








University at Buffalo

The State University of New York

School of Engineering and Applied Sciences

UB Engineering and Applied Sciences Dean's Quarterly Report #5 July 1, 2007 to September 30, 2007

Topics:

Advancement & Development 	Hires and Searches 	Projects 	Planning 	Events and Visits 
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Dear UB Engineering Faculty and Staff:

Here is a brief Dean's Office Progress Report concerning the highlights of the last quarter organized by topic:



1. Advancement and Development

In the past quarter, six proposals were presented to individuals, foundations, and corporations, totaling \$6,700,000 of philanthropic investment in our School. While only one has been approved, the remaining are pending further information, planning, and consideration.



2. Hires and Searches

a. Searches Completed

In my last progress report, I mentioned that three searches were nearing conclusion. I am happy to announce that those searches have concluded successfully - with three new faculty members who will join us in the near future. Their names below have hyperlinks to more information about their work.

Name	Research Field	Rank	Dept.	PhD Granting Institution
Chang Wen Chen	Multimedia Signal Processing	Professor	CSE	University of Illinois
Adel Sadek	Intelligent Transportation Systems	Associate Professor	CSEE	University of Virginia
Natalia Litchinitser	Photonic Materials	Assistant Professor	EE	Illinois Institute of Technology

b. Searches Started

Ten searches for Fall 2008 have been authorized in the areas and departments shown in the following Table. The successful conclusion of these searches, coupled with a small anticipated loss of three faculty members this year, will bring the School’s FTE faculty count to 158.7.

Strategic Strength	Topic	Rank	Department
INS	Multi-functional Materials – Energy Conversion	Assistant	MAE
ExEv	Wind, Blast, Fluid Modeling	Assistant	MAE
ExEv	Intelligent Transportation Systems	Assistant	CSEE
ExEv	Risk Analysis Information Infrastructure	Associate	ISE
ICT	Smart Environments	Assistant	CSE
ICT	Smart Environments (candidate identified)	Full	CSE
ICT	Smart Environments	Assistant	ISE
ICT	Smart Environments or Enabling Discovery	Assistant	CSE
Other			
SSE	Service Systems Engineering	Associate	ISE
Chair	MAE Chair	Full	MAE



3. Projects

a. Student Admissions Projects

i. Undergraduates:

Our expanded undergraduate recruiting efforts of last year will be continued this year. We achieved a 22-point increase in the SAT scores of our first-year students and will be working for a 20-point increase again this year. We will also continue to be more selective when admitting transfer students and be more attentive to recruiting underrepresented minorities.

ii. Graduate Students:

Our final count for graduate student enrollment this year was 1015. While this is 25 more students than last year, it is 85 students below our target of 1100. Missing our target was more a function of underestimating attrition and overestimating yield than a lack of qualified applicants. Next year a more accurate model for attrition and yields will allow us to meet our graduate enrollment targets with greater precision.

Last year the school graduated 62 PhD students, ten more than the year before. We hope that our new strategy of using a small percentage of our TA stipends to recruit top ranked

domestic students directly into our PhD programs will be effective at growing this number even more.

b. Service Systems Engineering

Our new program in Service Systems Engineering (SSE) began this fall with a class of 15 students, short of our goal of 50 students. State Education Department approval is still pending, limiting our ability to formally market the program. However, we anticipate the approval will be received in the next month. We made visits to several local companies to tell them about the program and to encourage their participation by sponsoring students, projects, and future hires. The companies included Catholic Heath System, Independent Health, HSBC, Roswell Park, Verizon, and CTG.

c. Biomedical Engineering Department (BME)

Dean Michael Cain from Medicine and I met with representatives of the Oishei Foundation to present our proposal for their review and consideration. They were excited about the new department and programs and encouraged us to submit a full proposal this fall. Following that presentation, I have been visiting the presidents and CEO's of local biomedical engineering related companies (Greatbatch, Gaymar, Reichert, Minrad, SmartPill, Cognigen, and Invitrogen) to gain their support. They have all offered to provide letters of endorsement.

d. New Engineering Building

We are on schedule and on budget for the new engineering building. The budget of a fully-designed, built and equipped building is still at approximately \$77 million. We are three months into design and will be completing the program verification and concept design within the next month. The next phase is schematic design, which will be followed by construction documentation. We hope to break ground in the spring or summer of 2009, with a completion date of May 2011.



4. Planning

Through a redesign of the School's Dean's Advisory Council (DAC), I have created four focus groups comprised of five (5) council members and five (5) to seven (7) UB faculty and staff. The focus group topics include: (a) Student Quality, Quantity, and Representation; (b) New Markets for

Education and Research; (c) Advancing Reputation and Resources; (d) Productivity, Excellence, and Growth. On Friday, October 12, the newly configured DAC met and discussed specific goals for the School. We hope to accomplish these goals in the next year.

1. Add 20 points to the average SAT score of our first year students
2. Increase underrepresented enrollment in freshman class by 30%
3. Grow undergraduate enrollment by 5% through better retention
4. Launch a plan to double PhD productivity
5. Enroll over 1100 graduate students
6. Launch BME successfully and populate SSE with 50 students
7. Improve peer/employer rankings in *US News* survey from 2.8 to 3.0 (out of 5.0)
8. Procure investment commitments of \$10,000,000
9. Increase national visibility – awards, publicity, innovations
10. Complete hiring plan shown in 2b (above) which would, therefore, increase faculty FTE to 157
11. Increase research proposals by 20%
12. Develop workload policies to optimize faculty efficiency



5. Events and Visits

a. Events

Date	Event	Location	Discussion Topics
7/10 & 7/11	Perkins+Will (architects)	UB Campus	Review of spaces for new building
7/19	NYS Legislature Western Delegation (hosted by Sen Volker, Sen. Young), JB Walsh (Ecology & Environment), Rick Victor (Praxair)	Buffalo, NY	Proposed oxy-coal project in Jamestown, NY
7/26	Department of Energy with Rick Victor, Technology Development Director- Praxair	Pittsburgh, PA	New clean coal power plant at Jamestown, NY
7/31 & 8/1	Perkins+Will (architects)	UB Campus	Review of spaces for new building
8/7	BEAM Golf Outing	Darien, NY	Strengthen corporate relationship related to BEAM
8/15	Perkins+Will (architects)	UB Campus	Clean room for new building
8/21 & 8/22	Perkins+Will (architects)	UB Campus	Progress on new building
8/24	Electrical Engineering Faculty Meeting	UB Campus	School goals for 2007-08
8/24	University Welcome	UB Campus	Celebrate beginning of academic year with new students and their families
8/26	Opening Day	UB Campus	UB Engineering freshmen welcome including kite competition

8/28	Ecole Nationale Supérieure De L'electronique Et Des Ses Applications [Philippe Marc, Carine Sabouraud (ENSEA); Vanita Misquita (IIT France/Overseas Office)]	UB Campus	Exchange agreement and collaborations
8/28	Computer Science and Engineering Faculty Meeting	UB Campus	School goals for 2007-08
8/28, 8/30, 9/4, 9/10, 9/11	Dinner with Dean's Scholars	UB Campus	General conversation
9/5	Dan Gunderson (Upstate Chair, Empire State Development Corp.), Hadley Pawlak (Chief of Staff, Upstate ESDC), Phil Wilcox (NRG Huntley)	Buffalo, NY	Clean coal power plant
9/6	Construction Manager Interviews	UB Campus	Interview candidates for Construction Manager position for new building
9/6	Praxair Corporate Reception	Tonawanda, NY	Corporate partnership reception
9/6	Genetics & Genomics in Disease and Development Mini-Symposium Dinner	Buffalo, NY	Opening of mini-symposium
9/12	Perkins+Will (architects)	UB Campus	Concept Design
9/13	Perkins+Will (architects)	UB Campus	Sustainability Charette
9/14	Miss Buffalo Cruise for Dean's Scholars	Buffalo, NY	Focus on engineering feats
9/17	Chemical and Biological Engineering Faculty Meeting	UB Campus	School goals for 2007-08
9/18	Dresser Rand Day on Campus	UB Campus	Enhance relationship between UB and Dresser Rand
9/18	Civil, Structural and Environmental Engineering Faculty Meeting	UB Campus	School goals for 2007-08
9/19	Industrial and Systems Engineering Faculty Meeting	UB Campus	School goals for 2007-08
9/20	Jared Snyder (DEC Asst. Commissioner-Air, Climate Change & Energy), George Rusk (Ecology & Environment), Dave Leathers (Jamestown BPU), Rick Victor (Praxair)	Buffalo, NY	Proposed oxy-coal project in Jamestown, NY
9/20	New Faculty Reception	Amherst, NY	University welcome for new faculty and spouses
9/21	Student Club Leaders Lunch	UB Campus	UB Engineering and student clubs
9/21	RIT Social (RIT faculty, UB ISE & MAE faculty)	UB Campus	Graduate level collaborations between UB and RIT

b. Visits

Date	Name and Title	Location	Discussion Topics
7/3	Robert Tom (Fisher-Price), Tom Moir, (B.E.S.T. Academy -BPS #6), Christine Wingo (UB AMP Program), Donald White (Praxair-retired), Sandra Budmark (Wendel Duchscherer), Tyra Johnson (LP Ciminelli), Doug Levere, (UB Marketing & Creative Svcs.), Rosemary Gambacorta (parent of BEAM student), Marilyn Helenbook (BEAM), Carmen Vella (General Motors-retired)	UB Campus	Marketing of BEAM
7/19	Jerry Marsala (Technology Education Dept./PLTW Lancaster HS)	UB Campus	Recruitment of high school students
7/20	Independent Health (Carol Cassell, Executive Vice President & COO)	Williamsville, NY	SSE Program
7/24	Jim McLernon BS '50 IE (retired Chairman of the Board-American Axle and Mfg., Inc.)	Detroit, MI	Promoting UB Engineering
7/25	HSBC (Holly Droney, Sr. HR Manager for Technical Services)	Buffalo, NY	SSE Program
8/3	Roswell Park Cancer Institute (Arthur Michalek, Senior Vice President & Dean for Educational Affairs)	Buffalo, NY	SSE Program
8/7	Shekhar Babu, Chairman, INDO-US University Initiatives, Amrita U.	Buffalo, NY	Overview of UB Engineering
8/8	Panjab Singh, Vice Chancellor, Banaras Hindu U.	UB Campus	Overview of UB Engineering
8/13	Sam Hoyt, 144th District Assemblymember	Buffalo, NY	Waterfront project in his district
8/16	Picatinny Arsenal Ardec (Saif Mousaui, Harry Moore, Harden Singh, Gordon Boezer)	UB Campus	Continued support for UB Engineering
8/20	Catholic Health System (Joseph McDonald, President & CEO)	Buffalo, NY	SSE Program
8/20	Oishei Foundation (Robert Gioia & Paul Hogan)	Buffalo, NY	Support for Biomedical Engineering Department
8/23	Verizon Communications [Managers-Network Engineering: Michael Federico, Planning (Buffalo & Syracuse); James Murphy, Design (Buffalo); Sharon Robbins, Support (Buffalo & Syracuse); Maureen Rasp-Glose, Director-External Affairs (Buffalo)]	Buffalo, NY	SSE Program
8/23	Pedro Caban, SUNY Vice Provost for Diversity and Educational Equity	UB Campus	Overview of UB Engineering
8/31	BEAM Marketing Subcommittee (membership shown in July 3, above)	Amherst, NY	Fundraising within the community and grant writing
9/7	Patrick Abrami, BS '72 IE, MS '75 IE, Partner & Consultant, Applied Management Systems	Boston, MA	Promoting UB Engineering

9/11	Jack Davis, BS '55 IE, President, I Squared R Element Company	Akron, NY	Promoting UB Engineering
9/14	Greatbatch (Thomas Hook, President & CEO)	Clarence, NY	Support for Biomedical Engineering Department
9/17	Harold Silverman, SUNY Sytems Administration Senior Vice Provost	UB Campus	Overview of UB Engineering
9/18	Phil Wilcox and Ray Long, Director, Northeast Region (NRG Energy)	Williamsville, NY	Clean coal power plant
9/21	Minrad (William Burns, CEO)	Orchard Park, NY	Support for Biomedical Engineering Department
9/21	Gaymar (Thomas Stewart, President & CEO)	Orchard Park, NY	Support for Biomedical Engineering Department
9/21	SmartPill (David Barthel, President & CEO)	Buffalo, NY	Support for Biomedical Engineering Department

I hope this report is useful. If you would like more information on any of the topics, please contact me.

Sincerely,

Harvey