FAMU-FSU College of Engineering News

Florida State maintains Top 20 status in US News & World Report Best Colleges rankings
Tallahassee.com
FSU's College of Business and the joint FAMU-FSU College of Engineering also moved up in national rankings. Florida A&M University was the ...
Thesis & Dissertation Manuscript Processes and Forms:

- If you have not already done so, you will need to have the following forms signed:
  - FAMU Committee Approval and Expertise Forms (two different forms - click on graphic above)
  - FAMU Research Project Approval Form (click on graphic above)
  - Thesis or Dissertation Manuscript Formatting – Click on graphic above for TEMPLATE for manuscript formatting. (Do NOT use the one from the FAMU webpage)
  - Required Defense Announcements!
  - FAMU University Announcement (Click on graphic above for Template) - Must announce and email this form to gradstudies@famu.edu at least two weeks prior to defense date.
  - College of Engineering Announcement (Click on graphic above for Instructions) - Must be posted at least two weeks prior to the defense date. You must allow two business days for the posting request to process. Please note that this is the College of Engineering’s policy which is in addition to the policies set by FAMU.
  - Department Announcement – Please see your specific department Graduate Coordinator for details if one is required. Any departmental requirements are in addition to the policies set by FAMU and the College of Engineering respectively.

IMPORTANT DATES AND DEADLINES TO KEEP IN MIND

- Thursday, September 17, 2020, ZOOM Call – Details to follow soon – If graduating Fall 2020 and have not attended previously, attend mandatory FAMU Manuscript Clearance workshop. SEE ABOVE for RSVP link!

- November 9, 2020 - Last day to submit master’s thesis and doctoral dissertation for pre-defense format review
  - Manuscripts submitted for the pre-defense format review must be 90% content complete, including any tables and figures, and must include the title page, committee page, table of contents, lists (if needed), abstract and references. (see Manuscript Template attached)
  - Email preliminary manuscript to mabate@eng.famu.fsu.edu.
  - November 23, 2020 - Last day to submit the post-defense, content-approved thesis, dissertation.
  - Email final manuscript to mabate@eng.famu.fsu.edu;
  - December 10, 2020 - Final manuscript and all forms must be received and approved in ProQuest 5 p.m. ET of this date.
  - All format and content changes must be completed and approved by your department graduate representative, your committee, Deborah Gautier and Dr. Jackson (FAMU Dean of Graduate Studies) prior to this submission.

If you have any questions or concerns, please feel free to reach out to Minday Abate.

FSU: Fall 2020 Graduation and Manuscript Deadlines

As we finish the second week of the term, I wanted to send out some reminders for those who may be Graduating and/or Defending a Manuscript during the Fall term!

Fall 2020 Graduates! Dates and links for applying to graduation and submitting manuscripts are below:
FSU- Graduation Ceremony is currently scheduled for December 11, 2020. More details will be sent by the Registrar's office at a later date.

Make sure apply to Graduate. The Graduation Application Window (my.fsu.edu) closes Friday, September 11, 2020.

Manuscript Clearance
Thesis, Treatise, Dissertation Information which includes deadlines, formatting/guideline requirements, Portal link and Submission Process
FSU Online Manuscript Clearance Portal

Required Defense Announcements:

FSU University Announcement - Submit your Defense Announcement to The Graduate School through the Manuscript Clearance Portal.

College of Engineering Announcement - All defense announcements must be posted at least two weeks prior to the defense date. You must allow two business days for the posting request to process. Please note that this is the College of Engineering’s policy which is in addition to the policies set by FSU.

Department Announcement - see department Graduate Coordinator for details. Any departmental requirements are in addition to the policies set by FSU and the College of Engineering respectively.

DATES AND DEADLINES: *Missing a semester deadline will result in the student automatically being ineligible for graduation that term.*

- October 26, 2020 – Last day for doctoral students to submit doctoral dissertation or treatise for pre-defense format review. This review is required for graduation.
- November 9, 2020 – Last day for master’s students to submit master's thesis for pre-defense format review. This review is required for graduation.
- November 23, 2020 – Last day for submission of the post-defense, content-corrected thesis, dissertation or treatise and required forms.
- December 11, 2020 – Last day for thesis, dissertation, and treatise students to receive an email from Manuscript Clearance confirming final clearance.

60-Day Deadline: The final, defended, content-approved manuscript and all required forms must be submitted to Manuscript Clearance within 60 calendar days after a successful defense. Students under the 60-day deadline must receive an email from Manuscript Clearance confirming final clearance no later than 7 calendar days after the 60-day deadline. This allows time for additional formatting corrections to be made, if necessary. Weekends and University Holidays are not excluded from any deadline, so please take this into account when planning to meet this deadline. No exceptions will be made for this policy.

If you have any questions or concerns, please feel free to reach out to Mindy Abate.
FAMU: Mock Interview Deadline Approaching

We are encouraging you all to sign-up on Hire-A-Rattler/Handshake for the Mock Interview Day on Sept. 21, 2020. The last day to submit for a time slot is Wednesday Sept 16 at 11:59 pm.

Employer mock interviews are as real as it gets, but without the stress or pressure of an actual interview. Whether you’re a first-year student or a graduating senior, you’re encouraged to participate. Plus, you’ll get to meet and learn from an employer in your field of interest.

Instructions: (must have a resume)
Login to Handshake -> Click on “Jobs” -> Click on “On Campus Interviewing” -> Search “Mock Interviews” -> Choose organization -> Choose “Related Job” (if you qualify for the interview/job)
Employers in attendance will include:

- Eli Lilly and Company - Sales and Marketing, Information Technology (Computer Science, Computer Information Systems, etc.), Pharmaceutical Research and Development
- Fanatics  All majors/industries including tech, marketing, merchandising, business management, hr, accounting, etc
- FEDERAL RESERVE BANK OF MINNEAPOLIS Banking, Financial and Business
- FEMA (Federal Emergency Management Agency) Government/ Federal
- Fiserv (formerly First Data)Technology and Computer Science majors, All
- Hilti North America Construction and Sales Industry
- Inn Club Vacations Incorporated Hospitality, but we staff all functional areas of business, to include: HR, Finance, IT, etc.
- Hyland software/technology (computer science/engineering, any technical majors
- Oracle Sales/Consulting
- Orange County Public Schools Education
- PepsiCo, Inc. Sales, R&D, and Supply Chain
- Siemens Automation company, who also specializes in electrification and digitalization/technology
- Texas Instruments (TI) Business & engineering (finance, accounting, operations, and IT)
- Thermo Fisher Scientific Life Sciences, Biotech, Pharma, Healthcare
- UPS HR/Business and Engineering
- Wellington Management Finance/Investment Management
- Wells Fargo & Co Financial Services

If you have any concerns or questions, contact Sean A. Collins (Sean.Collins@famu.edu)

FAMU: Check Out the Latest Issue of A&M Magazine

The Summer 2020 issue of A&M magazine features Women in STEM, First Lady Sharon Robinson, Vice President for University Advancement, Foundation Director and SBI Dean Shawnta Friday-Stroud, Ph.D., alumni Erica Hill and Natalie White, women leaders in architecture, sports and more.

This special edition includes a section highlighting FAMU’s battle against COVID-19 and the men and women on the frontlines confronting the global pandemic.

View the magazine here.

OPPORTUNITIES FOR GRADS AND POSTDOCS
NIH Predoctoral Fellowship Awarded to Ms. Shannon Helsper

Stroke is a leading cause of disability in the United States, exhibiting 17.6% mortality of the nearly 800,000 people afflicted annually and accruing related costs of $40.1 billion. An effective therapy is needed to minimize short- and long-term obstacles in ischemic stroke. Cell therapies, particularly those employing human mesenchymal stem cells (hMSC), are the focus of numerous clinical trials that seek to capitalize on potential therapeutic effects, including increased secretion of neurotrophic factors and cytokines under ischemia.

Our goal is to determine if the presence of hMSC in an ischemic region is required or if delivery of cell secretions, particularly purified exosomes, alone improves outcomes. We will compare 2D-cultured hMSC and 3D hMSC aggregates to generate both transplantable cells and hMSC-derived exosomes. Beyond in vitro analysis, we seek to use novel in vivo magnetic resonance imaging and spectroscopy (MRI/S) to evaluate the efficacy of these approaches. During an ischemic event, disrupted blood flow dysregulates Na+/K+-ATPase, leading to a cascade of osmotic swelling and ionic homeostasis disruption that culminates in neuronal death. Sodium, as a quantifiable metric of ischemic lesion and tissue recovery, is directly linked to this disruption. Thus, longitudinal analysis of sodium and metabolite levels in the ischemic core and penumbra will quantify sub-acute and long-term ischemic recovery. Selective and localized in vivo MRS will compliment sodium MRI by tracking changes in energetics, osmoregulation and neurotransmitters.

Further, we propose to engineer a unique 19F label that will be MR-visible to track the migration of exosomes, as an additional measure of the required therapeutic dose.

This project proposes the utilization of ultra-high field magnetic resonance imaging and spectroscopy (MRI/S) via the 21.1-T magnet at the National High Magnetic Field Laboratory (NHMFL) to track tissue recovery after administration of hMSC-derived therapy.


Shannon’s Budget (3 years): Stipend, tuition & fees (60%) and other costs ($4200/year):
total costs = $112,288

Recruitment of Dissertation Study on Historically Marginalized Students in Engineering

Dear Engineering Student,

My name is Bo Hyun Lee, M.A., and I am a doctoral student in counseling psychology at the University of Missouri, Columbia. I am conducting my dissertation under the supervision of Dr. Lisa Y. Flores to examine psychosocial and contextual factors among historically underrepresented students in their process of pursuing an engineering degree. I am writing to ask for your participation in this study. Your participation can provide valuable input on better understanding the role of psychosocial factors in pursuing engineering degree. Participation involves completing a confidential online survey (approximately 20-25 minutes to complete) at your convenience. Participation in this study is completely voluntary, and this research has been approved by the Institutional Review Board for Human Subjects in Research at University of Missouri (MU IRB # 2017708).
To participate in this study, you need to be 18 years of age or older who identify as African American/Black, Hispanic American/Latinx, Native American, and Bi/Multi Racial American. You also need to be declared major within engineering fields as of Spring Semester 2020. Individuals who consider majoring Engineering, but did not declare engineering as a major are not eligible for this study.

If you are interested in participating in this study, please click on the link below, fill out the informed consent form, and complete the study.

https://missouri.qualtrics.com/jfe/form/SV_bdZm6OILcszrcup

In exchange for participating in the study, if interested, you may enter a drawing for a chance to win one of 50 Amazon gift cards of $10, one of 15 Amazon gift cards of $20, one of three Amazon gift cards of $50, one of two Amazon gift cards of $75, and one $100 Amazon gift card. Please note that your email address will not be used to identify you in any way and submitting your email address is totally voluntary.

Please don’t miss this research opportunity.

If you have any questions about the study, please contact the principal investigators at the email or phone below. Thank you for your interest in this study. Your participation is greatly appreciated.

Bo Hyun Lee, M.A.
Lisa Y. Flores, Ph.D.

DOE SCGSR 2020 S2: Graduate Research Opportunities at DOE National Laboratories

The Department of Energy’s (DOE) Office of Science is pleased to announce that the Office of Science Graduate Student Research (SCGSR) program is now accepting applications for the 2020 Solicitation 2. Applications are due 5:00pm Eastern Time on Thursday, November 12, 2020.

We would like to bring to your attention 4 new transdisciplinary research areas for encouraging graduate training activities at the convergence of multiple disciplines and communities, including Microelectronics, Data Science, Conservation Laws and Symmetries, and Accelerator Science. We strongly encourage applications in these areas. Detailed information about the program, including eligibility requirements and access to the online application system, can be found at: https://science.osti.gov/wdts/scgsr/.

The SCGSR program supports supplemental awards to outstanding U.S. graduate students to conduct part of their graduate thesis research at a DOE national laboratory/facility in collaboration with a DOE laboratory scientist for a period of 3 to 12 consecutive months—with the goal of preparing graduate students for scientific and technical careers critically important to the DOE Office of Science mission.

The SCGSR program is open to current Ph.D. students in qualified graduate programs at accredited U.S. academic institutions, who are conducting their graduate thesis research in targeted areas of importance to the DOE Office of Science. The research opportunity is expected to advance the graduate students’ overall doctoral thesis/dissertation while providing access to the expertise, resources, and capabilities available at the host DOE laboratories/facilities. The supplemental award provides for additional, incremental costs for living and travel expenses directly associated with conducting the SCGSR research project at the DOE host laboratory/facility during the award period.

The Office of Science expects to make approximately 95 awards in 2020 Solicitation 2 cycle, for project periods beginning anytime between June 14, 2021 and October 4, 2021.

Since its inception in 2014, the SCGSR program has provided support to over 580 graduate awardees from 141 different U.S. universities to conduct thesis research at 18
The SCGSR program is sponsored and managed by the DOE Office of Science’s Office of Workforce Development for Teachers and Scientists (WDTS), in collaboration with the six Office of Science research programs offices and the DOE national laboratories/facilities, and program administration support is provided by the Oak Ridge Institute for Science and Education (ORISE).

For any questions, please contact the SCGSR Program Manager, Dr. Ping Ge, at sc.scgsr@science.doe.gov.

Hertz Fellowship Application Open through October 23, 2020

We’re excited to announce that the online application for the 2021 Hertz Fellowship is now open through October 23rd.

The Hertz Fellowship provides financial and lifelong professional support for the nation’s most promising graduate students in science and technology.

We’re looking for visionary leaders who want to apply their research toward solving the world’s toughest challenges – from improving human health to protecting the health of the planet.

Hertz Fellows receive up to five years of graduate funding and join an influential community of more than 1200 peers, creating lifelong connections that will accelerate one’s career.

Benefits of the Hertz Fellowship
- Full tuition equivalent for five years
- $34,000/year stipend - higher if combined with another fellowship
- Powerful community of 1,200+ peers
- Special events, workshops, and networking opportunities

Whether you know someone who might be a great candidate or you plan on applying, we hope you’ll explore these resources and share them with your friends and colleagues. You can always email us with any questions at fellowshipinfo@hertzfoundation.org.

NNSA Graduate Fellowship Program

Application deadline is October 2, 2020 for June 2021 positions.

Our positions are open to students actively pursuing their master’s or doctoral degree as well as students who have achieved their graduate degree within the past 18 months. Details about our program can be found here.
SEPTEMBER

STEM Resume Cafe - Thursday, September 17, 9am - 12pm, V

Center for Academic Innovation and Technology Workshop - Learner-Centered Teaching - Friday, September 18, 1:00 PM, V

STEM Career & Internship Fair - Tuesday, September 22, 9am - 4pm, V

FAMU Career & Internship Virtual Expo (Day1/Day 2) - Wednesday, September 23 @ 10:00 AM, V and Thursday, September 24, 2020 @ 4:00 PM, V

OCTOBER

Center for Academic Innovation and Technology Workshop - Interpreting/Responding to Student Evaluations - Friday, October 16, 1:00 PM, V

NOVEMBER

Thanksgiving Holiday- Wednesday, November 25 thru Friday, November 27, 2020

DECEMBER

2020-2021 Winter Break - Monday, December 21 thru Friday, January 1, 2021

JANUARY

College Reopens - Spring 2021 Semester, Monday, January 4, 2021

THINGS TO DO

International Observe the Moon Night, September 26

The Challenger Learning Center and the Tallahassee Astronomical Society invite you to a scheduled Zoom meeting.
Members of the public are invited to join this Virtual Event to celebrate International Observe the Moon Night, InOMN 2020, on Saturday, September 26, from 6-9 p.m. The free event will be held at your home or favorite location. Just look up and send us an email to let us know how many friends and family members were with you. You could send us a picture you took of the moon, a moon selfie, or a pic of your binoculars/telescope and send it to be counted in Tallahassee Astronomical Societies InOMN in Tally.

Send your photos to: jraymond@challengerth.com

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**COVID-19 INFORMATION**

**Florida’s COVID-19 Data and Surveillance Dashboard**
Florida Department of Health, Division of Disease Control and Health Protection

**Colleges Become New COVID-19 Hot Spots**
The *New York Times* (9/11, A1, Hubler, Hartocollis) reported on its front page that “campuses across the country are experiencing outbreaks.” It began last month “with a trickle of coronavirus infections as college students arrived for the fall semester.” Soon “that trickle became a stream, with campuses reporting dozens, and sometimes hundreds, of new cases each day.” Now that stream “feels like a flood” since in just the past week, a New York Times survey found “American colleges and universities have recorded more than 36,000 additional coronavirus cases, bringing the total of campus infections to 88,000 since the pandemic began.” Public health experts “say the rising number also underscores an emerging reality of the pandemic: Colleges and universities have, as a category, become hot spots for virus transmission, much as hospitals, nursing homes and meatpacking plants were earlier in the year.”

**Researchers Find Face Shields, Neck Gaiters, Masks With Valves Not Effective Against COVID-19**
“Plastic face shields, neck gaiters and masks with valves – three of the creative approaches to face coverings since COVID-19 hit the United States – are not very effective in curbing the spread of coronavirus particles, according to two new studies from Florida Atlantic University in Boca Raton,” the *Miami Herald* (9/11, Solomon) reported. FAU engineering researchers “tested how well shields and several types of masks worked on mannequins whose simulated coughs and sneezes were mapped to determine their path through the air.” They published their research in the journal Physics of Fluids.

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Want to add something to the next issue? Email us! Deadline is Friday noon for Monday publication.