportunity to directly express my passion for the history of country music, and specifically for Kitty and her work and what she means as an artist.”

Nevers, a Ramones buff, had recorded both alt-country and classic country, and possessed a broader vocabulary than most Nashville engineers. “I was delighted how it felt recording here,” Cantrell says. “Comfortable.”

Cantrell returned to Beech House this past April to record rhythm tracks for eight original songs, and now, in July, she’s filling out space, playing with sounds, colors, instrumentation, opening the palette to nontraditional hues.

“Each recording project presents a fresh question to answer for yourself about what you’re doing and why,” she says. “For this record, where I’m working for the first time with mostly my own songs and point of view, the pressure I’ve felt is to find what suits each song and do it justice. It’s challenging and exciting, because I have to really define the sound. When you use elements that people have associations with — banjo, pedal steel — it’s easy to sound like you’re playing a type of music rather than a song. I’m trying to think beyond the concept of what country music is, and to focus on what the songs want to sound like. People should hear the songs, not the setting. Everything comes from what the songs need in order to be the best versions of themselves.”



“I was delighted how it felt recording here. **Comfortable.**”

It is Thursday. On Monday, Cantrell will go back to New York and celebrate her forty-fifth birthday. By the end of the week, she will be back in Nashville for a funeral.

BARN RAISING

(Wednesday, July 11, 2012, 8:36 p.m.)

“Friends, as an artist, our next guest has helped shape and grow a passionate community of lovers of true country music in New York City over the past decade-plus.” Jim Lauderdale, the Nashville musician and songwriter, is cohosting *Music City Roots*, a weekly radio show broadcast live from the Loveless Barn out Highway 100, comin’ atcha over WRLT FM. “She was raised here in Nashville, and her love for the real thing was kindled here.”

In a back row inside an enormous converted barn painted white as a church, on a warm evening as sunny as tomorrow’s Beech House day will be wet, you sit with a cup of Ole Smoky Tennessee Moonshine and a plate of beans amid hundreds of folks of all ages who have packed the place to catch some serious pickin’ and grin-in’, and a little heartache, too.

“Her series of albums starting in 2000 have been hailed as among the most original and alluring works of modern country music,” Lauderdale says. “We’re delighted to welcome to the ‘Roots’ — Laura Cantrell!”

Cantrell, the fourth of five acts, stands before a silver microphone, dressed in a simple black blouse and dark jeans. She has delicate cheekbones, ruby-painted lips, dangling earrings, and cradles a honey-brown guitar. Mark Spencer stands beside her in his flannel and six-string. The hometown crowd settles in.

“Thank you, Jim,” says the lady. “Wow, it’s so cool to be here tonight.”

She’s a long way from New York City, and as she turns to cue Spencer, you and Ole Smoky reflect that the first home for Cantrell’s sound was farther away than that.

It was Shoeshine Records, an independent Scottish label, that released *Not the Tremblin’ Kind* in the UK in March 2000. As was standard in Britain, Shoeshine mailed *Tremblin’* to the BBC Radio disc jockey and producer John Peel, whom rock titan Jack White called “the most important DJ of all time.” Peel had been spin-

ning vinyl and waxing fervent over the British airwaves since 1967. He had consumed thousands of records, and his Peel Sessions, in which he invited his favorite artists to record a live set of songs in the BBC studios or at his farmhouse in East Anglia (among the hundreds: Jimi Hendrix, Led Zeppelin, Nirvana, the Smiths, Bob Marley), are, as the BBC calls them, “the stuff of legend.”

Well, Cantrell entered Peel’s ear like a bee nuzzling a flower, inducing the fabled DJ to declare *Not the Tremblin’ Kind* “my favorite record of the past ten years and possibly my life.” He invited the singer to do five Peel Sessions.

Cantrell’s charms also attracted Elvis Costello, who asked her to open for him during a leg of his 2002 US tour. (Cantrell, who to support her music worked as a vice president in equity research at Bank of America — again, her story is not to be confused with Loretta Lynn’s — was granted leave, and played eighteen dates with Elvis.)

Now, at the Loveless Barn, Cantrell and Spencer play the title track from her second album, *When the Roses Bloom Again*, a haunting hymn written in 1901 by Will D. Cobb and Gus Edwards about a promise made by a soldier to his sweetheart before he goes off to war. Cantrell’s understated vocals meet the doomful narrative, reminding you what a skillful storyteller she is. Cantrell never tells you what to feel. Never murders a lyric. Gently, she walks you to the edge of sorrow’s river. *I’ll be with you when the roses bloom again.*

The soldier, Cantrell sings, has fallen in the fray.

*I am dying, I am dying
And I know I’ll have to go
But I want to tell you
Before I pass away.*

As the soldier asks to be taken to the “far and distant river, where the roses are in bloom,” you feel the pressure behind your eyes. You wonder if the sweetheart will be there, waiting.

A DEATH IN THE FAMILY

*Precious memories, how they linger
How they ever flood my soul*

The voices rise inside the Church of Christ in Hendersonville, just east of Nashville. On the carpeted steps behind the flower-wreathed





casket, Ricky Skaggs and the Whites sing songs of praise. The large church is filled with family and friends, people from the music business, Opry members and performers. Cantrell is there, too, paying her respects. The Lord called Kitty Wells home on Monday, July 16, at the age of ninety-two.

“The Church of Christ is one of those churches that don’t allow a lot of ornamentation inside, which was fitting,” Cantrell says later. “It was just like my experiences with Kitty in person: very modest, very dignified, very touching.”

That Wells died on Cantrell’s birthday is not a detail that a person like Cantrell is likely to drop into conversation. She’s happier to explain what Wells’s success meant for female country artists (“nothing short of a revolution”), and the appeal of her straightforward style.

“Listening to Kitty is a different experience from listening to Patsy Cline or a lot of other singers who are maybe more technically expressive or embellished,” she says. “I always felt that Kitty, in the best of her songs, invests a lot of emotion, but there’s this restraint, almost as if the emotion is against her will. Like her heart has fallen, she can’t quite contain it, but she doesn’t want to make a show of it. So there’s a tension.

“I’ve heard people say, ‘I don’t get Kitty Wells. I never got her singing.’ What they’re basically saying is, ‘I don’t like her voice.’ Then other people say, ‘Oh, she’s a soul singer.’ That’s how I relate to it. This real presence of emotional content, but how much are we going to show? How much are we going to hold back? Maybe this is my own interpretation, but the people in my life I think of as Southern are sort of stoic. It was part of their upbringing — you weren’t supposed to show when you were hurting. Kitty’s rural audience could understand being both moved and sentimental without showing it too much.”

This description could fit Cantrell herself.

“Laura has a kind of out-of-time quality to her voice,” says Cerveris, who won a Tony in 2004 for his performance in Stephen Sondheim’s *Assassins* and is currently starring in *Evita* on Broadway. “It feels like a direct line to classic country singers. There’s something so simple and vulnerable about her voice. But

there’s also a steel-magnolia thing — a strength that’s intriguing and inviting. She makes you feel safe.”

RADIO DAYS

We were children of the radio, of the Top 40 throbbing from the console, of the well-made three-minute pop song. This was our lyric poetry, dense with emotions we were too young to understand, carried on melodies we could have enjoyed prenatally. As we sang along, we absorbed messages, structures. We came alive. We fell in love with songs long before we fell in love with people. Sentiments and imagery molded expectations. We could not have known what we were getting into.

Cantrell’s music takes us away, back to a blanket in the green, green grass, the transistor radio, the trouble-free days. Records are scattered on the banks of a girl’s bed. An innocence runs through it. Flowers sway and bend. In time, the river will be poisoned. There will be loss, heart-break, ruin. How will she make it through?

Peel away the petals, behold the stem of steel.

Songs ricocheted through the old house. Cantrell’s mother, a lawyer, listened to Johnny Cash, Joan Baez, Porter and Dolly. Her father, a judge on the Tennessee Court of Appeals, preferred the Great American Songbook: Hoagy Carmichael, Irving Berlin, Rodgers and Hammerstein. Outside, the WSM tower pulsed its giant rings, sending the Grand Ole Opry to millions every Saturday night. Then there was the rest of Nashville, country-music central, for better and for worse.

She left at eighteen. At Columbia, she majored in English and deejayed at WKCR, where, as an actual Tennessean, she was asked to revive the station’s *Tennessee Border* program. “There was a great parallel education going on,” Cantrell says. “Studying the Core, reading and learning to be a critical reader, and doing the radio show.” Taking Wallace Gray’s Eliot, Joyce, Pound class, then pulling Hank Williams records. Going from Langston Hughes to Bessie Smith. Trading records with Mac McCaughan ’89CC, who would later start the band Superchunk and cofound the indie label Merge Records. (A typical trade: the Louvin Brothers for Billy Bragg.) All these strands buzzing inside her before she ever strummed a chord.

“There was a great parallel education going on. Studying the Core and learning to be a critical reader, and doing the radio show.”



ESON CHAN

She started singing, and formed a campus group that played covers of Wells, Wanda Jackson, Johnnie and Jack. In her senior year, she took guitar lessons. She heard from traditional country-music fans around the city (“This is Hubba in the Bronx, can you play some Hank Snow?”) and got turned on to an alt-country scene downtown. It wasn’t until she graduated that she began writing songs of her own.

She wanted to work in radio, in programming. A job at ABC didn’t go where she’d hoped, so she took the gig in finance. In her spare time she volunteered at WFMU, the independent freeform radio station out of New Jersey, and in 1993 was given a show, which she named *Radio Thrift Shop*. As the “Proprietress,” she played all stripes of American folk music, the stuff you didn’t hear anywhere else. “My role on the radio,” she says, “was to share obscure music and to play more women artists.”

In 1997 Cantrell married Jeremy Tepper, a partner in Diesel Only Records, an indie label in Brooklyn. It was Diesel Only that brought out *Not the Tremblin’ Kind* in the United States in the fall of 2000, and into the country-music bin of Mondo Kim’s.

DRIVING DOWN YOUR STREET

“There’s an idea for me that it’s finally time to come home to make music, and to knit these two parts of my life together,” Cantrell says, as the Nashville rain beats time on the roof of Beech House. “When you’re dealing with stuff about home, it can be a little bit irrational — you really want things to work out.”

In a sense, the new album is about reclaiming her hometown. “I’ve had an arm’s-length relationship with Nashville in terms of making my own music,” she says. “So it was beyond gratifying to have Kitty Wells and her family acknowledge my work and appreciate it, and whatever qualms I’d had about being from Nashville but not quite of it were sort of resolved in the making of that record.

“But what we’d done with the Kitty Wells project was strictly defined country music based on a honky-tonk style made in the 1950s with very specific instrumentation, not really the blueprint for what I need to do with my own songs. So I looked at what else Mark Nevers has done at Beech House

with artists as diverse as Andrew Bird, Lambchop, Charlie Louvin, and many others, and saw how open the creative process is here, and felt it would be a good place to start. It’s so ironic for me that when I looked for a studio in which to creatively experiment and let loose, the freest place I could think of was literally a couple miles from the house where I grew up.”

Cantrell rejoins Nevers and Spencer in the front room to work some more on the guitar part for “Starry Skies.”

Nevers says, “Some of the earlier takes had a Buddy Holly thing goin’ that was pretty cool.”

Cantrell has another idea. “What would a Glen Campbell solo be like here?”

Spencer does a “Wichita Lineman” thing. Electric twang, deep and echoing.

When he’s done, Nevers says, “I like the way that one blowed up.”

“Yeah,” says Cantrell, “I liked it, too.”

They move on to the next tune, “Driving Down Your Street.” Nevers plays it back. It’s an airy, chugging, skiffley toe-tapper, a needlepoint woven with regret and longing. Cantrell often sews sadness to sunlight and breezes. Sweet melodies nourish the heart as it bends. Sorrow soothes itself by singing.

GOOD NIGHT, NASHVILLE

Cantrell’s last song in her set at the Loveless Barn is the first song from her first album. Hearing “Not the Tremblin’ Kind,” Cantrell’s signature piece, a dozen years later, you feel you’ve taken a long journey on the lost highways, the gravel roads. And you have. You’ve lived inside your own country-music jukebox, your heart’s a busted compass, yet you grasp that the home to which Cantrell carries you can’t be defined by geography or weather or a landscape or a skyline or a tree or a house or a song from childhood. You know it can’t be that, because right now, somehow, in a barn outside Nashville, you are there.

When Cantrell finishes, many in the crowd stand up to applaud.

“Thank you so much,” Cantrell says.

“All right!” says Jim Lauderdale. “Laura Cantrell!” He splays his hand on his chest and gives a nod. “Welcome home, Laura. It’s good to have you back.”

“There’s an idea for me that it’s finally time to come home to make music.”



KRISTINA KRUG

Walking the **WALK**



As Lee C. Bollinger begins his second decade as University president, he discusses some of his favorite topics: the new Manhattanville campus, Columbia's Global Centers, and a Supreme Court case at the intersection of his work in law and higher education.

Columbia Magazine: How has Columbia changed in your decade as president — and in the four decades since you earned your law degree here in 1971?

Lee Bollinger: This is a fundamentally different institution from what it was. Not because of me, but because of an enormous number of people who put in heroic efforts to build a sense of community and to work together toward achieving the greatness that's the potential of this institution. Fundraising is a good indication. In the last campaign, which ran through the 1990s, Columbia raised about \$2.5 billion over thirteen years. This summer we reached \$5 billion in the current campaign. That's twice the total in roughly two-thirds the time.

Columbia really did struggle from the late '60s through the '90s, and a lot of people put a lot of effort into trying to bring the University back. But in 2002 Columbia still had not been successful in bringing itself together as one institution instead of as a group of decentralized units. It simply wasn't organized that way, and attitudes were not such that it could thrive as an institution. Individual parts might, but only for a fixed period, because it takes a whole institution to make a university successful.

CM: It also takes a nuanced understanding of how a university needs to fit into its neighborhood.

Bollinger: There had been efforts to repair relations with the communities in Harlem, which were still incredibly stressed then and even hostile in the 1990s. That tension meant enormous things, including that Columbia couldn't expand. It did not have space in which to grow to build academic programs, to find new ways in which to educate students, to bring in more students, to enlarge our intellectual reach. Without new space, universities wither. They don't die, but they do become less than what they could be.

Over the past decade we've focused on our relationship with Harlem and on both managing the resources we have and bringing in new resources. We've worked on space, and the principal achievement there has been Manhattanville, a once-in-a-century opportunity to create an entire new campus that is equal in scale and potential to what the original Morningside Heights campus was

to the University a hundred years ago. Almost eighteen acres, nearly seven million square feet, being developed over the next half century with a master plan by Renzo Piano. This fall you'll see the first actual sign of our new physical presence as the steel for the Mind, Brain, and Behavior Initiative begins to emerge from the ground.

CM: Please complete this sentence: "To be an educated person in the twenty-first century, you need . . ."

Bollinger: You need what you've always needed: a deep exposure to the great thinking, writing, art, and music of the centuries. Today, you also need to have a feel for the great issues that confront the world.

CM: One of those issues is one with which you are closely identified. The US Supreme Court is scheduled to hear *Fisher v. University of Texas at Austin* on October 10. That case will look at the claim of a white applicant to the University of Texas who argued that she would have been admitted had the school not considered race as part of the application evaluation. If the court rules in her favor, Columbia and other colleges and universities across the country will lose one of their basic tools in ensuring a diverse student body. Are there still ways to make this work?

Bollinger: The answer is no. There is no other way to have the levels of diversity that we have come to value so much in American higher education and that have been so important to American society.

If the court were to rule against the University of Texas, it might be on very narrow grounds. For example, some justices might think that the Texas diversity plan [which grants admission to all Texas high-school students graduating in the top 10 percent of their class] is not sufficiently attentive to characteristics of individual applicants to satisfy *Grutter v. Bollinger*, the 2003 case that upheld the use of affirmative action in the admissions policy of the University of Michigan Law School. Or some might wish to hold that a *Grutter* process cannot be added to the 10-percent program, as it was here, because it is not needed to supplement the diversity already achieved. You could imagine a majority of the court deciding that such a ruling would not

Walking the WALK

impair the fundamental principle that the Supreme Court set down in *Grutter*.

As part of the amicus brief filed by Columbia and thirteen other universities in August, I advocated that the court uphold the lower-court decision allowing what the University of Texas has done. We are strongly on record for that.

But if a majority were to go the full distance, overruling the *Grutter* case and declaring that considering race under any circumstances, under any program in American universities is unconstitutional under the Fourteenth Amendment, it would have a drastic negative effect on racial and ethnic diversity on the leading campuses across the United States. All you have to do is look at what happened to Berkeley and UCLA since California's Prop. 209 in 1996 to see the long-term negative effects of not being able to consider ethnicity in admissions.

CM: Could economic diversity stand in for racial diversity?

Bollinger: There has been a view for a decade that you can achieve racial and ethnic diversity just by considering income status or economic and socioeconomic diversity. The argument is that you can try to get young people from the lower end of the socioeconomic spectrum and you will automatically get racial and ethnic diversity. But many studies show that this is not true.

Then some people say, if the Supreme Court were to throw out *Grutter v. Bollinger*, universities would find other ways to identify that the applicant was African-American, or Hispanic, or Native American. Universities would do what they could to achieve racial and ethnic diversity without appearing to consider race or ethnicity. My view is if the Supreme Court holds that the Constitution forbids admissions offices at universities from considering race or ethnicity, then no American university should violate that constitutional norm. That is the basic law of the country.

However much you might think the decision is wrong, you would undermine the integrity of society at its most profound level by trying to figure out other ways of doing what the Supreme Court disallows. And you'll be caught, because years down the line, some group that opposes affirmative action will sue, and they will get documents showing what you were doing. Those universities would be justifiably embarrassed and ashamed.

It is too easy to think that striving for racial and ethnic diversity is such a powerful part of our culture that surely it will continue. But if the Supreme Court were to declare it unconstitutional, then it will not, and should not, continue.

CM: In the majority opinion of *Grutter v. Bollinger*, Justice O'Connor wrote, "We expect that twenty-five years from now, the use of racial preferences will no longer be necessary to further the interest approved today."

Bollinger: First of all, I had never known a Supreme Court case that gave a time limit to its holding. Second, my view has been that for decades, and even centuries, American admissions offices have

considered many things in trying to put together student bodies that include people who have different life experiences and bring different talents to the whole community. You go back to statements by the early framers of the Constitution, who advocated that people from different parts of the country be brought together in university campuses. We do that. We take account of geographic diversity. We take account of diversity of capacities: some students are gifted in poetry, some in math, some in athletics. Some students have overcome great difficulties and have succeeded in some unusual way. We consider race and ethnicity along with lots of other things.

The issue is, how do we compose an incoming class of students? As long as we do so by looking at many factors, including race, the Supreme Court has so far held that we're within our constitutional freedoms and rights. Columbia's undergraduate student body is the most diverse among the top schools, and we're proud of that. The undergraduate program at Columbia — the College in particular — is one of the most selective, one of the most successful, one of the most vibrant undergraduate experiences in the world.

CM: What role does financial aid play in that?

Bollinger: In 2008 I announced that if your family makes less than \$60,000 a year, you come free to Columbia College or the engineering school. That's amazing. If you are entitled under our formulas, we will not expect you to take loans. We will give grants. This was a major reach for Columbia to build on the extraordinary financial-aid commitments that we have had for a long time. These are very generous terms, and they are consistent with the American ideal that the education of a young person should not depend on the wealth of his family or his circumstances; that it's too important a pivot point in a person's life to make wealth the determining factor of where one goes for an education and what kind of education he or she gets.

There are very few universities in the United States that live closer to that ideal than Columbia. Seventeen percent of the students in last year's College and engineering undergraduate classes received federally funded Pell Grants, the highest number in the Ivy League. That is one sign of our commitment to socioeconomic diversity.

CM: That still leaves a large percentage of students who either pay full fare or have to take out loans.

Bollinger: Yes, it is important to recognize that for someone who is not qualified for financial aid and pays the full amount, it costs a large sum of money to attend Columbia. I don't mean in any way to minimize the number of students who graduate with significant loans and indebtedness. But the opportunities they will have over a lifetime because of what they received at Columbia make those burdens well worth that.

I work all the time trying to increase our financial aid, and I think we're doing very well in that, thanks in large measure to the success of the campaign. We're also trying to raise funds for those

students, especially in the School of General Studies and the professional schools, who want to pursue careers in public service and need loan forgiveness in order to make those choices.

CM: It is rare that you speak publicly without talking about globalization and its implications.

Bollinger: In the space of a decade, the world has become a different place. Anyone who has gone to China over a period of decades, for example, knows how much that country has done to change itself. The same goes for Russia, India, Brazil, and so on. The staggering change in the world is a result of the embrace of forms of capitalism and the flows of international finance, business, trade, and investment. This is the driving force of enormous transformation in the world, a transformation that is as great and as fundamental as any other age you can think of.

We have seen a near collapse of the world's financial system. One of the things that has come out of that is a recognition that we simply do not understand how the world financial system really works.

The resources of the world are finite, and the environment is under threat. What do we really understand about the policies that should be put in place? What about the global institutions that were created largely out of the Second World War era? Are they adequate

CM: Have any of Columbia's Global Centers had problems with academic freedom similar to the troubles that NYU has faced at its campus in Abu Dhabi?

Bollinger: Not in any significant ways. The world is a complicated place, and there are few countries with exactly the same value system as the United States. You have to start from the premise that if you're going to be out in the broader world, whether with a branch campus or a center or some kind of program, you are going to be in societies that have policies, laws, practices, and customs that are contrary to those that we subscribe to in the United States.

As a beginning proposition, our understanding of the world depends upon our engaging with the world, even in places that are in conflict with our values. The alternative of retreating to your own base or your own country and not engaging with the broader world is a mistake. Every other institution, whether it's our government, foundations, or business, has taken the path of more engagement rather than less.

The types of things universities do will pose different risks. Setting up a branch campus in places that do not value or respect academic freedom or freedom of expression is more dangerous than setting up a center that is lightly funded and not engaged in bringing in a student body and having a resident faculty. If you had

Without new space, universities wither. They don't die, but they do become less than what they could be.

to this new world? These are questions that people in law, political science, science, engineering, the humanities, and public health are facing, and universities need to explore them. As the world raced by in the past ten years, we have not adjusted fast enough. It is not in the nature of universities to move as quickly as the outside world does. We tend to think more deeply about problems, and that means that the time we have to adjust to a new world is different.

CM: The graduate schools are notably international. What about programs for undergraduates other than a year abroad?

Bollinger: We have introduced an interesting certificate program called the Fifth Year, which will focus on globalization. A small group of students who have just received their bachelor degrees from Columbia College, Engineering, and General Studies will each select a global issue with a faculty adviser and then spend the first six weeks of the year on campus taking courses and seminars. They will spend the following six months working at different Columbia Global Centers to pursue research and attend lectures from leading political figures, people in business, and people in NGOs, and then come back and spend the last month or two at Columbia putting it all together in a proseminar. We hope that this may be as significant an opportunity for students and faculty to learn about the world as the Core Curriculum was a hundred years ago.

a branch campus and the order came down from a government, "You shall not teach this subject because it might incite students to disrespect the government," I think no self-respecting American institution would say, "Fine. We acknowledge that and we will conform." There are some things we simply cannot tolerate.

With a major investment like a branch campus, you are at risk of very big costs of withdrawal, and that is one of the reasons why we have chosen to go the simpler route of Global Centers. In our case, we still have to work out the parameters for ourselves about what we will and will not accept in the way of limitations. But up to this point, we're feeling good about the role the centers can play. Of course we also are trying to play a productive role in bringing the values of the United States and of American higher education to places that are less accommodating to it.

Of course everything comes down to this: What are we trying to do with the Global Centers, on Morningside Heights, and on the new Manhattanville campus? What are we trying to accomplish with our great missions of research, new knowledge, preserving knowledge, and educating the next generation of students? It is difficult for us to imagine just how great Columbia can be. That may sound strange. But almost every day I spend some time trying to make sure that I haven't underestimated just how much this place is going to accomplish. 🏛️

NEWS

NYC awards Columbia \$15 million for new data-science institute

Researchers call it “big data”: the troves of digital information constantly being generated by the mobile devices in our hands, the GPS units on our dashboards, and the tiny sensors that monitor the air quality and weather all around us. They say analyzing it could improve nearly every aspect of our lives, from the way we exchange goods to the way we plan our cities to the way we manage our natural resources.

This summer, the University established the Institute for Data Sciences and Engineering to support the acquisition and analysis of huge electronic data sets. The institute, which is overseen by the engineering school, is supported by a \$15 million grant from New York City as part of its Applied Sciences NYC initiative, which aims to promote technology commercialization and economic growth. As part of the agreement, Columbia

is committing to raise at least \$80 million in private investments and to hire seventy-five new faculty for the institute, in engineering and other disciplines, by 2030.

“When you ask questions about how to turn data into meaningful information, you are asking questions that every part of the University — from philosophy to humanities to health to law to engineering and science — needs to answer,” said President Lee C. Bollinger at a July 30 press conference. “And that’s why we need an institute that specifically addresses the challenges of our data-rich society.”

The Institute for Data Sciences and Engineering will initially support research in five key areas: smart cities, new media, health analytics, financial analytics, and cyber security. Columbia faculty are already doing cutting-edge work in these areas. Medical



Engineering professors Kathleen McKeown, at right, and Patricia Culligan have been named director and associate director, respectively, of Columbia's new data-science institute.

Frank Lloyd Wright papers coming to Avery

Twenty-three thousand architectural drawings. Forty-four thousand photographs. Six hundred manuscripts. Three hundred thousand letters. “It’s a magnitude beyond what anybody can imagine,” says Carole Ann Fabian, director of Columbia’s Avery Architectural and Fine Arts Library.

On September 4, the University announced that Avery, in a joint acquisition with the Museum of Modern Art, will receive from the Frank Lloyd Wright Foundation the entire paper-based archive of America’s essential architect.

Frank Lloyd Wright? At Columbia? Nature-besotted Emersonian, rural Wisconsinite married to the Midwest and the Southwest rather than the Upper West, schemer of horizontal Prairie houses rather than skyscrapers, a radical who declared that cities, one-time agents of culture, now stood in the way of culture, an innovator who bashed American architects for harking back to a European past instead of growing buildings from the native soil (“a building dignified as a tree in the midst of nature”), a man who is reported to have said of the love-triangle murder of Beaux-Arts leader Stanford White of the firm McKim, Mead & White, “Harry K. Thaw killed Stanford White for the wrong reason” — could it really be that the

drawings and scribbled-on cocktail napkins of this pioneer of modern design and espouser of “organic architecture” will reside in the vaults below McKim, Mead & White’s Beaux-Arts Avery Library?

“This was a very serious decision about doing the right thing for a national treasure,” says Fabian. “The Frank Lloyd Wright Foundation had a clear idea of its mission to protect the legacy in all its forms.” Under the agreement, the foundation will continue to operate the Wright historic sites of Taliesin (in Spring Green, Wisconsin) and Taliesin West (in Scottsdale, Arizona, where the papers have been kept since Wright’s death in 1959), while MoMA will house Wright’s architectural models. Avery, a world-class library that the foundation judged would provide superior care for the papers and greater access to scholars, will maintain the paper evidence of Wright’s 1,141 projects. “The drawings are works of art,” says Fabian. “You open any drawer and see jaw-dropping beauty.”

Situated amid Avery’s 1.5 million architectural drawings and records and more than 600,000 volumes, Wright’s papers will live alongside the corpus of works of other Americans like Philip Johnson, Greene and Greene, A. J. Davis, and, of course, McKim, Mead & White.

researchers, for instance, are developing computer systems that could one day enable doctors to determine whether a medication is likely to work for you based upon your genetic profile. Journalism faculty, meanwhile, are using data-mining software to scour speech transcripts and other documents in hopes of spotting political trends.

“One of the institute’s goals is to advance Columbia’s existing strengths in quantitative research,” says Kathleen McKeown, a computer science professor who has been named the institute’s inaugural director. “But academics from across the entire University will benefit.”

Some of the faculty who will be hired to participate in the institute will be computer scientists, statisticians, and applied mathematicians with experience managing and analyzing large databases, McKeown

says. These professors will be looking to collaborate with other faculty who are interested in solving practical problems by culling big pools of digital information — whether from social-media websites, Internet-shopping records, drug-safety reports, geographic information systems, or any other source.

“The availability of massive amounts of data is changing the way research is done in almost every discipline,” says McKeown, who designs language-processing software. “People who want to work with big data but aren’t sure how will find the resources they need here.”

The institute will be developed in phases. The first phase will culminate in 2016 with the opening of a newly renovated space for the institute on the fourth floor of the Mudd building, the engineering school’s home, as

well as separate spaces on the tenth and fourteenth floors of the Northwest Corner Building, an interdisciplinary science center that opened in 2011 and is not yet fully built out. Columbia plans to hire about thirty professors for the institute by then. In subsequent years, the University will create additional space for the institute at the Audubon building on Columbia’s medical campus.

The institute, in part by producing start-up companies, is expected to generate \$3.9 billion in economic activity for New York City over the next three decades, according to an economic-impact analysis conducted by the city’s Economic Development Corporation.

“We have a strong culture of entrepreneurship at Columbia Engineering, among our students as well as our faculty,” says Donald Goldfarb, the school’s interim dean. “The institute will foster that.”

“When you bring Wright to New York, and you put him in a collection like Avery, he’s now in this larger universe of genius — and remains a giant in that universe,” Fabian says. She points out that Wright “has always been a special focus at Avery,” and gives some examples: bookcases containing every significant research volume on Wright; dozens of rare editions of Wright books, including Wright’s own copy of *The House Beautiful* (what Fabian simply calls “the Book”); blueprints for Wright’s masterpiece Fallingwater and related letters of the Kaufmann family, which commissioned the house (“The Kaufmanns gave papers to Avery decades ago,” says Fabian. “The correspondence between Wright and Edgar Kaufmann will come together here”); preliminary drawings for the Guggenheim Museum; renderings of the Dana House; and Wright’s early drawings under mentor Louis Sullivan. The transfer of the larger archive, to be completed in five years, will make Avery the epicenter of Wright scholarship.

“If you’re a scholar, you’ll be able to see the primary materials — the actual drawings — and the secondary and tertiary literature,” says Fabian. “Treatise, plate volumes, drawings, and critical analyses all come into play here. The scholar visiting Avery will get to move across that entire body of work.”



THE FRANK LLOYD WRIGHT FOUNDATION ARCHIVES

Frank Lloyd Wright’s 1957 rendering of the Arizona State Capitol, which was never built, is among the treasures coming to Columbia.

Sreenivasan named University's first chief digital officer

Sree Sreenivasan, a new-media expert who for the past seven years served as the journalism school's dean of students, is now the University's first chief digital officer.

In his new role, Sreenivasan is developing a plan to expand Columbia's online education programs.

"The first step is to figure out which of our online offerings work best, which

ought to be scaled up, and whether there are altogether new opportunities we should pursue," he says. "For the next few months, I'll be listening and observing."

Several of Columbia's schools already run online degree or certificate programs. The schools of engineering and continuing education, for instance, offer electronic courses that enable students anywhere in the world to watch video lectures and submit assignments online. Others, including the journalism school, provide digital workshops for professional development.

Columbia has taken a more cautious approach in developing online courses than many of its peers, however. In the past year, more than a dozen major universities, including several Ivies, have begun offering free massive open online courses, or MOOCs, through private technology companies such as Coursera, edX, and Udacity. None of these ventures have a revenue stream, but given their popularity — a Stanford course on artificial intelligence enrolled 160,000 people last year — many higher-education officials expect that they will eventually make money, perhaps through tuition or advertising.

Sreenivasan says that he and other Columbia officials are in no hurry to involve the University in enterprises such as these.

"The possibilities are exciting because so many people can access your faculty's teaching for the first time," he says. "But how do you control the quality of that education? That's still a big question. The prudent course for Columbia, I think, is to see how this online landscape develops a bit further. There's certainly no need to rush into anything."

As chief digital officer, Sreenivasan is also looking for ways to expand the use of technology in traditional courses. Today, many Columbia faculty supplement their instruction with online tools, such as interactive websites that enable students to comment on one another's class projects.

"Over the past 250 years, Columbia has learned to do something special in the classroom," says Sreenivasan. "How can technology enrich the learning experiences of all Columbia students? My job is to figure out a thoughtful and strategic way to accomplish that."

Visit news.columbia.edu/oncampus/2826.



SHAJU JOHN

Sree Sreenivasan

Safwan Masri brings added managerial discipline to Global Centers

Safwan Masri has been appointed vice president for Global Centers, giving him oversight of the University's growing network of international academic hubs. He succeeds Kenneth Prewitt, the inaugural head of the Global Centers program, who stepped down as vice president this summer to devote more time to his own research.

Masri has been a key figure in the program since its inception in 2009, as the director of the University's first global center, in Amman, Jordan. Located in a 40,000-square-foot sandstone palace provided by the Jordanian government, that center has in many ways exemplified the

University's unique approach to promoting global scholarship: Masri and his staff, by tapping their professional networks in and around Amman, have routinely put stateside Columbia faculty in touch with potential collaborators throughout the Middle East, fostering new research, teaching, and service projects. Dozens of faculty and students from Columbia's architecture school, for example, have worked alongside Middle Eastern counterparts they met through the center on urban-planning and historic-preservation projects in the region.

"We've had academics here from Israel, the Palestinian territories, Lebanon, Jordan,

the United Arab Emirates, Turkey, and the United States all participating in conversations together," says Masri. "Those were exchanges that wouldn't have taken place otherwise, between people who might have never met. Everybody benefits."

Masri will continue to run the Amman center while presiding over the entire network, which now includes centers in Beijing, Paris, Mumbai, Istanbul, Santiago, Nairobi, and Rio de Janeiro.

"Safwan is exceptionally well prepared to assume this role," says President Lee C. Bollinger, pointing out that Masri has chaired a working group of all the cen-

Mailman School introduces new broad-based curriculum

A few years ago, the nonprofit Institute of Medicine issued a report calling on all schools of public health in the US to provide students a more broad-based education.

The institute's concern was one commonly expressed by alumni of public-health schools and the employers who hire them: that the schools put too much emphasis on accruing technical knowledge in a single area like biostatistics, epidemiology, population and family health, or environmental-health science.

This fall, Columbia's Mailman School, which is ranked among the top five public-health schools in the nation, became the first to overhaul its entire curriculum in response to those concerns. Its master's degree students will now earn half their credits in areas outside their concentrations and will spend more time acquiring practical skills such as writing policy briefs, coordinating outreach campaigns, speaking publicly, and negotiating.

The new curriculum was developed at the behest of Dean Linda Fried and is the result of an intensive two-year planning process that drew on input from 150 faculty members, in addition to many students, alumni, and employers. Yale's school of management advised Mailman on the creation of several new courses, such as Leadership and Innovation, in which all first-year students will learn team-management and conflict-resolution skills through role-playing. In another new required course, Integration of Science and Practice, students will develop plans to implement health policies drawn from case studies, such as New York City's recent ban on trans fats in local restaurants, and then pitch them in a mock conference.

"It's going to be intimidating to a lot of people," says Mailman professor Melissa Begg in a forthcoming article in the school's



Incoming students at the Mailman School of Public Health this fall are the first to follow a new curriculum that will provide them management and leadership training.

alumni magazine. "But that's what will happen when they get their jobs."

The article in Mailman's magazine, written by Jon Marcus, describes how the school's innovations are being monitored closely by other universities; one long-time Mailman professor involved in creating the new curriculum, Ian Lapp, was recruited away to Harvard this year to implement similar changes at its public-health school.

"What Columbia has done and Harvard is doing is challenging the status quo," says Sandro Galea, another Mailman professor who was centrally involved in the curriculum redesign. "It's a bold experiment. We don't know exactly how this is going to work. But there's going to be no appetite for going back."

ter's directors. "He has traveled to each of the Columbia Global Centers and provided guidance for raising their respective regional profiles."

Prewitt will remain a senior adviser to the Global Centers, working closely on a pilot program that permits newly matriculated undergraduates to spend a fifth year pursuing an individualized course of study at one or more of the centers; six students were accepted into the first class this year.

Masri, a native of Jordan, came to the United States in the late 1970s to attend college at Purdue, eventually earning his PhD in industrial engineering and engineering

management at Stanford. He is an expert on how companies can increase their efficiency using technology, a subject he taught for many years at Columbia Business School.

Among his goals as vice president, Masri says, is to systematize the Global Centers' operations in areas as diverse as hiring, fundraising, and working with host governments.

"With any entrepreneurial endeavor, you get things off the ground any way you can," he says. "The Global Centers are moving past that stage now. We need business models, marketing plans, and strategic approaches for raising money so that the centers will survive and flourish."



Safwan Masri

B-school alumni giving big for school's new home

Alumni of Columbia Business School have recently pledged large gifts for two new buildings planned for the school on the Manhattanville campus.

Leon Cooperman '67BUS, the founder and CEO of the investment company Omega Advisors, donated \$25 million for the facilities in April. Soon after, an anonymous donor pledged \$23.5 million. Charles Tate '72BUS followed with \$2.5 million, and Paul Montrone '66BUS with \$1 million. The B-school has now raised \$174 million for its new home, with

\$100 million having come from Henry R. Kravis '69BUS in 2010; its fundraising goal for the project is \$400 million.

Cooperman says that he and his wife, Toby, have taken the "giving pledge" advocated by Warren Buffett '51BUS and Bill Gates, which calls for wealthy Americans to donate the majority of their fortunes.

"Columbia opened the door to my successful career and was the place where I made friendships that have lasted my entire adult life," he says. "It's both a pleasure and an honor to be able to give back."



Leon Cooperman '67BUS speaking to MBA students last spring.



This photo of poet Jack Agüeros, taken in the 1960s, is part of his collection given to Columbia.

Sonnets on the barrio

Columbia's libraries have acquired the papers of Jack Agüeros, a seventy-eight-year-old Latino poet, playwright, and political activist. The author of five books, Agüeros is best known for his sonnets about the struggles of Puerto Rican immigrants in the city. He directed El Museo del Barrio, a visual-arts center in his native East Harlem, from 1977 to 1986.

Today, Agüeros suffers from Alzheimer's disease and can no longer write. His papers were donated by his children, who include

Marcel Agüeros '96CC, an assistant professor of astronomy at Columbia, and Natalia Agüeros-Macario '12GSAS, who earned her master's degree here in sustainability management. The materials include unfinished manuscripts; newspaper clippings documenting Agüeros's community activism; and videos of interviews and readings.

The acquisition marks the beginning of an initiative by the libraries and the Center for the Study of Ethnicity and Race to collect the papers of Latino artists and activists.

Virginia Cornish named Helena Rubinstein Professor

Virginia W. Cornish '91CC was named the first Helena Rubinstein Professor of Chemistry at a June 5 ceremony at the Northwest Corner Building, the site of her laboratory. The endowed professorship was created by a \$2 million gift from the Helena Rubinstein Foundation, named for the early-twentieth-century entrepreneur who turned her skin-care business into an international cosmetics brand.

Cornish is a pioneer herself, being the first female graduate of the College to become a tenured professor here. In

her laboratory, she is using methods of synthetic biochemistry to create new types of living cells for use in detecting diseases that include cholera.

"Madame Rubinstein was a woman ahead of her time, and she believed strongly in the importance of women breaking into new professions," says G. G. Michelson '47LAW, the longtime chair of the Helena Rubinstein Foundation and a former chair of the Columbia Trustees. "So it's fitting that Dr. Cornish should be chosen as the recipient of this chair."



Virginia W. Cornish and G. G. Michelson at a June event celebrating Cornish's new endowed chair.

In brief

Stories in numbers

Mark Hansen, a statistician, installation artist, and news-industry consultant who for the past three years was a UCLA statistics professor, has been named East Coast director of the new David and Helen Gurley Brown Institute for Media Innovation.

The Brown Institute is a joint venture between Columbia's journalism school and Stanford's engineering school. The goal is for journalists in New York, working remotely with engineers in California, to develop novel ways of gathering, presenting, and disseminating news online.

Hansen, in addition to codirecting the institute, will teach Columbia journalism courses on how to incorporate methods of statistical analysis into reporting.

"Mark Hansen has about as wide a range of interests, talents, and accomplishments as anybody I have ever met," says journalism dean Nicholas Lemann. "It is wonderful for the school, and for journalism, that he has decided to make the work he has been doing on the frontiers of journalists' digital revolution into his life's work."

Bernd Girod, a Stanford engineering professor, has been named the Brown Institute's West Coast director.

The institute was established with a \$30 million gift from the late *Cosmopolitan* editor Helen Gurley Brown in January in honor of her and her late husband, David Brown '37JRN. Helen Gurley Brown, who was also the author of the 1962 bestseller *Sex and the Single Girl*, died on August 13.

Cheap digs for good plans

Dozens of recent B-school graduates starting their own businesses now have a low-rent home in New York City's Soho neighborhood, where the Columbia Business Lab opened this summer.

The lab, run by the business school's Eugene Lang Entrepreneurship Center, is now home to about twenty new ventures, including an artisanal-sandwich brand, an indie-music website, fashion companies,

and app developers. It also hosts training sessions and networking events for alumni.

"We've always wanted to have an incubator space where the students could have a soft landing and affordable office space," says Lang Center director Murray Low. "But it was the students who really took it upon themselves to find us the space and pull this thing together."

A bad inheritance?

Students at the law school's Sexuality and Gender Law Clinic joined the fight against the Defense of Marriage Act (DOMA) in September, filing a brief with the US Court of Appeals in the case of a New York City woman who says she should be able to inherit the estate of her deceased female partner tax-free, just as someone who had lost a legal spouse would. The plaintiff, Edie Windsor, lost her partner of forty-six years, Thea Speyer, in 2009. She subsequently received a \$363,000 tax bill from the IRS for receiving Speyer's property, although the two were married in Toronto in 2007.

In this case, as in other suits now challenging DOMA, the Obama administration has agreed with many of the plaintiffs' legal arguments and has taken the position that DOMA is unconstitutional.

"One of the Constitution's most significant promises is that government will not single out certain groups for disfavor unless there is a legitimate reason for doing so," said Suzanne B. Goldberg, the director of the Sexuality and Gender Law Clinic. "Here, there was simply no good reason for the government to refuse to give Edie and Thea's marriage the same tax treatment it would have given if Edie had been married to a man."

Goldfarb named SEAS interim dean

Donald Goldfarb was named interim dean of the engineering school this summer, following the resignation of dean Feniosky Peña-Mora on July 2.

Goldfarb, a professor at the engineering school since 1982, chaired its Department of Industrial Engineering and Operations Research from 1984 to 2002.

Peña-Mora stepped down after a tumultuous academic year in which engineering faculty members formally expressed their dissatisfaction with his management style to the University's administration several times. Last fall, the administration, in response to these complaints, appointed Goldfarb to the newly created position of executive vice dean, in which he assisted Peña-Mora with many of his duties that involved communicating with faculty. But the school year ended with tenured professors voting no confidence in the dean.

This September, provost John Coatsworth announced the formation of a search committee, which he is chairing, to find the school's next dean.

Peña-Mora, who designs computer systems that enable multiple organizations to collaborate on complex tasks such as responding to natural disasters, is remaining on the school's faculty as a professor of civil and environmental engineering.

Columbia wins design awards

Columbia Magazine recently won several national awards for illustration and design. The Council for Advancement and Support of Education awarded the magazine, and art director Eson Chan, a silver medal for the illustrations by David Hollenbach that accompanied the Summer 2011 article "A Message for the World," about historian Manning Marable; a silver medal for the illustrations by Keith Negley in the Winter 2011–12 article "The Long Shot," about the cancer researcher Brent Stockwell, and a silver medal for the design of the same story; and a bronze medal for the design of the Summer 2011 article "The Untouchables," which featured original photos by Lois Greenfield, a celebrated dance photographer, showing former Lion fencers sparring.

EXPLORATIONS

Genetic fusion linked to brain cancer

It is a deadly embrace: two genes sitting side by side on a chromosome somehow collapse into each other during the normal process of cell division, combining their DNA to form a strange new gene. This gene, which can duplicate itself successfully in subsequent cycles of cell growth, wreaks havoc within a cell, eventually leading to its destruction.

Columbia researchers led by Antonio Iavarone and Anna Lasorella have shown that this process, which is called genetic fusion, contributes to the most common and deadly form of brain cancer: glioblastoma. Affecting some 10,000 Americans each year, glioblastoma is nearly always fatal, even when treated aggressively with

surgery, radiation, and chemotherapy. After diagnosis, people with glioblastoma live, on average, for just fourteen months.

The scientists' findings do not apply to all cases of glioblastoma. Their study suggests that the fusion of genes *FGFR* and *TACC* is involved in just 3 percent of cases. But the discovery could lead to new treatments for people with this subtype of the disease.

"From a clinical perspective, we have identified a druggable target for a brain cancer with a dismal outcome," says senior author Iavarone, a professor of pathology and neurology at Columbia University Medical Center.

The discovery is particularly exciting, says Iavarone, because the destructive pro-



ROBERT GLICK

Antonio Iavarone and Anna Lasorella



COURTESY OF NASA

Black-hole hunter

An X-ray telescope whose optics were designed at Columbia was launched into space recently and is now orbiting Earth, its sensitive lens pointed at our galaxy's dusty center.

The chief objective of NASA's NuSTAR telescope is to conduct a census of black holes, which are difficult to spot because they form where gigantic stars have collapsed, generating huge clouds of space dust. The only light to escape some of these clouds comes from so-called "hard" X-rays, which are more powerful than the "soft" X-rays used in medical imaging and which pass straight through the components of all other telescopes invented until now.

NuSTAR is able to focus hard X-rays because of a special optical device created by Columbia physicist Charles Hailey. It consists of 133 cylinder-shaped mirrors arranged concentrically and tapered slightly at one end, such that entering light beams hit the mirrors at an angle of less than one-quarter of a degree, which is the only way to reflect the hard X-rays.

The telescope, shown at left being loaded into its spacecraft at Orbital Sciences Corporation in Dulles, Virginia, will be in orbit for the next two years.

"I can tell you that we'll discover black holes of all masses, supernova remnants, and young stars," says Hailey. "But what really sends chills up my spine are the things we'll discover that I can't conceive of yet, that no one can envision."

tein that gets produced by the new *FGFR-TACC* gene is not found in healthy cells. This makes him hopeful that if a drug is found that can shut down the protein, it may do so without causing side effects.

Several single-gene mutations had been linked to glioblastoma in the past. “However, therapies targeting these alterations have not improved clinical outcomes, most likely because they have systematically failed to eradicate the proteins to which the tumor is addicted,” he says.

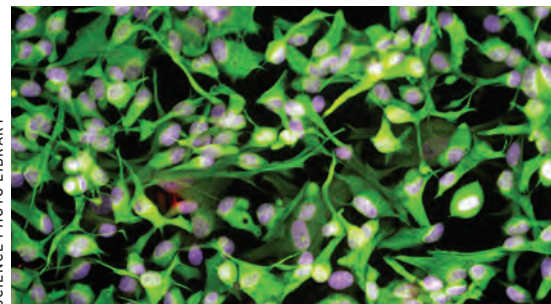
The Columbia researchers, to confirm that the protein produced by *FGFR-TACC* causes glioblastoma, injected the protein into healthy mice, 90 percent of which went on to develop tumors. In a separate

experiment on mice with glioblastoma, the scientists administered a drug to block the protein and were able to double the mice’s survival time.

Iavarone is now recruiting scientists at other institutions to launch a human trial to see if the experimental drug his team used in the mouse study, which is known as an *FGFR* inhibitor and is currently being tested on people with other forms of cancer, will help people with glioblastoma.

The scientists also hope their discovery will point the way to explaining other types of glioblastoma.

“It’s unlikely that we’ll find a single gene fusion responsible for most glioblastomas,” says Lasorella, an associate professor of



SCIENCE PHOTO LIBRARY

The most deadly form of brain cancer, glioblastoma, spreads among cells that compose the organ’s connective tissue, seen above.

pathology and pediatrics. “But we may discover a number of other gene fusions, each accounting for a small percentage of tumors, and each with its own specific therapy.”

Make Columbia part of your legacy

“Columbia is like one of my children—and my estate plans reflect that connection.”

—LISA CARNOY '89 CC
UNIVERSITY TRUSTEE

“Past generations transformed my experience here,” says Carnoy. “Now it’s my turn to invest in tomorrow’s Columbia.”

Join Lisa Carnoy in the 1754 Society—alumni and friends making a difference through bequests and other planned gifts to the University.



To learn more, e-mail gift.planning@columbia.edu or call 800-338-3294.

 COLUMBIA UNIVERSITY
Office of Gift Planning

NEWSMAKERS

Dipping for Gold

Third-year law student **Caryn Davies** won a gold medal at the Summer Olympics in August as part of the women's eight row-



GETTY IMAGES

Caryn Davies

ing team. This is Davies's third Olympic medal; along with her team, she earned a gold medal in 2008 and a silver in 2004 . . . **Ryder Kessler '11GSAS** is attracting notice for his invention, the DipJar, which has begun appearing in cafés and stores across New York City. The device, which is free for retailers, allows customers to add a one-dollar tip at the counter with a quick dip of a credit or debit card.

Capital Gains

Steven Bellovin '72CC, a professor of computer science, has been named chief technologist of the Federal Trade Commission by chairman Jon Leibowitz. Bellovin will advise the agency on technology and policy issues, drawing on his teaching and research experience at Columbia as well as more than twenty years at Bell Labs and AT&T Labs Research . . . **Kermit Jones '12SIPA** was chosen as a White House Fellow for 2012–13, and will spend the year working

with senior staff at the federal Department of Health and Human Services. Jones is a lawyer and a medical doctor, with experience as a Navy surgeon and as a primary-care physician in rural India.

Science Fare

Two Columbia professors have won prestigious Lasker Awards for their work in the biological sciences. **Tom Maniatis**, chair of the Department of Biochemistry and Molecular Biophysics at the College of Physicians and Surgeons, was recognized for his research relating to gene regulation and molecular cloning. **Michael Sheetz**, a professor of biological sciences, won an award for his work with cytoskeletal motor proteins, mechanisms that move cargo within cells, contract muscles, and enable cell movements.

High Prizes

The Inamori Foundation has selected University Professor of comparative literature **Gayatri Chakravorty Spivak** to receive the Kyoto Prize in Arts and Philosophy. The 50 million-yen (roughly \$640,000) prize



Gayatri Chakravorty Spivak

has been called the Nobel of the arts . . . **Katharina Pistor**, a professor of law, won this year's Max Planck Research Award for her work on international financial markets and comparative law. The 750,000-euro prize is given to two academics annually.

Coming Home

Sarah Kramer '03JRN was nominated for an Emmy Award for "Coming Out," a multimedia project that she reported and pro-



EARL WILSON

Sarah Kramer '03JRN

duced for the *New York Times*. The project, which was nominated in the news and documentary category, weaves together original essays and video content by gay, lesbian, bisexual, and transgender teenagers from across the country . . . *Here and There (Aquí y Allá)*, a feature film by **Antonio Méndez Esparza '08SOA**, was one of only two directorial debuts selected for the fiftieth annual New York Film Festival. *Here and There* tells the story of a man who returns to Mexico after working for several years in the US to find his family and community changed. It also won the top prize at the Cannes Critics' Week in May.

MARILYNN K. YEE / THE NEW YORK TIMES / REDUX

This is your magazine.

Please show your support with a
voluntary subscription.

Donate online:
<http://giving.columbia.edu/ColumbiaMagazine>

 **Yes! I want to support *Columbia Magazine*.**

Name (please print)

Address

City State ZIP

Check here if this is a new address

Telephone number (including area code)

Enclosed is my payment in the amount of:

\$50 \$100 \$200 Other \$ _____

Check enclosed (payable to Columbia University)

Charge my gift to my: MasterCard Visa

Credit card number

Expiration date

Signature

How are you affiliated with Columbia University?

Alumnus/a: School and year _____

Faculty member: Department _____

Staff member: Department _____

Friend

Other

Submit to:

Columbia Magazine
Columbia Alumni Center
622 W. 113th Street, MC 4521
New York, NY 10025

Telephone: 212-851-4155

Fax: 212-851-1950

E-mail: magazine@columbia.edu

www.magazine.columbia.edu

REVIEWS



A magician practices levitation in Lake Michigan during the summer of 1955.

Do You Believe in Magic? // By Daniel Asa Rose

Fooling Houdini: Magicians, Mentalists, Math Geeks, and the Hidden Powers of the Mind
By Alex Stone (Harper, 320 pages, \$26.99)

It's not every day that a book makes you levitate from your chair and travel halfway across town to see if an ordinary pizzeria is as extraordinary a place as your entranced brain imagines it to be. But that's what may well happen when you finish reading *Fooling Houdini: Magicians, Mentalists, Math Geeks, and the Hidden Powers of the Mind*, by Alex Stone '11GSAS.

Stone's memoir about his lifelong fascination with magic is transporting almost from the opening page. Partly it's because he is so candid about what attracts him to magic as a youngster in the first place: hoping it will help him navigate awkward social situations and meet pretty girls. In reality, he winds up spending the bulk of his youth with "pasty male virgins."

"For me, discovering the world of magic was like finding my own island of misfit friends, a place where everyone was special in the wrong way. Magic, let's face it, is a pastime for misfits, an outlet for outcasts with low self-esteem . . . With magic tricks, you can seem extroverted and outgoing while still maintaining a safe social

distance. Magicians hide in the spotlight, much in the way that photographers often mediate their social experiences from behind a lens and comedians hide behind jokes. Like physics, magic is all about nerds playing god with the universe."

But this isn't a book about smoke and mirrors. Stone becomes more seriously involved in magic while pursuing a PhD in physics at Columbia; he is intent on discovering the scientific principles that underlie almost every magic trick he learns. Why do people take pleasure in deceiving others, and in being deceived? What are the cognitive mechanisms at work when a person performs and watches a magic show? How does the brain process what it perceives to be reality? How reliable are our memories? "Strange as it may sound," he writes, "studying magic ultimately leads you to ponder some of life's deepest mysteries."

The characters Stone encounters on his quest are rendered with a true writer's eye for detail. "With his black Stetson hat, lizard-skin boots, and wide Doc Holliday moustache the texture

of dried tumbleweed, Richard Turner looks like a saloonkeeper from the Badlands, a Victorian-era cowboy, or a ghost town tour guide.” Turner, one of a series of off-campus magicians Stone meets on his journey, turns out to be less a cardsharp than some kind of hand acrobat, able to execute perfect one-handed shuffles with a deck in each fist simultaneously. Not one to keep an academic distance, Stone hunches in close enough to smell “the lanolin-and-mango lotion he applies three times daily to keep his skin moist and supple.”

You don’t even have to be terribly interested in the subject of magic to find Stone’s factoids irresistible, as for example this one: that historically, when long fingers proved a hindrance in executing certain maneuvers, some early magicians would amputate their fingertips. Or this: that at today’s magic shows you can distinguish other magicians in the audience because instead of applauding at the end of the trick, as laypeople do, they “clap during the seemingly uneventful moments when the secret moves occur. To the untrained eye, it’s as if the magicians are clapping at nothing.”

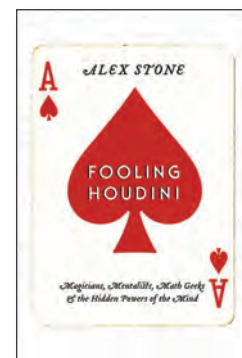
The deeper Stone becomes obsessed, the more riveting his account is. By the end of the book, he’s become a full-fledged “magicalaholic” with a pack-a-day habit (he likes his playing cards crisp), winging to magic conventions all over the world (there are more than a hundred such each year), even trying to inveigle himself into the good graces of a rough gang of three-card monte players on Canal Street (where they’ve relocated since being chased from Times Square by Giuliani’s cleanup). He’s lost his girlfriend — magic, it seems, has a way not of conjuring women, as he had hoped, but of making them disappear — and when he socializes it’s mostly to beta-test his material on friends. Magic has become a form of digital meditation for him, both his physics and his yoga.

Oh, and he’s become good enough to penetrate an inflated balloon with a cell phone, change the color of his shirt, produce salt in an endless stream from his hand, change a lemon into an egg, and make that vanish on command. He says that if he wanted, he could have become the ultimate shop-lifter. He also says he’s more proud of his ability to launch a coin eight inches vertically from his palm than he is for having graduated from Columbia.

But it was the atmosphere of the grimy pizza parlor near Herald Square that had me hooked beyond reckoning. Rustico II on West 35th Street is the perfectly ordinary site where extraordinary advice gets parceled out to Stone by his grizzled mentor who hangs there — advice like not flaunting your skill lest the audience attribute what they’re seeing to manual dexterity instead of magic. “Magic is not about selling your prowess,” he hollers at Stone above the din of Midtown regulars ordering pepperoni. “It’s about the effect you create — a profound violation of the natural laws of the universe. I don’t want them to think I’m skillful. I’m a magician, not a juggler.”

This is the kind of statement that may elicit a gasp of wonder from you. You’ll want to see for yourself where such wisdom gets transmitted. Is it a spell taking control of your limbs and propelling you crosstown — some sort of posthypnotic command? Or just evidence of what real-life magic can do — the magic of good writing.

Daniel Asa Rose is the author of Larry’s Kidney, named a best book of 2009 by Publishers Weekly.



© AP / CORBIS

The Long Run // By Rebecca Shapiro

Running Ransom Road: Confronting the Past, One Marathon at a Time

By Caleb Daniloff (Houghton Mifflin Harcourt, 256 pages, \$25)

The last miles of Caleb Daniloff’s first marathon were excruciating. Despite months of training, Daniloff wasn’t prepared for the physical and mental toll that the 26.2-mile course would take on him. But as he crossed the finish line, he knew he was ready to do it all again. Most marathoners wait a year before reattempting the full distance. Daniloff ’99SOA waited five weeks.

This kind of compulsion was natural to Daniloff, who was an alcoholic for fifteen years. He quit cold turkey when he was twenty-nine, but nine years later, at the start of the memoir, “the anxieties and insecurities I’d tried to cover up with booze still remained.” Marathon training proved the perfect stress-relieving, self-punishing, obsession-inducing hobby for his addictive personality. No one was surprised

REVIEWS

when he signed up for a second race so quickly. As his wife said, “You can’t just eat one burrito, you have to have five hundred.”

Runners and other endurance athletes will warm to the premise of Daniloff’s memoir, which follows him through five marathons in eighteen months, each in a location where he spent a portion of his life (Boston, New York, Burlington, rural Massachusetts, and Moscow) and each specifically designed to exorcise a set of demons from that period in his past. But running memoirs, even ones combined with tales of addiction or other hardship, are becoming commonplace, and non-running readers might find that the detailed race reports distract from the demons themselves, which are easily the most interesting part of his story.



Daniloff spent his teenage years, the incubator of his addiction, in Moscow, where his father, Nicholas Daniloff, was the Soviet bureau chief for *U.S. News & World Report*. The shy, awkward son was plunged into Soviet culture — Russian schools, competitive gymnastics, and a primitive pioneer camp — and easily adopted, too, the chain smoking

and binge drinking that went along with them. Then, in 1986, when Daniloff was a surly sixteen-year-old, his father was detained by the KGB and jailed on espionage charges, making international headlines, causing the family’s deportation, and cementing Daniloff’s downfall.

Daniloff returns to Moscow in 2009 as a part of his whirlwind therapeutic running tour, and it is only here that the memoir truly feels distinctive and exciting. As the son of an important Cold War figure, a human embodiment of the massively complicated relationship between the two world powers, who came of age wanting only to assimilate into that enemy culture, he brings a fascinating perspective that, with an extended visit to the city, could have carried the whole book. As he watches businessmen crowd the now commercialized streets, he remembers arriving as a scared sixth-grader: “Moscow’s boulevards were festooned with red banners and images of Socialist leader Vladimir Lenin and Party Secretary Leonid Brezhnev. No pizza, no hamburgers, no Coke.” Moscow has soared beyond hamburgers and Coke, which Daniloff finds out when he meets his childhood friends Kolya and Kosh at an upscale sushi restaurant, but watching them battle with the vodka bottle, unemployment, and the same general malaise that had once afflicted much of his life, too, Daniloff recognizes his own progress: “I had reached some kind of mile marker I couldn’t see.”

Of the 1%, for the 1% // By Christopher Caldwell

The Price of Inequality: How Today's Divided Society Endangers Our Future

By Joseph E. Stiglitz (W. W. Norton & Co., 448 pages, \$27.95)

Nitpicking and bloviation are the Scylla and Charybdis of popular writing about economics. Economics professors tend either to bombard their readers with equations, theorems, and statistics, or to assume they will be content with airy clichés about competitiveness and growth. Good business writers have long been a dime a dozen in the United States. The list of economics writers who have made themselves beloved of a wide reading public is a very short one. It has included Irving Fisher, John Kenneth Galbraith, and Paul Krugman. Today, it includes, preeminently, University Professor Joseph Stiglitz, whose new book, *The Price of Inequality*, spent much of the summer on the *New York Times* extended bestseller list.

Stiglitz is not just a good teacher with a gift for expository prose. He is an academic economist of the first rank. He won the Nobel Prize in economics for 2001, and he is cited by other economists more often than all but three of his colleagues worldwide, according to the Federal Reserve Bank of St. Louis, which charts such things. While his interests are broad, he has done groundbreak-

ing work in the economics of information, focusing on the power it confers on those who have it over those who do not. In other words, his work often has a political edge to it, and his politics are of a radical kind. Although Stiglitz served as the chair of Bill Clinton’s Council of Economic Advisers in the mid-1990s, in his new book he describes the Clinton era as “one of *seeming* prosperity.” He has harsh words for Clinton-era treasury secretary Robert Rubin and makes veiled criticisms of other officials. Nor does he see eye to eye with Barack Obama. Although Stiglitz defends the 2009 stimulus, he faults the president for mismeasuring the severity of the financial crisis he inherited and of being less aggressive than George H. W. Bush in prosecuting bankers for mortgage fraud. Stiglitz’s profoundest sympathies are with Occupy Wall Street and other expressions of what until a few years ago was called the “anti-globalization” movement. His preferred policy prescriptions include more collective bargaining, more affirmative action, and more government spending. “I entered economics,” he said

in his Nobel lecture, “with the hope that it might enable me to do something about unemployment, poverty, and discrimination.”

To look too closely at Stiglitz’s ideology, though, is to focus on what he has in common with a majority of the guests you’ll see on Fox News or MSNBC. What makes Stiglitz worth reading is his acute reasoning, his gift for getting quickly to the philosophical gist of an economic problem, and his agile deployment of data.

It takes Stiglitz less than a chapter to lay out how inequality has increased in the past thirty years. Even if you are familiar with the usual ways of measuring inequality — income shares of quintiles and percentiles, international comparisons of Gini coefficients — he will show you some new ones. For decades after World War II, for instance, productivity and wages were always closely correlated, diverging only around 1980. Other troubling signs began to appear at about the same time. Before then, Stiglitz notes, a recession meant that labor productivity went down. Why? Because firms were doing less with the same number of workers. Bosses would hoard these underutilized workers until good times returned. That doesn’t happen anymore. In recent recessions, labor productivity has gone *up*. That means employers are ditching workers at the first sign of trouble, and wringing more work out of the desperate ones who remain.

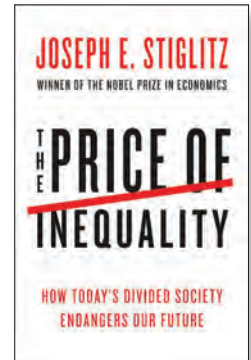
A lot of economists — perhaps most of them — believe that in an age of globalization and rapid technological change, that’s just the way the cookie crumbles. Stiglitz dissents. He sees inequality as for the most part politically created. It is the outcome of “rent seeking” behavior by elites. Instead of manufacturing things or performing useful services, rent seekers take advantage of the rules to collect payments from society at large. They may capture the agencies meant to regulate them, or use connections to exploit government-controlled resources, or buy the obedience of elected politicians. Stiglitz argues that the markets most culpable for inequality — finance, agriculture, pharmaceuticals — are hardly free. In fact, he proves it, by resorting to basic free-market principles. “The laws of competition,” he writes, “say that profits (beyond the normal return to capital) are supposed

to be driven to zero.” Because successful businesses attract imitators, building a fortune ought to be a Sisyphean game. Huge and sustainable profits are not something one tends to see in open markets.

Stiglitz has a knack for statistics. He takes them as an occasion to start thinking, not, as many economists do, as an occasion to stop. Whatever its cause, growing inequality breaks the link between such economic measures as gross domestic product and the experience of the average American. When, for instance, Mark Zuckerberg and his investors get billions apiece from an initial public offering of Facebook stock, mean incomes rise, but the median American does not necessarily feel better off. Indeed, whereas economists frequently see a tradeoff between income equality and economic performance, Stiglitz writes that “the magnitude of America’s inequality today and the way it is generated actually undermine growth and impair efficiency.” Rent seeking in the finance industry has drawn more and more Americans to where the money is, leading to a “misallocation of the country’s most valuable resource: its talent.”

Even when Stiglitz talks about equality and opportunity, he never does so sentimentally, and he never talks about doing things that are in the interest of all. That is an impossibility. Economics, in Stiglitz’s view, always has winners and losers. It is fraught with drama. It is pregnant with historical consequence. “One cannot escape issues of distribution,” he writes, “even when it comes to the simplest problems in organizing an economy.” Most Americans have come to agree, even those who don’t share his opinion on what that distribution ought to look like.

Christopher Caldwell is a senior editor at the Weekly Standard and a columnist for the Financial Times.



Plainsongs // By Kelly McMasters

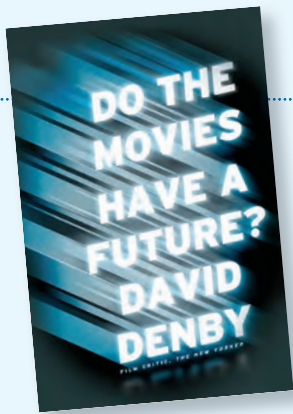
Ghost Dances: Proving Up on the Great Plains

By Josh Garrett-Davis (Little, Brown, 336 pages, \$25.99)

At the beginning of his memoir *Ghost Dances: Proving Up on the Great Plains*, Josh Garrett-Davis ’09SOA stands in front of a cage at the Bronx Zoo, staring at eleven American bison. “They’re built like woolly brown baseball players, heavyset with nimble lower legs,” he writes. “And the agitated tails sweeping city houseflies

away remind me of broken windshield wipers with rubber blades whipping pointlessly.”

Garrett-Davis identifies with these animals, which inhabit an unfamiliar space, unable to return to their home on the range, and unlikely to survive there even if they could. This is the book’s point:



Cinema Purgatorio

The book: *Do the Movies Have a Future?* (Simon & Schuster)

The author: David Denby '65CC, '66JRN

Columbia Magazine: We should be outraged, you write, at how the business of movies is squelching the art of movies.

David Denby: It didn't happen overnight, but it's just gotten more and more extreme: this bizarre yearly schedule of enormous blockbusters and then a ten-week Holocaust-and-tears season beginning in October and ending on Christmas Day, as the studios line up for awards.

Not that there aren't other movies. There are six hundred movies a year, and if you look at the *Times* every Friday, you can read about eight or ten smaller ones, some of which may be good, that have enormous difficulty gaining traction in theaters. It's expensive to open a movie in New York and Los Angeles, and there's not much money left over for advertising. People simply don't know about these movies. I can't tell you how often I hear, "I can't find anything to see." There's a sameness to the seasons, and it's produced by the business structure.

CM: One small film that you liked this year was *Beasts of the Southern Wild*.

DD: I'd never seen anything like it. It was about a mood and a vision of life from a little girl's point of view — a savagely joyous bayou tale. It moved back and forth seamlessly between realism and fantasy. It was just full of life and color and character.

So that's a success story, but if you look at the credits, it took four or five different entities to fund it. Talented directors now have to spend five or six years raising money rather than working. And even when these small, serious movies are hits, they don't necessarily have successors, because there's no business structure to support them. Each one is an exception.

CM: Did the big studios ever support art?

DD: When I first got interested in movies, as a Columbia undergraduate in the sixties, there were great films from France and Italy and Sweden. This was the period of Bergman, Fellini, Antonioni. Suddenly, movies were taken seriously as an art form. In the seventies, when I first started writing, there was an efflorescence of American filmmaking. Studios overestimated the size of the counterculture, so they turned the production facilities over to people just out of film school, like Coppola and Lucas and Scorsese and De Palma and Hal Ashby. Those directors didn't make independent films from the sidelines with money coming from eighteen different places. Those were studio films — *Nashville* and *Chinatown* and *The Godfather*.

CM: You suggest that the old studio system helped actors grow into their talents in a way that isn't possible now.

DD: There was a kind of minor league. Actors were given small roles to see what fit and whether the public responded to them. They weren't thrown right into the center of enormous films. So, it took a while for actors like Humphrey Bogart, Cary Grant, and John Wayne, but there was a point when the actor's character and the role matched together, and he became that person forever. There's as much acting talent out there today as there ever was, but it's weirdly developed. There are all these male buffoons who've developed in the last fifteen years, and the serious young actresses who have developed at the same time, like Charlize Theron or Emma Stone, don't match up with them. Who do you cast opposite Ben Stiller? The market has altered the development of stars in a way that makes it

very hard to do those wonderful love teams that were part of the pleasure of moviegoing in the thirties and forties.

CM: Tell me what a good critic does.

DD: Obviously, there's consumer advice. You have to keep score; you have to do that just to hold your job. You also have to find the right language to evoke the feeling of a movie. It's a sensuous medium; that's what draws us to it. You have to point people to what's exciting and new: a new talent, some unexplored area of life.

I think critics are more necessary than ever. I mean, there's no one else standing between these enormous marketing machines and the public. Sixty-some-odd critics have lost their jobs in the last three or four years. The studios would be perfectly happy if we all disappeared and there was nothing but a thousand niches on the Internet.

CM: The critics James Agee and Pauline Kael, you write, believed that "the nation's soul was on trial in its movies." Do you believe that, too?

DD: Yes. I just don't think movies are as essential to us as they were then. The media palette has broadened — or disintegrated. Mostly it's product, and people don't take it all that seriously. But I wonder if the Great Recession could yield a more serious kind of popular art, and maybe *Beasts of the Southern Wild* and *Girls* on television — this hip, depressive soap opera — are early examples. Maybe this is the beginning of a more intellectually and morally complex period of filmmaking as truthful as the period that followed Vietnam. The difference is, the big studios won't be behind it.

— Joshua J. Friedman '08JRN

Garrett-Davis doesn't wish to return to South Dakota, to the home he couldn't wait to leave, but as he looks back on the Great Plains, he sees truths about himself that have always defined him.

It's a story he tells in an unusual way — through a mixture of history, literary criticism, personal narrative, profile, reportage, and lyricism — in a book that is essentially a collection of essays that meander like bison, loosely grouped in a herd but still standing apart as individual animals.

Things started brightly enough for Garrett-Davis's family. "Neither of my parents was from the Plains," he writes. His mother grew up in California, his father in Ithaca, New York. They were civil-rights activists, with a button collection up on the living-room wall screaming out against nukes and censorship. Garrett-Davis's parents settled in Aberdeen, South Dakota, in the late 1970s, after a small courthouse wedding for which she "wore a green cotton dress, and he wore a Methodist-red corduroy sport coat," and opened Prairie Dog Records, using family money.

They divorced when Garrett-Davis was still small, leaving him with a fractured schedule: summers and vacations with his mother and her new girlfriend in Portland, Oregon, where she moved after coming out, and the school year with his father in Pierre, South Dakota. To assuage his heartbreak and confusion, he turned his attention to skateboarding and composing earnest lyrics stockpiled for his someday-band ("Save the Elephants": *So say you're very sorry / For taking their i-vorry*). In South Dakota, which Wallace Stegner called a "flat, empty, nearly abstract" world, hiding the secret of his mother's homosexuality is painful and isolating, but necessary, the narrator reasons, since "the first time anybody ever found out, I lost my mom." He lost much more than just his mother, it turns out — the divorce and surrounding circumstances made him bitter and angry toward his hometown — and the narrative is devoted to trying to get it back, even if only for a split second.

Garrett-Davis supplements this family narrative with dispatches on people and places tangentially related to him, employing a bewitching and satisfying range of technique. He mixes descriptions of prairies and pioneers with those of skateboarding and punk rock and offers long explanations of the surprising things that interested him as a teen and provided him with fellowship, such as L. Frank Baum's *The Wonderful Wizard of Oz* and the South Dakota governor, Bill Janklow, whom he reviled.

Some of these diversions don't work, as when he draws hyperbolic parallels between an ownership fight over Sue the tyrannosaurus fossil, which was discovered in South Dakota and then shuttled between a number of different institutions, and his own



© JIM BRANDENBURG / MINDEN PICTURES / CORBIS

custody battle. He is at his best when using his personal experience to illuminate some larger idea, as in the chapter that simultaneously skewers the Westboro Baptist Church (of "God Hates Fags" fame) and elevates Dakota Taylor, a gay gunslinger from a pulp paperback series. His playful spin on the writer Willa Cather is both endearing and brilliant; using her 1890 high-school graduation speech as evidence, Garrett-Davis determines that at sixteen she is "infinitely more badass" than the plains punks.

A PhD candidate in American history at Princeton, Garrett-Davis often pulls from primary sources for his pieces, including his own adolescent lyrics and local newspaper musings, letters from his mother to her marriage counselor, and timelines of the nineteenth-century buffalo slaughter. So, his prose is not academic. People "tumbleweed into South Dakota" and "splash into LA," and hate-preacher Fred Phelps "is Walt Whitman's evil twin, generating an overflowing word count, a commonplace book of hate-filled, exclusionary, overwrought, antique, hyperbolic, unedited provocation." Ruth Harris, the writer's eighty-five-year-old second cousin twice removed, is "an unshelled almond: a fibrous, sun-spotted exterior with a substantial and almost sweet heart." His parents come across as jagged and imperfect on the page, yet his affection still rings loudest.

Early in the book, Garrett-Davis remembers a pre-divorce moment, sitting in the car with his mother: "The birds will use it for their nests,' Mom would say as she let her hair out of the window of our red Datsun . . . I imagined lucky robin chicks growing with a golden braid of her hair coiled around them, that rich, dark blond that mine would be if I grew it out." The image of a shining strand of gold weaving through a nest of drab dead leaves and twigs seems to mirror Garrett-Davis's strategy of sparking through the dry plains like a star skidding across the earth, lighting up the landscape for us to see as he blazes his path away.

Kelly McMasters '05SOA teaches in the undergraduate creative writing department and the Graduate School of Journalism at Columbia. She is the author of Welcome to Shirley: A Memoir from an Atomic Town.

Joyful Noise // By Eric Liebetrau

On Celestial Music: And Other Adventures in Listening

By Rick Moody (Back Bay, 448 pages, \$15.99)

Ecstasy is a much-sought but rarely achieved state, an ineffable blend of joy and wonder. For novelist Rick Moody '86SOA, the author of *The Ice Storm* and *Purple America*, this feeling has always come from music. "I could not hide the way I reacted when music was around," he writes, "whether with tapping feet, or with impulsive singing, or with jubilation more egregious."

Moody has spent his life chasing that feeling — studying, playing, and above all, listening. More than just a hobby, he writes, music is an essential part of his craft, one that he takes with him to his writing desk over and over again.

Moody's first book of essays, *On Celestial Music*, is an homage to this force behind his prose, and he attacks his subjects with erudition, wit, and glee. There's something Whitmanesque in the scope and energy of these essays, which celebrate everything from the

debauchery of the Pogues to the skewed tenderness of the evangelical Christian group Danielson Famile.

"Against Cool," the collection's opening salvo, sets the tone by considering the narrative possibilities of music through the evolution of the idea of "cool," a slippery, constantly changing term that, after five hundred or so years of percolating, gained traction among the jazz musicians of the 1940s. In jazz Moody recognizes not only cool's natural habitat but "a laboratory for the way in which the term gets disseminated: spontaneously, loosely in an improvisatory fashion, as a delineator of passions and moods and styles." Carried through the '50s by the Beats, who "yoked Miles and Bird to Whitman and Emerson," the concept of cool found footing in Jack Kerouac's feverish accounts of the jazz performances he attended during the travels that formed the basis of *On the Road*. To Kerouac, writes Moody, cool was "a perfume of the infinite, a wisp of the spiritual, in which improvisation and spontaneity enable numinous predisposition, access to the ether."

The parallels between prose and song deepen in "Thirty-One Love Songs," as Moody examines 69 *Love Songs*, the three-volume album by the Magnetic Fields, almost with an editor's eye. He winnows the album's sixty-nine songs to a tighter thirty-one, and adds some entertaining personal notes by recalling his shaky stints opening for the band — as he tells us, an author reading from his work is not always the best lead-in for a rock concert — and giving insight into the Fields' quirky frontman, Stephin Merritt.

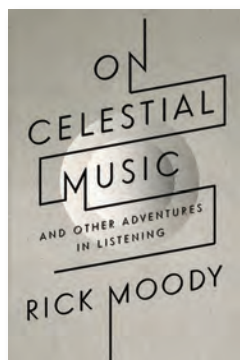
While many of the essays are earnest, "Guilty Pleasures" offers comic relief. Moody writes about the Brooklyn Record Club, a circle of friends who meet regularly to discuss their favorite songs. During the club's "guilty pleasures" night, Moody contributes tunes by Frank Zappa and Jethro Tull, a choice that forces him to admit his love of the compositional complexities, bombastic presentation, and esoteric lyrics of progressive rock. "Many, many people have called Jethro Tull the worst band of all time," Moody admits, which is why he is horrified to realize that he still likes them. Even worse, while Jethro Tull no longer tops his playlists, he reluctantly comes to recognize "prog rock" elements in some of the bands that do, including the experimental, digitally enhanced, mostly instrumental bands Tortoise, Godspeed You! Black Emperor, and Do Make Say Think.

Moody reserves his highest praise for "Some Propositions Concerning the Lounge Lizards," in which he muses on the genius of bandleader John Lurie. Moody recalls his favorite concert ever, a forty-five-minute Lounge Lizards show at Lincoln Center in 1992, and Lurie, the band's saxophonist and composer, responds in a phone call with his own memories: "There was so much love and strength. It was something that, while we were playing, could absolutely not be denied . . . there was a mounting ecstasy and power that could not be stopped."

Inventiveness, rebellion, and self-destruction — themes that persist throughout the collection — also define the final essays, illuminating not only the ecstasy of music, but some of the agony that comes with it. "The Problem of Impairment" focuses on the Pogues and their disheveled frontman Shane MacGowan. Moody takes this subject as an opportunity to discuss the intersection of drugs and music, and the complicated notion that many artists have produced their best work while high: "The problem with impairment . . . is: can you love the artist despite what he or she has become? Or must you love them in the process of unbecoming? Can you bear witness to impairment without participating in it? Is it possible to love the drunk and hate the drink? Recognizing the infirmity, can you love an artist nonetheless?"

Only occasionally does Moody's zeal tip toward excess, and most readers will welcome the author's ardor and encyclopedic knowledge. In this era of holier-than-thou music criticism, it's refreshing to find passion, intelligence, and unrestrained joy all in one package. Moody knows his stuff, and he makes readers want to know it, too; his rapturous dissections of popular music and its most intriguing practitioners will have music junkies dusting off their old vinyl or firing up Spotify to satisfy their cravings.

Eric Liebetrau is the managing editor and nonfiction editor of Kirkus Reviews, and writes for several other national publications.





MARK STEELE

Visit Columbia Magazine at our digital home!

At magazine.columbia.edu

- Are you a fan or a critic of Paul Auster? Tell us what you think
- Link to samples of music by Laura Cantrell
- Join the debate on fracking. Submit your letter online
- Like us on Facebook and follow us on Twitter
- Get up-to-the-minute bulletins via RSS and Columbia news feeds, and more

Check out what's new at
magazine.columbia.edu

facebook.com/columbiomag



twitter.com/columbiomag



CLASSIFIEDS

Books

THE ROMANTIC IDEAL BY STEVE SIMONSON '96SW: The book contains 56 formal sonnets unified by themes of love, beauty, hope, and desire. Mr. Simonson's sonnets have appeared in poetry journals in the U.S. and Europe, including one in an anthology. Available on Amazon.com.

Personals

ATTRACTIVE AND AFFECTIONATE: Looking for a man of means. 917-207-6135.

LASEK SURGEON: Featured in *NY Times/Wall Street Journal*. Dartmouth, Columbia, Harvard, Emory, NYU degrees. Seeks smart, sweet, skinny SWF 30 for marriage. \$10,000 donation to your charity for intro! dr@ParkAvenueLASEK.com.

RETIRED ACADEMIC: European, widow, 75, solid character, thoughtful, and young at heart. I am attractive, slender, possess a pleasant personality, and prefer simple elegance. Would like male companion and genuine friend to share in the cultural offerings of Manhattan and to spend quiet time. edenitto@aol.com.

SUCCESSFUL, ATTRACTIVE, INTELLIGENT, AND EDUCATED WOMAN seeks international, dynamic, strong, and charismatic man for committed, long-term relationship. Ideally 55 to 72 years old, Jewish, and based near NY. He would possess a fiercely curious, proactive, and gregarious attitude; be erudite, smart, witty, and cosmopolitan; revel in lively intellectual debate as well as appreciate calm and reflective moments. Interests would ideally include the arts, culture, enjoying international cuisine, film, and travel. Our client would love to share both quiet times and adventures with a warm and honorable partner who possesses a solid moral fiber and global outlook. Reply to: claire@grayandfarrar.com.

Professional Services

AMERICAN MASTERPIECES: Dryads Green Gallery will help you make an American impression! See www.dryadsgreengallery.com for affordable landscape beauty, 1840–1940.

ATTORNEY: Laury A. Betha, civil and criminal litigator, NY, NJ. 551-574-7861; lbetha2002@yahoo.com; www.laurybethalawfirm.com.

CAREER TRANSITIONS AND EXECUTIVE COACHING: Judith Gerberg: MA, LMHC — International career expert (quoted in *NY Times*, *WSJ*, *Newsweek*, *NPR*) and Columbia grad — has built her reputation guiding Ivy Leaguers to find the careers they love, manage stress, and create meaningful lives. Call and see what she can do for you: 212-315-2322; judith@gerberg.com; www.gerberg.com.

COLUMBIA-AREA REAL ESTATE EXPERT: If you are contemplating the sale or purchase of an apartment in the area of Columbia's campus, turn to a trusted and experienced source of advice, and Columbia B-School alum. George Bingham, The McIntosh Company: georgebinghamnyc@gmail.com.

EDITOR FOR HIRE: Novelist (Simon & Schuster, Grove) and essayist (*New Yorker*, *W/Norton*) available to evaluate your manuscript and tenderly oversee revision. Manuscripts improved for publication or made publishable, if possible. Fiction and nonfiction. Contact anna.writes@virgin.net.

EXPERT VIOLIN INSTRUCTION: All levels. Juilliard- and European-trained professional musician. 212-877-5549.

FINANCIAL PLANNING: Ralph E. Penny '72BUS, CFP (Certified Financial Planner). Fee-only. No products or insurance sold. Specializing in individuals needing help with investment decision/strategy, retirement, estate planning, or personal budgeting: 914-694-2025.

HOME/PROPERTY AND LIFESTYLE MANAGEMENT: Urban Upkeep cleans, paints, repairs, does chores, stocks provisions, conducts inspections, and waters plants. Maids, assistants, and party help. 3,500+ clients, insured. 212-532-0308; service@urbanupkeep.com. '98SIPA.

LINE EDITOR FOR ACADEMIC WORK: Former senior publishing editorial executive, Columbia MA in literature brings clarity and accessibility to white papers, theses, articles, or book projects. 973-773-0836.

MATH TUTOR: Extensive experience, proven track record, and excellent references. Available in Manhattan and New Jersey to help students grades 6–12 with schoolwork, test prep, enrichment. Master's; certified. Please call Mel: 732-603-9521.

RESEARCH ASSOCIATE/PERSONAL ASSISTANT: New York City. Highly intelligent, resourceful individuals with exceptional communication skills sought to undertake research projects and administrative tasks for a successful entrepreneur. We welcome applications from writers, musicians, artists, or others who may be pursuing other professional goals in the balance of their time. \$90–\$110K/year to start (depending on qualifications). Resumé to: rapany@gmail.com. Please note that, due to the high number of respondents, unfortunately we will be unable to reply to every inquiry.

STUDY/LIFE BALANCE: Wife/mom of Columbia alumni can assist with your study/life balance by arranging appointments, reservations, travel, errands, and cleaning projects. Text 917-957-0517 or conciierge4students@gmail.com.

TOLKIN ARCHITECTS: Earth-eco systems, Samuel Tolkin, New York-California-Washington: 310-451-5497; www.tolkinarchitects.com.

WILLIAM ALANSON WHITE INSTITUTE OFFERS AFFORDABLE PSYCHOTHERAPY: Providing a welcoming setting and friendly, personal service. Expanded training programs enable us to offer services to those who would benefit from intensive (three times weekly) treatment or psychotherapy. Our interpersonal orientation focuses on problems in everyday life and the impact people have on one another. Fees start at \$10/session for psychoanalysis and \$40/session for psychotherapy. Contact Dr. Elizabeth Krimendahl: e.krimendahl@wawhite.org or 212-369-2819.

Real Estate

CATSKILL MOUNTAINS, NY: 300+ ft. of cascading waterfalls adjoining architect-designed, year-round custom one-of-a-kind home, 5 deck levels, 90 min. to NYC. \$690,000. For more info visit: buyawaterfall.com; 845-647-3914.

DRESDEN, ME: Beautiful waterfront farm, 28 pastoral acres, 2,400-ft. river frontage. Comfortable, attractive 1789 home, 2 barns, rental incomes, farm store, turnkey organic operation. Rural, 45 min. to Portland. Other potential uses: B&B, equestrian center, veterinary practice. Many major improvements. \$895,000. www.bridgefarm.info; 207-841-5299.

FORT LEE, NJ: Luxury co-op building, 1 to 3 bedrooms, \$89,000–\$259,000, NYC transit at door. Frances Kosier; 201-394-1610/201-541-6400 x317; Century 21 Calabrese Realty.

FORT LEE, NJ: Stay close to NYC. Large family apartment, 3-bedroom, 2-bath, terrace. Two minutes from GW Bridge. Onsite grocery, cleaners, gym, etc. Sports for all ages, incl. pool, tennis, new playground. Bus on site to NYC or school. Owner sale — viewing welcome. Asking \$200,000. Call: 201-694-9190, rebates available.

MANHATTAN, NY: 1-bedroom available, Central Park/Fifth. sj386@columbia.edu.

NANTUCKET, MA: Homes by the sea or in town, for sale or rent, for families of all shapes. Pat Carr Calabrese: patcc@compassroserealestate.com; 917-655-4642.

PARK CITY, UT: www.parkcityluxuryrealestate.com.

TENNESSEE: Own in Tennessee. Music City — www.nashvillehomesforsale.org. Mortgage — nashvillemortgageadvisor.com. Trending city — homesinspringhilltn.com.

Vacation Rentals

CAVENDISH, VT: Farmhouse, 2 double bedrooms, 2 single, on dirt road. Swimming pool, screen porch, X-C ski, snowshoe. Near Okemo but best for book- and antiques-loving couple or quiet family. \$500/wk. Contact: anna.writes@virgin.net.

DEERFIELD BEACH, FL: Lakefront 2-bedroom, 2-bath villa, fenced backyard, near I-95, beach. Weekly/monthly. Contact: ABinNY@aol.com; 914-722-2757.

LONDON: Covent Garden. Spacious 1-bedroom. Private patio. Owner. 415-933-9903.

MANHATTAN, NY: Furnished luxurious vacation and business rental apartments: info@nyctemphouses.com; 644-465-5902; www.nyctemphouses.com.

NEW YORK, NY: Senior couple misses Lincoln Center. Needs 1-bedroom apt. on UWS for occasional weeks out of Maine. Flexible schedule, low-impact, reasonable cost. Pramsay42@gmail.com.

PARIS: Fifth floor, quiet, alcove studio sleeps three, balcony. View Eiffel Tower. www.parisgrenelle.com; 207-752-0285.

PARIS, MARAIS: Luxury rental in center of Paris. Close proximity Picasso Museum, Centre Pompidou, and other historical sites, as well as gourmet shops of rue de Bretagne. See owner's website at www.parischapon.com.

ROME: Spacious, stylish, renovated apartment. Living room, 2 generous double bedrooms, 2 baths, kitchen/breakfast room. Central location near St. John Lateran. \$850 weekly. 212-867-0489; www.casacleme.com; Lm603@columbia.edu.

TORTOLA, BVI: 3-bedroom house 60 feet above Long Bay Beach. 646-526-7111; ewinghouse@gmail.com; www.ewinghouse.com.

VAIL, CO: Completely remodeled 3-bed/3-bath plus loft that sleeps 8 right on Gore Creek. Great views, privacy. Pool/hot tub, tennis; on free bus route less than 5 minutes to Lionshead. All-season resort with world-class skiing, fly-fishing, dining, shopping, golfing. Competitive rates. Contact: casaseacliff@gmail.com.

Websites

JOIN RAREBRIDGE: A unique online community of high-caliber professionals from around the globe. Sign-up is free and takes just a few minutes of your time: www.rarebridge.com.

DATE SMART!

Join the singles' network exclusively for graduates, faculty and students of the Ivy League MIT, Stanford and few others.

The Right Stuff

www.rightstuffdating.com
1-800-988-5288



ADVERTISE HERE!

Columbia Magazine reaches 270,000 of the brightest, most enterprising people in the world. Wouldn't it be smart to place an ad with us?

Contact:
Bruce Ellerstein at
917-226-7716 or
be2187@columbia.edu



David Rakoff
at Lit Night,
April 25, 2012.

JENICA MILLER

House of Mirth

One of David Rakoff's last public appearances was on April 25, 2012, at the Columbia Alumni Center. The writer and humorist, who died of cancer on August 9, stood before a crowd of fifty for *Columbia Magazine's* second annual Lit Night and read an essay about his arrival in New York as a student. Afterward, during the Q&A, an audience member asked, "At what point do you know you're funny?"

Rakoff '86CC gathered his breath. "Being funny is never the point," he said. "My hope is that I can tell something vividly and specifically and, for want of a better term, prettily. I like *words*. I'm not one of those hyper-masculine minimal writers. I like words. But writing funny is just sort of what I do. It's as value-neutral as my eye color" — Rakoff's voice then shrank into a small, self-mocking

squeak of sadness — "I was going to say my *hair* color, alas, and then I remembered that I totaled that Mazda a while ago."

The crowd emitted some titters and a couple of outright guffaws. "What's the final referendum on when something's funny?" Rakoff continued. "You can usually tell when something's close but isn't quite there yet. In many ways it's like baking. You know what all the components are, but there's chemistry involved, and certain things have to be in place in order for the thing to work. When it happens, you sort of know it. If you're lucky, you get older and gain knowledge, and it's nice to have one realm in which I've gotten wiser, because" — Rakoff's voice curled again into a weepy rasp — "everything else is just a fucking mess."

A few people laughed. It shouldn't have been funny, but it was.



Campus Icon greet **NEW ERA**

Our prized landmark welcomes Columbia alumni back to campus with a special offer. Now our space is graciously restored for weddings and special occasions. Consider Faculty House for your next event and enjoy the perks of being Columbia Blue.

FACULTY HOUSE | 
COLUMBIA UNIVERSITY





HELLO
my name is

COLUMBIA *alumni* | 
ASSOCIATION

Columbia Alumni Center
622 W. 113th Street, New York • 1-877-854-2586

INTRODUCE YOURSELF



www.facebook.com/ColumbiaAlumniAssoc



www.twitter.com/ColumbiaAlumniA



www.alumni.columbia.edu/Directory