RESEARCH NEWS & UPDATES

B/a+p

February 2023

Important Dates:

1. **January:** Faculty annual reports were due by the end of January. Reports can be submitted at https://archplan.buffalo.edu/info4faculty/research/annual-report-and-plan.html

2. **February 3:**
   a. 12:30 – 2 PM: Office of Research Advancement (ORA) Office Hours, 309 Hayes.
   b. 2 – 5 PM: Writing Workshop, 309 Hayes.

3. **February 7,** 10 – 11:15 AM, CONCUR Travel and Expense Reimbursement System Training. Register for a Virtual Session. If you can't make it to a session, previously recorded sessions are available. Zoom.

4. **February 8:** 12:30 – 2 PM, NEH Fellowship Webinar. For anyone thinking about applying for an NEH Fellowship this Spring (due April 12, 2023), the webinar introduces the program, describes the application process and eligibility criteria, and offers application writing suggestions. It consists of a 45-minute presentation followed by a question-and-answer session. You can register for the event at the following link. See more about the fellowship below (Research Opportunities). Zoom.

5. **February 10**: 2 – 5 PM: Writing Workshop, 309 Hayes.

6. **February 16** (Schoolwide Meeting): 11 AM: Formworks and Careworks presentation by Daniela Sandler will provide information on these upcoming programs for seed funding. A panel of faculty will also discuss community engagement. 403 Hayes.

7. **February 17**:
   a. 12:30 – 2 PM: Informal Research Conversation: Anahita Khodadadi & UBRI, 309 Hayes/Zoom.
   b. 2 – 5 PM: Writing Workshop, 309 Hayes.

8. **February 24**: 2 – 5 PM: Writing Workshop, 309 Hayes.

Announcements:

1. **Are you working on any research proposals this spring?** In order to be better prepared for any proposals that will be submitted this spring, we'd like to hear from you. Let us know what proposals you are currently working on or are thinking about in the next few months so we can plan ahead!

2. NSF implemented revised versions of the **Biographical Sketch** and **Current and Pending (Other) Support** formats for consistency with the *Proposal and Award Policies and Procedures Guide* (PAPPG) (**NSF 23-1**). The

requirement to use the revised formats is effective for proposals submitted or due on or after January 30, 2023. These revised formats are now available in **SciENcv** and on the **NSF Policy Office website**. **As a reminder, the mandate to use SciENcv only for preparation of these senior personnel documents will go into effect for new proposals submitted or due on or after October 23, 2023.** Staff from NSF and NIH conducted a webinar to discuss the revised formats and demonstrate the SciENcv system. A recording of the webinar will be made available in the coming days at: **https://nsfpolicyoutreach.com/**.

3. SUNY RF TED@Work Series The SUNY Research Foundation (RF) has launched a new learning series open to all UB employees. Workplace learning should be driven by powerful ideas – which is the foundation for their new TED@Work program. Blending TED Talks with small and large group discussions, this program encourages new ways of thinking, beyond the scope of traditional learning. Sessions will be held one Friday per month at 10am from January - June. Sign up once to get access to the entire series. Register for TED@Work Series

Featured Publications

Song, Jin Young, **Vrana, Dan,** Heo, Seoyoung, He, Xiangdong, Shim, Jongmin**.** "Snap-Interlock Module System: Exploring an Alternate Architectural Construction Method." *International Journal of Space Structures.* SAGE Publishing. DOI: https://doi.org/10.1177/09560599221147468

Responding to the rise of temporary architecture motivated by fast changing cultural and societal interests, construction methods must be adapted to meet the needs of reconfigurable systems. The prototype of Snap-Interlock Module System (SIMS) proposed in this study aims to integrate the simplicity of dry *stacking* as a primitive construction method through a coordinated joint system in order to increase material efficiency and structural integrity. This study explores a method of stacking *blocks* using unique interconnecting mechanisms without bonding agents to allow for reconfigurability. The considered unit of SIMS is configured to have four legs with integrated hooks on both top and bottom, allowing each block to snap into four adjacent blocks on either end. The centerpiece is designed such that each block can individually possess geometric versatility toward organic growth of the whole system. Larger assemblies of SIMS blocks can create full-scale structures without the use of bolting, welding, or other bonding agents. Finite element analysis demonstrates that the explored interlocking motion falls into the elastic range of the considered steel and confirms that structural integrity can be secured at the building scale as well. In order to test the proof-of-concept, 1:3 scaled Polylactic Acid (PLA) blocks are 3D printed and assembled into a 2.5 m tall portal frame, leading to a full-scale structural model executed with six full-scale steel blocks. The assembly and disassembly of both prototype structures are easily executed by a single individual. Despite the limitations of the chosen fabrication methods and material choices, the study promises diverse applications in the changing urban context and contributes to the broader sustainability of our built environment via an alternative and reconfigurable construction method.

Guitart, Miguel. "Preserving Identities in Post-Industrial Rust Belt Cities: Reconsidering Buffalo's Material Memory," *City, Territory and Architecture*, No. 9 (Springer Open), May 2022. DOI https://doi.org/10.1186/s40410-022-00158-1

In the context of post-industrial Rust Belt cities, much needed investment seldom makes room for proper debate on the material memory and place identity embodied in the rich industrial legacy. However, a reflection on the intrinsic value of the vacant industrial structures of these cities leads to the unveiling of their most authentic identity. This identity is directly related to the material experience of their structures as it speaks to the qualities of a lasting presence in the collective memory. Post-industrial structures display material conditions that define their place character, constituting a negotiation between ruin and construction. This text contends that post-industrial materiality embodies necessary and strategic connections between past heritage and future interventions, implying the possibility of cyclical renovation in a context of reinforced identity. The text focuses on the potential of the existing post-industrial legacy of the city of Buffalo, NY, arguing that the material dimension that once defined its productive infrastructure frames the potential consolidation of its physical memory and future identity, and as such, a consolidation of its future growth.

Research Opportunities:

NAM Catalyst Award (Due: Feb 27)

The National Academy of Medicine (NAM), with support from Johnson & Johnson Innovation, the Bia-Echo Foundation, and the Yun Family Foundation invites applications to the 2023 US NAM Catalyst Award competition. The Catalyst Awards—part of the broader Healthy Longevity Global Competition—reward bold, new, potentially transformative ideas to improve the physical, mental, or social well-being and health of people as they age, in a measurable and equitable way.

NAM invites innovative ideas that **aim to extend the human health span** (i.e., the number of years lived in good health), especially approaches that challenge existing paradigms or propose new methodologies or concepts. High-risk ideas that could potentially yield high rewards and, in turn, dramatically change the field of healthy longevity are encouraged. Each Catalyst Award includes a $50,000 cash prize, exclusive access to additional funding opportunities (Accelerator Phase Prize: $185,000- 1 million and Grand Prize Phase Prize: up to 5 million), occasions to connect and collaborate with innovators from around the world, and amplification of the award and winning idea. The NAM will also administer Catalyst Award cycles in 2024 and 2025. In 2023, the **NAM will issue up to 20 catalyst awards.**

Applications may originate from **any field or combination of fields** (e.g., biology, chemistry, medicine, engineering, behavioral and social sciences, technology, data science, and policy). Examples of topic areas include but are not limited to:

- Behavioral health (e.g., social connectedness, engagement, and well-being)
- Biology of aging and molecular pathways
- Built environment and urban planning
- Disease prevention, including biomarkers and indicators of disease
- Health care delivery (e.g., technologies simplifying access to care, elder care services)
- Housing (e.g., smart-enabled homes, intergenerational housing models)
- Physical health (e.g., mobility and functionality)
- Policy (e.g., economic, health, and science)
- Reproductive longevity and equality
- Technology (e.g., telehealth; artificial intelligence; robotics; medical, assistive, and information technology)

The NAM strongly encourages ideas or projects that aim to reduce health disparities, promote health equity, or combat ageism. Application of human-centered design principals to engage older adults in the work, if applicable, are also strongly encouraged.

The NAM does not seek to fund existing programs (or slight variations thereof), approaches that are primarily public awareness, educational, or advocacy campaigns, nor products that are already commercially available. **Please note**: The NAM Catalyst Awards are open to any person or team of any discipline or background. For full details see the award competition page. Complete applications will include:

- A brief eligibility form
- Application form
- 2 page application

You can find a list of previous winners here and an informational webinar here. Please feel free to reach out with any questions or application support.

National Endowment for the Humanities Fellowships (Due April 12, 2023):

NEH Fellowships are competitive awards (a maximum of $60,000) granted to individual scholars pursuing projects that embody exceptional research, rigorous analysis, and clear writing. Applications must clearly articulate a project's value to humanities scholars, general audiences, or both. Fellowships provide recipients time to conduct research or to produce books, monographs, peer-reviewed articles, e-books, digital materials, translations with annotations or a critical apparatus, or critical editions resulting from previous research. Projects may be at any stage of development.

NEH invites research applications from scholars in **all disciplines, and it encourages submissions from independent scholars and junior scholars**.

Resources for Research

1. UB has a license for [REDCap](), a secure web platform for building and managing online databases and surveys. With this free service, you can avoid adding the purchase of survey/DB programs in your research proposals.

2. The [Office of the Vice President for Research and Economic Development]() (OVPRED) offers assistance in finding grant opportunities for researchers through UB Funding, grants for new and early career faculty, grants.gov, and limited submission opportunities.

3. In addition to the University at Buffalo's [SPIN Funding Database]() to search for funding opportunities, other searchable databases include [New York State Grants Gateway]() and [SBIR/STTR Funding]().

4. UB's Corporate and Foundation Relations staff members help faculty build relationships with businesses and foundations in ways that align with the university's research goals and support departmental activities. For more information call 716-881-8206.

5. Our Sponsored Project Services staff:
   a. Pre-proposal budget: Alyssa Caruso, [acaruso5@buffalo.edu](), (716) 645-4416
   b. Pre-award proposal: Brad Bermudez, [bermude@buffalo.edu](), (716) 645-4383
   c. Post-award analyst: Xiaohong "Sunny" Zeng, [xzeng2@buffalo.edu](), (716) 645-4400

Reminders

1. Sponsored Project Services (SPS) is enforcing the 5-day deadline for all grant submissions. If your proposal is not received at least five days before it is due, they may not review it. All proposals for sponsored research must be submitted through UB CLICK.

2. In addition, all proposals for sponsored research are required to be reviewed by Barbara Carlson and Nick Rajkovich. If you plan to submit a grant proposal, please let Barb and Nick know at least a week in advance to ensure a quick turnaround. In general, it will take one business day to get through the school review process.

3. Finally, are you working on, or considering applying for, a sponsored grant? Please contact Nick/Barb as soon as possible so we can help you start the process!
   - Barb's email is [carlsonb@buffalo.edu](); her office is 232 Hayes Hall.
   - Nick's email is [rajkovic@buffalo.edu](); his office is in the Hayes 317 suite

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Spring 2023 Research Events

Week	Date	12:30 - 2:00pm	2:00 - 5:00pm
4	Friday, February 3	Office of Research Advancement (ORA) Office Hours	Writing Workshop
5	Friday, February 10	Writing Workshop	
6	Friday, February 17	Informal Research Conversation (Anahita Khodadadi, PhD & Staff from the UB Regional Institute)	Writing Workshop
7	Friday, February 24	Writing Workshop	
8	Friday, March 3	ORA Office Hours	Writing Workshop
9	Friday, March 10	Writing Workshop	
10	Friday, March 17	Research Training (COI/CLICK Submissions)	Writing Workshop
11	Friday, March 24	Spring Break (no meeting)	
12	Friday, March 31	ORA Office Hours	Writing Workshop
13	Friday, April 7	Writing Workshop	
14	Friday, April 14	Informal Research Conversation (Kristine Stiphany, PhD, AIA & Kate Nelischer, PhD)	Writing Workshop
15	Friday, April 21	Writing Workshop	
16	Friday, April 28	ORA Office Hours	Writing Workshop
17	Friday, May 5	Writing Workshop	
18	Friday, May 12	Architecture Final Review Week (no meeting)	

All events will be held in the IDEA Center in 309 Hayes Hall. The research training and Informal Research Conversations will also be broadcast on Zoom: https://buffalo.zoom.us/j/7168296910?pwd=cTV5WEVxK2FqRWJzYk96UjJCTnJoZz09. If you have any questions regarding the schedule, please email Nick Rajkovich at rajkovic@buffalo.edu.