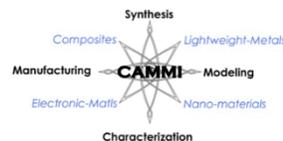




CAMMI POST-DOCTORAL FELLOW SOLICITATION



The UNH Center for Advanced Materials and Manufacturing Innovations (CAMMI) invites proposals to fund post-doctoral fellows that will broadly support the mission of the Center (see page 2 of this solicitation). These fellows are intended to provide research support that will advance one or more thrust areas. As such, the proposal must be submitted by a group of CAMMI faculty, e.g., one of the thrust areas, as opposed to a single faculty member. Co-funding for the position is desirable. This is a sliding scale with CAMMI completely supporting the post-doc if the person will benefit several CAMMI faculty members, to significant faculty support of the position if the post-doc will primarily benefit a small number of CAMMI faculty. This solicitation should not be construed as a means for a single faculty member to obtain partial funding for a post-doc. The post-doc must benefit and engage with a number of CAMMI faculty. Proposals that are not able to articulate a shared impact will not review well.

Key info.:	<u>Proposals Due via email</u>	<u>Anticipated Funding Decision</u>	<u>Anticipated Funding Available</u>
	March 1, 2016, 5pm EST	April 1, 2016	\$100k

Proposal structure (approximately 3-4 pages total)

1. **Background and Objectives** (approximately 1 page)

- i. Provide a justification and overview of the post-doc's role in CAMMI activities and faculty-specific research.
- ii. Specify whether the post-doc be engaged with industrial engagement, fundamental science research, or a mixture of both.
- iii. Provide a budget amount, source and amount of co-funding (if appropriate), and a duration of the post-doc support (typically up to 1 year).
- iv. Include a description of required skills and experiences, as well as a strategy and timeline for recruitment of the post-doc. If likely candidates has already been identified, provide details.

2. **Research Plan** (approximately 1-2 page)

- i. Describe typical research activities in which the post-doc will be engaged.
- ii. Detail the roles and responsibilities of faculty members who will utilize and mentor the post-doc.
- iii. Describe the expected results, anticipated challenges, and back-up plans in case of roadblocks.

3. **Impact** (approximately 1 page)

- i. How will the post-doc advance the mission and growth of CAMMI generally, and the thrust areas specifically?
- ii. How will the post-doc's activities lead to new opportunities that can be supported by industry, corporations, federal agencies, and/or foundations?

Evaluation: The evaluation criteria for these awards will be how well the proposed post-doc: a) advances the mission and growth of CAMMI, b) enhances research productivity and advancement, c) develops new or strengthens existing collaborations or external relationships, and d) increases competitiveness for external funding. Furthermore, the appropriateness of the shared support by faculty will be considered.

Recipients of these awards agree to:

- Provide a one-page report including (i) research and engagement outcomes, (ii) progress toward securing external funding, and (iii) any other key outcomes of funding at the end of the project.
- Allow the enabled work to be publicized in CAMMI promotional material and website.
- Acknowledge CAMMI funding on all papers published and presentations including post-doc support.
- Provide to CAMMI a quarter of the 10% PI indirect cost return received from the first funded award enabled by CAMMI post-doc funding support. This PI indirect cost return provided to CAMMI will not exceed the value of the funding from CAMMI. This will help sustain Center operations and grow administrative and PI support.

Acknowledgement: CAMMI is very appreciative of the seed funding that was provided by the CEPS Dean's Office and the Senior Vice-Provost for Research (SVPR) Office. The goal is to transition this seed funding into a sustainable Center that will strengthen the research and engagement efforts of faculty members; increase the overall research enterprise of the university; and create a nationally and internationally recognized Center in the interdisciplinary areas of materials and manufacturing.

Submission Process: The proposal must be a single PDF file that includes the proposal narrative. Remember to include fringe benefits for the post-doctoral fellow in your budget. But indirect costs should not be included in the budget. In the event that any elements of the proposal are missing or incomplete, the proposal may be rejected. Proposals (and budgetary questions) should be directed to: Brad Kinsey at brad.kinsey@unh.edu (603-862-1811).

CAMMI Mission:

The Center for Advanced Materials and Manufacturing Innovations seeks to assure that UNH is a part of the national goal to out-innovate, out-educate, and out-build the rest of the world. The Center is dedicated to providing an environment where researchers (faculty members, industrial personnel, post-doctoral fellows, graduate students, visiting scholars, and undergraduate students) can work collectively to conduct the fundamental research to realize the next technical breakthrough as well as transition these laboratory scale innovations to commercialized products. In addition to new innovations, the Center will work with industrial partners to solve current technical challenges in the fabrication of their high-technology products. Finally, the Center will provide the necessary interdisciplinary experiences to educate the next generation of technology leaders, inventors, employees, and entrepreneurs.

Center Goals: The goals of CAMMI will be to:

- Develop the next generation of advanced materials and manufacturing innovations through fundamental and applied R&D efforts.
- Collaborate with local, national, and international companies to enable such innovations through research projects (supported by public, private and industrial funds) and shared facilities.
- Educate the next generation of researchers, scientists, and engineers who will assure the next technological innovations are developed and manufactured in the U.S., particularly NH.
- Engage with other entities such as the NH Department for Resources and Economic Development, the NH High Tech Council, the NH Manufacturing Extension Partnership, and the Community College System of NH to assure the research and educational objectives are achieved.

Center Focus:

CAMMI will initially focus on four material thrust areas, i.e., composites, lightweight metals nano-structured materials, and electronic materials due to the established strengths of existing faculty members in these areas. With respect to electronic materials, this includes topics such as flexible electronics, fuel cells, and photovoltaics. Within these material systems, areas that build and rely on CAMMI faculty members' strengths such as materials synthesis; physical characterization; numerical and analytical modeling; and advanced manufacturing techniques will be investigated. These topics transcend the four material thrust areas and thus provide synergies across the Center. Other areas of expertise will be included in Center activities as well, e.g., rapid prototyping, statistical data analysis, control systems, and robotics, thus providing breadth across company needs and enabling additional areas for new innovations and research to be explored. CAMMI will also remain flexible allowing new material and research thrust areas to be initiated based on technology trends and national interests.