

## **Overall Structure of the Study Team**

This application leverages the expertise, infrastructure, and resources of a multidisciplinary team at Massachusetts General Hospital (MGH), within Massachusetts General Brigham (MGB). The team includes the Principal Investigator (PI), Co-Investigators (Co-Is), data and operations staff, and consultants. Administrative oversight and data coordination are managed centrally at MGH. Enrollment and participant-facing activities are conducted through the Memory Division at MGB and the Massachusetts Alzheimer's Disease Research Center (MADRC), with weekly check-in calls coordinated with Internet-based Conversational Engagement Clinical Trial (I-CONNECT) Foundation staff. No separate laboratory or testing center is planned for this feasibility study.

### **Principal Investigators and Co-Investigators**

**Dr. Junyuan Hong (Principal Investigator)** will lead all aspects of project implementation, including regulatory coordination, data management oversight, secure system operations, analysis planning, and dissemination activities. He will oversee Institutional Review Board (IRB) preparation, ensure secure and reliable conversational system operations, and coordinate integration across technical, statistical, and operational workstreams.

**Dr. Hiroko H. Dodge (Co-Investigator)** will guide adaptation of the I-CONNECT conversational protocol to ensure protocol fidelity and alignment with the target older-adult population. She will support study design, protocol implementation oversight, interpretation of feasibility findings, and manuscript development.

### **Data Analysis Team**

**Dr. Chao-Yi Wu (Co-Investigator)** will serve as the blinded lead statistician and will support analysis design, feasibility analyses, and reporting. She will also work on preparing manuscripts and disseminating the study results.

**Dr. Liu Chen (Data Manager)** will support the data analysis pipeline, including automated speech transcription for study conversations, language-feature extraction, and integration of remote assessment and satisfaction-survey workflows. He will also support the Research Electronic Data Capture (REDCap) data capture workflow and data preparation for analysis and dissemination. Liu will manage the hardware and software systems utilized for the project (i.e. creating a Redcap database platform, videophones, statistical software, data processing, and workflow processes), monitoring recruitment and quality-control data entry for all patient visits and generating a weekly report for recruitment, randomization and adverse events. He or she will manage the initial deployment, storage and maintenance, user access, training and technical troubleshooting. He or she will ensure data integrity, and appropriate and secure data storage. She will also work on preparing manuscripts and disseminating the study results.

### **Study Staff**

**Ms. Cathrine Young (Program Manager)** will oversee day-to-day operations, regulatory documentation, recruitment monitoring, and coordination across study personnel. She will supervise data operations and coordinate participant-support workflows with I-CONNECT Foundation staff.

**Study Coordinator (to be appointed)** will manage recruitment, screening, scheduling, assessment calls, participant reimbursement workflows, data entry, and coordination of weekly participant check-ins.

### **Significant Others**

**Dr. Zhangyang "Atlas" Wang** will advise on generative model design, technical feasibility, and system optimization for robustness and efficiency.

**Dr. Tianlong Chen** will advise on social-robot integration, hardware optimization, and hardware-aware artificial intelligence deployment.

**I-CONNECT Foundation Staff** will support weekly check-in calls and communication pathways for participant support and escalation when concerns arise.

The PI, Co-Is, and study staff will meet regularly to review recruitment, adherence, safety alerts, protocol compliance, and data quality. Operational decisions and action items will be documented by the central administrative team, and required reports will be submitted through institutional and sponsor reporting pathways.