CGCS Agenda – May 11, 2018

> Doctoral Recruitment Grant presentation:
  – Dr. Landers
  – Dr. Kim
  – Dr. Samaranayake

> Admission/GRE requirements - reminder

> Upcoming SLATE Storm

> Graduate Faculty Council Awards

> Graduate Faculty Election Update

> Graduate Faculty Updates

> Commencement Information

> Reminders/Upcoming Events
Doctoral Recruitment Grant

> Dr. Robert Landers
MAE Distinguished Undergraduate Research Fellowship

Track II Proposal
Program

Outcomes

1. Increase number of undergraduates matriculating into our PhD programs.
2. Increase number of undergraduates matriculating into outstanding PhD programs.

How Outcomes will be Measured

We will count the number of students that pursue a PhD.

Program Structure

- There are 5 fellows (must have a GPA ≥ 3.5).
- Each fellow receives $6000 during the summer (12 weeks, 40 hours/week, $12.5/hour).
- The Office of Graduate Studies provides $1000, the department provides $3000, and the faculty provide $2000.
- The Office of Undergraduate Studies provides an OURE for the student to continue their research during the school year.
- Students can participate in a technical communications workshop and present a poster at the end of the summer.
In addition to the 5 fellows, 8 fellows were fully funded by faculty.

<table>
<thead>
<tr>
<th>Student</th>
<th>Status</th>
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<tbody>
<tr>
<td>Nathan Lutes</td>
<td>Conducting undergraduate research this summer</td>
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<tr>
<td>Bret Curtis</td>
<td>Working on a joint Sandia/Missouri S&amp;T project</td>
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<tr>
<td>Seth Cockram</td>
<td>Accepted MS position at WashU</td>
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<tr>
<td>Andrew Hinkle</td>
<td>Pursuing PhD at Missouri S&amp;T</td>
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<tr>
<td>Andrew Hedlund</td>
<td>Considering Boeing and Navy Research Lab</td>
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<tr>
<td>Matt Klosterman</td>
<td>Accepted PhD position at UIUC</td>
</tr>
<tr>
<td>Michael Dvorak</td>
<td>Conducting undergraduate research this summer</td>
</tr>
<tr>
<td>Seth Lanius</td>
<td>Will work in industry</td>
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<tr>
<td>John Nganga*</td>
<td>Accepted PhD position at Notre Dame</td>
</tr>
<tr>
<td>Matthew York</td>
<td>Working at Sandia this summer</td>
</tr>
<tr>
<td>Lauren Tomanek*</td>
<td>Pursuing PhD at Missouri S&amp;T</td>
</tr>
<tr>
<td>Zachary Young</td>
<td>Conducting undergraduate research this summer</td>
</tr>
<tr>
<td>Gunnip Mueller</td>
<td>Working an internship this summer</td>
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* underrepresented student
We had 66 applicants, 8 of which are underrepresented.

The group has an average GPA of 3.82.

We accepted 11 Fellows (average GPA of 3.96), six of which the Department and faculty are fully funding.

Faculty are fully funding an additional 16 students (average GPA of 3.86).

Three students are underrepresented.
Doctoral Recruitment Grant

> Dr. Chang-Soo Kim
PhD Recruitment Grant
(ECE Summer Internship Program)

1st period (2017 summer):
• Original plan
  − 10-week, hourly-rate summer internship program
    Expanding global recruiting sources with strong ECE programs
  − “Feeder schools”: US (particularly S&T), S.Korea, Russia, Turkey, Iran, etc.
  − Focus on helping Assistant Professors (hosts)
  − Matching fund (e.g. travel, paperwork) provided by hosting faculty
PhD Recruit Grant (ECE Summer Internship Program)

- Progress
  - 8-week internship
  - 3 international internees (2 Bachelors, 1 Master): 1 applied/admitted (FS 2018), 1 scholarly publication
  - No success in S&T and other US institutions
  - 2 MOUs in progress (Dept level) with Turkish, S. Korean institutions
Exemplary Technical Report

APPENDIX

Student Name: Sangsu Lee

Current academic status: master

Affiliation: Ajou University, Suwon, Korea

Summary: He was involved in radio-frequency interference (RFI) project sponsored by Sony. RFI issues in wireless devices are critical for the RF sensitivity and it is difficult to analyze the RFI in real products. He developed an analytical formulation to understand the mechanism of noise coupling from an IC to an RF antenna by combining Lorentz reciprocity and dipole moment. He did a careful derivation and validate the formulation step by step through numerical simulations. He also wrote a technical paper based on his work and the paper has been submitted to IEEE EMC symposium 2018.

PhD Recruit Grant
(ECE Summer Internship Program)

2\textsuperscript{nd} period (2018 summer):

• 1 S&T and 3 international internees being recruited

• Short-term metrics of success: # of recruited PhDs (> 50%), # of MOU with feeder schools in Dept level (> 1)
Doctoral Recruitment Grant

> Dr. V.A. Samaranayake
What was the Grant for?

> Visit potential feeder schools – especially those who have not sent students before

> Meeting with potential students in an informal setting

> Provide potential students and their faculty advisors an overview of our program and its strengths
Completed Activities

Visited University of Missouri (October 2017)

> Undergraduate Research Talk – *Introduction to the nonlinear Schrödinger equation*

> Informal two-hour session with undergraduates over Pizza – *Discussion about their plans for graduate school and highlights of our graduate program*
Completed Activities - Continued

Visited University of Illinois – Urbana Champaign
(November 2018)

> Undergraduate Research Talk - *Introduction to the nonlinear Schrödinger equation*

> Informal two-hour session with undergraduates over Pizza – *Discussion about their plans for graduate school and highlights of our graduate program*
Completed activities – Continued

Visit to Fairmont State University, West Virginia (November 2017)

> One hour presentation

> Informal discussion with 25 students about the Math/Stat graduate program at Missouri S&T

> Interested students contacted the graduate director of the department
Completed Activities - Continued

Visit to Marshall University, West Virginia (November 2017)

> One hour presentation to students

> Informal discussion with 20 students about the Math/Stat graduate program at Missouri S&T

> Interested students contacted graduate director
Completed Activities - Continued

Visit to West Virginia University (November 2017)

> One hour presentation to students

> Informal discussion with 15 students and 6 faculty about the Math/Stat graduate program at Missouri S&T

> Interested students contacted the director of graduate studies
Completed activities - Continued

Mathematical Association of America Regional Meeting & MCMC Student Competition – Springfield, MO (April 2018)

> Set up booth to meet students after the mathematics contest

> Discussed our graduate program with undergraduate student visitors to the booth

> Visited other booths at the meeting and distributed information flyers about our graduate program
Additional Activities

Planning meeting to organize a ST. Louis Section of the Math Alliance (January & February 2018)

> One goal of the Math Alliance is to help partner schools attract graduate students

> Math Alliance partners are: Washington University at St. Louis, SIU Edwardsville, University of Iowa, Saint Louis University
Plans for the next Academic Year

> Target small 4-year colleges that are known for high quality education

> Visit selected schools and give presentations to undergraduate students and have an informal gathering with students over pizza

> Invite select students to visit Missouri S&T
Thank You!
Admission Requirements - Reminder

> If any changes, please notify grad@mst.edu

> For consistency, changes will only be made during summer for the NEXT academic year. Changes must stay in place for the full academic year.

> Changes will no longer be made in the middle of the academic year.

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**Graduate Admission Requirements**

Valid for Fall 2019, Spring 2020, Summer 2020 Semesters

<table>
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<tr>
<th>Graduate Admission Requirements for</th>
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<tbody>
<tr>
<td><strong>M.A.</strong></td>
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<tr>
<td>CURRENT</td>
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<tr>
<td>Edits (if any)</td>
</tr>
</tbody>
</table>

| **Ph.D.** | IELTS | TOEFL | GRE-V | GRE-Q | GRE V+Q | GRE A(W) | Ugrad GPA | MS GPA |
| CURRENT |       |       |       |       |         |          |          |       |
| Edits (if any) |       |       |       |       |         |          |          |       |

When applicants ask for a time to decision (from the submission of a completed application), what time frame should we give them (in weeks)?

________________________

Do you require S&T alumni applying for a graduate program to provide letters of recommendation?

YES [ ] NO [x]

Do you waive the GRE for S&T alumni if they meet a GPA requirement?

YES [x] NO [ ]

If yes, what is the GPA requirement? _________________

Please list any additional considerations for applicants.

Due back to Office of Graduate Studies by July 13, 2018
Upcoming SLATE Storm

> Tuesday, May 15, 2pm-3pm, Toomey 249

> Topics covered will include:
  – Reporting
  – Queries
  – Mailings
  – Ideas/Requests from YOU for additional things you would like to see/use to meet your department’s needs.
Graduate Faculty Council Awards

> The Graduate Faculty Council requested nominations for Outstanding Contributions to Graduate Studies and Graduate Staff Excellence.

> The winner of the Graduate Staff Excellence Award went to Tracy Zou in Business and Information Technology

  – Honorable Mention:
    > Tina Balch in Chemistry
    > Dawn Davis in Computer Science
    > Sharon Lauck in Geosciences and Geological and Petroleum Engineering
    > Judy Russell in Mining and Nuclear Engineering
    > Jeannie Werner in Civil, Architectural, and Environmental Engineering

> The winner of the Outstanding Contributions to Graduate Studies Award went to Dr. Wayne Huebner in Material Science and Engineering

  – Honorable Mention:
    > Dr. Kwame Awuah-Offei in Mining and Nuclear
    > Dr. Yu-Hsien Chiu in Business and Information Technology
    > Dr. Wei Jiang in Computer Science
    > Dr. Robert Landers in Mechanical and Aerospace Engineering
    > Dr. Kyle Perry in Mining and Nuclear Engineering
    > Dr. Jeffrey Winiarz in Chemistry
Graduate Faculty Election Update

The deadline to submit nominations for the officers of the Graduate Faculty for the next Academic year has been extended to Tuesday, May 15.

You can send nominations via email to Stephanie Lewis at struckhoffs@mst.edu.

After nominations have been collected, a link will be sent to the graduate faculty via email with an opportunity to vote for officers.
Graduate Faculty Updates

> The following changes were voted and approved at the April 30th Graduate Faculty Meeting:

**GPA Requirements for Graduate Students**

In order to earn a graduate degree, all students must achieve a cumulative GPA of 3.0 or higher in all graduate work taken at Missouri S&T, as well as for all graduate courses listed on the program of study (Form 1 for master's students and Form 5 for doctoral students). This 3.0 GPA requirement does not apply to courses taken for undergraduate credit

... nor does it apply to courses taken so long ago that they cannot be counted toward a graduate degree. No substitutions may be made on the program of study for courses in which the student has earned less than a B grade. All graduate students are encouraged to maintain at least a 3.0 cumulative GPA at all times, and certain departments may even require this minimum GPA. In cases where a graduate student repeats a course, both the original and repeat grades will be used in calculating the student’s GPA, and both will appear on the student’s transcript.

A graduate student who accumulates ten or more credit hours of C or F grades shall no longer be a candidate for a graduate advanced degree or certificate from Missouri S&T. This rule does not apply to courses taken for undergraduate credit, nor does it apply to courses taken outside of the respective degree or certificate completion time limits so long ago that they cannot be counted toward a graduate degree. This grade requirement limit is cumulative over all degree programs (M.S. plus Ph.D., M.S. plus a second M.S., etc.) and is not per degree program.
Graduate Faculty Updates  Cont.

> Effective immediately:
  - Form 1A and 5A
    > Revised programs that only include course changes will require signatures from the student and advisor(s) only
Commencement Info

10:00AM
SATURDAY, MAY 12
Candidates should plan to arrive by 9 a.m.
Undergraduate and graduate students in
the following disciplines:
> Architectural Engineering
> Applied and Environmental Biology
> Biological Sciences
> Ceramic Engineering
> Chemical Engineering
> Chemistry
> Civil Engineering
> Economics
> Engineering Management
> English
> Environmental Engineering
> Geological Engineering
> Geology and Geophysics
> Geotechnics
> Industrial Organization Psychology
> Materials Science and Engineering
> Metallurgical Engineering
> Petroleum Engineering
> Physics
> Psychology
> Systems Engineering
> Technical Communication

3:30PM
SATURDAY, MAY 12
Candidates should plan to arrive by 2:30 p.m.
Undergraduate and graduate students in
the following disciplines:
> Aerospace Engineering
> Applied Mathematics
> Business Administration
> Business and Management Systems
> Computer Engineering
> Computer Science
> Electrical Engineering
> Explosives Engineering
> History
> Information Science and Technology
> Manufacturing Engineering
> Mathematics
> Mechanical Engineering
> Mining Engineering
> Multidisciplinary Studies
> Nuclear Engineering
> Philosophy
Reminders/Upcoming Events

> **Writing Workshop: Punctuation**
  – Wed., May 16, 12-1pm
  208 Norwood
  Registration Required.

> **Formatting Your Thesis/Dissertation**
  – Thurs., May 17, 11am-12pm
  Toomey 140

> **Write-In**
  – Wed., May 23, 9am-12pm
  203 Library

> **New Graduate Student Orientation**
  – Friday, August 17, 8:30am-3pm
  > Hasselmann Alumni House
  > *Friday before classes begin*
  > Looking for faculty volunteers to speak about:
    – Acquiring funding
    – How to maximize and advisor/advisee relationship
Thank you!
See you this fall!