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### **Welcome to the NeuroMechatronics Lab (NML)!**

Here in the NeuroMechatronics Lab, we aim to improve the quality of life of individuals with neurological impairments. We seek to advance the scientific understanding of motor and somatosensory systems to better engineer new rehabilitation therapies and technologies. Our group of neural engineers are highly interdisciplinary, ranging across mechanical engineering, computational neuroscience, bioengineering, computer science, neuroscience, and more. Our research focuses on both developing and testing new technologies as well as working towards translation into real clinical applications. Throughout it all, we seek to keep in mind the neuroethical underpinnings and wider societal implications of neurotechnology.

### **Contributing to this document:**

This is a living document. As you go through the onboarding process and afterwards, information may need to be added or updated. Please feel free to edit this document directly.

**Website:** <https://www.meche.engineering.cmu.edu/faculty/neuromechatronics-lab.html>

**Wiki:** <https://nml-wiki.org/>

### **Location:**

Human Lab: Wean Hall 4120

Animal Labs: Mellon Institute

## Offices:

- Doug: 1323 Wean Hall
- Darcy: 1317 Wean Hall
- Dev, Ashley, Alpaslan: 4207 Wean Hall
- Max: 115L Mellon Institute
- Jackie, Larry, Jonathan, Kestrel, rotating student space: 118 Mellon Institute
- Jordyn, Ernesto/Jess, Nikhil, Ariel: 4617 Wean Hall
- Nikole, Dailyn, Prakarsh: 4620 Wean Hall
- Common Lounge, Tom, and Dennis: 4619 Wean Hall
  - Contains a microwave, coffee maker, minifridge

## Mailing Addresses:

Attn: Your name  
Wean Hall 4113  
5000 Forbes Avenue  
Pittsburgh, PA 15213

Attn: Your name  
115 Mellon Institute, CNBC  
4400 Fifth Avenue  
Pittsburgh, PA 15213

## Billing Address:

5000 Forbes Avenue  
Pittsburgh, PA 15213

## **GENERAL POLICIES**

### **Roles, Responsibilities, Expectations, and Mentoring**

#### *Faculty*

The primary job of the faculty members is to serve as mentors to the students and postdocs in the lab. They are also responsible for acquiring grant funding to support research projects and student and staff salaries. They supervise the research projects in the lab. They are responsible for ensuring the safety of all lab members, research participants and subjects, training of lab members, overseeing ethics protocols, conflict resolution, data integrity and the responsible conduct of research.

### *Staff*

The role of the staff members is to support ongoing and future research projects. Depending on their specific role, they may help with creating and modifying ethics protocols, executing experiments, ordering supplies for the lab, and building tools or devices for experiments.

### *Postdocs*

Postdocs are recent PhD graduates who are considered to be both staff and a trainee. A postdoc is a short-term role often intended to transition people into a faculty position, but is useful for industry as well. Postdocs drive their own research projects, help with grant writing, and mentor and train students. They are great resources for other lab members who may need help with anything from planning and executing experiments, writing a funding proposal, presenting at a meeting, or in general. The length of a postdoc can vary, but is typically 1-4 years.

### *PhD students*

Students in a PhD program are expected to lead their own research projects in fulfillment of a PhD thesis. This includes designing experiments, acquiring and analyzing data, writing papers, presenting at conferences, completing thesis milestones (qualifying exams, proposal, defense), and supervising/mentoring undergraduate students and junior graduate students in the lab. In NML, PhD students typically graduate after 5-6 years.

### *MSc students*

Students in a Masters program are expected to complete their own research projects in fulfillment of a Masters thesis. This includes designing experiments, acquiring and analyzing data, writing papers, presenting at conferences, and completing a thesis document. In NML, Masters students typically graduate after 2 years.

### *Undergraduate and Rotating Students*

Undergraduate and rotating students in the lab are expected to assist with ongoing research projects, perform literature reviews, analyze data, and generally gain research experience under the supervision of a graduate student or postdoc. The scope of the project and time commitment will vary depending on the nature of the employment/rotation.

## **Hours**

### *Faculty*

Faculty never sleep; therefore, they are expected to work over 100 hours/week. Faculty resources and benefits can be found here: <https://www.cmu.edu/hr/benefits/faculty.html>

### *Staff*

Full-time staff are expected to work 37.5 hours/week; part-time staff are expected to work 17.5 hours/week. Staff resources and benefits can be found here:

<https://www.cmu.edu/hr/benefits/staff.html>

### *Postdocs*

Postdocs are considered to be staff and are therefore expected to work 37.5 hours/week. Staff resources and benefits can be found here:

<https://www.cmu.edu/hr/benefits/staff.html> and here:

<https://www.cmu.edu/graduate/programs-services/index.html>

### *Graduate Students*

Graduate students are expected to work 37.5 hours/week, including coursework. Student resources can be found here: <https://www.cmu.edu/current-students/>,

here: <https://www.cmu.edu/stugov/gsa/Resources-for-Graduate-Students/index.html>,

and here: <https://www.cmu.edu/graduate/programs-services/index.html>

### *Undergraduate or rotating students*

The number of hours per week should be discussed with Doug or Darcy prior to joining the lab. Depending on the semester and whether or not the rotation is for course credit, the number of hours per week may vary. Typically, during the summer months, students are expected to work full time (37.5 hours/week). During the fall and spring semesters, students typically work part time (10-12 hours/week). Student resources can be found here: <https://www.cmu.edu/current-students/>

## **Lab Meetings**

### *All-hands Meetings*

We have an all-hands meeting each week (Wednesdays 09:00 - 11:00). We begin these meetings with general updates for the lab in the form of a slide presentation delivered by Doug. We then have 1-2 presenters talk about any of the following:

- Data/research update
- Practice talk for a conference or thesis milestone
- Journal club
- Tutorial (recorded for future instruction)

Past presentations are on the shared Drive: [Shared drives\NML\\_shared\Lab Meeting Stuff\Lab Meeting Presentations](#), including some recorded tutorials.

### *One-on-one Tagups*

Each lab member also has weekly one-on-one meetings with Doug. During these less formal “tagups”, lab members can discuss various topics related to their research, thesis milestones, and tasks in the lab. To streamline the tagup process, there is a template (in [Shared drives\NML\\_shared\Lab Meeting Stuff\Tagups](#)). New lab members should create a folder with their name and copy the template into their folder. Each week, the lab member should update the slides accordingly.

### *Project Meetings*

Each project/grant typically has group meetings that include PIs, collaborators, staff, and students. The frequency of the meetings may vary depending on the project and the type of reporting that needs to be done (for example, DARPA grants require frequent milestone updates and therefore require more frequent meetings of the team members). There are 2 large project meetings that are held every 2 weeks:

- Human subjects research: Tuesdays 9-11 AM
- Rodent research: Thursdays 9-10:30 AM

### *Journal Clubs*

If several lab members have an interest in a certain topic, we welcome them to join or start a journal club within the lab or with other members of our research community. Currently, we have a new journal club that discusses relevant research. They run on every other Wednesday from 12 -1 PM, and lunch is provided. For more information regarding this journal club, please contact Dailyn Despradel or Nikole Chetty on Slack.

The papers that are discussed at journal clubs (past and upcoming) are in this folder:

[Shared drives\NML\\_shared\Project Meetings\NML Journal Club\Research Papers](#)

## **Calendars and Scheduling**

### *Joining the Lab Calendars*

Adding the lab calendar (NeuroMech Lab) to your personal online calendar can help keep track of the meetings and other lab updates. To add the lab calendar to your Google calendar, use the '+' icon next to the 'other calendars' tab on the webpage. Choose to 'Subscribe to Calendar', and look up for the '[neuromech@andrew.cmu.edu](mailto:neuromech@andrew.cmu.edu)' account and add it to your calendar. Be sure to enable notifications from this calendar to keep up to date with any challenges. There is an additional calendar used to indicate when you are running experiments in the human lab (Wean4120 - Experiments) that you can subscribe to in a similar way by searching the name of the calendar.

### *Navigating Doug's Calendar Fire*

Doug will share his calendar with you when you join the lab. You will be able to see when he is busy or available, but not the details of the events. If you require an additional meeting with Doug, send him a Slack message with the following details:

- Topic of the meeting
- Suggested date and time (after looking through his calendar to make sure he is available)
- If it's in-person or virtual

If he agrees to a meeting, he will likely send you a calendar invite very quickly. If he doesn't, then you should send him a calendar invite with the necessary information.

You can also send him a calendy invite, which will automatically go on his calendar.

### *Meeting with Other Lab Members*

You can check the availability of other CMU personnel by searching their names in the "Meet with..." bar in Google calendar. However, not everyone manages all their meetings through CMU's Google calendar. Therefore, if you want to meet with someone, send them a Slack message or email to request a date and time.

### *Connecting Zoom to your Calendar*

Since most meetings are still virtual, we use Zoom to host our meetings. You can automatically generate a Zoom meeting from within your Google calendar invite if you integrate them. Instructions for doing this can be found here (Schedule with Zoom and Google Calendar):

<https://www.cmu.edu/computing/services/comm-collab/web-conferencing/zoom/how-to/schedule-meetings.html>

### *Equipment Sharing*

There are several pieces of lab equipment that are shared between projects and lab personnel. Additionally, the lab space in Wean 4120 is small, and we should minimize people in the lab when a research participant is present. Coordinating the sharing of equipment and lab space is done through two lab calendars:

- NeuroMechLab
  - Used to book equipment
  - Also shared with collaborators at RNEL (U Pitt)
  - Create a calendar invite in your own calendar, and share the event with NeuroMechLab
  - Include all relevant details:
    - Who is using the equipment
    - Type of equipment (and quantity)
    - Time using equipment
    - Location (to track where pieces of equipment are at all times and to coordinate movements)
    - For example: “Doug - DS8R, 1 TMSi + HDEMG, Wean” (calendar event will include times)
- Wean4120 - Experiments
  - Used to schedule experiments taking place in the lab

When you have experiments, it's best to indicate the times and equipment using both calendars.

For those who also work on projects at RNEL (U Pitt), equipment and experiment times should also be indicated on the NEST calendar. Please talk to your Pitt collaborator for getting access to this calendar.

We have a sign-out sheet for tracking equipment that is lent out or taken out of Wean 4120 (the human lab). You can find it here: [Shared drives\NML\\_shared\Equipment Manuals and Software](#)

## **File management**

We have several Google Drives through G Suite at CMU. Your CMU account will have a personal Google Drive with very large storage space. Every lab member should have access to [NML\\_shared](#). If you don't have access, request it immediately from Doug or

Darcy. Within this Drive, there are several subfolders related to lab activities, including but not limited to, lab meetings, purchasing, manuscript preparation, presentations, lab photos, equipment manuals, code sharing, etc.

The Administrative folder on the Drive has specific information on sending mail, reserving rooms, submitting for reimbursements, purchasing, protocols, computers, etc.

Depending on your research area, you may also require access to any of the following Drives:

NML\_Rodent

NML\_HumanData

NML\_NHP

NML\_NTRAIN

These research-area specific Drives are for storing raw and processed data, the approved ethics protocols and related documents, code for running experiments and analyzing data, and any other relevant materials. Please make sure you have all your data stored on the appropriate shared Drive. This ensures that we have appropriate cloud backups and access at all times.

Here is an example of a file structure for storing data:

ProjectName\SubjectID\Date\Data

You can access the Drives through a typical folder system (rather than through your internet browser), by installing FileStream onto your computer (instructions: <https://www.cmu.edu/computing/news/2020/google-file-stream.html>).

## Code Sharing

We have a lab Github account for tracking and sharing code:

(<https://github.com/Neuro-Mechatronics-Interfaces>). In Github, you can easily keep track of versions of code, and collaborate with others to write complex code structures. If you have not used Github before, you can find some helpful tutorials online that can show you how to push and pull code from repositories and keep track of different versions.

## Reference Manager

For keeping track of papers and for inserting references into papers, it is easiest if all lab members use Zotero, because Doug also uses Zotero. Zotero is free, cloud-based, and has Word and Chrome plug-ins. For collaborative papers, authors can share and contribute to libraries with ease. Learn more here: <https://www.zotero.org/>

## Conference attendance and travel

If there is a conference you would like to attend or present your research, please talk to Doug or Darcy about it. Very likely, they will cover the expenses for you to go. It is expected that students and postdocs who have been in the lab for more than 1 year will present their research rather than simply attending.

Once approved, you should contact Neil Emmett ([nemmett@andrew.cmu.edu](mailto:nemmett@andrew.cmu.edu)). Neil can register you for the conference, and book your flights and hotels. She will also reimburse [\(link to the form\)](#) you for your food and other expenses after the conference (please keep your receipts!!). Students who have access to CNBC funds should use those first.

CNBC travel stipend: The CNBC provides up to \$1,000 per year to support travel to scientific meetings for students. Please see the CNBC travel Policy:

<https://www.cnbc.cmu.edu/training/graduate/cnbc-grad-training-program/student-travel-policy/>

Important things to note: CNBC funds must be authorized prior to traveling by filling out a travel expense request form. Contacts for CNBC travel information are Melissa Stupka ([mstupka@cnbc.cmu.edu](mailto:mstupka@cnbc.cmu.edu) – for CMU students) and Emily Bandi ([ejb93@pitt.edu](mailto:ejb93@pitt.edu) – for Pitt students).

Lab travel stipend: The NML provides up to \$3,000 per year to support travel to scientific meetings for students and postdocs. This amount should be used as a guide for budgeting purposes.

Booking hotels and flights: Most conference websites provide extensive details on how to plan your trip (i.e., where to stay and how to get there). It is recommended that you read through the provided information before booking hotels and flights. It is generally suggested that you book your stay with the official hotel(s) supporting the conference. For example, SfN has designated student category hotel reservations that are guaranteed at a lower price. These hotels are also officially on the SfN shuttle schedule.

This makes for easy access to the convention center and provides a means of safe and free travel within a large radius of the convention center.

### *Society for Neuroscience*

Or SfN, is the largest Neuroscience conference and is held in the United States each year. Unless it is canceled due to a global pandemic (Covid-19, 2020 and 2021), all students and postdocs typically attend and often present at SfN. Since so many lab members attend SfN, it is best to organize our membership and poster information in a single spreadsheet so that Neil can complete our registration easily.

<https://www.sfn.org/meetings/neuroscience-2022>

<https://www.sfn.org/meetings/neuroscience-2022/housing-and-travel/hotel-information>

### **Vacation time**

Please take some time off for a vacation. For staff and postdocs, please request the time off through Workday (<https://www.cmu.edu/hr/resources/workday.html>).

All lab members should indicate the days they are away using the NeuroMechLab calendar (make an all-day event that states that you are away). It is also good practice to set up an auto-reply in your email so that people can expect a delayed response from you during that time.

### **Code of Conduct**

- no bullying or harassment of any kind - physical, verbal, sexual, emotional
- modules you need to do at CMU
- be kind, respectful, accountable
- keep things tidy (Especially Max!)
- don't leave behind unidentified bottles of liquids
- be respectful of people's time

## Lab and General Resources

### *TechSpark*

We have access to TechSpark, which is a makerspace. For access and/or training, please visit: <https://engineering.cmu.edu/techspark/index.html>

### *Printing*

We have purchased a printer for the lab that is accessible to all lab members. It is located in Wean 4120. You can connect to the printer using the IP address 172.26.161.31 if it does not pop up as an option automatically. The name of the printer is "BRWDCE9940393BB". If any of the printing supplies are running low (paper, toner), please add these items to the ordering spreadsheet immediately.

You can also print using campus printers:

This link will give you instructions on how to connect to the two printers in 115 of MI: <https://ni.cmu.edu/computing/knowledge-base/printing-mi-115-116/>

If you have any questions or issues you can email David Pane at [dpane@cmu.edu](mailto:dpane@cmu.edu). He is very helpful.

To connect to the printers in 4116 Wean Hall:

Enter run command `\\pgh-fsprint-01.andrew.ad.cmu.edu`

When prompted, enter your Andrew ID and password

In File Explorer window, double-click one of the following printers:

ME-HH-BLVL-SHARP3 -- Hamerschlag Hall B Lvl First copier

ME-HH-BLVL-SHARP4 -- Hamerschlag Hall B Lvl Second Copier

You can also set up campus printing, where you can use your ID card to print. The closest printers are in the Sorrells Engineering and Science Library by the elevators near the lab, and on the 5th floor near the washrooms. For more information regarding campus printing, go here:

<https://www.cmu.edu/computing/services/endpoint/printing-kiosks/campus-printing.html>

## *Purchasing*

Purchasing supplies or equipment for the lab is a shared responsibility for all lab members. We have a spreadsheet for tracking the purchasing needs of the lab and whether or not the order has been placed. The spreadsheet is located here: [Shared drives\NML\\_shared\Administrative\Purchasing\Supplies](#). To place an order, fill out the Purchasing Request Form 2020 (pdf file) from the folder:

[Shared drives\NML\\_shared\Administrative\Purchasing\Forms](#). Make sure the purchase is approved by Doug. When the form is complete, send the form to [me-purchasing@andrew.cmu.edu](mailto:me-purchasing@andrew.cmu.edu) and cc Doug on the email. He will indicate the funding source and approve the purchase. For purchases over \$5000, there is an additional form that needs to be filled out. That form can be found here:

[Shared drives\NML\\_shared\Administrative\Purchasing\Forms\Capital Equipment](#).

For purchasing questions, ask the lab first, then ask the purchasing department using the email above.

## **Ethics Protocols**

Proper, rigorous, and safe science must be done under specific ethics protocols. For both animal and human research studies, they must first be approved by the appropriate ethics board before commencing experiments. Ethics protocols can be accessed (for existing ones) or created (for new ones) through SPARCS (Sponsored Programs and Research Compliance System): <https://www.cmu.edu/research-office/sparcs/>).

To be included on an ethics protocol, you must complete certain CITI training modules (<https://about.citiprogram.org/>). If you are unsure of which modules to complete, ask a more senior lab member for assistance.

Resources for writing a new protocol can be found on the shared Drive: [Shared drives\NML\\_shared\Administrative\Protocols](#). There are examples of already approved protocols in the lab for references. You will also find a template for a recruitment poster here [Shared drives\NML\\_shared\Administrative\Protocols\IRB](#).

## *Accessing Protocols in SPARCS*

To access any protocols, you first need to be added to the protocol. SPARCS can only be accessed through a CMU-networked computer, or through a VPN. You can use the VPN to remotely access SPARCS. To download Cisco AnyConnect, see here: <https://www.cmu.edu/computing/software/all/cisco-anyconnect/>

## *Animal Research*

Animal research must be conducted in accordance with an IACUC (Institutional Animal Care and Use Committee) protocol. The primary concern in animal research is ensuring animal welfare at all times. This must be kept in mind when writing a new protocol and when conducting experiments.

We have a separate document on how to navigate the IACUC protocol forms in SPARCS, found here: [Shared drives\NML\\_shared\Administrative\Protocols\IACUC](#). If you require assistance with creating a new IACUC protocol, please message Jackie Hull on Slack.

## *Human Research*

Human research must be conducted in accordance with an IRB (Institutional Review Board) protocol. There are several forms and templates that must be used for IRB protocols. These have been recently updated (2021/2022) so be sure you are using the most recent template. You can find them here: <https://www.cmu.edu/research-compliance/human-subjects-research/guidance-forms.html>

It is important for the consent form to be in lay language, so that even your grandmother can understand the purpose of the study and risks associated with it. The major concerns around human research are ensuring participant safety and confidentiality. These should be kept in mind when writing a new protocol, conducting experiments, and storing data and identifiable information, such as consent forms.

Compensation for human subjects: It is easiest to give research participants an Amazon gift card. After the experiment, email Neil Emmett ([nemmett@andrew.cmu.edu](mailto:nemmett@andrew.cmu.edu)), cc Doug, and tell her the amount you need, the email of the person getting the gift card, the protocol number, and the letter of approval for the protocol. Getting cash is very inconvenient and takes a very long time.

You must fill out the hs-participant-pi form:

[G:\Shared drives\NML\\_shared\Administrative\Protocols\IRB](#). The form cannot be saved so you must print it and get Doug to sign it. Then you need to scan it and send it to Neil or Accounts Processing, then wait several months for them to write you a check. You must then cash it yourself and withdraw the cash from an ATM. If you must use this option, it's best to submit the form for several subjects worth of compensation several months before the experiments start. You can opt for a pre-paid debit card, which is simpler than cash. A word of caution: there is a fee for activating the pre-paid debit card, and if you exceed \$250 with the fee, then the subject must fill out a W-9 form. More info

can be found here:  
[/https://www.cmu.edu/finance/controller/ap/files/human-subject-payment-guidelines.pdf](https://www.cmu.edu/finance/controller/ap/files/human-subject-payment-guidelines.pdf)

Additional information on how to access the research facilities is in the Onboarding document.

### *Electrical Stimulation Safety and Best Practices*

Many of the human research studies in our lab use electrical stimulation. We were the first lab at CMU to submit an IRB protocol using electrical stimulation. Therefore, the IRB is particularly sensitive to the risks associated with electrical stimulation. To ensure that all lab members are adequately trained to use a stimulator safely and under best practices, we have a formal training and evaluation process that must be documented before anyone in the lab operates a stimulator, in particular the Digitimer DS8R. Currently, Ashley Dalrymple is in charge of delivering the training and ensuring all lab members have received 100% on the safety and best practices quiz before operating the stimulator. Please contact her on Slack to arrange for the training.

### **Experiments in Wean 4120 (Human Subjects Research)**

The lab space is fairly open and small; therefore, we must be considerate of the space when someone has a research participant in for testing. If someone has a participant in the lab, they will indicate that on the Wean 4120 Experiments calendar. They will also post a sign on the door indicating that testing is being conducted. They will also set up privacy screens. When there is a participant in the lab, please be respectful and do not enter if you don't have to. If you must enter the lab, please do so quietly and respect their privacy.

### **Onboarding Process**

We have a separate document that details the specific steps you need to take as a new student or employee. The document is located here:

[Shared drives\NML\\_shared\Onboarding.](#)

### *Headshots*

If you are in need of an official MechE headshot, please send an email to David Cochran [dcochran@andrew.cmu.edu](mailto:dcochran@andrew.cmu.edu) to schedule an appointment.

### *Access and Keys*

You can get keys to places like the offices or kitchen from Jordan (). Each key will require a \$5 deposit.

For access to the Wean Hall lab, you will need to contact Edward Wojciechowski Jr (wojo@andrew.cmu.edu) to activate your CMU ID card. Please cc Doug in this email.

For access to rooms at the Mellon Institute, contact Darcy Griffin or Jackie Hull.

## **Authorship Policies**

Specific criteria for authorship may vary for journal and field. Thus, it is a good idea to familiarize yourself with the guidelines posted by the individual journal you plan to submit your manuscript to. However, the American Association for the Advancement of Science has published a guide to authorship requirements and responsibilities and provided a decision tree. This document can be found online:

<https://www.aaas.org/resources/paper-authorship-requirements-and-responsibilities> or in the shared drive **Shared drives\NML\_shared\Onboarding**.

The four widely agreed upon criteria include the following:

1. Made a substantial contribution to the conception, generation, experimental design, analysis, and/or interpretation of the data.
2. Drafted and revised the work for intellectual content.
3. Approved the final manuscript for publication.
4. Agreed to be accountable for all of the work.

## **Preferred Suppliers**

CMU has a directory of preferred suppliers. This does not mean that you can't add new suppliers, but there is a separate process for that. You should always check first if what you need to purchase is available from one of these suppliers:

<https://www.cmu.edu/finance/procurementservices/supplier-directory/index.html>

## **Outreach and DEI Initiatives**

Being a good scientist also means connecting with the community and ensuring that academia and STEM are diverse, equitable, and inclusive (DEI). Many of our lab members are involved in various efforts to improve DEI in the lab, CMU, our research community, and STEM in general. It is highly recommended that lab members be involved in a DEI initiative in some capacity.

### *Within the Lab*

We have an outreach channel in Slack (*#outreach*) where we post upcoming outreach opportunities, as well as plan initiatives we will do as a lab. If you are interested in learning more about the ongoing and upcoming outreach opportunities, please join this channel.

### *In Collaboration with RNEL (UPitt)*

Many of the lab members collaborate with the Rehab Neural Engineering Labs (RNEL) at Pitt. RNEL has a strong DEI committee with 7 subcommittees: Youth Outreach, Undergraduate Outreach, Community Outreach, Education and Training, Messaging, Training and Discussion, and Funding. If you would like to know more about these DEI efforts, please talk to Ashley Dalrymple, Dev Sarma, Jordyn Ting, or Nikhil Verma on Slack.

### *MechE DEI TaskForce*

The Department of Mechanical Engineering has a DEI TaskForce, of which Doug is co-chair with Eva Mergner ([emergner@andrew.cmu.edu](mailto:emergner@andrew.cmu.edu)). There are 4 subcommittees: Outreach, Mentorship, Education, and Representation.

The goal of the Outreach subcommittee is to connect MechE members to outreach opportunities. They have a mailing list for subscribing to outreach activities (click here to join: <https://lists.andrew.cmu.edu/mailman/listinfo/meche-outreach>). Anyone who wants to participate in an outreach activity with students under 18, they must first provide clearances from the FBI and Act 153. The Outreach subcommittee and DEI TaskForce can help you get those clearances, and the MechE Department has agreed to cover the costs for attaining the clearances. The Outreach subcommittee has also kickstarted the MEOS (Mechanical Engineering Outreach Stars) program and logo contest. The MEOS program is a tiered system to reward and incentivize lab group and student organization participation in outreach, particularly to under-represented communities. Each semester, the subcommittee will circulate a survey where each lab group or student organization can enter their outreach activity information and letters of support. Based on the activities and a rubric, the group will receive either a bronze, silver, gold, or platinum level MEOS stamp. Email contact for the Outreach Subcommittee: [meche-outreach@andrew.cmu.edu](mailto:meche-outreach@andrew.cmu.edu)

The goal of the Mentorship subcommittee is to improve the mentorship experience of all MechE members. This group has created a series of Professional Development workshops on topics including networking, negotiation, and assertiveness. This subcommittee has also implemented a formal mentorship program, where more senior students and researchers are mentors to their juniors.

The goal of the Education subcommittee is to improve the overall educational experience for students in MechE. They have held several safe conversation spaces for MechE members to check in, which was especially important during the COVID-19 pandemic. **\*\*Need to add more from committee\*\***

## Representation

This subcommittee has lobbied to the Department on behalf of the MechE PhD students to change the qualifying exam such that the subjects portion be removed. This portion of the qualifying exam has a long, known history of hurting students from under-represented backgrounds due to the implicit biases of the examiners and topics.

**\*\*Need to add more from committee\*\***

If you would like to get involved in any of these subcommittees, talk to Doug or Eva to get access to the Slack group and Google Drive, as well as the contact information for the chairs of the subcommittee(s). You can also send an email to [meche-dei@andrew.cmu.edu](mailto:meche-dei@andrew.cmu.edu) for more information.

## Other

### *Deadlines*

If you have something that needs to be submitted by a certain date, such as an abstract, funding application, or paper, please give your co-authors and Doug or Darcy enough time to review it and provide feedback with plenty of time. For example, a conference abstract should have already gone through the co-authors and to Doug or Darcy within weeks of the deadline. Funding applications with more components should be provided several weeks in advance.

### *Recommendation Letters*

If you require a recommendation letter, Doug or Darcy would be happy to provide you with one. Please keep in mind that in order to write you the most thorough and commendatory letter possible, they will require your help and plenty of time to write it. It is generally expected that you will provide a template with some examples of things that you would like mentioned in your letter, including how you met, any projects that you are leading, students you are mentoring, papers you have written, conference presentations, successful funding, etc. It is also helpful to provide them with the criteria of the award or job so that they can tailor the letter to that.

### *Birthdays*

If it's your birthday, let us celebrate with you by bringing in a treat for sharing! Donuts have historically been the go-to treat.

### *Alias for CMU Email*

If you would like to drop the "andrew" from your email address, or make a better email address that doesn't cut off your name in the most awkward way, go here for instructions on how to create an alias:

<https://www.cmu.edu/computing/services/comm-collab/email-calendar/how-to/emailaliases.html>.

### **CMU Resources**

CMU has many resources to help us be successful and healthy. Please refer to these if you require assistance or are interested in becoming involved with these centers.

*Gelfand Center:* Service Learning and Outreach <https://www.cmu.edu/gelfand/>

*Eberly Center:* Teaching Excellence and Educational Innovation

<https://www.cmu.edu/teaching/>

Future Faculty Program – this program is designed to prepare graduate students and postdocs for teaching at the university level. For more information, visit: <https://www.cmu.edu/teaching/graduatestudentsupport/futurefacultyprogram.html>

*Software Download Center:*

<https://www.cmu.edu/computing/services/endpoint/software/software.html>

*Human Resources:* <https://www.cmu.edu/hr/index.html>

*Benefits:* <https://www.cmu.edu/hr/benefits/index.html>

*Counseling and Psychological Services (CaPS):*

<https://www.cmu.edu/counseling/get-support/for-yourself.html>

*Disability Resources:* <https://www.cmu.edu/disability-resources/>

*COVID-19:* <https://www.cmu.edu/coronavirus/>

Tartan Testing: CMU provides all students, staff, and faculty with free asymptomatic testing for COVID-19. The test is a RT-qPCR test. To book a test, please refer to this website:

<https://www.cmu.edu/coronavirus/health-and-wellness/testing/tartan-testing.html>.

Testing takes place in the East Campus Garage

(<https://goo.gl/maps/CmdXpTFSNXqZpTg5A> ).

## **Vendor Contacts**

TMSi: Parham Ebrahimi [support@tmsi.com](mailto:support@tmsi.com)

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Piezosurgery drill: Louis Panza [l.panza@piezosurgery.us](mailto:l.panza@piezosurgery.us)