

M e m o r a n d u m

To: University Senate
From: Fabio Leite, Chair, Council on Academic Affairs
Subject: Proposal to Establish the National eXtreme Ultrafast Science facility (NeXUS)
Date: April 10, 2024

A PROPOSAL FROM THE COUNCIL ON ACADEMIC AFFAIRS TO ESTABLISH THE NATIONAL eXtreme ULTRAFast SCIENCE FACILITY (NeXUS)

- Whereas NeXUS is the first of its kind ultrafast laser facility in the US, established in 2019 with one of the inaugural NSF Mid-Scale Research Infrastructure (MSRI) awards, and is currently supported by a \$10.5 million infrastructure grant ; and
- Whereas the NeXUS project translates new technology in high average power lasers developed in Europe to the US for the first time, fills a strategic gap in the US research infrastructure, and establishes the University as a global leader in ultrafast science; and
- Whereas temporary center status was given in 2023, but full designation as a University center will enable NeXUS to fulfill its unique mission that transcends traditional academic boundaries, demonstrate to NSF a strong level of internal support important in securing its longer-term support, and provide direct communication between the NeXUS Director, External and Internal Advisory Boards, and the Enterprise for Research, Innovation and Knowledge (ERIK); and
- Whereas for Ohio State researchers, NeXUS provides ready access to state-of-the-art capabilities in ultrafast molecular and materials characterization, interactions with research groups worldwide who will visit campus, and provides strategic overlap with existing university centers/institutes; and
- Whereas the proposal specifies all components expected, with details such as stated mission, administrative structure, and budget and funding, including first year of operation, space and facility needs, and funding sustainability; and
- Whereas the proposal has the support of the ERIK and includes letters of support from departments and centers within the University, and will host an NSF site visit team April 23-24, 2024 to evaluate its current \$12 million proposal for 5 years of Operation and Maintenance funding; and
- Whereas the proposal was reviewed by a subcommittee of the Council on Academic Affairs, and then approved by the full Council on Academic Affairs at its meeting on March 20, 2024; and

Therefore be it resolved that the University Senate approve the proposal to establish the National eXtreme Ultrafast Science facility.