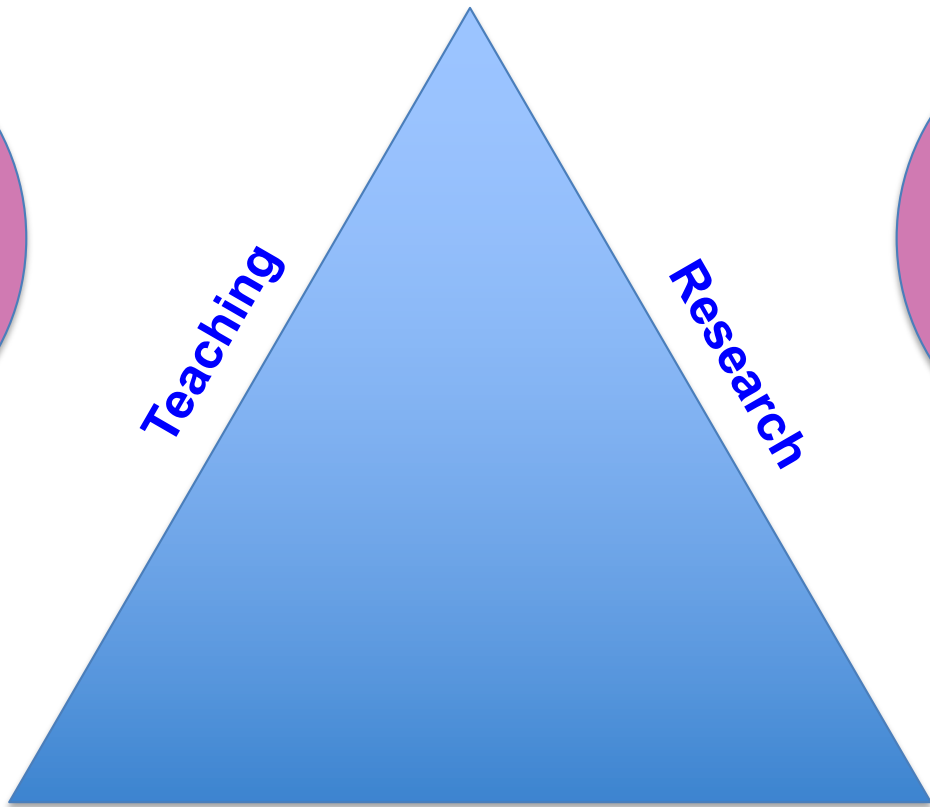


Scientists create and communicate knowledge about the natural world

Proposing Ideas
Designing Experiments
Interpreting Results

Disseminate Knowledge



Create Knowledge

Presenting
Writing
Mentoring

Time
Money
People

Money

- Doing science costs money
- Recurring costs are the most expensive
- Labor is the biggest recurring cost
- To some extent, time and money are fungible
- Being able to write a budget, track expenses, and forecast future expenses are important skills to have
- Start small

Quiz: How much does 1 year of a 50% RA graduate student cost to an extramural grant?

- A. \$30K
- B. \$48K
- C. \$66K
- D. \$83K

C

- Salary: \$29,000
- Fringe benefits 19.9%: \$5,771
- Indirect 55.5%: \$19,298
- Tuition remission: \$12,000

- Total: \$66,069

What will you get asked in a faculty or PI interview at a research institution?

- What is the first proposal you would write and where would you submit it?
- What agencies generally fund the research you do? What are their funding rates?
- What experiences have you had in proposal writing and funding?
- How big a lab do you want?
- What do you need to start up your lab?

Things you need to learn in your first year as a new faculty / PI

- Who supports budget drafts, proposal submission?
- Where I do find necessary information on rates, contacts in sponsored projects, etc...?
- What internal deadlines do you need to follow?
- What internal systems are used for routing of proposals, tracking expenses, certifying effort?
- How do I fund a student, post-doc, hourly?
- What options do I have to purchase supplies, equipment, services, book/reimburse travel?
- Are there internal competitions for funds?

Terms

- Proposal vs Grant vs Contract
- Pre-Proposal
- RFP, FOA
- Program manager / Program director
- Pre-award and post-award
- Sponsored projects, RSP
- Extramural vs intramural
- Budget narrative or justification
- Indirect or overhead
- Fringe benefits
- “summer” salary
- Capital equipment
- Tuition remission
- Subaward
- Cost sharing
- Cost escalation or inflation
- Audit
- Effort reporting

Read the RFP carefully

- Let's take a look at <https://grants.gov>

Focus on science first

- What do you want to do? What hypotheses are highest priority?
- What can you realistically do given time, money, people, resources, RFP budget caps?
- How flexible is the agency on categories?
- What would you scrap if asked to cut 10%?
- Start with essentials: capital equipment, people, then activities (travel, essential supplies), then extras (other supplies, conferences, publication fees)
- Let's look at an example

Justifying your expenses

- Let's look at a budget justification

Places you might need to make a budget

- Travel award
- Graduate fellowship
- Faculty start-up package
- Foundation or donor funding
- Federal grant proposal

Follow process, start early

- Every institution has different ways they want to handle budgets
 - Approvals and revisions take time, start early
 - Department grants person is key point of contact
 - Online systems and spreadsheets abound – WISPER
 - RSP has wealth of knowledge, but also trying to manage over 1 billion dollars of spending/proposals a year
 - Awards are typically made to the institution as contractor, so they have final say/sign off/liability for reporting and auditing. That said, fraud on a grant falls on the PI, who can be cited, fired or even imprisoned

You got funded!

- Start date
- Pre-award spending
- Tracking expenses – online tools
 - <https://wiser.wisc.edu/>
 - <https://admin.ssec.wisc.edu/>
 - Keep receipts, documentation, reconcile regularly
- UW specific: project numbers, account codes

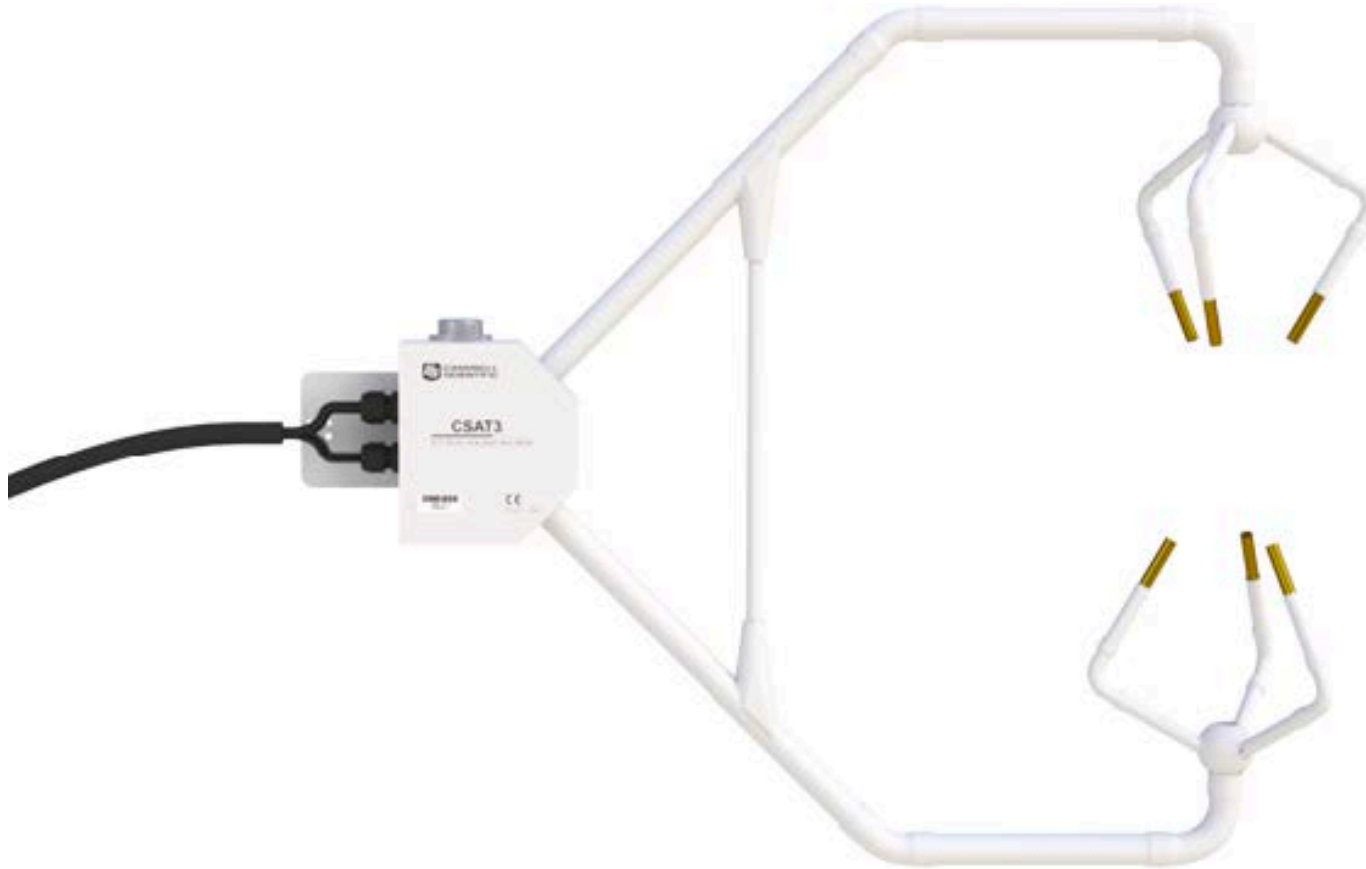
Terminology Game Two

- Startup
- Materials/Supplies vs. Capital Equipment
- MDS
- P-Card
- Requisition
- PO
- PIR
- E-reimbursement
- procurement bid / simplified bid
- Noncompete purchase / sole source
- fabrication
- preferred vendor
- Ineligible vendor
- Inventory
- <https://businessservices.wisc.edu/purchasing/>

Supply or Capital Equipment?



Supply or Capital Equipment?



Supply or Capital Equipment?

Waterproof CO₂ Sensor for Continuous In-Situ Monitoring

- ACCURATE
- DURABLE
- COMPATIBLE
- WATERPROOF
- COMPACT

