

ANYBODY'S GAME

WAGNER SENIOR FELLOW ROBERT M. SHRUM SIZES UP THE 2008 PRESIDENTIAL PLAYERS

he 2008 presidential election, it's been observed, is a nearly unique event in modern political history because it's the first campaign since 1952 where no incumbent president or vice-president is running. But that really isn't true. In 1952, Harry Truman, the incumbent, was a yet unannounced candidate when Tennessee Senator Estes Kefauver, the pioneering investigator of the mob, trounced the president in the New Hampshire primary. Truman promptly withdrew.

It's the 1920 election that in a real sense mirrors 2008. The campaign was waged amid deep popular dissatisfaction—not with World

War I, which had just been won, but with the peace treaty that Democrat Woodrow Wilson had negotiated and the Senate had repudiated. The Democratic candidate, James M. Cox, lost in a historic landslide with only 34 percent of the popular vote to Warren G. Harding's 60 percent.

This year it's the Republicans who are under such stress. Plagued by an increasingly unpopular war in Iraq and scarred by Hurricane Katrina and a slew of ethics questions, they are on the verge of fracturing their age-old habit of nominating the front-runner, the next person "in line," even if he's lost before. The Democrats have higher hopes and a compelling top

SHRUM WAS DUBBED "THE MOST SOUGHT-AFTER CONSULTANT IN THE DEMOCRATIC PARTY" BY THE ATLANTIC.

tier of candidates. Nominating either Hillary Clinton or Barack Obama would signal historic change and present America with a test of conscience. For that matter, the Republicans may very well offer the country the chance to elect the first Mormon or Italian-American president.

However, the 2008 election won't be like 1920 in one critical respect. It won't be a runaway unless the Republicans lose their heads and nominate a fringe candidate, say Texas Representative Ron Paul, whose libertarian ideology has led him to introduce legislation that would outlaw the Federal Reserve. or one of the other minor candidates who are paladins of the far right. In the polls, Democrats hold a substantial lead over Republicans in a generic race for president. It's much closer, however, when the pollsters offer names instead of party labels. While the Bush years have devalued the Republican brand, it's possible that next year America could still vote pretty much like a 50-50 country. Bet on the Democrats, but don't bet it all.

THE LINEUP

Early in 2007, the Republican nominee to be was Arizona Senator JOHN McCAIN. But the maverick decided to rerun the expensive, buttoned-down Bush campaign that wrested the nomination from him eight years before. He's the face of the surge in Iraq, and while he deserves credit for standing by his beliefs, the conservative base still doesn't trust him. He's struggling to raise money and is now a long shot.

Former New York City Mayor **RUDOLPH GIULIANI** (LAW '68), who's running a 9/11 campaign, rode into a lead in the polls, despite his stance on gay rights and abortion, but his margin seems to diminish each month.



WHO WILL BE THE NEXT PRESIDENT? (CLOCKWISE FROM TOP LEFT): SENATOR JOHN McCAIN; SENATOR BARACK OBAMA; FORMER SENATOR FRED THOMPSON; FORMER VICE PRESIDENT AL GORE; FORMER GOVERNOR MITT ROMNEY; FORMER SENATOR JOHN EDWARDS; FORMER MAYOR RUDOLPH GIULIANI; AND SENATOR HILLARY CLINTON.

Only a Republican party in a state of terminal desperation will nominate someone who disagrees with fundamental conservative views on social issues.

Enter stage right: **FRED THOMPSON**, actor turned Tennessee senator, then actor again. Trotted out as a paler clone of Ronald Reagan, Thompson experienced a slow nonstart to his campaign; he may end up having to run for reelection for his old job as DA on *Law & Order*.

monism may give credence to the notion that he believes what he's saying now: the flop not the flip.

New York Senator HILLARY CLINTON's problem is that she looks like the establishment choice in a year of change, so the former First Lady is trying to redefine change as nostalgia for the 1990s. As Bill Clinton said when he was speaking on her behalf and responding to the suggestion that the Clintons were old news, "Yesterday's news was pretty good."

Nominating Hillary Clinton or Barack Obama would signal historic change. For that matter, the Republicans may very well offer the country the chance to elect the first Mormon or Italian-American president.

Former Massachusetts Governor MITT ROMNEY may secure the nomination by process of elimination. He has reengineered his political persona to fit the ideological predisposition of the Republican primary electorate, renouncing the pro-choice stand that helped him win in the bluest of blue states. Ironically, his Mor-

BARACK OBAMA embodies change, but the Illinois Senator will have to satisfy primary voters that there's substance to go with the sizzle. If he does—and there's plenty of time because voters in Iowa and New Hampshire tend to rethink their choices after the first of the year—he could lap Clinton.

Former North Carolina Senator JOHN EDWARDS' best hope is that the skirmish that flared this summer between Clinton and Obama will escalate into full-scale negative ad war, which risks pushing Democratic primary voters to look for another choice. Fair or unfair, the 2004 vice-presidential nominee now appears the only likely alternative because none of the second-tier candidates as yet have the financial resources or a powerful differentiating message that would let them break through.

The least likely development is the late entry of former Vice President AL GORE. The politician has become a prophet, and the prophet shows no sign of coming down from the mountaintop.

Over his three decade career, Robert M. Shrum has served as senior adviser for the Kerry campaign in 2004 and for Gore in 2000, as well as strategist for more than 30 winning U.S. Senate campaigns, among other major races, which he details in his 2007 book No Excuses: Confessions of a Serial Campaigner (Simon & Schuster). He is currently on leave from his role as a senior fellow at the Robert F. Wagner Graduate School of Public Service.

scorecard

Think Global, Spend Local

It goes without saying that New York is a different sort of college town than South Bend, Indiana, or Hanover, New Hampshire. But while Manhattan doesn't run on NYU alone, it certainly benefits from the university's more than 16,000 employees and more than 40,000 students.

During the 2005–06 academic year, the university pumped more than \$405 million into the area through its central purchasing department.

Here's the breakdown:



SOURCE: NYU'S PURCHASING SERVICES

IN BRIEF

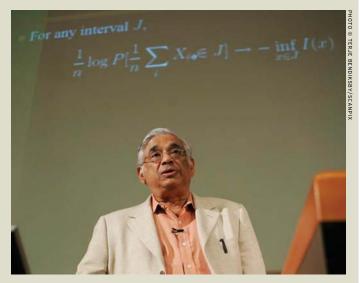
Math's Abel Thinker

Rare is the moment that Srinivasa "Raghu" Varadhan of the Courant Institute of Mathematical Sciences is not ruminating on intricate probability formulas. "Sometimes you wake up in the middle of the night and you think of it," he says. "You take a shower or you travel in a plane and you think of it. Often you don't even need paper and pencil."

Varadhan, whose relentless pondering distinguished him in his native India, where he studied with renowned statistician C.R. Rao, was recently recognized with an Abel Prize, or the "Mathematicians' Nobel"—the second for a Courant scholar in the five years since the award's inception. In May 2007, the Norwegian Academy of Science and Letters honored Varadhan with the nearly \$1 million prize "for his fundamental contributions to probability theory"—in particular for developing a system that would calculate the probability of rare events that evolve randomly in time and could be applied to fields such as the financial market and the insurance industry, among others. "In our days, it has become important to estimate the probability of risk," he says.

But the Frank J. Gould Professor of Science and professor of mathematics, who came to NYU as a Fellow in 1963, admits that the specific application of his work is generally less important to him than creating models that could have universal implications. While some prefer to explore a mountain range on foot, he likens his approach to the wider view of a satellite image. "You see the whole mountain range," he explains. "That's the difference between solving a particular problem and having a whole theory."

—Sabine Heinlein



NYU COMMUNITY GIVING

More than 3,000 faculty, administrators, and staff have donated funds to NYU since the beginning of the Campaign for NYU in 2001, contributing generously to personal passions and interests. In recognition of this commitment, this summer a

committee of faculty and staff kicked off Building Our Community Together, NYU's first-ever peer fund-raising campaign. "They wanted to offer their colleagues a formal opportunity to give money to the things that are most important to them," explains Stan Sheppard, the committee's liaison at the Office of Development and Alumni Relations. It's completely voluntary, no amount is too small, nor cause too obscure—from study-abroad student stipends to the Nursing Mobile Health Van—and especially for those on campus, it's easy to see the difference a donation can make.

MOGULS IN TRAINING

DIRECTOR What do you get when you mix Hollywood talent with Wall Street savvy? No, not Harvey Weinstein—but the new joint MBA/MFA degree for producers. The three-year graduate program, which will launch in fall 2008, combines degrees from the Tisch School of the Arts and the Leonard N. Stern School of Business, so students can simultaneously study the creative and business sides of filmmaking—something every aspiring producer needs in order to navigate this increasingly complex trade.

"The industry and financing of deals have gotten much more complicated over the past few years because the film studios now are all part of large media conglomerates," says C. Samuel Craig, director of the entertainment, media, and technology program at Stern, who cocreated the new degree with Tisch professor John Tintori.

In addition to the core requirements for both degrees, students accepted into the program can tailor their studies by choosing from about 20 specialty courses on topics such as movie marketing and how to fund a deal.

A SCHOOL BY ANY OTHER NAME...

Shakespeare's Juliet once asked, "What's in a name?" For the recently designated Steinhardt School of Culture, Education, and Human Development, the answer is simple: everything.

With programs ranging from applied psychology to studio art, and from music technology to nutrition and food studies, Steinhardt had long ago outgrown its purely educational identity, which started at its founding in 1890 as the School of Pedagogy. To correct this, Dean Mary Brabeck spent more than a

year consulting with
Steinhardt faculty, staff,
and students to find a mix
that incorporates the
school's vast offerings."We
love our diversity, and we
believe our new name captures it better," Brabeck says.

Along with the new moniker, Steinhardt has undergone a comprehensive visual makeover, choosing a sleek logo and branding scheme that reflect the school's academic spectrum and downtown spirit.

SERVICE, IN MEMORIAM

Eugene Marshalik—the 19-yearold CAS sophomore who was shot and killed last March while on duty as an auxiliary police officer in Greenwich Village-will be commemorated by a new scholarship, thanks to the anonymous gift of \$100,000 from an NYU alum. The Yevgeniy (Eugene) Marshalik Memorial Fund will be used to annually support two undergraduates who demonstrate a devotion to public service. A hardworking student and volunteer, Marshalik emigrated with his family from Russia to the United States in 1993, and hoped to one day work as a prosecutor. "The [donor's] decision to remain nameless is very much in keeping with Eugene's own modest, self-effacing, and generous approach to serving the public good," said Matthew Santirocco, dean of the College of Arts and Science. The fund will remain open to the contributions of others who wish to memorialize Marshalik.



sports

Good Call?

REFEREES MAY NOT BE ABOVE THE FRAY

by Andrew Flynn

s a longtime soccer referee, Mark Boyko (LAW '05) is well acquainted with home field advantage: The home team simply wins more often. The reasons for this, however, are less clear. Do ultra-rowdy crowds, for which European soccer is famous, serve to rally the home team or intimidate the opposition? Boyko had a hunch that he, as referee, might actually be most affected by the cheering. "I thought," he says, "if the referees are being influenced, then there's a good chance that some are prone to influence more than others."

To find out, Boyko, while working on an LLM at the School of Law, teamed up with his brothers and fellow soccer referees—Adam, a postdoc in biological statistics and computational biology at Cornell, and Ryan, a research assistant in the psychology department at Harvard—to analyze data from the English Premier League's games. Of all sports, soccer is one of the best poised for such a study because most of the subjective decisions are made by a single referee, allowing one individual's judgment to hold ultimate weight over a match. The brothers published their findings in the September 2007 issue of Journal of

A NEW STUDY FINDS THAT EVEN WHEN SOCCER FANS DON'T ATTACK REFEREES, SUCH AS AT THIS RECENT MATCH BETWEEN DENMARK AND SWEDEN, THEY MAY INFLUENCE CALLS ON THE FIELD.

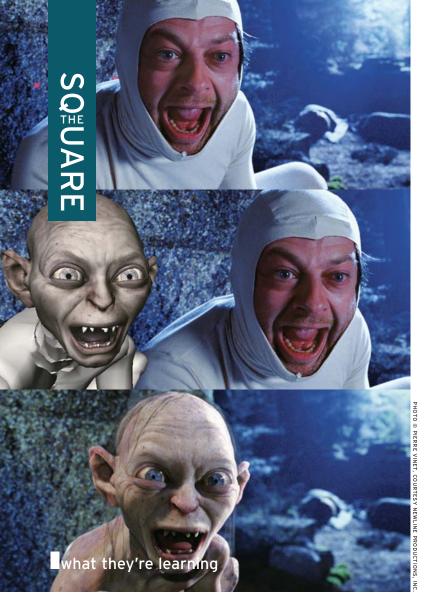
Sports Sciences, and while not surprising, the results were clear-cut: Not only did home teams score more goals, but more penalties were awarded to visitors, suggesting that referees favor one over the other, perhaps because of the roaring fans. By controlling for other factors and tallying the penalty calls of individual referees, the Boykos also discovered that some may be more biased than others, or have different "bias levels," but that this decreases with experience.

For Arnold Klein, however, the study has little to do with his calls on the field. A 34-year veteran of refereeing, who has officiated both NCAA Division I and international matches, Klein insists he feels neither pressure from spectators nor partiality for either side. "When I go out on the field, I see two colors," he says. "I don't know who's the home and who's the visiting team." And Klein prefers

boisterous crowds: "I don't like when the atmosphere is like in a church or a concert hall."

Boyko admits other critics have had similar reactions. "Nobody thinks that they are being influenced by the crowd," he says, "which is why we think that this is a subconscious, almost biological thing." In fact, researchers have recently noted higher levels of testosterone in home team athletes, and Boyko predicts future studies might explore the psychology and biochemistry of individual referees for all sports.

Regardless, Boyko hopes that officials will consider referees' bias, especially when they assign them to key matches. "If you have a competition where you are only going to play one championship game, and it's going to be at one of the teams' home stadiums," he says, "maybe you wouldn't want to be using the referee with the highest home field advantage."



THE CLASS:

Movers, shakers and...software?

by Renée Alfuso / CAS '06

n the first day of professor Chris Bregler's computer-science course in the Courant Institute of Mathematical Sciences, some students might be surprised by the complete absence of computers, the fact that half of their classmates are from the Tisch School of the Arts, and that their first day will be spent performing stage combat.

But Introduction to Motion

Capture isn't your typical science class. It focuses on the process of recording human movement or facial expressions—and then transferring that information into a computer-simulated form. The result can be seen in a slew of video games and animated films, such as the blockbuster *Monster House* (2006), in which characters appear startlingly lifelike, thanks to the magic of this new technology. Motion capture has also crept into traditional films. Director Peter Jackson used it

ACTOR ANDY SERKIS DONNED A
MOTION CAPTURE SUIT TO BRING THE
CREEPY, SCENE-STEALING CREATURE
GOLLUM TO LIFE IN LORD OF THE RINGS.

to create the monstrous Gollum in the *Lord of the Rings* trilogy and to make his scowling but sympathetic King Kong express himself without having to say a word.

Bregler actually consulted with George Lucas's production company before choosing the state-ofthe-art Vicon system for NYU's motion capture lab—the only one in New York City when it opened in 2003. Students from all disciplines soon flocked to Bregler for the chance to use the equipment, and the computer-science course is now also open to undergraduates from the dance, theater, film. and animation departments, among others. Each class is divided into teams where everyone performs rotating jobs-from directing to acting to working the cameras—to complete a final film project." A lot of the students know how to sit down and solve a computer or math problem, but then to actually come up with a story and execute a film-that's unusual for them," Bregler says.

Once fitted in a motion capture suit, a full-body outfit covered with small, reflective markers that lightsensitive cameras pick up, students can record virtually anything-and they do. Break dancers, ballerinas, and a full rock band have been captured in the lab, which boasts a 20-x-20-foot retractable dance floor. The recordings are then transferred to a computer where students can apply the movements and other special effects to any threedimensional character they create, which this past semester ranged from sprinting Lego men to pirouetting ninjas.

As the technology spreads, students find they are in high demand. "In just the past two weeks, I've gotten calls from companies desperately looking for people who know motion capture here in Manhattan," Bregler says.

The Syllabus: Introduction to Motion Capture

WEEK 1

Introductions / Suit up to practice recording motions, such as a fight scene / First assignment: Write, rehearse, and shoot a motion scene in class

WEEK 2

Reconstruct in 3-D the previous week's recorded data using Vicon iQ software / Compare how well on-screen recordings match actual movements / Watch and critique clips from *The Polar Express* (2004)

WEEK 3

Lecture on the history of motion capture: Invention of the film camera and the oldest human motion recordings / Review early Disney film animation, including *Snow White and the Seven Dwarfs* (1937), which copied live motion from other films / Examine rotoscope machine, used to trace film recordings onto a light table instead of drawing from scratch / Watch the Beatles' "Lucy in the Sky With Diamonds" from the animated film *Yellow Submarine* (1968) and scenes from Paul Verhoeven's *Total Recall* (1990)



IN 1937, SNOW WHITE ANIMATORS LOOKED TO REAL PEOPLE FOR THEIR ARTISTIC DEPICTIONS.

WEEK 4

Learn how to use MotionBuilder software to manipulate recorded movements into different characters / Watch the French animated comedy short *Cortex Academy* (2004) / Second assignment: Apply characters to recordings using MotionBuilder

WFFK 5

Discuss the emerging field of motion capture-based gaming, such as Nintendo's Wii system / Present final project proposals

WEEK 6

Introduce the 4,000-player game called "Squidball," created by NYU in 2004 at the Los Angeles Convention Center in a 190-x-190-foot room—the largest motion capture space ever built / Discuss the technology behind other games with large numbers of players and NYU's plans for future interactive games / Watch additional motion capture clips, including Radiohead's music video "Go to

Sleep" (2003) / Third assignment: Program special effects, such as supernatural jumps and fight moves, into recordings

WEEK 7

Learn advanced MotionBuilder tools for combining different recorded motions into one film / Study research projects that developed motion capture special effects used in video games / Watch Nike commercials

WFFK 8

In-class motion capture shoot for final projects / Learn more advanced computer techniques to complete final films

WEEK 9

Discuss motion retargeting and facial motion capture / Watch behind-the-scenes motion capture recordings from the film *King Kong* (2005) and research videos on changing animation techniques, such as the "super punch" from the film *The Matrix* (1000)



PETER JACKSON REPORTEDLY USED 132 FACIAL MARKERS TO CAPTURE SERKIS'S SUBTLE EMOTIONS FOR KING KONG.

WEEK 10

Learn Maya, a 3-D modeling package to create the appearance of characters by constructing different face shapes, body types, and clothes

WEEK 11

Learn how to make facial animations speak and appear more photo-realistic by animating footage of John F. Kennedy / Guest lecture by Jean-Marc Gauthier, assistant arts professor at Tisch and interactive artist, on 3-D real-time animation and motion capture art projects

WEEK 12

Guest lecture by Jeff Han, a consulting research scientist for the Department of Computer Science at Courant, in which students learn alternative motion capture techniques for new user interfaces, as well as the technology behind Nintendo's Wii system

WEEK 13

Learn how to use techniques from dance and movement experts in motion capture, such as motion languages like the Laban Movement Analysis / Field trip to Curious Pictures for inside peek at the industry, tour of soundstage, and to learn about internship opportunities

WEEK 14

Discuss artificial intelligence and motion capture, including advanced techniques, such as how to simulate behavior / Learn the software packages used for crowd animation, which allow users to create vast armies without having to motion capture each individual / Present final films

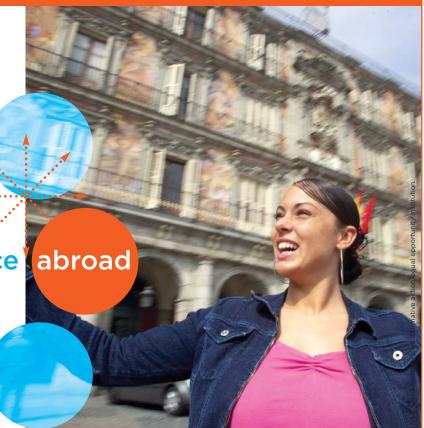
New York University

- **··≻** Monday morning.
 - Have coffee.
 - Fill out NYU study abroad application.
 - Submit and go to class.
- 6 months from Monday.
 - Board plane.
 - Wave goodbye to family.
 - Be there.

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music education

THE NEXT DIDDY?

CLIVE DAVIS DEPARTMENT IS CREATING INDUSTRY DYNAMOS

by Renée Alfuso / CAS '06

THE LATE 1990S REIGN OF BRITNEY SPEARS, 'N SYNC, AND

Backstreet Boys as a sign of a musical apocalypse, the period was truly a golden era—at least financially. Teen fans consumed endless merchandise, packed concert arenas, and helped to spike the combined sales of the top three albums to more than 29 million copies in 1999. But fast-forward to the present—past the emergence of inexpensive recording equipment, Napster, iTunes, MySpace, and streaming mobile-phone music—where the

ated, engineered, marketed, and distributed, and has democratized the industry so much that it now favors those skilled in all facets. Rather than relying on talent alone, artists are best served acting as triple threats—akin to rolling Elvis, the Colonel, and Sam Phillips into one.

Responding to this evolution, the Clive Davis Department of Recorded Music in the Tisch School of the Arts, which graduated its first class in spring 2007, is

Rather than relying on talent alone, artists are best served acting as triple threats—akin to rolling Elvis, the Colonel, and Sam Phillips into one.

top three albums had combined sales of only about 10 million CDs in 2006. The tech revolution has irrevocably altered how music is creone of a few programs training all students as musicians, technicians, and entrepreneurs. Undergrads might pursue courses in commer-



GRADUATING STUDENTS FACED THE MUSIC-AMERICAN IDOL STYLE-BY PERFORMING BEFORE A PANEL OF INDUSTRY VETERANS LAST MAY.

cial branding, ear training, sound mixing, and publicity all in the same semester. "The shift had already occurred in the industry, but not in [most] educational institutions," says department chair Jim Anderson. "Because we started in 2003, we've been able to keep up."

Named for legendary musicbusiness CEO Clive Davis (WSC '53), who helped steer Whitney Houston, Billy Joel, Bruce Springsteen, and Alicia Keys to stardom, the program regularly entertains key industry figures who offer real world advice—and, in some cases, harsh criticism. Graduating seniors in May 2007 presented Capstone Projects—the culmination of their creative, technical, and business ventures, ranging from album debuts to plans for an innovative nightclub in Croatia—before a panel of major-label executives.

Among the judges was Debbie Southwood-Smith, who has worked in the business for 20 years, most recently as VP of A&R

The Rock Star

TOM SCHECTER, AGE 22

The pitch: Tom Schecter

ming a bottle of

whisky." He

originally

formed the

band as a senior

in high school

and recently

started the la-

bel Freak City

Records to

record their

first album,

which he

"the musical equivalent of slam-

Album highlight: The band recorded their first single,"New Generation," with legendary engineerproducer Eddie Kramer, who's worked with Led Zeppelin, Jimi Hendrix, and The Beatles, after he selected their audition tape during a visit to NYU."He's been the man for 40 years, so having his name attached to anything is a huge deal," 🚆 Schecter says.

Serious drive: Though currently working as a paralegal in New York to pay the bills, Schecter is moving full steam ahead with his new album: "We're gonna play the hell out of any place that will take us, and we're gonna sell the hell out of this thing online."

Hear their music:

www.myspace.com/dibbleedge

The Songstress

JENNIFER NEWMAN, AGE 23

Multitasking: Jennifer Newman spent more than 300 hours in the studio working on her first fulllength indie pop album, on which she wrote, produced, engineered, and played piano and guitar. "I've always been interested in all the different sides of music, so I never

> really wanted to be just a singer," she says.

Musical influences:

She grew up listening to jazz vocalists, such as Ella Fitzgerald, and loves singer-songwriter Regina

Spektor. But she also listened to a lot of hard rock in high school and still ranks Tool as her favorite band.

Web waves: Her album was released on iTunes and Amazon.com, among other sites, this past summer, and she's pitching her songs out to more than 500 music blogs.

She already has more than 19,000 hits on her My-Space Web page.

On her own: Newman has more than 20 musicians in her

family-including her Grammywinning cousin Randy Newman-and her grandfather was president of Fox Music. "I've always tried to do things on my own," she says. "And then, when I'm ready, I can reach out to them."

Hear her music:

www.jennifernewman.net

The Producer EVAN MOORE, AGE 22

Here's a look at three students who presented Capstone Projects last May. Keep an eye out for them on MTV or at the Grammy Awards-or check out their Web sites today.

> Upstart: Evan Moore runs his production company Thunder, Lightning & Lightning in the cramped, subterranean Lower East Side recording studio that he and his partners once used for their band's rehearsals—until they realized they enjoyed being in the studio more than touring. "We're a rock band that records other rock bands," he says. Since they started in 2005, they've already produced four full-length albums, in addition to audio work for commercials and films, and are constantly searching MySpace and local shows for new talent.

> Working it: Moore and company produced a series of online commercials featuring live rock performances for Garnier Fructis. The shampoo company loved them so much that they ordered four times as many ads, which keeps Moore busy filming every two months in Miami."We use commercial work to support us so we can keep doing the more creative stuff," he says.

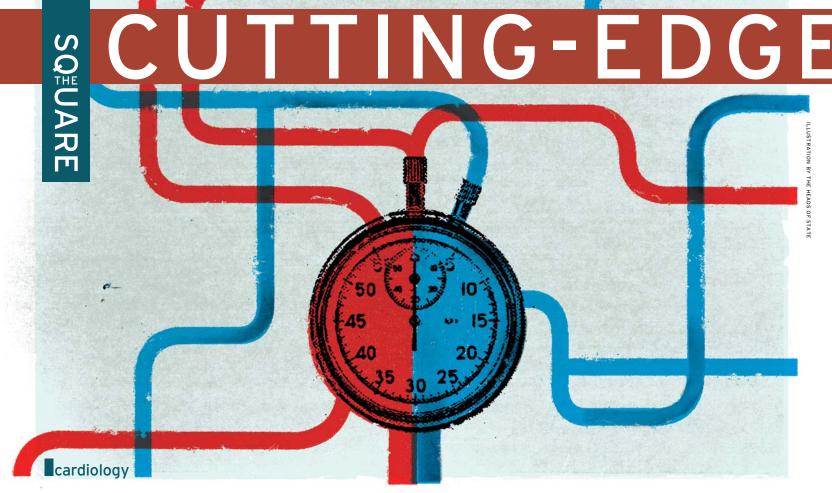
> > His vision: Moore wanted to create a different kind of production company because he was "fed

up with studios where producers were really just glorified engineers charging bands exorbitant hourly rates." Instead he charges a set premium and considers bands equal partners in the recording process.

Winning taste: Two of Moore's bands recently won first and second place in the John Lennon Songwriting Contest.

at Interscope Records, and believes resolving issues such as slumping sales and rampant illegal downloading is best left to this next generation of industry players, who have grown up with the technology that has rewritten music-business rules. "I don't think it's the adults who are going to figure out these problems," Southwood-Smith says. "I think it's going to be a bunch of 20-year-olds who solve it."■

■ NYU / FALL 2007 / 15 ■



CLOCK TICKS ON HEART PROCEDURE

by Samme Chittum

OR YEARS, ANGIOPLASTY HAS BEEN A POPULAR TREATMENT FOR HEART ATTACK SURVIVORS-

regardless of when it's performed. But a groundbreaking study now shows that, with some exceptions, the procedure saves lives in *only* the first 12 hours after a heart attack begins. Once that window has closed, explains Judith S. Hochman, director of the Cardiovascular Clinical Research Center at the NYU School of Medicine, many of the more than 50,000 Americans who receive this treatment annually are just as safe using pre-

scription drugs to prevent further heart damage.

"We were surprised because we did expect angioplasty to benefit all patients," admits Hochman, who designed and led the Occluded Artery Trial (OAT) study to resolve a controversy in the field over the effectiveness of the treatment, in which a balloon catheter is inserted through the arm or groin to unclog arteries that are then held open with stents. The OAT team

enrolled 2,166 patients at 217 hospitals across the country and abroad—half received drug therapy only; the others received drug therapy and underwent angioplasties three to 28 days after an attack.

After tracking the health of both groups for an average of three years, researchers found that the rates of heart attack, heart failure, and death were the same. "The main issue here is that medical therapy"—medications, such as statins, angiotensin-converting enzyme inhibitors, and aggressive risk factor modification—"has gotten better," Hochman says, eliminating

the need for many survivors to undergo a procedure that can cost from \$10,000 to \$15,000.

This news made national and international headlines—including a front-page article in *The New York Times*—last year following the report's release in *The New England Journal of Medicine*. The OAT study was also number five on the American Heart Association's top 10 list of articles published in 2006. "Change in practice is definitely happening," Hochman confirms, "although at this stage it is anecdotal."

Hochman estimates that onethird of eligible patients who survive a heart attack do not receive angioplasty within the 12-hour treatment window, often because they arrive at the hospital too late. The problem is that many don't recognize the subtle symptoms of a heart attack, such as shortness of breath, sudden fatigue, or tightness in the chest. Being attuned to these is essential—as Hochman notes, time lost is heart muscle lost. social psychology

THE HOW AND WHY OF ATTRACTION

by Jason Hollander / GAL '07

efore a big date, some women and men take pains sweating on the elliptical, getting primped at the salon, or choosing the most flattering outfit. And while this sounds like practical preparation, the effort might all be for naught if you've got the wrong wiggle or swagger. A new study reveals that a person's gait is just as important as his or her appearance when others size up their gender, the first step to determining attractiveness. For heterosexual men, "a woman who moves in a feminine manner will have a higher rating than a woman who's moving in a masculine manner," says Kerri Johnson, until recently a research scientist in the Department of Psychology.

While this may seem like a shallow method of evaluation, sex categorization is part of a natural, obligatory foundation for judging others, according to Johnson and co-author Louis Tassinary of Texas A&M, who recently published their findings in an article in Proceedings of the National Academy of Sciences. The two conducted studies in which participants rated computer-generated animations and drawings on degrees of masculinity, femininity, and attractiveness. The results indicated that

body shape—one's waist-to-

hip ratio—and body motion, mixed with preconditioned gender perceptions, provide the essential launching points for all other ingredients of attraction.

If it's natural to judge people, researchers found that participants still had some unnatural expectations—especially for women. Another study found that when both sexes were asked to select the figure of a "typical" male, most got it right, picking bodies in a normative range. But the majority believed the "typical" female body is one more akin to an anatomically exaggerated cartoon character—say, Jessica Rabbit or a Barbie dollsomething that "doesn't exist in nature," says Johnson, which has major implications for how women evaluate their own bodies.

But females aren't the only victims of perception. Johnson jokingly calls herself an aspiring "men's libber" because guys, she says, suffer the most from social expectations on how they carry themselves. "We have much greater latitude for women to behave in a masculine way," says Johnson, noting that men must adhere to an alarmingly narrow set of behaviors deemed appropriate. "When they step beyond that, they receive harsh penalties for it. It begins early in life, and it continues throughout."

SINGER BEYONCÉ'S GAIT
TYPIFIES A FEMININE STRUT.



Heredity Hidden in the Gums

by Janelle Nanos / GSAS '05

ur mouths might seem an unlikely place to unravel the mystery of human evolution, but the bacteria hiding in them offers new evidence of how our species spread from Africa to Asia to Europe, according to Page W. Caufield, a professor in the College of Dentistry. "Every human wants to know where they came from," says Caufield, lead author of a recent Journal of Bacteriology article that reports how the oral bacteria Streptococcus mutans has evolved alongside its human hosts. "The pieces of that puzzle are scattered all over the place. We learn from genomes, from paleontology"-and now dentistry.

Since 1994, Caufield has gathered mouth-swab samples from African-American, Caucasian, and Hispanic Americans, and journeyed to the Central African Republic, China, Brazil, Australia, Sweden, and Guyana for more. The resulting samples span the evolutionary equivalent of up to 200,000 years. With the help of David H. Fitch, a professor in the biology department and co-author on the report, Caufield was able to locate the DNA biomarkers that linked the samples together—all the way back to a single common ancestor, or "Ancestral Eve."

Because oral bacteria is our first line of defense-creating vitamins, digesting food, and fending against pathogens—the research sheds light on both the susceptibility of some ethnic groups to tooth decay, as well as a greater story of human survival. "DNA is DNA," Fitch says, "and it contains information and a historical record. The history is all there—you have to be smart enough to find it."

law and security

Mistrials

A LEGAL STUDY INVESTIGATES THE WAR AT HOME

by Sabine Heinlein / GSAS '07

n the past 15 months, the domestic war on terror seems to have taken a triumphant turn. In June 2006, seven men were arrested for conspiring to blow up Chicago's Sears Tower. A month later, a scheme to bomb train tunnels under the Hudson River was thwarted. Then last May, the FBI arrested six men for allegedly plotting an armed assault on Fort Dix in New Jersey, and only a few weeks later, charged four men with planning to explode the fuel

pipeline under John F. Kennedy International Airport in Queens. "For the terrorists, life since 9/11 has never been the same," President Bush assured the nation in his most recent State of the Union address.

However, the judicial reality of the past six years tells an altogether different story, according to the Terrorist Trial Report Card: U.S. Edition, a study of all terrorist cases that passed through the federal court system between September 11, 2001 and Septem-

ber 11, 2006. "The [report card] is meant to be a window onto the war on terror," says Karen J. Greenberg, executive director of NYU's Center on Law and Security and editor-in-chief of the report card. So far, this window has revealed troubling flaws in both the methods used to collect evidence and interrogate suspects, as well as the overall policy of relying solely on law enforcement and the Department of Justice to prevent another attack.

The study notes that of the 510 people deemed terrorist suspects at some point in the process, only four individuals—Zacarias Moussaoui, Richard Reid, Chao Tung Wu, and Shahawar Matin Siraj—were convicted of attempting to commit terrorism. (This past August, Jose Padilla joined this list.) Thirty-four cases were acquitted or dismissed and 169 cases are still pending. The remaining convictions—largely the result of plea bargains—cover a wide variety of

charges, including fraud, racketeering, and immigration violations.

"Time and time again the evidence that the government claimed to have at the beginning of a case evaporates before you get to the court record itself," explains Greenberg about the lack of actual terrorism convictions. "We are trying so hard to live in a risk-free environment that we are indicting people as quickly as we can, rather than at the end of surveillance."

Nevertheless, supporters argue that prosecution on lesser charges may be our next best defense, especially if the government has foreign intelligence that implicates a suspect, but cannot be used in U.S. courts. "Often, people who come on your radar screen because of national security concerns end up being prosecuted as immigration cases," says Andrew C. McCarthy, director of the Center for Law & Counterterrorism at the Foundation for Defense of Democracies. "If you can't prosecute them on terror-

THE U.S. GOVERNMENT PAID EHAB ELMAGHRABY, AT LEFT WITH HIS PARENTS, A \$300,000 SETTLEMENT AFTER HE WAS WRONGFULLY DETAINED, ABUSED, AND DEPORTED TO HIS NATIVE EGYPT FOLLOWING THE SEPTEMBER 11 ATTACKS.



ism crimes, the next best thing is that you have an immigration hook that can get them kicked out of the country."

But this "scattershot method," as Greenberg calls it, has sometimes spiraled out of control, as in the case of Ehab Elmaghraby, a permanent U.S. resident and native of Egypt. In September 2001, FBI officials arrested Elmaghraby, who operated a deli near Times Square, when they came to question his landlord, who had applied for pilot training years earlier. After being held for almost a year and abused in a Brooklyn detention center, he pleaded guilty to credit-card fraud—a crime he now says he didn't commit-and was deported to Egypt. The United States has since paid Elmaghraby a \$300,000 settlement. "Every time they violate an individual this way, they are violating the system as well and, as a result, weaken it," Greenberg says.

To strengthen the system, Greenberg suggests a number of solutions, from actively engaging the Muslim public through schools, community centers, and interfaith groups to honing law-enforcement officers' language skills. "The CIA and FBI are laughingly weak in fluent Arabic," she notes, which impedes their efforts at gathering reliable intelligence. But to truly restore trust in domestic counterterrorism programs, she says, the government needs to "establish a commission to consider how suspected terrorists should be tried, the nature of the allowable evidence, and procedures for prosecution and conviction that satisfy a broad array of the nation's legal and law-enforcement experts not just tiny coteries of lawyers working behind closed doors in Washington."■



VIOLET CITY

The first light to ever shine from the top of the Empire State Building was a single beacon to mark Franklin D. Roosevelt's 1932 presidential victory. Today, the top 30 floors—and some 1,336 bulbs—are lit nightly to celebrate holidays and major events, including the 1964 New York World's Fair and the Yankees' 2000 World Series win. For the past three years, the building has also cast a violet glow over Midtown each May, as pictured above, in honor of NYU's commencement ceremonies.

