The HCDI invites investigators to submit project proposals for application of novel platforms to either of two clinical challenges for consideration for funding in the Biomarkers Consortium precompetitive project model with a focus on identifying testable technical solutions, as yet not commercialized, on characterizing tumor heterogeneity:

1. Novel tissue imaging platforms to characterize tumor heterogeneity, tissue spatial connections/spatial heterogeneity. Particularly, given tumor heterogeneity, identify what is the minimal specimen required for assessment across multiple tumor types.

2. A blood-based or remote sensing technology that can be used to replace solid tumor biopsies and to understand cancer of unknown origin or tumor heterogeneity to enable meaningful clinical intervention opportunities.
Please keep the total project description to 2-3 pages in length (single spaced, 11 pt. font).

1. **Project Overview**
   
   1.1 Summary of the project including the clinical challenge to be addressed, technological approach, specific aims, and outcomes and deliverables.

2. **Project Scientific Design**
   
   2.1 Scientific strategy and the overall experimental plan include how the study design will address the project goals and objectives, as well as the definition of success given the stated aims, outcomes and deliverables.

   2.2 Describe the analytical technologies or assays platform(s) to be tested (note whether human or animal subjects will be involved in the project).

   2.3 Indicate the current status of the technology. Briefly outline the background and supporting data. Include information on where the technology sits on the development pipeline including validation status.

   2.4 Applicability - Describe why the technology would benefit clinical oncology as described under the clinical challenges and why this project is appropriate for the Biomarkers Consortium, the pre-competitive nature of the project, and how the project is novel.

3. **Timeline and Budget**
   
   3.1 Provide a high level timeline for the project (e.g., a short table), including each stage of the project if defined.

   3.2 Provide a high level budget (short table) including the budget for each project stage. Account for personnel, reagents and materials, equipment, any sample acquisition, and other requirements for work proposed.

   3.3 Note any existing funding relationships for this work.