Appalachian State University

<u>University Research Council</u>

URC AsULearn site

March 18, 2025 - 4:00-5:00 PM

Approved Minutes

Meeting time: 4:00 pm - 5:00 pm

Christine Hendren convened the meeting at 4:01 PM.

**Present:** Charna Howson, Gabriele Casale, Twila Wingrove, Becki Battista, Ashlea Green, David Russell, Heather Waldroup, Qingqing Sun, Nimet Degirmencioglu, Adam Hege, Shanté Mathes, Ashley Marshall, Nicholas Cline, Alan Needle, Xiaofei Tu, Jenn McGee, Dennis Guignet, Ellen Cowan, Grace Plummer, Justin Cervero, Christine Hendren, Ashley Colquitt

Excused/Absent: Chauntee Thrill, Panda Powell, Karen Fischer

**Admin:** Whitney Wallett

**Guests:** N/A

Approval of Minutes (3 mins) -

## February 18 minutes

Motion to Approve by: Shanté Mathes Motion seconded by: Heather Waldroup

No discussion. All in favor. None opposed. Motion passed.

### **New Business**

- I. Presentation: Honors College Heather Waldroup, Associate Director Honors College
  - A. Link to the Honors College site provided in chat: https://honors.appstate.edu/academics/departmental-honors/programs-directors
  - B. The Honors College isn't the only place that undergraduate research is happening at App State, but the requirement that all Honors students complete a research-based thesis or creative project distinguishes it from other programs or opportunities on campus.
  - C. Two pathways/types of Honors programs on campus the Honors College and Departmental Honors.
    - 1. The Honors College (students earning 'University Honors') requires students to complete 24 credits including a 3-credit thesis, 3 interdisciplinary HON seminars, an honors course in their major, and 9 credits of 'other' honors courses, as well as an international education

- experience. Given the length of this program, participants are generally admitted as incoming first-year students; however, a new 15-credit pathway has been developed recently to support transfer students coming in with significant earned credit and 2-3 years to complete the program.
- 2. Departmental Honors/Honors in the Major (e.g., Honors in Art, Honors in Public Health) programs require 9 credit hours consisting of a 3-credit thesis and 2 honors courses in their major. Students pursuing this pathway are generally admitted in their 2nd or 3rd year, and this pathway tends to be an ideal option for transfer students. Thirty campus departments/programs have an Honors program; the College of Education and the Hayes School of music do not. Anyone interested in establishing an Honors program within their department or program should contact Heather at waldrouphl@appstate.edu for more information about the associated process.
- 3. Many students participate in both programs/pathways, 'stacking' both University and Departmental Honors.
- D. How does the Honors College support student research?
  - 1. Mentoring of students. Any student in the Honors College works with an Honors Academic Mentor, a faculty or staff member with an advanced degree in their area. Mentors act as an official advisor in a student's first year and meet with the student throughout the remainder of the program to help develop relationships, connect the student with relevant faculty, and discuss potential directions/approaches for their thesis project. Students can also opt to participate in a peer mentoring program, as well.
  - 2. Mentoring of faculty. Each Departmental Honors program has a faculty director, and these directors meet as a community monthly to discuss any related issues. The Honors College hopes to partner with CETLSS and other institutions on campus to offer more development opportunities for participating faculty in the future.
  - 3. Making research visible both to and by undergraduate students. The Honors College sponsors faculty-led interdisciplinary honors seminars that introduce and connect undergraduate students to faculty research programs. To increase visibility of their own research, Honors students have the option of including their thesis in the former NC Docks/future OpenAIR repository, and the Honors College maintains a strong presence at the Southern Regional Honors Council Conference, an annual gathering for honors colleges and programs throughout the Southeast. Students from the Honors College will be attending this year's SRHCC in Chattanooga next week, allowing them to present their research and connect with other honors students throughout the region.

4. Internal funding. The Honors College sponsors two research scholarships each year - the Dr. Dane Ward Endowed Honors Research Scholarship supporting a student whose thesis project has a social justice impact, and the George Williams Garrett Memorial Scholarship for a student whose project has ties to the medical field. The Honors College also provides smaller special/flexible research grants to support travel or research equipment purchases throughout the year; these grants are available to Departmental Honors students that may lack access to other funding sources.

## E. Things to consider:

- 1. Does your department, program, or college have an Honors program, and if not, would this be of interest?
- 2. Does your department, program, or college have any research funds available to undergraduates? Funding is uneven across campus, and this may be something to advocate for.
- 3. How does your department or college recognize faculty mentoring of Honors theses on tenure and promotion documents?
- 4. Consider teaching an interdisciplinary Honors seminar. Seminars are at the first-year, sophomore, and junior levels, and calls are typically sent out for these opportunities once per semester.

### F. Questions?

- 1. What is typically the enrollment in the Honors interdisciplinary courses? Are they smaller capped? / Yes typically capped around 15. Backfill pay is available now, despite not previously having a budget for it; if someone taught an Honors seminar, your home department/Chair would receive whatever the adjunct rate is to provide better support to the departments. The seats/FTEs also go back to your department as incentive for your chair (e.g., why let someone teach a 15-seat class when he could teach a 60-seat class?)
- 2. A faculty member recently applied Honors to our Introductory Sociology course can you basically take Honors work and apply it to an existing course? / Absolutely, it can go both ways. Anyone can teach one of the HON interdisciplinary seminars, perhaps for a course that you've developed or that you're excited about but that doesn't fit in with your standard department curriculum. Alternatively, if you teach a gen ed class, you can opt to offer a full Honors section or an Honors cutout of 5-10 seats if you question whether you can fill an entire special section of that course. This can be a really great way to draw Honors students who might not know much about your discipline to your department, and often,

- Honors students end up exploring research opportunities or completing their thesis with someone with whom they took an Honors gen ed course.
- 3. I'm mentoring an Honors student and am very happy with her. How does a student get accepted into an Honors program/how can you promote more Honors students within your department? / When first-year University Honors students first apply to App, Vicki Klima and the rest of the Honors staff read all of the hundreds of applications and make choices that tend to be distributed across all of the campus majors. Big programs like Biology and Psychology tend to receive many Honors students, while smaller programs like Applied Design tend to have fewer. There used to be an Honors program in Interior Design when it was in Tech, but when the department was reconfigured, it was lost. Establishing a Departmental Honors program in Applied Design would be a great way to students from Apparel, Interior, and Industrial Design involved, and the Honors College welcomes further discussion with the department on how to make that happen.
- 4. The School of Music is another area that doesn't have Departmental Honors, and we've had a few students that have done the University Honors students, but the study abroad component can be a challenge in terms of finances and timeline. Are there any opportunities for support in that area or other pathways? / Yes and yes. Our dream is to have the funding to send all of the Honors students abroad like the other programs at Honors conferences are able to do. That being said, the Honors College offers Honors seminars with a built-in international component each semester for those that can't physically go abroad. These courses receive an IE designator, and we suggest that students take these courses in their sophomore or junior year. The Honors College also has some scholarship support for study abroad; this year, we're able to give each student approx. \$800 for going abroad this summer. Historically, this summer abroad opportunity has been most ideal for School of Music students given their timeline. Many students are also Pell eligible, so also eligible for the \$4-5k available through a Gilman opportunity, however both Gilman and Fulbright's opportunities are currently frozen.
- 5. The Southeastern honors conference is it just for University Honors students, or is it for our Departmental Honors students, too? / Given current funding, it's been limited to University Honors students. Even with the number of students currently going, we've run into a shortage of 12-passenger vans and it's still expensive, costing approx. \$10,000 after registrations, hotel rooms, etc. We'd like to support more Departmental Honors students, but are limited to supporting our own right now. We hope

- to do some fundraising to allow us to take a bigger group to next year's conference in Montgomery, Alabama that will include a big event around the Civil Rights Museum. There may be space to bring Departmental Honors students next year, or they may be able to apply to OSR and get some related funding as well. It would be a great opportunity to introduce them to the culture of academic conferences, what a panel looks like, etc., as well as to network with fellow Honors students from across the Southeast region. Link to the conference website placed in the chat: <a href="https://www.srhconline.org/">https://www.srhconline.org/</a>. OSR can provide funding to support students interested in attending that conference. We would be limited to \$400 per student presenting. There is also a North Carolina Honors Conference that is a lot more affordable and easier to access. This conference is smaller in scope, but it still provides the opportunity to list a presentation on a student's CV and is a nice place to start.
- 6. An event that ORI will be holding on May 7th is an exploratory event that is designed to address the idea of a Mountaineer Student Scholar, a name meant to include all students engaged in any kind of research on campus. By naming all of these students, we aim to provide them with a CV line, as well as to pull all of the groups that support student research on campus together. The May event won't be particularly student-focused, although a select few students may be invited to share/represent their point of view; instead, the audience is really those resources across campus that help engage with student research. We hope to sound off and say what everybody does, find connection points, and start to think about programming for a broader, student- and student mentor-focused expo/event this fall.
- II. Presentation: Systems & Research Computing Justin Cervero, Director, Systems and Research Computing
  - A. What Systems and Research Computing (SRC) offers.
    - 1. We are building on the work that Scott Marshall did in years past to meet researcher or faculty needs that are outside of the normal offerings of the university. Given the depth of IT expertise and years of experience that we have, the SRC team knows a bit more about what some applications need above and beyond what the university would typically offer. More than anything, the SRC team exists for consultation, and that ties into the team's needs to learn about what everyone is doing in their various research specialties in order to build and work with partner institutions and

- vendors to stand something up or direct you to a service that can achieve your goals when crunching data, working with AI, securing data, etc.
- 2. Data security is becoming more important, and the SRC team is finding that a lack of guidance and policy exists on how we handle our data as an institution. We hear stories about PI and sensitive data being stored on a USB stick in someone's desk, and we're trying to find solutions so that we have central, secure storage for all of that.
- 3. Justin has two dedicated research engineers on his team that work with researchers to a) understand what they're trying to do, the problems they might have, what software they'd like to use, how they'd like to approach the project or issue, etc., and b) offer what tools or resources SRC possesses or is aware of that might be able to address their needs in a different or more effective way. For example, someone in the College of Health Sciences is interested in building a large language model that is the core of many of the big AIs that we talk about (e.g., ChatGPT, Copilot, Gemini, Claude). This researcher essentially wanted to put a large machine under their desk to facilitate building and training the model, but SRC is suggesting alternatives that won't cause the office temperature to rise to 95 degrees or that won't cause a major investment in something that isn't shareable or only used 10% of the time.
- 4. Sharable tools and/or solutions are a major goal of the team; Justin wants to support researchers so well that they evangelize to faculty and other researchers about the resources that IT is offering/can offer as part of their own grant proposals and research efforts. A timely and wide-reaching example of the sharable resource that SRC aims to provide is coming out of Duke University, part of the NC Share Consortium and partnering with MCNC. Duke is offering every higher education institution in the state access to a gigantic computing resource in which they've invested what appears to be tens of millions of dollars. All faculty and students across the state can sign in and use the resource in exchange for simply identifying people to help support it, and SRC will be acting as a liaison in this process. SRC plans on identifying candidates for the system's use, and they're excited to see what this obscene amount of computing power can achieve.
- 5. SRC works with major tech companies (e.g., Lenovo, IBM, Google, Microsoft, etc.) to identify and connect researchers with platforms and resources that are a best fit/right tool for their disciplines.
- 6. SRC provides policy and standards concerning data storage, security, retention, etc.
- B. What Systems and Research Computing needs.

- 1. Information and ideas. SRC needs to be able to collaborate with faculty on what they're doing, what they need to do, and what amount of data storage/computing power (e.g., number of terabytes) SRC might need to support. Justin doesn't expect researchers to know exactly how much support they'll need at early stages of the project, and in fact, his team will review your data sets and work with you to figure that out.
- 2. Evangelists, experimenters, and those that seek to use/be engaged in projects like Duke's new high-power computing resource.
- C. Please take this information and the excitement and some of the ideas or resources mentioned back to your departments! It's people that reach out and who think they have something cool to work on that are going to get these projects off the ground, whether it be our HPC or NC Share's.
  - 1. David Russell is a good example, having reached out to Justin concerning RStudio for the classroom vs. research involving really heavy number crunching. The NC Share system is split into RStudio that can be spooled up for students and the classroom and a research RStudio environment with massive amounts of GPU behind it. David's work would be a great candidate for this tool/space, exploring what works for us, what challenges we have, what we'd like to add on, etc.

#### D. Questions

1. Dovetailing on your comments about the privacy of data, when we use a large language model like ChatGPT, especially for research, there are concerns on whether the data uploaded is secure. Larger institutions like Columbia University have their own 'private' ChatGPTs to ensure the security of any research uploads; is there any interest here or around the UNC System in this type of model? / There is heavy interest, but simply not heavy funding. AI falls under SRC's purview, and they are trying to diversify it a bit and get more people on it given the high volume of requests the team receives. SRC does have options available to help address these concerns though. We have an internal-use-only AI in Copilot given the business data protections afforded by our overarching agreement with Microsoft; to use it, you go to copilot.microsoft.com and sign in with your App State credentials. Copilot's models are slightly behind ChatGPT's models, but with the exception of the interface, it functions just the same and is safe for the input of business data but NOT confidential or patient data yet. SRC is also working to find solutions with OpenAI who had 6,000 App State accounts/users as of last year; not all of these accounts were paid, meaning that some portion of those users likely put institutional data into OpenAI's public model. Unfortunately, OpenAI's quote for a set of minimal accounts to help resolve this issue

- was cost-prohibitive (\$300,000/year), but discussions with the group continue. SRC also recently met with Claude AI concerning their paid model, as well as Google to discuss their AI offerings for Gemini. Cost remains an issue for the full use of either Microsoft's or Google's product (\$450/user/year +). Courses teaching students how to build their own LLMs are also a concern given that the source of funding blurs across the research and academic sides involved. Given funding and cost challenges, cost-sharing partnerships (like NC Share) are going to be our best bet for successful solutions. Knowing who all is wanting to work on what and with what tools will help SRC come up with ways to help fund/share the costs of the tools we need.
- 2. A question about Overleaf, a latex writing online platform. We have an introduction page on the website, but when I asked my department, we don't have a subscription to that service. However, I've also heard that faculty from other departments are using this. As this is something particularly useful for collaborative research writing, I was wondering if that's something that we can do, and can we also incorporate AI assistants into those academic writing platforms directly? / We do have some licenses for it, but Justin will have to follow up on this question given that he wasn't aware of the program until this question was asked. Justin will get in touch with whoever controls that license, get a bit more information about the application, and then assist with getting the collaborative enterprise version as needed. It does appear that others on campus are already using this resource. People in the Economics Department are using this as well. There's the free version, but because collaborators at other institutions have licenses, some faculty are able to jump on and collaborate through their licenses. There does appear to be wider interest in using it though. Justin indicated that if more faculty than just a few within a particular department appear to need it, a site license might make more sense depending on cost.
  - a) Another thing to keep in mind with using generative AI outputs that assist with the writing or analysis involved in journal articles/scholarly publications is rights over the output. It's good to check with the publisher on their AI policies. Their concerns relate to both upstream and downstream in the life of the article/publication. My understanding is that some AI tools retain rights to their outputs which then restricts the author's/publisher's use of the article/publication. For example, see Wiley's guidelines: <a href="https://www.wiley.com/en-us/publish/book/ai-guidelines">https://www.wiley.com/en-us/publish/book/ai-guidelines</a>

- 3. Are there costs associated with the NC System-wide computing power that individual researchers would have to cover? / No, that's the amazing thing about it; they've put like \$20 million into this, and it's a fully-funded, five-year 'grant' for the entire state. It's massive, free, and hosted at the MCNC data center that provides internet connectivity across the state. As all the universities pipe through that center, we get super fast connections to them and easy transfer of data back and forth. In a meeting with Duke University yesterday, they indicated that the partner institutions will meet as a consortium to decide how much of the total usage each institution will receive with a target of 80% usage at all times. All they've asked is that we put our name on the site, support it, and find researchers who are interested in using it. <a href="https://ncshare.org/">https://ncshare.org/</a>
- 4. Justin added that his research engineers also assist with code, so if you have projects but aren't quite sure how to make it work, please let them know. Justin wants to grow this service, expanding it beyond just advising to helping write the high-performing computing code that researchers need.

#### **Old Business**

- I. URC grant
  - A. Language re: better defining allowable costs to be inclusive of creative arts
    - 1. Panda Powell is drafting sample language to consider

## **Announcements (5 mins)**

- Research podcast now streaming on Spotify: <u>Research Excellence: Research, Scholarship</u> and Creative Activity.
- Office of Student Research Research Grants and Travel Grants are now open and available due the 15th of each month.
  - Annual Celebration of Student Research and Creative Endeavors Wednesday, April 16, 2025
    - 4th floor of Student Union.
    - Email OSR (<u>osr@appstate.edu</u>) if you have additional questions.
- Graduate Student (GSGA) Travel and Research grants March 31st
- Feel free to reach out with Institutional Repository (IR)-related questions or comments:
  - Natalie Foreman for outreach, promotion, and general IR inquiries
  - Agnes Gambill for copyright, licensing, intellectual property, terms and conditions, and related areas
  - <u>Ashlea Green</u> for metadata/data management, persistent identifiers (e.g., DOIs, ORCID iDs), data/repository standards and best practices, and related areas

No additional announcements made.

# Next meeting April 15, 2025, 4:00 pm - URC grant review panel

# Adjournment

Motion to adjourn only if there is unfinished business.