$7.2 Million Grant for Pitt to Develop Microbicides Against HIV/AIDS

By Clare Collins

The University of Pittsburgh Graduate School of Public Health (GSPH) has received a five-year, $7.2 million grant from the National Institute of Allergy and Infectious Diseases (NIAID) to develop microbicides against HIV transmission. The grant will allow Pitt to test two microbicide formulations—a film and ring that release the active ingredient over time.

Microbicides are substances designed to prevent or reduce the sexual transmission of HIV when applied topically to the vagina or rectum. Currently, there are several microbicides being tested, but none has been proven effective. Testing of many products will likely be required before finding one that is safe and effective against HIV, as well as easy to use and acceptable to both sexual partners.

“The HIV/AIDS epidemic remains uncontrolled in many regions in the world,” said principal investigator Phalguni Gupta, professor and assistant chair, Department of Infectious Diseases and Microbiology, in GSPH. “In developing countries, HIV is most often spread through unprotected heterosexual intercourse, creating a great need for new ways to prevent transmission beyond the condom, whose use is often at the discretion of men.”

The project at Pitt will involve cell culture and animal studies of two microbicides, RC101 and CSIC, that target different stages of virus growth. RC101 inhibits entry of the virus into a cell, while CSIC works to inactivate an enzyme that the virus needs to grow after it has entered a cell. Study investigators will evaluate these microbicides in two formulations—a film delivery system inserted into the vagina and used for up to seven days, and a ring delivery system inserted on a monthly or periodic basis. They also plan to test the microbicides in the presence of other sexually transmitted diseases and bacterial vaginosis, a common vaginal infection.

“If proven effective, microbicides could have particular impact among women in developing countries, giving them the power to prevent sexually transmitted diseases,” Gupta said.

At the forefront of research on microbicides, the University of Pittsburgh also leads the National Institutes of Health-funded Microbicides Trial Network (MTN). Headquartered at Magee-Women's Research Institute in Pittsburgh, MTN is a global clinical trials network focused on preventing the sexual transmission of HIV.

Concordia Club Sale to Pitt Set to Close This Month

By Sally Kalson

The University of Pittsburgh agreed in July to purchase the Concordia Club, Oakland, for $2.1 million. An auction of the club’s furnishings, china, silverware, and other items was held Nov. 28, and the building will be formally purchased in mid-December. Plans for the club’s building—and its membership—remain uncertain at this time.

It’s the end of an era for the Concordia Club, which for more than a century was the place to be for prominent members of Pittsburgh’s Jewish society. In the face of declining membership and a shortage of cash, club members voted [July 16] to approve the sale of their historic building on O’Hara Street in Oakland. The University of Pittsburgh will pay $2.1 million for the structure that the club has occupied since 1913. Its previous headquarters was on the North Side, where the club was founded in 1874, the same era as the Duquesne Club.

The future of the organization is uncertain. Concordia board member Foster Goldman, who negotiated the sale, said members might decide to use the proceeds to buy or rent another facility. Alternatively, they might join in with another club, or dissolve the organization and distribute the proceeds among the members.

Meanwhile, the sale’s closing is tentatively scheduled for Dec. 14. Pitt has not said what it will do with the building, which sits in the middle of its campus. In 2005, Pitt bought the 81-year-old University Club for $3.1 million and, after extensive renovations, turned it into a faculty club.

“It’s a shame that it’s come to this,” Goldman said. “My parents were members, and I’ve been using the club all my life. I hate to see it go, but given the situation, it’s the right decision.”

At its peak, the club had close to 300 equity members, plus associate and junior members. As of May, equity members numbered only 147.

Formed 135 years ago by German Jews, mostly members of the Rodef Shalom Congregation, the Concordia Club’s purpose was “to promote social and literary entertainment among its members,” according to its charter.

Continued on page 2
The club quickly became a prestigious gathering place for the movers and shakers of the time. Judge Josefah Cohen was the primary founder and first president, and the membership rolls were filled with prominent names. However, the club's relative opulence and a large rooming house were not enough to prevent it from falling on hard times.

The building has been the setting of countless parties, weddings, Passover seders, bar and bat mitzvot, birthday and anniversary celebrations. Men met there for smokers, women for bridge games and teas. Many thousands of glasses have clinked in its rooms, and many thousands of cigars have been fired up. Concordia members attended its lectures, plays, concerts, and games, including bowling in the alleys long since removed. The building has been the setting of countless parties, weddings, Passover seders, bar and bat mitzvot, birthday and anniversary celebrations. Men met there for smokers, women for bridge games and teas. Many thousands of glasses have clinked in its rooms, and many thousands of cigars have been fired up. Concordia members attended its lectures, plays, concerts, and games, including bowling in the alleys long since removed. The club staged periodic frolics featuring song parodies written and performed by members on the expansive, curtained stage in the ballroom. Women were not allowed as full members until some time after 1972, a situation that Hesselman notes kept them out. When Concordia moved into its grand new building on O'Hara Street, it was one of city's most opulent. The chino, crystal, and linens were elegant; the flower arrangements profuse. "Not a day passes without some function." When Concordia moved into its grand new building on O'Hara Street, it was one of city's most opulent. The chino, crystal, and linens were elegant; the flower arrangements profuse. "Not a day passes without some function." When Concordia moved into its grand new building on O'Hara Street, it was one of city's most opulent. The chino, crystal, and linens were elegant; the flower arrangements profuse. "Not a day passes without some function." When Concordia moved into its grand new building on O'Hara Street, it was one of city's most opulent. The chino, crystal, and linens were elegant; the flower arrangements profuse. "Not a day passes without some function." When Concordia moved into its grand new building on O'Hara Street, it was one of city's most opulent. The chino, crystal, and linens were elegant; the flower arrangements profuse. "Not a day passes without some function." When Concordia moved into its grand new building on O'Hara Street, it was one of city's most opulent. The chino, crystal, and linens were elegant; the flower arrangements profuse. "Not a day passes without some function." When Concordia moved into its grand new building on O'Hara Street, it was one of city's most opulent. The chino, crystal, and linens were elegant; the flower arrangements profuse. "Not a day passes without some function." When Concordia moved into its grand new building on O'Hara Street, it was one of city's most opulent. The chino, crystal, and linens were elegant; the flower arrangements profuse. "Not a day passes without some function." When Concordia moved into its grand new building on O'Hara Street, it was one of city's most opulent. The chino, crystal, and linens were elegant; the flower arrangements profuse. "Not a day passes without some function." When Concordia moved into its grand new building on O'Hara Street, it was one of city's most opulent. The chino, crystal, and linens were elegant; the flower arrangements profuse. "Not a day passes without some function." When Concordia moved into its grand new building on O'Hara Street, it was one of city's most opulent. The chino, crystal, and linens were elegant; the flower arrangements profuse. "Not a day passes without some function." When Concordia moved into its grand new building on O'Hara Street, it was one of city's most opulent. The chino, crystal, and linens were elegant; the flower arrangements profuse. "Not a day passes without some function." When Concordia moved into its grand new building on O'Hara Street, it was one of city's most opulent. The chino, crystal, and linens were elegant; the flower arrangements profuse. "Not a day passes without some function."
Medical Aspirations

By Pamela Jordan

Kyle Anthony is striving to achieve big goals. The freshman entered the University of Pittsburgh in the fall of 2009 as a biology major with a focus on pre-medicine. Anthony hopes to eventually enroll in medical school and become a doctor. With such challenging aspirations, the African American Alumni Council (AAAC) found Anthony to be the perfect scholarship candidate.

The AAAC’s mission is to support the African American alumni community by strengthening the community’s connection to the University of Pittsburgh. It also promotes the recruitment and retention of African American students. The group has supported student scholarships since the late 1980s. In October, the AAAC announced the public phase of a $3 million campaign to fund scholarships for underrepresented students.

Anthony was awarded the AAAC endowed scholarship, which will help him with the cost of attending what he calls his perfect-match school. While researching universities in high school, Anthony’s main criteria were location and reputation. As a Chicago native, Anthony liked that Pitt offers both a city and a campus environment.

“This scholarship has affected my life in many ways. Along with the financial impact, it has also made me proud to be recognized for my academic achievements,” Anthony said. With the rising cost of education and the nation’s economy in turmoil, Anthony knows that every penny counts. He said he is incredibly grateful to the AAAC donors “for their generosity toward future generations.”

With the rising cost of education and the nation’s economy in turmoil, Anthony knows that every penny counts. He said he is incredibly grateful to the AAAC donors “for their generosity toward future generations.” Anthony added that while he remains uncertain about which medical specialty he will pursue, he is certain that he wants to eventually give back to the community and help others reach their goals, just like the AAAC has helped him.

Pitt Lands Grant for Health Sciences Librarian Certificate Program

Pitt’s School of Information Sciences and Health Sciences Library System were awarded a $591,311 grant from the Institute of Museum and Library Services to support the creation of a post-master’s degree health sciences librarian certificate program. The grant is aimed at helping address a national need for librarians and information managers in the health sciences.

The 15-credit program provides a focused curriculum addressing current issues in health-sciences librarianship and is offered online to lend working students flexibility. Highly qualified health sciences librarians are needed as the health care industry focuses on evidence-based medicine to translate basic research into clinical care and disease prevention. Health-sciences librarians play a key role in helping practitioners and researchers keep pace with a rapidly expanding knowledge base. Pitt’s program will prepare students for positions in health-sciences libraries in academic medical centers, hospitals, public health agencies, research institutes, and other health care settings.

More information is available on the certificate program’s Web site at www.sis.pitt.edu/health.

—Anthony M. Moore
Educating Teens About HIV/AIDS held its Fifth Annual Observance of World AIDS Day and the Red Ribbon Gala on Dec. 1 at The Twentieth Century Club in Oakland. The evening’s speakers included Donald S. Burke, dean of the University of Pittsburgh Graduate School of Public Health and the UPMC-Jonas Salk Professor of Global Health, and Jeannette E. South-Paul, the Andrew W. Mathieson Professor and Chair in the Pitt School of Medicine’s Department of Family Medicine. Educating Teens About HIV/AIDS presented its First Annual Red Ribbon Awards—which recognize commitment and contributions to HIV prevention—to Charles R. Rinaldo Jr., chair and professor of infectious diseases and microbiology in Pitt’s Graduate School of Public Health and professor of pathology in the School of Medicine; Cecile M. Springer (GSPIA ‘71), former president of the Westinghouse Foundation and now principal of Springer Associates; and Robert Hill, Pitt’s vice chancellor for public affairs and chair of the Red Ribbon Gala committee. From left are Kezia L. Ellison, Educating Teens About HIV/AIDS founder; Rinaldo; Alberta Graham-Ellison (EDUC ’96G), vice president and project director of Educating Teens About HIV/AIDS; and Hill, who also served as the gala’s master of ceremonies.

Andreas Kakouris, Ambassador of Cyprus to the United States, visited Pitt Chancellor Mark A. Nordenberg on Nov. 13. From left, Professor Panos Kypros Chrysanthis, a professor in Pitt’s Department of Computer Science and director of the Advanced Data Management Technologies Laboratory; Alberta Sbragia, the Chancellor Mark A. Nordenberg University Chair and director of Pitt’s European Union Center of Excellence/European Studies Center; Kakouris; Nordenberg; Professor Daniela Donno Panayides, a Pitt assistant professor of political science; and Lawrence Feick, director of the University Center for International Studies and a professor of business administration in Pitt’s Joseph M. Katz Graduate School of Business.

The Shona Shawl African Dance and Drum Ensemble, part of Pitt’s Department of Africana Studies, presented its unique musical production of Nativity: A Christmas Gift Dec. 5 and 6 in 4227 Alumni Hall. The show, which also will be presented Dec. 18-20, was inspired by Langston Hughes’ Black Nativity and explores the Christmas season through traditional West African dance and 20th century gospel music. Ticket information is available by calling Dorsey Records at 412-731-6607.

University of Pittsburgh Chancellor Mark A. Nordenberg delivered keynote remarks during the Dec. 3 Graduate and Professional Students Association’s (GPSA) Winter Student Appreciation Reception. GPSA is the governing body for all Pitt graduate and professional students. From left, Marguerite Matthews, GPSA vice president of committees; Daniel Jimenez, GPSA president; and Nordenberg. Matthews and Jimenez are doctoral students in Pitt’s Graduate School of Public Health.

WORLD AIDS DAY

GRADUATE, PROFESSIONAL STUDENT RECOGNITION

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Taking the Heat: Pitt Team Conquers Hurdle to Nano Devices With First Metallic Nanoparticles Resistant to Extreme Heat

By Morgan Kelly

A University of Pittsburgh team has overcome a major hurdle plaguing the development of nanomaterials that could lead to more efficient catalysts used to produce hydrogen and render car exhaust less toxic. The researchers reported Nov. 29 in *Nature Materials* the first demonstration of high-temperature stability in metallic nanoparticles, the vaunted next-generation materials harnessed by a vulnerability to extreme heat.

Götz Veser, a professor and CNG Faculty Fellow of chemical and petroleum engineering in Pitt's Swanson School of Engineering, and Anmin Cao, the paper's lead author and a postdoctoral researcher in Veser's lab, created metal-alloy particles in the range of 4 nanometers that can withstand temperatures of more than 850 degrees Celsius, at least 250 degrees more than typical metallic nanoparticles. Forged from the catalytic metals platinum and rhodium, the highly reactive particles work by dumbfounding the pyroelectric susceptible components as temperatures rise, a qualification Cao likened to a gecko shedding its tail in self-defense.

"The natural instability of particles at this scale is an obstacle for many applications, from sensors to fuel production," Veser said. "The amazing potential of nanoparticles to open up completely new fields and allow for dramatically more efficient processes has been shown in laboratory applications, but very little of it has translated to real life because of such issues as heat sensitivity. For us to reap the benefits of nanoparticles, they must withstand the harsh conditions of actual use."

Veser and Cao have presented an original approach to stabilizing metallic catalysts smaller than 5 nanometers. Materials within this size range boast a higher surface area and permit near-total particle utilization, allowing for more efficient reactions. But they also fuse together at around 600 degrees Celsius—lower than usual reaction temperatures for many catalytic processes—and become too large. Attempts to stabilize the metals have involved encasing them in heat-resistant nanostructures, but the most promising methods were only demonstrated in the 10- to 15-nanometer range, Cao wrote. Veser himself has designed oxide-based nanostructures that stabilized particles as small as 10 nanometers.

For the research in *Nature Materials*, he and Cao blended platinum and rhodium, which has a high melting point. They tested the alloy via a methane combustion reaction and found that the composite was not only a highly reactive catalyst, but also that the particles maintained an average size of 4.3 nanometers, even during extended exposure to 850-degrees Celsius. Even small amounts of 4-nanometer particles remained after the temperature topped 950 degrees Celsius, although the majority had ballooned to eight times that size. Veser and Cao were surprised to find that the alloy did not simply endure the heat. Instead sacrificed the low-tolerance platinum and then reconstituted itself as a rhodium-rich catalyst to finish the reaction. At around 700 degrees Celsius, the platinum-rhodium alloy began to melt. The platinum “bled” from the particle and formed larger particles with other errant platinum molecules, leaving the more durable alloyed particles to weather on. Veser and Cao predicted that this self-stabilization would occur for all metal catalysts allowed with a second, more durable metal.

Veser and Cao conducted their work with support from the National Energy Technology Laboratory, the lead research and development office for the U.S. Department of Energy’s (DOE) Office of Fossil Energy, as well as the DOE’s Office of Basic Energy Sciences and the National Science Foundation.
the potential to see interactions and particles that haven’t been seen before. The atmosphere here is very exciting.”

The most coveted particle is the elusive Higgs boson. It is the only missing piece of the Standard Model, which theorizes that all visible matter stems from interactions between the three elementary particles: quarks, leptons, and bosons. The Higgs boson is thought to be central to the interaction of these particles—and therefore an integral part of the world—yet it’s never been observed. The LHC could prove or disprove the boson’s existence and possibly cast suspicion on the Standard Model, which has guided physicists for the past 50 years.

Years could pass before the LHC produces energy levels high enough to detect Higgs, Boudreau said. But six years since he started working on the LHC, Boudreau joins his colleagues in celebrating the collider’s hard-won early successes. Technical problems have scuttled a handful of launch dates, including a September 2008 setback, when ruptured magnets required a year of repairs.

“These early collisions are not very exciting, but they show that the LHC is back on track,” Boudreau said. “When I consider how long it took to get to this point and that we could have the highest energy levels in the world within the next year, just getting the beams to collide is a huge milestone.” More information is available on CERN’s LHC Web site at lhc.web.cern.ch.

Several researchers from Pitt’s Department of Physics and Astronomy are contributing to the Large Hadron Collider (LHC) project, both in Pittsburgh and at the European Organization for Nuclear Research in Geneva, Switzerland. From left, graduate student Kevin O’Connell, Professor James Mueller, Professor Emeritus William Cleland—who began Pitt’s involvement in the LHC in 1994—and graduate student Kevin Sapp.
Concerts


Exhibitions


Opera/ Theater/ Dance


Dreamgirls, Heinz Hall, December 29-January 3


Nativity: A Christmas Gift, Shonie Sharif African Dance and Drum Ensemble, December 18-30


A Kodachrome Christmas, one-woman play, through Dec. 27, City Theatre, 1300 Bingham St., South Side, 412-431-2489, www.citytheatrecompany.org.
By Amanda Leff Ritchie

The holidays can be challenging for even the most diligent dieters. But are weekends just as detrimental? Researchers at the University of Pittsburgh and Quinnipiac University in Hamden, Conn., found that weekend eating patterns change significantly.

J. Jeffrey Inman, a University of Pittsburgh professor of marketing and associate dean for research in the Joseph M. Katz Graduate School of Business, and his coauthor, Adwait Khare, Quinnipiac University professor of marketing, studied two years’ worth of data on consumers’ eating behavior and found that the quantity and quality of foods eaten at mealtimes and over the course of a day during the week differ considerably from those consumed on weekends and holidays.

Just as important as the daily calorie increase on weekends and holidays is the nutritional value of the food consumed, according to the research, which was published in the Fall 2009 issue of the Journal of Public Policy & Marketing.

U.S. Department of Agriculture incorporate recommendations for holiday and weekend eating into its food pyramid guidelines. Understanding eating patterns and knowing that a weekend can be just as dangerous to the diet as a holiday dinner arm consumers, doctors, and nutritionists with more knowledge to fight obesity, says Inman.

Inman says his advice for consumers interested in monitoring their intake during the holidays is “don’t insult your mother-in-law by skimping on the meals, but maybe take a pass on that extra glass of eggnog.”

This research is the follow-up to a 2006 study by Inman and Khare on the habitual behavior in American eating patterns—a behavior that may lend itself to developing more effective strategies for maintaining a healthy diet. According to the previous study, people are most habitual when eating breakfast—rather than lunch or dinner—possibly because breakfast is usually eaten in the same environment and under greater time constraints. Results of the previous study also indicated that the food consumed for breakfast has a larger effect on what is consumed for lunch and dinner of the same day, because people pay more attention to meals within a single day than to what was consumed on a previous day.

Inman and Khare would like to follow up this most recent research with a study of the impact of intervention programs on sweetened beverage consumption.

Too Much of a Good Thing?

Holiday and weekend eating habits can jeopardize diets, study finds
Clockwise from above: Schenley Plaza during construction, some of the new food concessions lining the walkways, and the carousel at the south end of the plaza.