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

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VUMC Office of Research

VANDERBILT **V** UNIVERSITY
MEDICAL CENTER

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

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

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

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

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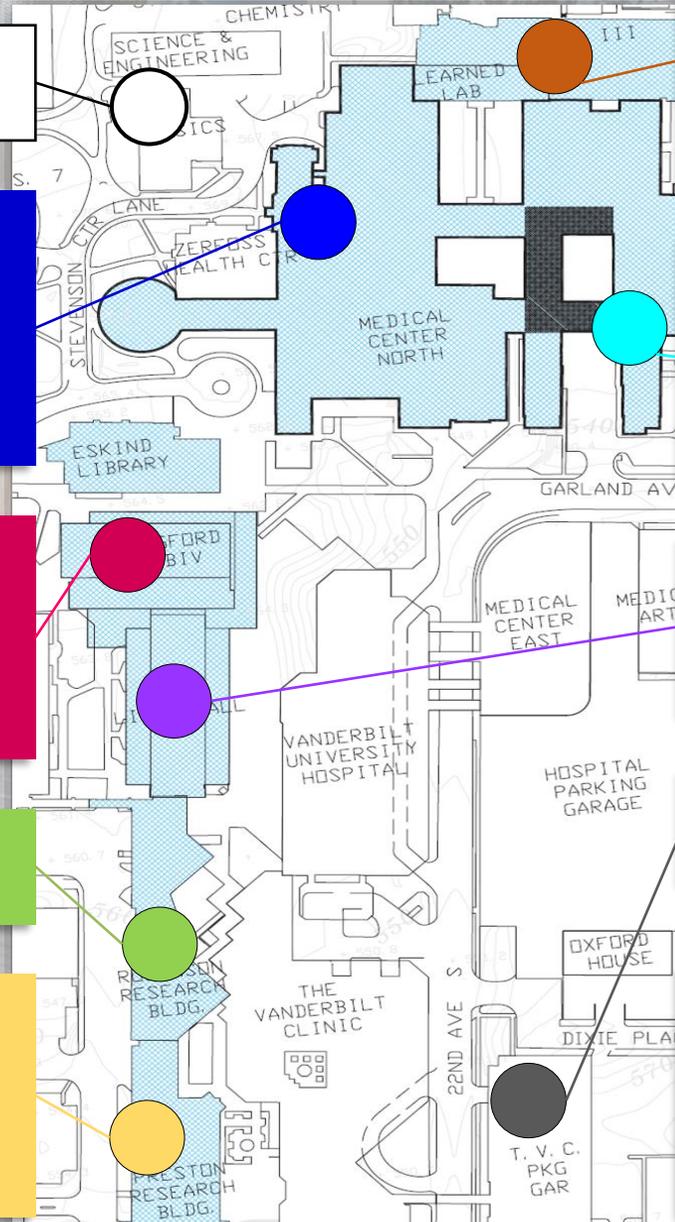Center for Structural Biology
Cell Imaging Shared Resource

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

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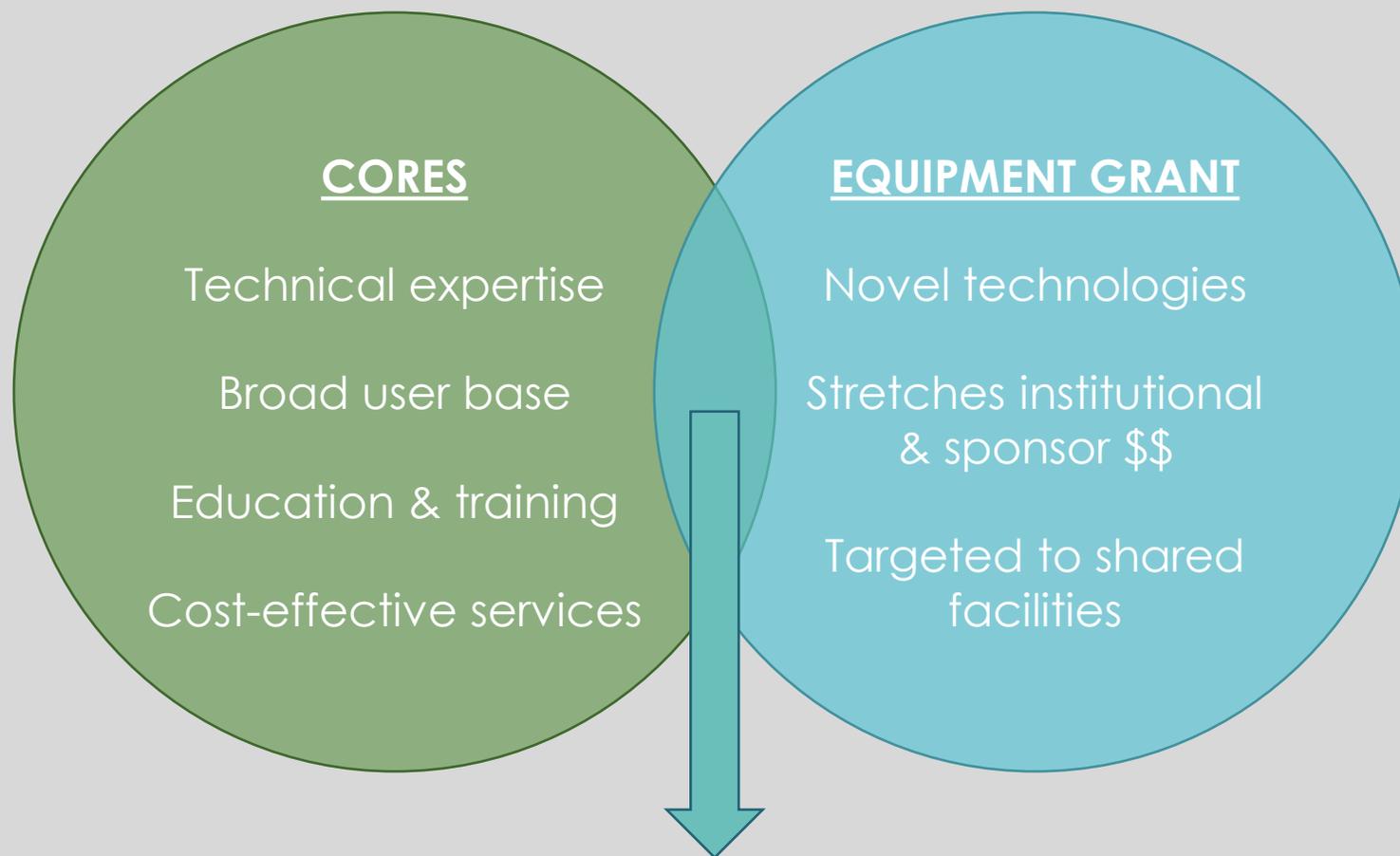Mouse Metabolic Phenotyping Center
ZCORE - Zebrafish Aquatic Facility

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

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

Addt'l Grants
NSF MRI
NIH Supplements
Private Corp/Fdn

Novel capabilities + expert guidance = scientific breakthroughs
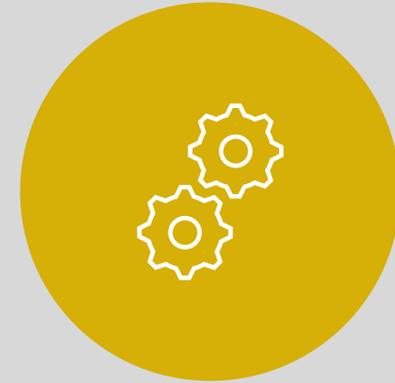
PI and Central Office roles

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?*

Ideation & Planning

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

Describe plans for integration into a shared resource/core facility, instrument management, operational support and user access; briefly list any other major user projects.

Provide written statement of support from the PI's (or core's) department or center, committing to provide backup of the equipment financial plan for 5 years from installation of the instrument or for its effective lifetime.
* must provide value
⬆ Upload

Project abstract: (Max. 1000 words)
* must provide value
⬆ Upload

Upload a full list of Major/ Minor users. (Word or Excel file accepted.)
⬆ Upload

Must include following for each user:
1. Name
2. Primary Department
3. Grant number & Project description
4. Estimate % of Total Usage

Note: This can be the list you plan to submit, or an actual log of recent usage, e.g. an iLab usage log. If submitting a usage log, please highlight major users.
* must provide value

The core's advisory committee will serve as the S10 instrument advisory committee. Please propose up to three ad hoc members of the core advisory committee to support annual review of the instrument to meet NIH reporting requirements.

Equipment Proposal Information:

Name of this equipment:
* must provide value

Equipment details:
1. Type of instrument
2. Model
3. Manufacturer
4. Special capabilities or value-added to VUMC core facilities
5. If this instrument is currently present at VUMC, provide justification for purchasing a similar equipment.

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?*

Performance report

All new submissions must include a report of <u>existing</u> 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.**

Central Office & Current PIs

Citations

Instrument Status

Usage Data

Performance Report

Submitting PIs
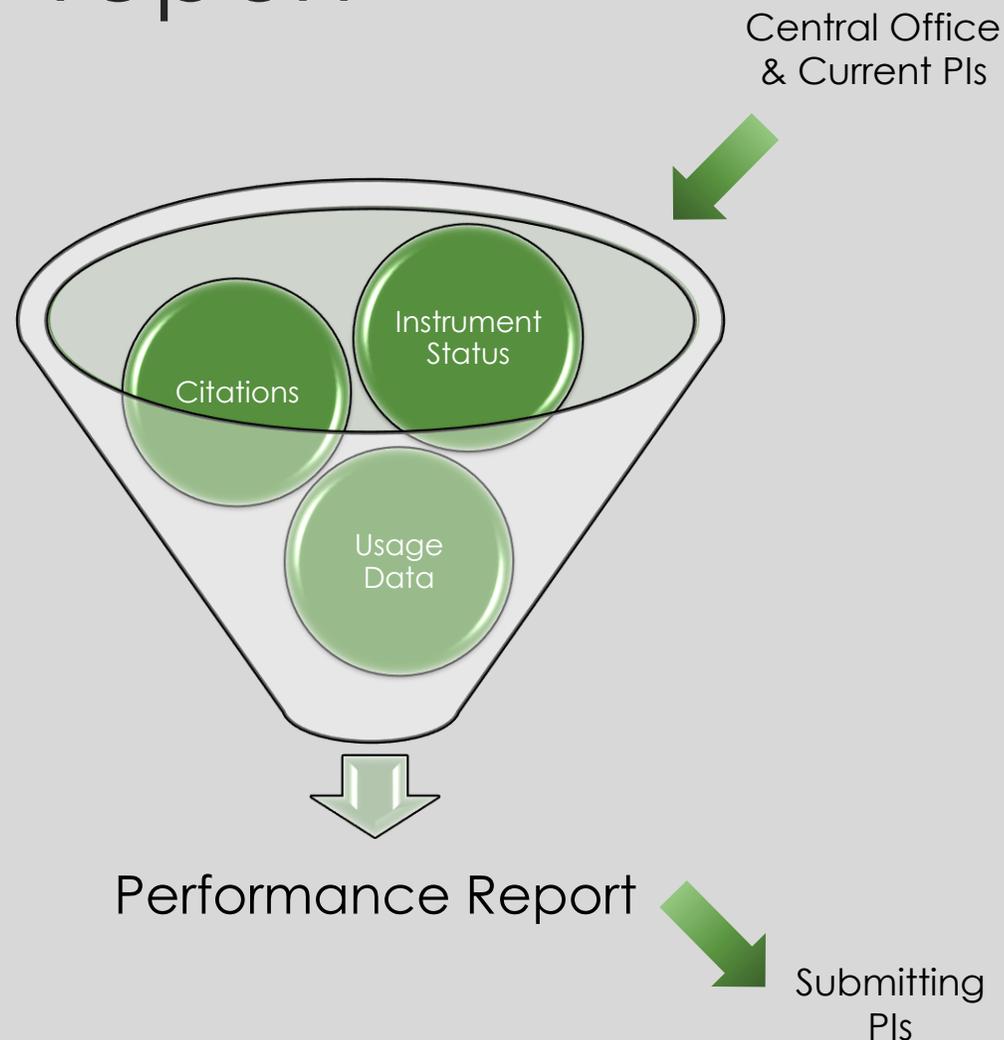
Letters of support

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 and Central Office roles

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**

Leica Bond RX Automated Immunohistochemistry and *in situ* stainer, awarded in 2018

- Instrument/Project Name: The Leica Bond RX
- Access facilitated through: Translational Pathology Shared Resource
- Principal Investigator: Katherine Gibson-Corley, DVM, PhD, Pathology, Microbiology, & Immunology

Recommended acknowledgement text for citations: "This work was supported by grant 1S10OD023475-01A1 for the Leica Bond RX, housed in the Vanderbilt Translational Pathology Shared Resource."

Publication counted in next performance report

More Core business & additional citations

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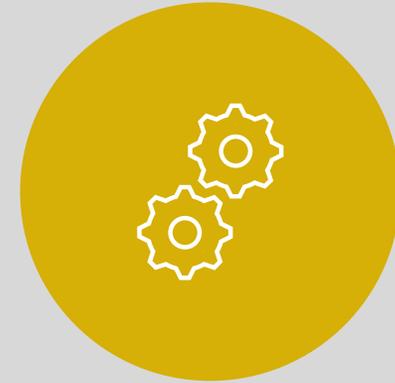
The S10 **support** lifecycle

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

Thank you!

Vanderbilt Shared Resources

Grant Sponsors NIH NSF

V **Research Dev & Support Team;
School of Med - Basic Sciences**

Templates & Resources:
www.vumc.org/oor/s10

amy.f.martinez@vumc.org

**VUMC
Office of
Research**