Since the first Understanding Interventions (UI) conference in 2007, we have been working to create a professional community bound by a unity of purpose: the development and implementation of informed approaches to the training of the next generation of diverse scientists. This requires the exchange of knowledge across boundaries, with full appreciation for “difference” in disciplines, cultures, and language. To achieve this overarching goal, the UI community has been making the transition from a conference to a formal organization. We have begun the process of transforming the website from primarily serving as a vehicle for conference announcements to a portal that will expand to providing ongoing resources for our communities of interventions scholarship and practice, as well as a conduit for social and professional engagement. We are not fully there yet but this publication is a significant stride toward exchanging, codifying, and interacting to accelerate both understanding and intervention.

To fulfill community needs, we are building an online annotated database accessible through the UI website. This database will help the community disseminate valuable scholarly interventions data and best practices, with the goal of impacting the translation into practice. Key members of the UI community are spearheading and participating in this project, and we encourage your participation in various forms—offering citations to recent literature and commenting on reports and columns presented here.

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The 6th UI Conference Helps Fuel Research Interests

This report by Dr. Elisabeth Russell-McKenzie, ELJ Consulting, Bryn Mawr, PA, was submitted September 30, 2014. It summarizes the evaluation findings of the Sixth Annual Conference on Understanding Interventions That Broaden Participation in Research Careers. The conference was held in Baltimore, Maryland on May 16-18, 2014. The purpose of the evaluation is to provide information to the conference organizers, participants, and other stakeholders on ways to shape future conference programs. The conference was organized under the auspices of Long Island University with funding from a T36 grant awarded by the National Institute of General Medical Science, NIH. The full report will be posted at the UI website, www.understanding-interventions.org

Conference attendees represent four somewhat interrelated groups—program directors and staff involved in running intervention programs that broaden participation in research careers; researchers who use theory-driven approaches to understand underlying factors that shape the success of individuals in scientific careers; program evaluators who investigate the effectiveness of intervention programs; and officials from government agencies, non-profits and professional associations who support efforts to broaden the scientific workforce.

The conference featured plenary sessions with keynote speakers or panels devoted to broad topics and concurrent sessions devoted to some combination of programmed intervention, research, or evaluation topics.

The evaluation findings are based on four sources of information:

- Conference registration database containing basic demographic information on all conference attendees
- A Pre Conference survey that was administered online between May 9th and 16th, 2014, with a 69% response rate (n=145).
- Session surveys administered online at the end of each day and remained open for a subsequent 72 hours. Response rates varied between 41% and 59% of actual attendees.
- A Post Conference survey administered online between June 1st and July 15th, 2014, with a 49% response rate (n=101).  

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Current UI Projects in the Pipeline

There is a growing interest in the Understanding Interventions community. In a recent evaluation, more than half of the survey respondents indicated that they would search a database for articles, participate in focus groups near their geographic location, and participate in online discussion groups. Less interest lied in contributing written material for newsletters or website, or mentoring other participants.

Because of such a strong interest in the online database of intervention articles, UI announces the upcoming launch of its online Annotated Bibliography Project. The database will be available early to mid 2015.

Additionally, the UI website www.understanding-interventions.org is undergoing major revisions to include an area for UI Community Members only. This area will allow members to discuss relevant interventions topics and issues in an informal online environment, make others aware of innovative intervention practices, and post various professional development opportunities for others to consider.
Findings addressed here emphasize substantive issues of program content rather than logistical aspects that are elaborated in the full report.

Demographic description of conference pre-registrants: Conference pre-registrants were from 29 states, the District of Columbia, Puerto Rico and the US Virgin Islands. The life sciences and STEM education were the most frequently identified fields. Participants came mainly from institutions of higher education—about nine out of ten of survey respondents were affiliated with some type of university setting, representing over 113 at different institutions, and agencies (federal and private). Just under two thirds of the conference participants were first-time attendees.

Primary Focus in Broadening Participation in STEM/ Reasons for Attending Conference: Approximately half were involved (or wished to be) with research on the factors supporting underrepresented groups in the pursuit of research careers. Program evaluation, either conducting evaluations or having responsibility for demonstrating program outcomes, was the primary focus for 29% of respondents. Three-quarters of survey respondents indicated networking as a reason for attending the conference and about half commented on networking as one of the key outcomes of value.

Gap between perceptions of session content and respondents’ priorities: The largest gaps between what participants wanted and what they experienced concerned ways to measure the advancement of underrepresented students from an institutional perspective, translating research and theory into action, using data to strengthen interventions (predictability and retention), and funding issues. Topics requiring more attention were: translating research and theory into action (46%), using data to strengthen intervention (46%), ways to evaluate whether or not an intervention is effective (46%), and research findings regarding effective interventions (39%).

Networking: Attendees value the networking and social interaction opportunities, particularly networking to meet future collaborators. There was some support for establishing more formal mechanisms to meet different types of attendees. Suggestions include a chance to meet other people at the conference “in my position.”

The Poster Session: Organizationally it seems to work as a networking opportunity and is the right length. The posters enhance the amount of information participants got from the conference.

Overall assessment of the value of attendance at the 6th UI conference: Approximately 96% of the survey respondents agreed that the conference program was well organized, 97% agreed that attendance at the conference was worthwhile, and for 83% most of the information presented was new. The pre-conference organization was not as well received. Timing of Conference in May is not very convenient. Cost of registration is high for students (if they do not receive travel grant). The phone Guidebook App was too cumbersome. Better internet access could have solved the survey participation concern during the conference.

Going Forward: The conference met the expectations of nine out every ten respondents. More than half of the survey respondents indicated that they would search an Understanding Interventions database for articles, participate in focus groups near their geographic location, and participate in online discussion groups. They were least likely to contribute written material for newsletters or the website, or mentor other participants.
Identifying Common Ground—Interventions Community Transitions

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Other ways to assist include volunteering to organize a session at the annual conference, sharing UI website information with colleagues and students, and just providing email feedback on what “hits” and what “misses.” What do you find compelling, urgent, and deserving of more focused attention? Let us know.

What we are asking is reflected in some of the contents of this publication. Likewise, we need information from our members on UI-related events (regional or national), as well as on funding and training opportunities. Finally, the social networking and “discussion” sections of the website requires community participation, including how we can make this publication a source unlike others you consult. Finally, we have read your evaluations of the 6th UI Conference. Your help in proposing sessions, speakers, and formats will ensure that the 7th Conference will better serve your needs. To provide feedback, please email: info@understanding-interventions.org.

In short, we are listening. As we continue to identify common ground to make common cause, we crave your ideas, your energy, and your dedication. Thanks for your contributions to building the UI community.

Another Perspective on Mentoring

UI Co-chair, Daryl Chubin, has published an article in DiverseScholar titled, “A Generational Perspective on Mentoring.” He notes, “I am a social scientist by training, a policy scientist by experience, and a mentor by choice.”

Having worked for 40 years in universities, federal agencies, and nonprofit organizations, he offers five basic “ground rules” that emphasize reciprocity of investment in any mentoring relationship. The post can be found at:

The 7th Understanding Interventions Conference will be held May 15-17, 2015 The Westin San Diego in San Diego, CA.

While the conference will continue the dialogue among practitioners in behavioral/social science, education researchers, evaluators, and faculty in STEM fields, it will emphasize applications that work in various settings with diverse populations. Workshops, plenary and concurrent sessions, and posters will communicate effective strategies from successful STEM intervention programs, present results from empirical studies, and synthesize the translation of research findings into practice.

Graduate students are strongly encouraged to attend.

Travel grants are available.

For reports on five previous conferences and more information on the 2015 event, see http://understanding-interventions.org
Understanding Interventions held a satellite meeting at Savannah State University (SSU) during the summer of 2014. Program directors of NIH and NSF student training and professional development programs joined together to discuss common challenges that plague training programs across the nation, with a goal of coordinating a network to serve student research training. Discussions centered on ideas such as faculty perception of the training opportunities and programs, the lack of opportunities in science due to the paucity of grants, lack of student resilience, the disproportion in hiring of faculty of color, and the overlooked trend of students who work full time and have families. Do training programs prepare students for careers that don’t exist?

Meaningful relationships were fostered at SSU that will facilitate high impact practices across institutional training levels as well as developmental activities among the program directors. These campus leaders need to address research training and career development for students in the biomedical sciences. They agreed that the relationship between institutions must be symbiotic. Even visiting professorships should benefit faculty as well as students, presenting opportunities for postdocs to give seminars, and teaching students how to better navigate the scientific career system.

Dr. Sharon Milgram, Director of the NIH Office of Intramural Training and Education, presented opportunities for intramural training at the NIH. These opportunities aid in the development of scientific and professional skills for all NIH Intramural Research Program trainees at all levels. Her presentation identified key factors for trainee success, specifically the student’s level of preparation for research careers—confidence, commitment, academic preparation, and hands-on knowledge are all essential for student success. Additionally, Dr. Milgram stressed the importance of finding quality mentorship, and suggested "one size does not fit all" in research training.

In summary, three primary themes emerged from this meeting:

*Dance with No Music*—Where do Students Go after Training?
What should be the added value and outcomes of training? Should industry partnerships be examined more closely?

*Preparation and Admission*: How Important is K-12?
Just how competitive are graduating high school seniors for admission to college and application to jobs?

*Data and Information Exchange and Networking*
How do we measure value?

Understanding Interventions will hold other satellite meetings in 2015 to facilitate and encourage the assembly and association of scholars and practitioners engaged in interventions research, student training, and development programs. These meetings will help to disseminate and discuss current data and concerns about broadening participation in science careers, and create a greater awareness of the paucity of students of color pursuing successful science careers and its societal implications.
An Index of Change
Construction of the UI Annotated Database is Underway

The University of Michigan-based Diversity Research and Policy Program (DRPP), under the direction of Drs. Phillip J. Bowman and Angela Ebreo, is coordinating with the UI co-directors and a team of scholars from the UI community, to plan, design, and develop an annotated database. At this stage in the planning process, the vision is of an “organic” file that will be organized thematically by concept and contain in its annotation a definition/summary of what it is/means, followed by a list of sources (with full citations) that guides the reader seeking further information.

The idea is to compile, much like the index of a book or report, a glossary of key literature that is encompassed by the work of the UI community. The sources will be articles in refereed journals, government/think tank reports, and research and evaluation instruments that have been subjected to expert review and application. The database will be a resource with a vibrant, open-source supplemental component whereby contributions are continuously made from the UI growing community.

Notice of updated content will be posted at the UI website.

Available Soon:
The UI Annotated Database
To make contributions, email info@understanding-interventions.org