

**U.S. Department of Health and Human Services  
National Institutes of Health (NIH)  
Office of the Director  
Division of Program Coordination, Planning, and Strategic Initiatives**

**Bridge to Artificial Intelligence (Bridge2AI) Module Microlab1  
June 14, 2021**

**Draft Summary  
Discussion Points, Highlights, and Action Items**

**I. Welcome**

Jocelyn Tejada, facilitator, Knowinnovation (KI), welcomed the attendees and provided an overview of the agenda. She explained that KI staff will facilitate the meeting and oversee the use of the associated technology platforms. She explained that the event is the second in the Bridge2AI Scientific Meetings series. Microlab 1 will explore the Teaming and Ethics modules. The remaining modules will be explored in Microlabs 2 and 3, and a Grand Challenge Team Building Expo will be held the following week.

Lanay M. Mudd, Ph.D., Program Director, Division of Extramural Research, National Center for Complementary and Integrative Health, also welcomed the attendees. She explained that the Microlabs are intended to help applicants think more deeply about the modules and to foster team building.

- Attendees will have the opportunity to meet other potential applicants and to form teams. The day's agenda will focus on meeting potential team members and collaborators. Each module will begin with an introduction and overview, followed by breakout sessions. An integration breakout session will explore the intersection of the modules.
- Attendees were provided links to the [Slack channel](#) and [KISTorm platform](#) that will be used for breakout sessions and networking. The Zoom platform will be used for the plenary presentations and breakout sessions.
- Support can be accessed through Zoom and Slack messaging. Additionally, KI support staff can be accessed via email.

**II. Teaming Module Breakout**

Dr. Mudd introduced the Teaming module breakout session. She reminded the attendees that Data Generation OT2 applications must include all six modules: Teaming, Ethics, Standards, Tools, Data Acquisition, and Skills and Workforce Development. She noted that the Teaming module will play a key role in facilitating interactions. The Teaming module's purpose is to enable interdisciplinary and inclusive team science within the data-generation project. The module includes promotion of diversity and coordination across all six modules to foster a team science approach.

The Teaming module should incorporate members with expertise in team science who possess experience in bringing diverse teams and large groups together. The Teaming module includes task integration (i.e., establishing a governing structure and common workflows across modules), relationship building and social integration (i.e., developing trust and a shared vision, sharing responsibilities, managing pressure points), team proposition (i.e., developing a process to involve diverse disciplines, demographics, and perspectives), and a plan for diverse perspectives (i.e., developing recruitment and

outreach strategies, planning activities to promote inclusivity). The Teaming module will be central to the success of the data-generation project.

- Discussion prompts for the breakout session include (1) identifying the greatest challenges for the Teaming module (e.g., philosophical, technical) and (2) engaging underrepresented communities.
- Attendees can access videos on the modules through KISstorm.
- The Bridge2AI Integration, Dissemination, and Evaluation (BRIDGE) Center U54 mechanism also includes a Teaming core.

### **III. Ethics Module Breakout**

Shurjo K. Sen, Ph.D., Program Director, Division of Genome Sciences, National Human Genome Research Institute, presented an overview of the Ethics module breakout session. He encouraged the attendees to consider connections between the modules. He stated that ethical considerations must serve as the foundation for research projects and emphasized that the purpose of the Ethics module is to establish and maintain ethical, legal, and social principles of using artificial intelligence (AI) and machine learning (ML) in biomedicine at the forefront of each data-generation project. This module is intended to instill a culture of ethical inquiry, rather than compliance. The Ethics module should incorporate expertise in ethical, legal, and social aspects of biomedical research; ideally, researchers should be poised at the intersection of these research topics within AI and ML.

- Discussion prompts for the breakout session are related to law, health disparities, health services and implementation, and technical considerations (e.g., algorithmic bias). Many other questions, however, can be explored.
- Psychology, sociology, and anthropology are also within scope for this module. The legal, judicial, and social contexts of AI and ML also should be considered.
- All projects should consider ethics in the context of the BRIDGE program's plan for enhancing diverse perspectives. The Skills and Workforce development module, in particular, is connected closely with the Ethics module.
- Ms. Tejada reminded the attendees to capture the key insights based on the discussion through KISstorm.

### **IV. Integration Breakout**

Dr. Mudd presented an overview of the integration breakout session. She reminded the attendees that the data-generation projects should include members with expertise in the different module areas. She instructed the attendees to consider the Teaming and Ethics module breakout sessions in the context of all six modules, with a goal of generating data sets centered on a biomedical or behavioral research Grand Challenge.

- The attendees were instructed to consider (1) advantages of or opportunities for including the Teaming and Ethics modules and (2) how the modules could interact with one another—from a practical perspective—for a data-generation project.

### **V. Upcoming Microlabs and Next Steps**

Ms. Tejada reminded the attendees of the upcoming Microlab sessions. The June 16 session will address Standards and Tools, and the June 18 session will address Data Acquisition and Skills and Workforce

Development. Microlabs 2 and 3 will be held in a similar format to Microlab 1. An Expo will be held on June 23. The attendees were reminded that they do not need to register for these meetings separately.

The attendees were invited to attend an informal networking session through the Wonder platform, which can be accessed through KISstorm. Ms. Tejada informed the attendees that networking opportunities are available through KISstorm; users can be filtered and identified by their expertise. She encouraged the attendees to initiate conversations through the Slack channel.

- Grace C.Y. Peng, Ph.D., Program Director, National Institute of Biomedical Imaging and Bioengineering, encouraged the attendees to think about approaches for incorporating diverse perspectives. She reiterated that attendees can find collaborators via the search function through KISstorm.
- Andy Burnett, Managing Director, KI, provided instructions for connecting with other participants through KISstorm and Slack. He demonstrated the filter function through the search tool, which can be used to find participants who possess, or are seeking, particular areas of expertise.
- Mr. Burnett noted that a technical glitch regarding selection has been detected and will be corrected by June 15. He reminded the attendees that they can seek support through the Slack channel and KI support email.
- Mr. Burnett clarified that KISstorm provides an online space for collaboration during events, and Slack is intended for continuous communication. The KI staff will guide attendees on appropriate use of KISstorm during events. He encouraged attendees to complete their profiles through KISstorm.

#### **Action Items**

- None