Preface

Since the first conference on Understanding Interventions that Broaden Participation in Science Careers was held in 2007, the Understanding Interventions community has been growing, diversifying, and broadening its purview. As the movement begins its tenth year, the community is entering a new era of expansion and outreach. As just one example, for the first time this year, the conference summary has been adapted for the web, with the summaries of individual sessions available from a hyperlinked agenda on the Understanding Interventions website.

As described in the preface of last year's conference report, the receipt of a major grant from the National Institute of General Medical Sciences of the National Institute of Health has made it possible to execute several actions that were years in the planning. Key among these is the evolution of the Understanding Interventions website (http://understanding-interventions.org) to a portal where members of the community can access a variety of resources to learn about new opportunities, build their professional expertise, and disseminate their work. We have assembled a hard-working team of researchers, technologists, and information specialists to develop the UI Index (which is described in Chapter 7 of this report). Sections of the UI Index already unveiled include searchable databases of (a) peer-reviewed literature from across the sciences on interventions to broaden participation in science careers, (b) journals that publish interventions research, (c) reports from major organizations related to the status of training and diversity in science, and (d) published work on evaluation measures related to interventions. Sections under development will provide searchable access to the Top 50 cited articles for a variety of topics related to Understanding Interventions. Planning has begun to bolster our capacity for real-time dissemination of Interventions research as well as evaluation and program development originating in the UI community.

The Understanding Interventions conference took place for the first time on the West coast -- in San Diego, California, on May 15-17, 2015 -- and attendance was the highest it has ever been at nearly 250 people. The conference schedule contained more talks than ever before, with more than 40 hours of presentations and discussions, and the break areas and poster sessions were thronged with people networking and building collaborations. The vitality of the UI community testifies to the wisdom behind the original intention of the conferences: to provide opportunities for researchers, practitioners, evaluators, and other experts to learn from each other and combine forces to study how interventions can be made more effective.

Of the attendees at the 2015 conference, 46 percent were college and university faculty, and about 60 percent of those were from STEM PhD-granting institutions. Almost two in five were academic non-faculty, mostly postdoctoral fellows, and 11 percent were graduate students. Nine percent were from federal agencies, and six percent were from professional societies and nonprofits. Of all the attendees, 57 percent were attending their first Understanding Interventions conference, the largest number of newcomers ever. One third were travel award recipients.

Because the conferences are built up largely from abstracts submitted by potential presenters, with specific themes suggested by the conference organizing committee, the

programs of the conferences and resulting summary reports differ from year to year. This year, the summaries of presentations fall into seven separate chapters.

Chapter 1: Opportunities to Increase Diversity

Chapter 2: Community Colleges

Chapter 3: Undergraduate Interventions

Chapter 4: Graduate and Career Interventions

Chapter 5: Mentoring and Coaching

Chapter 6: Gender-Based Interventions

Chapter 7: Tools for Interventions

For the first time this year, the conference summary also has been adapted for the web, with summaries and highlights of individual sessions available from a hyperlinked agenda on the Understanding Interventions website.

One of our favorite parts of the conference is the final plenary session, in which we invite participants to give us feedback on the conference and suggest ideas for future conferences. As usual, we received many excellent suggestions, including:

- Holding the conference in other parts of the country where it would attract new participants
- Conducting satellite meetings focused on particular themes such as mentoring, program dissemination, or training for program implementation and evaluation
- Using the UI website to discuss and agree on standards for collecting evaluation data
- Inviting teams from universities, perhaps with travel support, so that larger groups can be exposed to effective interventions
- Inviting more graduate students, postdocs, and junior faculty to the conference to provide additional perspectives on the issues discussed
- Inviting participants with expertise in marketing to help grow the community and disseminate its expertise
- Inviting reporters to help spread the ideas and stories discussed at conferences
- Making greater use of social media to involve more people in the community and disseminate ideas
- Providing experts from the Understanding Interventions community to speak at disciplinary society meetings or at institutions
- Devoting attention to the budgetary situation in research funding and education
- Further diversifying the disciplinary background of conference participants

The Understanding Interventions community still has tremendous room to grow. We would like to double the size of the conference -- to 500 participants or more. We also would like to increase corporate involvement, especially since many graduate students will be going into the for-profit world and not into academia. Broadening participation in science careers is an issue that affects many sectors of government, academia, industry, and the nonprofit world. All would benefit by becoming members of the Understanding Interventions movement.

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