

MEMORANDUM

TO: Deans, Directors, Department Heads, and Faculty

FROM: Alan H. Rebar *Alan H. Rebar*
Vice Chancellor for Research, Innovation and Economic Development

SUBJECT: Access to Research Instrumentation and New Lab Management Software

DATE: November 8, 2017

To ensure that NC State researchers have access to state-of-the-art research instrumentation and services, the Office of Research, Innovation, and Economic Development (ORIED) initiated a strategy to (i) identify and resource NC State Core Research Facilities, (ii) develop a common lab management software platform to manage NC State Core Research Facilities, and (iii) establish formal partnerships with neighboring academic institutions to facilitate inter-institutional access to research instrumentation. This memo provides updates on each of these strategies.

NC State Core Research Facilities

Two service centers developed by the College of Agricultural and Life Sciences (CALs), the Cellular and Molecular Imaging Facility ([CMIF](#)) and the Genomic Sciences Laboratory ([GSL](#)), were identified as University Core Research Facilities in 2013 and are administered and resourced by the Provost's Office and ORIED. Two service centers administered by the College of Engineering, the Analytical Instrumentation facility ([AIF](#)) and the NC State Nanofabrication Facility ([NNF](#)) were identified as University Core Research Facilities in 2016 and were provided with significant additional resources to upgrade instrumentation and facilities. More recently, a new structural characterization facility (termed the Molecular Education, Technology and Research Innovation Center; METRIC) that focuses on mass spectrometry, X-ray crystallography and nuclear magnetic resonance was created from service centers developed by CALs and the College of Sciences (COS). This new university core was created through a partnership between the Provost's Office, ORIED, Office of Finance and Administration (OFA), CALs and COS. ORIED is charged with oversight of METRIC operations, as well as convening regular meetings of University Core Research Facility Directors to coordinate activities and plan for the management and growth of research instrumentation and services.

Common Lab Management Software

In 2016 ORIED and the Office of Information Technology (OIT) partnered to develop a lab management software suite that facilitates the scheduling of user reservations for shared research instrumentation, tracks the training of users and provides for billing and auditing of activities in shared research facilities. This [software suite](#) was developed in close cooperation with the Directors of University Core Research Facilities and takes advantage of a user-friendly, cloud-based tool termed Mendix. This platform is now "live" in AIF, GSL and CMIF and will be rolled-out to METRIC and NNF in the near future. In addition to providing a common interface for users of University Core Research Facilities, significant operational and cost efficiencies are anticipated.

Inter-Institutional Agreements

In 2013 NC State and UNC-Chapel Hill formalized an agreement that enables researchers to utilize shared research resources at each campus at internal service rates. More recently, NC State formalized an analogous agreement with UNC-Greensboro and NC A&T that enables researchers on these three campuses to utilize shared research resources, including the Joint School of Nanoscience and Nanoengineering, at internal service rates. ORIED will continue to partner with UNC campuses, as well as other institutions, to increase access to technologies and services that will support research success.

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