The NIBIB’s DEBUT Challenge is open to teams of undergraduate students working on projects that develop innovative solutions to unmet health and clinical problems. NIBIB’s mission is to improve health by leading the development and accelerating the application of biomedical technologies. The goals of the challenge are 1) to provide undergraduate students valuable experiences such as working in teams, identifying unmet clinical needs, and designing, building and debugging solutions for such open-ended problems; 2) to generate novel, innovative tools to improve healthcare, consistent with NIBIB’s purpose to support research, training, the dissemination of health information, and other programs with respect to biomedical imaging and engineering and associated technologies and modalities with biomedical applications; and 3) to highlight and acknowledge the contributions and accomplishments of undergraduate students.

To participate in the challenge, a team of undergraduate students must identify an unmet health/clinical need, and design and build a biomedical technology/method that addresses it. Areas of interest for these design projects include, but are not limited to, diagnostics, therapeutics, technologies for underserved populations and low resource settings, point-of-care systems, precision medicine, preventive medicine and technologies to aid individuals with disabilities.