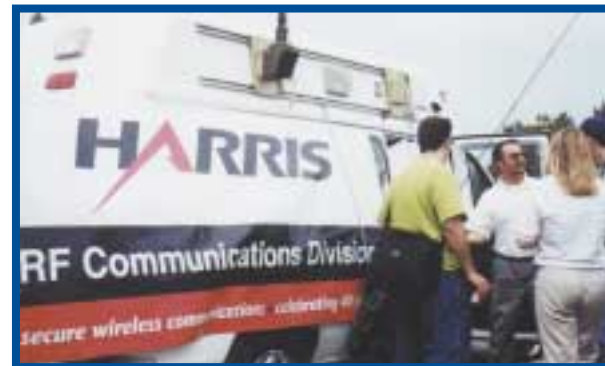




Students, faculty and staff came out in numbers to enjoy good food, volleyball and conversation at this year's Fall picnic, sponsored by the EAA, UB Engineering and the Engineering Student Association. The picnic provided an educational opportunity as well. The Harris Corporation provided a hands-on demonstration of two of its new radios. Students learned how to use wireless email with the radios and were able to test their capabilities by communicating with them across the commons. Students also provided demonstrations of their own, including this year's prize winning clean snowmobile.



UB ENGINEERING CALENDAR

March 29
Dean's Scholarship Reception and Music Event

April 20
Order of the Engineer Student Spring Picnic

April 26-27
Dean's Council

May 12
Engineering Commencement

UB ENGINEERING



BUFFALO engineer

2000-2001

School Launches \$18 Million Campaign

Campaign General Chairman, **James W. McLernon** (IE, 1950) and Dean Mark H. Karwan announced on October 20, 2000 the public phase launch of the comprehensive campaign for the School of Engineering and Applied Sciences. The announcement was made at the campaign leadership meeting held on campus that brought together all the volunteer and staff leadership representatives of all the university schools and units. The kick-off heralded UB's public campaign phase for the next three years, and ended the quiet phase of the last four years.

The comprehensive campaign for the School of Engineering and Applied Sciences has set a goal of \$18 million, Chairman McLernon announced, with \$12.6 million in gifts and commitments secured to date. "I am proud to chair this campaign for the benefit of the students and faculty of the Engineering School," McLernon said. "When Mark asked me three years ago, I thought about it and couldn't say 'no'."

"This campaign marks the first time the university has appealed to its alumni and friends for support on this scale," he continued. "Other large private and public universities have conducted campaigns of this size in the past. This is our time to give back and help our school gain in stature and quality."

continued on page 3

Dean Karwan on the Campaign Trail

Dean **Mark H. Karwan** announced the results of four years activity in the quiet phase of the comprehensive campaign for the School of Engineering and Applied Sciences, and cited this as being one of the most gratifying parts of his job. With \$12.6 million of the \$18 million goal already committed, Karwan said he has learned much from successful alumni and corporate partners of the school, and continues to do so. After four years in the quiet phase, the campaign Kick-Off announcement heralds the beginning of the public phase of the next three years.

"While the growth of our development activity has been dramatic over the last six years, and our campaign progress over the last four years has been outstanding, the personal relationships I have formed with these donors and supporters have been especially rewarding and satisfying for me," Karwan said.

Karwan also credited President Greiner and his team for UB's commitment of resources to development in the schools, culminating in the first School of Engineering and Applied Sciences based development officer beginning in Fall 1994. "Our development team, led by Jim Seng, gets me off campus to corporate receptions we have held at Moog, Inc., National Fuel, and Calspan/Veridian."

continued on page 2



What's Inside

Generation to Generation Campaign -2-

Faculty News -14-

New VR Technology -15-

Alumni News -18-

Class Notes -20-

Rae and Mayne Honored at 2000 Convocation Ceremony

Two professors in the Department of Mechanical and Aerospace Engineering, **William J. Rae** and **Roger Mayne**, were honored at the 2000 Convocation.



Rae (c) is congratulated by President Greiner (r) and Dean Karwan (l)

Rae was awarded the title of Distinguished Teaching Professor by the State of New York Board of Trustees. This title represents the highest faculty rank in the SUNY system.

Rae joined UB's Department of Mechanical and Aerospace Engineering in 1983 after a thirty-year career as a research scientist and key engineer with the former Cornell Aeronautical Laboratory, which later became the Arvin/Calspan Advanced Technology Center. Since then, he has been honored with numerous awards for his dedication to engineering and engineering students. In 1993, he received the SUNY Chancellor's Award for Excellence in Teaching. He was also given the Most Helpful Teacher Award by the UB chapter of the American Institute of Aeronautics and Astronautics (AIAA), as well as the Carl Naish Award from the Students Association

continued on page 14

Reinig Honored with 2000 Engineer-of-the-Year Award

The UB Engineering Alumni Association has selected **Irvine G. Reinig II**, P.E. (BS, Civil Engineering, 1969; MS, Civil Engineering, 1970) as the 2000 "Engineer of the Year." This award is presented annually to a UB Engineering alumnus who has distinguished him or herself in alumni, community, business and professional activities.



Reinig is a lifelong resident of the Buffalo area and has made a number of important contributions to its commercial and environmental development during his thirty-year career in civil engineering. He began his career working for the NYS Department of Transportation and ran his own geotechnical instrumentation business for nine years. During that time he became a licensed professional engineer and moved on to the U.S. Army Corps of Engineers (Buffalo District) where he held positions as a

continued on page 19

Buffalo Engineer
External Affairs
SEAS Dean's Office
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University at Buffalo
Buffalo, New York 14260



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Praises for Enginet[™] from Around the Globe



"I need a master's degree in engineering for my job as an assistant professor in Architectural Technology. No universities

within commuting distance was a real dilemma. The UB professors [were] great about accommodating my off-campus needs. I strongly recommend Enginet."

-**Dave Hultenius**, First All-Enginet Graduate



"I live in a remote, earthquake-prone island about 3,000 miles from UB. Right after I graduated with a bachelor's

degree in Civil Engineering, my dream always was to have a master's degree in structural and earthquake engineering. But this was too far for my reach at that time. Now, thanks to Enginet, my dream is coming true."

-**Jose Lockhart**, a civil engineer who works as a private structural designer in the Dominican Republic



"When my employer relocated me for the third time in three years I began looking for a graduate program that

was flexible to the traveling business person. After talking with representatives from 50 different colleges, I found Enginet. Have you ever heard the phrase "Seek and you shall find?" Well, I have found. Most other programs require several students at each remote site. Not Enginet. Enginet makes it possible to pursue your graduate dreams. My favorite part is that the lecture information comes right to my door. I save time, money and don't get stuck in traffic. What's not to like?"

-**Joanne Prentiss**, a GM Manufacturing Engineer in Atlanta Georgia

EngiNet[™] Faculty Nationally Recognized

Congratulations to Ramesh K. Shah, one of our EngiNet professors and a senior staff research scientist at Delphi Harrison Thermal Systems. He has been awarded the Heat Transfer Memorial Award by The American Society of Mechanical Engineers (ASME) for his significant contributions to the development of comprehensive design theories for heat exchangers, the critical assessment of worldwide literature and research in his field, and education worldwide

Spring 2001 EngiNet[™] Courses

School of Engineering and Applied Sciences:
EAS 522 Principles of Engineering Management II

Civil, Structural, and Environmental Engineering:

CIE 424 Computer-Aided Design in Civil Engineering
CIE 531 Design and Construction of Earth Structures
CIE 543 Water Quality Modeling
CIE 617 Advanced Finite Element Methods
CIE 619 Structural Dynamics and Earthquake Engineering II

Electrical Engineering:

EE 519 Industrial Control Systems
EE 529 Introduction to Electromagnetic Compatibility
EE 540 Energy Conservation in Motor Drive Systems

Industrial Engineering:

IE 504 Facilities Design
IE 573 Discrete Optimization

Mechanical and Aerospace Engineering:

MAE 522 Heat Exchanger Design
MAE 541 Topics In Finite Element Analysis
MAE 542 Engineering Applications of Computational/Fluid Dynamics
MAE 552 Heuristic Optimization
MAE 510ANM Analytical Methods

For more information and to receive course descriptions and registration materials, contact Marge Hewlett, EngiNet Administrator (716) 645-2768 ext.1106 or mhewlett@eng.buffalo.edu. You may also visit us at <http://www.eng.buffalo.edu/EngiNet>.

In Memory of Nicole Klanian

Nicole Kristen Klanian, a graduate student in the EngiNet program, passed away this Fall after a lengthy battle with asthma and related illnesses. She was 25.

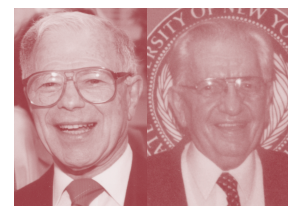
Miss Klanian graduated from Clarkson University in 1998 with a degree in civil and environmental engineering. She was pursuing her master's degree in environmental engineering at UB via the EngiNet program. Miss Klanian was a member of the Chi Epsilon and Delta Zeta organizations.

Despite a seven year battle with asthma and related illnesses, she never lost her spirit or concern for others and remained cheerful and optimistic until the end. Fiercely determined to finish her master's program, "Nikki" would watch videotapes of classes even after she became too weak to hold books.

Known for her sparkling blue eyes and friendly manner, Miss Klanian was emphatic about organ donation and loved soccer and Broadway musicals.

Fogel and Strauss Campaign Honorary Co-Chairs

Joining the Dean and General Chairman McLernon on the campaign team as Honorary Co-Chairmen are **Charles M. Fogel** and **Howard E. Strauss**.



C. Fogel (l), H. Strauss (r)

Charlie joined the faculty at the school's inception in 1946, and Howard in 1948 in the ME department. Over the years, these two men served the school in many capacities, and taught and advised thousands of alumni. "Mark and Jim Seng tell me they can't count the number of former students who still remember our working together, giant slide rule and all," said Charlie. "I stay in touch with many former students - it's easy today with e-mail ... We are very proud of how they met those and succeeding challenges."

Charlie also wrote the 50th Anniversary book of the UB School of Engineering and Applied Sciences for the 1996 anniversary year celebration.

Howard echoed his sentiments about their tenure at the university. "I guess Charlie and I have become elder statesmen of the school," he said, "but I don't feel like it - I still play tennis twice a week! ... I hope our alumni feel they were well

prepared in engineering principles by our faculty. Mark and Jim tell me they hear good things for the most part, so I guess we did our jobs."

Both Charlie and Howard are excited about the campaign and what it means for the future of UB. "Howard and I are happy to help Mark and his team raise funds from alumni and friends of the school," Charlie said. "Helping others has always been my, and I hope their, guiding principle; and the School needs our support."

Both also noted the timeliness of the campaign. Howard said, "Charlie and I have seen tremendous changes over the years at UB and the School, and the time seems right for this campaign. Mark Karwan and his team of faculty and staff are leading the school very well."

"The success of this campaign comes at a crucial time after years of funding cuts to UB at the state level. The school needs to pursue new revenue sources like this campaign," added Charlie.

You can reach Charlie at <cmfogel@eng.buffalo.edu> and Howard at <hstrauss009@yahoo.com>.

School Launches \$18 Million Campaign

story continued from cover

The SEAS campaign was launched as part of the overall University at Buffalo "Generation to Generation" comprehensive campaign with a goal of \$250 million. To date, \$125 million has been pledged across all schools and units. McLernon serves as part of the overall campaign executive committee along with Jeremy Jacobs, Sr., (SOM, 1960) William Niese (Law, 1961), Frank McGuire (SEAS, 1953), Erma Hallett Jaekel (Law, 1936), and Robert Rich, Sr. (SOM, 1935). "I think our campaign in the School of Engineering and Applied Sciences is a perfect example of what we mean by our 'Generation to Generation' theme," stated McLernon. "Charlie Fogel and Howard Strauss were founding members of the School's faculty, and Mark Karwan is our Dean today. Charlie, Howard, and I believe strongly in Mark's leadership, and he and his team are leading the school in areas where it needs to go."

McLernon also cited the faculty and staff of the school for

special mention. "I think the work of Denny Malone and his team of Vice Chairs in the faculty and staff campaign was outstanding. They reached the more than 200 people that work in the school, and raised more than \$2.6 million, with 80% of the full-time faculty giving to the campaign. It is very important that we can say to others in the campaign that all those who work at the school have been solicited and strongly support this drive."

The campaign goal for the School of Engineering and Applied Sciences of \$18 million is comprehensive and will count all types of gifts and commitments: cash, securities, pledges, equipment, deferred or planned gifts and trusts, and real estate. "I and many donors have found that working with the Development professionals at the university has enabled them to take advantage of tax and estate planning that includes philanthropic support for the School in this campaign, and still provide for their heirs and beneficiaries," Jim McLernon continued.

Faculty & Staff Campaign Success

Dr. Dennis P. Malone, distinguished service professor and Director of Engineering Physics in SEAS, publicly announced at the Kick-Off event on October 20th, the results of the effort he led as Chairman of the Advance Gifts.

The campaign was conducted in 1998 among the more than 200 members of the School's faculty and staff. Denny stated that more than \$2.6 million was contributed and pledged by 118 donors. Among full-time faculty of the School, Malone said the percentage of participation was an "outstanding 80%."



"I think it is very important for us to be able to say to our prospective donors that we who work at the School have been asked to give ourselves, and that the majority of us have given at some level. In our meetings we emphasized that we need a high percentage of participation, especially among the faculty."

Malone also shared the success with the eight individuals who served with him as Vice Chairs, each representing a department or group within SEAS:

Ms. Jackie Cramer - Dean's Staff
Dr. Colin Drury - Industrial Engineering
Dr. David Kofke - Chemical Engineering
Dr. Pao Lo Liu - Electrical Engineering
Dr. Dale Meredith - Civil, Structural, and Environmental Engineering
Ms. Cathy Muscarella - Clerical group
Mr. Ken Peebles - The Shops & Computing Node Staff
Dr. William Rae - Mechanical & Aerospace Engineering

Dr. Stu Shapiro - Computer Science & Engineering

Denny also recognized the exceptionally generous commitment of \$2.5 million (at a minimum) made by one of his faculty colleagues, and made anonymously. "The anonymous gift by one of our faculty is the largest in the SEAS campaign to this point, and has given us tremendous momentum in the campaign for the School. A gift of this size by our faculty member speaks loudly and with credibility to our alumni and friends."

Dean's Council Meeting

The Council applauds the energy, vision, and increased activity of the Office of Career Planning and Placement. The numerous career fairs, large number of companies (>175) recently on campus, and the dedication of a full-time staff member to SEAS were cited. The Council would like to see further improvement in the facilities used by the Career Planning and Placement Office, to more adequately reflect the importance of this unit.

The Council received a demonstration of the new web-based placement system and was impressed with the modernization of our industry/student matching process for internships and co-ops. The Council noted that the databases in Career Planning and Placement and the SEAS Student Work Experience Programs should be tied together and should include the Alumni database, and all should be easily accessible from the UB homepage.

The Council believes SEAS has many opportunities available for multi-disciplinary projects and notes the potential of two of UB's newest Centers, the NYS Center for Engineering Design and Industrial Innovation and the Institute for Lasers, Photonics & Biophotonics.



Leroy Runk, second from left. New Member of Dean's Council

2000-2001
Dean's Council

Joseph P. Allen, Ph.D.	James W. McLernon, B.S.'50
Clement R. Arrison Jr.	Lawrence L. Peckham, B.S.'69, M.B.A.'74
Richard A. Aubrecht, Ph.D.	Charles G. Rader, Ph.D.'74
Michael J. Cadigan, B.S.'79	Hope Reed
Ephraim Garcia, Ph.D.'90	Lee Runk, B.S.'62
Robert H. Goldsmith, B.S.'51	Hatim A. Tyabji, M.S.'69
Steven L. Lerner, Ph.D.	William L. West Jr., B.S.'67, M.B.A.'69
Stephen E. Lubniewski	
Michael Majdalany, B.S.'76	
Kenneth A. Manning, B.S.'74, J.D.'77	

Great Lakes Program Appoints New Director

UB's Great Lakes Program (GLP), one component of a multi-campus research project that compiles and distributes information about the Great Lakes, has named Dr. Joseph Atkinson as its new director.

Atkinson, a professor in the Department of Civil, Structural and Environmental Engineering, has a lengthy history of supervising environmental research. He is involved with UB's Environment and Society Institute and the Integrated Graduate Education and Research Training Program in geographic information sciences, and heads the university's Environmental Fluid Mechanics Laboratory. Atkinson also served as UB's GLP interim director during the 1998-99 school year.

At his new post Atkinson is looking to extend awareness of the program's activities to the rest of the university. "The lakes are a really great system to look at. I think it's a worthwhile endeavor and I appreciate the opportunity to be here and play a role in that."

MCEER Appoints Higgins to Transportation Research Post

The Multidisciplinary Center for Earthquake Engineering Research (MCEER) has named Michael S. Higgins, P. E., senior program officer for transportation research. Higgins will coordinate the center's Highway Project, which is sponsored primarily by the Federal Highway Administration (FHA).

Higgins, a graduate of UB, joins MCEER from the Civil Engineering Research Foundation (CERF) in Washington, D.C. where he served as project manager for the Highway Innovative Technology Evaluation Center (HITEC). He was named CERF's "Employee of the Year" in 1998.

MCEER's Highway Project seeks to improve the seismic performance and reliability of the nation's highway system. The project involves more than 40 investigators from over 20 institutions throughout the United States. George C. Lee, Ph.D., Samuel P. Capen Professor of Engineering and director of MCEER, serves as project director.

Bloebaum Chair Appointment

Dr. **Christina Bloebaum**, Chair of the Department of Mechanical and Aerospace Engineering, has been named the Chair for Competitive Product and Process Design in the newly established New York State Center for Engineering Design and Industrial Innovation (NYSCEDII).



The new chair and center are dedicated to advancing new integrated approaches that allow for rapid development of cost-and-performance-optimized designs. They are viewed as major assets to promote alliances between the existing computational and engineering strengths at UB and those in local and regional industry.

Those who support the center believe it will prompt significant economic development and growth. Sixteen local companies wrote letters on its behalf, describing in detail how important these new resources would be to their continued commercial success.

Bloebaum was appointed by Mark Karwan, Dean of the School of Engineering and Applied Sciences, at the recommendation and approval of the Honorable Sheldon Silver, Speaker of the New York State Assembly. Silver guided the legislation to form NYSCEDII and to provide the \$175,000 necessary to fund this chaired position.

Karwan stressed the importance of the chair to the future of UB engineering and the region. "This chair will provide the university with an opportunity to enhance its growing strength in the area of advanced engineering design and to become a leader, not just regionally but nationally in this critical technology for the 21st century." He believes Bloebaum's experience makes her the right person to perform this vital role. "With her proven track record of dedication and accomplishment in this area, I am confident that Dr. Bloebaum will lead the center to a level of international distinction."

Engineering Alumni Association CLASS NOTES

Joint Sewer Agency in Paducah, KY.
Thomas J. Gukelberger (1988 BS ASE) has recently joined Price Waterhouse Coopers as a principal in their operations strategy practice. He resides in Melrose, MA with his wife Jennifer.
Jonathan M. Hager (1987 BS ME) and his wife Dolores are proud parents of Kelsey Ann, born November 1999.
Michael A. Jackson (1980 BS, 1983 MS, 1992 PhD EE) has been associate professor of Microelectronic Engineering at the Rochester Institute of Technology from 1986 to the present.
Thomas E. Melodick (1986 BS CE) was promoted to development manager for Latin America at Shell Chemical Company.
Carl R. Mende (1984 BS ME) manages the Buffalo office of Lawrence-Angus Controls,

a manufacturing firm covering Upstate New York.
Randolph W. Rakoczynski, P.E. (1980 MS Civil) is currently president of the New York State Society of Professional Engineers.
Thomas F. Shewan, P.E. (1986 BS ME) is employed as the State University system engineer by the Florida Board of Regents. He received an MBA from Florida State University and his Professional Engineering license in 1993.
Joseph C. Slater (1989 BS, 1992 MS ASE, 1993 PhD ME) was promoted last September to associate professor at Wright State University in Dayton, OH.
Eric R. Stegman (1986 BS IE) is practice director for Distributed Computing Assessment Services, Gartner Group.
Kyle F. Swierski (1989 BS CIE) is employed at Acres International Corp. and has worked on

projects in the U.S., Peru, Bolivia, Costa Rica, and Belize.
1990s
Michael A. Gwin (1990 BS ME, 1992 MS ME) has been with Corning Inc. for more than seven years and is currently working on Project Engineering and Project Management.
James W. Harris (1990 BS CE) when he's not working on his golf swing, is process control coordinator, leading the implementation of new safety system design practices for UOP.
William O. Peck (1996 BS CE) is a process engineer at URS Greiner Corporation in Buffalo, NY.
2000
David J. Cusano (2000 BS ME) at the DaimlerChrysler, Toledo, Ohio assembly plant, he is a vehicle engineering wind and water engineer.

UB Alum Funds Minority Fellowship in Graduate Engineering Program continued from page 2

Stone said that he established the fellowship simply because he wanted to help someone get an education, but he's happy that it will help further the ongoing growth of his alma mater. "As part of one of its first graduating classes in engineering, it just makes me feel good to see that UB is growing," he said, "and so proud that the engineering school is becoming nationally recognized."

Stone's career with GE spanned four decades, during which he rose from an engineer at Knolls Atomic Power Laboratory, where he worked on nuclear power

plants for the Navy, to the Vice President of the company and an elected member of the prestigious National Academy of Engineering. During his career, he worked with a number of influential figures, including the "father of the nuclear Navy," Admiral Rickover, and the present Chief Executive of GE, Jack Welch.

Stone retired in 1987, but continues to consult for various utilities and some Department of Energy facilities. He now lives with his wife, Joan, in San Jose, California.

UB Joins Upstate Alliance to Expand Local Industry

The University at Buffalo has joined a new alliance of upstate New York education, industry and government partners that aims to further economic prosperity in the region.

The Upstate Alliance for Innovation has received a two-year, \$600,000 National Science Foundation grant to enrich entrepreneurial efforts in the region. UB will cooperate with two other universities, the Rochester Institute of Technology and the University of Rochester, to lend expertise to the project and track records in technology development.

The mission of the alliance is to create a regional community of innovators to help accelerate the commercialization of their discoveries and technologies. Its key goals are to create more collaborative research between alliance schools and small-

to mid-size upstate companies and to create 10-15 new firms in the region, including spin-offs from its partners' research.

Jerry McGuire, director of technology transfer and licensing for the UB Business Alliance, predicts that the project will "raise invention disclosures and patent applications by 20 percent."

To reach this goal, the alliance will create a cohesive group of 100 innovators, to which UB and the other alliance universities will contribute. Deans at the universities will nominate faculty and technical staff members whose research has potential for commercialization and who have interest or experience in working with small companies.

VISIT OUR NEW WEBSITE AT www.eng.buffalo.edu/Alumni

Engineering Alumni Association CLASS NOTES

1949

Chauncey Weisman (1949 BS ME) is proud to announce that he has celebrated his 87th birthday and 63rd wedding anniversary in June 2000.

1950s

William J. Atkins (1952, EE) has retired from the Defense Department and is a volunteer counselor for SCORE (Service Corps of Retired Executives) with small businesses.

Carl H. Bauer (1959, ME) was appointed director of engineering at Cooper Turbocompressor in Cheektowaga, NY, in July 1999.

Anthony J. Chimera (1952 BS EE, 1959 MS IE) has retired from GA Tech Research Institute consulting with Lockheed Martin on F22 program.

Horst W. Klussmann (1953 BS ME) is retired but is a consultant at General Electric Co., Lynn, MA.

Philip H. Meldrum (1950 BS ME) retired on June 1999 after 23 years as Bates College plant engineer. He is still working part-time on a few projects.

Richard F. Schneeberger (1950 BS EE) has been retired from Calspan Corp. since 1990 where he worked from 1953-1990 and before that at Wurlitzer from 1950 to 1953.

Kenneth O. Young (1954 BS MS) is employed by Lexis-Nexis in Washington, D.C., developing knowledge management programs.

1960s

Delwyn G. Arnold (1966 BS EE) is retired. He is an independent consultant for computer applications in small businesses and non-profit organizations.

David G. Conlin (1965 BS CE) has been elected to the Board of Directors of the Massachusetts Moderators Association. He is town mediator for the Town of Nahant, MA. David is a partner in the law firm of Dike Bronstein Roberts & Cushman, Boston, MA.

Daniel J. Feeney (1969 BS CIE) is project manager supervising the design and construction of a Ritz-Carlton Hotel near Vail, CO.

Anton Gilson (1960 BS EE) is director of engineering at Quality Measurement Systems. **Donald W. Gray** (1961 BS ME) is retired from General Motors and has founded Gray International, a consulting company focusing on new business development.

Karl A. Kugler (1962 BS ME) is retired as superintendent of Power and Utilities Department at Burns Harbor Plant of Bethlehem Steel Corp. He plays the zither throughout eight states at clubs, festivals, symphony soloist and private parties, as well as on TV and radio appearances.

Alan J. Moorman (1963 BS EE) is president of Integrated Technologies, this year they will ini-

tiate a unique computer simulation study for mobile hydraulic equipment related to load holding valves and control logic.

George W. Neuner (1965 BS CE) has been elected president of the American Association of Patent Law Firms. He is a partner in the firm of Dike Bronstein Roberts & Cushman, Boston, MA.

Peter S. Pawlak (1965 BS ASE, 1967 MS, 1970 PhD ASE) is chairman of the Technology Department at SUNY College at Buffalo.

Lance E. Robson (1962 BS, 1966 MS CIE) is president of Robson Lapina Inc. which provides forensic engineering architecture scientist and fire investigation services throughout the northeastern U.S.

Steven Tsengas (1960 BS IE) received his PhD in November 1999 and was elected chairman and CEO of Ourpet's Company.

Imre G. Von Balinth (1969 BS ME) has been named manager of engineering as of August 1999 at MAC Products Inc. in Kearny, NJ.

1970s

Michael F. Dlugosz, P.E. (1978 BS EE) is vice president of engineering at Cannon Design in Grand Island, NY., an architecture/engineering firm with nine offices across the United States.

James A. Duncavage (1971 BS CIE) has been promoted to professor in the Department of Otolaryngology at Vanderbilt University, Nashville, TN.

Frederick G. Fedri, P.E. (1970 BS ME) is currently manager, Health Environment and Safety Communications and Training. His volunteer work includes the New Church building committee - post construction coordinator, and the Dallas Alliance for Minority Engineers middle school coordinator.

Gary V. Gottlieb (1973 BS CIE) is director, High Priority projects with the New York State Department of Transportation.

Paul G. Hammond (1972 BS CIE) has been with Massman Construction Co. (marine construction work) in St. Louis, MO for 23 years. Most of his work is with projects on the Mississippi River.

Fred A. Jacobowitz (1975 BS EE) is president of Oakleigh Software Services, Inc. involved in software development and project management.

Niles A. Kin (1971 BS, 1976 MS EE) is Canadian manager for CryoLife Inc., a Bio-Tech Company, market leader in human tissue processing for transplant and bio-adhesives.

William J. Kosina (1973 BS EE) is manufacturing manager at Great Lakes Technologies in Liverpool, NY. He was president of the Engineering Alumni Association in 1980 and a Board Member from 1978-1980.

Ronald W. Leta (1972 BS ME) is working for the US Navy, as supervisory machinery systems

engineer for the US Atlantic Surface Fleet.

Stanley Lew (1973 BS ME) is senior technical advisor with the Product Law Group of Michelin North America, Inc. in Spartanburg, SC. He is a 4th degree Black Belt and instructor in Judo at the Upstate Karate Family Martial Arts Center.

Anthony V. Lyons (1977 BS CE, 1981 MS CE) has been promoted to director of Paper Technology Development at IMERYS, Inc.

Timothy A. Meterko (1971 BS CE, 1990 MEng CE) is 25 years with Occidental Chemical in Niagara Falls, NY. He is currently responsible for outsourcing process development and manufacturing for Oxychem's Specialty Business Group.

James S. Moe (1970 BS ME) is new executive director of information systems at Cliffstar in Dunkirk, NY.

Daniel C. Oliverio (1978 BS EAS) has earned his MBA and Juris Doctor degrees from UB. He is a partner in Hodgson, Russ, Andrews, Woods & Goodyear, LLP in Buffalo, NY. He is also a member of the Board of the UB Business Alliance and The Center for Industrial Effectiveness.

Lawrence S. Segal (1975 BS, 1976 MS EE; 1979 PhD CE) is currently a member of the research staff at M.I.T. Lincoln Laboratory.

Ronald J. Watson (1978 BS CIE) is president of R. J. Watson, Inc. which designs and manufactures components for the heavy construction industry.

Darryl A. Yoblick (1970 MS IE, 1973 PhD IE) is president of Human-Computer Systems Co. in New Jersey, a consulting practice for human factors engineering.

1980s

Mario A. Campos (1985 BS IE) received an MBA from Butler University, Indianapolis, IN, in 1991 and works at Ford Motor Co. since 1992. He is married to Renee and has two children, Mario II and Andrea. He is in the U.S. Navy Reserve with the rank of Lieutenant, in SSB Fuels Company G.

Michael J. Chow, P.E. (1982 BS CIE) was recently named as an associate of Mueser Rutledge Consulting Engineers, New York, NY.

Daniel D'Angelo, P.E. (1983 BS CIE) was recently appointed director of the Design Quality Assurance Bureau of the New York State Department of Transportation where his responsibilities include assuring the quality of the design of the \$1.3 billion annual construction program (500-550 projects).

Peter R. Duncombe (1983 MS CE) is at IBM SRDC and is a research engineer working in low K (dielectric constant) materials development.

Robert E. Game (1980 BS CIE) is the executive director of the Paducah-McCracken

Annual Development Report



Dear Alumni and Friends,

I would like to personally extend my sincere gratitude to those of you who have given your support to the School of Engineering and Applied Sciences in the past fiscal year. Your gifts continue to enhance our school and help us improve our curriculum, renovate our labs, recruit a stronger student population and provide vital faculty and staff development.

More broadly, your gifts have helped us to meet many of our long-term goals. With New York State continuing to push a public/private partnership model for SUNY, the need for private and corporate support is greater than ever. The state no longer funds 90% of our budget as it did just a decade or so ago. Today, the University is "state assisted", with only 30-35% of its budget coming from the State. More than ever before, your support provides needed dollars that are essential in meeting our academic and student needs.

Also, with your support, we continue to strengthen our relationships with corporate partners. Our Industry-University Day luncheons and our Technical Job Fairs have continued to grow and are more successful than ever. These corporate relationships have helped to grow our research dollars and provide new opportunities for our students in terms of internships and career prospects.



Throughout this issue of the Buffalo Engineer you will see various articles on alumni and friends of the School. The alumni entrepreneur list reminds our current students and faculty that UB Engineering alumni are making a significant mark regionally, nationally and internationally in today's global economy. You will read about the recently announced "Campaign for UB, Generation to Generation". This is the largest campaign of its kind ever conducted by a public university in New York and New England. Because of our alumni and friends, the School of

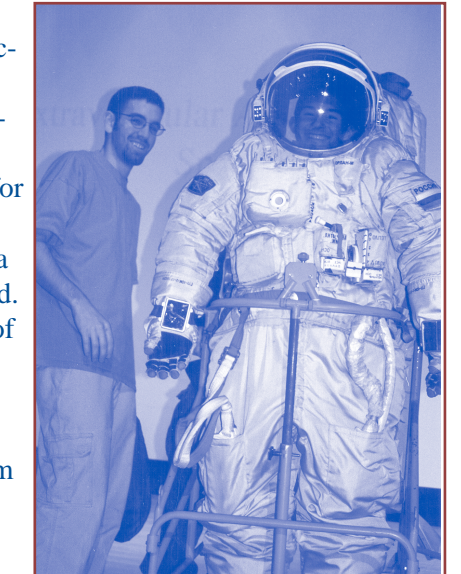
Engineering and Applied Sciences is truly one of the leaders in this campaign with one of the most aggressive goals.

The School greatly appreciates each gift you have made in our 2000 fiscal year, which ran from July 1, 1999 to June 30, 2000. We have made every effort to ensure that the following list is complete and accurate, and ask you to contact Jim Seng or Tim Siderakis at 716-645-2133 (e-mail: seng@buffalo.edu; tsiderak@buffalo.edu) with any questions you may have.

Again, thank you for your continuing support to UB and specifically the School of Engineering and Applied Sciences. We are most grateful.

Sincerely,

Mark H. Karwan
Dean, School of Engineering and Applied Sciences



Delta Society Members*

\$50,000 to \$99,000

Robert H. '51 and Catherine H. Goldsmith, Rancho Santa Fe, CA

\$5,000 to \$9,999

Charles A. '42 and Philomena E. '39 Bauda, Boynton Beach, FL
 Joe Y. Chuang '72, Redondo Beach, CA
 Ernest '74 and Britta Hausmann, Eggertsville, NY
 Hiroshi Morihara '71 and Mary McSwain, Gresham, OR
 Kent Simons, Manchester, MO

\$1,000 to \$2,499

Joseph P. and Bonnie D. Allen, Arlington, VA
 Stella N. Batalama and Dimitris A. Pados, East Amherst, NY
 Erich Bloch '52, Washington, DC
 Allan N. and Sue Bredenberg, Orchard Park, NY
 Paul and Celia '72 Ehrlich, Lebanon, NH
 Charles M. '38 and Bernice Y. '46 Fogel, Buffalo, NY
 Henry H. '51 and Rosalyn Frank, Beachwood, OH
 Paul S. Goodman '92, Buffalo, NY
 Wilson Greatbatch '56, Akron, NY
 Robert Francis Hanley '90, Wheaton, IL*
 Norman M. Hayes '80, Sunnysvale, CA
 Gerry Hiatt and Patricia Hess Hiatt, Mill Valley, CA
 Irene Kovshik, Pine Brook, NJ
 George C. and Grace S. Lee, East Amherst, NY

\$10,000 to \$49,999

Jin-Yi Cai, Clarence, NY
 Vladimir Hlavacek, Clarence, NY
 Mun K. and Un Ok Lee, Staten Island, NY
 Henry E. '49 and Joan H. Stone, San Jose, CA
 John Zahorjan, Seattle, WA

\$2,500 to \$4,999

Paul Beatenbough, Lyndonville, NY
 Christina L. Bloebaum, Getzville, NY
 Mark H. and Sabina L. Karwan, Buffalo, NY
 Rebecca S. Landy and Robert Tell, Orchard Park, NY

Roderick G. MacKinnon '82, San Diego, CA
 Michael G. Majdalany '76, San Francisco, CA
 Dennis P. Malone, Williamsville, NY
 Kenneth A. '77 and Diane L. '97 Manning, Buffalo, NY
 Frank J. McGuire '53, Buffalo, NY
 Kyung Wan Min '76, Mentor, OH
 Larry L. '69 and Nancy Peckham, Webster, NY
 Michael E. Ryan, Williamsville, NY
 James M. and Linda L. Seng, Lancaster, NY
 Winslow T. Shearman '64, Binghamton, NY
 Tsu-Teh and Dorothy Tsai Soong, East Amherst, NY
 Donald E. Yost '51, Los Gatos, CA
 One donor wishes to remain anonymous

* Delta Society membership is based on annual gifts of \$1,000 or more, except for alumni who have graduated within the last ten years who may give \$500 per year.

Dean's Associates \$500 to \$999

Peter K. and Margaret S. Allen, Pleasantville, NY
 Charles T. '73 and Susan Walters '88 Brunskill, Williamsville, NY
 Robert A. Burnett '81, Slingerlands, NY
 John L. Burr '78, Kingston, NY
 Gary F. '87 and Andrea S. '75 Dargush, Snyder, NY
 Frank W. Farbizio '80, West Babylon, NY
 Donald R. '56 and Elfriede I. '57 Ferguson, Williamsville, NY
 Edward W. Grenzign '78, Ronkonkoma, NY
 Mile A. Kordovski '79, Rochester, NY
 Steven Lerner, Williamsville, NY
 Pao-Lo Liu, East Amherst, NY
 Dennis Menzenski '70, Bridgewater, NJ
 Mark E. Newton '80, Liverpool, NY

Sunil Pai '87, Bellevue, MA
 Kenneth G. Parker '82, Williamsville, NY
 Mike Peterson, Merrillville, IN
 Walter Romashko '61, Minneapolis, MN
 Robert M. '83 and Andrea A. Rosten, Harrisburg, PA
 Ralph Rugen '88, Port Jefferson Station, NY
 Mohammed Safiuddin '82, Williamsville, NY
 Anna M. Stave, Oneonta, NY
 Scott D. '79 and Coleen B. '79 Stevens, Scotia, NY
 Matthew S. Szkotak '83, Clifton Heights, PA
 Charles S. Tittle '52, New Bern, NC
 Darold C. '66 and Katrina S. '56 Wobschall, Williamsville, NY
 Larry R. '52 and Mary Lou A. Zangerle, Dearborn, MI

Scholars' Society \$250 to \$499

Eitan Shalom '83 and Edie L. '83 Agai, W Hempstead, NY
 James A. '72 and Gail A. Alcott, Glenmoore, PA
 Farhat Ali, Saratoga, CA
 Nisar B. Amin '96, Bear, DE
 Mark J. Azzaro '80, Bridgeton, NJ
 John Baker '82, Houston, TX

Robert E. '84 and Grace M. '84 Barnes, Amherst, NY
 Jonathan Matthew Bearfield '91, Dallas, TX
 Abhay Vasudeo Borkar '94, Dayton, NJ
 Michel Bruneau, East Amherst, NY
 Donald A. Coates '64, Canton, OH
 Gary A. Coleman '77, Binghamton, NY

Reunion Weekend

Engineering alumni from the Classes of 1950, 1975, 1990 and the Decade of the 90's gathered at the Amherst Holiday Inn on October 20th to celebrate the anniversaries of their graduation.

The evening began with a separate social hour to honor the Class of 1950 and then a combined social hour for all who attended to reminisce with faculty, staff and fellow alums.

EAA Past President Peter Buechi (CIE 68, 70) offered a toast to each class prior to dinner. Following a most enjoyable meal, Dean Mark H.

Karwan welcomed all in attendance and spoke about the future direction of the School of Engineering and Applied Sciences.

President Ted Myers (CIE 8 1) spoke about his vision for the Association and then joined Jon Kolber (CIE 72, 74) in presenting the EAA "Engineer of the Year" to Irvine G. Reinig, II (CIE 69, 70). Irv received the traditional "Buffalo" trophy and then expressed his great surprise and deepest appreciation for being selected to receive this award from the Association. The evening concluded with a presentation on the Alumni House project by Donald Roberts from the General Alumni Association. All alums will be hearing more about this exciting project in the future.



Peter Buechi (center), accepts plaque honoring his distinguished service to EAA.

On Saturday morning, a group of alums from the Class of 1950 gathered for breakfast to share more time together. The annual EAA Homecoming Tailgate Party kicked off at 11:30 with plenty of hotdogs, drinks and giveaways for everyone. A large group of alums attended the Bulls homecoming football game. Unfortunately, the Bulls lost the game to Ball State, but all who attended enjoyed the fun of watching college football on a beautiful Fall day.

Overall, the reunion weekend was a big success. Please plan on joining in when your class is being honored.

SPEAKERS WANTED!!

Students often ask if UB Engineering Alums are available to speak at club meetings and events. In order to meet this need, the Engineering Alumni Association is seeking volunteers to become part of a "speakers pool" from which clubs can arrange speaking engagements with practicing engineers. Engineers of all disciplines are needed.

If you are interested in participating in this program, please contact the Engineering Alumni Association.

Reinig Honored 2000 Engineer-of-the-Year

story continued from cover

senior foundation and design engineer. Subsequently, he served as a chief geotechnical engineer for Thomsen Associates/Empire Soil Investigations; and managed GZA GeoEnvironmental Technologies, Inc. (a publicly owned company) New York operations where he rose to the position of principal and served on the company's board of directors over a 13 year period. He currently is a consulting engineer and works part time as an assistant professor at Erie Community College, Department of Engineering Science.

During his career, Reinig has provided geotechnical and/or environmental engineering services involving investigation, analysis, design, and construction for over 500 projects in New York. He has also published technical papers, made presentations to professional groups and clients, and conducted loss prevention and technical training to peers. Reinig has been very active in professional organizations at both the national and regional levels throughout his career. He is a member and past president of the American Society of Civil Engineers Buffalo Section (ASCE) and is a member of the National Society of Professional Engineers.

Within professional circles, he is well known for his tireless efforts to recruit and organize volunteers to help introduce and inform children and young adults about engineering. He conceived, developed and runs "Engineering Expressions" (1990) for ASCE. The purpose of the program is to introduce children, 10 to 12 years old, to engineering principles through a series of hands on workshops. Since its beginning, the program has been presented to over 4,200 children in Western New York. Over the past year, he has volunteered his time to develop and run another program called "Engineering Opportunities" for the Technical Societies Council of the Niagara Frontier. This is a resource program for high school students interested in engineering. He is a volunteer for Future City Competition, National Engineers Week Mall Day, and the BEAM Summer Pre-College Program.

Past Recipients of the EAA Engineer-of-the-Year Award

1989	Frank Notaro, PE ME '57, MS '67
1990	Wilson Greatbatch, PE EE MS '56
1991	Howard Strauss, PE ME MS '54
1992	Thomas Canty, PE ME '77
1993	James W. McLernon, PE IE '50
1993-4	Ralph F. Abate, PE CIE '68, MS '69
1994	James E. Stevens, Ph.D. CE '66
1995	Charles G. Rader, Ph.D. CE '74
1996	Charles M. Fogel, Honorary Alumnus
1997	James F. May, PE ME '49
1998	Anthony L. Russo, PE ME Ph.D. '69
1999	George A. Giotis, IE '49

2000-2001 Engineering
Alumni Association Board
of Directors

Theodore A. Myers,
PE Pres., CIE BS '81
Andy Sarantapoulas,
VP, ME BS '98
Louis A. Picciano,
Sec., EE BS '65
Stephen Buechi,
Treas., CIE BS '93,
MEng '95
Peter J. Buechi,
PE Past Pres., CIE
BS '68, MS '70
Robert E. Barnes,
School Liaison, IE
MS '76, Ph.D. '84
Howard E. Strauss,
PE EAA Faculty
Advisor Emeritus,
ME MS '54
William W. Swenson,
PE EAA Coordinator
Emeritus
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Craig M. Forget,
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MS '81
John J. Jondle,
EE MS '69
Ronald D. Koczaja,
CE BS '70
Jonathon E. Kolber,
PE CIE BS '72 MS '74
Anthony Markut,
IE BS '79
Fred Meli,
PE CIE BS '76
Michelle Rhodes,
CE BS '99
Richard Rink,
PE CIE BS '80
Joseph S. Testa,
EE BS '57
Allen J. Zylinski,
PE CIE BS '89,
MEng '94
Kervin Lajolie,
ESA Representative,
ME BS '01

PRESIDENT'S MESSAGE



I am pleased and honored to serve as your President this year. Over the past several years I have had the opportunity to meet many of you, from the "old timers" from the early years of UB Engineering to recent graduates and students. One thing which all 18,000 of us over the past 55 years have in common is that we are all UB Engineers! This is an accomplishment which we can individually and collectively be proud

of- whether we studied in Parker Hall or Jarvis Hall; whether we used a personal computer; or whether we became Civil, Industrial, Mechanical, Nuclear, Aerospace, Computer, Chemical or Industrial Engineers. Each of us has a place in the history of UB Engineering.

The Year 2001 presents us with the opportunity to "give something back" to our School of Engineering and often gives an opportunity to have some fun. In this light, I ask you to:

- Become a member of the UB Engineering Alumni Association. Your dues are well spent to provide high quality events and to support student functions.
- Ask a friend or colleague to become a member.
- Recruit a UB Engineer to work with you.
- Consider giving to our UB Engineering Alumni Association Scholarship Fund. We are constantly impressed with the quality of students who apply and their worthiness to receive our support.
- Join us at a social or sporting event, or volunteer your time to address a group of students.
- Visit the UB Campus and the School of Engineering.

Our traditional program of events has proven successful. This includes the annual reunion dinner, tailgate party and football event, basketball event, and partnership with the Dean's Scholarship Awards event. Support of student activities and awarding of scholarships has never been stronger.

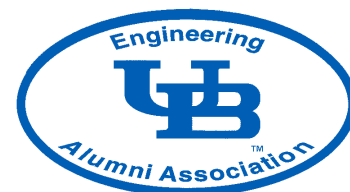
We continue to look for ways to make our program even more successful and build your Engineering Alumni Association. Your ideas for additional or alternative events are wanted. Please contact our office by e-mail, telephone or by mail. We really want to hear from you.

Thank you to all who have supported our organization through your membership, participation and generous scholarship contributions. Thank you also to Peter Buechi, Past President, and all who have served and are serving on the Board of Directors, and to the School of Engineering for helping to develop our programs and organization.

Collectively, we can have a positive impact on current students and our School.

Yours for UB Engineering,

Theodore A. Myers, P.E.
President



Scholars' Society Cont.

Dileep G. Dhavale '72, Worcester, MA
Donald J. Duquette '53, North
Tonawanda, NY
Michael D. Eberth '84, Brownstone, MI
Gerard F. Esposito '74, Seminole, FL
Adly T. Fam, East Amherst, NY
George B. Fisher '50, Clarence Center,
NY
Gerald John Fitzpatrick '88,
Germantown, MD
William K. George, Getzville, NY
Robert E. Grace '63, Fairport, NY
William E. and Lee M. '86 Grunert,
Williamsville, NY
Maurice W. Guest '68, Marcellus, NY
Richard S. '80 and Sue Guido,
Pittsburgh, PA
M. Amine Hajji '73, San Jose, CA
Steve E. Hutchinson '81, Elverson, PA
Michael W. Hyer '64, Blacksburg, VA
Dennis Michael Kasprzyk '78, Des
Moines, WA
Thomas S. Katra '68, Fayetteville, NY
Jan A. Klapetzky '70, Williamson, NY
Roger T. Korsh '97, Kenmore, NY
Lidia P. Kostyniuk '75, Brighton, MI
Gerald W. LaWall '54, Rohrsersville, MD
Zheng Li '94 and Wenyun Ji '91,
Bellevue, WA
David J. Liszewski '79, Sharon, MA
Keith P. Loeperre '77, Fremont, CA
Russ Miller, East Amherst, NY
Sandra D. Motley '84, Madison, NJ
Frank '67 and Rosemarie Notaro,
Amherst, NY
Frank J. Notaro '85, Chicago, IL
Edward J. Paprocki '81, Longmeadow,
MA
William J. and Esther M. Rae, Snyder,
NY
David John Recktenwalt '96, West
Seneca, NY
Paul J. '82 and Debora A. '87 Reimers,
Lancaster, NY
James M. Smith '76, Hilton, NY
Andres and Mary P. '95 Soom,
Williamsville, NY
James Edward Stevens '76, Bay Village,
OH
William N. Sullivan '68, Albuquerque,
NM
Philip A. Treventi '72, Murray Hill, NJ
Steven Tsengas '60, Mentor, OH
Jon Z. Walker '78, Falls Church, VA
James J. Whalen, Clarence, NY
Chu Ryang Wie, Amherst, NY
John Zahorjan, Sr, Orchard Park, NY
Daryl Zbrzezny, West Seneca, NY

Century Club \$100 to \$249

Mark W. '91 and Barbara J. Ackley, East
Aurora, NY
Douglas A. Adams '75, Fullerton, CA
Paschalis Alexandridis, Amherst, NY
Amde M. Amde '76, Silver Spring, MD
David Lee Anderson '94 and Margaretha J.
Lam-Anderson '94, New York, NY
Wayne Arthur Anderson '70, Orchard Park,
NY
Lisa A. Andruscavage '78, Albuquerque,
NM
Eric C. Banas '84, Wheatfield, NY
Kristine M. Bartosiak '79, Newtown Square,
PA
Berten C. Bean '83, Taylor Lake Village, TX
James D. Becker '77, League City, TX
Lakhmichand T. Belani '70, East Amherst,
NY
Sharada Bhansali '78, Dix Hills, NY
Ronald J. Blaszak '79, Syracuse, NY
Richard L. '78 and Penny J. '80 Blumstein,
Edison, NJ
Jeffrey P. Boldt '83, Carmel, IN
Tami A. Boss '81, Kingston, PA
Linda Bovino, Kenmore, NY
Richard J. Boy '66, Rochester, NY
Donald G. Brennan '50, Williamsville, NY
Scott J. '91 and Maria Isabel '91 Brennan,
South Elgin, IL
Bruce A. Brice '73, Jamaica, NY
James J. '74 and Joann M. '75 Briggs,
Rochester, NY
Riccardo Z. Brognara '83, West Orange, NJ
Robert D. Brown '68, Los Alamos, NM
Charles P. Bryant '84, Colchester, CT
Thaddeus F. Bryzinski '50, North
Tonawanda, NY
Kirstin Bucci and Andrew Labovitz,
Millburn, NJ
Michael T. Bucci, Akron, OH
Rapus Bunupuradah '97, Bronx, NY
P. Allister Burt '47, Albuquerque, NM
John J. Busuttill '81, Redmond, WA
Paul R. Calabrese '72, Eden, NY
Karen A. Catalozzi '84, Grafton, MA
Wai Chan '97, Brooklyn, NY
Roman P. Chaws '80, Windsor Locks, CT
Padmavati Chitrapu '89 and Srinivas
Yerramilli Prasad '92, Sterling, VA
Thomas J. Cici '52, Evansville, IN
Daniel C. Clark '61, East Aurora, NY
Michael C. Constantinou, Buffalo, NY
Francis L. Conte '74, Swampscott, MA
Robert M. Corby '85, Alexandria, VA
A. Robert Corpus '56, Kent, WA
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Buffalo, NY
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NY
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Alison Frey '81, Benecia, CA
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Eric H. Gassenfeit '86, Grosse Pointe Park,
MI
Gary M. Gilbert '74, Minoa, NY
James E. Glattly '76, Houston, TX
Timothy John Gluszak '88, Chanhassen,
MN
Linda Jalal Gohari '88, Malvern, PA
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Dale R. Green '83, Elma, NY
Steven E. Gross '72, Yardley, PA
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NY
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Oscar W. Haas '88, Edison, NJ
Philip N. Hahn '85, West Seneca, NY
Paul G. Hammond '72, St. Louis, MO
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Carle Place, NY
Eileen Louise Hassett '00, Amherst, NY
Miltiadis K. Hatalis '84, Bethlehem, PA
Kenneth M. Hattam '81, Fort Lee, NJ
Xin He, Buffalo, NY

Century Club \$100 to \$249 Cont.

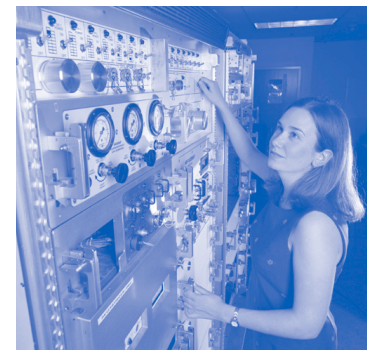
Joaquim L. Heck '71, Knoxville, TN
 Leonard F. Hoffman '60, Circleville, OH
 Harold S. '59 and Julia L. '55 Holman,
 Golden Valley, MN
 John K. Howell '71, Tonawanda, NY
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 Gayle E. and Edward W. Hutton, East
 Aurora, NY
 Tzeng-Tung Hwang '77, Wappingers Falls,
 NY
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 Hanwook Jung '96,
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 James R. '66 and Brenda Ball '92 Knight,
 Columbia, MD
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 George M. Kosanovich '75, Westmont, PQ
 Cheryl R. Kosikowski, Buffalo, NY
 Joseph A. Kowalski '69, Buffalo, NY
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 Lee Anderson '94, New York, NY
 John J. Lanahan '80, Lenoir City, TN
 Dennis J. Leslie '78, Salem, NH
 Kevin Patrick Licata '88, Charlotte, NC
 Claire L. Livingston '84, Foster, RI
 John A. Lordi '68, Williamsville, NY
 William J. Luker '82, Glastonbury, CT
 Carl R.F. Lund, Amherst, NY
 Donald H. Luther '58, Surf City, NC
 Ronald J. Maj '82, Owings Mills, MD
 George F. and Georgette Martins, Newton,
 MA
 Jasdeep Singh Matharu '87, San Jose, CA
 Chris J. Maurath '81, Apple Valley, MN
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 Williamsville, NY
 James J. Mc Lafferty '87, Waldwick, NJ
 David C. Mc Laughlin '74, Kenmore, NY
 Jeffrey Thomas McGinty '94, Orchard Park, NY

Patrick J. McGowan, Orchard Park, NY
 Keith and Mary Lou McNamara, Columbus,
 OH
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 Leonard Pillinger '50, Flushing, NY
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 Raj R. Raghavan '77, Gaithersburg, MD
 G. '83 and Manju '83 Rajeswaran, Fairport,
 NY
 Andrei M. and Tova A. '83 Reinhorn,
 Williamsville, NY
 Franklyn W. '49 and Barbara M. '52 Roesch,
 Warrensville Heights, OH
 Ned Rogers '49, Waverly, NY
 Christopher M. Rump, Williamsville, NY
 Leroy Hammond Runk '61, Orchard Lake,
 MI
 Henry L. Sandonato '78, Lewiston, NY
 John Thomas Satterlee '95, Woodstock, NY
 Christopher J. Scolese '78, Springfield, VA
 Chandresh R. Shah '87, Briarcliff Manor, NY
 Stuart C. and Caren D. Shapiro,
 Williamsville, NY
 John Joseph Shea '89, Pittsburgh, PA
 Barbara Ann '97 and Lawrence J. '80
 Sherman, Grand Island, NY
 Louis P. Sileo '67, Liverpool, NY

Edward Y. Sing '64, Bloomfield Hills, MI
 David Thomas Skinner '94, Waterloo, NY
 Gregory N. Smith '82, Herndon, VA
 Kenneth L. Smith '80, Beaufort, SC
 Andrew T. Spilsbury '60, Torrance, CA
 Donald L. Starkey '67, Potomac, MD
 Leonard Stencil '83, Fremont, CA
 Lisa A. S. Stephens, Wilson, NY
 William Albert Stevens '89, Sackets Harbor,
 NY
 William P. Sturmer '78, Cherry Hill, NJ
 Ronald S. Svec '80, Berkshire, NY
 Takuto Takabayashi '93, Manchester, CT
 Paul W. Taylor '69, Poughkeepsie, NY
 John Eric '87 and Alice '87 Tesmer,
 Elizabethtown, PA
 David T. Theoclitus '88, Gillette, NJ
 Robert E. Tiede '73, Manassas, VA
 Penley Toffolon Kidd, Bronxville, NY
 Keith R. Tompkins '65, Chesterland, OH
 Hai-Lung Tsai '80, Rolla, MO
 Thomas A. Tuttle '80, Fulton, NY
 Richard F. Twardokus '68, Bloomfield, NY
 Alexander W. Tzetzio '91, Lancaster, CA
 Andrew Clark VanEitten '90, Fredericksburg,
 VA
 Sookie Vartanian '63, Montebello, CA
 Pawan Rikhav Vora '94, Broomfield, CO
 Eric M. Wagner '80, Cary, NC
 Stanley J. Walczyk '84, Baltic, CT
 Wayne A. Walter '64, West Chester, OH
 Eugene Yeou-Geng Wang '74, Sugarland,
 TX
 Andrea Michelle Wargula '89, Salt Lake City,
 UT
 Carla Weinpahl '86, Hoboken, NJ
 Herbert M. Wendling '49, Alden, NY
 Robert Wetherhold, Amherst, NY
 Gordon J. Wilson '49, Hamburg, NY
 William J. Wirth '64, East Aurora, NY
 Walter I. Wolentarski '85, Moorpark, CA
 Erez Wolf '92, Ponte Vedra Beach, FL
 Mark B. Wolfe '82, Miami Springs, FL
 Mary Ellen Wolinski '80, Myrtle Beach, SC
 Patrick C. Wong '76, Bloomfield, NJ
 Ta-Hsiung Wong '83, Indianapolis, IN
 Gary W. Wood '73, Loudonville, NY
 David W. Wundrow '90, Brecksville, OH
 Peter Sunway Yao '69, Claremont, CA
 David A. Young '78, Dearborn, MI
 Mary Zahorian, Clifton, NJ
 Joan Zahorjan, Cambridge, MA

UB Student Co-ops at NASA

Ever wonder what it feels like to sit in NASA's mission control? How about the cockpit of the 747 that carries the Space Shuttle on its back? Just ask **Laurie Darling**, a UB senior in the Department of Mechanical and Aerospace Engineering. Darling spent last semester working at the Johnson



Space Center, NASA's central branch in Houston, Texas. These experiences marked only the beginning of Darling's three semester co-op with NASA. She was one of only 18 students chosen to co-op at the center from among over 1,100 applicants. For the next two years, she will alternate semesters studying at UB and applying those studies to projects in Houston. Darling works in the Biomedical Engineering Department where engineers design and build the hardware that tests the physiological effects of space on humans. She is assigned to a project called the Human Research Facility, a laboratory that will perform experiments onboard the International Space Station (ISS). It is scheduled to be deployed in February, 2001 when the space shuttle will transport it to the ISS. Darling also works on developing new technologies using virtual reality to train the astronauts on the ground.

Darling can't pinpoint when she first became interested in space, but she says that interest has received a stronger focus from her experiences at UB, especially her participation in the UB chapter of the American Institute of Aeronautics and Astronautics (AIAA), for which she has served as secretary and, most recently, as team captain for the Team Space Design Competition. "I've always been fascinated with anything related to space," Darling said, "so when I came to UB and heard of AIAA, I immediately joined the club. I think AIAA really helped me further my knowledge and desire for the space field." Darling hopes that her experience will lead to a full-time position with NASA once she graduates. Over ninety per cent of NASA's new hires are co-ops, so Darling is optimistic. "My future here looks promising!" she says.

BEAM Giving High School Students Hands-On Knowledge in Engineering

BEAM (Buffalo-Area Engineering Awareness for Minorities) sponsored two educational programs in accord with its mission to prepare inner city, minority, female and other under-represented students for careers in science, engineering, and technology.

Thirty minority middle and high school students participated in the BEAM SEAS Saturday Science and Technology Academy. In the first session of the program, the students were introduced to the university engineering laboratories of **Paschalis Alexandridis**, assistant professor in the Department of Chemical Engineering, **Thenkurussi Kesavadas**, assistant professor in the Department of Mechanical and Aerospace Engineering and **Thomas Furlani**, associate director of the Center for Computational Research. The next session was held in the Robotics and Manufacturing Lab in Bell Hall. **Jeffrey Tilson**, Computational Scientist, conducted the 3D computer visualization demonstrations in the virtual reality lab. In a final session, engineering student **Jackman Prescott** disassembled a laptop computer for the students.

Fourteen minority junior high school students participated in the BEAM pre-collegiate summer program. This five-week program, coordinated by **Drexel Gidney**, Senior Academic Advisor and Director of Minority Engineering Programs, consists of Math Enrichment, Introduction to Engineering Computing, and Technical Communications. Engineering students **Omar Conteh**, **Roberto Estrada** and **Beaugenor Belotte** instructed the students in math and computers. The technical communication course-work was provided by the SEAS Center for Technical Communication through the voluntary efforts of **William E. Grunert** and **Floreal R. Prieto**. This course concluded with an oral presentation by each student.

UB Engineering Students

SAVED
 Companies \$1,000,000
 Last Year



SEAS would like to encourage our alumni to consider the advantages of employing a UB engineering student through the Co-operative Engineering Educational Program and Engineering Career Institute.

If you would like to employ one or more of these students, contact Mr. Dean C. Millar, director of the Co-op Program, 415 Bonner Hall, (716) 645-2768 ext. 1112; email: dcmillar@eng.buffalo.edu.

3rd Annual BEAM Golf Tourney Honors Campaign

BEAM (Buffalo-Area Engineering Awareness for Minorities) sponsored its 3rd annual golf outing to raise money for student programs.

This year's event was in honor of **Anthony J. Campagna**, who passed away last June. Campagna was the Vice President of the BEAM Executive Committee of the Board of Directors and also earned his Master's degree in chemical engineering from UB. About ten years ago, he left off a successful career as a chemical engineer to pursue a career in teaching as an associate professor of chemistry at Erie Community College. He later moved to Daemen College, where he served as associate professor of chemistry until his death.

The Tony Campagna Memorial Award was presented to his wife **Suzanne** in his honor. This established an annual award to be presented in his memory to an individual who best demonstrates outstanding loyalty and service to BEAM. The first annual recipient was **Marilyn Helenbrook**, Executive Director of BEAM. Dean of Engineering Mark Karwan presented it at the golf fund-raiser.

The Tournament was sponsored by URS Group Consultants, Inc., the University at Buffalo School of Engineering, Praxair, EGW Associates, Superior Staffing/Technical Resources and Wendel. The Department of Public Works, County of Erie held a special event to raise money for the BEAM golf fund-raiser at its department picnic. The Commissioner of Public Works, **Maria Lehman**, PE, and Principal Engineer **Charles Stickler**, both graduates of UB civil engineering, were victimized in the dunk tank to raise money for BEAM student programs.

Information on the BEAM programs may be obtained through Marilyn Helenbrook, BEAM Executive Director, 412 Bonner Hall, 645-3066 x1114.



Charles Stickler, ready for the dive

SEAS has made every effort to create a complete listing of our donors and their gifts of at least \$100. We apologize for any errors or accidental omissions of names. Our fiscal year closed on June 30, 2000. If we received your gift after this date, it will be credited to the FY2000 report. If we have misprinted/omitted your name, please contact James Seng or Tim Siderakis, Office of Development, School of Engineering and Applied Sciences, University at Buffalo, Amherst, NY 14260-1900. Call (716) 645-2133 or e-mail seng@buffalo.edu or tsiderak@buffalo.edu

Buffalo Engineer STUDENT NEWS

Veronica Livescu was awarded second place in the Bioengineering Division Student Paper Competition at the Masters level held at this year's ASME International Mechanical Engineering Congress and Exposition. The second place award includes a certificate, a cash award, and reimbursement for expenses incurred traveling to the conference. Veronica's paper deals with PIV measurements in a model of a human intracranial aneurysm.

Joseph M. Moritz (CE '00) was selected as one of the 35 Tau Beta Pi Fellows for 2000-01, all of whom receive extensive financial aid for a year of advanced study. Moritz was at the top of an engineering class of more than 500 students and was the president of Tau Beta Pi's New York Nu Chapter at UB. He is interested in advanced programs that focus on the biochemical/biomedical aspect of his major, particularly the application at MIT of polymeric materials to the design of new tissues and drug release devices, and hopes to continue this research in an academic setting.

Yan Shtarker, a freshman computer science-and-engineering major, was awarded a highly competitive Energy Research Undergraduate Laboratory Fellowship from the U.S. Department of Energy (DOE). Shtarker will conduct his research at the Oak Ridge National Laboratory (ORNL), one of 11

DOE sites participating in the fellowship program. He will work with Stephen Scott in ORNL's Computer Science and Mathematics Division developing new software programs for three-dimensional computer visualization that will run on advanced parallel computers.

Chang Hyon Suh, an undergraduate student in EE, and **Veena Pureswaran**, a graduate student in CSE, were both awarded Motorola Scholarships in the amount of \$1,150.

The Year 2000 Graduate Research Scholarship, presented in honor of professor David M. Benenson, was awarded to three graduate students: **Georgios Karystinos**, a Ph.D. candidate researching wireless multiple access communications and statistical sign processing; **Ioannis Psaromiligkos**, a Ph.D. candidate working on research in communications; and **Zhiyong Yuan**, an M.S. candidate researching software methodologies. The awards were given in recognition of their productive research during their graduate studies. Each student received \$500 and a certificate

Five students in the School of Engineering and Applied Sciences have been awarded the Grace W. Capen Academic Award by the Women's Club at UB. They are **Scott M. Ferguson** (MAE), **Anthony J. Guetta** (CSE), **Heichi (Gigi) Lo** (CSEE), **Rainee M. VanNatter** (CE) and **Carolyn M. Zielinski** (MAE).

UB Grad Wins Karl U. Smith Award

Caren Wenner (Ph.D., IE, 2000) was awarded the Karl U. Smith Award for best paper from a dissertation at the tri-annual meeting of the International Ergonomics Association (IEA), held last July.

Wenner's dissertation was on human factors. The paper, entitled "The Role of Instructions in the Performance of Aircraft Inspection Tasks," addressed how people use written instructions to help structure and perform their assigned tasks.

The award is named for Karl U. Smith, a major figure in human factors. It was presented in his honor by the past and current presidents of the IEA,

Martin Helander and Ian Noy. Smith's son, Thomas, was on hand at the presentation and congratulated Wenner afterwards.

Wenner currently works at Sandia National Laboratories where she is a senior member of the technical staff in the Department of Statistics and Human Factors. Much of her work supports research efforts by the Federal Aviation Administration, although she is also involved in several other projects at the lab.



Caren Wenner (c), with Helander and Noy

Bullmobile Finishes Strong at Nationals

A team of students representing the University at Buffalo took third place in the annual Chem-E-Car Competition hosted by the American Institute of Chemical Engineers.

The competition took place at the AIChE's national convention held in Los Angeles this past November. UB's entry, the Bullmobile, competed against eleven other teams from around the nation. The UB team gained the right to participate in the nationals by winning the AIChE's regional match that was hosted by the university last spring.

The competition stipulated that a car, powered solely by a chemical reaction and designed within certain criteria, was to travel a given distance while carrying a given load. The distance and load were randomly determined within preset ranges just prior to the start of the competition. Teams were also judged by a poster presentation and the safety merits of each entry.



Bullmobile members receiving award (from left): Larry Lenz, Mark Przybylski, Scott Boyle, Gary Gomlak, Johannes Remainder, Michael Wolbert, Janine Horn, and Luong Luu.

Corporations, Foundations and Organizations

(Includes Matching Gifts)

\$100,000 and up	\$10,000 to \$49,000	\$5,000 to \$9,999
American Axle & Manufacturing, Inc. ParaSoft Corporation Techno Ventures LLC	Alcatel USA, Inc. American Chemical Society Community Foundation for Greater Buffalo Computer Analysis Plus E.I. DuPont, De Nemours & Company GE Fund Graham Manufacturing	Cache Corporation ILX Lightwave Corporation International Business Machines Corporation Into Telecommunications Consulting, Inc. Motorola Foundation Praxair Corporation U.S.A. The Procter & Gamble Fund Sun Microsystems, Incorporated Veridian Engineering
\$50,000 to \$99,999	\$2,500 to \$4,999	\$1,000 to \$2,499
Delphi Harrison Thermal Systems The Whitaker Foundation	American Institute of Steel Construction, Inc. American Precision Industries Bethlehem Steel Foundation Dopkins and Company, LLP Fisher-Price Flasher Handling	AISC Education Foundation American Heart Association Arrison Family Charitable Foundation Atto Technology Inc. Carleton Technologies, Inc. Electronic Data Systems Ergonomics Research, Inc.
	International Imaging Materials Inc. ISSMO Kettering University TX RX Systems, Inc. United Parcel Service of America, Inc.	FMC Corporation Hodgson, Russ, Andrews, Woods & Goodyear, LLP Minrad, Inc. Niagara Mohawk Power Corp. Phillips, Lytle, Hitchcock, Blaine and Huber Scholarship Foundation
Dean's Associates \$500 to \$999	Scholars' Society \$250 to \$499	
Avery Dennison Corporation General Mills Foundation General Motors Foundation IBM International Foundation	Merrill Lynch & Co. Foundation, Inc. Raytheon Company	Abbott Laboratories Fund American Institute of Chemical Engineers AT&T Foundation The Hershey Foods Corporation Fund Lucent Technologies
		Microsoft Corporation National Starch and Chemical Foundation, Inc. Pittway Corporation Charitable Foundation United Technologies Corporation
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		R & D Engineering, P.C. Reliance Insurance Companies Rensselaer RJR Nabisco Foundation SGL Carbon Corporation Square D Foundation Travers/Collins/Partners Verizon Foundation Westinghouse Foundation
Partners \$5000	Corporate Supporters \$2500	Corporate Friends \$1000
Delphi Automotive Systems International Business Machines Corporation Motorola Foundation Phillips, Lytle, Hitchcock, Blaine & Huber LLP Praxair Foundation, Inc. Sun Microsystems, Inc. Veridian Engineering Fisher Price	Flasher Handling International Imaging Materials, Inc. TX RX Systems, Inc. United Parcel Service of America, Inc.	ATTO Technology, Inc. Carleton Technologies, Inc. Ergonomics Research, Inc. Hodgson, Russ, Andrews, Woods & Goodyear, LLP Niagara Mohawk Minrad, Inc. Moog, Inc. Xerox Corporation USA

Industry University
Day Annual
Corporate Fund

SEAS Recognizes Founders and Co-Founders of New Companies

We at the School of Engineering and Applied Sciences feel a deep sense of pride in the accomplishments of our alumni. In our ongoing efforts to learn and know more of them, we wanted to feature the following group as a sampling of UB SEAS Alumni who founded or co-founded a private or public company or corporation. If you have been omitted, please give us a call at 716-645-2133, Ext. 1226.

Russell L. Agrusa '76 EE

CEO & President
Iconics, Inc.
Foxboro, MA

Chandra K. Bhansali '80 Eng

President
Micro Vision Software, Inc.
Hauppauge, NY

Nicholas D. Change '65 EE

President & Chairman
Dytran Instruments, Inc.
Chatsworth, CA

Mark A. Corio '83 EE

President
Rochester Microsystems, Inc.
Rochester, NY

Nikhil Dakwala '91 EE & CSE

Submicron Design & Test Solutions Group
Austin, TX

John R. Davis, Jr. '55 IE

President
I Squared R Heating Element Co. Inc.
Akron, NY

A. James Dearlove '69 MAE

President and CEO
Penn Virginia Corporation
Radnor, PA

David A. Donatello '90 MAE

Vice President
Rail Development Group
Rush, NY

George Giotis '49 IE

President
Flasher Handling
Depew, NY

James Glattly '73 CIE

President
Pioneer Chlor Alkali
Houston, TX

Wilson Greatbatch '56 EE

CEO (Retired)
Wilson Greatbatch, Ltd.
Clarence, NY

Scott Hassan '92 CSE

Co-founder & former VP of Engineering
EGroups.com
San Francisco, CA

Daniel P. Kaegebein '62 EE

President (Retired)
TXRX Systems, Inc.
Angola, NY

Peter G. Kelly '80 MAE

President
Competition Data Systems, Inc.
Williamsville, NY

Timothy J. Klein '84 EE

President, CEO, & Co-Founder
ATTO Technology, Inc.
Amherst, NY

Krishna S. Kolluri '88 IE

Vice President & GM
Healtheon/WEB MD
Santa Clara, CA

Hratch Kouyoumdjian '70 CIE

President
Hratch Kouyoumdjian & Associates
San Francisco, CA

Karl Kostusiak '60 EE

CEO & President
Detection Systems, Inc.
Fairport, NY

UB Engineers Take Virtual Reality to Washington

UB engineering professors had the opportunity to showcase some of the cutting edge virtual reality technologies developed in the School of Engineering and Applied Sciences (SEAS) on Capitol Hill this summer, as part of Science Day 2000. SEAS was represented at the event by Dr. **T. (Kesh) Kesavadas**, assistant professor of mechanical and aerospace engineering, and Dr. **Russ Miller**, professor of computer science and engineering and director of the Center for Computational Research.

At the UB exhibit, members of Congress were invited to experiment with Fakespace Systems' ImmersaDesk, the virtual reality machine in UB's Center for Computational Research. With this equipment and a pair of 3-D goggles, they could redesign state-of-the-art factories with the click of a mouse. Kesavadas touted the potential of this software for manufacturers. "Our software can provide manufacturers with tools to enable them to model before they build, to simulate before they produce and anticipate and solve production problems before they occur, all of which has the potential to lead to significant cost savings."

Members of Congress also tried out SnB, software that allows researchers to solve difficult molecular structures based on X-ray diffraction data. SnB, which also uses the ImmersaDesk, enabled members of Congress to walk inside molecules of tomorrow's most potent drugs. Miller, who helped develop SnB, described why the software could help drug designers come up with more precisely targeted pharmaceuticals.

"Many biologically important proteins are so large you can't view the entire image in any meaningful way on a screen. So what you want to do is move around inside the molecule so you can view portions of it at a time. This allows you to verify what exactly is in the molecule and therefore do rational drug design." Several members of UB attended the event: President **William R. Greiner**, who participated in a White House meeting about the importance of funding for basic scientific research; Dr. **Tom Furlani**, associate director of UB's Center for Computational Research; and Dr. **Bruce Pitman**, professor of mathematics and CCR director of outreach.

New VR Technology Allows Doctors to Operate Long Distance

Medical dramas on television or in the movies have regularly portrayed the traumatic experience of the airlift, in which a patient is rushed by helicopter from one hospital to another while his or her life hangs in the balance. Professors in the Departments of Mechanical and Aerospace Engineering and Computer Science and Engineering are helping to develop a virtual reality system that could make some of those costly, not to mention traumatic, airlifts unnecessary.

This "Virtual Human Model for Medical Applications" allows physicians to wear a customized virtual reality glove during the patient examination that collects data on what the physician is feeling through sensors located in the glove's fingertips. **Thenkurussi Kesavadas**, Ph.D, an assistant professor in the Department of Mechanical and Aerospace Engineering and director of the university's Virtual Reality Lab, is the project's principal investigator. He explained that, through this technology, doctors at a second site will be able to experience that data in real-time without personally examining the patient, therefore eliminating the need for physical transport in many cases. He expects this virtual reality system to be ready within two to three years.

The system takes as its raw material the Visible Human Data Set developed by the National Institutes of Health, which features complete, digitized sets of the human body. Using a very powerful graphics computer, the researchers "supersample" smaller and smaller sections of data for a given body part or organ, enabling them to get increasingly detailed pictures of each one and to develop more complex equations about how each section will respond to applied forces.

Kevin Chugh, a UB doctoral student in computer science and co-author of the project, explained what makes this research so revolutionary.

"Our big contribution is that we are writing algorithms to model how soft tissue deforms as a real mass, rather than just as a surface, which is what many groups are currently doing. No one else is doing this in real time."

The research is funded by the Calspan-UB Research Center's Center for Transportation Injury Research (CentIR).

This year has seen an exceptional number of retirees from SEAS. We would like to wish the following people well in their future endeavors:

Harry Delano retired from the Department of Computer Science and Engineering after 20 years of service as director of labs for the department. Harry was active in Distributed Computing Consultants at UB, aiming to enhance service by broadening communication and blurring traditional organizational boundaries. He now consults with high tech companies in Buffalo and Austin, TX.

Pat Doeing retired after many years with the school's Office of External Affairs. She was heavily involved with supporting alumni activities, working with student groups, hosting special events and conferences and assisting the Buffalo area Engineering Awareness for Minorities (BEAM).

William George had a distinguished research and teaching career with the Department of Mechanical and Aerospace Engineering since 1974. He was also the director of the Center for Thermal/Fluids Engineering and the Turbulence Research Laboratory at UB.

Carolyn McLean retired from Node Services after many years of service to the university. After working in the Computer Center and Library Computing, she ended her career at Node Services as an Instructor Support Specialist, specializing in Mac and PC support. She also ran the engineering listserv.

Dale Meredith was a professor in the Department of Civil, Structural and Environmental Engineering. He was distinguished for his service to the profession by ASCE for founding the Journal of Water Resources Planning and Management and for services as chair of the executive committee of the Water Resources Planning and Management division of ASCE. He also received a certificate of commendation from the National Association of State Universities and Land Grant Colleges for lifetime achievement.

Dinah Rossbacher has been a senior academic advisor in SEAS for a number of years. She advised undergraduate transfers and helped prepare each semester's schedule of undergraduate courses.

Gail Taggart came to SEAS in 1966 and worked in Student Services as a keyboard specialist and flow sheet evaluator.

Thomas Weber is one of the founding fathers of the Chemical Engineering Department, which he served for 37 years. During that time he taught almost all of the department's 1400 alumni at one time or another. He has served the department in a number of other capacities, including chair. He is well-known for his service to ASEE.

Darold C. Wobschall retired after 33 years of distinguished services to the university. He is a well-respected expert of electronic instrumentation and a leader in electrical engineering education. He is the founder of Sensor Plus, Inc. and President of Esensors, Inc.

Buffalo Engineer FACULTY NEWS

Dr. **Doug Hopkins**, research associate professor in the Department of Electrical Engineering at UB, served as chairman for the International Workshop on Integrated Packaging (IWIP) held last July in Waltham Massachusetts. 46 representatives from more than eleven countries attended the conference. Hopkins and Dr. **Walter J. Sarjeant**, James Clerk Maxwell Primer Professor of Power Technology in the Department of Electrical Engineering, both presented material at the workshop. Hopkins and past Chairman Dr. Krishna Shenai of the University of Illinois at Chicago began the first day with a two-part course on "Power Electronics Packaging—A Systems Perspective," in which they covered the latest technologies for packaging levels one through three. Sarjeant presented the lead paper for the second day of sessions, entitled "A Report on Packaging Implications of Advances in Capacitor Technologies." The workshop received technical sponsorship from the Energy Systems Institute, through which Hopkins is affiliated as an Institute Fellow and Research Associate Professor.

Chunming Qiao, associate professor in the Department of Computer Science and Engineering, has been appointed the Editor-at-Large of IEEE's Communication Society (ComSoc) in the area of optical networks.

Dr. **Shambu Upadhyaya**, professor in the Department of Computer Science and Engineering, was made an IBM Faculty Fellow this year, a highly prestigious recognition that comes with a \$40,000 research award. IBM has supplemented this faculty

partnership award with a top-of-the-line server, valued at around \$35,000, which Upadhyaya installed in the new Electronic Test Design Automation Lab, also sponsored by IBM. Dr. Upadhyaya also moderated a panel entitled "Integrating Fault Tolerance and Security in Distributed Information Systems" at the 19th IEEE Symposium on Reliable Distributed Systems, held in Nuernberg, Germany last October. He was also the chair of this symposium.

Dr. **Tarunraj Singh**, associate professor in the Department of Mechanical Engineering, spent part of his sabbatical at the IBM Almaden Research Center in San Jose, CA where the first hard disk drive was invented. He is involved in the design of feedforward controllers for accessing data in a time-optimal way while minimizing the vibration of the read/write head. This work is central to the disk drive industry's goal of 100 Gb/in/in storage density over the next two years.

The **Centers for Multisource Information Fusion (CMIF)** and **Excellence in Global Enterprise Management (GEM)**, both in the Department of Industrial Engineering, have been awarded Organized Research Unit status by the Provost's office. CMIF, directed by professor **James Llinas**, focuses on basic and applied research in multiple-source information processing environments. GEM, directed by professor **Ram Akella**, is a hub for joint industrial and academic ventures in global enterprise management and promotes collaborative efforts in frontier academic research and high-impact industrial developments.

FIVE SEAS FACULTY AWARDED GRANTS

Five members of the SEAS faculty have won education technology grants to help develop information-technology in the classroom for 2000-2001. The grants are for proposals geared specifically towards introductory-level courses that would help further Access 99, the student computer access initiative, now embarking on its second year. The program is sponsored by the Office of the Senior Vice Provost for Educational Technology.

According to William Fischer, former vice provost for faculty development, it "represents the university's continuing commitment to supporting faculty engagement in the integration of IT into the rapidly evolving academic learning environment." The awardees from SEAS are:

- **Corky Brunskill**, director of, and **Michelle Chan**, educational technology specialist in, the Science and Engineering Node Services: \$10,000 for "Operation Mother Hen."
- **Bharat Jayaraman**, professor of computer science and engineering: \$10,000 for "Visual Programming and a Visual Interactive Execution Environment."
- **Carl R.F. Lund**, chair and professor in the Department of Chemical Engineering: \$10,000 for "A Case-Study Web Site that Spans the Chemical Engineering Curriculum."
- **Pao-Lo Liu**, chair and professor in the Department of Electrical Engineering: \$9,880 for "An Educational Technology-Based Electrical Engineering Curriculum."
- **David A. Kofke**, professor of chemical engineering: \$5,850 for "Understanding Deployment Problems with Java Applets." seventeen grants were awarded overall, totaling \$146,075.

Rae and Mayne Honored at 2000 Convocation Ceremony continued from cover page

of Millard Fillmore College for his dedication to students at that institution.

Formerly associate dean of engineering for graduate students, Rae is currently chair of the mechanical engineering undergraduate committee. He has served on numerous other committees, including the university-wide undergraduate curriculum committee and the board of the Catholic Campus Ministry Foundation.

Mayne was awarded a 2000 SUNY Chancellor's Award for Excellence.

He has been a member of the engineering faculty at UB for thirty years. During his tenure, he has twice served as the chair of the Department of Mechanical and Aerospace Engineering, first from 1986-89 and again from 1995-98. His research focuses on systems, design optimization and mechanical design. He is the co-author of Introduction to Engineering and has also co-edited a book entitled Progress in Engineering Optimization, published by the American Society of Mechanical Engineers, of which he is a fellow.

Mayne's commitment to teaching has also been recognized by his students. In 1992, he was named Educator of the Year by the Mechanical and Aerospace Engineering Graduate Student Association. Mayne has served as a consultant to many companies, as well as for the U.S. Postal Service and the United Nations Development Program.



Mayne

SEAS Recognizes Founders and Co-Founders of New Companies

Ganapathy Krishnan '88 CS
Executive VP & Chief Technology Officer
Network Commerce, Inc.
Seattle, WA

Kenneth R. Laughery '82 IE
President
Micro Analysis & Design, Inc.
Boulder, CO

Lawrence J. Lukis '74 EE
Co-founder & Chief Technical Officer
LaserMaster Technologies
Eden Prairie, MN

Brian M. Maouad '89 EE
President
Advance 2000, Inc.
Williamsville, NY

James F. May '49 ME
President (retired)
Oakgrove Construction Company
Elma, NY

Frank J. McGuire '53 EE
Chairman
The McGuire Group
Buffalo, NY

Alan J. Moorman '63 EE
President
Integrated Technologies, Inc.
Mentor, OH

Hiroshi Morihara '71 ME
President
VIA Press, Inc.
Gresham, OR

Purnendu Ojha '89 IE
Chairman & CEO
NEXTAG.com
San Mateo, CA

Lawrence L. Peckham '69 IE
Founder & former CEO
LPA Software
Fairport, NY

Lance E. Robson '66 CE
President & Partner
Robson, Lapina, Inc.
Lancaster, PA

George W. Sarney '61 ME
Former President & COO
Siebe, Inc.
Foxboro, MA

Kaushik A. Shah '70 IE
President & Owner
Par Foam Products, Inc.
Buffalo, NY

Yong-Chul Shin '93 EE
Co-founder & VP of Technology
Cedartech
Williamsville, NY

Rohini Srihara '91 CS
Founder
Cymphony
Williamsville, NY

Douglas Taylor '71 ME
President & Chairman
Taylor Devices, Inc.
North Tonawanda, NY

Nicholas Trbovich ME
CEO
Servotronics, Inc.
Elma, NY

Hatim Tyabji '69 EE
Chairman
Datacard
San Mateo, CA

Raymond U. Wopperer '49 ME
President (retired)
Frontier Insulation Contractors
Buffalo, NY

Obituaries

Dr. David M. Benenson, professor of electrical engineering, died July 1 in his Williamsville home. He was 73.

A UB faculty member since 1963, Benenson served as chair of the department of Electrical and Computer Engineering from 1983-89 and as director of graduate studies from 1995-99. He was a founder of the Cooperative Engineering Program, serving as its director from 1996-99.

His research interests included fluid dynamics, electrical arcs, plasmas, plasma chemistry, turbulence, power circuit breakers and plasma processing. He was the author or co-author of 114 technical papers and held various editorial positions with journals related to gaseous electronics and plasma science. Benenson holds (with UB colleagues), two patents, both of which involve work relating to "Method and Apparatus for Diagnosing the State of a Machine." He was a member of Sigma Xi and was a senior member of the Institute of Electrical and Electronics Engineers.

A scholarship fund in Benenson's name has been established with the UB Foundation, Inc. Checks should be made out to the UB Foundation with "Dr. David Benenson Memorial Scholarship" in the memo line.

William R. Johnson, business and contracts manager for the Multidisciplinary Center for Earthquake Engineering Research (MCEER) and a long-time member of the UB community, died June 17 in Millard Fillmore Hospital. He was 62 years old.

A UB graduate, Johnson joined the university's professional staff in 1961 as an assistant purchasing agent. He later was named assistant to the vice president for finance, and in 1968, was appointed director of the capital equipment division of the Office of Facilities Planning. UB President Robert L. Ketter recruited Johnson in 1986 to serve as business manager and develop the physical facilities for what is now MCEER.

During his career, Johnson made numerous vital contributions to the UB campus and facilities. He was responsible for major equipment acquisitions during the construction and early development of the North Campus. He was also instrumental in the purchase of the \$1.5 million seismic simulator for the Department of Civil Engineering. Johnson was well-known throughout the UB community and the SUNY system, having served on the Professional Staff Senate Executive Committee and as a member of the SUNY Purchasing Association. He was also certified as a materials manager and a professional purchasing manager.

Johnson was very active in his community as well. A resident of Lockport, he helped bring cable-television to the area in the mid-70s and continued to serve as the secretary-treasurer of the cable commission up to his death. As secretary of the City of Lockport Emergency Response Planning Committee and the Niagara County SARA Title III Emergency Response Planning Committee, he also helped write a plan for the management of toxic and hazardous materials spills for the city.

The complaints of many Florida voters about the ballots used in this year's presidential election has left many researchers searching for ways to improve the voting procedure. One UB professor feels that the answer might be found in the same human-factors principles that ensure user-friendly designs in the most common appliances, from refrigerators to computers.

"No matter what the system is, you need to apply good design principles to it," said Ann Bisantz, Ph.D., assistant professor of industrial engineering. Finding the root cause of human errors in a specific system is the focus of Bisantz's research.

She recently received a \$300,000 grant from the National Science Foundation to study human decision-making in complex environments, such as manufacturing, aviation and transportation.

Bisantz thinks that the principles of human-factors research should be used to conduct a detailed test of the design of the voting machine. "There are systematic ways to do these tests," she said. "To develop a good voting system, for example, you would test it with a good cross-section of voters in the country."

One of the most basic human-factors principles is that a good design should let the person who is using the product or system identify and correct his or her own mistakes before they become critical.

"For example, a computerized system could ask a voter who had not cast a ballot for a specific office if they had really intended to leave that blank," she said.

Machines also need to be tested for the physical challenges they may pose.

"The issue of whether or not a ballot or voting machine is easy to use is not a matter of opinion," Bisantz continued. "This is something about which data can be collected. It can be empirically tested and measured."

Building a Better Ballot Through Human-Factors Research

Warren Thomas Recalls Move to North Campus

Imagine driving to UB without having to worry about that endless search for a parking space, or visiting the campus cafeteria without allotting extra time for the long lines. Sound a bit like Utopia? It might today when one considers the hectic pace of campus life, but not that long ago it was a reality.

This past Fall marked the twenty-fifth anniversary of Bell Hall, which opened for business on the North Campus in 1975. When the Department of Industrial Engineering (IE) moved into Bell, there were only three other buildings on the campus: Governor's, Ellicott and O'Brian. Initially, IE was the sole occupant, but it was later joined by part of the Department of Electrical Engineering, as well as Information and Library Studies.

Dr. **Warren H. Thomas**, who is Professor Emeritus in IE but was then chair of the department, recalls those early days with fondness. "It was exciting," he said. "You were here first and knew others were coming. We would just walk around the grounds and look at the places where the other buildings were supposed to go up."

Thomas remembers a time when Bell towered over Furnas Hall, which was only in an early stage of

construction and wouldn't open until 1979. He occupied a corner office in Bell and watched the new building grow slowly taller outside his window.

"One day I looked out my window, and I said to myself, 'that thing looks crooked,'" Thomas said. "Sure enough, it was off eighteen inches. They had quite a job to straighten it out."

Campus life in those days was much less hectic but was not without its own special hassles. Although there were no parking problems, the walk from what is now the Ketter Lot (then a mere square of dirt) to the door of Bell Hall could be a messy one. "Whenever it rained or snowed," Thomas recalled, "it was terrible. Nothing but mud."

Dry days weren't much better, since the swirling wind that is a signature feature of the area could leave one feeling a bit like Pigpen, the Peanuts character who is forever followed by a cloud of dirt. But it is not these minor inconveniences that stand out when Thomas speaks of those early days. His memories are dominated by different images: the thrilling ease of unfilled spaces and, above all, the excitement that always accompanies any grand, unfinished thing.

	1975	2000
Enrollment		
Undergraduate	1462	2554
Graduate	445	818
Degrees granted		
Undergraduate	217	421
Graduate	76	205
Ph.D.	27	40
Faculty	79	110
Research Expenditures		
Total (in millions)	\$2.5	\$19.1
Dollars per faculty member	\$31,600	\$174,000

Bell Hall completed, 6/1974

Furnas partially completed, 3/1976



MCEER Forms New Strategic Partnership Network

The Multidisciplinary Center for Earthquake Engineering Research (MCEER) has formed a Strategic Partnerships Network to advance the application of technology by uniting business, industry and government.

The program will encourage the formation of alliances between manufacturers, engineers, information-technology specialists, facility owners and others involved in or affected by earthquake-mitigation technology. It hopes to accomplish its directives by stressing the mutual concerns of ordinarily competitive organizations.

"Our overall goal," said MCEER Director **George C. Lee**, "is to create value through cooperation—valuable opportunities for participants to advance their organizations' missions, and valuable solutions to safeguard Americans and America's economy from earthquake disasters."

The partnership network will offer these participants access to specialty interest groups centered around various technologies currently studied at MCEER, including site remediation, structural control, advanced-systems analysis, high performance materials, condition assessment, and decision-support systems.

These technologies "can dramatically advance the way our nation mitigates losses from earthquake disasters," Lee said. "Technology manufacturers, marketers, consultants and users all share a stake and can all benefit from the opportunity to work collectively to advance common goals and technology application."

For more information, contact Donald Goralski at MCEER by phone at 645-3391 or by e-mail at <goralski@acsu.buffalo.edu>.

New Advanced Certificate Program in Computer Science Given Green Light

The New York State Education Department and the Chancellor of the State University of New York have approved an advanced-certificate program in computational science.

The program, a cooperative effort between UB's Center for Computational Research (CCR) and participating UB departments, is designed to train science-and-engineering graduate students at the University at Buffalo in scientific computing. It is available to students pursuing master's and doctoral degrees in mathematics, physics, chemical engineering and mechanical and aerospace engineering.

"The certificate program will make these students a lot more marketable to prospective employers," said **E. Bruce Pitman**, Ph.D., chair of education, outreach and training programs at CCR and a UB professor of mathematics. A multidisciplinary field that unites computer technology with many kinds of disciplinary research, computational science often is called the "third science," complementing theoretical and laboratory science.

In addition to high-technology, fields that require this kind of expertise include the investment community, where advanced computing is used to develop new financial products; advanced engineering and design firms for the automotive and aerospace industries, and national laboratories, where scientists use scientific computing to do everything from predicting the weather to designing new chemical catalysts.

Students in the certificate program must take a total of 15 hours of approved graduate coursework -- usually five courses -- including a two-semester course in high-performance computing offered by CCR in collaboration with the departments of Chemical Engineering, Mathematics, Physics and Mechanical and Aerospace Engineering. Students select the remaining nine hours from computing and applications courses offered by each of the participating departments.

"These requirements highlight the interdisciplinary nature of computational science because they expose students to fundamental methods while providing them with an understanding of how computing is applied to their chosen discipline," said Pitman.

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