

Six Beautiful Minds

How they stay brilliant.

THEY ARE THE EINSTEINS of our time, one-of-a-kind thinkers awarded MacArthur "genius" grants or Nobel Prizes who have come up with theories explaining the cosmos, inventions for the blind, and art that shakes our souls. We asked some of the brightest lights in the country how they recharge their brains when the ideas stop flowing.

■ **SARAH RUHL, 33**
Playwright (*The Clean House, Passion Play: A Cycle*) and 2006 MacArthur Fellow
If Ruhl hits a snag while writing, she reaches for a book. "Reading authors who have a very particular approach to language, like Gertrude Stein, can unleash something—scrambling the letters around in your head so you start hearing things differently. Pablo Neruda, Elizabeth Bishop, really any poet I take off the shelf is like reprogramming my brain as far as language goes." But Ruhl

says the best medicine for mental burnout is a change of pace. "I visited Oxford and wrote at the Bodleian Library. Time is ancient there. America has a very fast clock, and to get serious work done you need to feel a sense of time being elongated."

■ **JOHN C. MATHER, 60**
Astrophysicist, cowninner of the 2006 Nobel Prize in physics
"One of the most powerful scientific tools ever invented is the telephone," Mather says. When inspiration falters, he dials up his colleagues to brainstorm. Or he tries explaining what's stumping him to his wife, a ballet teacher. "It makes the problem clearer to me because I have to go back to the beginning and question all the basic assumptions." But, he adds, there's nothing like fear of failure to catapult the brain into action. "When you have a deadline or when you know that your equipment is about to go up in a rocket and you won't have another

chance to fix it, your mind works in a way that it otherwise never would."

■ **GEORGE SMOOT, 62**
Experimental astrophysicist, cowninner of the 2006 Nobel Prize in physics
"Recovery regimens" are Smoot's mental sharpening method. During a recent one—a two-week getaway to Mexico's Cabo San Lucas—his days included waking up to "watch the sunrise over the Sea of Cortez and the fishing boats head out," a workout (20 minutes of strength training plus 30 minutes of aerobics) followed by a Jacuzzi, long walks, a bit of TV after a great dinner, and going to bed early. "It is the rest and quiet time to think after being exposed to many new things that allows ideas and creativity to flower," he says.

■ **MARK MORRIS, 50**
Choreographer, 2006 recipient of the New York City Department of Cultural Affairs Mayor's Award for Arts & Culture
Like Smoot, Morris travels to stay mentally on his toes, but for him, the destination of choice is India. On a recent visit to a resort in Kerala, he received morning and evening Ayurvedic massages, "all involving a large quantity of hot oil," did yoga, worked out, went vegetarian, and enjoyed the fact that somebody else was planning his entire schedule. When he gets stuck on a dance in his Brooklyn studio, he diverts his attention, perhaps to another piece he's creating. "I don't stop working," he says. "I work all the time. Inspiration is either overrated or doesn't exist. This is my job; I show up and I do it. I don't get

extrasensitive and go lie down or something."

■ **CLAIRE TOMLIN, 37**
Aviation engineer, 2006 MacArthur Fellow
"If you're hitting your head against the wall," says Tomlin, a professor at Stanford and Berkeley who on a given day might be developing a mathematical model for air-traffic control systems, "the students can often provide new insights. My office is next to my lab, and so I wander in and talk to whoever is there"—though the conversation may have nothing to do with what she's working on. "Consciously thinking about something else and then returning to the problem gives me a fresh perspective."

■ **RAY KURZWEIL, 59**
Inventor, recipient of the \$500,000 Lemelson-MIT Prize, the most prestigious cash prize for invention in the United States
To jostle his ingenuity, Kurzweil uses a technique called lucid dreaming. Right before he drops off to sleep, he reviews the specifics of a problem—the background, options, context—until they become embedded in his dreams, a state where taboos relax and the rules of logic evaporate. At the first glimmer of consciousness, he's trained himself to return to the problem. "I am still in the dream, but I have conscious thinking as well so I can direct the dream," he says. "I have access to all these new creative links that I made while I was dreaming about the problem, but I also have my rational faculties. Within 15 or 20 minutes, I will typically have new key insights."

—THEA SINGER

