



**Bucknell Engineering Alumni Association  
Annual Report  
2007-2008**

**TABLE OF CONTENTS**

**INTRODUCTION** ..... 3  
**PRESIDENT’S MESSAGE** ..... 3  
**DEAN’S MESSAGE** ..... 5  
**COMMITTEE REPORTS/ACCOMPLISHMENTS** ..... 8  
    Admissions – Shari Aser, Chair ..... 8  
    Career Development – Suzanne Schick Tanz, Chair ..... 8  
    Development – Harry Kitch, Chair ..... 9  
    Membership – Brad Mostoller, Chair ..... 9  
    Outreach/Affinity – Liz Roman, Chair ..... 10  
    Planning – Rob VanSchooneveld, Chair ..... 11  
**ALUMNI AWARDS** ..... 11  
**ANNOUNCEMENTS** ..... 12  
**APPENDIX – BOARD MEETING MINUTES** ..... 13  
    Meeting Minutes, October 19-20, 2007 ..... 13  
    Meeting Minutes, February 21-22, 2008..... 17  
    Meeting Minutes, May 31, 2008..... 23

## **INTRODUCTION**

Beginning in 2002-2003, the Bucknell Engineering Alumni Association Board of Directors marked the beginning of a new approach to document the accomplishments of the Bucknell Engineering Alumni Association. The Board of Directors assigned this task to the Planning Committee so that the Board, the Association members, the College of Engineering and the University had a synopsis and permanent record of the activities and accomplishments of the Association. The minutes of the meetings of the Board of Directors are attached to provide the details of the Board's actions during the 2007-2008 academic year.

## **PRESIDENT'S MESSAGE**

**By Rob Van Schooneveld '75**

June 2008 marked the completion of my first year as President of the Bucknell Engineering Alumni Association (BEAA). Through the help of our dedicated board members, we were able to successfully fulfill the mission of the BEAA. That mission is to promote the general well being of Bucknell's College of Engineering by encouraging alumni to take an active interest in the affairs of the University.

To accomplish this mission, the BEAA uses a three-pronged attack by involving engineering alumni with the faculty, the students, and other alumni.

The BEAA Board was able to support the faculty by sitting with them and bringing the board's firsthand knowledge and experience of the qualifications required to work in industry as engineering professionals. This also helps the various departments meet their requirements for ABET certification.

The BEAA Board was able to support the students by sharing their career experiences with the first year students during the Career Connections Event held in the fall and with upper class students during the Engineering Career Network Event held in February. We also include students from each one of the engineering societies who serve as BEAA board members. This gives the alumni board members a chance to relate better to student issues and concerns, as well as a chance to offer alumni help to the societies. In the fall of 2008 we look forward to adding an 11<sup>th</sup> student board member from Engineers Without Borders.

The BEAA Board was able to support alumni by helping to host the Engineering tent at the Bucknell Village event held during Homecoming and hosting the popular Cocktails and Contraptions event during Reunion weekend for returning alumni and their families. We also co-sponsored a tour of the General Motors plant in Wilmington, DE that was attended by both alumni and students.

In November, the BEAA in conjunction with the College launched the initial Bucknell Engineering Networking (BEN) Event in Washington, D. C. followed by BEN events in

Philadelphia, San Francisco, Los Angeles, San Diego and Pittsburgh. The purpose of these affinity events is to re-connect engineering alumni with the college and other alumni in their geographic area by hosting informal get-togethers. Dean Orbison attended all of these events and he was able bring all attendees up to date with a short State of the College presentation. President Mitchell also attended the Washington event where is spoke about the new direction for Bucknell. Based on the success of these events, we are planning future BEN events with the next one scheduled for Baltimore in November 2008 and other areas where there are a high population of engineering alumni.

It was a busy year and we will continue to take an active role in supporting the College of Engineering beginning with the Homecoming Weekend meeting in October 2008.

## DEAN'S MESSAGE

By James G. Orbison, '75, Ph.D., P.E.

This has been another successful year for the College of Engineering, achieved through the efforts of many people working to advance and enrich the educational experiences of our students. The Board of Directors of the Bucknell Engineering Alumni Association (BEAA) continues to play an important and growing role in those efforts. Over the past few years, the BEAA group has grown to provide very real assistance to the College, often in ways that can only be provided effectively by external constituents. BEAA initiatives are making a difference in a great many areas, through activities within the ECLIPSE\* Program such as:

- A February Career Networking event that brings engineering alumni and students together to discuss career opportunities, and a number of off-campus alumni events that have been opened to student participation when their schedules permit.
- The Women in Engineering program that connects prospective women engineering students with women engineering alumae is enhancing the success of our admissions process with prospective women engineering students. This program, now in its fifth year, has contributed to an increasing number of entering women engineering students at Bucknell. Currently, 26 percent of our engineering students are women, comparing favorably to the national representation of just over 17 percent.
- A formal ceremony inducting the engineering junior class into the BEAA at a College of Engineering dinner celebration during Homecoming Weekend.
- A session, *Connections for Engineers: Majors and Careers*, within the ENGR 100 Exploring Engineering course, connecting engineering alumni with first-year engineering students and structured to provide our new students with information directly from engineering alumni regarding the engineering professions, professional life, and professional responsibilities.
- This year, a new initiative, the Bucknell Engineering Network (BEN) was introduced, bringing together engineering alumni at receptions in locations across the country. This year, receptions were held in Washington, D.C. (the inaugural reception attended by President Mitchell), Philadelphia, San Francisco, Long Beach, San Diego, and Pittsburgh, and plans are underway for receptions in the coming year in Baltimore and three locations in Texas: Austin, Houston, and Dallas.

*\*Enterprising Connections Linking Industry, Programs, Students, and Engineering alumni*

All of the Board's efforts, directly and indirectly, enrich the educational and professional development opportunities available to our students. The BEAA continues to make a difference, and an increasing difference, in their lives and futures.

In the College of Engineering, we will undergo the periodic ABET accreditation review of our undergraduate degree programs in the coming year. The bachelor of science degree in biomedical engineering will be seeking accreditation for the first time, and re-accreditation will be sought for the chemical, civil, electrical, and mechanical engineering degree programs along with the computer science and engineering degree program, which holds dual accreditation through the Computing Accreditation Commission and the Engineering Accreditation Commission of ABET.

Since the last accreditation review in 2002, much has changed in the College of Engineering:

- A new revision of the College's strategic educational plan, *The Bucknell Plan for Engineering Education* (BPEE), was developed by the College's Strategic Planning Committee in 2006. The plan is consistent with and supports the university's strategic plan, *The Plan for Bucknell*, and identifies challenges, opportunities, and priorities for the next decade in the College. The BPEE was adopted by the College in December 2006.
- All degree programs have implemented comprehensive educational assessment processes of program outcomes and program educational objectives. These processes include regular surveys of our students and our alumni, longitudinal tracking of a series of metrics, and assessment of student work that is directly related to our program outcomes. Nationally-normed engineering senior exit surveys consistently place us among the top 5 engineering colleges participating in the survey (approximately 65 in number) in most categories.
- Three new undergraduate degree programs and one new graduate degree program have been developed and initiated, including the bachelor of science degree in biomedical engineering (2003), the dual-degree program resulting in a bachelor's degree in an engineering discipline and a bachelor's degree in management (2006), a bachelor of science degree in computer engineering (2008), and a master of science degree in environmental engineering (2005).
- The number of tenure-track engineering faculty has increased by nearly 40 percent since the year 2002. The percentage of women tenure-track engineering faculty has approximately doubled over the past six years, and the College of Engineering is now ranked 16<sup>th</sup> among all engineering colleges nationally in the percentage of women tenure-track engineering faculty.

- The number of applicants for admission to the College of Engineering has increased substantially. As a result, the admissions process has become more selective for this College, and the percentage of engineering applicants offered admission has declined from 47 percent in 2002 to 27 percent in 2008. Student quality has increased as well, and the combined math and verbal SAT average now exceeds 1,360.
- The new Breakiron Engineering Building was occupied in the fall of 2004. This building, of 38,000 gross square feet, increased the space available to the College of Engineering by 45 percent.

But some things, quite deliberately, have not changed: the College of Engineering continues to dedicate itself to providing undergraduate engineering education of the highest quality with faculty who are committed to our students as both individuals and as developing professionals and contributors to society.

In sum, this has been a year of continuing progress. Our students are benefiting from the efforts and generosity of all who have made these advances possible. I want to personally thank all members of the Board of Directors of the Bucknell Engineering Alumni Association for their eager efforts, selfless assistance, and dedication to the College of Engineering and our students. It is a privilege to work with you in this shared endeavor.

## **COMMITTEE REPORTS / ACCOMPLISHMENTS**

### **Admissions - Shari Aser, Chair**

2007-2008 academic year, continued to be a year of transition for the Admission Volunteer program university wide. The Women in Engineering Program (WIE) continued to exceed expectations as for the fifth consecutive year. As a result of our continued success many of the new admissions initiatives for 2007-2008 are being modeled after WIE, including the Admissions Mentor Program which is similar to the former Top Prospect Calling program. For the 2008-2009 academic year, the total women enrollment in the college has grown to 27% after remaining at 24-25% over the past few years with the national average at approximately 18%.

With the addition of student members to the BEAA Board of Directors and working with SWE, we held the second annual SWE/WIE All-nighter during National Engineers Week. This was a networking opportunity for the female engineers and WIE volunteers. The evening was a huge success and we are already planning new activities. In addition several WIE Volunteers and SWE Members traveled to the National SWE Conference. We are very excited about the success of the WIE program, and we look forward to building on this momentum in the upcoming academic year.

### **Career Development – Mitch Blumenfeld, Chair**

During the 2007-2008 academic year the BEAA Career Development Committee continued to connect students and alumni through our very successful on-campus events tied to Homecoming and National Engineers' Week. In the fall semester we held the second annual Connections for Engineers session for the Engineering 100 class and despite difficult weather conditions, hosted a very successful Engineering Career Networking event during National Engineers' Week in February.

After compiling student feedback from the first Connections for Engineers event in the fall of 2006, the Engineering 100 faculty and BEAA introduced a new format for this event in 2007. Students were given the opportunity to meet with alumni in a relaxed, informal atmosphere to encourage open dialog and more questions from the students. This year 191 first-year students attended and met with 27 alumni, including many members of the BEAA Board of Directors. Each alumni participant received a collection of questions and interests from students considering their engineering discipline. This allowed the alumni to open the session by addressing more specific questions and then engage students directly based on the interests they had expressed. Students had the opportunity to meet with multiple alumni to encourage exploration of several engineering disciplines. The questions covered topics from extracurricular activities to career choices and favorite engineering classes. The event received very positive feedback from faculty, alumni, and student participants and we are actively planning for the third annual event in the fall semester of 2008.

The Engineering Career Networking event is held every year at the end of National Engineers' Week and provides an excellent opportunity for students to meet and network with alumni across a wide range of industries and engineering disciplines. Targeted

toward juniors seeking internships or interested in certain industries after graduation, this event is open to all students from first-year through graduate students. Alumni who are working as engineers but also using their engineering background in medical, legal, sales, and other related professions provide career advice and other coaching to the students. This year we connected 222 students with 32 companies/alumni who were able to return to campus despite the snowstorm. Interest in this event continues to grow each year and we look forward to continuing this event in the spring semester of 2009.

Thank you to all of the staff at the Career Development Center, supportive engineering alumni, and BEAA board members for making this another successful year for the Career Development Committee!

**Development – Rob Van Schooneveld, Chair**

The BEAA Development Committee set a goal of 100% participation of the BEAA Board of Directors in annual giving for 2007-2008. *While we did not reach our goal this year with 93% participation, we will work to increase this to 100% in 2008-2009.*

**Membership – Brad Mostoller, Chair**

The BEAA Nominations and Membership Committee reviewed the list of potential candidates for the BEAA Board of Directors. The following existing members agreed to accept new three-year terms beginning July 1, 2008:

Mitch Blumenfeld '91	2 <sup>nd</sup> Term continuing through June 2011
James Geiling '55	2 <sup>nd</sup> Term continuing through June 2011
Joanne Janssen '87	2 <sup>nd</sup> Term continuing through June 2011
Wende Pogust '79	3 <sup>rd</sup> Term continuing through June 2011
Suzanne Schicktanz '80	3 <sup>rd</sup> Term continuing through June 2011
Vicki Sholtes '78	3 <sup>rd</sup> Term continuing through June 2011
Liz Springer '96	2 <sup>nd</sup> Term continuing through June 2011
Rob Van Schooneveld '75	3 <sup>rd</sup> Term continuing through June 2011
Stacy Wolin '87	2 <sup>nd</sup> Term continuing through June 2011

The Nominations Committee developed a “shortlist” of top candidates for the open positions. Each potential candidate was contacted personally by a committee member to explain the activities of the BEAA and the responsibilities of a Board member. As a result of these contacts, the following individuals were nominated and elected to the Board for three-year terms beginning July 1, 2008:

- Brad Gething '01, BSCM
- Diane Hymas '79, BSCM
- Lance Lauletta '80, BSEE

Additionally, there were two positions specifically defined to be filled by alumni graduated within the past five years. The following individuals were nominated and elected to the Board for three-year terms beginning July 1, 2008:

Erica Augustenberg '06, BSCM  
James Tucker '07, BSCE

In addition, it was our honor to nominate Dr Edward Staiano ('58) to receive the Distinguished Engineering Alumni Award. The award will be presented during Homecoming Weekend in October.

### **Outreach / Affinity – Liz Roman, Chair**

The goal of the Affinity Committee is to organize activities and programs to activate engineering alumni and reconnect them with the College and with each other. This goal supports our belief that active and connected alumni are more likely to contribute to the College and the Bucknell community as a whole whether through service, general involvement, or donations. Affinity Committee programs also raise awareness of the BEAA and have generated a higher level of awareness of other College initiatives, such as the ECLIPSE Program.

This year, the Affinity Committee included engineering students, alumni and friends at a number of on and off-campus events. Highlights of the year included the following:

- In October, as part of Homecoming Weekend, engineering faculty and the BEAA hosted the engineering tent at the first annual Bucknell Village. The tent was located in the quad between Dana Engineering and Olin Science. Alumni and their families gathered there to reconnect with each other, faculty and friends. Lunch was offered by the University. The event was a great success.
- That evening, the BEAA, engineering alumni and friends of Dana Engineering gathered in Davis Gymnasium to support the 2007 student research symposium and induct the junior class into the BEAA. During the cocktail hour, guests had the opportunity to review the projects and speak with many of the student researchers. Following dinner, President Mitchell and Dean Orbison offered comments. The event concluded with the induction of the Junior Class into the BEAA. The students were welcomed into the Association by BEAA President Rob Van Schooneveld and received a small BEAA gift to serve as a reminder of their affiliation with Bucknell Engineering in their college years and beyond.
- In May, the BEAA hosted another Cocktails and Contraptions social for Reunion Weekend. Once again, the event was held in the Dana Engineering lobby and adjacent rooms. Alumni and their families constructed rafts from the materials that were provided. Approximately 370 guests attended the event.

The University's focus on alumni connections remains in a state of transition and will continue to evolve over the next year. The goal of the University is to bring together like-minded students, staff and alumni beyond the boundaries of the University and/or existing Alumni clubs. The BEAA Affinity Committee supports this new initiative and is working with the University's Alumni Relations to develop off-campus events that support the program. Fortunately, the BEAA continues to be positioned to lead the

University, as the types of programs being recommended by Alumni Relations for the University family at large are the same events that the BEAA has organized for years.

In conclusion, the Affinity Committee would like to extend our condolences to the family of Vice President Charlie Pollack '70. Charlie was a friend of the College of Engineering and a supporter at many BEAA events. He will be missed.

### **Planning Committee – Suzanne Schicktanz, Chair**

The BEAA amended the by-Laws to increase membership from 46 to 47. The new member will be an engineering student representing Engineers without Borders, bringing the total number of student members to 11. This representation will allow input from engineering students studying beyond the Bucknell campus. The faculty advisor to this program is Biomedical Engineering professor, Dr. Joseph Tranquillo.

The Affinity Committee has been restructured into 3 new Committees based on the growth in the affinity area from Bucknell's effort to reconnect with alumni.

#### Off-Campus Events - Networking

This committee is responsible for Bucknell Engineering Networking (BEN) events for engineering alumni to include updates on the College of Engineering and the BEAA. Previous off-campus engineering networking events have been well received by staff, faculty and alumni and provide excellent support for Bucknell Engineering and the BEAA. A specific committee to lead these events will help focus on future planning and coordination to continue this momentum.

#### Off-Campus Events - Tours

This committee will focus coordinating off-campus tours that are open to all Bucknell Alumni. These events are often co-sponsored with the Bucknell Clubs and this committee leads the engineering liaison for area Clubs of Bucknell

#### On-Campus Events

This Committee is responsible for organizing on-campus affinity activities that are often open to all Bucknell alumni. These include events such as Cocktails and Contraptions, BEAA dinners and social events.

### **ALUMNI AWARDS**

The Bucknell Engineering Alumni Association moved the presentation of the seventh Distinguished Engineering Alumni Award (DEAA) to Homecoming Weekend 2008. All future annual DEAA celebrations will be presented during Homecoming Weekend.

## **ANNOUNCEMENTS**

Susan Darnell '87, M'91 and Joe Migliosi '83 concluded their terms the end of June 2008.

New and returning officers for the term beginning July 2008 are as follows:

Rob Van Schooneveld '75, President  
Joanne Janssen '87, Vice President, Activities  
Brad Mostoller '88, Vice President, Nominations & Membership  
Suzanne Schick Tanz '80, Secretary/Treasurer

New members for the term beginning July 2008 are as follows:

Erica Augustenborg '06, Brad Gething '01, Diane Hymas '79, Lance Lauletta '80,  
James Tucker '07

Shari Aser '98 will remain the Chair of the Admissions Committee.  
Mitch Blumenfeld '91 will remain the Chair of the Career Development Committee.  
Brad Mostoller '88 will remain the Chair of the Membership/Nominations Committee.  
Liz Roman '91 will remain the Chair of the Affinity Committee.  
Suzanne Schick Tanz '80 will remain the Chair of the Planning Committee.

The Executive Committee of the BEAA effective July 2008 will be  
Rob Van Schooneveld '75, Suzanne Schick Tanz '80, Joanne Janssen '87,  
Brad Mostoller '88, Shari Aser '98, Liz Roman '91, and Mitch Blumenfeld '91.

## **APPENDIX - BOARD MEETING MINUTES**

### **Bucknell Engineering Alumni Association**

#### **Board of Directors**

##### **October 19-20, 2007 Meeting Minutes**

Member Participation: Apruzzese, Aser, Barker, Beardslee, Blumenfeld, Booth, Bunker, Darnell, Geiling, Haberstroh, Hines, Janssen, Lando, Lavin, McDonnell, Migliosi, Mosteller, Mrozinski, Novak, Pogust, Roman, Sandri, Schicktanz, Sholtes, A. Spak, M. Spak, Springer, Stoltzfus, Van Schooneveld, Vidoni, Wojtysiak, Wolin.

Student Member Participation: Caro, Greenley, Hoffman, McCaffrey, McKeehan, Joey Smith (for McKeehan on Saturday), McKendry, Parker, Rakszawski, Woodhead.

Faculty/Staff Participation: Dean Orbison, Lois Engle, Angela Fritzges, Sarah Bell, Pam Keiser, Prof. Malusis, Prof. Meng, Prof. Aburdene, Prof. Baish, Prof. Cavanagh, Prof. Gross

Guests: Brad Gething, James Tucker, Kim Kaczor

The meeting was called to order by Rob Van Schooneveld.

The past presidents of SWE were recognized for their efforts; Katie Hoffman, Kim Kaczor, Brenda Lando, Michelle Beardslee and Kristen Sandri.

June meeting minutes were reviewed and approved.

Rob reviewed the day's agenda, key times and points to note. Rob encouraged everyone to attend Bucknell Village in the afternoon and engage in conversations with alumni and students. Thanks were given to Angi for coordinating the tickets and T-shirts for the day's events.

The evening's BEAA Induction Dinner Celebration and dinner was reviewed noting details for board member participation.

Rob discussed the Tau Beta Pi Graduate School Conversations and said it was a successful event.

#### **Student Societies Review**

##### ACM - Mike Rakszawski

They have created a resource for CompSci majors; *The Connection*, a newsletter which discusses current course offerings. ACM sponsors Geek Week with pizza parties and speakers from other colleges. They are also bringing in speakers to the college; Harriet Edelman, Avon Chief Information Officer, Joel Henry from the University of Montana, and David Nichol from the University of Illinois specializing in computer simulation.

AICHE – Danielle Woodhead

AICHE received the Outstanding Student Chapter Award. They are preparing for the National Conference in Salt Lake and are planning a brewery trip later in the semester.

ASCE – Matt McKeehan

ASCE held an ice cream social, built candy structures, and brought in speakers (Forester; interviewing techniques and Turner; construction industry) to promote interaction between first year and upper class students. ASCE is always looking for additional speakers, and they are looking for suggestions for a field trip.

ASME – Steve Parker

This organization would like to plan an educational tour, and they are bringing in speakers for research. There is also a CE/MechE football game planned. They are looking for a fundraiser to address low society funds and are always looking for suggestions for speakers and tours.

BMES – Allie McKendry

BMES sent students and professors to Los Angeles for paper presentations at the BMES National Conference. They are planning a trip to Sloan Kettering Research and will have a lasagna dinner at the end of the semester. This organization is already working on Engineering Week in hopes of retaining the Golden Hammer they received last year.

IEEE – Tom Caro

IEEE hosted speakers from Penn State and Virginia Tech to discuss electrical engineering topics including wireless networking. They are planning a trip to a power plant to better understand power generation.

NSBE – McCaffrey

This club attended a regional conference and will be attending a national conference in Florida this spring. They are holding weekly events to increase student participation including a resume writing event and a multicultural explosion event.

SWE – Katie Hoffman

SWE has been busy. They hosted an ice cream Welcome Event, worked with General Electric to sponsor an internship experience panel discussion, hosted a dinner with Harriet Edelman (Women in Leadership), and sponsored the Saturn plant tour with the BEAA. SWE will be attending the National Conference in Nashville and has a student/professor Meet & Greet and a SWE Alumnae Meet & Greet planned. They are printing T-shirts for fundraising and have a prospective incoming student event planned. SWE will be attending the regional conference this spring.

TBP – Justin Greenley

TBP had its initiation this fall and is trying to increase its visibility. They are researching alums that have been graduate students in hopes they would be willing to share their experiences and are looking for ideas to get involved and help its members.

**Committee Updates**

Admissions – Shari Aser

Currently, Admissions is revamping their programs. Shari has been in discussions with Patti Flannery and there is not a need for the committee to be engaged at this time.

The “Women in Engineering” program has been very successful. 117 WIE volunteers have been involved calling prospective female students to encourage their interest and desire to become an engineer. Once they submit applications, they are contacted again to check for questions. Top prospects are encouraged to attend Bucknell. Volunteers will stay in contact with incoming students prior to them coming to campus.

Nominations – Brad Mostoller

The committee is working with the Development Office looking for a prospect for next year's Distinguished Engineer and to replace departing members on the BEAA Board.

Affinity – Liz Roman

SWE, BEAA, and the Philadelphia Club toured the Saturn Plant in Delaware in late September. Susan Darnell was instrumental in securing this trip and George Lavin helped to finalize the tour. Lance Lauletta '80 and Trevor Smith '91 helped to arrange tours and lead the group. Saturn managers spent over 2 hours with the Bucknell group. Thanks also to Jim Geiling for his help with this successful event. There was positive alumni and student feedback and the dinner with Trevor was excellent.

Career Development – Mitch Blumenfeld

Yesterday's Connections for Engineers event was considered successful. 191 students attended with only 7 no-shows. There were 27 alumni leading table discussions (21 alumni were from the BEAA Board). It was felt the student preparation made the event more valuable and everyone preferred the new format. It was a good event to get students acclimated to college and uncover unrealistic perceptions. Thanks to Lois and Angi for their coordination with the Connections event. It was suggested that students be requested to talk to different alumni if they are considering other disciplines and have a list of what alumni are at which tables. Possibly include each student's curriculum with their info. This event is a good segue for the February Career Networking Event as a means to stay connected with alumni over the next 4 years. Pam Keiser has been promoted to the director of the Career Development Center and Sarah Bell is the associate professor of the CDC. Sarah will now be our main contact with the CDC.

College and University Updates – Jim Orbison

Applications to the College of Engineering were up 7% this year. By contrast, national applications were down. The College is accepting 1 out of 3 applicants.

SAT's were also higher this year; 1364, up from 1353 in 2006.

Women engineering students have taken their first dip in over 4 years; down to 24% from the previous 27%.

The College of Engineering has one of the highest percentages of women faculty in the country with 20% tenure-track positions which is more than double the national average.

Six additional faculty positions were added in 2007-08.

The College of Engineering needs more faculty offices and may have to begin doubling up. Lab space is also becoming tight and Dean Orbison is working to secure a new building.

In the 2008 US News & World Reports, the College of Engineering at Bucknell is ranked 8<sup>th</sup> out of 172 engineering colleges not offering PhD degrees.

The Senior Exit Survey for the college showed no decline in any of the 15 categories.

Additionally, 60 students took the Engineering In Training Exam (Fundamentals of Engineering) and 93% passed the exam compared to a national passing rate of 78%.

In other news, the University does not have a current Provost, so several Deans are filling in as part of a "Dean's Council". The Academic Vision Statement has proved to be a helpful guide leading to strategies, priorities, practices, and subsequent assessment of achievement.

There are new academic grants from the National Science Foundation:

- Geotechnical Building
- Pedagogical Research
- Research in Nanotechnology

The University has hired an outside consultant for energy conservation prompted by the increase in the natural gas bill. This year the bill is expected to be >\$700,000!

Next year there will be two Summer Institutes as a 3 week study abroad effort. One will be a trip to Switzerland with side trips to France and Germany with a focus on energy, and the other will be to Scandinavia with a focus on geothermal technology.

More good corporations are coming to campus for placement; Northrop Grumman, Texaco, ExxonMobile, and others. We need to continue this momentum.

It is felt that the College of Engineering at Bucknell is far ahead of National averages on so many fronts because of the focus on excellent undergraduate programs.

Closing Comments – Rob Van Schooneveld

Thanks were given to Lois and Angi for all they have done to prepare for the weekend. Rob encouraged the group to attend the Research Symposium after the football game. Meeting was adjourned.

## **Bucknell Engineering Alumni Association**

### **Board of Directors**

#### **February 21-22, 2008 Meeting Minutes**

Board Members: Apruzzese, Blumenfeld, Geiling, Haberstroh, Hines, Janssen, Lavin, McDonnell, Novak, Sandri, Sholtes, A. Spak, M. Spak, Stoltzfus, VanSchooneveld, Vidoni, Wojtysiak, Wolin, Caro, Rakszawski, Hoffman, Woodhead, McKeenan, Parker, McKendry, McCaffrey, Greenly

Faculty: Aburdene, Csernica, Evans, Meng, Rich, Baish, Cavanagh

Staff/Admin.: Jim Orbison, Lois Engle, Angela Fritzges, Sarah Bell, Laura Denbow, Megan Rogers

Guests: Erica Augustenborg, Scott Beach, Mike Bolduc, Joe Capowski, Andrew Fimiano, Brad Gething, Diane Hymas, Mike Roberg, Joe Rusiewicz, Dave Sobeck, Becky Stump, Charles Wilk, Don Tyson, Devin Shaffer

**Friday Call to Meeting & General Business** - Rob Van Schooneveld, President  
The meeting was called to order by Rob Van Schooneveld.

Rob welcomed everybody and then those attending introduced themselves.

The October meeting minutes were reviewed and approved.

After lunch, BEAA members divided according to their degree and met with their respective departments.

After the meetings with the degree departments, BEAA members participated in the Career Networking Event held in Larison Hall followed by the College of Engineering dinner. Engineering students presented the winning poem and videos from the Engineering Week competition. Students from the Electrical Engineering department won this year's competition.

**Saturday Call to Meeting & General Business** - Rob Van Schooneveld, President  
Affinity committee split into three areas (On-Campus, Off-Campus Network, Off-Campus Tours).

The Admissions committee has been reassigned. This committee will be staffed by Shari Aser.

The next Distinguished Engineering Alumni Award will be awarded in the fall of 2008, during Homecoming Weekend along with the induction of the engineering junior class into the Alumni Association.

**Bucknell Engineering Network (BEN) Launched** - Rob Van Schooneveld and Lois Engle

The November 1<sup>st</sup> event in Washington, DC with President Mitchell as the speaker was a huge success. Lois Engle, Joanne Janssen, Rob Van Schooneveld and Jeff Stoltzfus attended representing the BEAA. There were 49 attendees.

Future events planned:

- March 13 – Philadelphia, PA
- April 7 - San Francisco, CA
- April 8 – Los Angeles, CA
- April 9 - San Diego, CA
- June 22 – Pittsburgh, PA
- Spring 2009 – NYC (tentative)
- Next Fall - Seattle and/or Denver (tentative)

**Membership & Nominations** - Rob Van Schooneveld

Members whose terms are ending June 2008 will be contacted by Brad Mostoller regarding their renewal status. Susan Darnell and Joe Migliosi, due to personal and professional obligations, will not be renewing their terms at the end of June 2008.

Brad Gething '01, ChE, Diane Hymas '01, ChE, and Lance Lauletta '80, EE, were unanimously approved to join the Board of Directors to serve a three-year term effective July 1, 2008.

Erica Augustenborg '06, ChE, and James Tucker '07, CE, were unanimously approved to join the Board of Directors as Young Alumni members (0-5 years since graduating) to serve one three-year term effective July 1, 2008.

**Distinguished Engineering Alumni Award**

The candidate proposed for this award in October is Dr. Edward F. Staiano '58. The "Motion For" was unanimously accepted. The "All in Favor" was also unanimously accepted.

**Student Representatives Updates**

Tom Caro – IEEE. The IEEE has been bringing in speaker candidates and they worked very hard to win the Golden Hammer Award.

Mike Rakszawski – ACM. On April 5 ACM invited Susquehanna, Lycoming and Bloomsburg to the Bucknell campus. They brought in Michael Jenkin of York University, Canada, to speak about Robotics and Monty of McGill for the chess deep blue competition. They are planning a trip to another university to observe research or visit a museum.

Katie Hoffman – SWE. Later in February they are planning an ice skating event. On February 21, 2008, they are hosting the student/alumnae meet and greet. In April 2008 they are planning an outreach to the local elementary students to teach them about engineering. March 2008 is the regional meeting. They designed SWE t-shirts and will be selling them in Dana lobby in the next few weeks. Officer elections will be held next week. The Women's Resource Center has an Engineering Event Grant which will help to encourage young girls to explore engineering.

Danielle Woodhead – AICHE. The national conference is in Manhattan in April. They are planning a Yuengling Brewery tour in the future. AICHE will be co-hosting with Drexel University on November 16, the Philadelphia National conference (100<sup>th</sup> anniversary), which is an honor.

Matt McKeehan – ASCE. There has been a change of officers and a new president this year. Kiddelson Associates are coming to campus to talk about transportation careers. ASCE is having a membership drive and will be passing out CivE hard hats to boost sign-ups. The newsletter will become more regular in order to help keep in touch with students. ASCE will be adopting a local high-way, and helping with the area cub scout badges. They are planning an end of the semester picnic.

Steve Parker - ASME. The Saturn plant tour in Wilmington, DE occurred this past fall. It was very successful. The annual MechE and CivE football game social happened this past fall. ASME is active in bringing speakers to talk about research every one or two weeks. ASME is fully participating in Engineering Week. The mini Baja team is going to Tennessee on May 1-3. They are hoping to plan a sky diving event sometime in the future. ASME will be selling t-shirts in Dana lobby over the next few weeks.

Allie McKendry – BMES. They are planning a tour of Sloan Kettering in NY in the future. They are planning a Spring BBQ, brunch at a Professor's house, and a trip to a medical device company in Pennsylvania.

Mike McCaffrey – NSBE. The NSBE national convention is March 18, in Orlando, Florida. Next week NSBE will be holding officer elections.

Justin Greenly – TBP. Currently, they are in the process of voting in new student leaders. Their volunteer activity is road clean up. Next weekend they are hosting engineering futures professional workshops; which are 2-4 hours that Andrea Pinckus talks about people skills and professional skills. TBP sponsors review sessions for the FE exam.

The senior student board members offered no criticism nor could they think of any enhancements for the board. They were glad to be involved.

### **Alumni Relations and Career Services Updates & B-Link Overview**

Laura Denbow, Executive Director of Alumni Relations & Career Services

Sarah Bell, Associate Director of Alumni Relations & Career Services

Megan Rogers, Manager of Student Communications

- Bringing Alumni Services and Career Services together
- Reunions on campus and clubs off campus
- Build communities by interest
- Three pilots were introduced
- Pilots are doing well so would like to continue and scale up
- Need to fix the club program
- Developing a Tier club structure.
  1. Tier 1 Heavy Hitters - 6-12 events in their clubs a year. Replace happy hours with liaison models with volunteers for careers, sports, cultural, etc., and will work with organization head that they tie.
  2. Tier 2 middle group with volunteer positions concentrated on interests.
  3. Tier 3 would be alumni with less involvement.
  
- B-Link will launch publicly in March – will replace “myBucknell” that is not user friendly
  1. Communication – Alumni Connection email, Magazine, and B-Link. Login Process will be easier, functionality by using “groups”
  2. Post events, news feed, message board
  
- Department Re-organization that focused on career – repurposed 85% of positions
  1. 4 teams – Education, experience, communications and customer service, relationships management
  2. Need to be financially responsible
  
- Feb 7-9, 2009 – Winter Homecoming to support strong winter sports Programs – will sponsor and spotlight extra curriculums. Thoughts to do Industry and Profession Network on Fridays and during Basketball Season.
  
- Career Services Updates – new companies on campus, and more student externships, interviewing day and career fairs and international student career fair.

**College Updates – Jim Orbison, Dean**

Jim provided updates to the BEAA board regarding the Engineering College (see presentation in appendix).

A new computer engineering degree program will be implemented for fall 2008. This was made available for applications this year. There were more applicants for this new program than for the electrical engineering and the computer science and engineering degree programs.

First year Civil Engineering enrollment for 07/08 is high, at 49 students. Next year the college will target for a lower enrollment number. The grand total for all engineering disciplines is 166 students.

The annual revenue into the engineering fund is at ~\$425K (vs. 2002 at ~\$200K). The Engineering Senior Survey for 2007 has approximately 80 questions. The students will rate the survey using a 1-7 scale. Bucknell's rank is in the top 10% in all but one category (Career Services and job placement). In many categories BU ranks in the top one or two out of 62 colleges (competitive colleges include UVA, Tufts, UPenn, USC, Duke, etc.).

The average starting salaries for graduates in 2003-2006 are all up. Against the national median the Chemical Engineers and the Civil Engineers are over the median. The Mechanical Engineers are lower for BU compared to national average. The college will follow and track this because the Mechanical Engineering firms that are hiring from Bucknell are very good companies with well known names and reputations.

30% of seniors went on to graduate schools.

In 2007, all major external grant awards were funded by the National Science Foundation (NSF).

The Admissions shift this year resulted with regular decision applications being down 10%. The engineering applications are down 15%. We will not know until later in the academic year about the quality of the students that decided to attend Bucknell. There have been no personal interviews over the last two-years, which made Bucknell non-accessible to families.

**Engineers without Borders/Board Membership** - Rob Van Schooneveld, President Liz Banerjee, a member of Engineers without Borders USA requested membership to the BEAA Student Board of Directors. Their project is installing solar panels for a village of 75 families in Ecuador. The project would replace kerosene lighting with solar lighting which would extend the villages lighted hours so they could learn and read at night. With fundraising they would be able to get more than three students to Ecuador during the summer. There are 25 members in the club. The project costs approximately \$14,000 plus airfare and tools. The villagers would need to be trained in repairs. The new advisor for the Engineers without Borders USA is Professor Tranquillo in the Biomedical Engineering Department. The "Motion For" (to accept Engineers without Borders to the BEAA Student Board of Directors) was unanimously accepted. The "All in Favor" was also unanimously accepted.

The by-laws were updated to include the increase in members from 46 to 47. With that number, the student members will increase from 10 to 11 members. The by-laws will be sent out with these revisions noted. This will be a provisional amendment until the next meeting.

The "Motion For" was unanimously accepted. The "All in Favor" was also unanimously accepted.

**Departmental Meetings De-Brief - Rob Van Schooneveld, President**

- The Mechanical Engineering department is preparing for ABET, and is increasing flexibility among the math and science requirements.
- The Electrical Engineering department talked to Admissions about how to increase the underrepresented groups. Bucknell offers scholarships to the FIRST members for robotics. The new Faculty are doing well. The department will not rush to fill the new open positions. They are thinking about showing the senior design projects during Homecoming, in order to the alumni to see the projects.
- The Computer Science department is evolving and can be embedded into many disciplines summer research.

**Engineering Career Network Event De-Brief - Mitch Blumenfeld, Career Development Chair**

There were 222 students out of 239 that attended the Career Networking Event on February 22. There were 48 companies registered with 32 companies participating despite the weather conditions. The engineering dinner was a success with 419 students, faculty and staff in attendance.

**Committee Updates - Admissions, Lois Engle for Shari Aser, Chair  
Affinity, Lois Engle for Liz Roman, Chair**

Admissions - Not much has been happening. The WIE program is still rolling along as usual. There are no new updates on the top prospect calling program.

Affinity – We discussed the tier structure for the clubs. The beginning steps are to get liaisons for all clubs. But first, the clubs need to get their act together. There has been the restructuring of the affinity committee. In September/October we are planning a tour in Rochester/Niagara Falls of the dam's hydroelectric power plant. This will be pretty awesome, as we may have the opportunity to stand on top of the turbines. Security is very tight so we will have to register six-weeks ahead of time in order for background checks to be processed.

**Closing Business - Rob Van Schooneveld, President**

Winter Homecoming will be in February 2009. This will be too early for the BEAA Board of Directors, because our meeting coincides with Engineering Week which is after Winter Homecoming, in February 2009.

Rob encouraged everyone to try B-Link.

The six senior students members present for their last BEAA meeting were; Mike Rakszawski, Mike McCaffrey, Justin Greenly, Katie Hoffman, Steve Parker and Tom Caro. They were presented with gifts for their time, service and dedication to the board.

Meeting adjourned.

## **Bucknell Engineering Alumni Association**

### **Board of Directors**

#### **May 31, 2008 Meeting Minutes**

Member Participation: Aser, Barker, Beardslee, Blumenfeld, Booth, Bunker, Geiling, Haberstroh, Hines, Hoffman, Janssen, Lando, Lavin, McDonnell, Mostoller, Mrozinski, Novak, Pogust, Sandri, Schick Tanz, Springer, Stoltzfus, Van Schooneveld, Wojtysiak

Faculty/Staff Participation: Dean Orbison, Lois Engle, Angela Fritzes, Sarah Bell

Guests: Erica Augustenborg and James Tucker

#### **Welcome and Updates - Rob Van Schooneveld, BEAA President**

Rob called the meeting to order.

He encouraged members to attend the Reunion Rally to support Shari Aser as the 2008 Young Alumni Award recipient (*awarded to an alumnus or alumna of the last 15 years whose professional accomplishments, service to alma mater and/or selfless and caring work to benefit society are distinctive*) and to also attend the President's Volunteer Reception.

Volunteers were requested to assist with the Cocktails/Contraptions event hosted by the BEAA.

The February meeting minutes were reviewed and approved.

Homecoming weekend is October 24-25, 2008. The BEAA will host the Connections for Engineers Event. The fall meeting also includes the Student Research Symposium followed by the induction of the junior class of engineers into the BEAA. Ed Staiano '58 has been chosen to receive the Distinguished Engineering Alumni Award, which will be presented to him at the College of Engineering Celebration Dinner on October 25, 2008.

The BEAA website has been visited by many alumni. It's on the Bucknell homepage and Lois would appreciate any input (updates and additions). B-link is not completely on-line yet so continue to use myBucknell. Feedback from members is B-link is easier to navigate than myBucknell.

All BEAA members need to participate in the Engineering Fund. 100% participation in Engineering Fund by BEAA members sets a good example when we seek donors. The Engineering Fund supports student societies, faculty travel, Engineering Summer Institute, lab equipment, finance starting costs with new faculty, grants (to get matching funds), and BEAA activities.

## **Committee Updates**

### Admissions Committee –Lois Engle for Shari Aser

Not much has been happening. The WIE program is still rolling along as usual. There are no new updates on the top prospect calling program.

### Career Development - Mitch Blumenfeld

The Connections for Engineers Event will have the same small table discussion format as last year's event. The committee will communicate the event in the Engineering newsletter this summer and then begin requests for volunteers at the start of the school year. EG100 would like the BEAA to have alumni represent each discipline, especially Computer Science. They would also prefer younger alumni since the freshmen may relate better to them. There will be a new Computer Engineering major. The committee needs to determine who will talk with them.

### Nomination Committee - Brad Mostoller

BEAA members need to complete their committee choices. The Committee is seeking input for nominations for membership vacancies. The committee is beginning work to determine the next distinguished engineering alumni.

Susan Darnell and Joe Migliosi, due to personal and professional obligations, will not be renewing their terms at the end of June 2008. Joanne Janssen will replace Susan as the VP for Activities.

Erica Augustenborg '06, James Tucker '07, Brad Gething '01, Diane Hymas '01, and Lance Lauletta '80, all will begin their terms effective July 1, 2008.

Affinity Committee Structure & Off Campus Networking – This committee is working with Alumni Relations and searching for the next location. They choose a location that coordinates with conferences where staff and faculty will be present and plan for approximately 50 people at each event. The committee will mail invitations to potential participants and have volunteers contact local people to drive interest in the event. We must make it clear these are not fundraising events, but are for networking with fellow alumni. The event in Pittsburgh is June 22, 2008. The SWE conference will be in Baltimore on November 6-8, 2008. We are planning an engineering alumni event on November 7, 2008 to tie in with the SWE conference. The Texas event is scheduled for June 2009. The engineers in the Philadelphia area would like us to return next year for another event. These events have helped to reinforce faculty and BEAA relationships since they have been approaching the BEAA with requests for venues.

Off Campus Tours– Liz Roman will chair this committee. The BEAA has had very successful tours in the past. There were two key items that made the Saturn tour possible; (1) having someone with clout in the organization and; (2) student participation that

could offer potential recruits. Coordination and finding a location that pertains to engineering is also critical for success. These events are good for providing engineering liaisons for the area clubs of Bucknell. The area clubs are now tiered. The top tier clubs and their BEAA liaisons are:

Chicago, Hank Weil  
District of Columbia, Joanne Janssen  
New York, Darryl Novak  
Philadelphia, Rob Van Schooneveld  
Northern California, Liz Bunker  
Boston, needs a representative  
London, will not be represented due to a small number of engineers here

On Campus Events – Stacy Wolin will be nominated to chair this committee. This committee coordinates and executes events such as Cocktails and Contraptions, student society events, and BEAA dinners and social events. Committee members must be able to attend the meetings in order to be on this committee.

Recap of Affinity Events from last year:

Off campus Networking events were held in DC, Philly, and California.

- DC event was in November at the Arlington Navy Building with President Mitchell and Dean Orbison attending with approximately 50 alumni.
- The Philadelphia event took place at the Conshohocken Marriott with about 50 people attending. Dean Orbison attended and delivered the College of Engineering overview.
- Southern California held events in La Jolla and Long Beach and included the Clubs of Los Angeles and San Diego. Although there was not a large turnout, the event had a true engineering presence.
- Northern California – There were 26 participants in Northern California thanks to Liz! Last minute emails helped drive attendance. John Scarborough also helped with this event.

States that are farthest from Bucknell (California and Florida) appreciate a Bucknell presence. Connecticut, Boston, Northern New Jersey, or Philadelphia are being considered for another event next spring.

In order to include engineers no longer practicing pure engineering, these events should be communicated for “BU alumni” sponsored by the College of Engineering and the BEAA. It was suggested that BEAA board members have a Q&A list in from on them when they make phone call invitations to alumni to boost last minute registrations. This would prepare board members with callers that have objections as to why they shouldn’t attend the event. Guests are also invited to these events, but most participants attend by themselves so they can concentrate on networking. Starting with the California events, we began inviting past and current engineering parents. We may also consider including prospective area high schools. Kurt Theide will potentially integrate these events with the new Admissions model for venues. A speaker might also increase participation.

We are looking at hosting events at key locations every year and then hosting events at other locations every 2-3 years.

Planned off campus tours

- Hershey Park is planned for Saturday, Nov 1, 2008 to tour the new Fahrenheit rollercoaster. Families will be invited to attend.

Potential future off campus tours brainstormed were Frito Lay in Aberdeen, Montour Power Plant, Indian Point Nuclear Power Plant, Mondavi winery, Arlen Ness Motorcycles, Mack Trucks in Allentown, and BP Solar.

**College Updates – Jim Orbison, Dean of the College of Engineering**

The Lewisburg borough is undergoing an improvement project which is associated with Bucknell, but is not seeking Bucknell funding.

Applications for the University and the College of Engineering are both down 10% which is a large decline. Admissions offered to 1 out of 3 last year but this year only offered 1 out of 4. The University targeted 925 students and 990 accepted, but the College of Engineering had 185 offers, but only 150 students accepted for the fall. There was strong financial competition from other colleges (Lehigh and Lafayette), for example, Lafayette offered merit packages to students with SAT's below 1300. Bucknell made a financial aid guarantee for any students whose parents earned \$50,000 or less and had over 500 students meet the criteria, but then redefined annual income and only 100 qualified.

The College of Engineering faculty faces issues similar to other companies in that it is difficult to hire in a very rural area. Lewisburg and "trailing spouse" can be issues. We often lose good candidates due to these factors. Also Electrical Engineers are in extremely high demand by the open market which can offer large salaries.

**Closing Comments – Rob VanSchooneveld**

Our goal is to get the Affinity Committees up and running and to have the outside events in place. We still need to find a third location for the Off Campus Networking Event. Committee calls should be occurring during the summer and fall months before the Homecoming meeting. Thanks were given to Lois and Angi for their tireless efforts!

Meeting adjourned.