SUPPORTING SHARED INSTRUMENTATION GRANTS: FROM RFA TO AUR (AND BEYOND!)

Amy Martinez, PhD
VUMC Office of Research
Vanderbilt Cores

>80
Vanderbilt cores

>$60M
Annual core billing

>300
Core staff and faculty

>$150M
Invested over 20 years

$1.50 per $10 from NIH flows through Cores

Medical Research Building III (MRBIII)
- Mass Spectrometry Core
- Proteomics Core
- Mass Spectrometry Tissue Core
- Neurochemistry Core Laboratory
- Center for Structural Biology
- Cell Imaging Shared Resource

Medical Center North (MCN)
- Murine & Rat Neurobehavioral Labs
- Flow Cytometry
- Genomics cores: VANTAGE & BioVU
- Human Imaging Core
- Small Animal Imaging Core
- Radiochemistry Core

Medical Research Building IV (MRBIV)
- Genome Editing Resource
- Chemical Synthesis Core
- Cell Imaging Shared Resource (CISR)
- Digital Histology Shared Resource
- Metabolic Physiology Shared Resource
- Islet Procurement & Analysis Core

Stevenson Center
- Biomolecular & Small Molecule NMR
- CISR EM Facility

Medical Center North (MCN)
- Clinical Research Center (CRC)
- Translational Pathology Shared Resource
- Cryo-EM Facility
- CISR EM Sample Prep Lab
- Nikon Center of Excellence (CISR)
- Molecular Epidemiology Biospecimen Core
- Center for Experiential Learning and Assessment

Light Hall
- Cell Imaging Shared Resource
- Molecular Cell Biology Resource Cores
- Mouse Metabolic Phenotyping Center
- ZCORE - Zebrafish Aquatic Facility

Robinson Research Building
- High-Throughput Screening Facility
- Eicosanoid Core Laboratory

Preston Research Building
- Center for Quantitative Sciences
- Genomics data analysis: VANGARD
- Hormone Assay and Analytical Services
- Protein and Antibody Resource (VAPR)
- QCORE - Zebrafish Quarantine Facility
- Mass Cytometry Center of Excellence

The Vanderbilt Clinic (TVC)
- Investigational Drug Services
- Cooperative Human Tissue Network

10 minute walk
- Biostatistics Collaboration Center
- Health Services Research cores
- Phenotyping & PheWAS core
- Survey Research Shared Resource
- Health Policy Database cores

SEASR too!
Shared equipment grants keep Cores on the leading edge

**CORES**
- Technical expertise
- Broad user base
- Education & training
- Cost-effective services

**EQUIPMENT GRANT**
- Novel technologies
- Stretches institutional & sponsor $$
- Targeted to shared facilities

**Add'l Grants**
- NSF MRI
- NIH Supplements
- Private Corp/Fdn

**NIH S10 Program**
- $50k - $2M
- Single instrument
- Biomedical focus
- NIH funding reqd
- 5-year reporting

**Novel capabilities + expert guidance = scientific breakthroughs**
The S10 lifecycle

IDEATION & PLANNING

PREPARATION & SUBMISSION

IMPLEMENTATION & REPORTING

How can our central research office support S10 PIs & Core partners at each stage?
PI and Central Office roles

**PI & Core Partner:**
- Assess need & gather users
- Demo instrument, get data
- Identify sources of support
- Consult w/ central office(s)
- Keys: start early & communicate!

**Office of Research:**
- Review & advertise RFAs
- Provide guidance packet
  - What’s new this cycle?
  - Tricky concepts, like AUT
- Run internal application process

- Is the instrument unique and need well-justified?
- Does user group have NIH funding?
- Will this implementation require construction?
- Any required components/software that grant won’t fund?
Internal proposal process

- Why have one?
  - Craft custom letters of support
  - Plan any new commitments
  - Review for duplication
  - Connect PI with core partner
  - Advise on all aspects of RFA

- Aim to request materials that can be directly “re-used” in the NIH application
- Goal: Approve all submissions!

Collect info on:
- Equipment
- Core partner
- User groups
- Financial plan
**PI and Central Office roles**

**PI & Core Partner:**
- Prepare the application!
  - Coordinate institutional partners
  - Communicate with Central Office & NIH Program Office, as needed
  - Get updated quotes
- Review & re-review the RFA

**Office of Research:**
- Compile performance report
- Provide grant-ready text
  - Describes institution & central core administration/oversight
- Prepare letters of support

- Who is writing what? (PI vs. Users vs. Core Personnel)
- Have I requested all the letters I need?
- When does my grants team need my materials?
- Did I respond to all reviewer critiques from last cycle?
All new submissions must include a report of existing S10 awards at your institution.
  ◦ Partner with existing S10 PIs/Cores to complete
  ◦ RFA lays out specific format & requirements

Great opportunity to:
  ◦ “Get the scoop” on existing S10s
  ◦ Help PIs troubleshoot issues; connect with Advisory Group or Program Office
  ◦ Guide PIs and/or users on linking citations in myNCBI
    ◦ Starting early gives more time to identify and link publications! Think February/March.
Letters of support

Great opportunity to:
- Show reviewers we read the RFA
  - Describe institutional back-up of the proposed financial plan for 5 years after installation (or longer)
- Highlight new and ongoing support to Cores
- Showcase previous success of PI and Core

PI may also need other letters, e.g. Biosafety Official or inventory of similar instrumentation

Building blocks of an effective letter

- “Commit to provide backup for the financial plan” for 5+ years
- Highlight PI and Core expertise
- Summarize institutional support for the Core
- Describe matching funds, if applicable
PI & Central Office roles

**Implementation & Reporting**

**PI & Core Partner:**
- Buy, install & maintain instrument!
- Identify new users/projects
- Organize annual advisory group
- Submit final progress report & annual usage reports

**Office of Research:**
- Provide template for S10/Core advisory committees
- Feeds into AURs
- Consult on any issues that arise
- Incentivize S10 citations

- Do I need to request a no-cost extension?
- How can I advertise our new instrument/services?
- How can I encourage users to cite the S10 grant?
- Are there any issues to communicate to the NIH PO?
Citation voucher program

Office of Research maintains list of eligible citations

Researcher includes citation in publication

Researcher submits publication & requests Core voucher

Office of Research issues Core voucher

Publication counted in next performance report

More Core business & additional citations

Note: Advertising the program is key!
The S10 support lifecycle

IDEATION & PLANNING
- Internal proposal process
- Advise on RFA
- Connect PIs & Cores

PREPARATION & SUBMISSION
- Performance report
- Letters of support
- Advise on RFA

IMPLEMENTATION & REPORTING
- Advisory committees
- Citation vouchers