

# CARE LEADS HERE





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# CREATING A RESEARCH INFRASTRUCTURE WITH A SERVICE-ORIENTED MINDSET

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# Outline

Stimulus to expand research infrastructure at the Heritage College

Successes and challenges in targeted areas

# Questions

- How many of you are involved in research administration?
- How many of you are investigators?
- How many of you have all of the components you need to be successful from your research infrastructure?

# The Stimulus to Expand the Research Infrastructure at the Heritage College



3 Institutes

- Diabetes Institute
- Ohio Musculoskeletal and Neurological Institute
- Infectious and Tropical Disease Institute

Success in development and commercialization of a new drug

- Somavert by Dr. John Kopchick

Human subjects research

NIH support for basic research



**Collaborative research was identified as a strategic priority for the College.**

**We approached this with a faculty-centered, service-oriented mindset.**

# Clinical & Translational Research Unit (CTRU) for Human Subjects Research

Mission is to support human subjects research, protect the safety and well-being of study participants, and maintain a culture of compliance.

Staff assists with feasibility, project development, IRB submission, implementation, regulatory guidance, and much more.

Personnel include RNs, DO, project managers, research assistants, and a recruitment specialist.



# Clinical & Translational Research Unit (CTRU) for Human Subjects Research

## Successes

- In FY2017 the CTRU supported 24 clinical research studies for 14 principal investigators
- 926 study visits
- 648 unique study participants
- Funded by NIH, industry (pharma and device), association, university and college funds
- Medical student experience program created
- Very high rate of study participant satisfaction
- Provided services to investigators from 5 colleges and 3 institutes

## Challenges

- Many inexperienced investigators
- Unfunded studies can drain resources
- Not embedded in a clinic or hospital
- Faculty may not have protected time for research
- Rural setting – transportation barriers; insufficient numbers of study participants
- University doesn't have optimal processes for some types of research operations
- Difficult to serve other campuses as well as the Athens campus

# Shared Equipment Core Facilities

Establishing core facilities as part of the research infrastructure has many advantages

- Efficient use of financial resources
- Makes equipment available that would otherwise be cost-prohibitive for an individual investigator
- Providing technical support as part of the core facility improves quality of data and operation of equipment
- May be viewed favorably by funding agencies



# Shared Equipment Core Facilities

## Successes

- Core facilities are available for
  - Microscopy
  - Mitochondria Seahorse
  - Immunology
  - MicroCT
  - Mouse metabolic phenotyping
- Each has faculty lead who oversees a technical expert
- Business plan is in place for each one
- Researchers understand how to access services and what to expect
- Modest fee-for-service agreements help offset technician salary and service contracts on equipment

## Challenges

- Difficulties establishing business plans that suit all users
- Core facilities do not generate enough revenue to be cost neutral
- Service contracts are costly but may be necessary to keep equipment available and in good working condition
- Faculty need time to administer the facility and provide technician oversight
- Need research business operations oversight to maximize success

# Primary Care Research

Primary care research is an important part of the College's goal to become *the* leader in primary care education.

Primary care research at the Heritage College has a broad reach and scope, including community engagement and health systems science.

Investigators collaborate with partners throughout the university and surrounding community.



# Primary Care Research

## Successes

- Strategic plan was developed and is being implemented
- Established Primary Care Research Initiatives group with executive director and staff
- Added primary care faculty who are producing scholarly activity
- Provides excellent opportunities to engage students in research
- Primary care investigators share interests with many other types of researchers in the College and throughout the university

## Challenges

- The definition of primary care research is not universally agreed upon or understood
- Some investigators are inexperienced
- Some studies unfunded or underfunded
- Investigators may not have enough protected time for research
- Difficult for some to see how research can be a part of their practice

# Molecular and Animal-based Research

Molecular and animal-based research has a long history of success at the College.

These investigators play a critical role in translational research that will ultimately impact patient care.

These areas of study are expensive and rapidly evolving. The faculty have diverse interests and biological specialties. While some have received NIH and/or NSF funding, the competition for sustained funding is fierce.



# Molecular and Animal-based Research

## Successes

- Eight NIH grants awarded last year with almost \$2 million in revenue
- Upgraded animal facilities
- Strategic 'cluster hires' of faculty with complementary interests and skills
- A needs survey distributed to all faculty and research staff in 2017 yielded responses that have led to multiple action items by research administration

## Challenges

- Keeping up with rapid advancements in technology is expensive
- Animals are housed in multiple locations throughout the university
- Research-intensive faculty request reduced teaching and administrative duties
- Difficult to obtain NIH funding

# Collaborations Within and External to Ohio University

Collaborations and Team Science are the norm today. The research infrastructure should be designed to foster collaboration and reduce or eliminate administrative barriers.

Heritage College investigators routinely partner with researchers in other colleges at the university and with affiliated health systems such as OhioHealth and Cleveland Clinic.

Making these collaborations as seamless as possible is no small task.



# Collaborations Within and External to Ohio University

## Successes

- Heritage College investigators work with university institutes and innovative multidisciplinary teams
- Research leaders from OU and OhioHealth meet regularly
  - Formal collaborative research documents are in drafted and being reviewed
  - ~20 projects currently
- A shared interests with Cleveland Clinic has created novel ways to foster collaborations, and a visiting scholar program is under development

## Challenges

- Significant administrative hurdles still exist between institutions despite years of efforts
- Clinicians in health systems may not have protected research time and may not have incentive to participate in research
- Not everyone embraces the concept of team science
- Distance between locations

# Conclusions

Research can be difficult and expensive. It requires an investment by administration and the return on investment may not be evident for a long time.

The research infrastructure can facilitate success by listening to faculty needs and putting resources toward efficient processes and reducing barriers.

A service-oriented approach goes a long way toward helping to make this happen.

Photos courtesy of the Heritage  
College Office of Communication

*“Questions?”*



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