Panel: Designing Studies for Feasibility Testing, Refinement and Validation of Digital Biomarkers

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SUMMARY

One of the most critical steps for digital biomarker research is the study design for feasibility testing, refinement, and validation of digital biomarkers. Any small to large-scale research studies/other practical explorations of various digital biomarkers requires the investigators to decide various study design parameters, such as characteristics of subject pool, recruitment technique, type of digital tools, the length of the study, the size of the dataset, modeling techniques and evaluation metric etc. Depending on the research question, these design parameters can significantly affect results and research outcomes. The focus of this panel will bring together researchers from academia, industry and medical sciences to facilitate a lively and stimulating discussion about various digital biomarker related user study design challenges and solutions. In this panel, we will have experts focusing on diverse digital biomarker related challenges including modeling psychological health with social media data, health sensing and intervention design with a mobile phone, and health tracking tool development with smartwatch etc.

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