



NORTHERN ARIZONA UNIVERSITY

POLICY FOR UNIVERSITY RESEARCH CORE FACILITIES

Effective Date: April 1, 2017
Responsible University Official: Vice President for Research

Rationale

University Research Core Facilities (URCFs) are proposed to advance the strategic initiatives of the NAU research community by providing a centralized location and cross-campus access to sophisticated and highly specialized major equipment, instrumentation, and services. The goal of each facility is to increase the quality and efficiency of research endeavors at NAU and to foster research-intensive learning environments for state-of-the-art student training. The advantages for housing major equipment in URCFs include (i) creation of environments that foster interdisciplinary and collaborative research opportunities; (ii) efficient use of campus research space through co-localization of related equipment; (iii) evidence of demonstrable infrastructure and institutional support to enhance NAU competitiveness for external funding; and (iv) development and maintenance of major research infrastructure to enhance future faculty recruitment.

Purpose of Policy

This document provides guidelines for designating, maintaining, and undesignating the facilities; commitments for administration and institutional support; and policies for setting rate schedules. The NAU Office of the Vice President for Research is ultimately responsible for establishment and oversight of policies ensuring that the URCF operates within state, federal, and NAU guidelines. The President has the right to terminate a URCF designation unilaterally, or to add conditions or exceptions to any of the policies described herein.

Definition of a University Research Core Facility

A University Research Core Facility is a designation granted by the OVPR, in consultation with the President, for operations that manage major research instrumentation and services needed by faculty researchers, and that meet the qualifications of this policy. Operations and facilities that fall under the jurisdiction of Research Compliance, for example the Animal Care Facility, have regulatory requirements that supersede this policy document, and are therefore given a separate status.

Each University Research Core Facility will have the following characteristics:

- House major equipment and provide services that are open and accessible to all NAU researchers and external colleagues.

- House major equipment consisting of instrumentation whose cost is beyond the budget of one faculty member's start-up funds or individual research grant, and whose complexity requires specialized training for use and maintenance.
- House major research equipment that is of general use to several disciplines, not limited to one subfield of research.
- Operate under an identified Faculty Director.
- Maintain a dedicated staff person (Assistant/Technical Director or Research Specialist) to provide facility oversight and technical expertise.
- Maintain a faculty advisory committee of at least 3 members that includes major users and established researchers from colleges and departments with greatest need for the core.
- Support a minimum of 4 independently funded investigators from at least two departments.
- Be able to charge and receive reimbursement from extramural funds as a recharge center, using an approved rate schedule.
- Generate a minimum revenue per year for services.
- Be able to track utilization, and provide the OVPR with an annual report of the year's financial and operational activity as well as plans and concerns for the coming year.
- Follow all regulatory guidelines and best practices required for a federally funded core facility and an NAU shared service (<https://nau.edu/comptroller/recharge-centers/>).
- Maintain a current list of URCF users, and an up-to-date website that includes a publically available rate schedule.

Process for Creating, Combining, and Ending Academic University Research Core Facilities

The creation, maintenance, or dissolution of a URCF designation will be determined based on the needs of research-active faculty, the availability of university resources, and the strategic initiatives of the university that form the basis of its research and scholarship goals. Policies and operations of NAU URCFs will be developed and overseen by a central URCF Oversight Committee consisting of representatives from the OVPR, the relevant Dean's Offices, and the Faculty Directors of existing URCFs.

Creating an Academic URCF: The organization of related major equipment into a URCF has the advantage of the institutional support outlined below. However, major equipment with use restricted to a group of investigators associated with a specific grant, center or department is not required to be housed within a URCF, nor would it meet the criteria for establishment of a new URCF. Such limited use facilities may negotiate with deans and chairs/directors for institutional support, but would fall outside of this policy.

Criteria to guide investment decisions for the designation of a new URCF, maintenance of an existing URCF, or addition or replacement of equipment within a URCF will include (i) the extent of demonstrated interdisciplinary faculty needs that cannot be met by existing equipment in URCFs; (ii) a quantitative measure of external research funding to support the use of equipment in the proposed URCF or the addition of equipment into an existing URCF; (iii) the extent of redundancy in terms of existing equipment on campus, including equipment in existing URCFs; and (iv) the alignment of supported or proposed research activity with institutional strategic priorities for

research. Proposals for additional URCFs and equipment additions or removal may come from institutional leadership, individual investigators, collaborative groups of faculty, and URCF staff.

Criteria to guide decisions for the removal of equipment from a URCF will include the extent to which existing equipment is (i) underutilized; (ii) no longer functional; or (iii) no longer aligned with the evolved purpose of the URCF or the institutional strategic priorities for research.

A proposal for a new URCF designation should be submitted to the Associate Vice President for Research. Information to be provided in this request is listed in **Appendix I**.

Funding mechanisms such as the Major Research Instrumentation (MRI) Program sponsored by the National Science Foundation (NSF) are appropriate sources of support for purchase of major equipment, and interested investigators are encouraged to consult with OVPR staff regarding how the URCF structure can increase the competitiveness of NSF-MRI and related proposals. New equipment may also be added through matching fund acquisitions or in-kind donations.

Maintaining an Academic URCF: Institutional resources will always be limited, and strategic initiatives for research will evolve over time; therefore, there must be continued monitoring of the institutional return-on-investment. The same criteria for creation of NAU's URCFs will be used to evaluate continuation of a URCF, namely faculty need, external support, duplication with other equipment on campus, and alignment of URCF support with institutional strategic initiatives. Data for NAU's URCF evaluation will come from the URCF annual report and from yearly research productivity metrics such as FAAR data, Academic Analytics reports, publications citing the URCF, and external proposals submitted and grants awarded that require equipment maintained by the URCF.

Sun-setting an Academic URCF: The Vice President for Research or the President has the authority to terminate the URCF status for financial, space or scientific reasons. An ongoing operational deficit that cannot be eliminated in a reasonable time through an increase in rates may lead to URCF closure. The need for reallocation of research space will be evaluated through criteria outlined in the NAU Research Space Policy. The scientific productivity supported by the URCF will be evaluated yearly, based on URCF annual reports and on research productivity metrics such as FAAR data, Academic Analytics reports, publications citing the URCF, and external proposals submitted and grants awarded that require equipment maintained by the URCF. Equipment in a terminated URCF, and equipment determined to be no longer useful for a URCF will have responsibility returned to the PI providing the original funds for the equipment's purchase, or in his/her absence, will return to the department/school or academic/research unit responsible for the original funds used to purchase the equipment.

Institutional Support

Institutional support for the URCF structure can be expected to include (1) 10% assigned release time for the Faculty Director, (2) contribution to salary support for a full-time staff person, and (3) service contracts for equipment maintenance and repair. Decisions regarding the establishment and continuation of institutional support will be made on a yearly basis in consultation with major

stakeholders, including URCF staff, relevant chairs, deans, OVPR, Provost, and other relevant University central administrators, and will be based on the metrics of productivity described above for creation, maintenance, and sun-setting of an Academic URCF.

Faculty Director: will develop the mission plan, oversee the facility, grow the user base, work with users to develop proposals for external and internal support of the facility, and serve as liaison between the URCF, users, and administration. The Faculty Director will work with URCF staff to generate reports and to review and revise policies and rates for the URCF on an annual basis. Specific duties of the Faculty Director will be defined for each URCF in the MOU document. The Director will receive one annual course release to carry out these duties.

Staff Person (Assistant Director or comparable position): will be responsible for the day-to-day operation, equipment maintenance, scheduling, training, billing, report generation, and web page maintenance for the facility. Specific duties of the staff person will be defined for each URCF in the MOU document. The salary for one full-time MS or PhD level staff person will be provided by some combination of fee recovery and institutional support.

Service Contracts: The overall goal of the URCF is to maximize productivity and quality of NAU-sponsored research by providing access to highly complex and specialized equipment. This major equipment requires ongoing preventative maintenance, frequent parts replacement and occasional instrumentation repair that is beyond the expertise of individual faculty and staff, and almost always requires procedures to be carried out by qualified personnel. These unscheduled costs associated with repairs and travel for service technicians are not routinely covered by direct costs in individual grants, or in departmental or college budgets. Setting fee structures to completely cover service contracts creates exorbitant fees that discourage and inhibit faculty use of the instrumentation. The annual cost of repairs without a service contract is several-fold higher than the cost of the service contract. Therefore, in order to protect NAU's investment in major equipment and to incentivize faculty to use such equipment, and to commit time and effort toward obtaining external funding for major equipment, NAU will contribute to the costs of service contracts for major equipment residing in URCFs. These costs will be covered by funding from the President, Provost, the VPR, the Deans, Academic/Research units at appropriate levels, balanced by reasonable fees. Charges to PIs for use of the facility (fees) are described below.

Rates and Fees

NAU's URCFs will function under approved rate schedules, as first-come-first-served, recharge cost centers. Each URCF must maintain an appropriate approved business plan and an approved budget. The URCF may operate on an annual membership basis for NAU researchers; or on a fee-for-use basis with different rate tiers for users within NAU, for non-NAU academic members, and for industry users.

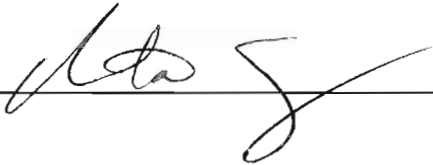
Rate schedules will be generated according to NAU Comptroller Service Center Policy, CMP 401-02. Billing rates will be designed to recover not more or less than the aggregate cost of a product/service over a defined break-even period. Annual evaluation of rate calculations will be

based on actual costs and use, and rate revisions will include consideration of any operating deficit or surplus of the previous period greater than 60-days operating.

Fees may cover costs of consumables (operating supplies, reagents, materials, etc.), other necessary soft support (student assistants, training by staff, etc.), equipment parts or supplies not covered by service contracts, and depreciation on non-federally purchased equipment. Courses for training on major equipment that are taught by URCF staff may recover student course fees consistent with ABOR and NAU policy.

Signatures


Approved: Rita Hartung Cheng, President, Northern Arizona University

Signature  Date 3/1/17

Approved: Daniel L. Kain, Provost, Northern Arizona University

Signature  Date 3/1/17

Approved: William Peter Grabe, Vice President for Research, Northern Arizona University

Signature  Date 3-1-17

Appendix I.

Proposal for Designation of a New University Research Core Facility

1. PRIMARY CONTACT FOR THE URCF PROPOSAL

[Name, Department/School/Center, Email, Phone]

2. PROPOSED UNIVERSITY RESEARCH CORE FACILITY

[Title]

3. JUSTIFICATION

[Describe the advantages of the proposed URCF in terms of NAU's current research strengths and initiatives]

4. PROPOSED LOCATION

[Describe where the instrumentation or services would be located, and any renovations that would be required to house the proposed equipment]

5. PROPOSED INSTRUMENTATION/SERVICES

[List the instrumentation or services for the proposed URCF, and provide the funding source(s) for each item as appropriate]

6. EQUIPMENT MAINTENANCE NEEDS

[List the maintenance costs/service contract costs required to support the proposed equipment or services. A proposed fee rate structure is not required at this time]

7. OVERLAP WITH OTHER EXISTING EQUIPMENT

[Provide a list of similar or related equipment on campus that resides in an existing URCF, or would not be housed in the URCF, each item's current location, and a description of the differences in capabilities, if necessary]

8. PROPOSED STAFF

[Provide the name of the person willing to serve as Faculty Director for the proposed URCF; describe staffing needs for the proposed URCF]

9. CURRENT AND PROPOSED USERS

[List faculty users of existing equipment or services over last three years, and potential NAU users for the proposed facility, and as an appendix include biographical sketches and current/pending support for at least four major users. List probable external academic or industry users for the proposed URCF; biographical sketches and funding support are not required for external users]

10. SUSTAINABILITY

[Describe proposed funding mechanisms to defray university costs for maintenance contracts and core facility staffing. It is expected that the URCF will function under an approved rate schedule, as a first-come-first-served, recharge cost center. If an existing facility already functions as a service center, what are the yearly fee recoveries?]