Paul Gartside, Adam Leibovich Are Named 2010 Bellet Teaching Excellence Awardees

The University of Pittsburgh has named Paul Gartside, a professor in the Department of Mathematics, and Adam Leibovich, a professor in the Department of Philosophy and Astronomy, winners of the 2010 Tina and David Bellet Teaching Excellence Award. The Bellet Award recipients will be honored at a bursary-only dinner at 7 p.m. April 7 in the University Club’s Fraternity Grill.

The Bellet Awards were established in 1998 and endowed in 2008 with a $1.5 million gift from School of Arts and Sciences alumnus David Bellet (CAS ’67) and his wife, Tina, to recognize outstanding and innovative undergraduate teaching in the School of Arts and Sciences. A committee appointed by the Arts and Sciences faculty chose the recipients.

Pitt Trustees’ Properties and Facilities Committee Approves $46 Million In Construction, Renovations

The Property and Facilities Committee of the University of Pittsburgh Board of Trustees approved nearly $46 million in construction and renovation projects, highlighted by a $28.2 million laboratory expansion and renovation project for the Department of Physics and Astronomy; it also approved three third-party leases for more than 190,000 square feet of space. The construction and renovation projects are expected to generate 248 construction and 99 construction-support jobs and create three experimental physics research faculty positions.

Dick Thornburgh Forum for Law and Public Policy Announces Inaugural Grant Winners

The University of Pittsburgh’s Dick Thornburgh Forum for Law and Public Policy has announced the inaugural recipients of the Dick Thornburgh Academic Support Grant. The grant has been designed to support inclusion of the Dick Thornburgh Archive Collection, a rich resource of informational and analytical significance.

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Pitt to Hold March 5 Open Forum on Search for Provost Maher’s Successor

By Sharon S. Blake

All members of the University of Pittsburgh community are invited to participate in an open forum to discuss the search for a successor to Provost James V. Maher. The session will take place from 11 a.m. to 1 p.m. Friday, March 5, in 2700 Posvar Hall, on the Pittsburgh campus.

Faculty, staff, and students who cannot attend may view a live Web cast of the forum and submit questions online at https://tinyurl.com/ydygecs. Individuals on Pitt’s regional campuses may also participate via live videoconference at the following locations: Bradford: 237 Swarts Hall Greenburg: 250 Millstein Library Johnstown: 201 Biddle Hall Titusville: G7 Haskell Library

The forum will be a free-flowing exchange, during which the search committee, chaired by Distinguished Service Professor of Pharmacy and Vice Chancellor for Research Conduct and Compliance Randy P. Juhl, former dean of the School of Pharmacy, will brief attendees on the search process and time line. Those attending can provide input on the process, the time line, and the present and future challenges they feel the new provost will face.

Provost Maher, widely credited with helping lead Pitt through a period of unparalleled progress, announced in November that he would leave that position and return to the Pitt faculty. Juhl says the advances Pitt has made over the last decade make the position of provost all the more attractive.

The 21-member search committee already has a good representation of faculty, staff, and students of various disciplines and ranks, said Juhl. Nonetheless, he is looking forward to hearing what the Pitt community has to say.

“This forum gives us the opportunity to review some of the finer points with people and to reinforce things we’ve thought about already,” said Juhl. “The more people we talk to, the better.”

The search committee has retained the services of R. William Funk & Associates, a national search firm serving the higher-education sector. The committee hopes to select a diverse and highly qualified pool of 70 to 90 candidates. That list will be shortened to four or five names that will be presented, without committee’s rankings, to Chancellor Mark A. Nordenberg, who will make the final decision.

The goal is to have the new provost named by July 1 of this year and in place by the start of the Fall 2010 academic year.

Pitt Plans 30th Annual Latin American and Caribbean Festival

The Center for Latin American Studies (CLAS) at the University of Pittsburgh will host the 30th Annual Latin American and Caribbean Festival from noon to midnight Saturday, March 27, in the William Pitt Union Ballroom.

The festival will feature food, crafts, and information vendors, music, and dance performances that will take place in the WPU’s Assembly Room. From 10 a.m. to midnight, there will be dancing to the sounds of Latin American music.

Since its inception, the festival has showcased diverse Latin American and Caribbean cultures by combining the resources of CLAS with people of Latin American heritage. The growth of Pittsburgh’s Latin American community has made the festival one of the largest gatherings of Latin Americans in Western Pennsylvania.

Mexican artist Armando Jiménez Aragón will be the festival’s guest artist—demonstrating how he designs and creates animalitos (imaginative animal figures). He is the grandson of Manuel Hormelárez, who created the renowned animalitos (Guacamul woodcarvings).

For more information, contact Luz Amanda Hank at lavst12@pitt.edu or 412-648-7394.

United States’ First Female African American Rabbi to Give Talk

The path to the pulpit has been a long and winding journey for Alyse Stanton, the United States’ first female African American rabbi. Stanton will share her life experiences during a free public lecture titled “Layers of Healing, Layers of Hope” at 7:30 p.m. March 3 in the Ballroom of Pitt’s William Pitt Union.

Born to a Christian family in Cleveland, Ohio, Stanton converted to Judaism at age 24. She completed seven years of rabbinical training at the Hebrew Union College-Jewish Institute of Religion before assuming the role of rabbi of Congregation Bayt Shalom, a 60-family synagogue in Greenville, N.C., in June 2009.

Prior to converting to Judaism and preparing for the rabbinate, Stanton worked as a psychotherapist specializing in grief counselling; her counseling experience includes the treatment of individuals affected by the murderous 1999 shooting rampage at Columbine High School. She is an alumnus of Colorado State University, where she earned a bachelor’s degree in psychology in 1988 and a master’s degree in education in 1992. She received a professional counselor’s license in 1998.

Stanton’s presentation is sponsored by Pitt’s Office of Cross Cultural and Leadership Development and the United Jewish Federation of Pittsburgh.

For more information on the event, call 412-621-8875 or e-mail carlya@hilleljuc.org.

—Anthony M. Moore

March 3 Health Fair For Pitt Staff and Faculty

The University of Pittsburgh LifeSolutions, an employee assistance program, will host an interactive wellness event for Pitt faculty and staff from 11 a.m. to 1:30 p.m. Wednesday, March 3, in the William Pitt Union’s Kurtzman Room.

The free event, Healthy Lifestyle Experience 3, is to promote the benefits of a mind-body connection for a healthier lifestyle. Information on health-related programs and resources will be available, along with healthy cooking demonstrations, nutrition advice, chair massages, exercise demonstrations, blood-pressure assessments, and other activities.

Additional information is available at 1-800-647-3432 or www.hr.pitt.edu/benefits.
Knowledge, Experience, and the Gift of Hope

Nancy Davidson brings scientific expertise, groundbreaking research to her job as director of the University of Pittsburgh Cancer Institute

Armed with extensive knowledge and experience in breast cancer research and treatment, Nancy Davidson became director of the University of Pittsburgh Cancer Institute (UPCI) and the UPMC Cancer Centers in February 2009. Along with her top-notch academic and clinical experience, the internationally renowned cancer researcher brings one other essential tool to her post: the gift of hope.

Davidson manages all aspects of UPCI’s cancer research, clinical care, and educational activities, which have grown exponentially since the institute’s founding more than two decades ago by UPMC. Some 36,000 patients from across the nation and the world seek expert care each year at Hillman Cancer Center—UPCI’s flagship treatment and research facility—along with a network of more than 40 locations in the region and abroad.

Today, as Davidson embraces her leadership role there, she recognizes the world-class legacy she has inherited from UPCI’s first director, the acclaimed oncologist Ronald Herberman.

“I have come to one of the best cancer centers in the country,” she says. “My overall goal is to take advantage of all the resources here to make a difference in how we take care of cancer, how we allow people to live beyond cancer, and how we prevent cancer.”

—Nancy Davidson

In her tenure as a medical staff fellow at NCI and later as the head of the Breast Cancer Program at the Sidney Kimmel Comprehensive Cancer Center at Johns Hopkins, Davidson devoted much of her effort to studying how these targeted endocrine therapies worked as a way to refine and improve treatments, especially for premenopausal women with breast cancer. She published key findings on the roles of hormones on the molecular and cellular biology of breast cancer and the mechanisms that regulate the disease beyond the realm of pure genes—for instance, how environmental factors can lead to cancer-causing changes in gene function without altering the DNA itself.

Dedicated to translating these promising lab discoveries into new medical treatments, Davidson helped organize the National Breast Cancer Research Consortium, a collaborative network of scientists from 16 academic medical centers working together to improve understanding of the disease and test new therapeutic strategies. She also guided major clinical trials for several first-line drugs, resulting in outcomes that now mean early breast cancer is no longer a death sentence for most women.

Davidson’s expertise as a scientist is also brought to bear in the clinic, where she forms close, lasting bonds with her patients as she helps them navigate their cancer journeys. And she doesn’t shy away from the tough challenges, either. In fact, she receives referrals from physicians nationwide for some of the most complicated and difficult cases. Her expertise and her work have taught her that hope isn’t a fantasy.

“I am a better doctor for people who have problems, and there’s no question that someone who has a diagnosis of cancer has a problem,” Davidson says. “But the common concept of oncology—that cancer equals death—is just not the case anymore. There are many, many people who develop cancer, get appropriate therapy, and then move on with the rest of their lives.”

She recently ended a term as president of the American Society of Clinical Oncology (ASCO), the world’s largest organization of cancer physicians. At ASCO, she worked to craft federal legislation to improve access to care for uninsured cancer patients and established a task force to devise ways to reign in the skyrocketing cost of cancer treatment, says the organization’s CEO, Allen S. Lichter.

“Nancy is a natural leader and people want to follow her,” says Lichter. “She articulates her positions well and has a special way of being direct without being blunt. She’s a good consensus builder and commands a well-deserved level of respect among her peers. These are the types of things that make her a significant leader and what will make her a tremendous success at Pitt.”

Davidson is working to renew the center’s NCI core grant, which will sustain key functions and prime future progress. Another goal is to help ensure that scientific discoveries move more quickly from bench to bedside, so patients throughout UPCI’s affiliated hospital network—and ultimately cancer patients everywhere—benefit quickly from the University’s innovative research. She seeks to cement Pitt’s strengths in fields such as cancer immunology and virology, while enlisting departments such as computational and structural biology to figure out what makes cancer cells tick at the most fundamental level.

Moving forward, Davidson—who has won numerous awards and honors throughout her career—will also begin to grapple with helping UPCI to fulfill its aspirations of being among the top five academic cancer centers in the country. “Of course, our most important ranking is how we do with our patients and against cancer,” she center.

Davidson is aware of the profound impact her work has on the lives of women who have been diagnosed with breast cancer. This helps her stay focused on her ultimate mission at Pitt—to bring the world closer to a cure for all types of cancer. Although progress has been made in recent decades, cancer still is responsible for about 360,000 deaths annually and remains a leading killer of Americans.

Cancer, which is actually a collection of more than 200 diseases, remains a complex and formidable foe. In her role with UPCI, Davidson remains a complex and formidable foe. In her role with UPCI, Davidson will continue to build an impressive arsenal of experts, technologies, and scientific firsts to disrupt and dismantle malignant processes. And she’ll rely on another strength, too: “I have learned from my patients that people want to follow her,” says Lichter. “She articulates her positions well and has a special way of being direct without being blunt. She’s a good consensus builder and commands a well-deserved level of respect among her peers. These are the types of things that make her a significant leader and what will make her a tremendous success at Pitt.”

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(Aspects of this article were drawn from Jennifer Bailey’s feature story, “The Science of Caring,” which appeared in the summer 2009 issue of Pitt Magazine.)
This is a statement prepared by University of Pittsburgh Chancellor Mark A. Nordenberg for his Feb. 23 appearance together with the leadership of the Commonwealth’s other state-related universities—Penn State, Temple, and Lincoln—at the annual funding hearing of the Pennsylvania House of Representatives’ Appropriations Committee in Harrisburg.

In referring to the decade just closed, one national columnist, reflecting what seems to be a common attitude, proposed that we “did a not at all fond farewell to the Big Zero—the decade in which we achieved nothing and learned nothing.” In terms of progress in advancing its basic missions, such a description certainly would not apply to the University of Pittsburgh. Instead, the past 10 years were a decade of distinction and impact at Pitt. Consider just these few telling examples:

• Applications for admission to our programs have continued to soar, and so have the performances of enrolled students. Last year, for example, Pitt claimed its third Rhodes Scholar in the past five years—a record that more typically might be associated with an elite Ivy League institution than with a public university. During the past decade, Pitt awarded nearly 76,000 degrees, each representing the determined use of the power of higher education to build the foundation for a life of achievement and impact, consistent with the American dream;

• In the last 10 years, University of Pittsburgh graduates received, among many other honors, the Nobel Peace Prize, the Nobel Prize in Physiology or Medicine, the National Medal of Science, the Fritz Medal in Engineering, the Pulitzer Prize for Fiction, and the Shaw and Albany prizes in medicine. Ten of thousands of Pitt alumni whose accomplishments may never trigger such public recognition do lead productive lives that include regular contributions to their home communities. It is important to note that 83 percent of Pitt’s undergraduates and 76 percent of our entire student body come from Pennsylvania and that more than 61 percent of our graduates live and work here, a number that would be even higher if there were more robust job growth;

• Over the course of the past decade, Pitt’s research expenditures totaled an astonishing $5.33 billion. Those largely imported, but locally spent, funds are a sign of institutional stature, support pioneering research, and provide the financial foundation for tens of thousands of local jobs. Pitt now ranks among the top five universities nationally in funding its faculty attracts from the National Institutes of Health, joining Harvard, Johns Hopkins, Penn, and the University of California at San Francisco. Pitt also ranks among the nation’s top 10 universities in total federal science and engineering research and development support;

• Both before and after Pittsburgh’s G-20 Summit last September, our home region attracted national and international attention for its development of an economy increasing tingly tied to university-based research. And over the course of the past decade, Pitt’s research strengths have been an essential factor in the launch and growth of a wide range of technology-driven economic development initiatives, including the Pittsburgh Life Sciences Greenhouse, the Fritz Medal Collaborative (as well as its predecesors, the Pittsburgh Life Sciences Greenhouse and the Robotics Foundry), and the Pittsburgh Tissue Engineering Initiative.

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Saviors of Our Cities: A Survey of Best College and University Civic Partnerships. That assessment reflects our long-standing efforts to strengthen the economy and enhance the overall quality of life in our home communities.

In terms of state funding, though, the past 10 years might more fairly be labeled a “lost decade” for Pitt and Pennsylvania’s other state-related universities. To provide some sense of the longer-term patterns, trends from fiscal year 2001 through fiscal year 2009 are revealing. During that period, the state’s general fund budget grew by nearly 40 percent; inflation increased by slightly more than 24 percent; state support for community colleges rose by some 33 percent; state support for the State System...
Pitt now ranks among the top five universities nationally in funding its faculty attracts from the National Institutes of Health, joining Harvard, Johns Hopkins, and the University of California at San Francisco. Pitt also ranks among the nation’s top 10 universities in total federal science and engineering research and development support.

of Higher Education increased by nearly 6 percent, and state support for Pitt increased by less than 0.3 percent. Also telling is the fact that actual Commonwealth dollars invested in Pitt fell by more than 5 percent during this period, because some past state support was replaced by federal Medicaid matching funds.

The months of 2009, of course, presented their own special difficulties. By this time last year, for example, we were into the second half of December, well past the middle of a year that was required to absorb two midyear appropriation cuts. That responsibility was shouldered without complaint, given the fact that we all were moving through such economically challenging times. However, making the required adjustments—which included an institution-wide salary freeze—was not easy, either for the University or for its people.

If those midyear appropriation cuts were somewhat predictable once the recession had emerged, two other major challenges from the past year were not. In midsummer, we faced the startling attempt to label the state-related universities as “nonpublic.” That designation would have resulted in tens of millions of dollars in additional losses, because all four schools would have been denied federal stimulus funding and would have been deprived of certain state-funding protections built into federal law. Fortunately, not only for the four involved institutions but for the cause of public higher education, that position was not accepted by the U.S. Department of Education.

However, that was not the end of our special challenges. Because of ongoing disputes over gaming legislation, we were nearly halfway through the current fiscal year, into the second half of December, before our appropriation finally was approved, and our first appropriation payment was not received until earlier this month. Particularly because we had acted, in good faith, to hold tuition increases to very low levels, this delay created a high level of stressful uncertainty among our students and their families. It also resulted in financial strain and an inability to plan effectively within the institution.

In the budget that has been proposed for Fiscal Year 2011, funding for the Department of Education would increase by slightly more than 4 percent, with state support for basic education increasing by nearly 5 percent. In contrast, funding for the University of Pittsburgh and the other state-related universities would stay at the same level as that for the current fiscal year. This is the continuation of a clear and extended pattern. Compared to fiscal year 2003, for example, state support for basic education will have increased by 43 percent, while actual state dollars allocated to the University of Pittsburgh will have remained the same.

Obviously, flat funding is better than the cuts that were endured last year and in some other past periods. However, flat funding will not provide any support for the cost increases that are a virtual certainty. Even more troubling is the fact that federal stimulus funding, upon which two successive state budgets will have been built, is scheduled to disappear in fiscal year 2012. This “funding cliff” threatens to produce larger state budget deficits and likely will result in even greater pressures on funding for public higher education. Some protections have been built into the basic education funding line. Consideration should be given to similarly responsible planning for higher education.

During the past decade, the University of Pittsburgh has enhanced its position as the institution of choice for many of this state’s most talented and hard-working students, has developed academic programs of acknowledged strength, has been recognized as an international center of pioneering research, and has emerged as increasingly critical to job creation and economic growth in its home region. As we emerge from the current economic crisis, the interests of the people of Pennsylvania clearly would be served if more adequate levels of funding were restored to this important Commonwealth asset.

Of course, our University’s regional contributions go far beyond job generation. Our levels of community commitment and impact are evidenced by the fact that Pitt was the country’s top-ranked public university in the 2009 edition of Saviors of Our Cities: A Survey of Best College and University Civic Partnerships. That assessment reflects our long-standing efforts to strengthen the economy and enhance the overall quality of life in our home communities.
University Art Historian
Terry Smith Wins Prestigious
Frank Jewett Mather Award

Example of how case studies are structured

Continued from page 1

Terry Smith

By Sharon S. Blake

One of the most significant honors for art criticism has been awarded to Terry Smith, Andrew W. Mellon Professor of Contemporary Art History and Theory at the University of Pittsburgh.

The College Art Association (CAA) is honoring Smith with the Frank Jewett Mather Award for Smith’s recent book *What Is Contemporary Art?* (University of Chicago Press, 2009). In its award citation, the CAA called Smith “that rare art and social historian who is able to write criticism at once alert to the forces that contextualize art and sensitive to the elements and qualities that inhere to the works of art themselves.”

Smith’s book offers the most comprehensive mapping of contemporary art currently available. Within the bewildering variety of art, he distinguishes three prominent currents. Mainstream modernism continues in the work of leading U.S. and European artists such as Richard Serra and Gerhard Richter, while a diluted avant-gardism is evident in the retro-sensationalism of figures like Damien Hirst, Jeff Koons, and Takashi Murakami. At the same time, Smith reveals, artists involved in the decolonization of Africa, South America, and Asia have focused on questions of identity, history, and globalization. A younger generation embodies yet a third approach to contemporaneity by investigating time, place, mediation, and ethics through small-scale, interactive, media-savvy art making.

The Frank Jewett Mather Award, first presented in 1963, is named after a professor of art and archeology who taught at Princeton University from 1910 to 1933. It has been won by many distinguished critics, including Max Kozloff, Barbara Rose, Clement Greenberg, Lawrence Alloway, Rosalind Krauss, Lucy R. Lippard, Robert Hughes, Leo Steinberg, Douglas Crimp, Eleanor Heartney, and Arthur C. Danto.

Smith is a Fellow of the Australian Academy of the Humanities and a visiting professor on the faculty of architecture at the University of Sydney. He was recently the GlaxoSmithKlein Senior Fellow at the National Humanities Research Centre in Raleigh-Durham, N.C. Smith’s books include *Making the Modern: Industry, Art and Design in America* (University of Chicago Press, 1993), which won the inaugural Georgia O’Keeffe Museum Prize in 2009 for the best book on American modernist art published in the past 25 years.
Happenings

Concerts


Film

La Pasion Segun Berenice (Jaime Humberto Hedano, 1976), Spanish film screening, 6:30 p.m. March 5, Frick Fine Arts, Anam, Amigos del Cine Latinoamericano Film Series: From Genre to Gender, Pitt Center for Latin American Studies, Department of Hispanic Languages and Literatures, www.amigosdelcinelatinoamericano.blogspot.com.

That’s Why I’m Working (Maarten Schmidt, Thomas Doebelie, 1999), 2 p.m. March 7, Oakland. University at California Institute of Technology’s Division of Geological and Planetary Sciences.

Appalachian Spring, musical performance by the River City Blues Band, 8 p.m. March 6, Ingomar United Methodist Church, 1501 W. Ingomar Rd., Fox Chapel. Pittsburgh Concert Chorale, 412-655-7654, www.pghchoruss.org.

Exhibitions


Frick Art & Historical Center, 1934: A New Deal for Artists, art exhibition celebrating the 75th anniversary of the Works Progress Administration’s Public Works of Art Program, through April 25, 7227 Reynolds St., Point Breeze, 412-371-0600, www.frick.org.


Film

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Accepted Manuscript

Lectures/Seminars/Readings

“A Critical Re-examination of the Electrophoretic Aerosol-Debris Effect,” Allan Waldman, professor of physics, University of Pittsburgh at Johnstown, 12:05 p.m. March 2, 817R Cathedral of Learning, Lunchtime Talk Series, Pitt Center for Philosophy of Science, 412-624-0152, pitphilsci@pitt.edu.

Daniel Boekhorst, artist-in-residence, Queen Museum of Art, New York, and lecturer, Columbia University and Yale University, 2 p.m. March 2, Frick Campus Auditorium, University Center, Carnegie Mellon University, 5000 Forbes Ave., Squired Hill, Carnegie Mellon School of Art Lecture Series, 412-286-2499, atookoo@andrew.cmu.edu.


“South Koreans in the Debt Crisis: The Creation of a Multilateral Welfare Society,” Jeoseok Song, professor, University of Toronto’s Department of East Asian Studies, noon March 4, 4130 Posvar Hall, Asian Ocean Lecture Series, Pitt Asian Studies Center, jennm@pitt.edu.


Miscellaneous


Opera/Theater/Dance


Pitt/PhD Dissertation Defenses

Nicole R. Fowler, Graduate School of Public and International Affairs, 10 a.m. March 2, “Treatment Decision for People With Life-Threatening Diseases: An Analysis of Treatment Variation in Secondary Preventive Care Among Medicare Beneficiaries With Dementia,” 3200 Posvar Hall.

Joseph N. Horn, School of Medicine’s Molecular Biophysics and Structural Biology Graduate Program, 10 a.m. March 4, “Processing of Alternative DNA Structures in the Human Telomere,” 1018 Biomedical Science Tower 3.

S. Luperus, Graduate School of Public Health, Epidemiology and Biostatistics, 2:30 p.m. March 5, “MicroRNA-137 Promoter Methylation as a Biomarker for Squamous Cell Carcinoma of the Head and Neck,” M’22 Graduate School of Public Health.

My Deviant Muse: Photographic Imagery in Glass

Pittsburgh Filmmakers Gallery

March 13-April 18

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That Is Key to Understanding Teen Behavior, Study Finds

Internal, Environmental Factors Trigger Brain Activity in Teens

By Morgan Kelly

While the otherworldly behavior of teenagers is well documented, University of Pittsburgh researchers have taken a significant step toward finally unraveling the actual brain activity that can drive adolescents to engage in impulsive, self-indulgent, or self-destructive behavior. Published in the current edition of Behavioral Neuroscience, the Pitt study demonstrates that adolescent brains are more sensitive to internal and environmental factors than are adult brains and suggests that the teenage tendency to experiment with drugs and develop psychological disorders could stem from this susceptibility.

Lead researcher Bita Moghaddam, a professor in the Department of Neuroscience in Pitt’s School of Arts and Sciences, said that although the exact mechanics of the adolescent brain’s reaction need further investigation, the current study is a starting point in mapping the neural path from stimuli to behavior in the adolescent brain. Pitt neuroscience doctoral student David Sturman was the report’s lead author, conducting the study with Moghaddam and Pitt research assistant Daniel Mandell. The project was supported by the National Institute of Mental Health.

“Adolescence is a period of volatility and vulnerability with tendencies toward interpersonal conflict, emotional reactivity, and risky behavior, but we know very little about the brain mechanisms that promote this state,” Moghaddam said. “We want to know how the adolescent brain interacts with the environment at the brain-cell level, when the neural signals are firing. Once we identify how certain factors trigger teenage behavior, we might better understand—and possibly address—the origin of the risk taking and psychological disorders such as depression and schizophrenia that occur during this period.”

The researchers trained adolescent and adult rats to respond to a visual light cue by rewarding them with sugar pellets. Previous research has shown that adolescent rats and mice exhibit behavioral differences from adults similar to those of adolescent humans, including greater impulsiveness, impatience, and vulnerability to psychological problems, the authors wrote. The rats were placed in front of three holes with the light behind the middle hole. If a rat poked its nose into the center hole when the light was activated, it received a pellet; if it explored the right or left hole, it got nothing. The researchers found that the adolescents responded to the light cue at least as readily as adult rats, suggesting a similar or slightly better capacity for learning.

After six days, the rats no longer received a reward for choosing the center hole. They were divided into four test groups, each with an equal number of adults and adolescents: rats that were given 20 percent less food between sessions and received the light cue; rats that received the light cue but could eat as much as they liked between sessions; a group that received less food and no light cue; and a group that could eat between sessions but was not shown the light cue during the experiments.

Moghaddam and her team found that adolescents tended to return to the center hole far more often than the adults did although they received no reward and continued going to the hole long after the adult rats stopped altogether. Such doggedness was even more prominent in adolescents who received the light cue and had a restricted diet before the experiment.

This group nosed the center hole 30 times, twice as often as adults under the same circumstances and as adolescents with less food and no light cue. Adolescents that received the cue and had free access to food made for the center hole only a third as often.

Thus, rats experiencing internal and external stimuli—hunger and the light cue—compulsively sought the earlier reward long after the other rats realized it no longer existed. These results suggest that human teenagers can similarly behave irrationally and compulsively when faced with certain feelings and settings, Moghaddam said.

“A scenario could range from the relatively mundane, such as hungry teenagers being more likely than adults to buy fast food immediately after seeing an advertisement, to despair and relationship problems eliciting thoughts of suicide,” she said.