UNIVERSITY of PENNSYLVANIA Almanac

Tuesday, April 3, 2001 Volume 47 Number 28 www.upenn.edu/almanac/

SENATE From the Senate Office

Under the Faculty Senate Rules, formal notification to members may be accomplished by publication in Almanac. The following is published under that rule.

Members of the Faculty Senate FROM: Larry Gross, Chair SUBJECT: Senate Nominations 2001-2001

1. In accordance with the Faculty Senate Rules, official notice is given of the Senate Nominating Committee's slate of nominees for the incoming Senate Officers. The nominees, all of whom have indicated their willingness to serve, are:

Chair-elect: Mitchell Marcus (prof computer & info sci) Secretary-elect: Louis A.Thomas (assoc prof management)

At-large Members of the Senate Executive Committee (to serve a 3-year term beginning May, 2001): Sydney M. Evans (assoc prof radiology/vet) Peter J. Kuriloff (prof education) Martin Pring (assoc prof physiology/med) Eileen Sullivan-Marx (asst prof nursing)

At-large Member of the Senate Executive Committee (to serve a 1-year term beginning May, 2001): Gerald J. Porter (prof mathematics)

Two Assistant Professor Members of the Senate Executive Committee (to serve a 2-year term beginning May, 2001): Eileen V. Lake (asst prof nursing) Jerome Maddox (asst prof political science)

Senate Committee on Academic Freedom and Responsibility

(to serve a 3-year term beginning May, 2001): Rosalyn Eisenberg (prof pathobiology/vet) Seth Kreimer (prof law) Eric W. Orts (prof legal studies)

Senate Committee on Conduct

(to serve a 2-year term beginning May, 2001): Charles Bosk (prof sociology) Charles W. Mooney, Jr. (prof law) David M. Stern (prof Asian & Middle Eastern st)

Senate Committee on the Economic Status of the Faculty

(to serve a 3-year term beginning May, 2001): Eric T. Bradlow (assoc prof marketing) Richard E. Kihlstrom (prof finance)

2. Again in accord with the Senate Rules you are invited to submit "additional nominations, which shall be accomplished via petitions containing at least twenty-five valid names and the signed approval of the candidate. All such petitions must be received no later than fourteen days subsequent to the circulation of the nominees of the Nominating Committee. Nominations will automatically be closed fourteen days after circulation of the slate of the Nominating Committee.' Pursuant to this provision, petitions must be received by mail at the Faculty Senate, Box 12 College Hall/ 6303, or by hand at the Faculty Senate Office, 109 Duhring Wing by 5 p.m., Tuesday, April 17, 2001.

3. Under the same provision of the Senate Rules, if no additional nominations are received, the slate nominated by the Nominating Committee will be declared elected. Should additional nominations be received, an election will thereafter be held by mail ballot.

William Smith Term Professor: Dr. Kamien

Dr. Randall Kamien, associate professor of physics and astronomy, has been named the William Smith Term Professor in SAS. He came to Penn in 1995 from the Institute for Advanced Study in Princeton. He took his B.S. and M.S. at Caltech and his Ph.D. from Harvard University. Dr. Kamien's research interests center on problems in liquid crystals, biologically inspired physics

After receiving a Career Award from the NSF in 1998, Dr. Kamien became a fellow of the Alfred P. Sloan Foundation in 1999. He is an associate editor of *Physical Review E* and the author of many articles in peer reviewed publications.

Named in honor of the first provost of the University of Pennsylvania, the William Smith Term Chair has been established with a generous gift from Martin Lipton, Esq. A 1952 graduate of the Wharton School, Mr. Lipton is a senior partner and director of the New York law firm of Wachtell, Lipton, Rosen & Katz. He is



Randall Kamien

an active philanthropist and volunteer who has supported education and the arts for many years and who has served Penn as a University trustee and an SAS overseer.

Merriam Term Professor of Chemistry: Dr. Winkler

Dr. Jeffrey D. Winkler, professor of chemistry, has been named the Merriam Term Professor of Chemistry in SAS. He came to Penn in 1991 from the University of Chicago. He took his A.B. from Harvard and his Ph.D. from Columbia. His research looks at the total synthesis of naturally occurring compounds with important biological activity, the development of new reactions and strategies in organic synthesis, the design and synthesis of small molecules that mimic the functions of biological catalysts, and the preparation of macromolecular structures with well-defined structures and functions such as conducting or non-linear optical properties.

Last year, Dr. Winkler was the recipient of the Arthur C. Cope Scholar Award from the American Chemical Society. In 1989 Dr. Winkler received the American Cyanamid Young Faculty Award; in 1988 he received the NIH-NCI Research Career Development Award; and in 1987 he was selected as a Sloan Research Fellow. He is the author of many articles and papers. He is a member of the



Jeffrey Winkler

Cancer Center and a founding member of the Center for Cancer Pharmacology

The Merriam Term Chair in Chemistry was created from the late John W. Merriam's generous bequest to Penn. Mr. Merriam received his bachelor's and master's degrees from the Wharton School. He began his entrepreneurial career during the Depression when he developed his first apartment complex and went on to become one of the Delaware Valley's leading real estate developers. Mr. Merriam was also very active in the Philadelphia arts community and served on the boards of the Philadelphia College for the Performing Arts and the Pennsylvania Academy of Fine Arts.

U.S. News Rankings: Four Penn Schools in Top 10

The annual U.S. News & World Report rankings of "America's Best Graduate Schools" in the magazine's April 9 issue show four of Penn's schools in the top ten with two schools, Education and Law, joining Wharton and Medicine (last year's rankings are in parentheses).

#4 School of Medicine (#3) #4 Wharton (#3)

#8 School of Education (#11)

#10 School of Law (#12)

U.S. News began ranking graduate programs in 1987 which are based on a combination of objective and reputational measurement.

Within the specialty programs of Wharton: Finance

- #2 Accounting, Entrepreneurship, and Marketing
- #3 International Business, Executive M.B.A.
- #5 General Management and Quantitative Analysis
- #6 Nonprofit Organizations
- #7 Management Information Systems and

Production/Operations Management The programs within the School of Medicine ranked:

- #3 Women's Health, and Pediatrics
- #6 Internal Medicine
- #9 Drug/Alcohol Abuse

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- Update; CrimeStats; Classifieds
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SENATE From the Senate Office

The following agenda is published in accordance with the Faculty Senate Rules. Questions may be directed to Carolyn Burdon either by telephone at (215) 898-6943 or by e-mail at burdon@pobox.upenn.edu.

Agenda of Senate Executive Committee Meeting Wednesday, April 4, 2001, 3-5:30 p.m.

- 1. Approval of the minutes of March 7, 2001
- 2. Chair's Report
- 3. Past Chair's Report on Academic Planning and Budget and Capital Council
- University Research Foundation Policies—Panel Transparency vs. Anonymity and Selection of Panel Members: Vice Provost for Research Neal Nathanson
- 5. Graduate Education Policy Changes: Deputy Provost Peter Conn
- 6. Informal discussion with President Rodin and Provost Barchi
- 7. Progress Report on Faculty Gender Equity Study: Co-Chair Phoebe S. Leboy
- 8. Other new business
- 9. Adjournment by 5:30 p.m.

Penn Police National Accreditation

The University of Pennsylvania Police Department (UPPD) received national accreditation through the Commission on Accreditation for Law Enforcement Agencies, Inc. (CALEA), at CALEA's spring conference held recently in Greensboro, North Carolina. Penn's Police Department becomes the first nationally accredited campus police agency within the Commonwealth of Pennsylvania. Twenty eight other campus police agencies across the United States are also currently accredited by CALEA.

"The department achieved accreditation after a review conducted by a CALEA team of assessors that analyzed all aspects of the UPPD's policy and procedures, management, operations and support services," said Maureen Rush, Chief of Police and Interim Vice President for Public Safety at Penn.

Verification by the team that the UPPD met the Commission's state-of-the-art standards was part of a voluntary process to gain accreditation—a highly prized recognition of law enforcement professional excellence, Chief Rush noted.

"By obtaining accredited status, the UPPD is now among an elite group of professional law enforcement agencies that have demonstrated excellence and professionalism in the delivery of law enforcement services to the communities they serve," Chief Rush said.

The UPPD had to comply with 439 standards in order to gain accredited status, according to Karen B. Shepard, CALEA Accreditation Program Manager for the UPPD.

According to Ms. Shepard, the assessment team was comprised of law enforcement practitioners from similar but out-of-state agencies. The assessors reviewed written materials, interviewed individuals, and visited offices and other places where compliance was observed. Once the Commission's assessors completed their review of the agency, they reported back to the full Commission, which then granted the UPPD accredited status at the Greensboro meeting.

Chief Rush, along with Deputy Chief of Operations Michael J. Fink, Accreditation Manager Sergeant Gary Heller, and Community Relations Officer Stacey Livingston attended the conference and accepted the award on behalf of the entire department.

- OF RECORD -

Effective July 1, 1996; Revised March 30, 2001

Reminder: Policy on Secular and Religious Holidays

1. The University recognizes/observes the following secular holidays: Martin Luther King Day, Memorial Day, July 4, Thanksgiving and the day after, Labor Day, and New Year's Day.

2. The University also recognizes that there are several religious holidays that affect large numbers of University community members, including Christmas, Rosh Hashanah, Yom Kippur, the first two days of Passover, and Good Friday. In consideration of their significance for many students, no examinations may be given and no assigned work may be required on these days. Students who observe these holidays will be given an opportunity to make up missed work in both laboratories and lecture courses. If an examination is given on the first class day after one of these holidays, it must not cover material introduced in class on that holiday.

Faculty should realize that Jewish holidays begin at sundown on the evening before the published date of the holiday. Late afternoon exams should be avoided on these days. Also, no examinations may be held on Saturday or Sunday in the undergraduate schools unless they are also available on other days. Nor should seminars or other regular classes be scheduled on Saturdays or Sundays unless they are also available at other times.

3. The University recognizes that there are other holidays, both religious and secular, which are of importance to some individuals and groups on campus. Such occasions include, but are not limited to, Sukkot, the last two days of Passover, Shavuot, Shemini Atzerat, and Simchat Torah, as well as Chinese New Year, the Muslim New Year, and the Islamic holidays Eid Al-Fitr and Eid Al-Adha. Students who wish to observe such holidays must inform their instructors within the first two weeks of each semester of their intent to observe the holiday even when the exact date of the holiday will not be known until later so that alternative arrangements convenient to both students and faculty can be made at the earliest opportunity. Students who make such arrangements will not be required to attend classes or take examinations on the designated days, and faculty must provide reasonable opportunities for such students to make up missed work and examinations. For this reason it is desirable that faculty inform students of all examination dates at the start of each semester. Exceptions to the requirement of a make-up examination must be approved in advance by the undergraduate dean of the school in which the course is offered.

-Robert Barchi, Provost

PPSA

Fire Safety Session: April 4

John Cook, Safety Specialist, and Corporal Joseph D. Fischer, Crime Prevention Officer for Penn Police, will share important points about fire and safety around campus, at Irvine, G16 on April 4, noon-1 p.m. in a session you cannot afford to miss.

—Anna Loh, PPSA Chair

Public Safety Staff Changes





William Danks

Anthony Whittington

Maureen Rush, Chief of Police and Interim Vice Presdient for Public Safety, announced that she has filled two high-level vacant positions in the Division of Public Safety.

Detective Supervisor William J. Danks, who has been the acting deputy chief of investigations for the Penn Police Department, was promoted to Deputy Chief of Investigations, the second highest tier within the Penn Police Department. Deputy Chief Danks will replace Thomas King who left in November 2000 to become the director of Safety and Security at Haverford College. Mr. Danks will command the UPPD Detective Unit and the Records Department. In his role, he will be responsible for direction and supervision of all criminal and civil investigations, as well as Dignitary Protection Details. He will also be responsible for the records management technology interface for the UPPD.

Since March 1999 he has served as a UPPD Detective Supervisor; he joined the UPPD in July 1996 as a Senior Investigator. Mr. Danks, a Temple alumnus with a degree in criminal justice, came to Penn from the Philadelphia Police Department where he spent 20 years in the Detective Division and five as a member of the Homicide Division. He has extensive experience with crime scene investigations, collection and preservation of physical evidence, preparation of police reports, interviews and interrogations, warrant preparation and service, trial preparation of major cases and court testimony.

Anthony Whittington, formerly a senior budget analyst in the Office of Budget & Management Analysis, is the new Manager of Administration and Finance for the Division of Public Safety. He had been in the Budget Office since December 1997; he worked in the Treasurer's Office, 1992-1997 as an asset manager. Mr. Whittington had been an accountant in the office of the VPUL, 1989-1992. He began working at Penn in 1986 in the Comptroller's Office. He attended Drexel. Mr. Whittington will report to the Vice President for Public Safety and will be responsible for oversight of the Division of Public Safety's financial and administrative offices.

Chief Rush said "the Division of Public Safety is very fortunate to have Bill and Anthony in their respective positions. Both men bring an enormous level of expertise and knowledge to their departments. I am also grateful to be able to fill these top positions from within the existing University of Pennsylvania employment pool."

Alliance Between Wharton and INSEAD: Globalization



Gabriel Hawawini

Patrick T. Harker

The Wharton School and the European graduate business school INSEAD have announced the formation of an Alliance in the global development and delivery of management education.

The Alliance combines the resources of the world's leaders in management education to deliver top quality business education to post-graduate candidates and executives across four dedicated campuses: Wharton's campuses here and in San Francisco, and those of INSEAD in Fontainebleau France, and Singapore.

In a joint statement, the deans of Wharton and INSEAD cited the demands of fast-paced, multinational companies for superior global education, as the driver behind their decision to form the Alliance.

Dr. Patrick T. Harker, dean of the Wharton School, said "We are creating a model for delivering business education in a global environment that is changing profoundly, with technology-enabled learning as a critical component. It is an opportunity for our respective faculty and students to have greater access to the world, and in turn, the world will have greater access to the offerings of the two Schools."

"Tomorrow's market leaders in management education must have global reach and be part of a global and lifelong business education and knowledge network," said Gabriel Hawawini, dean of INSEAD. "INSEAD and Wharton share a common vision of the opportunities available in business education. With our respective leadership positions around the world, our goal is to deliver a business education unmatched by any other business school in the world," he added.

Joint Executive Education on a Global Scale

The Alliance will offer global customized executive education and open enrollment programs at its four dedicated campuses in the U.S., Europe and Asia. As a first step to delivering enhanced value to multinational corporations, a modular general management program for high potential managers will be offered across the four campuses.

The two schools will also develop a number of new courses based on their combined faculty strength. The first will be a course in *Global Financial Management*; the second will be an *MBA Update* designed to provide the latest thinking, perspectives and techniques for those who have already earned MBA degrees.

Finally, the two schools will co-brand some existing courses; the first is *Advanced Industrial Marketing Strategy*, which is currently taught by Wharton and INSEAD faculty in both Philadelphia and Fontainebleau, and by INSEAD in Singapore.

Global MBA Courses Offered

MBA students from both schools will be able to enroll for coursework across four campus locations worldwide—Wharton's in Philadel-



John Kimberly



Hubert Gatignon

phia and San Francisco, and INSEAD's in Fontainebleau and Singapore.

In addition, they will be able to participate in unique and exclusive summer elective programs on Wharton's California and INSEAD's Singapore campuses. Credits will be linked between the two schools.

Each school is offering its career management services to participants from the partner school, enhancing the global opportunities for MBA graduates of both.

Center for Global Research and Development

INSEAD and Wharton focus heavily on research as a means of developing new business knowledge. The Alliance will include a new research center to provide enhanced access to corporations and other participating organizations, as well as to raise global awareness of emerging business and societal issues.

Collaboration in Delivery of Ph.D. Courses

The collaboration will include student exchanges, use of technology-supported learning, joint dissertation committees and exchange of faculty.

Faculty Exchanges in Person & via Technology

Faculty from the two schools will expand upon their existing collaboration and visits to conduct research and teach across the four campuses in the Alliance. Wharton and INSEAD pioneered an MBA course on product design and development last year that brought together students at INSEAD and Wharton in a distance-learning program, with full classes and instructors participating on each continent. Such "cyber-exchanges" will allow students at both INSEAD and Wharton to take advantage of specialized elective courses at the other institution without having to travel.

Alliance Leadership

Dr. John Kimberly will manage the alliance as executive director, and will report to the deans of Wharton and INSEAD. Dr. Kimberly is the Henry Bower Professor of Entrepreneurial Studies at Wharton and holds the Novartis Chair in Healthcare Management at INSEAD. He holds appointments as professor in Wharton's Management and Health Care Systems Departments and has spent the last two years at INSEAD as a visiting professor, teaching and conducting research.

Dr. Hubert Gatignon will serve as research director for the Center for Global Research and Development. Dr. Gatignon is the Claude Janssen Chaired Professor of Management at INSEAD and is also INSEAD's Dean of Faculty. Prior to joining INSEAD, Dr. Gatignon was a Professor of Marketing at Wharton.

As part of the Alliance, the dean of each school will join the governance board for the partner school.

U. S. News Rankings

continued from page 1 #10 Geriatrics

The School of Engineering program ranked #30 (#33) this year tied with Columbia and Duke with a program specialty in the top ten: #8 Bioengineering/Biomedical

Specialties within the Ph.D. programs received high ranking this year as well.

#9 Economics with program specialties:

#9 Microeconomics

#10 Industrial Organization and International Economics

10 English with specialties:

#4 Medieval/Renaissance Literature, 18th to 20th Century British Literature, and African-American Literature

#7 Colonial American Literature

11 Sociology with specialties:

#7 Social Stratification

#8 Economic Sociology

#13 History with one specialty:

#6 U.S. Colonial History

Council Meeting Coverage

At the March 28 Council meeting, President Judith Rodin called the recent Tree Planting Day "an enormous success" thanks to UCGreen, the UA and all those who participated.

President Rodin then turned to the main item on the agenda, namely the annual presentation on the budget planning process.

Michael Masch, vice president of budget and management analysis, provided an orientation to financial planning at Penn, touching on the necessary constraints, the trends and challenges facing the University during FY 2001 (July 1, 2000-June 30, 2001) and beyond. (See pages 4-5 for more on the Budget presentation.) Mr. Masch said Academic Planning and Budget meets bimonthly and reports to the Provost. He noted that when it comes to undergraduate tuition and fees, the dispersion of charges is narrow from most to least expensive school among Penn's peers. Due to Penn's need blind admissions approach, there is an aggressive financial aid effort to calculate and meet the need for matriculants. While donors are generous to Penn, he said, the University needs even more generosity, partnerships and joint ventures. Endowment income is increasing steadily.

Provost Robert Barchi expressed a debt of gratitude to Mr. Masch and his colleagues for all their work on the large and complicated budget. Provost Barchi suggested that Penn would look toward such non-traditional sources of revenue as tech transfer. He noted that there are constraints and opportunities that lie ahead.

The 1999-2000 Committee on International Programs presented revised recommendations on the need for space to house the Office of International Programs when Bennett Hall undergoes renovation in the future and space for short-term housing for international faculty and scholars. It was agreed that it would be beneficial to spread the word about the short-term housing that is needed through the Office of Off-Campus Housing and PFSNI listserv and other pre-existing channels.

The Penn Online Calendar has recently undergone some changes in response to comments from users and suggestions from students. Randall Couch, of ISC, described how the user interface and provider tools have been improved to make it easier to find and add information about events. There are new options, including the customized calendar views.

Budget 2000-2001: President Rodin's Report to the University Council

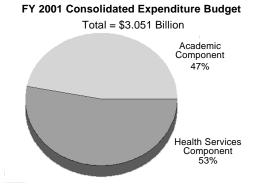
President Rodin's report to Council on March 28 included the University's financial planning approach and the components of the University budget. The pie charts show the academic budget revenue by source as well as the expenditure budget.

Additionally, the charts highlight the challenges the University faces as well as goals to be achieved in light of fiscal constraints.

The tables, pies, graphs and text are from the slide presentation.

Components of the Consolidated University Budget

- The Consolidated University budget has two major components—"Academic" and "Health Services"
- The Academic budget includes:
 - —Schools (including the School of Medicine)
- —Resource Centers
 - -Auxiliaries
 - —Central Service Centers
- The Health Services budget includes all components of UPHS except for the School of Medicine:
 - —Hospital of the University of Pennsylvania (HUP)
 - —Presbyterian Medical Center (PMC)
 - —Pennsylvania Hospital
 - —Phoenixville Hospital
 - Clinical Practices of the University of Pennsylvania (CPUP)
 - -Clinical Care Associates (CCA)



Penn's Financial Planning Approach

- The University engages in strategic long-term financial planning.
- New programs, priorities and initiatives are discussed and planned long before they are included in the annual University operating budget.
- Consultation occurs through the Academic Planning & Budget Committee and in other forums.
- New initiatives that will be implemented and budgeted in Penn's Fiscal Year 2002 budget have been identified and publicized already—during the current year or prior years.

How the University's Budget Supports Goals and Priorities

- Provost and Deans work together to develop School budgets that maximize level of resources available for investment in strategic goals and priorities.
- Executive Vice President and Vice Presidents work together to develop Central Service Center budgets that maximize level of resources available for investment in strategic goals and priorities.
- Limited central resources—e.g., Subvention, Research Facilities funding, Facilities Renewal Program funding—are directed wherever possible towards investments in the Schools that support their most important goals and priorities.

Growth in Other Revenue Sources Will Be Constrained

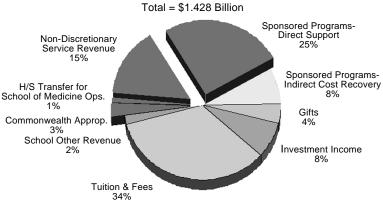
- The federal ICR (grant overhead) rate is likely to decline in the coming years, limiting the growth in grant ICR income.
 - Rate has fallen from 65% in FY 1991 to 58.5% in the current fiscal year.
 - Budget planning parameters assume a further drop to 56% in FY 2002.
- The Governor is proposing only a 1.9% increase in the University's Commonwealth Appropriation for next year.
- Penn's spending rule provides for only a 3.1% increase in spendable investment income for FY 2002, in contrast to double-digit growth in each of the past three years.
- Most University business services either break even or generate narrow margins in sales and service income after meeting all operational and programmatic requirements.

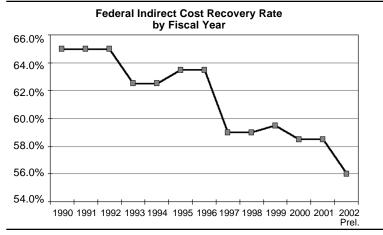
FY 2001 Academic Budget Sponsored Program Indirect Cost Recovery

	FY 2000	FY 2001	FY 2001	% Change
	Actual	Budget	Projected	vs. 2000
Income (\$000)	113,107	115,444	125,000	10.5%
ICR Rate	58.5%	58.5%	58.5%	

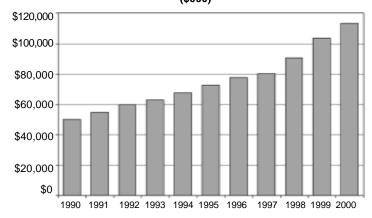
- Direct Sponsored Program expenditures are projected to increase by 10.9% in FY 2001.
- Total direct and indirect Sponsored Program revenue represents approximately 33% of the FY 2001 Academic Revenue Budget.
- The School of Medicine accounts for about 65% of Sponsored Program dollars awarded to the University.

FY 2001 Academic Budget Total Revenue by Source



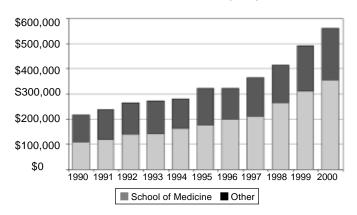


Total Indirect Cost Recovery Rate by Fiscal Year (\$000)



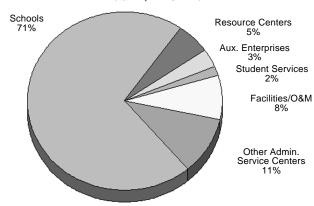
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Sponsored Project Activity by Fiscal Year Total Awards Received (\$000)



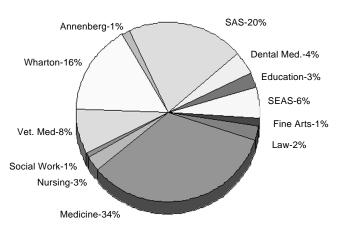
FY 2001 Academic Budget Expenditures by Responsibility Center Category

Total = \$1.428 Billion



FY 2001 Academic Budget Expenditures by School

Total = \$1.011 Billion



Note: The Budget presentation aslo included information concerning tuition increase. This information was provided in the March 27 issue of *Almanac*. The University's fical year begins July 1. The budget for FY 2002 will be reviewed and approved by the Trustees at their Stated Meeting in June.

Peer Institution Endowment/Student Among Top 20 Endowments as of June 30, 2000

Institution	Assets (\$Billions)	(\$/Student)*
Princeton University	8.40	1,316,202
Yale University	10.10	918,766
Harvard University	19.20	913,546
M.I.T.	6.50	660,502
Stanford University	8.57	558,088
Dartmouth College	2.47	467,449
Washington University	4.30	389,035
Chicago, University of	3.70	335,753
Northwestern University	3.64	235,782
Columbia University	4.26	223,516
Cornell University	3.40	166,227
PENN	3.20	161,168

^{*} Based on FTE students as of Fall 1999

Penn's Undergraduate Financial Aid Policy

- Undergraduate financial aid is based on level of financial need: student expense budget (tuition, fees, living expenses) family contribution = financial need
- Aid package components to meet financial need:
 - —Self-help (student loan, work-study)
 - —Grant (external, University)
- Penn grant is awarded to the extent financial need exceeds required self-help plus third-party grants.
- Penn instituted a variety of exclusions and adjustments to the "family contribution" to make Penn more affordable to middle income families years before other peer institutions who adopted similar measures just two to three years ago.

FY 2001 Financial Aid Budget General Operating, Gift, and Investment Income Funds (\$000)

	FY 2000	FY 2001 Budget	% Change
Undergraduate Student Aid	56,000	58,300	4.1%
Graduate Student Aid	57,000	59,200	3.9%
Total Student Aid	113,000	117,500	4.0%

- Fundraising for financial aid endowment remains a top priority.
- Undergraduate need-blind policy is a competitive necessity.
- Penn remains significantly under-endowed relative to peers.

Note: Figures exclude Sponsored Program Funds.

Illustrative Needs for Academic Investment

Penn has a vital need to maintain and enhance its reputation and rankings through:

5-Year

		Investment Required
•	Faculty recruitment and retention	\$25 Million
•	Life Sciences building	\$90 Million
•	Undergraduate quality of life—	
	recreation, housing and dining	\$350-400 Million
•	Continued investments in	
	information technology	\$50-100 Million
•	Facilities Renewal	\$50 Million

Challenges We Face

- Extensive needs for strategic academic investments
- · Enhanced generation of endowment revenue
- Fiscal stability in the Health System

How Penn is Achieving its Goals in Light of Serious Fiscal Constraints

- Efficiency
 - —Both in Central Service Centers and in administration of Schools
- Development
 - —Ambitious, successful, focused fundraising in support of goals and priorities
- University/Private Sector Partnerships
 - —Getting others to spend their money to do things Penn needs so that our own resources can be spent on core academic priorities

Amethyst Network Professional and Peer Conference

The University is hosting a one-day conference, *Challenge To Change: The 2001 Amethyst Network Professional and Peer Conference*, on April 4, to examine alcohol and other drug use on college campuses. The conference will be held from 9 a.m. to 4 p.m. at Houston Hall, in Bodek Lounge. More than 85 professionals are expected to attend and a few on-site registration slots are still available. There is no charge to attend.

Confirmed speakers are Provost Robert Barchi and Drs. James and Janice Prochaska, founders of ProChange, Inc. Keynote speakers, Jim and Janice Prochaska, are recognized nationally and internationally for their work in the development of the stage model of behavior and applying this model of change to both individual behavioral and organizational change.

Penn's *Working Group on Alcohol Abuse*, chaired by Provost Barchi was recognized by the U.S. Department of Education as a 2000 Alcohol and Other Drug Prevention Model on College Campuses. The conference is funded by the U.S. Department of Education because of this recognition award and hosted by Penn's Office of Health Education, on behalf of the Amethyst Regional Network.

This conference is designed to heighten awareness and broaden discussion relating to alcohol and other drug use on college campuses. Alcohol and other drug prevention efforts will not succeed if efforts focus solely on individual behavior change. Successful efforts to reduce alcohol and other drug abuse on college campuses need to be comprehensive in nature, grounded in good research and address the environmental factors that affect individual behaviors.

The Amethyst Network is a Pennsylvania-based consortium of Alcohol and Other Drug (AOD) professionals working in higher education and dedicated to furthering the delivery of effective AOD programming and counseling services to students, staff and faculty in colleges and universities. Monthly meetings, listserve communication, and annual peer and professional conferences are just a few of the ways the group shares resources and ideas to meet its goal.

For more information on the conference and to register, visit http://pobox.upenn.edu/~she/amethyst/ or call (215) 573-3525.

Open Enrollment: April 16 through April 27

Look for Open Enrollment materials to arrive at your home address during the week of April 9, 2001. As described in the March 20 issue of *Almanac*, there will be some benefit enhancements this year, including: the elimination of the front-end deductible for Caremark prescription coverage under the HMO medical plans; an increase in inpatient and outpatient mental health benefits under the UPHS POS medical plan and both HMO medical plans; and the addition of implants as a covered service under the Penn Faculty Practice dental plan.

Beginning April 16, you will be able to enroll via the Open Enrollment website at www.hr.upenn.edu/openenroll/ or by calling the Penn Benefits Center at 1-888-PENN-BEN (1-888-736-6236). Please note that you may only make changes to your elections from April 16 through April 27, 2001.

The following table presents the 2001-2002 plan year health care rates for full-time University faculty and staff. This information will also be included in the information packets that will be sent to your home during the week of April 9, 2001. Part-time faculty and staff and post-docs will see the rates that apply to them when they receive these information packets.

2001-2002 Health Care Rates

		Weekly	y Paid	Month	pay period) Ily Paid	
Opt	ions	Single	Family	Single	Family	
Medical						
BC/BS Plan 100	2	\$25.50	\$66.58	\$110.50	\$288.50	
PennCare	11	14.88	38.65	64.50	167.50	
UPHS POS	12	6.46	16.85	28.00	73.00	
Aetna US Healthcare —PA	5	3.46	9.12	15.00	39.50	
Aetna US Healthcare —DE	10	3.46	9.12	15.00	39.50	
Aetna US Healthcare —NJ	6	3.46	9.12	15.00	39.50	
Keystone HMO	9	3.35	8.65	14.50	37.50	
Dental						
Penn Faculty Practice Plan	1	\$ 1.38	\$13.79	\$ 6.00	\$ 59.75	
MetLife Preferred Dentist Program	4	1.15	9.19	5.00	39.83	
metalio i referred Berniot i regiam		1.10	3.10	3.00		_
Vision						
OptiChoice	2	\$ 0.79	\$ 2.13	\$ 3.42	\$ 9.25	

Change of Address? Please advise your Business Administrator so that your mailing address will be updated in the system.

—Division of Human Resources

The Open Enrollment Benefits Fairs

An opportunity to talk with providers and pick up new provider directories

- Thursday, April 19, *Houston Hall, 10 a.m.-2:30 p.m.*-This will be a joint Health and Open Enrollment Fair combining the efforts of the Benefits and Quality of Worklife divisions of Human Resources. Take advantage of free health screenings in addition to the opportunity to obtain information from the benefits providers.
- Thursday, April 26, Houston Hall, 10 a.m.-2:30 p.m.
- Tuesday, April 24, New Bolton Center, 10 a.m.-2 p.m.

Take Our Daughters to Work

Human Resources is sponsoring activities across campus for *Take Our Daughters to Work Day* on April 26 for girls ages 9-15. Many special activities are planned for this day. This year, we are using an online process for registering for the activities. Information on how to register is outlined below.

Sample Workshops & Activities:

- Adolescent Health
- Career Services
- · Museum Tour
- Character Counts
- Fine Arts Project
- Nutritional Health
- Robotics for Girls
- Computer Technology
- Bringing Fun to WorkPenn Relays
- Law Enforcement Careers
- Physics/Astronomy Observatory Open House

Note: Please remember that sponsors must accompany their young female guests at all times and have supervisory approval to participate.

New On-line Registration Process:

If you are interested in registering for an activity, but are unable to access Human Resources' on-line course catalog, please call Orna Rosenthal at (215) 898-5116.

To see and register for this year's activities, go to www.hr.upenn.edu/quality/daughters.htm. Each registration represents 1 sponsor and 1 guest. If you are bringing more than 1 guest, please contact Orna Rosenthal at (215) 898-5116 or rosenthal@hr.upenn.edu.

Adopt a Daughter for a Day:

If you are interested in "adopting a daughter" for a day on Take Our Daughters to Work Day, please contact Isabel Mapp at the Center for Community Partnerships: sammapp@pobox. upenn.edu or (215) 898-2020.

—Division of Human Resources

Penn Dental in Chestnut Hill

The University of Pennsylvania Dental Care Network recently opened the Penn Dental Center at Chestnut Hill. The Chestnut Hill practice, located in the Wyndhill Professional Center, 8200 Flourtown Avenue in Wyndmoor, is the sixth office now open in the Dental Care Network, which accommodates the faculty practice of the School of Dental Medicine.

The director of the Chestnut Hill office is Dr. Kenneth Carsto, who is a former director of the Penn Dental Center at Overbrook and associate director of the Dental Care Center. Presently, other staff dentists at Chestnut Hill include Drs. Frank Torrisi, Jennifer Schwartz and Amy Shearer. As the practice builds, plans call for offering a full range of specialty services at the Chestnut Hill location, including periodontics, endodontics and orthodontics.

Penn Dental Center at Chestnut Hill currently has appointment hours on Monday, Tuesday, and Wednesday, 8 a.m. to 7 p.m.; Thursday 7 a.m. to 5 p.m.; and Friday 7 a.m. to noon. The office can be reached at (215) 836-9833. For additional information on the Dental Care Network, call (215) 573-8844.

Update

APRIL AT PENN

FITNESS/LEARNING

7 Japanese Highlights of the Garden Tour; part of Japanese Festival; 2-3 p.m.; Morris Arboretum. Also April 14 & 21 (Morris Arboretum).

MEETINGS

3 Single Parents Association Meeting; discussion on fatherhood; noon-1:30 p.m.; Griski Room, Houston Hall; bring a book that has helped you in your life (Single Parents Association).

ON STAGE

5 African Rhythms Spring Performance; 8 p.m.; International House; tickets \$5 available on Locust Walk. Also April 6.

SPECIAL EVENTS

8 Japanese Festival; celebration continues with children's activities, tea ceremonies and tours; noon-3 p.m.; Morris Arboretum. See Fitness/Learning. Also April 15 & 22 (Morris Arboretum).

TALKS

- **3** East-West Dialogue: CEO of Chinese Flagship Enterprise Meets with #1 Business School; Ming-Jer Chen, Global Chinese Business Initiative, Wharton, and Zhang Ruimin, Haier Group; 4:30-6 p.m.; rm. 105, Lauder Fischer Hall (Global Chinese Business Initiative).
- **5** World Health Quality: The Global Power of Nursing; Gretta Styles, former president, International Council of Nurses, and June Clark, former president, Royal College of Nursing; 3:30 p.m.; auditorium, School of Nursing (Nursing Dean's Distinguished Lecture).

Deadlines: The deadline for the weekly update is each Monday for the following week's issue. For the May AT PENN calendar it is *April 10*.

See www.upenn.edu/almanac/calendar/ & caldead.html for details on event submission.

CLASSIFIED—PERSONAL

PROPERTY INSPECTION

Need Home Repairs? Your insurance company could owe you thousands of dollars. Do you have any of the following problems in your home: Leaky Roofs, Water Stains, Fire, Broken Hot Water Heater, Plumbing Overflows, Cracked Ceramic Tile, Theft, Vandalism, Power Surges, Leaks, Broken Siding Etc., Claims denied by your insurance company? Call me for a free no obligation, policy evaluation & property inspection. Call Lisa Smith, Licensed & Bonded Public Adjuster (215) 668-4180. An advocate for the owner of residential and commercial property.

FOR RENT

One bedroom plus den **bi-level apartment** in owner-occupied townhouse. Quiet tree-lined street in Rittenhouse Square area. A/C, Gas heat, F/P, H/W floors, W/D. Backyard. Security system. Smoke-free facility. Avail 5/15. \$950+(215) 546-4075.

THERAPY

Competent psychotherapy: group, family and individual. Please call for an appointment: Shari D. Sobel, Ph.D. (215) 747-0460.

To place a classified ad, call (215) 898-5274.

Almanac is not responsible for contents of classified ad material.

CLASSIFIEDS—UNIVERSITY

RESEARCH

The University of Pennsylvania Health System needs volunteers for a male osteoporosis research study. If you are generally healthy and are 18 to 80 years old, you may be eligible to participate. Volunteers will receive a general physical examination and blood tests at the time of the first visit. Those who qualify will be asked to return for a second visit for magnetic resonance imaging (MRI) of the leg and wrist and a dual energy X-ray absorptiometry (DEXA) scan of the spine and hip. Both exams are performed on the same day and take approximately 45 minutes each. The tests will be repeated in 6, 12, and 24 months. Participants will be compensated for their participation. Please contact Louise Loh or Helen Peachey at (215) 898-5664 for more information.

Experiencing **neck and shoulder pain** for three months or more? You may be eligible for a study at the UPenn Pain Medicine Center involving free Botox injections. Call Lisa Bearn at (215) 662-8736.

Weight Management Study- Looking for male and female African American/Black participants, age 25-70, who need to lose weight, for a lifestyle change based study. Must have a UPHS primary care physician. Last group for this year starting April 30, 2001 so call now for more information! (215) 746-PENN.

More Penn Pearls



Almanac (March 20) unearthed Penn Pearls—various images from all over campus that often go undetected to the casual observer. (see them on line at www.upenn.edu/almanac/v47/n26/PennPearls.html).

How perceptive are you?

Can you guess what the "pearls" pictured here are, or

where they are on campus? Visit www.upenn.edu/almanac to see these images in color and discover their identities and whereabouts. — Ed.

The University of Pennsylvania Police Department Community Crime Report

About the Crime Report: Below are all Crimes Against Persons and Crimes Against Society from the campus report for March 19 through March 25, 2001. Also reported were 20 Crimes Against Property: (including 18 thefts, 1 retail theft, and 1 burglary). Full reports on the Web (www.upenn.edu/almanac/v47/n28/crimes.html). Prior weeks' reports are also on-line.—Ed.

This summary is prepared by the Division of Public Safety and includes all criminal incidents reported and made known to the University Police Department between the dates of **March 19** and **March 25**, **2001**. The University Police actively patrols from Market Street to Baltimore Avenue and from the Schulylkill River to 43rd Street in conjunction with the Philadelphia Police. In this effort to provide you with a thorough and accurate report on public safety concerns, we hope that your increased awareness will lessen the opportunity for crime. For any concerns or suggestions regarding this report, please call the Division of Public Safety at (215) 898-4482.

	03/20/01 03/20/01 03/20/01 03/21/01 03/21/01 03/21/01 03/21/01 03/22/01 03/23/01 03/23/01 03/23/01 03/25/01	2:53 AM 9:12 AM 9:37 PM 1:12 AM 10:40 AM 10:46 AM 2:00 PM 4:06 PM 6:54 AM 3:50 PM 5:38 PM 5:37 PM	3700 blk Walnut St. 3600 Spruce St. 4100 blk Locust St. 3400 Sansom St. 140 S. 36th St. 3535 Market St. 3718 Locust Wlk. 3901 Locust Wlk. 4051 Sansom St. 3417 Spruce St. 3400 Spruce St. 4247 Locust St.	Male urinating in public/Cited Electrical wires cut Vehicle passenger side window damaged Unknown attempted to take bicycle Unauthorized charges on credit cards Unwanted phone calls received Unknown person using personal info. for credit cards Unauthorized charges on credit card Vehicle tires slashed Suspect arrested for trespassing Suspect arrested for arson Unwanted phone calls received

18th District Report

9 incidents and 4 arrests (3 robberies, and 6 aggravated assaults) were reported between **March 19 and March 25, 2001** by the 18th District covering the Schuylkill River to 49th Street and Market Street to Woodland Avenue.

03/19/01	9:00 PM	4800 Sansom St.	Aggravated Assault /Arrest
03/19/01	9:01 PM	4800 Sansom St.	Aggravated Assault /Arrest
03/19/01	9:15 PM	4800 Sansom St.	Aggravated Assault /Arrest
03/20/01	8:30 PM	4400 Market St.	Aggravated Assault /Arrest
03/21/01	5:00 PM	213 46th St.	Aggravated Assault
03/22/01	2:59 AM	4935 Spruce St.	Aggravated Assault
03/23/01	8:30 AM	4600 Baltimore Ave.	Robbery
03/23/01	8:30 PM	4500 Regent St.	Robbery
03/24/01	10:20 PM	601 52nd St.	Robbery

Almanac

Suite 211 Nichols House 3600 Chestnut Street, Philadelphia, PA 19104-6106 Phone: (215) 898-5274 or 5275 FAX: (215) 898-9137 E-Mail: almanac@pobox.upenn.edu URL: www.upenn.edu/almanac/

The University of Pennsylvania's journal of record, opinion and news is published Tuesdays during the academic year, and as needed during summer and holiday breaks. Its electronic editions on the Internet (accessible through the PennWeb) include HTML and Acrobat versions of the print edition, and interim information may be posted in electronic-only form. Guidelines for readers and contributors are available on request.

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The Charles Addams Fine Arts Hall

Penn's Graduate School of Fine Arts (GSFA) celebrates the dedication—at last—of a permanent home for the Fine Arts at Penn. Located in the former Skinner Hall, overlooking Walnut Street across from Sansom Common, the state-of-the-art facility has been named The Charles Addams Fine Arts Hall in memory of the former Penn student and world-renowned cartoonist, Charles Addams (1912-1988). The founding gift for the building was made by Lady Barbara Colyton, with additional donors including Fern Karesh Hurst, Harvey and Barbara Kroiz, and others.

The Charles Addams Fine Arts Hall greatly increases GSFA's capacity to expose Penn students, largely undergraduate, to the Fine Arts, providing facilities for 2,500 students per semester—1,000 more than was feasible when the undergraduate Fine Arts program was housed in the temporary Blauhaus. The building supports not only GSFA, but also classes for the Annenberg School for Communications, and the Digital Media Design program, a collaborative offering of SEAS, the Annenberg School, and GSFA.

"With resources for classes that range from digital imaging and graphic design to undergraduate architecture and advanced painting and drawing, there is no more outstanding facility among Penn's peer institutions, nor at any other world-class university, than Charles Addams Fine Arts Hall," said John Moore, GSFA Fine Arts Chair and Guttman Professor. Among its noteworthy facilities are:

The Digital Video Center: The first and only facility of its kind at Penn, this suite for creating and editing film and video is the keystone of the Digital Media Design program, gives Penn a leading edge in film and video studies and sets a high standard for Penn's competitors.

The Photography Center: Photography is by far the most sought-after Fine Arts program in the University curriculum with approximately 220 students participating each semester in photography courses that range from beginning photography to photojournalism. The program now has a faculty of eight, compared with a faculty of one in 1995.

The Gutman-Nathan Clay Center: Penn's ceramics program now offers its popular classes in The Gutman-Nathan Clay Center, an extensive facility which includes three student studios that are supported by a clay kiln room, clay-mixing room, glaze making facility, and plaster room. The ceramics program's faculty is comprised of five individuals affiliated with Philadelphia's highly respected Clay Studio.



The Addams Family in the Sculpture Court greets visitors.



A sandblasted glass portrait of the artist is in the lobby.

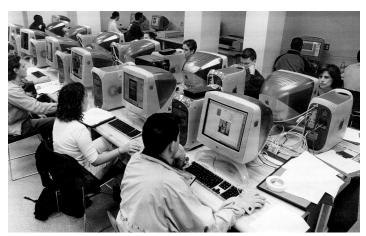


Maria C. Romanach Architects, CW '68, gave the 1954 building a new look.



The Gates: A juried competition was held to commission newly designed gates at the entrance to the Addams Hall sculpture court from the 36th Street walkway. The winning entry designed by Mark Lueders, MFA'93, of the undergraduate fine arts faculty will adorn the walkway in the spirit of Charles Addams.

The Charles Addams Gallery: It is fittingly ironic that the exhibition, Charles Addams at Penn—organized by the Architectural Archives—is now in the gallery bearing his name—for it was in the same buildingthen the Faculty Club—that Charles Addams' original cartoons were exhibited in November 1979 with the artist on hand for the opening. Charles Addams was raised in Westfield, NJ, where, as a child, he would explore his grandmother's Victorian mansion whose nooks and crannies later became the mythical home of his signature characters, the members of the Addams Family. After attending Colgate, 1929-30, he transferred to Penn, 1930-31, because he wanted to take art courses. The year at Penn turned out to be first-year architecture instead of art, so the following year he attended the Grand Central School of the Arts in New York. He returned to Penn in 1980 to receive an honorary degree, Doctor of Fine Arts.



The Digital Imaging & Digital Photo Lab will serve hundreds of students.



The Charles Addams Gallery is the first permanent home for the Fine Arts.

= 2001 SCUE WHITE PAPER =

To the University Community:

For 37 years, the Student Committee on Undergraduate Education has worked to promote the academic interests of the University and its undergraduate community. In the past, SCUE has prompted better course offerings, greater faculty-student interaction, more effective grading policies, innovations in New Student Orientation, and changes to curricular requirements at Penn.

Five years have passed since we published our last comprehensive *White Paper* on education at Penn. The University has changed a great deal in the last five years, and increasingly finds itself at the forefront of educational innovation. SCUE has been fortunate enough to help forge Penn's evolution. In that time, SCUE has also concentrated on determining the unique strengths of this University, and on finding ways to place those strengths at the heart of every student's education. Offered in this 2001 White Paper on Undergraduate Education are the discoveries we made.

SCUE presents the 2001 White Paper as a means of beginning or furthering dialogue on the issues contained herein. The Agenda for Excellence and experiments such as the Pilot Curriculum have positioned Penn at a critical educational juncture. We offer our plans and proposals as a means for propelling the quality of education at Penn even further.

We hope this paper will be met with great consideration and will inspire both discussion and substantial change. SCUE is, as always, deeply interested in hearing and discussing reactions to our ideas, and can be contacted at scue@dolphin.upenn.edu or through our address SCUE, 209 Houston Hall, 3417 Spruce Street, Philadelphia, PA 19104-6306.

We look forward to continuing our involvement in undergraduate education at Penn. SCUE thanks you for your consideration.

—Lindsey Mathews, SCUE Chair, 2001

—Joshua Wilkenfeld, SCUE Chair, 2000

On Undergraduate Education

Introduction

Nearly four decades ago, an energetic group of undergraduates came together in an effort to debate, reform and advance the cause of undergraduate education at Penn. Rather than simply bemoaning problematic issues, these students sought to enact viable, workable and practical solutions to important and far-reaching problems. If the current Student Committee on Undergraduate Education is the product of the hard work of our predecessors, this *White Paper on Undergraduate Education* is our deed to future reformers.

Contained within these pages are our thoughts, views and suggestions on some of the most salient and pressing matters that confront our four undergraduate schools. By way of deferring to Benjamin Franklin's wish that we learn all which is useful and all which is ornamental, we speak of reform in terms of theory and in terms of practice. While we necessarily speak in abstractions when it concerns "changing the campus culture" or "advancing the frontiers of knowledge," we also offer concrete proposals in terms of the Major Advising Program and information technology reform. Such is our goal: to spur discussion and to forge tangible change. We hope our work is viewed using both of these important benchmarks as a starting point.

SCUE continues to advocate for the advancement of a meaningful dialogue regarding the substance, purpose and execution of an undergraduate education at Penn. Our proposals have the ability to help make an undergraduate education at this University second-to-none. As has been done in the past, we look forward to working in concert with our fellow students, and with the faculty, staff and administration of America's oldest university, to build on our legacy, improve our programs, and better educate our constituency: the undergraduate community of scholars.

Research

Introduction

A distinct advantage at Penn and institutions of its kind is the realm of opportunity for learning outside of the traditional classroom environment. Original research represents perhaps the best of these opportunities because it allows the student to synthesize classroom knowledge, outside reading, personal experience, and hands-on fieldwork to create a new intellectual statement. Such a process not only enriches the field in which the research was performed, but also enriches the individual by training him or her to analyze critically.

Though Penn is a research institution—a very fine one—undergraduate knowledge of research is arguably minimal. SCUE believes that at Penn, an institution with some of the world's best and broadest research opportunities, undergraduates not participating in substantive research during their time at Penn are not fulfilling the educational potential of their time here. Because the academic benefits of increasing undergraduate research at the University are so great, this chapter discusses the issues surrounding research at Penn and proposes some solutions to potential roadblocks. These issues are the following:

- 1. The Community of Scholars
- 2. Resources for Research
- 3. Research Publicity
- 4. A Complete Research Database

The Community of Scholars

Part of the desire to introduce Penn students to a full career of research experience stems from the desire to include Penn students in a community of scholars. As of right now, faculty and graduate students all share

membership in the common experiences of careers in research, and all can proudly proclaim that they have colleagues in their study. Part of SCUE's desire to enhance the undergraduate research experience at Penn stems from our desire to allow undergraduates to exist in a full-time academic community that extends well beyond classroom walls and hours. This is in the spirit of some of the college house initiatives as well as SCUE's Lunchroom and Preceptorials programs.

Community of Undergraduates: The results of research are meant to enhance the life of the researcher as well as the general community. For this reason, it is imperative that undergraduates at Penn not only be encouraged to benefit from their own research, but from the research of their undergraduate colleagues as well. When successful undergraduate research is conducted—whether in the sciences, the humanities, in business, or elsewhere—the undergraduate community as a whole should benefit. To facilitate this widespread benefit, researchers of similar topics should be grouped together loosely for the purpose of group sharing and feedback. This community is salubrious in two ways: first, one's own research benefits greatly from understanding cutting-edge research in related areas; second, we all benefit from learning that lies at the frontiers of knowledge. Undergraduates performing similar research processes can likely be of invaluable help to one another in overcoming difficulties and providing inspiration. This idea is in accordance with expanding the Provost's Scholars program (SCUE, White Paper on Experimental Education, 1999) and the newly created Center for Undergraduate Research and Fellowships (CURF).

General Community of Scholars: In addition to having undergraduates share their work within the undergraduate population, a scholarly community containing faculty, undergraduates, and graduate students must be established. At present, graduate students and faculty interact in research discourse, helping and learning from each other in the process. Undergraduates are a natural added component to this community. With graduate students acting as research companions in some cases and mentors and advisors in others, undergraduates can more fully reap the benefits of the tremendous graduate population at Penn. Further, faculty members, much as they are now for graduate students, must be utilized as professional aids for undergraduates. Faculty should be implored to help promote undergraduate research in terms of aiding in publication, in introduction to conferences and symposia, and in simple mentoring.

The expansion of the scholarly community at Penn will help break down many of the artificial barriers that separate the different learners and teachers at Penn. By promoting the inclusion of undergraduates in this community, every scholar at Penn can succeed better in his or her intellectual endeavors.

Resources for Research

In encouraging a greater emphasis on undergraduate research, Penn has the responsibility not only to make students aware of research opportunities, but also—and perhaps more importantly—to provide them with the resources which conduce excellent research. These sources take three primary forms: textual, personal, and monetary.

Library Privileges: Unquestionably, the Penn library system either contains in itself or has access to texts that make possible extensive research on almost any subject. Unfortunately for the student researcher, however, availability of these texts is limited. The first obstacle has to do with the student's personal borrowing limit, which allows a student to

check out only thirty books at a time. While under most circumstances thirty is a more than adequate number, for a serious research student, a larger number of books could very well be necessary. Furthermore, on top of all the texts borrowed for the research project, the student could conceivably need several more for an unrelated assignment in another class. The current book limit, though seemingly sufficient, makes nearly impossible the simultaneous production of two separate projects, especially when one of them is an extensive research project. There should exist, then, a simple procedure which would allow the book limit to be waived or at least substantially extended for the researching student. This process could be as easy as having the department head or faculty advisor for the student sign a form verifying the need for an extended limit. Such a request could be processed by the system so that instead of putting a block on checkout as the student attempts to borrow his or her thirty-first book, the system simply scans the text as usual. The small change in the system would have a significant impact on the number and especially the quality of undergraduate research projects.

Because access to materials is so crucial to research, students doing such projects should also be granted extra rights in borrowing and keeping books. First, research students should be exempt from recall. Though the recall system allows a student in need of a book to avoid the frustration of waiting indefinitely for the text to be returned, it creates for the student already using the book the frustration of having to return a text he or she may still be using. Since good research is a semester or yearlong project, a student should be able to work in confidence that he or she will be able to keep any necessary resources throughout that time period. When another person recalls the book, the student will not be sent a form informing him or her that the due date has been bumped up, nor will the student's borrowing privileges be suspended until that book has been returned. Instead, the student will receive a letter or an e-mail informing him or her that another student has requested the book and, if possible, the return of the text in question would be appreciated (though in no way mandatory). Also, should the student choose to return the book, the other student would be given the text for a limited time—the standard four weeks, but without renewal period—and the library would hold the book for the research student upon the book's return. This recall adjustment would guarantee that research could continue with only limited interruptions in research availability.

With final regards to the library system, the student should have access to almost any text. If multiple copies are in Rosengarten, one of those may be removed. More importantly, though, texts in both the stacks and the special collections off-limits to most undergraduates should be made available for checkout for research students. Implementing both this privilege and the exemption from recall could be achieved through the same form used to extend the checkout limit. With minor adjustments, then, new opportunities make themselves available to researchers, with the only possible result being better and more extensive research from undergraduates. Accessing the Experts: Many times, personal interviews or discussions with experts can be just as important and as useful as the texts. Because of this, the researching student should find the entire faculty available for advice or information. Already, the vast majority of teachers and graduate students generously take time to talk to students about projects or just to stimulate discourse. This is a habit we must continue, especially in regard to research. Professors have an obligation to their students to serve as resources and should make all attempts to accommodate a student who comes to them for information for a project. Faculty members should also make an effort to provide the student with names of other resourceseither textual or personal—which may be able to assist the student further. SCUE also realizes, of course, that students need to feel comfortable talking to their professors outside of class and must realize that taking the initiative is their responsibility. For truly great undergraduate research to proliferate, both students and professors must continue to realize the importance of faculty as resources. SCUE sees CURF as an ideal forum for accomplishing such interaction.

Finding the Funds: In many cases, research can be done by using the two sources mentioned above: texts and people. In some situations, however, other types of information gathering are needed to make the project worthwhile. While the University should not be responsible for providing unlimited funds to undergraduate researchers, it should provide support in two ways that will cut the cost for the student: first, the University should make available to the student all necessary laboratory facilities and equipment. Assuming the student is requesting nothing inordinate or useless, Penn should have no qualms about allowing students to use whatever materials it has, even if the student could obtain it on his or her own. Second, the University should better advertise fellowships and grants that would help fund research, a task that CURF has the potential to accomplish. While ideally, no cost should be spared in the quest for information, realistically, this is not always possible. Defraying the cost of research to the student will encourage more experimental and innovative

practices and will, if used in conjunction with textual and human resources, make exceptional undergraduate research possible, practical, and appealing.

Research Publicity

In addition to providing a research-oriented community and granting access to research resources, the key to successful integration of research into the undergraduate educational experience is to make clearly known what research opportunities exist. The student should also be made aware of the obligations that research entails. Passing on this information is primarily done through the use of advertising to the undergraduate in any field of study.

The first part of this advertisement should happen in the classroom, with professors beginning to advertise in two important ways. First, professors should integrate the research they do into their classroom lessons. This adds a way for the student to see the use of the research in the development of the subject and in the enhancement of the field. Such a process will also have positive impacts upon teaching quality: when faculty members free themselves from the binds of textbooks to teach their personal passions, such passions can only help to make a classroom experience all the more memorable and effective. This will, in turn, generally motivate students to begin their own search of purpose in enhancing the larger field. Additionally, faculty members ought to inform students of available research opportunities and other pertinent information.

Wherever appropriate, professors should ask students for help in their own projects or refer them to other professors who need help in their research. They should, above all, always be open to the student, being willing to listen to project proposals and dilemmas and to respond with advice. While this model may be the status quo in some disciplines, it is relatively unknown to most students. Additionally, creative use of the work-study program across disciplines can enable students on financial aid to choose research over other job options.

Advertisement is integral to the growth of research on this campus because it helps unaware students find a greater presence of research and more opportunities to explore. Ultimately, it also aids the overarching goal of breaking down the psychic and institutional barriers which have traditionally kept students from fully realizing their research potential. SCUE believes that inviting this underused segment of the Penn population into the research mix will have nothing but positive effects on the education of students, the research of faculty, and the overall intellectual climate at Penn. Because research as a whole is integral to the entire intellectual atmosphere of the university, the efforts here described—efforts on the communal, informational, and promotional levels of research—must be pursued if we at Penn are truly to take academic training to the highest echelon.

A Complete Research Database

Currently, SCUE is working to improve undergraduate research—and by extension, research in general—by assisting in the development of a research database for the CURF. Specifically, it will include a description of all current research projects being performed at the University, along with information about each faculty member's broader academic interests and areas of expertise. The database will be online and available to all members of the Penn community in order to help them find other scholars according to research interest.

As a first step in solving the problems currently associated with undergraduate research, the database will improve research publicity and give students access to the experts by listing everyone involved in the research community. Additionally, for a student to become interested in taking on a research project, he or she must first know what research opportunities are available—a task which is often daunting given the current infrastructure. To that end, the database will be designed in such a way that through a quick search, any student will be able to find a project of interest and the appropriate person to contact. Such a consolidation of easily accessible information will provide invaluable research opportunities, whether the student wants to become involved in a current project, start his or her own, or learn from one of the many experts across Penn's campus. The increased awareness will then lead to a boost in undergraduate participation in the scholarly community at Penn.

Above all, we hope to foster intellectual exchange between *all* scholars—faculty members, graduate students, and undergraduate students alike. Faculty will be able both to discover other experts in their field and to find students who can assist them in their projects, while students will become more involved in research at Penn. As it stands, the database is in its earliest stages and will require extensive resources and input. SCUE hopes to find the support necessary to compile it successfully.

Technology

Introduction: Academic Programs in the Information Age

Information technology has changed and will continue to dramatically change collegiate environments and society as a whole. Consequently, the University needs to try harder to educate the entire student body about

technology—in terms of its uses both inside and outside of Penn. SCUE recommends the following steps outlined in this section be taken.

An introductory seminar should be available every semester to acquaint interested students with the Penn network. The course should familiarize students with web-browsing techniques, FTP, e-mail utilities, newsgroups, listserves, and the network in general. Such a course would have two major benefits: first, students would be prepared to enhance their own coursework at Penn through Penn's already existing infrastructure, and second, students would gain insight into the same tools most frequently used in outside information technology environments.

The second step is developing IT-related courses. Understanding that information technology plays a crucial role in all disciplines—not simply Computer Science Engineering—SCUE maintains that such courses must be made accessible for the student body as a whole. A good example of such a course is CSE 100, the course syllabus for which is available online at www.seas.upenn.edu/~cse100. Other courses—which have great interdisciplinary potential—might involve studying e-commerce, Internet technology in general, the technological revolution and its implications, or simply how information technology has influenced thinking in relevant disciplines.

Finally and most importantly, the University needs to develop crossdiscipline academic programs relating to technology. Some programs already exist and have been very successful. For example, the program in Digital Media and Design has become quite popular in the past couple of years. Nevertheless, more programs must be created, with some possible areas including:

- 1. A program between the Legal Studies department, the Law School, and SEAS exploring the connections between Law and Technology. There is a growing need for experts in the fields of intellectual property, electronic privacy, copyrights on the web, and information security. This pre-law program would be the first of its kind and would set an example for other universities to follow.
 - Medical Informatics.
 - 3. A SAS major in digital media.
- 4. A Wharton undergraduate concentration in e-commerce which includes both business and technical perspectives of the field.
 - 5. Environmental Engineering.

Hardware

As the IT revolution rages on, there is an overwhelming amount of new technology being developed at every moment. It is crucial for the University to isolate and use those technologies which can help improve the quality of education here. The most obvious areas requiring development are the computing facilities on campus. The following improvements need to be made:

- 1. A large computing facility similar to the computing labs in the Towne Building must be created for the College of Arts and Sciences. It should remain open 24 hours a day. The College of Arts and Sciences is the largest undergraduate school at Penn, and yet its students have to use Engineering or Van Pelt computers, and cannot even log on to the Wharton terminals. Penn advertises that because of our state-of-the-art public computing facilities, personal computers are not a necessity. To make good on this pledge, the University must open sufficient lab space for all students to use at the times they use it most—late at night. As a corollary to this, e-mail terminals such as the ones located at the entrance to Williams Hall should be present in every large building on campus. Logan Hall and Bennett Hall are perfect candidates. These terminals are cheap and lighten the load of more powerful computers in labs, and students can communicate more easily with faculty and one another during the day. The e-mail terminals located in the Wharton school should be available for use by students who are not enrolled in Wharton. The restriction of these terminals to Wharton students is against the spirit of a unified university.
- 2. It is necessary to add more Ethernet connections for portable computers in classrooms. The faculty will not be able to use technology effectively to enhance classroom learning if classrooms themselves are not wired for IT delivery. SCUE encourages in-class feedback systems for large lectures, as well as network access during class to information relevant to the course. Such improvements in class technology can only be wrought through network wiring of classrooms, specifically lecture halls.
- wiring of classrooms, specifically lecture halls.

 3. The computing labs need to be equipped with specialized hardware such as scanners and video cameras. Once video cameras are installed, students should be able to reserve time for video conferencing. This will allow them to work on projects together with people who are not on Penn's campus and will help to create more versatile presentations for other classes.

The second area requiring funding and development is the physical side of PennNet. The Internet culture seems to be moving in the direction of *Converged Networking*, where data, voice, and video streams will merge on one network. Speed, security, and variety of supported functionality will be the concerns not only of today, but of tomorrow as well. In order for Penn to smoothly transition into the network infrastructure of the future, the following areas need to be developed:

- 1. Wireless access.
- 2. Integration of Computers and Telephony.
- 3. Systems that can report accurate statistics on resource usage. This

information will be crucial for the design of future systems.

4. Partnerships with area ISP's.

5. Update the speed of access in dorms and off-campus housing to 100BaseT. Finally, more attention needs to be paid to wireless technologies. More than ever, students are using Palm Pilots and other wireless computing devices. School computing centers, as well as the college house ITA system, should begin to provide basic technical support for this type of hardware.

Software Support

Providing timely and understandable software assistance is critical to providing for efficient, computer-based student work. Currently, much assistance is already being provided to students through various tutorials on the web, training sessions, and printed materials. However, these materials are fragmented to such an extent that they are not conveniently accessible. Moreover, these materials are often incomplete and insufficient. In addition to providing first-rate software support, the University must constantly invest in upgrading currently licensed software packages and constantly look out for new ones. In order to achieve the above, the following steps should be taken:

- 1. Throughout the Penn Web, there are many resources such as FAQ's and tutorials designed to help with certain software packages. These tutorials, however, are distributed among all the different schools. A single web page, with links to all of the tutorials and demos online, must be compiled and made conveniently accessible. All of the University's computing centers' web sites should provide a link to this page.
- 2. There are some applications which are very frequently used, but which have either no existing tutorials or tutorials which are not sufficient. These tutorials must be created and added to the aforementioned repository. For example, many students have trouble with opening and reading postscript files and there is little information on the web about how to do this. While individual professors have often posted instructions on their personal web pages, efficiency and convenience mandate that such instructions be centrally located.
- 3. More sophisticated software requires personal instruction in addition to online manuals. There are some workshops currently offered by ISC for applications such as Microsoft Word and Excel, as well as by the Mathematics Department for Maple. In addition to better publicizing these existing resources, the University must create a process by which the student body can register desire for workshops on other software packages.
- 4. The Penn Web Search Engine needs to be optimized so that the search results are ranked sensibly.

Penn Web

Penn Web should be reorganized along more logical principles. While the disparate development of Penn's web forced the creation of multiple servers and web styles, this organization has become quite troubling for students as the entire school has moved content to the web. All course-related web pages at the University should be easily found and accessible. At present, the history department's server is called "clio," accounting's is called "debit," with other schools and departments maintaining their own uniquely named servers. Such naming schemes make it very difficult for a student to find information quickly on a department or course. A standardized naming system (such as www.school.upenn.edu/department/coursenumber) would dramatically increase students' ability to find course material on the web.

Technology as a Teaching Tool

Learning and teaching should never be limited to the classroom. Indeed, technology now offers various opportunities to make learning outside of the classroom even more valuable and exciting. Course and department web pages can help organize the huge amounts of information available on the web so that it can be used most efficiently and successfully by students. E-mail can provide a forum for increasing student-faculty interaction. Newsgroups, listserves, Blackboard, and WebCafe can even make it possible to continue class discussion outside of the classroom. The following section contains recommendations on how to reap the extraordinary benefits of such technological tools.

Class Web Pages: Class web pages are becoming increasingly common throughout the University, although their popularity and use varies according to subject and department. Though a likely reason is that certain subjects seem to lend themselves more easily and more usefully to using the Web than other subjects, web pages can be excellent supplements to teaching in any class, and are valuable tools in helping students select courses. Every department should, therefore, be responsible for providing course web pages. The following are several suggestions for them:

- 1. Course web content should be subject to minimum standards. SCUE believes that every course offered at the University should have, at the least, the short description of each course that professors are required to submit before each semester, a detailed syllabus, professor contact information, teaching assistant information, and a usable listserve for students and/or the professor. A good example is Professor Catriona MacLeod's web page for German 244, which can be viewed at: www.sas.upenn.edu/~cmacleod/GRMN244/index.html.
- 2. Web pages might include resources which are relevant and useful to the

course. For example, the web page for Music 20, taught by Norman Smith, provides clips of music, texts, and supplements to class work and reading. Superb examples of the use of the World Wide Web provide Internet link portals to resources of direct relevance to the class. Many times, notes for classes are maintained on web sites as a highly useful review aid.

3. If professors choose to construct the web pages themselves, sufficient technical support should be offered to faculty members in creating and maintaining their web page, linking course web pages with Internet content and readings, and maintaining student feedback on courses via the course page. Professors should be actively involved in creating the content, while the responsibility for posting and providing course pages should fall to the department.

Departmental Web Pages: In addition to individual course web pages, the University should require the use of departmental web pages, again according to University-set minimal standards. This can be accomplished through several methods:

1. Each undergraduate school should put together and maintain a list of all courses offered in a particular semester. The courses should be categorized by the departments in which they are offered. An exceptional example is the class list for SEAS, which can be viewed at www.seas.upenn.edu/class.html. Since January 1, 2000, this page has been hit almost 8,000 times. As much as 6,500 of those hits came from outside of the University, underlining the basic fact that the reputation and attractiveness of the University in the eyes of others depend very strongly on web presence.

2. Departments can also create standard, easy-to-find link lists of class web pages off of their own departmental websites. An excellent example is the homepage of the English Department (www.english.upenn.edu), which provides links to both professors' and class homepages. The department also requires professors to submit short descriptions of their courses before each semester, and these descriptions become links in the English Department's course roster. Students report that this is enormously helpful.

3. Finally, departmental pages should also maintain minimum standards of information. Lists of faculty, faculty research interests and current research projects (which would also assist the CURF), departmental philosophies, and announcements for departmental events should all be maintained on departmental web sites. This information is invaluable for students considering significant research, for prospective applicants considering Penn, and for underclassmen shopping for majors and wishing to learn about the different educational opportunities available at Penn.

4. The University must encourage educational use of the web by not only removing the obstacle of technological illiteracy, but also by dissolving the illusions of difficulty so frequently associated with the creation of web pages. To this end, school computing resources offices, in conjunction with MMETS, need to create a central, well-publicized resource where professors and departments can obtain:

a. Tutorials on HTML and web page design.

b. Human assistance in creating the websites.

c. Examples of previously created websites as well as templates of simple, yet useful web pages. While some of these resources already exist, they are dispersed throughout the University and frequently duplicated, thus unable to serve their purpose efficiently.

E-mail: Use of e-mail has become a necessity for most professors at Penn, and whether it is appreciated or resented, e-mail is an important means of communication between members of the faculty and students. Professors should be encouraged to read and respond to e-mail on a regular basis, and they should warn students of when they will be unavailable over e-mail. E-mail can also be an excellent way for professors to encourage input that students might otherwise be hesitant to give, and can allow for greater interaction between the professor and students.

Class Listserves and Newsgroups: Listserves are an excellent, often overlooked class resource, and they can serve a purpose as basic and as useful as posting class syllabi on the Web. Professors can use listserves to send reminders, to make changes to the syllabus, to make homework assignments, or to make additional commentary on class material. Listserves also encourage students to communicate with one another and with the professor outside of class, and to continue class discussions beyond a three-hour time slot.

Class newsgroups are an excellent option for courses in which listserves are heavily used, and in which professors are looking for a better, more organized way to handle discussions via e-mail. Newsgroups can be accessed through any e-mail program or Internet browser, and students would only have to subscribe to a class newsgroups in order to read messages that are posted, as on a virtual bulletin board. Professors can set up a class newsgroup by filling out the online form at the following website: www.upenn.edu/computing/netnews/news-request.html.

Blackboard and WebCafe: In the past two years, the University has been investigating asynchronous teaching tools that move beyond the constraints of class listserves and newsgroups. The two software packages that have been successfully piloted and are now being heavily used are Blackboard (used in SEAS, SAS, GSFA) and WebCafe (Wharton). This software

allows a professor to create an elaborate website with rich features in a minimal amount of time. Blackboard contains a set of utilities for course support, such as a private discussion board, a chat system, grade distribution, group file sharing, course information pages, a homework hand-in system, course e-mail, self-grading quizzes, and more. These useful features, while difficult or impractical to implement using HTML, are easily enabled in Blackboard or WebCafe. The support for the software varies by school: in the College, SAS Computing sets up Blackboard accounts and has held interest meetings with various faculty and departments; several Wharton departments have already integrated Blackboard and WebCafe into courses; and the Engineering school is now hosting courses on the use of the program as part of the university-wide pilot program. The schools should continue to develop these support programs for faculty so that professors can find material on and assistance in using the software and deciding whether it would be right for their courses.

Teaching

Introduction

In the words of Jacques Barzun, "Teaching is not a lost art, but the regard for it is a lost tradition." The goal of this section is to make artful, exceptional teaching more easily attainable and more prevalent at Penn. SCUE believes that for the sake of undergraduate education, teaching—the transmission of knowledge and wisdom—is as important as exceptional scholarship and research. We will discuss several areas of teaching which are often problematic for professors and which are vital to undergraduate education, as well as notable methods and models currently used by various professors and departments. Central issues include:

- 1. The Lecture Versus the Seminar
- 2. Student-Faculty Interaction
- 3. Student Presentations
- 4. Teaching Assistants

Lectures Versus Seminars

The setup of a class can have a profound effect on the quality of learning and education. Classes at Penn generally fall into one of two categories: the lecture or the seminar. Given these models, certain ways of handling classes are more effective than others, depending on a number of variables, such as subject matter and the teaching style of the professor. In this section, we will describe the methods we have found to be effective and the issues concerned with the lecture and the seminar.

Class Discussion in the Seminar: The main difference between the lecture and the seminar is the element of discussion, and in most cases, smaller is almost certainly better. With enrollments of ten to twenty students, seminar courses allow for a level of class interaction and participation manageable for the professor and meaningful for the student. Discussion is the most important part of seminars, and when it is carefully guided, it can be the best way for students to learn. However, when discussion is not focused or handled well, students have a greater tendency to "tune out," and the burden of commenting and interpreting falls to the professor.

To combat this tendency, SCUE suggests that professors carefully control discussions and remain focused upon leading the discussion to some defined point. While questions should be encouraged and can even serve as the basis of discussion, professors should always be aware of the balance between *talking* about the material and conveying educational and important information. Often, in those areas of study which are more subjective and interpretive, students essentially "run" the course, and this method creates a far greater risk of descending into meaningless commentary. Instead, professors should always *direct* the discussion.

In seminar courses, which depend more heavily upon conveying concrete knowledge than on interpretation, utilizing class discussion can be a difficult task. However, SCUE believes that the main reason lectures are often ineffective is that the material is *told* but not expanded upon in some meaningful way. Seminar discussion can be a more effective alternative. Rather than lecturing, professors can use the seminar method of posing and answering questions in order to teach the material. Dialogue improves learning, and seminars provide the unique opportunity for students to question and respond to the material.

Class Discussion in the Lecture: One of the most difficult issues of the lecture course is how to keep students interested in the material. Some professors rely entirely on giving effective lectures, while others try to encourage student participation and discussion. However, keeping discussion interesting and useful is a difficult task with a large number of students. These two suggestions can allow for effective discussion time in lectures:

1. Professors can pose questions to the students which are interpretative or analytic, and not simply asking for facts. However, SCUE recognizes that in doing so, professors should remain critical and ready to form a student's response into a way of conveying information or class material. Professors can also make a clear distinction between the "lecture" time and "discussion" time in the course. For example, they can specify that the first hour of a course be designated as a lecture, while the last half-hour be reserved for student

comments and questions. Another model, used by Dr. Andrew Shatte, involves building in short question periods after each section of material is presented. There is an understanding that when the question time runs out, the newsgroup will be used to continue discussion. In this way, class discussion will not impair the quality of the professor's lecture, while at the same time, discussions can be focused and remain an integral part of the class.

2. Professors can creatively use technology to add virtual discussions to lecture-oriented courses. As mentioned previously, forums such as Blackboard, listserves, and course chat rooms are easy means to stimulate discussion without robbing a class of lecture time.

Quality Control in Lecture Courses: Frequent and periodic student evaluations are particularly useful in lecture courses where there is less contact between the professor and the students. An excellent example of how evaluations are used effectively in a lecture course can be found in Marketing 101, taught by Professor Barbara Kahn. Professor Kahn establishes "quality circles" in each recitation section, and a larger one for the general class. "Quality circles" are groups of randomly chosen students who meet with the professor in order to provide feedback about the course material or teaching methods. These meetings occur several times in the course of the semester, each time with the same group of students. In this way, the professor is able to control the quality of the course and interact closely with the students.

The Setup of the Classroom: One factor, which is crucial to the quality of discussion, is the actual layout of the classroom. Seminars are optimized when conducted around a table at which everyone—including the professor—can sit. If the class is located in a room with chairs, the professor can simply tell the students at the beginning of each class to arrange themselves in a circle. First, this allows the focus of attention to shift easily among students and the professor, and it encourages the students to contribute to the discussion. Second, this allows students to engage in discussion with each other rather than to direct all comments through the professor.

Reaching a balance between teaching and class discussion can be difficult in both lectures and seminars. However, a lecture professor can allow students to pose questions and comments without sacrificing his or her own control of the class, and seminar professors can remain in control of class discussions while ensuring that the course material is being clearly conveyed. Through consideration of these issues, as well as being aware of the setup of the classroom, lectures and seminars will be able to maximize their quality.

Student-Faculty Interaction

Perhaps the most valuable relationships that students will have during their years at Penn are those with professors. But all too often, constraints on time and resources, as well as the size of many lecture courses, make it difficult for students to interact with their teachers. There are, however, many techniques professors can use to encourage communication and interaction with students.

In the Classroom: In large classes, getting to know students individually can seem impossible. However, there are several ways in which professors can overcome this problem:

- 1. When students speak in class, professors should ask their names—and continue to use them later when possible. This small action can be immensely important in establishing relationships with students, and it creates an atmosphere of comfortable familiarity in the classroom.
- 2. In every class, students should be given time, as suggested previously, to ask questions and to make comments. Establishing communication in the course encourages interaction outside of classroom and makes the student feel comfortable in approaching the professor with questions.

Office Hours: All Penn faculty members are required to hold office hours, and many encourage students to make arrangements for other meeting times if their office hours are not convenient. However, the question then becomes how best to take advantage of this time and to encourage students to use it. One suggestion is that when appropriate, professors hold office hours in an informal setting, such as a coffee shop or lounge, rather than in their offices. In this way, they appear more approachable, and students are more likely to use this opportunity. Professors can also have lunch or coffee breaks with students, which is becoming a popular option at Penn. It has also become an easy option since the inception of the SCUE Lunchroom, a program which allows students to take professors to lunch at the Faculty Club, free of charge. Such options should be enthusiastically and regularly encouraged by professors. SCUE strongly urges all faculty members to invite their undergraduates to take them out to lunch at the SCUE Lunchroom.

Recitations: Professors can take advantage of recitation sessions in several ways to encourage interaction:

- 1. Implementing more professor-led recitations for selected sections would give students the opportunity to communicate with professors on a closer basis.
 - 2. Professors could attend recitation sections at least once during the

semester, which would give an impression of approachability, and which would also encourage interaction with the TA.

3.If class sizes prevent professors from leading recitations, they could hold optional recitations or discussion groups—a method Dr. Walter McDougall has used. These informal meetings could be used to discuss or review course material and to answer student questions.

Student Presentations

Many professors throughout the university have begun to use the student presentation as a course requirement in smaller classes. The quality of such presentations, however, is often difficult to control or to judge, and their worth for other students can be questionable when compared to lectures by the professor. While presentations can be valuable and worthwhile and provide important opportunity for improving students' communications skills, more attention ought to be paid to how they are controlled and treated as requirements, for which the following suggestions are offered.

The Purpose of Student Presentations: It is crucial that the student making a presentation offers an argument, thesis, or topic, which can be treated as a subject of discussion for the class, as opposed to a merely informative presentation. Presentations should be treated like graduate symposia, wherein an undergraduate is expected to form a thesis on the topic, and not merely present factual information. The "informative" presentation is often problematic for several reasons:

- 1. A professor would probably be better suited to present such information.
- 2. Other students cannot be entirely certain that the information being presented is correct.
- 3. Such presentations are often used to replace the input of the professor on subjects of his or her expertise.

In terms of the worth of presentations for the class as an audience, the second point above is very important. Frequently, presentations are simply incorporated into an ensuing class discussion, and feedback by the professor on the content of the presentation is not given. Thus, other students in the class place less weight on the validity or importance of the information being presented by the student. Professors should therefore feel free to argue with the content of presentations, and to draw out the strengths contained within them.

What to Expect from a Student Presentation: An effective method for improvement would be to judge undergraduate class presentations with the same standards as those of graduate courses. For example, it is often the practice in English graduate seminars to require students to give presentations before the class which are accompanied by short papers that the student can choose to distribute, and to afterwards defend the thesis of his or her presentation before rigorous, even difficult questions posed by both the class and the professor. This model would be useful for undergraduates in several ways:

- 1. Requiring that a short paper accompany a presentation would ensure that an actual argument is being presented.
- Having short papers for other students to read would make the student's presentation easier to follow.
- 3. By challenging the student's thesis, the presenter and the class would gain a better understanding of the subject.

The third point is particularly noteworthy. If in-class presentations are to be as useful as other requirements in the course, students should be expected to defend the arguments of the presentation, much as a professor would question the validity of a thesis or the arguments made in a paper or in the responses to test questions.

The Requirements for a Good Presentation

- 1. Students should be required to meet with the professor before finalizing the topic and content of their presentations, in order to ensure the accuracy and validity of their arguments.
- 2. Presenters should be required to distribute handouts which summarize the main points of their presentation, if distributing papers to accompany their presentations is not required. This is extremely helpful for the class in following the arguments of the presentation.
- 3. Professors should give written evaluations and grades for the presentations, much as they would for a paper or test, which place more value on the presentation requirement and would give the student useful criticism.

When used effectively, student presentations can be an excellent way to develop interaction among students and professors. If professors choose to use them as a course requirement, these suggestions can make them a more effective part of the class.

The TA System

Presently, there is no basic university system of training teaching assistants at Penn. Instead, a number of departments at Penn have established their own methods of training and evaluating their TAs, while other departments have no training programs at all. Every graduate student who becomes a TA, however, ought to be prepared to teach and to work with undergraduates by their departments and with the help of professors. TAs affect the quality of teaching in many classes, and large class sizes often necessitate that they act as "surrogate professors" in recitations,

office hours, discussions, and even grading. Because of their importance to teaching at Penn, an evaluation of teaching requires their consideration. *The First Semester: TA Training:* During their first semester, graduate students should not be TAs, but should instead use part of the time to become trained as teachers. Departments can assist the process in one of two key ways:

1. By providing a course in pedagogy that will count towards the graduate degree, such as the one that the English department has used.

2. By providing a structured series of weekly meetings, in which graduate students meet with faculty members, sit in on undergraduate seminars led by stellar professors, and/or meet with other TAs.

TA Evaluations: Every department should use written evaluations and faculty supervision of graduate student teaching. Professors should attend at least one recitation session per semester and should meet with their TAs regularly to discuss course material, recitation and discussion topics, and teaching methods. For example, the Art History and Philosophy departments encourage weekly meetings to be held between professors and TAs, thereby creating a strong and necessary connection between what students are taught in lectures and in recitations. These meetings would also encourage the development of a strong rapport between professors and their TAs, and would enhance the quality of their work together.

Students should also complete written evaluations of their recitations and teaching assistants. Currently, some departments do not use TA evaluations at all, while others collect evaluations but do not pass them on to TAs or faculty members. Student evaluations can be the most effective way to monitor the quality of TA teaching; accordingly, there should be a structured student-evaluation process in each department to ensure that all TAs receive regular feedback.

The Center for Teaching and Learning, as run through the School of Arts and Sciences, is also an innovative way for all teachers to receive constructive feedback in an anonymous, non-confrontational manner. SCUE strongly encourages the growth and broader use of the resources of the Center for Teaching and Learning.

Whatever the method, departments can use the evaluations by professors and students to keep track of the teaching experience and quality of a TA. Most TAs at Penn will help teach several courses throughout their graduate studies, and during this time, departments can maintain files that include past evaluations from both professors and undergraduates. This information will help departments and TAs in three important ways:

- 1. TAs can improve their teaching over the course of their graduate career, rather than cultivating their abilities in just one particular class.
- 2. Departments will have files on hand to make the most strategic use of TAs and to evaluate each graduate student's strengths and weaknesses in teaching.
- 3. Department files can be used to decide TA teaching recognition or awards, both by the department and in the university.

Improving Graduate Student Teaching: No matter how good the evaluation or preparation program, there will be some TAs who are either inexperienced or sub-parteachers. As a solution, some of the following methods can be used:

- 1. Inexperienced or weak TAs can be assigned to courses that are taught by the strongest faculty members in a department, which will not only balance the quality of a course, but will also provide models for TAs looking to improve their own teaching skills.
- 2. Departments should consider ways of using TAs that will rely less heavily on teaching alone. For example, the best TAs in a department could lead recitation sections, while others of a lesser ability could assist professors and hold office hours and review sessions.

Graduate students have become a fundamental part of teaching at the undergraduate level. By making exceptional graduate-student teaching a priority, the University will significantly improve the quality of teaching in general, and will establish a precedence of producing excellent teachers and scholars.

Graduate Versus Undergraduate TAs: SCUE endorses the use of qualified and trained undergraduate TAs. Different course and recitation structures create some situations more appropriate for teaching by undergraduate TAs, with others more appropriate for teaching by graduate students.

Undergraduate TAs should play a role in several course areas. First, many interdisciplinary courses are taught under the auspices of multiple professors and multiple departments. Such courses may have no relevant graduate program, and hence should make use of undergraduate TAs who have completed relevant coursework or disciplinary experience. For example, Cognitive Science is an undergraduate program with elements of linguistics, computer science, philosophy, psychology and other disciplines. A graduate student in any one of these disciplines is not a student of Cognitive Science, and hence will be ill prepared to deal with all relevant aspects of Cognitive Science coursework. Hence, as no Cognitive Science graduate program exists, the members of the student body most educated in Cognitive Science are undergraduates. Thus, qualified undergraduates are in the best position to help students in recitations. Similar arguments can be made regarding International

Relations, PPE, or even within the Pilot Curriculum.

Secondly, while SCUE appreciates and understands the intense financial circumstances requiring some graduate students to become teaching assistants, SCUE also recognizes that the high proportion of international graduate students in certain disciplines can sometimes lead to a language barrier. In certain recitations, particularly those found in mathematics and the sciences, the primary function of TAs is to clarify lectures and go over assignments. In such cases, clarity of presentation must be valued over theoretical expertise—even at the cost of replacing more expert graduate students with more easily understood undergraduates.

SCUE does, however, greatly value the work all graduate students are doing at this university. They are certainly among the world's brightest students and will be at the forefront of the next generation of researchers and university faculty. As such, and in accordance with earlier chapters, SCUE strongly encourages graduate TAs, wherever appropriate, to share their research experiences with their undergraduate students. By providing the perspective of another intellectual, graduate students will provide a greater value to the lecture classes they assist. Additionally, such teaching will help stimulate undergraduates to consider their own research potential. Finally, SCUE believes that by occasionally incorporating their research into their teaching, graduate students will become more passionate teachers. In so doing, the atmosphere and learning environment of a recitation will be markedly enhanced.

Helping Students Make Informed Academic Decisions Major Advising Program (MAP)

The wide range of academic disciplines at Penn enables students to follow their interests in almost any field imaginable. Although this breadth of subject matter sets the University's students at a great advantage, many underclassmen find the limitless possibilities daunting. With so many options, SCUE has found that many freshmen and sophomores have trouble deciding which field of study best suits them. Compounding the issue is the fact that most underclassmen's experience with a certain subject is limited to their time spent in an introductory class. These large lectures are often not exemplary of upper level courses that they would take as a major.

With these issues in mind, SCUE intends to implement a new program which will help students make decisions about their major, with guidance from their peers. The Major Advising Program (MAP) will match an undecided freshman or sophomore seeking guidance with an upperclassman majoring in a field of the underclassman's interest. Through the pairing, this underclassman will be able to attend an upper level class and have his or her questions about the department and course of study answered by a fellow student. Our hope is that this hands-on experience and personal advice from a peer will permit underclassmen to choose their major with greater ease and with more knowledge and confidence. Although initially invented to assist students, MAP could also benefit smaller departments at the University. The structure of MAP would permit underclassmen to explore disciplines of interest beyond their own coursework. This could potentially lead many students to major in fields of study with which many freshmen and sophomores are unfamiliar, thus maximizing the vast resources available and lending greater security to smaller departments.

MAP will most likely be administered through a website which will describe the program and also permit interested upperclassmen to apply to become advisors. The website will include anecdotes from students explaining why they chose their major and what their experience has been since. These quotations should provide a convenient and lively glimpse into the various academic avenues one can pursue at Penn. SCUE, in conjunction with the College advising office, is currently working out the logistics of the website. SCUE sees the system and the website in their completed state being maintained by the advising offices at Penn.

Our hope is that this program will help students make critical decisions about their future, and will provide an innovative tool for the advisors looking to guide them. SCUE believes MAP has the ability to harness the value of hindsight and experience only upperclassmen can offer.

Course Evaluations

In a university with as wide and diverse a course offering as Penn, choosing classes can be an art unto itself. Before signing up for a class, students must consider many factors, including, but not limited to: interest in the subject area, timing, degree of difficulty, completion of the general requirement, completion of the major requirement, and last but not least, the slipperiest question of all: "What's the professor like?" Fortunately, the Penn Course Review, while certainly not perfect, does help students assess the quality of a professor by providing other students' input and evaluations *.

^{*} While SCUE invented and implemented the course evaluation forms, they are no longer under our purview. Over a decade ago, a separate organization spun off of SCUE and has since had sole responsibility for distributing, processing, and publishing the evaluation forms and results. The term "SCUE course evaluation form" is thus an all too frequently used misnomer.

At the same time, the current book format of the Course Review takes nearly a year and a half to publish, costs students ten dollars upon publication, and is not printed in large enough quantities to meet the demand of the entire student body. The delay in particular impairs students' ability to make informed decisions, since the Course Review is unable to keep up with new professors, new courses, and innovations made to existing courses.

By moving the Course Review online, the problems caused by the delay will be solved. Evaluations filled out by students in fall classes could be processed by advance registration for the following fall semester, and input on spring classes could be available early in the summer. Beyond making the information available to all members of the Penn community, this would allow incoming freshmen to learn about courses at Penn before first-semester registration. Furthermore, if the program proves successful, the capabilities of the Internet could allow the evaluations to be one part of a complete "center" for course information, with links to the course description, syllabus, and semester timetable. Moving the Course Review online should also allow for a more sophisticated and detailed presentation of the data.

It is important to note, however, that in the process of putting the Course Review online, SCUE would like to revamp the forms in order to suit all members of the Penn community as best as possible. We are deeply interested in hearing input from faculty, students, and administrators alike.

Preceptorials

Preceptorials are short, small, non-credit seminars generated by students and led by some of the University's most lauded faculty. The program is designed to foster discussion-based student-faculty interaction and learning for its own sake; to that end, there are no grades or tests. Students are emphatically encouraged to attend all meetings of the Preceptorial and to complete all assigned readings. This program was designed and proposed by SCUE in 1995 and has flourished since its inception.

Approximately thirty Preceptorials are now offered each semester, and many of them have upwards of seven hundred requests for enrollment. Most Preceptorials meet three times over the course of the semester, for 1-1/2 hours per session, but some are one or two-day trips. There are no more than 15 students in a Preceptorial, and they are open to students of any year or school. There is no fee to participate; all expenses, including food and travel, are paid. Thanks to work by students, registration for Preceptorials occurs through Penn In-Touch during advance registration, just as it would for a regular class.

Because of the growth of and demand for Preceptorials, SCUE is in the process of partially divesting itself of the Preceptorials program in order to provide adequate human resources. Preceptorials now operate, therefore, through a separate organization. While SCUE still funds Preceptorials, this immensely successful program should have separate funding in order to continue to grow and to meet student demand successfully.

Other Programs Similar to Preceptorials: The popularity of Preceptorials has spawned numerous similar programs across campus. Hillel, the Engineering School, the Joseph Wharton Scholars Program, the College House System, and other groups have begun creating small, studentinitiated, faculty-led seminars. SCUE encourages the development of such programs through these forums and others. Understanding the exceptional benefit of fostering extra-classroom contact with faculty members, SCUE believes that such programs strongly complement the SCUE Lunchroom and Preceptorials programs.

The overwhelming popularity of the Preceptorials program has also left many students unable to secure coveted places within a preceptorial. Thus, SCUE further recommends that departments consider offering their own version of Preceptorials: well advertised, broadly accessible seminars with standing faculty. Specifically, those fields which are narrowly accessible for students without the appropriate backgrounds (sciences, professional fields, etc.) should consider increasing their participation within the Preceptorials program, or offering similar opportunities to the undergraduate population at Penn.

New Student Orientation

In conjunction with the administration and the Undergraduate Assembly over the past year, SCUE has sought to fundamentally reshape New Student Orientation (NSO). SCUE's motivation has been to turn what was once a hectic, relatively unorganized process into a cohesive period of time that can prepare freshmen for many aspects of their lives at Penn and in Philadelphia. To this end, SCUE has lobbied for and will continue to lobby for emphasizing Penn and Philadelphia's resources, communities, and histories as a proper orientation to life at Penn.

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In the fall of 1999, a joint SCUE/UA proposal to the Council of Undergraduate Deans (CUD) resulted in the campaign to expand and revamp the existing NSO. The following is the proposal made to CUD, which SCUE believes should continue to guide the process of NSO revision currently underway.

Objectives of NSO: SCUE believes that a successful NSO should leave freshmen with an understanding of both Penn and Philadelphia's resources, community, and unique history. The following is a list of objectives intended to help students gain a better perspective—academically, socially, functionally, and culturally—of Penn as an educational institution and the city in which we all live.

An Introduction to Penn

Academic Resources: One of the most difficult challenges upon arriving at Penn is learning how to take advantage of the wealth of resources and opportunities here. If students are to make the most of their experience at Penn, they must be provided with the appropriate tools to do so in the earliest stages of their education. To that end, SCUE believes the following objectives must be met during NSO.

In order to integrate new students fully into academics at Penn, the advising system must accomplish three major tasks. First, advisors must take time to inform students about requirements, and to apprise them of valuable educational opportunities students might not otherwise recognize. Advising should not only help students know how to meet degree requirements, but should empower them academically by helping them build a cohesive and meaningful experience. Without the sense of confidence and command over their education that result from sound advising, students cannot make the most of their time at Penn. The groundwork for such must be laid during NSO.

Second, advisors should help students understand the role of the advising system, and how to best make use of it—two daunting tasks for students new to Penn. Finally, advisors should begin to build advisor-student relationships which can extend throughout a student's entire undergraduate career.

The library system is among the most extensive in the country; consequently, proper training is necessary in allowing students to navigate it and take advantage of it most successfully. While an intensive tutorial on the library system would be inappropriate during NSO, students must at least be cursorily introduced to the library. Students should learn about available research resources and tutorials so that they are comfortable with the mechanics of research from the outset. Students should also be made aware of the available study resources they can use throughout their Penn career, including study spaces, computers, and group meeting spaces.

Technology is another resource that requires a brief introduction during NSO. In order to help students make use of the technological advantages Penn offers, NSO should successfully introduce students to communal computer resources, inform students of the computer technical assistance available to them, and begin to introduce students to how technology can enhance learning.

History and Community: The sooner students understand Penn's rich history and distinguished and lively traditions, the sooner they will feel a part of Penn's community. For this reason, SCUE believes that NSO should not only introduce students to academic resources, but also to the spirit and the character which define Penn.

NSO should explain to students the history of higher education, particularly as it relates to Penn's growth as a university. In order to appreciate our university, students should learn the historical facts, nuances, and traditions which make Penn unique. The Penn community at large can be even further strengthened by building community within College Houses during NSO.

At the same time, it is imperative that NSO help students explore the different and overlapping communities which exist at Penn. NSO provides a valuable opportunity for students to begin to appreciate, meet, and exchange with other students from different cultures and backgrounds. New students should also be exposed to the myriad clubs, organizations, performing arts groups, and sports teams Penn boasts.

NSO can also strengthen the academic atmosphere at Penn by instilling in students a sense of academic community within their school and the University from the beginning. Academic integrity should also benefit from such an effort.

Finally, Penn should use NSO to instruct students about the physical campus community and the safety issues within it.

An Introduction to Philadelphia

Penn students should not constrain themselves to the borders of Penn's campus. In order to make the most of their education at Penn, students must take advantage of our urban setting, and the many resources and opportunities Philadelphia has to offer. Ultimately, students are not only members of the Penn community, but also citizens of Philadelphia. NSO can help students locate the resources and gain the tools to become productive citizens and to incorporate the richness of Philadelphia into their education.

The geographical comfort zone students define during their first few weeks at Penn often dictates to what extent they move beyond Penn's borders to take advantage of Philadelphia in the future. In order to broaden that comfort zone as much as possible, NSO can serve as an introduction to Philadelphia as well as Penn. From museums to symphonies to First Fridays, Philadelphia boasts a number of cultural opportunities with which students can be made familiar during NSO. A rich array of neighborhoods and communities comprise Philadelphia, and NSO is an ideal time to introduce students to them as well. Finally, NSO can show students the various retail and social opportunities across the city. Yet none of this will be successful if NSO does not help students understand the various transportation options across the city and how they work. If students do not feel comfortable navigating the city, they will not take advantage of the many resources here.

We are fortunate to live in a city with a unique and important history, an appreciation of which can be cultivated in students during NSO. Students can learn about Philadelphia's history and what gives the city its character today. Knowing the city and its origins will not only make students more excited about living here, but will strengthen the sense of community and attachment students feel towards both Penn and Philadelphia.

Fundamental Problems in the Old NSO

In reviewing past orientation schedules, it seemed that virtually all of the above objectives were addressed. However, much research and a compilation of personal experiences proved otherwise. The most important mission of the new NSO program should be to meet these objectives in an effective way. The following were identified as the central problems which previously prevented NSO from meeting the objectives:

1. NSO had a "rushed" feel to it.

This problem primarily stemmed from only four days being allotted for orientation. Attempting to fit everything into such a short period of time resulted in students (and parents) having too much to do at one time, and consequently not reaping the benefits of many valuable programs and resources. A primary goal of extending NSO was to reduce the amount of stress and to maximize the focus on important issues. For this reason, we do not want to expand the time to implement more university-sponsored programs, but rather to give students ample time for all of the activities and tasks that move-in and adjustment to Penn require. If NSO programs are simultaneously redesigned along the guidelines of (3), SCUE believes this can be accomplished.

2. Schedule NSO programs during "pre-academic" time.

The four-day orientation period forced the extension of orientation events into the academic year. This resulted in sparse attendance, failure to meet objectives, and therefore, inadequate preparation for the freshmen. In order to ensure students can give their full attention to orientation programs, the programs must be offered at a time during which the students can focus on them. Once classes begin, both statistics and our own experiences show that participation drops dramatically.

The programs themselves were short and segmented activities.

We believe that this was the cause of the "boring program" and "what was the point?" reactions to NSO reported in the VPUL surveys. This can be solved by designing programs which are cohesive and integrated, and which can be successfully institutionalized. The Philadelphia Walking Tours are an example of a program which, when successfully designed and executed, will allow for many objectives to be met at once in an enjoyable and effective way.

4. Students were not developing meaningful and lasting intellectual relationships.

NSO did not seem to foster either intellectual relationships or exchange. This is not to say that social relationships are undesirable, but that intellectual interaction is an equally necessary component of NSO. NSO should become more academic in nature, so that there is a substantial foundation for cultivating such exchange. Heavily infusing advising into orientation will help this, as well as implementing the proposed Proseminars program.

5. Coordination and implementation needed to be improved.

As with any large event, without good coordination and imple-mentation, NSO cannot be successful. Two suggestions surfaced from RA, GA, and orientation staff reports, as well as from students: first, more attention needs to be paid to the details of orientation; and second, certain responsibilities need to be reallocated so that weight does not fall so heavily on a select group of people.

Event Schedule

The following is the SCUE/UA proposed event schedule. We support the Orientation design that was implemented for the Class of 2004, but are including this because SCUE believes it exemplifies additional methods of addressing NSO objectives, and further ameliorating the aforementioned problems.

Day 1: Theme: Move-In

Day 2: Theme: Welcome to Your School

Day 3: Theme: Philadelphia—The City of Brotherly Love Day 4: Theme: West Philly and Life around Campus Day 5: Theme: Welcome to the University of Pennsylvania Day 6: Theme: College Trip—Making Real Bonds

Day 7: Theme: Bringing It All Together

[Ed. Note: See www.upenn.edu/almanac/v47/n28/SCUE.html for the full proposed event schedule for NSO, including the daily Events as well as the Principles and Objectives for each day.].

Remarks on the Newly Revised Orientation

SCUE supports the many innovations and alterations made to NSO academic programming. The extension of the Penn Reading Project is a valid means of introducing students to the resources of Penn's faculty. Extended advising hours introduce the freshman class both to Penn's advising network and to the myriad courses and departments available at the University. SCUE further supports the development and implementation of NSO programs aimed at exposing freshmen to the research component of university work. Beyond introducing students to the resources of the library system,

NSO might include an introductory research experience similar to the Penn Reading Project, in order to provide a balanced picture of the academic experience at Penn. Regarding Penn's community and culture, SCUE supports extended cultural arts programming throughout the NSO period. Further, Proseminars are a valuable means for initiating dialogue within and across the various communities at the University. Obviously, social programming and unscheduled periods are ideal for allowing Penn freshmen to develop their own friendships and social networks.

NSO should also contain substantive content on the history of Penn and its system of higher education, which will in turn provide a valuable context for choosing classes and guiding a Penn career. We believe that the "roadmap" tours, with further revision, can help accomplish this. Likewise, NSO should elaborate on the history, community, and resources of the city of Philadelphia. In this vein, SCUE helped organize and continues to encourage the use of NSO's walking tours of West Philadelphia and Center City.

SCUE's guiding principle is ensuring that freshmen have the ability to turn a large city and school into a personal experience in the best way possible. Through coming to know the city and the University intimately, Penn freshmen will learn how to make the best use of both and to broaden their Penn experience as much as possible, from the outset. SCUE enthusiastically supports the recent changes made to the NSO schedule and event planning, while hoping that all future reforms and changes will take into account the principles herein articulated.

Conclusion

A major theme encountered throughout this White Paper is the notion of the universal Penn experience. We do not advocate, in this broad treatise, reforms intended to better the quality of a single department, or to expand the resources of a lone program. Rather, we ask the administration, the schools and the faculties to collectively engage in a process of revision and evolution to service all undergraduates. By bettering educational offerings, programs and services across the full expanse of pre-baccalaureate programs, we better the University as a whole.

We actively encourage departments and schools to seek out good models of service to students by observing how other groups at Penn manage their affairs. Just as there is a "Best Practices" award given to offices which administer their financial and business affairs well, there should be notoriety given to faculty, departments, programs and centers which fulfill their undergraduate mandate, be it through teaching, undergraduate research exposure or the like, beyond the normal call of duty. We have attempted to begin this precedent by publicly naming those who we believe have best exemplified this norm. We hope this trend continues into the future.

SCUE is also excited at the ever-growing attention paid to undergraduate issues by the University's central administration. Creation of organizations such as the Council of Undergraduate Deans and the Provost's Undergraduate Working Group show the high priority campus leaders give to future generations of Penn alumni. We look forward to working with these groups, and the numerous other ad hoc committees which affect undergraduate life, in an effort to build on recent progress.

In closing, we firmly believe that creating a true campus culture which respects innovative methods of teaching and learning requires a commitment to extending the traditional boundaries of education outside the classroom. In the future, we hope to continue this trend in hopes of ever bettering the tripartite Pennsylvania mission of learning, research and service.

2001 White Paper on Undergraduate Education The Student Committee on Undergraduate Education

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Day 1—Theme: Move-In; Events: Students move in. Principles and Objectives: Reduce the "rushed" nature of NSO by giving students one uninterrupted day to move in, so that they can focus on orientation events later. Day 2—Theme: Welcome to Your School; Events: Students attend Dean's Meetings, meet with advisors, and participate in university-sponsored activities. Principles and Objectives: To lay the groundwork for students to get the most out of their education/experience. This will also be an opportunity for students to begin building strong relationships with their advisors.

Day 3—Theme: Philadelphia—The City of Brotherly Love; Events: Students will explore the city by taking a historical walking tour of the city and by participating in a scavenger hunt or other activity with their hallmates. SEPTA will be used as a means of transportation. Principles and Objectives: Fully develop the community of the hall. Enable students to learn about Philadelphia's resources, to become immediately integrated into Philadelphia, and to see how Philadelphia plays an important role in a Penn education.

Day 4—Theme: West Philly and Life around Campus; Events: Students will attend a Clark Park Festival which will feature local merchants as well as booths sponsored by community service organizations for which students can volunteer. Principles and Objectives: Enable students to learn about West Philadelphia's resources, to become integrated into the West Philadelphia community, and to see how West Philadelphia plays an important role within a Penn education. Day 5—Theme: Welcome to the University of Pennsylvania; Events: A live SCUE "roadmap" of the campus. Students will learn about the resources, history, nuances, and traditions of Penn on a tour led by Peer Advisors. Students will also participate in the Penn Reading Project, attend the Safety Workshop, and take placement tests. Principles and Objectives: Better acquaint students with Penn's campus and resources, foster intellectual discussion through the Penn Reading Project, and equip students with basic safety skills.

Day 6—**Theme:** College Trip—Making Real Bonds; **Events:** Students choose to go hiking, rafting, shopping, or on one of several other day-long trips. This can be arranged based on interest among students in the same House or a grouping of several halls.**Principles and Objectives:** Enabling students to develop meaningful and lasting relationships. This trip can be used to meet various objectives in a concentrated fashion.

Day 7: **Bringing It All Together; Events:** Students attend Penn Life Sketches, take part in College House activities, attend a fair of all the student organizations, and Convocation.**Principles and Objectives:** Enabling students to better understand and to become a part of the Penn community.