2022-2023 Report from the College of Built Environments Office of Research
October 2023

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SUMMARY

This 2nd-annual CBE Office of Research (CBE-OR) report aims to highlight productivity, outcomes, and impacts; and the efforts of the CBE-OR to support this work. This report will discuss fiscal and academic metrics; of note, the fiscal year (FY) discussed in this report was from July 2022 - June 2023, referred to as FY23. This report builds on the baseline CBE-OR annual report from 2021-22 and will highlight accomplishments and achievements stemming from previous years' work.[1]

Overall, FY23 funding supporting research-related activities totaled over $10,789,437. Categories of funding received in FY23 include Grants and Contracts ($8,893,570), UW Internal Funding (non-CBE) (over $244,833), CBE Internal Funding ($44,250), Gifts in support of research ($929,236), and Centers and Labs' Service Agreements ($677,548). In FY23 through the Office of Sponsored Projects, CBE researchers submitted 55 proposals, with 27 grants and contracts awarded to CBE PIs. CBE researchers published over 56 articles which are listed on the research portal, including books, and book chapters collectively (more information is detailed in section "1. CBE Research Outputs").

CBE-OR's Strategic Action Plan (Figure 1) is based on the understanding of CBE's research needs (which are detailed in the section "2. CBE research needs"), and our goals of supporting, connecting, elevating, and accelerating research. We also used four "lenses" across our work plan: cross-boundary scholarship; supporting student research; equity, diversity, and inclusion; and continual learning. We originally identified 9 areas of focus, under each of which we'd planned a suite of activities. This work plan drove all our activity for the year, and is detailed in the sections under "3. CBE-OR efforts".

Figure 1: CBE Office of Research Strategic Action Plan 2022-3

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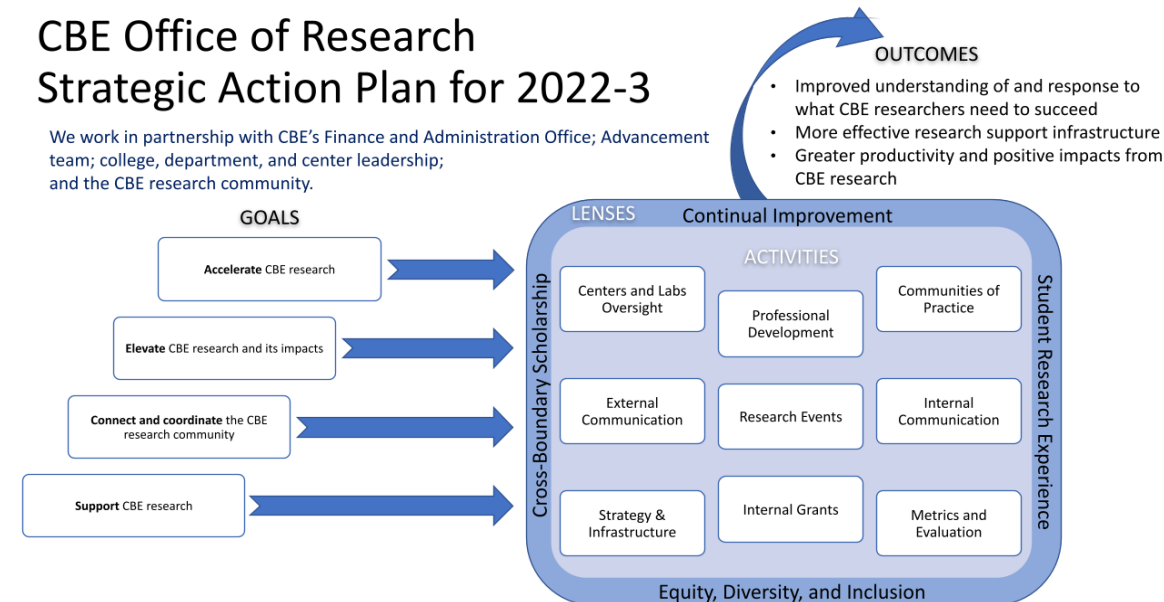
[1] Note that the 2021-2022 report reported metrics on an Annual Year basis (from January 2021 - December 2021). We shifted to a Fiscal Year metric analysis July 2022 - June 2023 in this report to align with the academic calendar and the university's fiscal year reporting.

1. CBE RESEARCH ACTIVITY

In this section, funding and outputs from CBE research are discussed. By tracking proposals, awards, and dissemination, we can see CBE's positive impact and recognition.

1.a. CBE Research Funding

Research funding is discussed below for FY23. The University of Washington completed a planned fiscal transformation project in July 2023. Overall, FY23 funding supporting research-related activities totaled over $10,789,437. Categories of funding received in FY23 include Grants and Contracts ($8,893,570), UW Internal Funding (non-CBE) (over $244,833), CBE Internal Funding ($44,250), Gifts in support of research ($929,236), and Centers and Labs' Service Agreements ($677,548).

1.b. Grants and Contracts

Grants and contracts in CBE are supported by two different offices: CBE's Finance and Administration Office and CSDE (College of Arts and Sciences). During FY23 CBE researchers submitted 32 proposals through the CBE Finance and Administration Office, 7 proposals through CSDE, and 16 proposals as Co-PIs submitted through other departments.

During FY23, 27 proposals were awarded, totaling $8,893,570. Of that, $8,525,915 was awarded to CBE for grants and contracts with CBE Principal Investigators and awards with sub-budgets to CBE PIs. Also, CBE PIs received $367,655 awarded through CSDE. Of note, researchers had a 100% success rate when seeking funding from King County or the State of Washington as the sponsor. The total amount awarded by department is represented in Table 1.

Table 1: Total Amount Awarded in FY23 by Department

Department	Total Amount Awarded in FY23
Architecture	$7,091,397
Construction Management	$99,283
Landscape Architecture	$93,052
Real Estate	$596,169
Urban Design & Planning	$1,013,669

Of the 27 awarded proposals, Architecture (including Carbon Leadership Forum team members) brought in the most awards (11), followed by Urban Design & Planning (8), the Runstad Department of Real Estate (4), and Landscape Architecture (2) and Construction Management (2) (see Figure 2).

Figure 2: Number of Awards Received and Number of Proposals Submitted*

Number of Awards Received and Number of Proposals Submitted
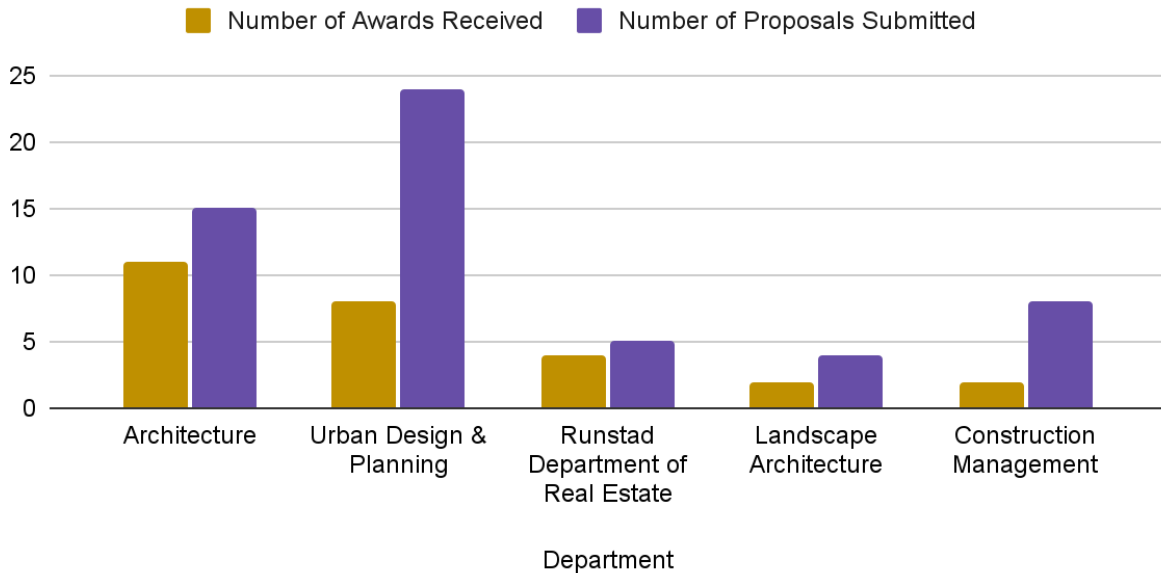
*Figure 2 reflects all proposals submitted in FY23, and all awards received in FY23. This does not reflect a one-to-one comparison of proposals to awards due to the time lag expected between submitting a proposal and receiving a notice of award. For example, a proposal submitted in May 2023 would be represented in this Figure as a proposal submitted in FY23, however, it would likely not be represented as an award received in FY23 because it was not funded by the time FY23 closed. This is not a one-to-one representation due to carry over of when proposals were awarded either from FY22 or not-yet awarded which would be expected in FY24.

The total amount of funding received by CBE is an important metric to measure the year-over-year growth and reach (surpassing the $4,000,000 benchmark of research support received in FY22). The college is on a positive trajectory for funding with a range of support from various sources and funding types. With the additional support of an expanding CBE Finance and Administration Office (discussed further in "3.e. Strategy and Infrastructure"), the trend of increased funding for the college is expected to continue.

In addition to external funding, UW-Internal grants have been awarded to CBE from other UW organizations, including Population Health Initiative, Urban@UW, and EarthLab. During FY23, over $244,833 was awarded by UW entities. Additionally, CBE awarded funds from the college to internal researchers, totaling $44,250 (discussed further in section "3.j. Internal Grants").

1.b.i. Gifts in support of research

CBE received gifts in support of research totaling $929,236 during FY23. This funding was to support 5 research funds: Integrated Lab Design Support Fund, Northwest Energy Efficiency Alliance (NEEA) Base Support, Center for Integrated Design for Discovery Commons Fund, Carbon Leadership Forum, and CBE Applied Research Consortium.

1.b.ii. Service agreements

CBE Researchers, and some Centers and Labs, received funding in the form of service agreements from industry, government, and community partners. Service agreements totaled $677,548 in FY23.

1.c. CBE Research Outputs

CBE research outputs include academic products such as journal articles, reviews, books, and book chapters. The build-out of the research portal publications database took place in FY23, adding 587 publications to the database. Of those, 28 were published and added to the portal within the first 6 months of 2023.

A goal of CBE-OR for FY24 is to develop further tracking of other research outputs in the Research Portal, such as videos, public reports, conference papers, technical reports, software code, data sets, art/exhibits, and invited talks.

CBE-OR would like to highlight the below outputs and awards which have a strong relevance to the UW and wider Seattle community.
1. [Report on high-speed rail in the PNW region](#)
2. [$2 Million NSF award to support research on sustainable construction materials](#)
3. [Urban@UW 2023 Research to Action Inaugural Cohort](#)
4. [NIH R21 Grant Awarded to study Gentrification, Mobility, and Health](#)

2. CBE OR EFFORTS

CBE-OR's goals are to support, connect, elevate, and accelerate research at CBE. In addition to aligning our work with the CBE Strategic Framework and our understanding of CBE research needs, we utilized 4 overarching lenses in our work during FY23. These lenses are Research Student Experience, Cross-Boundary Scholarship, Equity, Diversity, and Inclusion, and Continual Improvement.

FY23 involved continuing to expand the research administration infrastructure under the CBE Assistant Dean for Finance and Administration with the hiring of both a Research Administrator and Grants Manager as well as a Fiscal Specialist (see section 2e below). Work continued to develop a process for CBE Policies & Procedures (P&P), to support the accurate, inclusive, and transparent creation and implementation of P&P for research, teaching, administration, and other efforts.

In addition, based on the frameworks developed in 2021-22 by the CBE-OR, the 2022 faculty cohort completed onboarding and orientation in FY23.

2.a. Research Student Experience Lens

ADR Dossick continued working with directors of the Urban Design and Planning (UDP) and Built Environments (BE) Ph.D. programs to adequately support all Ph.D. student and programming needs. One of the awarded Inspire Funds included a 3rd year PhD student, Novi Bramono, on the research team (PI: Chris Lee).

PhD students continue to be highlighted and included on the Research Portal. Additionally, Ph.D. students presented at the Climate Solutions community of practice meetings throughout FY23.

ADR Dossick gave the introductory welcome for the 2022-2023 cohort for the Applied Research Consortium as well as for the 2023 annual Ph.D. Symposium "Place, Space, and Belonging," along with the heads of the Ph.D. Programs in Urban Design and Planning and Built Environments on Friday, May 19, 2023.

In coming years we would like to further understand the needs of research students and to develop additional supports for that community.

2.b. Cross-Boundary Scholarship Lens

The CBE Office of Research is committed to supporting the communities of practice (CoPs) that emerged from the CBE Strategic Framework efforts: Humanities, Histories, & Futures; Technology; and Climate Solutions. This support looks different per CoP; in FY23 the Climate Solutions CoP continued to host research lunch-and-learns. More details can be found in the CoP section of this report.

The cross-boundary scholarship is clear in the funding received by CBE research teams. Population Health Initiative funding was awarded to multiple CBE projects in FY23, with many teams involved in collaboration with other colleges and disciplines on campus. Additionally, ongoing collaborations with other departments and centers such as CSDE also facilitate CBE research.

Throughout these engagements across units, the university, and beyond, we prioritized the elevation of interdisciplinary and community-engaged scholarship. We also work to uplift collaboration in all mention of CBE research, all research-related events, and all RFPs and proposal efforts for which CBE leads or provides input.

2.c. Equity, Diversity, and Inclusion (EDI) Lens

The CBE-OR takes multiple actions through an EDI lens, but there is always an opportunity to do better in this space. For example, research EDI resources are shared as an item in the bi-weekly research newsletter shared with the CBE research listserv via email.

For the CBE internal grant awards, EDI was an explicit evaluation criterion in award assessment for the Inspire Fund and the Research Restart Fund. Two of the four February 2022 Research Restart awardees explicitly addressed EDI topics in their proposals, and all of the November 2022 Research Restart awardees addressed EDI in their proposals. The Inspire Fund supports community-engaged scholarship that addresses EDI topics; all 5 of the February 2022 Inspire Awardees discuss EDI-related topics, with 3 of the awardees explicitly discussing EDI impacts in their funding applications.

Applied Research Consortium addresses EDI through an explicit intercultural curriculum for both the students and the participating consortium members. This program elevates students of color in embedded internships in industry settings.

A goal for FY24 is to further monitor the exposure and "air-time" individuals and projects are offered in spaces to share their work. Sharing and distributing those opportunities with an EDI lens will continue to work toward that goal. Additionally, CBE-OR will continue to support the promotion and other academic resources and support available to those who need it, approaching this work with an EDI lens as well.

2.d. Continual Improvement Lens

Throughout FY23 we continued to work to improve our services and our approaches. For example, CBE-OR took the lead in developing the P&P process, which will increase transparency, equity, accountability, and efficiency for research as well as other activities. Over 15 new policies were drafted in FY23, and CBE-OR hopes to have at least half of those reviewed and published within FY24.

An additional goal is to improve the functionality and effectiveness of our internal and external communications; a new project called the "publications project" aims to automate more of the portal process regarding publications and research products. Finally, the CBE internal research bi-weekly newsletter could be more effectively shared through an online website or bulletin posting, which is an opportunity to improve the existing communications process.

2.e. Strategy and Infrastructure

By the end of FY23, measurable advancements were made to support research infrastructure within CBE. Four individuals were hired to support CBE-OR operations. A Research Administrator, a Grants Manager, and a Fiscal Specialist were hired in the Finance and Administration Office, while a new Administrative Specialist was hired for the CBE Office of Research in FY23. With a larger team to support CBE-OR operations, this will allow for more agile progress and adaptation to ongoing goals and project work.

In partnership with the Associate Dean for Research (ADR) Carrie Sturts Dossick and the CBE-OR Administrative Specialist, the Research Administrator has begun the process of developing P&P resources for CBE-OR. This will evolve towards a webpage on the CBE website/intranet that will be developed through FY24 as the UW Financial Transformation rolls out.

2.f. Evaluation and Metrics

Reports were pulled for FY23 evaluation and metrics. Reports consisted of marketing and communications reports regarding news stories and features, advancement reports regarding financial gifts in support of research, and grants and contracts reports summarizing totals regarding funding and grant applications applied for and received.

2.g. Professional Development

ADR Dossick conducted a range of mentorship and professional development activities throughout FY23. ADR Dossick maintains office hours throughout the year to allow for access and visibility when support is needed. ADR met with CBE faculty and staff for a total of over 22

hours during FY23. Meeting topics included general onboarding and introduction to CBE-OR support, guidance for grant application planning and submission, along with grant management.

2.h. Centers and Labs Oversight

CBE-OR continues to provide support and oversight for Centers and Labs. Although budgeting and human resources oversight is conducted by Centers and Labs department Chairs, the CBE-OR team has the opportunity to provide other kinds of support. In strategic planning for FY24, the possibility of creating resources and frameworks to support the department Chairs and leadership in this role with specific mentorship and leadership training for Centers and Labs staff and participants was discussed. Providing a set of centralized resources will be explored further so that all Centers and Labs within CBE will have access to the same complete set of resources as they are developed. This may include mentorship and coaching resources, as well as resources dedicated to searching for securing funding. Additionally, CBE-OR is working to support Centers and Labs in securing the space and facilities that are needed to support their full range of work. This includes the possibility of developing shared workspaces in FY24 to allow for maximum collaboration while still providing the technical resources needed by each team.

2.i. Communities of Practice (CoP)

CBE-OR supports topic-based and role-based communities of practice (CoPs). Topic-based CoPs include Climate Solutions, Technology, and Humanities, Histories, & Futures. Role-based CoPs include research leaders, staff who do research, and students who do research.

The Climate Solutions CoP hosted research lunch & learns, sharing various stages of research projects including progress and outcomes. The lunch & learns was open to anyone in CBE or the University of Washington. The May 2023 Climate Solutions meeting focused on a panel discussing connecting teaching and research. This session was very well attended by faculty and students from multiple departments in CBE, especially faculty who were teaching studio courses that integrated climate solutions from research into teaching. Christine Bae was the moderator of the session, and the following faculty and students were able to participate and represent their studios and projects.

- Architecture Research Studio: Mass Timber Research Studio: Designing for low emissions: Chris Meek & student Bryce Boho
- BE Studio: Near Future Circular City: Envisioning Seattle's South Park as an environmentally just neighborhood: Catherine De Almeida, Gundula Proksch & Natalie Gregorius
- URBDP Studio: Connecting climate change and Snohomish comprehensive plan: Students Maren Grunnet & Caroline Passalacqua

2.j. Internal Grants

CBE administered four internal grants in FY23. The Johnston-Hastings Research Travel Award; the Johnston-Hastings Research Publication Award; two cycles of the CBE Research Restart Fund, and the CBE Inspire Fund.

Research Restart Fund
Two cycles of the Research Restart Fund were awarded in 2022.

Four awards were distributed in July 2022. Details about these projects are below.

1. Ann Huppert used a portion of her award for course buy-out offset, and the other portion of the award for general research support towards her book (highlighted below in the Johnston-Hastings Travel Award section).
2. Ken Yocom and Branden Born were awarded funds to work with the City of Seattle but ended up not using the funds as the matching funds did not materialize.
3. Arthur Acolin received a no-cost extension through the end of 2023 due to delays in implementing the survey for the project. In July 2023, the project had completed the design of the survey instrument and postcards and was working with UW Creative Communication for printing and mailing support.
4. Vikram Prakash used this funding for his book project (see the Johnston-Hastings Publication Award below for more details).

In a second award cycle, an additional four Research Restart projects received funding, detailed below. Products from these awardees are expected in Fall 2023.
November 2022 Awardees:
1. Manish Chalana
2. Elizabeth Golden
3. Jeff Hou
4. Kathryn Rogers Merlino

Notably, Manish Chalana received the research funding to start his work which led to his receiving a Fulbright award. Manish will travel to India in Fall 2024 beginning the Fulbright project.

Johnston-Hastings Research Travel Award
The Annual Year 2021-2022 Professor Ann Huppert (Architecture) received the Johnston-Hastings Research Travel Endowed Award.

Professor Huppert was awarded a two-month Senior Research Fellowship at the Center for Advanced Study in the Visual Arts, National Gallery of Art, in Washington, D.C. for September and October 2022 for research on a chapter of her book, *Building Knowledge: The Culture of Construction in Sixteenth-Century Rome.* The Johnston-Hastings Research Travel award augmented the fellowship support Professor Huppert received from the National Gallery, covering airfare and per diem expenses.
While in D.C., Professor Huppert conducted research work, including assessing primary source material and utilizing library materials, to complete a preliminary draft of the book chapter on the construction history of the Palazzo Farnese. A report of Professor Huppert's work is available as part of the 43rd annual report of research reports and record of activities of The Center. Professor Huppert is continuing work on the book, including an upcoming Research Restart Award-funded trip to Rome summer of 2023.

The Annual Year 2022-2023 Johnston-Hastings Research Travel Award was awarded to Robert Hutchison, an affiliate professor in the Architecture department. Professor Hutchison's work will be summarized in the FY24 CBE-OR report.

Johnston-Hastings Research Publication Award
The Annual Year 2021-2022 recipient of the Johnston-Hastings Research Publication Award was Professor Vikram Prakash. The funds from the Johnston-Hastings Research Publications award were used to support work on the now-published book "A House Deconstructed" [Available here:
https://www.amazon.com/House-Deconstructed-Mark-Jarzombek/dp/1638400520 .]

Inspire Fund
In FY23, 2 cycles of the Inspire Fund were awarded. The purpose of the Inspire Fund is to support research activities for which a relatively small amount of support can be transformative. This may include work that is traditionally underfunded, or that done by scholars who are members of groups currently underrepresented in our college.

The February 2022 Awardees and their projects are described below, including reports received discussing their project progress and products.
1. "Defining the New Diaspora: Where Seattle's Black Church Congregants Are Moving and Why": Rachel Berney, Donald King, Branden Born
    a. This funding was used to hire a graduate student to help do a literature/local resource search, assist faculty with the development of an interview protocol and participant selection process, and file for IRB approval. Through Donald King and pastors from four local churches, we sought participants for interviews. While the project team was successful in the literature review, interview protocol development, and IRB approval, they noted that they were unable to recruit any participants for the project through the churches. "We aren't exactly sure why this is—we believe that due to the multiple requests on the congregations coming from the Nehemiah Project and beyond that the pastors may not have highlighted the interview opportunities, even though we were paying $100 for participant's time. It's also possible that the congregants were informed and were not interested in participating." This funding gave the opportunity for the hired graduate student to learn these and practice new skills during this project work.
2. "Exploring Cross-Border and Cross-Cultural Community Development: Politics of the Possible": Branden Born
    a. With this funding, Professor Born spent a month in Oaxaca to work with Ollin staff and Dr. Nuñez Mendez on three focal topics:
        1. Planning the continuation of the annual International Assembly for Community Development, 2023 and beyond. These "asambleas" have brought together hundreds of people (about 100 each time) to discuss issues of cross-border (mostly US/Canada/Mexico) community concern. Plans for an assembly hosted in Washington are on hold due to visa backlog times and inconsistency/difficulty in obtaining visas.

2. Collect, as possible, data (recordings, photos, notes) from previous asambleas and community visits. Develop a publication strategy and timeline.
3. Develop new community relationships for cross-institution collaboration and exploration, and connect with old collaborators as allowed by varying post-COVID community protocols.

This funding made possible the opportunity for Professor Born to spend time on location working with co-researchers and community partners. The project team had been working together under a set of shared values and aspirations for years, and only recently begun to see the efforts coalesce into solid and growing activities like the assemblies, as well as the contributions from research about community governance and values in rural Mexico.

3. "Affordable Housing Book Project": Gregg Colburn, Rebecca Walter
   a. Funding for this project was used to hire Graduate Research Student Assistants during the Summer Quarter 2022 and 2023 (with approved carry-over to Summer 2023).
4. "Investigating the Health Requirements and Risk-Responsiveness Criteria in Office Building Codes for Mitigating COVID-19 and Future Airborne Diseases": Chris Lee, Sofia Dermisi, Heather Burpee, Novi Bramono
   a. This funding supported conducting: (a) a literature review from academic journal publications and guidelines from health and professional organizations such as WHO, ASHRAE, AIA, and IFMA using content analysis method, (b) interviews with the professionals, experts, and code officials from the city of Seattle and the State of Washington, and (c) developing a hypothesis for the risk-responsive criteria for building codes. The project team analyzed several factors relevant to the building code's risk responsiveness from the 18 guidelines and six journals published between 2020 to 2022. 8 factors were explored; space management, ventilation, air filtration, temperature and RH, monitoring indoor air quality, air disinfection, building operation compliance, and cleaning & disinfection management.

      Based on the literature review and interviews, the project team proposed the criteria for a risk-responsive building code as follows:
      i. *Risk-responsiveness factor*: building codes should address space management, ventilation, air filtration, temperature, relative humidity, air disinfection, operation compliance, and cleaning and disinfection management.
      ii. *Ease of enforcement*: building codes should consider the design could be easily monitored and enforced during operation. Several design requirements, such as air filtration level, ventilation rates, temperature and relative humidity, and prescriptive codes over performance-based, fall into this criteria.
5. "One Seattle: Leveraging Seattle's Comprehensive Plan Update to Advance Housing Diversity, Affordability, Livability, and Racial Equity": Rick Mohler

a. This funding supported products from the Architecture 594 research seminar and Architecture 508 design studio, which tasked students with exploring the potential to increase the quantity and diversity of housing options in five Seattle neighborhoods through the major update to Seattle's comprehensive plan with input from the OPCD representatives outlined above. The Inspire Fund allowed two students from the studio to work with the PI in producing an exhibit of the student work with the intention of engaging the public in the comprehensive planning process and helping them envision what new housing alternatives might look like and how they might lead to neighborhood change. The exhibit includes information on the comp plan update process and employs a graphic novel format to make the information accessible.

A second cohort of projects was awarded Inspire Funds in April 2023. These projects are mentioned below by title, however the products from these projects will be discussed in the FY24 CBE-OR Report.
1. "Affordable Housing Book Project": Gregg Colburn and Rebecca Walter
2. "Participatory Design as a Tool for Green Space Development in Amazonian Cities, Iquitos, Peru": Coco Alarcon and Ken Yocum
3. "Benjamin F. McAdoo Jr. Research Collective - II": Tyler Sprague
4. "Preliminary Case Study: Readiness of Our Regional Electrical Vehicle Infrastructure Under the Increasingly Volatile Climate": Lingzi Wu

Additional internal funding was received from different sources within the University of Washington.

Urban@UW awarded multiple research teams including CBE researchers funding, highlighted below:
- "Artificial Turf in Low-Income Neighborhoods: A Climate Resilient Urban Space?" Catherine De Almeida (September 2022)
- "Just Circular Communities: A Resiliency Framework to Support a Just Transition toward Regenerative Economies in Frontline Communities," Catherine De Almeida, Gundula Proksch, Nat Gregorius, Christoph Strouse (April 2023)

Population Health Initiative awarded the below funding:
- "Linking Climate Adaptation and Public Health Outcomes in Yavatmal, Maharashtra," Celina Balderas Guzmán, Sameer Shah*, Pronoy Rai* (May 2023)
- "Sustainable Materials for Structural Applications," Tomás Méndez Echenagucia, Kate Simonen, Eleftheria Roumeli* (May 2023)
- "Conduct Site Visits in Preparation for the Development of an Environmental Evaluation Framework for Community Land Trusts," Vince Wang, Dylan Stevenson, Sandy Bishop*, Jackie Keogh* (May 2023)
- "DecarbCityTwin: A Platform for Equitable Decarbonization of the Built Environment," Narjes Abbasabadi, Carrie Sturts Dossick, Kate Simonen, Christopher Meek, Daniel

Kirschen*, Mehdi Ashayeri*, Lylianna Allala*, Ani Krishnan*, Nicole Ballinger* (May 2023)
- "Incorporating Youth Perspectives to Improve Disaster Planning: Piloting Drone-Based Photovoice to Explore Cultural Assets," Matias Korfmacher, Daniel Abramson (May 2023)
*denotes individuals from other UW departments or colleges, or community partners

EarthLab also awarded funding to CBE researchers:
- "Cultivating Transdisciplinary Support for Equitable and Resilient-Floodplain solutions," Celina Balderas Guzmán, Dylan Stevenson (April 2023)

Campus Sustainability Fund awarded funding to CBE researchers:
- "Campus Sustainability Fund UW Energy, Information, and the New Work of Building Operations in the Digital Age," Carrie Sturts Dossick, Daniel Dimitrov (May 2023)

2.k. Internal Communications

CBE-OR continued the implementation of a bi-weekly newsletter through the CBE-research listserv. The newsletter includes highlights of CBE research; upcoming research meetings; updates from our office as well as, when appropriate, from CBE's Office of Finance and Administration; opportunities for conferences, awards, fellowships, funding, and competitions; and events related to the built environment disciplines. The newsletter also features a section highlighting DEI resources for research.

A future goal for FY24 will be to gauge and measure engagement with the newsletter distributed via the CBE-OR listserv using email read receipts and when posting the newsletter on a webpage, page engagement and metrics. This will be used to evaluate readability and reach, as well as adjust the frequency and method of newsletter delivery if appropriate.

CBE-OR also facilitates research presentations at the monthly All College Meetings. In the 6 All-College meetings during FY23, 8 researchers and their projects/teams were highlighted (including the Research Portal as a resource, and Carbon Leadership Forum as a project).
- Tomás Méndez Echenagucia (Architecture)
- Allison Hyatt (Carbon Leadership Forum)
- Rachel Berney (Urban Design & Planning)
- Dan Abramson (Urban Design & Planning), Julie Kriegh (Architecture), and Lynne Manzo (Landscape Architecture)
- Kate Simonen (Architecture), Carbon Leadership Forum
- Jeff Hou (Landscape Architecture)

In addition to the bi-weekly newsletter, and the All College Meetings, the CBE Intranet is used for internal research communications.

The research intranet pages include a live list of upcoming funding opportunities for CBE researchers to consider pursuing. This resource page received 282 views and had 147 users with an average of 1 minute, 58 seconds per user. Views per user was approximately 1.92.

Notably, in 2023, the development of a page for Policies & Procedures began on the Research intranet pages, to facilitate localized communication of resources to CBE researchers.

A goal for FY24 will be to measure page engagement for the policies and procedures pages on the CBE Intranet and implement additional strategies to point researchers toward these available resources.

Air-time tracking has been used to monitor who is receiving speaking opportunities or having their work featured during internal meetings. A goal of FY24 will be to review this process and adapt it to be more efficient and effective at tracking air-time in various settings.

2.l. External Communications

The Research Portal is the primary CBE-OR external communication platform. During FY23, 25 news stories were shared on the Research Portal highlighting work from CBE researchers. Additionally, 3 Spotlight Stories were published, which are larger-scale stories highlighting major contributions or achievements. "Plywood on steroids: CBE experiments with building materials for a sustainable future" (February 2023) received 405 views from 260 users, with an average engagement time of 1 minute and 12 seconds. "Don't take concrete for granite: the secret research life of CBE Department of Construction Management Assistant Professor and concrete materials researcher Fred Aguayo" (April 2023) received 393 views from 285 users, with an average engagement time of 1 minute and 42 seconds. Finally, "Architecture and Democracy: Unitarian Churches" (May 2023) received 5 views, from 3 users, with an average engagement time of 1 minute and 26 seconds.

An additional external communication benchmark of note is the high rate of participation CBE faculty and researchers had in the Lightning Talks sponsored by EarthLab and CLF which took place in Fall 2022.

Explained further in the section "3. Looking to Next Year 2023-2024," a goal of CBE-OR includes expanding the types of research products highlighted on the research portal to provide a comprehensive summary of products for external viewers.

Finally, the new "college at a glance" one-page report serves as an external communication summary of the operations and outcomes from CBE-OR in FY23 (the FY23 one-page report is the inaugural one-page report).

2.m. Research Events

CBE-OR hosted specific events for research faculty development, especially focused on mentorship in FY23.

ADR Dossick invited the Interim Chair of Industrial & Systems Engineering and Professor Cynthia Chen from the University of Washington Civil & Environmental Engineering to speak with 8 early-career faculty regarding the National Science Foundation (NSF) grant review process. The discussion allowed the faculty to ask questions of Professor Chen, a former NSF Program Director. Professor Chen provided advice on preparing and submitting applications and selecting the best program to submit an application to.

CBE-OR hosted two professional development-related research events. First, an NSF mock grant review panel. This panel facilitated a review of grant proposals for early-career CBE researchers, reviewed by 3 more senior CBE faculty researchers. Each application was read by all 3 reviewers, and 2 of those reviewers left detailed comments on the application in advance of the mock panel discussion.

Additionally, ADR Dossick hosted a discussion with 4 early-career CBE researchers sharing resources regarding the process of mentoring graduate students. ADR Dossick shared advice regarding mentoring all levels of students at the University of Washington, along with best practices on communication and facilitation throughout the mentorship process.

In FY24, CBE-OR hopes to host additional meetings and trainings for researchers, highlighting specific resources available within CBE for both grants and contracts support as well as career development and mentorship opportunities.

3. Looking to Next Year 2023-2024
CBE-OR has multiple goals for FY24. One goal for internal communications is to transition the bi-weekly research newsletter from its current email format into a website blog-style or bulletin format. Having a living blog-style format will allow researchers to easily search back through previous content and resources shared in the newsletter.

Another goal is to improve the research portal updating process, including automating some of the ways publications and products are added to the portal. By refining the approach for sharing publications and other research products on the research portal, this will increase the amount of content shared, and reduce the time and staffing needed to manage this process in its current format.

Other goals include expanding the types of metrics and evaluations included in this report. This may include exploring new tools and especially EDI-focused methods for metrics and evaluation. This could relate to teaching load and research funding from an equity lens and, measuring student and faculty service learning and civic engagement within the community.