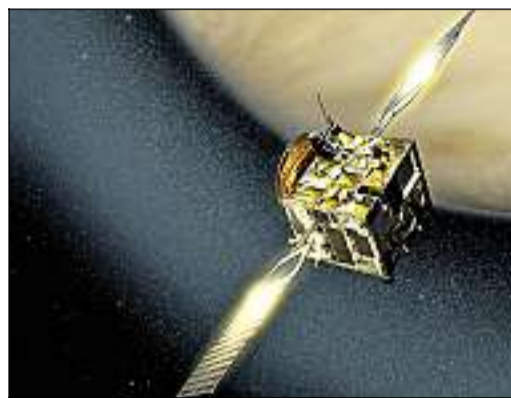


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A better Life



ESA

Venus Express: Has charted planet's southern half.

Venus may have once been more pleasant

Oceans once bathed Venus, and continents once shifted on its surface. Today, Venus endures 800-degree temperatures and sulfuric acid rains. But a Venus Express spacecraft map of the planet's surface released Tuesday by the European Space Agency suggests granite covers its southern highlands, which means the weather there was once balmy. "If there is granite on Venus, there must have been an ocean and plate tectonics in the past," study chief Nils Müller of the University of Münster and DLR Berlin said in a statement. A *Journal of Geophysical Research* report suggests that heat signatures confirm the granite finding. Granite forms on Earth only when volcanic rocks are pulled beneath ocean floors by continental drift and then return to the surface.

— Dan Vergano

Girl's heart cures itself after transplant



AFP/Getty Images

Clark: Had transplant at age of 2.

British doctors who implanted a donor heart directly onto the failing heart of a 2-year-old girl in 1995 report that after a decade with two blood-pumping organs, Hannah Clark's faulty heart healed itself enough so that doctors could remove the donated one. That surgery was done two years ago, and today Clark, now 16, has started playing sports, has a part-time job and plans to go back to school in September. Details of her revolutionary transplant and follow-up care were published online Tuesday in the journal *Lancet*. "The heart apparently has major regenerative powers, and it is now key to find out how they work," said Douglas Zipes, former president of the American College of Cardiology.

Rejected math papers find a home

Anyone who ever has been rejected can understand *Rejecta Mathematica* (math.rejecta.org). With the motto "caveat emptor" (Latin for buyer beware), the journal offers papers that have been rejected elsewhere, an effort by current and former Rice University mathematicians to find a place for rejected equations. "This project is really a reaction to the fact that all kinds of interesting papers get rejected for a variety of reasons, and we're trying to create a home for these 'orphans,' which typically are just abandoned on someone's website," editor Mark Davenport says.

— Dan Vergano

By Michelle Healy from staff and wire reports
E-mail betterlife@usatoday.com

Describe your nutritional detours



What are your diet weaknesses when you travel? Do you indulge in candy, burgers, soda? Tell us about your nutritional breakdowns with such things as fast food, room service, restaurant meals and boardwalk snacks.

Mail your story, name, and day and evening phone numbers to reporter Nanci Hellmich at: 7950 Jones Branch Drive, McLean, VA 22108, or e-mail nhellmich@usatoday.com.



By Todd Pitt, USA TODAY

In the city that never sleeps: George Dawes Green, author of *The Juror* and now *Ravens*, has a sleep cycle that migrates until night is day and vice versa.

In sync only with himself

Sleep disorder turned author's life upside down for years

By Janice Lloyd
USA TODAY

So much for counting sheep when he cannot sleep, or for trying meditative readings.

Those salves might work for others who toss and turn at night, but not for George Dawes Green. The author has a rare sleep disorder that affects less than 2% of the population, experts say. His sleep schedule evolves, turning day into night and night into day.

Oddly enough, Green takes solace in writing psychological thrillers, page-turners enriched by flawed and vulnerable souls who, like himself, he says, are captive to spells they both loathe and enjoy.

In his third novel, *Ravens* (Grand Central Publishing, \$24.99), out today, winning a \$318 million lottery turns out to be a family's nightmare.

"That's the way life is," Green says. "We are all captives. No one is happy about the IRS and all the laws we have to follow, but there are authorities that tell us what to do, and we find it a good idea to listen."

What he found a good idea to obey is his disorder, called non-24-hour sleep-wake syndrome, or hypernycthemeral. He tried to fight it as a child and young adult, but not now. He goes with it.

"It's never easy," Green says. "There is always that sense (that) if only I had a regular schedule, I could get so much more done. But I couldn't be as creative. When I let myself go free — going to sleep when I want — then creativity surges through me."

He says he sleeps a solid eight hours and is awake for about 17

How to get your 7 or 8 hours

More than 20 million Americans complain of insomnia, the American Academy of Sleep Medicine says. Most people need seven or eight hours of sleep. Tips for achieving that:

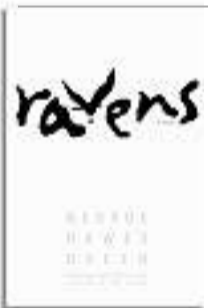
DO

- ▶ Exercise in the morning two to three times a week.
- ▶ Keep the bedroom dark, quiet, cool (75 degrees or cooler) and just for sleeping.
- ▶ Get up at the same time every day.
- ▶ Jot down worries before bedtime in a different room and then say goodnight to them.
- ▶ Have a routine that prepares you for bed so your body will recognize it and want to sleep.

DON'T

- ▶ Go to bed unless you're sleepy.
- ▶ Have a big meal before bed.
- ▶ Take naps unless you have to and never after 3 p.m.
- ▶ Drink alcohol within six hours of bedtime.
- ▶ Take a sleeping pill for more than three weeks without consulting your physician.
- ▶ Smoke a cigarette or ingest other forms of nicotine before bed.
- ▶ Drink caffeine after lunch.
- ▶ Exercise strenuously within six hours of bedtime.

Source: American Academy of Sleep Medicine



hours — just not the same hours as everyone else. His waking changes about 20 minutes a day, he adds. In other words, someone could sleep from 1 a.m. to 9 a.m. during Week 1, then by Week 4 sleep from 8 a.m. to 4 p.m.

Sleep cycle askew

Experts say people who have the disorder can rarely work a normal workday or have satisfying relationships — and are often mistaken for having insomnia. Green is single, although, he says, "I'm a very social person." He tried shift work and worked as a guard at night before he started his own business.

"Most people are in sync with the external environment," says Phil Gehrman, an assistant professor of psychiatry and sleep specialist at the University of Pennsylvania. "Pretty much every process in our body follows a 24-hour circadian rhythm."

"The main driving force is a nucleus in the brain. It sends out a signal to train the body and brain to follow these rhythms. In most people, those rhythms are set to a 24-hour cycle."

Gehrman says the duration of the cycle can be "way different from 24 hours. You can have a

"There is always that sense if only I had a regular schedule, I could get so much more done. But I couldn't be as creative. When I let myself go free — going to sleep when I want — then creativity surges through me."

period that was less than 24 hours, and you're finishing the day faster. If they have a longer rhythm, then it takes them longer biologically to complete a day."

At times, Green's night will match up with the real night, but then his rhythm will drift and he'll be off the pace of the rest of the world. "It can be hard to adjust," Gehrman says.

By using bright lights in the morning, Gehrman says, you can attempt to bring the day forward. Using melatonin at night can bring the night forward.

Green says a New York sleep specialist suggested he try both, but "I got insomnia and couldn't sleep for days."

When he learned to follow his

own sleep schedule, he said life became "rich and joyful."

"I always thought I was an incredibly stressed person, but found out I was not stressed if I could live with this condition."

As a child, he couldn't stay awake in class. He says he didn't pass after the fourth grade and dropped out of public schools when he was a teen: "It got worse and worse. I really couldn't focus in school at all."

He was a voracious reader ("loved Edgar Allan Poe and Dostoevski") and earned a high school diploma by passing the New York Regents exams. He decided early on he was a novelist, "but they were very dark novels."

Now, splashes of humor create a quirky tension between good and evil in his writing. Burris is the lead detective in *Ravens*. He is an unassuming and smart crime solver, but he's totally out of sync with what is going on around and within him — especially when it comes to his love interest. "He was fun to work on," Green says.

The Moth storytellers

After his second book, *The Juror*, became a best seller (and was turned into a motion picture starring Demi Moore and Alec Baldwin), he set out in 1997 to re-create a storytelling group called The Moth (themoth.org) in his New York apartment. It now has several locations around the country, and the website gets a half-million downloads a month on iTunes. Participants have included Garrison Keillor of *Prairie Home Companion*, Todd Hansen, head writer of *The Onion*, Candace Bushnell of *Sex and the City*, Malcolm Gladwell of *The Tipping Point* and *Blink*.

"When I was in my 20s, we'd stay up all night on a friend's porch drinking bourbon and telling stories. The moths would come onto the screen and start spinning around the porch light. That's how I got the name."

The Moth meets at 7:30 to-night at The Players. Green will be the guest of honor at *Dial M for Moth: Thriller Stories* and will tell a tale.

Any guesses on whether the audience will be able to drift off to a peaceful sleep afterward? "I do have to worry people," he says with a laugh. "It's part of the fun."

Death rates in Puerto Rican hospitals higher than in states

Cap on Medicaid, Medicare cited

By Jack Gillum
USA TODAY

Patients in Puerto Rico die at statistically higher rates from heart attack, heart failure and pneumonia than those admitted to mainland hospitals, a USA TODAY analysis of new government data shows.

While 11.6% of patients in the states admitted for pneumonia die within 30 days, that number rises to almost 15% in Puerto Rico. Death rates for heart attack also crest above average (18.6% vs. 16.5%) and are slightly higher for heart failure (12.1% vs. 11.2%).

And the rate at which patients were readmitted to Puerto Rican hospitals within a month of discharge also edged up, according to the data. In particular, pneumonia patients landed back in a

hospital bed 19.4% of the time, vs. 18.2% in the states.

"The findings highlight the need to focus on the quality of care in Puerto Rico," says Harlan Krumholz, a Yale cardiologist who helped develop the Medicare analysis released last week of more than 1 million deaths and readmissions in more than 4,600 hospitals from 2005 to 2008.

USA TODAY based its findings — which Krumholz called "concerning" — on this Medicare analysis.

The results come as Congress and President Obama debate changes to the USA's health care system. Those changes, advocates in Puerto Rico say, should include efforts to bring Medicare and Medicaid payments more in line with U.S. hospitals, partly by removing reimbursement caps in the U.S. territory.

Yet the problem in Puerto Rico may run deeper: The island's several dozen hospitals may lack money for infrastructure, new equipment and more doctors, according to a report last month by the



Hospital database



Visit health.usatoday.com to see your hospital's death and readmission rates for heart attack, heart failure and pneumonia.

Puerto Rico Health Care Parity Coalition. The report said Puerto Rico receives about \$20 per Medicaid participant vs. \$330 in the states, meaning that, all things considered, hospitals may have

fewer dollars to spend on facilities and patient care. Since 1997, the report found, Medicaid reimbursement costs in Puerto Rico have increased by more than 300% to roughly \$1.7 billion in

2008; federal contributions, meanwhile, have increased by about 96% during that time.

"Many of the patients postpone services for too long because of a lack of funding to pay for deductibles or drugs," says Jaime Pla Cortes, president of the Puerto Rico Hospital Association.

And some patients, he says, don't have the same options as U.S. residents for long-term care, what he calls a "contributing factor" in higher hospital readmission rates.

Peter Ashkenaz, a spokesman for the U.S. Centers for Medicare & Medicaid services, says Puerto Rico received about \$180 million more this fiscal year in payments for federal health care programs, which includes \$100 million in federal stimulus money.

A separate USA TODAY analysis of the Medicare data found that patients die more often at hospitals in the nation's poorest and smallest counties, compared with those in more affluent population centers.