Ready access to advanced core technologies is essential to keep our investigators competitive and successfully recruit new faculty. It is challenging, however, to support and maintain these important facilities. Ken Greis, PhD, scientific director of College of Medicine core facilities, explains how we pay for core facilities and keep them viable.

Funding and Sustaining Our Core Facilities

At UC and at many other institutions, “cores” typically were initiated organically and sustained at the departmental level to meet the needs of investigators with related research programs. They often centered on specific techniques or readouts (e.g., gene sequencing) or were formed around capabilities that require specialized training and/or expensive instrumentation (e.g., bioinformatics, imaging).

While initial investment was often shared by colleges and departments, cores were managed by departments which assumed ongoing operational support responsibilities. Despite most having fee mechanisms (“recharges”), revenues often are insufficient to cover all costs resulting in the need for departmental subsidies. Continued funding pressures have compelled department chairs to re-evaluate their own resources including whether departmental funds are a viable option to support a college-wide core.

The College of Medicine Dean’s Office better organized support and management of core facilities, substantially increasing its portion of subsidies in the past two years. A core assessment in 2012 led to the creation of a new role: the scientific director for CoM core facilities. A working group also was established earlier this year to develop best practices for core funding and sustainability.

Core Working Group Goals

The CoM core working group has these primary goals for core sustainability:

- Quality core facilities must be available to meet the needs of the research community.
- CoM leadership and core directors must have consistent and equitable processes for evaluating existing and proposed core facilities.
- Financial support for core facilities should be stable.
- Core facilities should align with the strategic research plans for the CoM, centers and institutes.

The working group has generated draft guidelines for the management, creation and sustainability of core facilities. These guidelines are expected to be implemented by the end of the year after vetting by core directors, department chairs and the CoM research leadership.

Since resources are limited, it becomes necessary to make hard choices to minimize duplication of core capabilities and maximize the return on core investments.
Since resources are limited, it becomes necessary to make hard choices to minimize duplication of core capabilities and maximize the return on core investments. This has led to some recent closures of unsustainable core facilities (e.g., Drug Discovery Center) and consolidation of essential core functions (e.g., transgenic mice).

CoM investigators have full access to all Cincinnati Children’s core facilities at internal user rates. Similarly CCHMC-based investigators can access UC-based cores. This reciprocal relationship prevents a duplication of cores. A listing of CoM and CCHMC core facilities is available at med.uc.edu/research/cores.

The CoM has recognized the need to provide seed funding for investigators to support core activities for new grant applications. The Just-in-Time (JIT) core support funding mechanism was established in 2012 in collaboration with the CCTST. This mechanism provides up to $7,500 in core fees to collect data critical for supporting an imminent grant submission. Similar JIT or matching fund support for cores is available for Cincinnati Cancer Center and Center for Environmental Genetics members (see the CoM core website for links to these options).

Helping Our Core Facilities
The sustainability of strong cores is dependent on their use and on impact that the cores have on our research enterprise. The more investigators utilize and support the cores financially by including them in grants, the more likely the cores will be sustainable. If a core activity is a central part to the aims of a grant, then core support should be written specifically into the grant and budgeted to ensure the funding is adequate for these activities.

Impact is also highly relevant. Increased collaboration with core scientists will increase success. This includes recognizing the independent expertise made available by the core and collaborating as authors on manuscripts resulting from work done in a core. Core support should be acknowledged in every manuscript so that the impact can be measured.

We must evolve and strengthen cores with solid research and business plans that meet our current research needs and anticipate future needs so cores can be sustainable.

---

Did you know?

- There are 15 research cores within the CoM with over $1.4 million in subsidy support this year.
- UC and CCHMC investigators have full access to all core facilities across both institutions at the same internal rates.
- Core rates are regulated by the government cost compliance office to ensure that only the actual cost of the activity is included with no mark-up.
- There are several mechanisms available to access internal funds to offset some core service costs.

---

Core support should be acknowledged in every manuscript so that the impact can be measured.

Ken Greis, PhD
Scientific Director, CoM Core Facilities
Associate Professor of Cancer Biology
ken.greis@uc.edu