Executive Retreat 2016

Graduate Recruitment: Advertising

Sven Bilén
Dana Marsh
Overview of Objective

Audiences

• Prospective students, especially current UG students, GRE test-takers, ENGINE contacts
• Peer institutions, especially key faculty contacts at institutions who don’t have relevant graduate programs
• Alumni, especially those who graduated with BS (only) within the last 5-10 years
• Corporate contacts, especially those that have established relationships with our College
Overview of Objective (continued)

Processes

- General graduate program advertising/marketing handled on the College level
- Specific degree program advertising/marketing handled on the Department level
  - Based on each Department’s strategic initiatives and unique programs
- All faculty/staff should be prepared and able to assist current or future graduate students by either answering questions or referring the individual to the proper faculty/staff member(s)

Criteria for Success

- Higher click-thru rates
- Contact form completion/leads to graduate program contact
- Direct calls to department graduate program contact
- Increased applications from qualified applicants
- Increased exposure of all programs among key stakeholder groups
2015-2016 Advertising Efforts

Online Advertising

- Google AdWords
- Google Ad Network
- Facebook Ads
- Twitter for Business
- US News & World Report

Email Marketing

- GRE test takers
- Engineering National Graduate Institutional Name Exchange (ENGINE)
- College- and Department-level messages

Internal Marketing

- Undergraduate E-News
- Engineering Broadcast System
- College/Department Websites
- Graduate Program Open House

Print Advertising

- US News & World Report

Events

- National Society of Black Engineers (coordinated and attended by CEOI)
- Graduate Program Visitation Weekend
2016-2017 Advertising Opportunities

Advertising
- Discipline-specific publications
- Student chapters of leading associations

Internal Marketing
- Student organization outreach
- Connection with advisors to pitch graduate program options

Email Marketing
- Student chapters of leading associations
- Undergraduate programs that don’t have strong/any graduate programs
- Personal outreach from faculty to influential peers worldwide

Content Creation
- Continued development of research/grad program areas of websites
- Encourage faculty to keep personal and research group/lab websites current
- Encourage faculty to keep Activity Insights current
- Provide print and electronic materials for distribution by faculty and administrators
- Continue to create video content and stories about graduate programs, graduate students, research

Events
- Identify and attend segment- or discipline-specific national events
- GradSchoolMatch (virtual 24/7 event)
Advertising: Discussion

• Have department heads work with strategists to discuss strategic initiatives related to graduate program communication and recruitment then have strategists develop marketing plan (and related budget) to achieve these agreed-upon goals

• Additional surveying of accepted students to collect information to fine tune advertising efforts
  o How they heard of the programs
  o Why they did/did not choose Penn State
  o What other schools they considered/visited
Informal Advertising

- Student recruiters
  - Current graduate students go back to their undergraduate institutions to meet with juniors/seniors
- Faculty advocates
  - Faculty member/graduate officer traveling to top undergraduate programs (domestic and international) to discuss all graduate opportunities in engineering
- Up-to-date AI entries (that feed the online directory)
- Up-to-date faculty and lab websites
- Informational slides for faculty to show prior to invited talks/presentations

Cross-promotion

- Promoting other program opportunities to students who aren’t accepted into their primary program preference
- Centralized College application review process – either through access to Grad School information or deployment of Customer Relationship Management (CRM) tool
Additional Audiences: Discussion

• Recent alumni with MS, especially for specialty programs
• National discipline-specific listservs
• Promote what makes us unique
  o Entrepreneurship, Leadership, etc. taken with program
Discussion & Additional Issues

All efforts must be:

• Deliberate
• Coordinated
• Advocated
Graduate Student Recruitment Weekend

- Email invitations sent to top applicants, faculty, current students
- Individual itineraries sent to top applicants, faculty, current students
- Letters with acceptances, assistantship offers, fellowships sent to top applicants
- ADHGP gives welcome and department overview presentation
- Faculty give 3-minute research presentations (speed-dating) on Thursday evening
Graduate Student Recruitment Weekend

- Social with current grad students
- Lab tours
- Individual meetings with faculty
- Social with CoE faculty and current graduate students
- Follow-up emails sent by ADHGP and individual faculty
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Other Events and Correspondence

- MNE event for current undergraduates
- STEM Open House
- CoE Open House (Dec, after deadline)
- Email correspondence
- ENGINE and GRE test takers lists
- GEM Consortium database
- Website, “how to apply” & FAQ
- Under-represented friendly website
Additional Important Correspondence

Films made from our graduate students’ eyes
Workshop given to our graduate students by ME/film student

Films made by our Communication Strategist
Communication: Discussion Notes

- Each unit/program should circulate slides on their approaches so everyone can compare their strategies for effectively using the time.
- Dean Elnashai asked the question on how we should engage with students not attending the recruitment weekend. Shall we have a set of guidelines for 1-year and M.S. students? Do we want a customer response system (CRS)? The response from the attendees was that, yes, guidelines would be helpful.
- At least one program has tried having a “faculty fair” as a part of the recruiting weekend where faculty stand at posters summarizing their research programs, and visiting students get a chance to meet with the faculty members of their choice.
- Another suggestion for engagement is that we do a better job recruiting Penn State undergraduates including those who might be interested in 4+1 opportunities.
- Mechanical and Nuclear Engineering has encouraged their current graduate students to produce short 3 or 4 minute videos to effectively communicate their experiences to perspective students. Dana Marsh indicates these videos sometimes include music and are well-aligned with CoE productions.
Graduate Recruitment: Selecting

Chita Das
Peter Butler
Selecting Prospective Students

• The typical criteria for selecting students is based on department goals for PhD programs. These include:
  o Academic credentials
  o School ranking
  o reference letters
  o research statement
  o program-specific requirements, number of assistantships, etc.
  o Diversity of student body
  o Consideration for student’s intended career track

• Some strategies for identifying students that are most likely to succeed are:
  o Develop metrics that are tightly correlated to student success.

• Some strategies for assessing candidates are:
  o Early engagement with potential candidates prior to making offers
  o Reach out to our own top undergraduate students
Selecting: Discussion

It would be good to have some data on what part of the application is a predictor of success in the program

- Possible Predictors are:
  - GRE Verbal
  - GPA
  - Ranking of school students come from
  - Papers by students

- What are the metrics for success?
  - Awards to students
  - Passing candidacy exam first time

It is likely that the best predictor depends on the metric for success that is chosen.
Challenges

Goals for selection of students are:

• Select highest performing students from elite universities
  o Challenge: how do we get them to accept our offers?
  o Challenge: Our peer departments in other universities are making competitive offers
• To have more US students
  o Challenge: Relative to international students, the numbers are low
• To have more female and underrepresented students
  o Challenge: The number of applicants are relatively low
  o There is a need to have a critical mass of students already here
Challenges: Discussion

Since selection of students is tied to funding,
- There was a concern that UGFs can’t be used for current Penn State undergraduates.
  - This was clarified; there are restrictions but it can be done
  - The goal of UGFs are to attract the best possible students.

How do we attract more domestic applicants?
- We need to improve our recruitment from Penn State.
- We need to make the PhD more attractive to students interested in careers in industry.

How can we increase the number of NSF grad fellowships?
- Develop programs for fellowship writing in the students’ first year
- Tie internal fellowship awards (GEFs, UGFs, Bunton Waller etc.) with obligation to apply for external fellowships
Additional Issues

Need to strengthen reputation of graduate programs

Admit students with multi-year support/fellowships
  • Increase College/University level support

Need more proactive approach to selecting Ph.D. students
  • Visiting top universities in potential countries
  • Formal methods of student exchange program
Discussion & Additional Issues

• To get the top students we need to take a risk and make multi-year offers.
• We need a strategy for managing risk
  o We need to communicate to the student that multi-year funding is guaranteed
  o Behind the scenes we know there is uncertainty about research funding.
  o To manage the risk we can
    • Put primary responsibility for funding on faculty.
    • Develop internal agreements that faculty are primarily responsible for funding, followed by department and college.
Graduate Recruitment: Hosting

Patrick Fox
George Lesieutre
Hosting for Graduate Recruitment

A key to successful recruitment of high-ability students:
  • The on-campus visit
But on-campus visits are **expensive** and **time-consuming**:
  • We need to make these visits effective — How?

**Step 1: Evaluate past hosting events**
1. What was success rate (student accepts/arrivals) in recent years?
2. What was commitment level from DH? from faculty?
3. What strategies worked well?
  • Connections with faculty members (pre-offer, visit, post-visit/offer)
    show seriousness and commitment, facilitate faculty match
    o Labs and grad student research groups
  • Competitive financial offers and follow-up
    o Multi-year commitments more effective
  • Some benefit from “event” – excitement and community
    o Departments and COE
4. What needs to be changed?
5. What were the costs?
Hosting for Graduate Recruitment

Step 2: Prepare for the hosting event

1. Most successful programs bring students to campus and extend offers early
   - Some programs send offers early, host visits later
   - Some benefit to late visit, prior to deadline (but risk cancellation)

2. College-wide weekend with events that bring all student visitors together with faculty and current students
   - Convey scale and diversity/richness of the college
   - Many programs make offers prior to visit, some after
     - Advance offers should based on more than paper application
       (PSU undergrad, trustworthy reference, phone call, Skype)
   - Offers after visits
     - Some students visitors appear not to be serious
       or not a good match for initially-interested faculty member

3. Make clear arrangements with faculty, staff and current students

4. Choose participants carefully
   - Need full engagement of dedicated faculty member from each program

5. Provide handouts, department-to-college level
   - Consistency is important
   - COE communications office to manage

6. Send materials to student visitors ahead of event
Hosting for Graduate Recruitment

**Step 3: Conduct the hosting event**

1. Night before: bring students to campus
2. Next morning: common COE continental breakfast
3. Introductions from Dean
4. Introductions (in Department) from DH and Graduate Program Chair
5. Presentations on graduate curriculum (MEng, MS, PhD)
6. Presentations from major research groups
7. Breakout meetings with individual faculty members (advisor(s) of interest)
   - Grad-student on grad-student meetings and meals are helpful
8. Facility tours: department, college, campus, institutes /centers as necessary
9. Common lunch hour with faculty and students (with other departments?)
10. Include social events to convey a sense of community for visitors
    - DH home? (no alcohol)
11. Closeout session with ample time for questions and discussion
Step 4: Follow-up on the hosting event

1. Reach out to top student prospects
2. Communicate with student visitors within 48 hours
   - First, DH or Grad Coordinator with generic message
   - Second, individual faculty members in various specializations
   - Coordinate the contacts for consistency, coverage, etc.
3. Offer further assistance as needed
4. Offers should have some urgency for student visitors to respond
   - Connotes value of our programs (cannot insist on pre-15 APR)
   - Grad School prefers multi-year PhD offers
     - If one-year, offer letter must be clear
   - Students often wait to deadline to inform us of decisions
     - Since acceptance rate is <100%, need to hedge offers, accepting some financial risk
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Graduate Recruitment: Fellowship Offering

Kultegen Aydin
Amy Freeman

PennState College of Engineering
Fellowship Offering

Timing and selection process:

1. Departmental offers (immediately)
2. CoE - GEF
3. UGF
4. Diversity Fellowships
5. Other

Issues:

1. Hold the graduate coordinators meeting earlier.
   - During first week of classes in spring or earlier i.e. end of Fall semester
   - Focus it on recruitment funding and deadlines in addition to planning for the open house
2. Announce information on various funding options and awards earlier to give departments time for selecting students.
3. When students decline, it is usually late too late to recruit another top student. How can we expedite student decisions?
4. Sometimes the next student in line has already accepted a lesser offer from the department. Do we still make the offer?
Where to start:

1. Department offers
   • Endowed fellowships
   • RA, RA/TA, and top-ups [e.g., for Ph.D. in EE: Grade 13 RA + $6K top-up, equivalent to Grade 19]

2. CoE - Graduate Excellence Fellowship (GEF)—[$30K+$4K stipend, 3 years, recommend 4]
   • Too costly? Should the amount be left to departments after 1st year?

3. University Graduate Fellowship (UGF)—[$27.5K + $4K stipend, 3 years]

4. Diversity Fellowships (DF)
   • Bunton-Waller Assistantship (BW)—[Grade 16 TA, 4 years for Ph.D.; according to AF this award would be more attractive if it had a stipend~$30K when combined with Graham top-up]
   • Robert W. Graham Endowed Graduate Fellowship—[$4K top-up to offer made]

5. Other, e.g., CoE - Diefenderfer Graduate Fellowship—[$21K stipend, 1 to 3 years, this was not used for recruiting in 2016]
Fellowship Offering – cont.

Sample Offer Letter (funding section):

I am pleased to offer you financial support in the form of a departmental graduate assistantship. This departmental assistantship provides a stipend of approximately $19,350 for ten months, as well as coverage of tuition and fees and 80% of the premium for your health insurance plan through the University for the 2016/2017 Academic year. You have also been selected to receive a $6,000 supplemental fellowship for the 2016/2017 academic year, based on your strong academic record and references. Professor _______ will serve as your scientific advisor. Please note that the total value of your fellowship plus graduate assistantship offer, including tuition, stipend, fees, and note health insurance, is approximately $59,415 per academic year. (Also note that a ½ time assistantship appointment is the standard at Penn State.)

These offers are contingent on full-time enrollment in the (Department) Engineering graduate program and demonstration of satisfactory progress in your course work and research, beginning your studies Fall 2016 semester, and successful completion of background checks. Your research must be conducted under the direction of a tenured or tenure track faculty member from the (Department Name) Department, who will determine your progress. You should actively seek a research advisor and come to a mutual agreement no later than the middle of your second semester in our program.

Include a paragraph acknowledging the source for the top-up fellowship
Graduate Recruitment: Following Up

Cheng Dong
Phillip Savage
1. Before an offer is made: Immediately following applicants on-campus visit (for departments that do not make admission/financial aid offers prior to the on-campus visit)

• Maintain personal contact with first/second-tier applicants, especially those who have talked to their advisor of interest.
• Most of us often think it would be ideal to give offers right after applicants visit, because if we wait too long after the interview to give an offer, then we have lost momentum. The problem is that we need the UGF list to do that.
• One way to improve this situation would be to prioritize the UGFs earlier and be able to give UGFs out just after (or during) the interview.
• We would also like to have the option to move on to our second tier candidates, if during the interview it was clear that our first selection wasn’t a good choice or had very low probability of accepting an offer.
Before an offer: Discussion

How do departments determine the number of offers to make?

We generally know historical acceptance rates and make admission/support offers accordingly. If acceptances run high or low in a given year, balance can be restored in the following year.
2. During and after an offer: Strategies for getting the applicants likely to accept our offer:

- It may not necessarily be good to extend offers to candidates with little apparent interest in Penn State (i.e., we are their safety school).
- We need to focus students who may have links (research, geographic, or other) to PSU.
- Keep in contact after the offer is made; weekly emails, phone calls, checking in, inquiring about status with other schools, offering to answer questions, etc. is important.
- Providing faculty research updates, rotation options, curriculum options, etc., is also important in order to engage admitted applicants.
- Keep active communication with the second tier applicants that we have not made an offer to as the first choice – they could very well be our next offers.
During and After: Discussion

A suggestion was made to add prospective/admitted grad students to the COE email list so they receive information from and about the college while they are in decision-making mode.

Do all graduate students who accept an offer show up in the Fall? How large is the number of no shows?

Nearly all admitted PhD students appear in the Fall. No shows are rare. Some (~ 20% was an estimate given) MS/MEng students accept but do not show up in the Fall, typically due to financial reasons.
During and After: Discussion

There was an extended discussion about external (DOD, NSF, NASA, DOE) fellowships and how to get more of them. Key points are summarized below.

- Hold national preparation workshop at Penn State for undergraduate NSF fellowship applicants.
- Improve our local culture to emphasize these fellowships (e.g., train faculty how to write winning letters, encourage students to apply)
- Focus on opportunities (e.g., DOD) where Penn State might have a competitive advantage (e.g., because of ARL)
- Have our UG students engaged in research (is summer best time?)
- Have ready-made “broader impact” opportunities for new graduate students so they can have strong NSF GRFP applications
- Best opportunity for success and greatest impact is with our current domestic PhD students (though we should also encourage our UG students to apply)
- Have our PSU REU students write a Fellowship Application as requirement
- Require our fellowship recipients to write external Fellowship Applications
- Provide financial incentives for our own students to apply?
3. After the accept or decline of an offer:

- For post (particularly decline) keep in contact with them, particularly to find out where they decided to go and why they did not accept our offer.
Graduate Recruitment: Onboarding

Judith Todd
Chimay Anumba

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PennState College of Engineering
Onboarding – Before Arrival

1. Important to maintain communication with accepted students before they arrive on campus:
   - Graduate Program Assistant
   - Graduate Officer
   - Prospective Advisor
   - Direct attention to on-line departmental Graduate Handbook

2. Need to link incoming students with Dept. Grad Students Association:
   - Help with accommodation, other issues
   - Arrival meeting

3. Provide clear instructions for actions on arrival

4. Schedule AEOCPT – American English Oral Communication Proficiency Test
Onboarding – On arrival

1. Outline steps for registration:
   • Within Department
   • With DISSA (Global Programs)
   • Courses

2. Office/Desk assignment – sort out before student arrival

3. Orientation Programs:
   • Departmental orientation – distribute Graduate Handbook
     o Meet the department head, graduate officer, faculty, new students, department Graduate Council Officers
     o Detailed outline of program requirements and expectations
     o International Office visit, start I-9 process, SSN, PSU ID card, begin new hire paperwork
     o Safety orientation
     o IT orientation
     o Course requirements, seminars, SARI requirements, ethics
     o Candidacy examination information – notice of Town Hall meeting
     o ENGR 888 –
       o Graduate degrees offered

   • Graduate School orientation
Onboarding – On arrival, cont.

- Departmental orientation – continued
  - IT orientation
  - Course requirements, seminars, SARI requirements, ethics
  - Candidacy examination information – notice of Town Hall meeting
  - ENGR 888 –
  - Graduate degrees offered

3. Graduate School orientation

4. Departmental TA training

5. Introduction to other graduate students

6. Introduction to advisors

7. May need to be repeated (canned version) for late starters
Join the Family - Social Events

- Graduate and faculty picnic
- Departmental ice-cream social
- College-level social event (not another orientation) would be helpful so new students meet graduate students from all departments in the College
Expectations for Students

- Development of academic plan
- Research plan
- Never too early for a Gantt chart for schedule, milestones, etc.
- Clear expectations on number and type of publications, time to graduation, travel, etc.
- What does the student expect of the adviser?
- Refer to 2 handouts
Advisor: Mentor vs. Supervisor

- Faculty role and responsibilities
- What is the difference between mentoring and supervising?
Meetings

- Individual and/or group
- Frequency
- Format
- Deliverables
- Presentations
Assignment of Advisor

- When?
  - Temporary on intake
  - Permanent
Department Mentoring

- New student orientation
- TA orientation
- Course required of all students: identify topic, write a proposal, research integrity training, advisors are engaged (evaluate proposals)
- Means to meet and get to know faculty
Mentoring Effectiveness

- Training mentors
- Online forms and systems for mentoring
- Monitoring mentoring
- Assessment of mentoring
Discussion & Additional Issues

• Clear expectations handout to grad students
• Not all programs have a rigorous way of looking after our graduate students
• Mentoring toolkit exists - from student perspective and faculty perspective
• Should have a focused departmental faculty meeting with mentoring grad students as the topic
• Who are the mentors when students are not doing a research thesis?
• Could put performance of faculty as mentor in their annual review
Discussion & Additional Issues

- Need for mentoring new faculty, including how they should be a good mentor to grad students
- Need for postdoc mentoring
- Look at undergrad mentoring with alumni as examples for what we might do with grad students. Perhaps alumni would be great mentors for 1 year masters students.
- Could be part of new office for corporate relations
- Women graduate association or group
- Ask the 'customer'... the grad students for what they want in mentoring, community building, advising, etc
Discussion & Additional Issues

• An opportunity to look at the results of Tom’s survey and how we can improve based on findings
• Mentoring toolkit website:

http://www.gradschool.psu.edu/current-students/mentoring/
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Graduate Recruitment: Tying up loose ends

Anthony Atchley
Christine Masters
Assessment

1. Short-term and long-term
   - Yield for a given year
   - Success of students who choose Penn State
     - Degree completion rate
     - Time-to-degree
     - Scholarly productivity
     - Job after graduation

2. Data driven decision making for improvements

3. Identify metrics for each of the 8 recruitment topics

4. Establish baselines

5. Create effective assessment instruments for each

6. Benchmarking

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1. Advertising
2. Communicating
3. Selecting
4. Hosting
5. Fellowship offering
6. Following up
7. Onboarding
8. Mentoring
What have we missed?
Discussion, Notes & Assessment

1. **Short & long term**
   - Yield for a given year
   - Success of students who choose Penn State
   - Degree to completion rate
   - Time to degree
   - Scholarly productivity
   - Job after graduation

2. **Data-driven decision making for improvements**

3. **Identify metrics for each of the 8 recruitment topics**

4. **Establish baselines**

5. **Create effective assessment instruments for each**

6. **Benchmarking**
**Discussion, Notes & Assessment**

**Data Collection**

New Office of data analysis and assessment (collecting data – admin, academic, student) will put together a table of what we plan to collect, then review by department to see if there is anything missing. What are the highest priority questions that we want answered? When we know this, we can prioritize what data we collect.

Note: Large proposals often ask and require institutional/college data

**Feedback**

- CoE report like University of Toronto – has almost every metric of performance.
- CoE model should have 1st and 2nd level metrics. We don’t have our 1st level metrics solid enough yet. As long as our ranking is decreasing, we will have trouble recruiting strong students. The quality of the student is much more important than the quality of the advisor. If we don’t influence the 1st level metric we cannot influence the 2nd level metrics. We need to increase the number of students first, then we can start to look at 2nd level things like changing quality.
- Should we recruit students differently, depending on where they plan to go (industry vs. research)?
- Maybe we don’t want more PhD students, but instead, more PhD students who publish at least three papers prior to graduation.
- Might inquire if graduates simply have a job, not specifics about what job they are getting.
Information Pertaining to Graduates

• Identify what our key performance indicators are
• Do we want more PhD graduates or more MS graduates?
  o We have notions about which of 1-8 have the most influence on end results
  o Our grad school has not collected a large amount of extensive data, however this is not tied to determining where to focus future resources
• Should we consult with those who study higher education to explore the impacts of 1-8? AAU criteria?
• Track the employment of graduates through surveying faculty and potentially through alumni correspondence seeking professional whereabouts of graduates
  o Questions like this exist on the Annual Faculty Review
  o Involve Communication Specialist to find ways to catch attention and get information (Girls in Engineering video)

What have we missed?

• Ads that are looking for applicants - How to get this information out to students about great jobs that they can apply for. Over 150 ads like this were sent to MNE last year.
  o Aerospace does this through their professional society
• Becoming more competitive with national fellowships (NSF, NRT) and then communicating them
• Adhering (or not) to typical admission cycles in different situations – particularly 1 year programs
  o Example: could someone choose to join the 1 year masters program after the deadline if they change their mind from before
  o Find a way to communicate in a positive way that we are open for business, but not desperate for it
• Finding ways to compete with job offers that are outside academia – which are typically very good
Discussion, Notes & Assessment

What have we missed? (Cont.)

• Putting together a list among Big 10 universities of top women PhD graduates to distribute and create a culture of taking academic positions
• Ideas for starting video series for students or a grad student “boot camp”