

WASHINGTON



2017

January 2017 - 2020

Form BID teams

Themes 2,4

What happened:

- The dedicated BID staff at both the HEI and ISE enroll active and potential principal investigators (PIs) in BID teams, explaining what resources are available to participants.

2017 - 2020

Institutionalize specific BID tools

Themes 2,4

What happened:

- Based on themes that arose in work with multiple HEI researchers, the ISE-HEI BID team recommends that Portal to the Public workshops be written into all HEI REU proposals as well as into most other NSF proposals.
- Boilerplate language is offered to PIs to include in their proposals. Multiple summer camps co-developed by HEI researchers and the ISE becomes annual events.

Spring 2017

Proposal development opportunities for researchers

Themes 2,4

What happened:

- The HEI staffer developed and offered, with the ISE staffer's help, a series of 8 proposal development workshops for National Science Foundation (NSF) CAREER proposers.
 - NSF CAREER proposal development workshop series guided participants to write and submit an NSF CAREER proposal.
 - 1) guidance for enhancing the competitiveness of each part of the proposal, 2) specific writing tasks to be completed between meetings, and 3) peer-review and feedback on proposal sections.
- As part of participating in these sessions, the researcher could work with the BID team to create a customized BI plan for their proposal.

Summer 2017

Expand HEI-ISE partnership activities

Themes 2,4

What happened:

- BID team staffers and others from the ISI and HEI partner to offer grade 5-10 summer camps in computer science, cybersecurity, and crowd research in collaboration with HEI researchers who are potential BID PIs.
- These summer camp collaborations further cement the relationship between the HEI and ISE, create opportunities for potential PIs to use these activities as part of their BI plan in proposals, and demonstrate an authentic partnership to proposal reviewers.

2018

February 2018 - 2019

Develop customized BID tools

Themes 2,4

What happened:

- After meeting with each PI and eliciting their preferences, time, budget, and abilities, the ISE staffer creates a BI menu, customized to each PI, with cost estimates for the ISE to engage in each item.
- The PI can choose from among these menu items based on time, budget, and project focus. The HEI and ISE staffers create a boilerplate language for each PI to customize for use in each proposal they submit.

Spring 2018

Offer proposal development opportunities for researchers

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June 2018

Execute NSF-funded BI activities

Themes 2,4

What happened:

- As proposals are funded, the HEI and ISE staffers collaborate to deliver Portal to the Public Workshops to REU PIs
- Four NSF CAREER awards were funded. BI activities are in various stages of execution.
 - All collaborations between the HEI and the ISE have been paused due to COVID-19. The ISE has closed, and work at the HEI has moved to virtual platforms.

October 2018 - 2020

Leverage BID tools for PI career advancement

Themes 2,4

What happened:

- The HEI staffer talks to Deans and faculty departments about the BID tool called Broader Impact Identity (we called it BI Legacy).
- The HEI staffer promotes the BI Legacy (Identity) Narrative as a companion to a researcher's research agenda and suggests its usefulness in promotion and tenure dossiers.
- Deans indicate their support and BI work is making its way through the appropriate channels to be recognized and considered in promotion and tenure committees (Oct 2018 and ongoing with little progress at present).
- Broader Impact Legacy (Identity) Workshops are offered to faculty with support from multiple Deans at HEI.

2019

2019

BI position at HEI reduced, then discontinued

Themes 2,4

What happened:

- New leadership at the HEI released a new strategic plan with new priorities.
- Decision was made to reduce, then eliminate the dedicated BI position at UWB.
 - The position was funded at half time for 2019, then eliminated in 2020.
 - The ISE staffer moved to a new position within the organization. No one replaced them in that role for the ISE. The HEI staff person relied on their existing relationships to continue communications between the two institutions.

June 2019

COVID-19 suspends HEI-ISE partnership

Themes 2,4

What happened:

- The ISE closed and operations at the HEI moved to online platforms as a result COVID-19.
- Both institutions have expressed their desire to resume collaborations when possible.

- The responsibility for the relationship has been passed to a HEI leader in the Office of Research and an executive in the ISE.

NEW YORK



2017

October 2017

Hire dedicated staff

Theme 4

- Sciencenter and Cornell's staff create a new BID position at Cornell's Office of Sponsored Programs (OSP): this is a new and strategic location for this position.
- Broader Impacts Design (BID) Manager is hired at Cornell and BID duties added to position description at Sciencenter. Collaborative work is embedded into the positions.

November 2017 - Spring 2018

Higher Education Institutions (HEI) Broader Impacts Landscape Assessment

Themes 2, 4

- BID Manager conducts interviews and self-guided research on BI resources, infrastructure, and organizational models at 30 peer HEI institutions and Cornell, to establish a baseline for common HEI practices of BI support.
- Interview early adopting BID faculty to get their early feedback on BID team processes and supports.
- Meetings with Grant and Contract Officers (GCO) and other program administrators at Cornell to discover what they already knew and what they wanted to know about BI opportunities and resources.
- BID Manager establishes a role as a BI resource/network builder within Cornell's Office of Sponsored Program and other campus units.

November 2017- Summer 2018

HEI and ISE co-develop partnership tools

Theme 2

- Co-developed internal tools to streamline BID work within partnership/across institutions.
- Co-created Google Drive database for shared documentation.
- Co-developed tools for National BID projects based on what was successful here.

2018

April 2018

Portal to the Public for early-adopting BID faculty and their labs

Themes 2,4

- OSP and Sciencenter staff lead workshops for researchers and their labs; the workshop was integrated into researchers' undergraduate and graduate-level courses.

May 2018

OSP Workshop for faculty

Themes 2,3

- OSP annual National Science Foundation and NSF CAREER Funding Workshop
- BID Manager had very limited involvement in these workshops in year 1, Sciencenter invited to speak on a CAREER panel.

Fall 2018

Revisit mapping of the system one year in

Themes 3,5

- A better understanding of how this project fits into our institutions.
- In-person meetings proved very beneficial and decided to continue monthly.
- Power dynamics emerged in the partnerships; learning to negotiate individual and partner priorities.
- BID team views ourselves as experts within the field; ready to share what we've learned with our communities.
- See opportunities to elevate the quality of BI programs for everyone.

November - December 2018

SE Staff Turnover at Sciencenter

Theme 4

- The learning curve for new staff in a BID role, no overlap for training; shared documentation helped create a smooth, fast transition.
- Work again to quickly build new relationships within the partnership.

2019

February - June 2019

BID Manager is Integrated into a Variety of Faculty Development Initiatives at Cornell

Themes 2,3

February 21, 2019

OSP Roundtable

- BID Manager is seen as an expert within OSP, BID project integrated within OSP.

March 4, 2019

Engaged Cornell workshop

- First attempt to co-develop a workshop with another group on campus.
- Unsuccessful because we relied on their recruitment and advertising, which resulted in zero PIs attending.
- The realization that our team could and should take ownership of these workshops.

May 16, 2019

CAREER BI Identity Workshop

- Led by BID Manager with support from ISE. The starting point for many. faculty who now see BID Manager as an important resource.
- Sciencenter increased its role as a resource for researchers interested in BI.

March 27, 2019

CAREER Panel

- BID Manager more involved in planning, learned from previous year.
- BID has been seen as an important part of the CAREER workshop.
- Sciencenter Director and a PI who worked with us are panelists to highlight the partnership.

March 8, 2019

K-12 Outreach Lunch: Connecting to a potential local BI ecosystem

Themes 3,5

- Assessing the landscape of BI activities within Cornell outreach organizations.
- Realization of what we might be able to bring to a broader community.
- Showing up so we can be seen as part of the BI community on campus.

May 28, 2019

ISE Portal to the Public Expansion

Themes 1,2

- Portal to the Public included with subaward for partners.
- Extended invitations to members of other labs to participate.
- Realization of expertise in BI for Sciencenter.

September 5, 2019

ISE Empowered to Declined BI work with Researchers that are Not a Good Fit

Theme 3

September 2019

New Online NSF BI Resources Developed and Posted on Cornell OSP website

Theme 4

- Tools and resources developed through partnership now available on OSP website for faculty.
- Accessible to faculty across campus.

October 16, 2019

Community Partner Workshops

Themes 1-5 (link to themes, not one specifically)

- Including the broader community in BI projects has resulted in the planning of a series of workshops for informal science institutions.
- Pilot workshop planned with a diverse group of community organizations that we have established relationships with to assess the needs of the community.
- Conceived and co-developed by BID team members.

- We view ourselves as experts within the field who have valuable knowledge and resources that we can share with the community to elevate the quality of BI for everyone.

2020

January - May 2020

Changes to Cornell's NSF CAREER Workshop

Themes 4,5

- Single Event to a Semester Long Series
- BID Manager more fully integrated into Faculty Development efforts at OSP, and a new NSF CAREER series is launched which takes place over 6 months and includes a number of campus BI resources and community partners.

May 2020

Community ISE Partnerships & Broader Impacts Forum

Themes 4, 5

- BID Manager created a new program within NSF CAREER series and over 80 Cornell faculty, and 10 ISE units on campus and in the community participated in a community-wide forum for Broader Impacts Design, Broadening Participation in STEM, Partnership Practices, Evaluation, and Resources.

October 2020

BID Manager Role Moves toward Institutionalization

Theme 5

- BID Manager services and expertise are integrated into OSP Research Concierge program, and OSP Director looks for ways to make the staff position permanent during the COVID pandemic.
- A new, temporary position is secured for January 2021. Temporary nature due to COVID uncertainty. The aim is to make the position full-time permanent.

November 2020 - Jan 2021

Institutional Broader Impacts Visioning Statement Co-Created

Themes 4,5

- A Broader Impacts visioning document is developed by OSP and Cornell's OEI (Office of Engagement Initiatives) to support a larger campus-wide initiative for faculty development in broader impact activities.
- OSP and OEI leadership are in conversation to jointly develop infrastructure and a new BID Manager position, to serve both campus units (and potentially be jointly supported) by Vice Provost for Research and Vice Provost for Engagement and Land Grant Affairs.

WISCONSIN



2017

Pre-existing - 2020

Campus community training in BI

Theme 4

What happened:

- 1st generation of Wisconsin Idea STEM Fellows program, this initial implementation of the Portal to the Public at UW-Madison to support public engagement.

Pre-existing - 2020

Faculty training in BI

Theme 4

What happened:

- NSF Career program workshop is an annual workshop for faculty anticipating submitting a CAREER proposal to NSF. The 3–4-hour workshop gives an overview of NSF and the BI criterion. Activities include preliminary visioning of BI plans, budgets, and partnering opportunities.
- Follow up with individual consultations are the normal outcomes of the workshop.

Pre-existing - 2020

Graduate student training in BI

Theme 4

What happened:

- NSF Graduate Research Fellowship Program workshop is an annual workshop for graduate students anticipating submitting a GRFP proposal to NSF. The 3–4-hour workshop gives an overview of NSF and the BI criterion. Activities include preliminary visioning of BI plans, budgets, and partnering opportunities.
- Follow up with individual consultations are the normal outcomes of the workshop.

2018

January 2018 - 2020

Campus community training in BI

Theme 4

What happened:

- Deep revisions and alignment of Impact Identity for the Wisconsin Idea STEM Fellows program, this program is a local UW-Madison version of the Portal to the Public program with workshops, development of an interactive exploration station, and participation in 3 outreach events.
- Cohorts of about 15 are organized every 3-4 months.

January 2018

Build sessions - post STEM Fellows

Themes 2,4, and 5

What happened:

- STEM Fellows is a program described previously. These build sessions facilitate prototyping development of outreach activities for individuals and labs.

February 2018 - Fall 2018

BI Sharing

Theme 4

What happened:

- Website development, broaderimpacts.wisc.edu, is a resource-focused website for campus researchers on Broader Impact.
- Sections include Understanding Broader Impacts, Broader Impacts Planning Step by Step, Partners and Programs for Broader Impacts, Wisconsin Idea STEM Fellows, Contact & About, and Latest BI News

February 2018

Information sharing with central campus Administration

Themes 4,5

What happened:

- Sharing about BID resources, events, and support for PIs.
- Informing campus leadership in Office for Vice Chancellor for Research and Graduate Education of BID grant.
- The OVCRGE had oversight with both CAREER and GRFP workshops.

March 2018

Share BID Initiative with senior college research administrators

Themes 4,5

What happened:

- Information sharing about BID with the research office in the College of Engineering led to many (est. 25) referrals to BID for grant consultations on Broader Impacts.

April 2018 - 2020

BI Communication

Theme 4

What happened:

- Information sharing with central campus Administration about BID resources, events, and support for PIs
- Informing campus leadership in Office for Vice Chancellor for Research and Graduate Education of BID grant.
 - The OVCRGE (Office for Vice Chancellor for Research and Graduate Education) had oversight with both CAREER and GRFP workshops.

April 2018

BI Promotion

Theme 4

What happened:

- Information sharing about BID with the research office in the College of Engineering led to many (est. 25) referrals to BID for grant consultations on Broader Impacts.

April 2018

Share BID Initiative with campus front line outreach community members

Themes 4,5

What happened:

- Networking on campus with groups such as our Science Alliance network of science outreaches enabled BID to integrate its activities with ongoing and existing programs.

May 2018

Online consulting with PIs

Theme 4

What happened:

- Consulting with individual PIs serves to meet the demands of campus PIs and to serve as a resource for NSF grants being submitted for funding.

August 2018

WISCIENCE STEM Immersion program collaboration

Theme 5

What happened:

- WISCIENCE STEM Immersion program collaboration, this was a lunch in August 2018 with 35 incoming URM Undergraduates self-identifying as future STEM majors.
- The lunch introduced the students to UW-Madison graduate students with the intent to begin establishing possible mentor/mentee relationships.
- No follow-up was organized so program intent failed.

September 2018

National Advancing Research Impacts in Society Center

Theme 5

What happened:

- The evolution of NABI into the ARIS Center afforded many opportunities for BID to engage with new partners on the national level.
- The BID project and ARIS Center adds much clout to BI presentations on campus.

December 2018

Launch of Illuminating Discovery Hub

Themes 4,5

What happened:

- Illuminating Discovery Hub, this new organizational structure in the Wisconsin Institutes for Discovery building gave the BID project both a physical presence in the WID building as well as a programmatic home of many of its programs.
- The BID project role will be defined as the Hub's activities evolve.

2019

February 2019

Web revisions

Theme -

What happened:

- Website maintenance and updating, broaderimpacts.wisc.edu, is a resource-focused website for campus researchers on Broader Impact.
- Sections include
 - Understanding Broader Impacts
 - Broader Impacts Planning Step by Step
 - Partners and Programs for Broader Impacts
 - Wisconsin Idea STEM Fellows
 - Contact & About
 - Latest BI News
- Completed

May 2019

STEM for All Multiplex video production

Themes 4,5

What happened:

- The 2019 video project that we submitted was produced by Travis Tangen with assistance by our intern. Our video snapshot features the connections and case studies of how this more comprehensive Broader impacts Design process supports researchers' participation in designing and implementing Broader Impacts plans.
- The AAAS video allowed us to capture our BI story and can be used to continue the promotion of our BI work both on campus and beyond.

June 2019

National sharing of BID project, NSELA SLI

Themes 1,5

What happened:

- The BID project and some of its materials and activities were presented at the National Science Education Leadership Association (NSELA) Summer Leadership Institute (SLI).

August 2019

STEM Fellows in person

Themes 4,5

What happened:

- Wisconsin Idea STEM Fellows program, this program is a local UW-Madison version of the Portal to the Public program with requirements of 2 four-hour workshops, development of an interactive exploration station, and participation in 3 outreach events.
- Cohorts of about 15 are organized every 3-4 months.

September 2019

BI Consultations (AISL, etc.)

Themes 4,5

What happened:

- UW-Madison is consistently a top 10 recipient of NSF funding.
- This effort expands the network of individual consultations in numerous NSF Directorates and improves the BI plans in these submissions.

October 2019

GRFP workshop

Themes 4,5

What happened:

- NSF Graduate Research Fellowship Program (Graduate Research Fellowship Program) workshop is an annual workshop for graduate students anticipating submitting a GRFP proposal to NSF. The 3-4-hour workshop gives an overview of NSF and the BI criterion. Activities include preliminary visioning of BI plans, budgets, and partnering opportunities.
- Follow up with individual consultations are the normal outcomes of the workshop.
- *This program has run annually since 2017*

2020

January 2020

STEM Fellows in person

Themes 4,5

What happened:

- Wisconsin Idea STEM Fellows program, this program is a local UW-Madison version of the Portal to the Public program with requirements of 2 four-hour workshops, development of an interactive exploration station, and participation in 3 outreach events.
- Cohorts of about 15 are organized every 3-4 months.
- For PIs interested in working with local governments.

May 2020

Online NSF CAREER workshop

Theme 4

What happened:

- The annual CAREER workshop meets the needs of many junior faculty as they prepare their CAREER submission. The workshop covers basic BI 101 ideas and connects many PIs with campus and community resources that can improve their BI plans.
- *This program has run annually since 2017*

May 2020

ARIS Summit Session with new campus partner

Theme 5

What happened:

- Many campus individuals are unaware of many resources that serve our greater Madison and Wisconsin communities.
- This presentation is an example of a new office, University Alliance, on campus that partners with local governments to solve pressing community problems. It could offer BI opportunities.

June 2020

Infographic Development

Theme 4

What happened:

- Development of BI resources on website
 - Website resources have become even more important in these times of distance and virtual activities. Numerous resources have been modified to be more useful in these unusual times of professional development.

August 2020

Development of new self-guided BI workshop tools

Theme 4

What happened:

- The BI tools development creates sustainable UW-Madison resources that are accessible to all of campus.

September 2020

BI Consultations (AISL, etc.)

Themes 4,5

What happened:

- UW-Madison is consistently a top 10 recipient of NSF funding.
- This effort expands the network of individual consultations in numerous NSF Directorates and improves the BI plans in these submissions.

October 2020

Online GRFP workshop

Theme 5

What happened:

- With new resources from the NSF CAREER online workshop
- UW-Madison submits a large number of GRFP proposals, and our resources serve to introduce graduate students to BI, connect them with campus outreach and community engagement professionals, and improve their BI plans for their GRFP proposals.
- *This program has run annually since 2017*

November 2020

Test of WI Idea STEM Fellows session on creating online videos/intros

Theme 4

What happened:

November 2020

Impact Identity self-guide for BI planning with faculty videos

Theme 4

What happened:

- The Impact Identity activity has oftentimes proven to be extremely impactful for PIs to identify their interests in Broader Impacts activities and audiences. This planning resource is useful for asynchronous activities with BI Impact Identity.

December 2020

Model of online BI development - Speciation Cards

Theme 1

What happened:

- Evolution outreach for BI is a challenging research area.
- This long-term partnership with a lab of about 10 graduate students, post-docs, and research staff is an example of how a BI project can expand from the PI to an entire lab group.