Activating Alumni

Tau Beta Pi living alumni number in the hundreds of thousands (450,000 to be exact). Many of them have not heard from the Association since they were initiated, perhaps many years ago, because of outdated contact information. This past spring, there has been a movement to reach out to alumni in different parts of the country and invite them back and welcome their involvement in the organization.

Since the beginning of the year, Executive Director Curt Gomulinski has hosted eleven alumni gatherings with close to 150 alumni in attendance. From this effort one inactive alumni chapter has become active again, a new chapter has been chartered, and seven TBP alumni chapters have added alumni to their membership rosters. Curt plans to host more alumni gatherings this fall and next spring. (Click here for the calendar.)

Why are alumni becoming more active? It is a good networking opportunity to meet other TBP members, many of them engineers but several in other fields such as law, medicine, and education. Alumni also want to work with our collegiate chapters and have a positive impact on their development.

More than 150 alumni have expressed interest to be involved, whether in social and networking events, professional development, or volunteering for MindSET, our K-12 math and science initiative. Others have indicated their desire to support the local collegiate chapters.

This fall, many collegiate chapter officers will receive an email from TBP Headquarters with the names and email addresses of alumni in the area who have expressed such interest. Please contact the alumni listed to discover how they might like to support your chapter. Invite them to attend initiations, as the last initiation they attended might have been their own many years ago.

Perhaps they would be interested in serving as an advisor to your chapter or speaking to the student members about their work, research, or life experience. Alumni may also appreciate the opportunity to participate in tutoring, MindSET activities, or other chapter projects on campus. Please welcome and network with them. You never know what assistance, experience, or resource they may have to offer.

(Continued on page 2)
Activating Alumni

continued from page 1

TBP Headquarters (HQ) is always actively searching for information on our “lost alumni” from sources such as networking sites and news articles. For a different project, chapters could work together to locate their own “lost alumni.”

Some institution’s have alumni associations that can help gather addresses. The number of bad addresses for some chapters is staggering. To see how many alumni from your chapter have bad addresses, log into the online reporting system, and select “Utilities” and then “Chapter Statistics.” If you are interested in participating in this project, contact HQ.

Keep In Touch

It is important to keep TBP up-to-date with your contact information after graduation, so that HQ can send you updates on the Association and alumni activities. Send address and email changes to addresschange@tbp.org.

If an alumnus chapter does not exist in the area, start one. If the chapter is inactive, restart it. Headquarters can help with the process; details are also on the alumni website.

It takes many steps to gather steam and reap the benefits of alumni involvement. This is just the beginning. Until then, continue to collaborate with alumni in the area and stay involved after graduation. Together we can do great things!

Find the alumnus chapter nearest you at www.tbp.org/alumni/chapters.cfm and join.

2012 Outstanding Advisor

Dr. Abigail M. Richards

Chief advisor to the Montana Alpha Chapter of Tau Beta Pi at Montana State University, Dr. Abigail (Abbie) M. Richards, (Washington Beta ’99) assistant professor and biological engineering program coordinator at MSU, is the 2012 Tau Beta Pi Outstanding Advisor.

She will be honored on September 29, 2012, at the 107th annual Convention in Lexington, Kentucky. Tau Beta Pi President Dr. Larry A. Simonson, P.E., will present $1,000 and a commemorative plaque to Dr. Richards. Another $1,000 grant will be presented to the Montana State University College of Engineering’s discretionary fund.

The chapter’s nomination stated: “Dr. Richards deserves the outstanding advisor award because she goes above and beyond in every facet of her life. In addition to inspiring students to attain high academic standards, she has spent endless hours coordinating with the college of engineering to establish the importance of our engineering society. She has maintained this significant interface, and Tau Beta Pi has become an extension of the college itself. She has done an excellent job fostering leadership, and filling an advisory team that is likewise supportive of the Association and its mission.”

During her second year as chief advisor, the MT Alpha chapter received the 2009-10 R.H. Nagel Most Improved Chapter Award. Nearly 150 new members have been initiated during the previous two academic semesters. Dr. Richards has been instrumental in bringing stability to the chapter leadership. Read the full press release.
The 2012 Tau Beta Pi Convention will be hosted by the Kentucky Alpha Chapter at the University of Kentucky.

This year’s Convention will take place at the Hyatt Regency Lexington, in Kentucky, from September 27 to 29.

The TBP Convention serves as the supreme governing body, conducting the business of the Association. Delegates will be present from the nearly all of the 238 collegiate chapters across the country.

This is a great opportunity to meet and socialize with other engineering leaders. Chapter representatives are also provided with training and brainstorming sessions from the award-winning Engineering Futures program to the Interactive Chapter Exchange (ICE) sessions.

A corporate and graduate recruiting fair kicks-off the Convention on Thursday at the adjoining Lexington Convention Center with the opportunity for students to meet with representatives regarding employment opportunities and even interview on-site.

We encourage members to take full advantage of Convention offerings to meet with TBP National Officials, attend special sessions, and network.

On the final day of Convention, members will have lunch on the campus of the University of Kentucky and will be given tours of the campus with a special focus on the college of engineering.

A model initiation will take place and conclude the chapter development offerings. If you are planning to attend this year’s Convention, please be sure that your travel plans have been submitted. The deadline is August 26.

Convention materials and committee assignments will be distributed electronically this year in early September. Please contact TBP Headquarters with any questions or concerns.
So far, the honors council has formed its first ever industry mentorship program to bridge the gap between academia and industry. There are currently 26 higher-level managers on board mentoring students from Tau Beta Pi, other engineering honor societies, and the honors program. The mentor and mentee meet approximately every two weeks and discuss a broad range of topics such as creating an elevator pitch, having a top-notch résumé, valuable personal and phone interviewing skills, useful networking techniques, discussions on graduate school versus industry, among other hands-on activities such as giving students a tour of a company’s facilities.

The honors council has received extremely positive feedback from this program and hopes to expand it in the coming years. Interest in joining TBP and other honor societies has already increased during the first iteration of this program.

The honors council also wishes to create a stronger sense of community amongst all honor societies. Each of the societies holds an induction ceremony once or twice each year to recognize academically high achieving engineering students. Starting this year, we hope to integrate the induction processes for the honor societies by having one traditional induction ceremony followed by a combined post-induction banquet with a key-note speaker, which will be held annually in the spring semester. Participants of the combined ceremony will include inductees, honor society members, alumni, faculty, staff, as well as the industry mentors.

Send questions and comments to Parth Oza (NJ B 2012), Vice President of the NJ B Chapter of TBP and president of the engineering governing council at parthoza3@gmail.com. More information about the Rutgers School of Engineering Honors Council can be found at http://egc.rutgers.edu/ruhonorscouncil.
2012 Tau Beta Pi Laureates

Carl J. Kirpes, Iowa Alpha ’12
An Iowa State University graduate in mechanical and industrial engineering cited for his diverse achievements.

Steven Limpert, Arizona Beta ’12
A graduate of Arizona State University with a degree in electrical engineering, cited for his achievements in the arts.

Jason D. Metzger, Maryland Gamma ’12
An aerospace engineering graduate of The United States Naval Academy, cited for his achievements in the arts.

Steven D. Prendergast, Indiana Gamma ’12
Cited for his diverse achievements, he graduated from the University of Notre Dame in 2012 with a degree in aerospace engineering.

Steven Limpert, Arizona Beta ’12
A graduate of Arizona State University with a degree in electrical engineering, cited for his achievements in the arts.

Kyle E. Zobeck, Indiana Delta ’12
Cited for his achievements in athletics, he is majoring in mechanical engineering at Valparaiso University.

Read the press release for full biographies of the 2012 TBPI Laureates.
Electronic Catalog Card
Reporting System: How-to

Beginning with the fall 2012 reporting cycle, physical catalog cards have been eliminated. Instead, each elected candidate will be required to go to the Tau Beta Pi website and fill in his/her catalog card information. Systems will be in place to allow the chapter reporting officers to monitor the responses and notify candidates to fulfill their requirement.

Another important change is that the middle name is now in a separate field; previously, the first name and middle name were in the same field.

Here are some other important changes to take notice of:

1. The email of all eligible candidates is required at the time the report of election is submitted. This is necessary to notify the elected candidates of the catalog card requirement.
2. The eligibility spreadsheet has been modified to capture the email address.
3. The catalog card spreadsheet has been eliminated as it will no longer serve the purpose of providing member information without significantly complicated and confusing spreadsheet.
4. Elected candidates are sent an email with a link to submit their catalog card information. The link is keyed to make it unique to them. The link is validated and most tampering will be trapped.
5. If an elected candidate does not have an email, the chapter reporting officers can enter the catalog card information as can Headquarters.
6. Headquarters, and only HQ, can mark a card as submitted to allow the reporting process to continue. This is an exception and requires human intervention.
7. More information is captured with the electronic catalog card than the paper card. Most information is required, some is optional. Edits are in place to validate the required fields.

Here are the basic steps for completing electronic catalog cards and submitting a completed election report.
The report of eligibility, where the names of the eligible candidates are entered, now includes a field for middle name and email address.

Catalog Card for New Tau Beta Pi Member Your University (TN O)

<table>
<thead>
<tr>
<th>Title:</th>
<th>First:</th>
<th>Middle:</th>
<th>Last:</th>
<th>Trailer: Jr., Sr., PhD, etc.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Raymond</td>
<td>H</td>
<td>Thompson</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Preferred Name:</th>
<th>Gender</th>
<th>Male</th>
<th>Female</th>
<th>Birthdate (mm/dd/yyyy)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>mm/dd/yyyy</td>
</tr>
</tbody>
</table>

Presently studying for a [ ] degree, expected to be obtained in [ ]
Elected to Tau Beta Pi as Section 2 (Undergraduate) initiation April 24, 2012.

Permanent Address
An address that will not change in the next year

<table>
<thead>
<tr>
<th>Line 1</th>
<th>508 Daugherty UT</th>
<th>Line 2</th>
<th>1512 Middle Drive</th>
</tr>
</thead>
</table>

City | Knoxville |
State | TN - Tennessee |
Zip | 3796 |

Current Address
Where you currently receive personal mail

<table>
<thead>
<tr>
<th>Line 1</th>
<th>PO Box 2697</th>
<th>Line 2</th>
<th>Current Address Line 2</th>
</tr>
</thead>
</table>

City | Knoxville |
State | TN - Tennessee |
Zip | 37901-2697 |

Email | tbp@tbp.org |
Alternate Email Address | |
Alternate | |
Phone | 865-545-4578 |

Gender must be provided, date of birth (DOB) cannot be left blank and select the type of degree from the list.
After completing the report of election, chapter officers have access to a new option, using the Catalo Cards button from the election screen, which displays those candidates that have been elected and accepted election. Those eligible candidates that were not elected or did not accept election will not appear on this screen.

Each name on the E-Card member selection screen is a hyperlink that will allow a chapter reporting officer to enter/view/edit the actual catalog card for the individual. The section under which they were elected and the catalog card status are displayed; cards that have been completed will show a status of “completed.”

The chapter reporting officers control when emails are sent to newly elected initiates. They can also enter a custom message to be included with the email. When sending emails, only those elected candidates that have NOT completed the catalog card will receive the email. These reminder emails can be sent as often as needed. **There is NO automatic process to send the emails** and they **MUST** be done by the chapter reporting officers.

When the elected candidate receives the email, a link in the email will allow them access to enter their information. The link is to the main TBP website, not the chapter reporting website. All the menus are active and provide the elected member a chance to view the website.

There are different electronic catalog cards (screens) based on the section (2-6) of the candidate. When filling out the electronic card, errors due to missing or incorrect data will prompt the fields to be highlighted with red boxes. Additionally, a description of the error is provided on the bottom of the page.

Once the information has been entered, the candidate will receive an acknowledgement screen. An attempt to use a link for a catalog card that has been completed will not allow the card to be updated again. If the catalog card needs to be revised, HQ must be contacted to enable the changes.

When an electronic catalog card has been completed, the status of the elected candidate will change on the E-Card page. The chapter election report **CANNOT** be submitted until all the catalog cards have been completed. HQ has the authority to forcefully mark an elected candidate as having submitted their catalog card and this capability is **ONLY** available through HQ.

Hopefully, the move from paper to electronic catalog cards will improve the reporting process for the TBP chapter officers and the candidates. Additionally, HQ will encounter fewer issues when transferring information from a 3x5 index card, which will improve the accuracy of the TBP membership database. Finally, it is important that TBP captures more relevant information for future communications with its members.

Raymond (Ray) Thompson is the computer systems administrator at TBP HQ, and has worked to implement the electronic catalog system. During his tenure, which started in late 2001, he has done much of the work to improve the data systems and record keeping at TBP. Ray also produces the photographs at the annual conventions.
This summer, Tau Beta Pi added a new travel benefit for members and their families. Through a partnership with Local Hospitality, Inc., members now have access to a worldwide inventory of hotels at exclusive discounted rates. Take advantage of average savings of 10-20 percent anytime at any hotel.
Get Personal and Follow Up!

Initiate Just One More Electee Per Chapter!

This has been the challenge given to the chapters for the past several years. While this year there were fewer chapters meeting this goal (110 versus 120), the Association exceeded the “initiate one more” goal with 424 new names added to our membership rolls. The 8,784 undergraduates initiated is a number not seen since the mid-90’s! I commend those chapters excelling at the most important function of a chapter—marking in a fitting manner those students deemed worthy of becoming members of Tau Beta Pi.

Individual chapter results were good. Sixteen chapters (same as last year) initiated at least 25 additional students. Montana Alpha topped the list initiating an additional 84, easily edging Virginia Alpha (66). Forty-six chapters recorded a year-to-year increase of at least 50%. Twenty-one (down from 35) of those at least doubled the number of initiates. A special thanks goes to the 8 (down from 11) chapters initiating ALL candidates! On the flip side, 109 (down from 110) chapters initiated fewer students.

Ninety percent of chapters (195 up from 183 last year) use email as the preferred way to contact eligible candidates. Although email is a convenient means of communication, it has its drawbacks. Emails aren’t read, bulk emails are directed to the junk folder, and full mailboxes cause bounced mail—you’ve seen it happen. Do you follow up to make sure the email went through? If it didn’t, what did you do next? For most chapters the answer to that question was—nothing. This is an area where some extra effort would go a long way.

More chapters (81 or 38%) reported using a personal touch—and not just the small or medium-sized chapters. Iowa Alpha (Iowa State), Indiana Alpha (Purdue), and California Alpha (Berkeley) reported using personal invitations. With the historically high number of students not accepting our invitation, maybe it’s time to get personal.

Do you know why students are uninterested? Have you asked them? Reporting indicates lack of awareness continues as the most likely reason. A personal invitation would let the eligible students know we really want them to join us. It would also provide an opportunity to answer their questions and perhaps resolve any misconceptions they may have.

How did you learn about TBP? Did you see a poster? Were you sent a brochure or invitation? Did someone tell you? You can help! Especially if your chapter is one of our larger ones. Ask to see who is on the list of candidates, and invite those you know to your chapter’s get-acquainted meeting. Do the same for those you elect. Learn who is on the list, and offer to contact those whom you know. Invite them to join. TBP Headquarters has sample letters on the website and an invitation for chapters to use. Or just express a simple “I’d like you to join us.”

While 70% of scholastically eligible students were rejected and not elected, nearly all of them (95%) were rejected for lack of interest. On top of that, an overwhelming 84% of those were noted as not responding to the chapter’s invitation! These are staggering numbers, and there appears to be no end in sight. There may be more students, however, who would join our ranks—but they must know they’re invited. So, get personal, and follow up!

How well do the students, faculty, and staff in your engineering school know about TBP? Chapters reported: Very well 20% (up from 17%), Somewhat 67% (up from 65%), and Slightly 13% (down from 18%). Awareness in the engineering schools remains in the medium category. The numbers are moving in the right direction, but there is still considerable room for improvement. For Tau Beta Pi to realize its vision to be universally recognized as the premier honor society, we must continue to increase the Very Well number!

Achieving our goal of attracting the best and brightest engineering students as members requires continuous improvement. Publicity works! Posters or brochures in prominent locations are effective in publicizing your chapter. More than half of the chapters used these materials last year, and the reaction to them continues to be overwhelmingly positive. Recognizing new members in the school newspaper provides an excellent means of letting others know the high standards for which TBP stands.

Is TBP recognized on your campus as the premier honor society? If you’re in the very-well-known group, well done! I encourage your chapter to keep up the good work. If not, why not? If each member reached out to one or two friends who are eligible but not yet initiated, we would easily exceed our goal. Get personal and have a successful fall!

—R.E.H.
Students at the Michigan Beta Chapter of Tau Beta Pi are some of the first in the nation to be trained in conducting Family Engineering activities that engage elementary-aged children and their parents in learning about engineering through teamwork, creative problem solving, and fun.

Developed by Michigan Technological University, the Foundation for Family Science & Engineering, and the American Society for Engineering Education with a grant from the National Science Foundation, Family Engineering is growing into a nationwide initiative.

Family Engineering: An Activity & Event Planning Guide is prompting events across the country at schools, libraries, museums, and community centers. TBP students are perfect role models to excite young learners about engineering.

Twenty members of the chapter turned out on a snowy Monday evening (Feb. 27) to design rockets as part of the Blast-Off activity. Participating students designed and tested their custom-built Hot Chocolate Machine using paper cups and a push pin, plus warm water and milk/chocolate powder.

The TBP students also presented a Family Engineering Night at Barkell Elementary in Hancock, MI, on March 22.

About the author: Joan S. Chadde has been the Education Program Coordinator (Western U.P.) for the Center for Science & Environmental Outreach at Michigan Tech since 1995. She is also the Education Program Coordinator for the Western U.P. Center for Science, Mathematics, and Environmental Education.

She can be reached at: Email: jchadde@mtu.edu

For more information on Family Engineering, visit the website http://www.familyengineering.org/

Engineering students from Michigan Tech “team up” to learn how to present one of the fun activities found in the new Family Engineering: An Activity & Event Planning Guide.

Fellows & Scholars: 2012-13

Tau Beta Pi awarded 40 graduate fellowships to our 79th group of Fellows. The press release is available online with biographical information on each of this year’s Fellows.

Applications are welcomed from all members of Tau Beta Pi, students and alumni, that are planning graduate study. Download informational files from www.tbp.org after November 1. The filing deadline for fellowship applications is January 31.

There were also 200 TBP Scholars selected and named to receive a total of $392,000 in scholarship awards as part of the 2012 Scholarship Program. Only junior members of TBP who will be full-time, on-campus seniors are eligible to apply—online at www.tbp.org after November 1. There are a few one-semester awards that will be given. The new deadline to submit scholarship applications is June 1.
Alumnus Spotlight

Col. Alfred A. Pantano Jr., Virginia Delta ’87, recently took command of the U.S. Army Corps of Engineers in northern Afghanistan in a military ceremony. A graduate of the Virginia Military Institute, Col. Pantano was previously commander of the Jacksonville (FL) district.

Dr. Mildred S. Dresselhaus, South Carolina Gamma ’51, was one of seven scientists to be named winner of the 2012 Kavli Prizes. Dr. Dresselhaus won the nanoscience prize for her research on carbon nanotubes. She is currently a professor at MIT.

Effective September 1, 2012, Dr. Brett A. Peters, Arkansas Alpha ’87, will become the dean of the College of Engineering & Applied Science at the University of Wisconsin-Milwaukee. In his current position at Texas A&M University, Dr. Peters is a professor and former department head.

New Mexico State University recently named Dr. Satish J. Ranade, New Mexico Alpha ’76, head of the electrical and computer engineering department. Dr. Ranade has been a professor of engineering at NMSU for 31 years.

PuzzleCast was recognized by Popular Science with a 2012 Invention Award. Amanda L. Harton, Virginia Alpha ’12, is one of the four co-creators of PuzzleCast which produces a modular cast that consists of six pieces that can be removed independently, enabling patients to move more parts sooner.

Student Spotlight

Colorado School of Mines graduate, Jordan S. Larsen, Colorado Alpha ’12, has been named as a First Team Academic All-American by Capital One/CoSIDA. Larsen is a two-time Academic All-American, civil engineering graduate, and three-time First Team Academic All-American as selected by the National Wrestling Coaches Association.

Mallory A. Vogel, DC Beta ’12, has been selected as the Div. III Scholar-Athlete of the Year by the Intercollegiate Women’s Lacrosse Coaches Association. Vogel graduated in May with a degree in biomedical engineering at the Catholic University of America. She will also complete her master’s degree in 2012.

Worcester Polytechnic Institute field hockey player, Celena H. Dopart, Massachusetts Alpha ’12, was chosen as the Capital One NCAA Div. III Academic All-America of the Year for the Women’s At-Large division. Dopart earned a degree in aerospace engineering and will attend MIT for graduate school.

USA Science & Engineering Festival

Tau Beta Pi hosted a booth (#612 of more than 3,000) April 27-29 at the second USA Science & Engineering Festival that took place at the Washington E. Convention Center.

An adaptation of the MindSET bridge module was presented to festival participants. During the three-day event, more than 1,250 attendees stopped by the TBP booth where they were greeted by volunteers from the Maryland Beta chapter at the University of Maryland, the DC Gamma chapter at George Washington University, the DC Alpha chapter at Howard University, and several other TBP alumni. A total of 21 volunteers interacted and led bridge building activities that demonstrated important K-12 math and science concepts during the Expo.

After building a bridge, participants were able to test the structure and determine the weight that would cause the bridge to collapse. Several successful bridges withstood more than 20-pounds of weight being evenly distributed across the bridge.

Several inquiries were made regarding the Association and the K-12 MindSET program. Teachers and parents received brochures and were invited to sign up requesting further details on participation with MindSET. The K-12 students received instruction, support, bookmarks, and TBP insignia pens to recognize their involvement.

In total, 17,500 craft sticks were distributed as part of the hands-on bridge building activity. Almost 15,000 brass fasteners were used in the construction of the bridges. Several enthusiastic cheers could be heard as bridges survived unexpected amounts of weight. A good time and learning experience was enjoyed by all. For more information, visit www.usasciencefestival.org.
NEW Tau Beta Pi Apparel Designs

Order Yours Today!
Convention Recruiting Fair

Whether you are looking for your first job, networking, or considering your graduate school options, Tau Beta Pi’s Convention Recruiting Fair has exciting opportunities for you. Companies looking to hire the best and brightest engineers will be on hand, along with top graduate schools from all around the country. Be sure to bring at least six copies of your résumé, and submit your members’ résumés (to resumes@tbp.org) for inclusion in the DVD given to recruiters by September 7. Formatting details here.

Scheduled recruiters include: Aerotek, EMC, Ceradyne, Lexmark, MIT Lincoln Laboratory, National Oilwell Varco, Sandia National Laboratories, White Stratus, and more than ten graduate schools. Arrive early on Thursday, September 27, at the Lexington Convention Center. To see the full list of attendees and to learn more about the Recruiting Fair, visit: tbp.org/Convention/Sponsors.