

## Physics prof beats viscosity

Iran Times: An Iranian-born physics professor has helped develop a microscopic swimming device that works like a paddle steamer and can be shrunk to help distribute drugs inside the body. For microscale swimmers, the viscosity of water—the resistance to flow—poses a dilemma because any forward movement during one half of a swimming stroke is negated by an opposite backwards motion in the second half; the result is that the device goes nowhere. “In a stiff fluid, what you achieve in half of your swimming cycle you undo in the next half-cycle,” said Ramin Golestanian, a physicist at England’s University of Sheffield. But Golestanian, along with co-developers Pietro Tierno, Ignacio Pagonabarraga and Francesc Sagues of the University of Barcelona in Spain, have overcome this problem by developing a micro-machine that swims by imitating a paddle wheel. The device is the first artificial microswimmer to move without using chemical propulsion or twisting itself into different shapes. The researchers built their microswimmer from two beads—one and three micrometers in diameter. They coated the beads in a protein called streptavidin that binds strongly to DNA and then fastened them together with two 8-nanometre strands of DNA. According to *New Scientist* magazine, the beads—which are made from a magnetic material—align themselves with any applied magnetic field. By rotating the magnetic field, the team set the beads spinning, and found the beads moved through water at about 1 millionth of a meter per second. At that rate, it takes 11.6 days to move one meter. “It’s like a unicycle wheel with the smaller bead as the pedal making it go around—with the DNA as the pedal shaft,” Golestanian explained. Now that the team has



developed the microscale model, they believe its technology can easily be shrunk to the nanoscale level—the level at which it would be useful as a drug carrier within the body. “Microscale and nanoscale hydrodynamics are not all that different,” said Golestanian. Golestanian received his BS in physics from Sharif University of Technology in Tehran and his MS and Ph.D. in physics from the Institute for Advanced Studies in Basic Sciences (IASBS) at Zanjan University. Golestanian told the *Iran Times* his doctorate was supervised remotely by an Iranian professor at the Massachusetts Institute of Technology (MIT), Professor Mehran Kardar, who helped Golestanian visit MIT for the last year of his doctoral work. Golestanian then completed his postdoc from the Kavli Institute for Theoretical Physics at the University of California at Santa Barbara in 2000.

## Court gives Bratz dolls to Barbie

Iranian-American’s firm may be put out of business

Iran Times: The Iranian-American maker of Bratz dolls has lost in court in the worst way and is in danger of being put out of business in a matter of weeks. The copyright infringement suit brought about by Barbie-maker Mattel Inc. against Bratz-maker MGA Entertainment Inc. has ended with a federal judge banning Iranian-American Chief Executive Isaac Larian and MGA from producing and selling the Barbie competitor; Larian and

ethnic-looking dolls a target of a 2007 American Psychological Association report on the Sexualization of Girls. Describing the Bratz dolls as dressed “in sexualized clothing, such as miniskirts, fishnet stockings and feather boas,” the report said it was worrisome that young girls were being “associated with an objectified adult sexuality.” The trial itself courted controversy when a juror made racist remarks against MGA’s Iranian-born founder and chief executive during jury deliberations. According to court papers, Juror No. 8 told the rest of the jury that her attorney husband had worked with Iranians and found they were “stubborn, rude, stingy, are thieves and have stolen other person’s ideas.” The woman’s comments were revealed to Judge Larson by another juror. Larson said he was deeply disturbed by the racist remarks and dismissed the juror, but determined the remarks had been made near the end of deliberations, after the jury had already come to unanimous agreement that Larian, 54, was guilty of copyright infringement and thus “did not affect or influence the decision made by the jury.” Although Bratz sales have been declining, the dolls will produce an estimated \$300 million in revenue this year for MGA. In June, sales of Bratz in the U.S. reached \$3.1 billion since their launch in 2001; sales of Barbie—still America’s most popular toy—fell by 15 percent in 2007. Throughout the trial, Judge Larson tried to get the disputing companies to settle the legal battle that has cost both companies tens of millions of dollars, but last Wednesday, he said, “The hostility between these parties is such that this form of remedy is unworkable.” Analyst Dean McGowan of Needham & Co. said it was time for the two sides to talk. “They have to come to a peaceful settlement. And I do mean immediately, within days.” Otherwise, wholesale buyers might drop Bratz, he said. “If you’re a vendor, you don’t know if you will be getting the dolls, where you will be getting them from,” he said. “You don’t know if the brand will be liquidated.” Larian has portrayed himself as David fighting Goliath. In July, he said he would never negotiate with Mattel. “I need to sleep good at night. I can’t be in bed with them,” Larian said. But last week after the ruling, Larian said he had changed his mind. He said his change of heart came not only because of the court decision, but because of the recent death of his father. “It gave me a different perspective in life. How much more time do I have left to fight? Isaac Larian is ready any time to talk,” he said. But Mattel has yet to respond. McGowan suggested the two parties come to a traditional royalty arrangement. “The common royalty structure is, if you’re making something that is someone else’s intellectual property, 15 percent to 20 percent. That would still be very profitable for both parties,” McGowan said. Larian responded to McGowan’s suggestion by saying, “Everything is negotiable.”



MGA will now appeal the decision. The close of a four-year legal dispute pitting Mattel against MGA resulted in a federal judge on December 3 banning the Bratz-maker from making and selling its pouty-lipped and hugely popular Bratz dolls—Barbie’s main competitor. The judge also required MGA to turn over any unsold product to Mattel—but only after the holiday shopping season ends. This comes on top of an earlier ruling in late August, which ordered MGA to pay Mattel \$100 million in damages. U.S. District Judge Stephen Larson wrote, “Mattel has established its exclusive rights to the Bratz drawings and the court has found that hundreds of the MGA parties’ products, including all the currently available core female fashion dolls Mattel was able to locate in the marketplace, infringe those rights.” Earlier a federal jury found the Bratz dolls were created by Carter Bryant when the designer was still employed by Mattel; Bryant was under contract with the Barbie maker when he created Bratz; that contract gave ownership of all of Bryant’s designs to Mattel. Bryant reached a sealed agreement with Mattel before the trial began. Larson wrote that there was “a strong economic interest” in keeping a profitable company like Larian’s healthy during difficult economic times, but that “there is also a strong public interest in enforcing copyright laws.” Mattel attorney Michael Zeller said, “It’s a pretty sweeping victory. They have no right to use Bratz for any goods or services at all.” Mattel must now decide whether it wants to shut down the multi-million dollar Bratz franchise, make and market the dolls itself, or allow MGA to continue producing the dolls under a license from Mattel. The Bratz dolls’ heavy makeup and hip-hugging, midriff-baring clothes made the

## Sarkozy will never shake hands with Ahmadi-nejad

Iran Times: French President Nicholas Sarkozy last month set off a diplomatic scuffle with Iran by proclaiming publicly that he would never sit down with President Ahmadi-nejad or anyone else who called for Israel to be wiped off the map. Sarkozy began with effusive praise for the people of Iran as cultured and sophisticated—and then asked how they could be led by a man Sarkozy implied was neither cultured nor sophisticated. Lost in the ensuing slanging match was the fact that Sarkozy’s intent appeared to be to discourage President-elect Barack Obama from ever sitting down with Ahmadi-nejad. This was the second time since Obama’s election that Sarkozy has gone out of his way to denounce any Obama-Ahmadi-nejad talks. Some analysts think Sarkozy fears direct talks between the presidents of Iran and the United States will remove Europe’s central role in dealing with the Iranian nuclear issue and once again marginalize Europe. In a July 2007 debate, Obama was asked if he would sit down and talk with Ahmadi-nejad and other unpopular world leaders without preconditions in his first year in office. Obama said he would. In subsequent months, that very simple answer was qualified so that Obama now advocates talks by his administration, not necessarily himself personally, during his first year. Sarkozy seemed unaware of that shift since July 2007. In a speech last Tuesday, Sarkozy said, “How is it that a people such as the Iranian people—one of the world’s greatest peoples, one of the world’s oldest civilizations, sophisticated, cultured, open—have the misfortune of being represented as they are today by some of their leaders? ‘I have said this to my friend Kofi [former UN Secretary General Kofi Annan]: I find it impossible to shake hands with someone who has dared to say that Israel must be wiped off the map. ‘I know perfectly well that we must resolve what is perhaps the most serious international crisis we have to resolve—that of Iran moving toward a nuclear bomb. ‘We cannot resolve it without talking to Iranian leaders. But, after what was the Shoah [Hebrew for Holocaust], after what was the 20th Century, I cannot sit at the same table as a man who dares to say: Israel must be wiped off the map.’ The Is-



lamic Republic summoned the French ambassador in Tehran to hear a formal protest. Ahmadi-nejad himself remained silent for five days and then responded mildly, telling reporters, “We do not care much—we have to see in practice—we do not consider this remark to have any political credibility.” Only after another two days did Ahmadi-nejad finally attack Sarkozy directly, accusing him of pharaonic behavior. In Islamic literary tradition, taken from the Qoran, pharaohs symbolize arrogance and oppression. Speaking in Khuzestan, Ahmadi-nejad accused Sarkozy of adopting “an arrogant, pharaonic style.” The president said, “No one in Iran has asked to negotiate or shake hands with you. Then why do you set conditions?” Iran also boycotted a meeting held Sunday in Paris to try to work out policies for dealing with the instability and drug production in Afghanistan. All of Iran’s neighbors were invited and all attended except Iran. The Foreign Ministry spokesman in Tehran said Monday that Iran dropped out because of Sarkozy’s speech. French Foreign Ministry spokesman Eric Chevallier said Iran had initially informed it that Foreign Minister Manouchehr Mottaki would attend, then said no, then said yes and finally said Iran would be represented by its ambassador in Paris. In the end, no Iranian showed up. The contradictory messages to the French Foreign Ministry and the week-long delay in Ahmadi-nejad’s nasty response suggested Iranian officials were debating and unsure how they should respond. That in itself is a surprise, because the Islamic Republic routinely responds forcefully and swiftly to any Western remarks that are insulting, even if only remotely so.

## Iranians in U.S. more likely to own a business

Iran Times: A new survey of business owners in the United States finds that Iranian immigrants are more than twice as likely as U.S.-born Americans to own their own businesses. The survey was conducted by the U.S. Small Business Administration to find how well immigrant groups are doing in the business world. It found that only two other immigrant groups had a greater proportion owning their own businesses—Greeks, who are famed for their restaurants, and Koreans, who now seem to dominate the laundry business the way Chinese immigrants did a century ago. The SBA told the *Iran Times* it defined small businesses as all firms that have less than 500 employees; the SBA said more than 97 percent of U.S. businesses are considered small. Under this definition, the study included most private doctors’ offices and other small professional practices. It is likely the inclusion of physicians is what showed Iranian immigrants to be so prominent in small business. The survey also found that Iranian small business owners earned far more money than small business owners from any other immigrant group except Asian Indians. And Indians and Iranians both have a very

major presence in the medical field. The survey found that 9.5 percent of U.S.-born Americans own their own businesses. Among immigrant groups, 26.0 percent of Greeks, 22.6 percent of Koreans, 21.5 percent of Iranians and 18.1 percent of Italians own their own businesses. Among Mexicans, by far the largest immigrant group in the United States, only 6.5 percent own their own business. Turning to income, the survey found that U.S.-born small business owners made a little more than \$50,000 in 2000. Indians, however, averaged just over \$83,000 while Iranians came in at \$76,000, probably reflecting their prominence in the medical field. Next came Canadians at \$65,000 and Greeks at \$60,000. Mexican small business owners averaged only \$27,000. The report, entitled, “Estimating the Contribution of Immigrant Business Owners to the U.S. Economy” was released last month by the U.S. Small Business Administration (SBA). The study used data from three large nationally representative government datasets: the 2000 Census 5 percent Public Use Microdata Sample (PUMS), the 1996-2007 Current Population Survey (CPS), and the 1992 Characteristics of Business Owners (CBO).

## 10 hang in one day, including a mother

Iran Times: Ten people were hanged in Tehran last month, including a mother convicted of murdering her temporary husband after she reportedly found him trying to rape her teenage daughter. Zahra, the daughter of the executed Fatemeh Haghghat Pajouh, spoke out against her mother’s hanging November 26. Zahra, who was 15 at the time, told Radio Farda her mother saved her from being raped, then fought and ultimately killed Mohammad in 2001. “I was asleep. I woke up with a start and found Mohammad on top of me. He ripped my clothes. I couldn’t scream. He closed my mouth with his hand. Then, my mother came and pulled Mohammad [who was not her father] off me and took him outside,” Zahra said. In Iran, men and women are allowed to enter into sigheh or temporarily marriages. An Iranian official said Pajouh had killed her husband by “cutting him into small pieces.” According to Amnesty International, Pajouh’s conviction had been upheld in 2006 following a



review by the Supreme Court. Courts had rejected her claim that she had killed her drug-addicted husband in an effort to prevent him from raping her daughter—who was from a previous marriage. The executions of the 10 convicts were reported to have been for murder, robbery and kidnapping. They brought the total number of executions recorded by Amnesty International in 2008 to at least 296.