JDRF and W.W. Smith Trust’s $15.5 Million Gift for Type 1 Diabetes Cure

The Juvenile Diabetes Research Foundation International (JDRF) announced a major step in its continuing efforts to find a cure for Type 1 diabetes and its complications. It is awarding over $15.5 million to fund research at the JDRF-W.W. Smith Charitable Trust Center for Islet Transplantation and the JDRF Center for Gene Therapy at Penn’s School of Medicine.

Over a five-year period, the JDRF-W.W. Smith Charitable Trust Center for Islet Transplantation is receiving $8.1 million to meet the challenges of restoring normal insulin production in patients with insulin-dependent diabetes mellitus (Type 1 diabetes). The JDRF Center for Gene Therapy is receiving $7.57 million to conduct five projects focusing on gene transfer technology and gene therapy for complications of diabetes.

“We believe that the use of cutting-edge technology will speed up our progress toward finding a cure,” said Charles J. Queenan III, JDRF’s chair of research. “We rely on the generosity of funders such as the W.W. Smith Charitable Trust and thank them for their help in stamping out this insidious disease.”

Islet Transplantation

The JDRF-W.W. Smith Charitable Trust Center for Islet Transplantation is developing an integrated approach—three projects and two supporting core units—to deliver a successful clinical islet transplantation program. One project is using a non-invasive technique, positron emission tomography (PET), to better understand the fate of islets after transplantation. A radioactive version of a drug has been developed that would bind to molecules found specifically on islets. Currently, studies are examining whether the link between the islets and the radioactive drug is strong enough to produce optimal visual images.

“We are working on two important strategies. First, we want to make islets less vulnerable to attacks from the body’s immune system and secondly, we are investigating new methods of observing those transplanted cells in action,” commented Dr. Ali Naji, director of the JDRF-W.W. Smith Charitable Trust Center for Islet Transplantation.

In another project, Center scientists have already determined that transplanted islets have a greater chance of surviving in the thymus of rodents with diabetes. Their next step is to conduct similar studies in pre-clinical animal models and use a novel protocol of drug treatment to prevent the immune system from attacking transplanted cells.

A Human Islet Transplantation Clinical Program brings the research from the lab to the patient with Type 1 diabetes. This program will identify and monitor patients with Type 1 diabetes who are suitable candidates for islet transplantation. The program will test the “Edmonton Protocol” for islet transplantation, using a combination of three steroid-free drugs to prevent rejection of the donor islets.

The two core units were established to focus on procuring human pancreata and developing a standardized system to isolate high quality islets for distribution. The islet core facility will generate large quantities of highly purified and quality controlled human islets which will be used for transplantation.

The Center, now also funded by the NIH as an Islet Cell Resource Center, is a comprehensive islet transplantation program, focusing on the isolation, evaluation, transplantation and imaging of high-quality human islets for treatment of Type 1 diabetes mellitus. As principal investigator, Dr. Naji is responsible for assessing the feasibility of islet transplantation in humans and evaluating new immunosuppression protocols associated with the procedure.

Gene Therapy

The JDRF Center for Gene Therapy will use gene transfer technology and gene therapy to develop new and more effective treatments for Type 1 diabetes and its complications. At the JDRF Center for Gene Therapy, scientists are making progress using gene therapy for wound healing, foot ulcers, and diabetic retinopathy—alterations in the blood vessels of the retina caused by high levels of glucose. Growth factor genes are delivered directly to the wounded tissue, to promote healing where it is needed. Researchers are assessing whether transferring vascular endothelial growth factor (VEGF) genes to veins and arteries could promote blood vessel growth. They are also using a new technology—magnetic resonance angiography—to observe how blood vessels are formed. They are developing new vectors to deliver genes to the eye that will cause cells to produce proteins in the vitreous fluid. Abnormal blood vessel growth would be slowed down or stopped.

Investigators, with Dr. James M. Wilson, director of the JDRF Center for Gene Therapy, (continued on page 2)
### OF RECORD

#### Rules Governing Final Examinations

1. No instructor may hold a final examination nor require the submission of a take-home final exam except during the final examination period in which final examinations are scheduled; when necessary, exceptions to this policy may be granted for postponed examinations (see 3 and 4 below). No final examinations may be scheduled during the last week of classes or on reading days.

2. No student may be required to take more than two final examinations on any calendar day during the period in which final examinations are scheduled. If more than two are scheduled, the student may postpone the middle exam. If a take-home final exam is due on a day when two final examinations are scheduled, the take-home exam shall be postponed by one day.

3. Examinations that are postponed because of conflicts with other examinations, or because more than two examinations are scheduled in the same day, may be taken at another time during the final examinations period if the faculty member and student can agree on that time. Otherwise, they must be taken during the official period for postponed examinations.

4. Examinations that are postponed because of illness, a death in the family, or some other unusual event, may be taken only during the official periods: the first week of the spring and fall semesters. Students must obtain permission from their dean’s office to take a postponed exam. Instructors in all courses must be willing to offer a make-up examination to all students who are excused from the final examination.

5. No instructor may change the time or date of a final exam without permission from the appropriate dean.

6. No instructor may increase the time allowed for a final exam beyond the scheduled two hours without permission from the appropriate dean.

7. No classes (including review sessions) may be held during the reading period.

8. All students must be allowed to see their final examination. Exams should be available as soon as possible after being graded and with access ensured for a period of at least one regular semester after the exam has been given.

In all matters relating to final exams, students with questions should first consult with their dean’s offices. Faculty wishing to seek exceptions to the rules also should consult with their dean’s offices. Finally, the Council of Undergraduate Deans and SCUE urge instructors to see that all examinations are actively proctored.

—Robert Barchi, Provost

### Penn’s Way 2002 Raffles

For information about the Penn’s Way Campaign call (215) 898-4738 or pennsway@robox.upenn.edu

To be eligible for the Week One raffle drawing, you must submit your sealed confidential envelope to Payroll by the close of business on Wednesday, November 21. The drawing will be on Monday, November 26.

—Valarie Swain-Cade McCoullum and Mitchell Marcus, Penn’s Way Co-Chairs

### Cancer Center Grants

The University of Pennsylvania Cancer Center announces the availability of two types of seed money grants for faculty to conduct cancer-related research projects: the American Cancer Society Institutional Research Grant and the Cancer Center Pilot Projects Program. These awards vary in terms of eligibility criteria, budget periods and maximum dollar awards. These awards are the same in terms of research project proposals and deadlines. If eligible, faculty may apply for both awards using the same research project description and abstract supplemented with the relevant budget forms and additional information. A space is provided on the application form to specify for which grant (or both) the application is intended.

### I. American Cancer Society Institutional Research Grants for Junior Faculty

**Description and Eligibility Criteria:** Through its American Cancer Society Institutional Research Grant (ACS IRG), the Penn Cancer Center will provide partial support to full-time University faculty for cancer-related research. The stated purpose of the ACS IRG is to provide seed money to junior faculty members (e.g., assistant professor) to initiate promising new research projects so they can obtain preliminary results that will enable them to compete successfully for national peer-reviewed research grants.

Hence, investigators who have a peer-reviewed national research grant or have previously received support from the Cancer Center ACS IRG are not eligible. Seed money grants from $5,000 to $20,000 will be awarded for the exploration of new developments in basic, clinical and cancer control research. Behavioral sciences or health services research related to cancer are eligible for these awards. Covered costs include laboratory personnel costs (non-faculty), data manager or research nursing support, laboratory supplies, animals, and small equipment; no travel or patient costs are allowed.

**Application Deadline:** The deadline for submitting a completed ACS IRG grant application is January 15, 2002.

**Award Period:** The award period for the ACS IRG will be one year (July 1, 2002 to June 30, 2003).

### II. Cancer Center Pilot Projects Grants for All Faculty Levels

**Description and Eligibility Criteria:** The Cancer Center will provide seed money grants up to $25,000 to University faculty members at any level for innovative cancer research projects that have the potential for national peer-reviewed grant funding. Investigators who have already received peer-reviewed funding for their proposed projects will not be eligible for this award. Investigators who have not previously conducted cancer research, but are proposing a cancer-related project are encouraged to apply. Covered costs include faculty salary, travel, laboratory personnel costs, data management or research nursing support, laboratory supplies, animals, and small equipment; no travel or patient costs are allowed.

**Application Deadline:** The deadline for submitting a completed Pilot Projects grant application is January 15, 2002.

**Award Period:** The award period for the Pilot Projects grant will be from March 1, 2002 to November 30, 2002.

For More Information or an Application: University faculty from all Schools and Departments are invited to obtain application forms and instructions from Cancer Center Administration, 1635 Penn Tower, (215) 349-8382.

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### Penn’s Way 2002 Raffles

**Week One Raffle Prizes**

1. Overnight stay with breakfast at the Sheraton
2. Book from University of Pennsylvania Press
3. Gift certificate for two for dinner at the Ivy Grille
4. $20 gift certificate to Shula’s
5. $10 gift certificate to Houston Market from Bon Appetit
6. Book of 10 passes for the Class of 1923 Ice Rink
7. Tickets for two for a performance at the Annenberg Center
8. One Faculty Club Membership
9. Lunch for two in the Harrison Dining Room, Faculty Club
10. Picture Frame

**Over $15.5 Million Grant for Cutting-Edge Diabetes Research**

(continued from page 1)

are exploring an important challenge in gene therapy: the ability to control gene expression. When researchers transfer genes responsible for insulin production, there needs to be control because unchecked insulin leads to hypoglycemia which can be life threatening. Dr. Wilson is developing a way to turn the action of a particular gene on and off—a ‘biological insulin pump’. Scientists are using a virus vector to deliver the insulin gene into the body. The patient would activate this transferred gene and switch on the ‘pump’ by taking an oral drug. When the patient stops the drug, the insulin would switch off. The goal would be the control of blood sugar levels in a simple, patient-directed manner.

“We have gathered a committed group of Penn experts with a clear objective: to develop viral vectors and use gene transfer to pursue many approaches to treatment of complications,” said Dr. Wilson. “This collaboration, I believe, will produce some promising research for clinical applications.”

JDRF

Juvenile Diabetes Research Foundation, JDRF, the world’s leading non-profit, non-governmental funder of diabetes research, was founded in 1970 by the parents of children in Philadelphia and New York with juvenile diabetes—a disease which predominantly strikes children suddenly, makes them insulin dependent for life, and carries the constant threat of devastating complications. Since inception, JDRF has provided more than $500 million to diabetes research worldwide. Eighty-seven cents of every dollar goes directly to research and education about research. JDRF’s mission is constant: find a cure for diabetes and its complications through the support of research. For more information, visit their website at www.jdrf.org, or call 1-800-223-1138.

ALMANAC November 20, 2001
Changes to Pay Stubs
The Payroll Office, Human Resources and ISC have developed a new, more informative pay stub for Penn faculty and staff. The redesigned pay stub will be easier to understand and provides information in a more logical manner than the current pay stub. The new pay stub will be implemented the week of November 19. Any check or advice that you receive after November 19 will reflect the new design.

A few highlights will include the following:
• Your Social Security Number will be removed from the pay stub.
• The paid-time-off balance will be displayed for weekly paid employees at the point in time the checks were generated.
• The actual name of the health and welfare plans to which an individual subscribes, including medical, dental & optical, will replace generic descriptions.
• Longer and more informative descriptions will replace the short and cryptic abbreviations in place today.
• Your federal tax status and the number of exemptions will be displayed.
• Information about deductions has been reorganized into one, easy-to-read section.

— Rosemary Nissley, Manager, Financial Systems, Administrative Information Technologies

18th District Report
7 incidents and 2 arrests (including 4 robberies, 2 aggravated assaults and 1 rape) were reported between November 5, 2001 and November 11, 2001 by the 18th District covering the Schuylkill River to 49th St. & Market St. to Woodland Ave.

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Location</th>
<th>Incident</th>
</tr>
</thead>
<tbody>
<tr>
<td>11/07/01</td>
<td>8:39 PM</td>
<td>905 49th St</td>
<td>Aggravated Assault/Assault</td>
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<tr>
<td>11/07/01</td>
<td>5:00 PM</td>
<td>543 49th St</td>
<td>Aggravated Assault/Assault</td>
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<tr>
<td>11/07/01</td>
<td>3:30 PM</td>
<td>5000 Market</td>
<td>Robbery</td>
</tr>
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<td>11/07/01</td>
<td>2:57 AM</td>
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<td>Robbery</td>
</tr>
<tr>
<td>11/08/01</td>
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<td>Robbery</td>
</tr>
<tr>
<td>11/08/01</td>
<td>2:57 AM</td>
<td>4400 blk Walnut</td>
<td>Rape</td>
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<tr>
<td>11/10/01</td>
<td>10:13 PM</td>
<td>4827 Pine St</td>
<td>Robbery</td>
</tr>
</tbody>
</table>

The University of Pennsylvania values diversity and seeks talented individuals. Campus-wide opportunities are available for faculty and staff, with priority given to underrepresented groups. Applicants should be directed to Valerie Hayes, Executive Director, Office of Affirmative Action/Equal Opportunity; (215) 662-6580.

The PPSA Book Group Meeting, initially scheduled for November 21 at the Penn Bookstore, has been moved to November 28, 12:15-1:15 p.m.

EXHIBIT
24 Holiday Garden Railway: A Colonial Christ- mas; buildings made of natural materials at holiday time; G-scale model trains, holiday lights, colonial decor; 10 a.m.–4 p.m.; Morris Arboretum. Info.: (215) 247-5680. November 23 and December 1, 2, 8, 9, 15, 16, 22, 23, & 26-30 (Arboretum).

FITNESS/LEARNING
30 Open Observatory: talk: The Big Bang, by Chung-Pei Ma, physics & astronomy; non-enceouraged to peek through telescopes; 7:30 p.m.; by Chung-Pei Ma, physics & astronomy; non-
Endowment Overview

by Landis Zimmerman, Chief Investment Officer

FY 2001 AIF Return

For fiscal year 2001 the Associated Investments Fund (“AIF”), which is the endowment’s main investment vehicle, out-performed its benchmark by 13.4%. The AIF returned a positive 6% during the year versus a loss of 7.4% for its benchmark. In more intuitive terms, a hypothetical portfolio consisting of 70% in the S&P 500 and 30% in the Lehman Government Corporate Bond Index would have lost 7% over the same period. Domestic equities and international equities contributed the bulk of this out-performance because together they represent the largest part of the endowment’s assets and had strong positive returns in an environment where most major market indices were down substantially. The performance in these portfolios resulted from their tilt toward value stocks and, as a result, very little exposure to the technology, media and telecommunications sectors which performed very poorly and dragged the market down over the last 18 months or so.

Other asset classes including bonds, absolute return investments, and real estate also out-performed their benchmarks and produced strong positive returns in an environment that was extremely negative. Two disappointments were the high-yield bond portfolio and the AIF’s investment in emerging markets equities. We have since transitioned half of the high-yield portfolio to a new manager and, based on a strategic review, eliminated our dedicated allocation to emerging markets equities although our international managers may still participate opportunistically up to a modest limit. We have continued to make good progress building the AIF’s nascent private equity portfolio but will not be able to judge its performance for several more years.

Compared to our peers for fiscal 2001, Penn’s performance was well into the top quartile for the year. The median return among 32 endowments over $1 billion was a loss of 2.4%. Any endowment returning greater than a loss of 0.1% was in the top quartile. What is interesting about these numbers is that our peers’ returns were not more negative as a result of their substantial allocations to venture capital investments, which performed miserably over the last year. We think there are two reasons for this. The first has to do with the way the venture capital industry values its investments. Some venture firms have not written down their investments entirely and the numbers are reported on a lagged basis; they can be three to six months old. As a result, it is likely that the poor performance in the venture industry will continue for another six to nine months. The second reason is that many of our peers hedged at least some of their exposure to venture capital investments and thereby were able to offset some of the losses.

Although the AIF has out-performed its benchmarks over the last five years it has been compounding at a fairly modest absolute rate commensurate with market conditions. Therefore, one issue that faces Penn now is that while over the decade of the 90s the endowment has been able to produce substantial growth in spending available to the University, that growth is slowing as a result of recent years’ performance. We believe, however, that the AIF’s investment strategy is appropriate to preserve its value in today’s difficult markets.

Previously, many regretted that Penn had not participated in some of the growth and technology investments of the latter half of the 1990s. Some of the restructuring that has taken place in the AIF has been to address that. However, it would have been a mistake had we abandoned our strategic philosophy and bought growth and technology at the top of what we now call the “market bubble.” Much of the AIF’s current rebound in good relative performance resulted from sticking to our strategic philosophy.

Our investment activities over the last fiscal year focused on 1) continuing to re-orient our domestic equity portfolio, which is the AIF’s single largest allocation, and 2) continuing to build the AIF’s two alternative investment programs. These include its absolute return hedge fund investments and its private equity fund investments.

With regard to domestic equity, last year we invested $150 million in a new large cap manager and as a result this portfolio is now one-third indexed to the Wilshire 5000 and two-thirds invested with five active managers. It retains a value tilt, which is why we had substantial out-performance this past year.

New Investments

We added $200 million in new investments to seven absolute return hedge fund managers and one new high yield bond manager, which we transitioned from our existing high yield bond manager. Our absolute return strategies include long-short equities, convertible bond arbitrage, merger arbitrage, non-merger event arbitrage, and investments in distressed securities. This is the part of our portfolio we believe will produce long run equity returns but in a pattern that is different than the public markets. For example, when the blended stock-bond index lost 7% in fiscal 2001, this hedge fund portfolio earned 16.6%.

We made $80 million in commitments to ten new private equity funds, which brings the total commitments to private equity to $328 million. But because of the way this money is deployed very little has actually been drawn and invested. So the allocation to private equity in the AIF is only $60 million or about 2% of the endowment.

There was substantial other activity over the fiscal year outside of new investments. We changed the bond portfolio investment guidelines to improve its overall credit quality. Bonds represent the University’s “insurance” during poor economic times and, as a result, we want to have a very high quality portfolio that will retain its value, which it has. Second, the Trustees adopted a new policy to review potential conflicts of interest that may involve trustees whose firms manage investments. Third, we made significant improvements to our custodial services and improved the AIF’s securities lending program. Fourth, we simplified the organization of the endowments’ myriad components and consolidated assets under the AIF umbrella. We believe as a result we can manage the endowment more efficiently and reduce its associated operating costs. Fifth, Ed Mathias joined Penn’s Investment Board in June. Ed is a partner of the Carlyle Group, which is a preeminent private equity firm located in Washington D.C. Finally, the Office of Investments added two new investment professionals to make sure that we have the staff to appropriately source, monitor and manage the AIF’s investments.

First Quarter FY 2002

The first quarter of fiscal 2002 was very difficult. During the quarter, the AIF lost 5.8% compared to a loss of 8.1% for its benchmark. Again for a more intuitive comparison, a hypothetical portfolio consisting of 70% in the S&P 500 and 30% in bonds lost almost 9%. Over the quarter, the S&P 500 lost almost 15%. It has been a very difficult quarter for everyone. So although the AIF out-performed its benchmark, which we are pleased about, we nonetheless sustained losses.

Again Penn’s domestic equities and international equities were largely responsible for the AIF’s relative out-performance versus the benchmark. The AIF’s investments in bonds, real estate and absolute return hedge funds turned in modest, but importantly positive returns during a quarter that produced extraordinarily negative market returns.

Fiscal Year 2001 Performance

<table>
<thead>
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<th>Penn AIF</th>
<th>Benchmark</th>
<th>Allocation</th>
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<tbody>
<tr>
<td>Total Fund</td>
<td>6.0%</td>
<td>(7.4%)</td>
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<tr>
<td>Domestic Equities</td>
<td>9.8</td>
<td>(15.4%)</td>
<td>46%</td>
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<tr>
<td>International Equities</td>
<td>3.4</td>
<td>(23.6%)</td>
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<tr>
<td>Bonds</td>
<td>12.3</td>
<td>11.1</td>
<td>21</td>
</tr>
<tr>
<td>Absolute Return</td>
<td>16.6</td>
<td>11.3</td>
<td>10</td>
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<tr>
<td>High Yield Bonds</td>
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<td>(12.2)</td>
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<tr>
<td>Real Estate</td>
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<tr>
<td>Emerging Markets</td>
<td>(29.0)</td>
<td>(25.9)</td>
<td>—</td>
</tr>
<tr>
<td>70% S&amp;P / 30% Lehman GC</td>
<td>(7.0)</td>
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www.upenn.edu/almanac

COUNCIL State of the University

The following was presented at the November 7 University Council meeting as a component of the annual State of the University.