TMC Biodesign is bringing together highly talented innovators from various backgrounds to build solutions to healthcare’s greatest problems.

ABOUT
TMC Biodesign is a paid, one-year Fellowship program in Houston, TX, that brings together highly accomplished innovators from diverse backgrounds to create novel digital health and device solutions for healthcare’s greatest unmet needs. Our Fellows are provided unprecedented clinical access to the largest medical center in the world, making it possible to successfully pinpoint needs and develop new solutions with support from leading experts and resources at the Texas Medical Center.

DIGITAL HEALTH & DEVICES
By applying established biodesign principles to the development of cutting-edge solutions, TMC Biodesign will enable and train two teams of four innovators to create new technologies, effective business models, and novel applications that will reinvent the future of healthcare.

MEDICAL DEVICES FELLOWSHIP TEAM
The TMC Biodesign Medical Devices Team will have the opportunity to shadow doctors in a specific clinical focus area and use established biodesign principles to create novel point-of-care, minimally invasive devices or implants, clinical or surgical tools, and other innovative medical device solutions.

DIGITAL HEALTH FELLOWSHIP TEAM
TMC Biodesign’s Digital Health Team will be the first of its kind to focus exclusively on building digital health solutions. Our Fellows will build transformative solutions in mobile, web, cloud, data analytics, remote monitoring, sensing & wearables, population health management, EMR solutions, and telemedicine.

MENTORSHIP
TMC Biodesign Fellows will be creating their solutions in TMCx, a startup accelerator that provides a collaborative ecosystem and valuable mentorship community for some of the most promising healthcare startups. The TMC Biodesign program has an extraordinary network of leading experts, experienced entrepreneurs, and industry professionals that advise and mentor our Fellows throughout different stages of the program. The program allows fellows to take full advantage of the leading expertise, unique resources, and mentorship opportunities that only the TMC can provide.

APPLY
TMC Biodesign is looking for people with innate entrepreneurial and engineering skillsets to build solutions to some of healthcare’s greatest problems. Lively, out-of-the box thinkers who embrace change and share our passion for innovation and entrepreneurship are strong candidates for this Fellowship. Candidates with a background in medicine, biosciences, engineering, computer science, design, or business are highly encouraged to apply.

Apply online at tmcinnovation.org/apply
TMC BIODESIGN PROCESS

TMC Biodesign is designed to expose Fellows to the entire product development and entrepreneurial life cycle and foster their understanding of how innovations become viable ventures. Fellows go through three established stages in the Biodesign process – identify, invent, and implement.

IDENTIFY

The program begins with immersive clinical shadowing where the Fellows observe patients and healthcare professionals in a specified clinical setting. From their observations, the Fellows identify a variety of unmet needs and begin a process of needs screening that includes the exploration of current treatment options and analysis of stakeholders and possible market.

INVENT

After determining the greatest unmet need, the Fellows begin the concept generation and selection stage during which they utilize Biodesign principles to ideate and brainstorm a range of potential solutions. The Fellows prototype multiple designs and continuously iterate throughout this stage with the mentorship of experienced clinical and entrepreneurial advisors until the best possible solution is determined.

IMPLEMENT

The final weeks of the fellowship program are dedicated to development strategy and market integration. The Fellows develop R&D, Clinical, Regulatory, Quality, and Process Management strategies, as well as competitive advantage and business strategies during this phase. In addition, they focus on creating a successful business plan, steps necessary to apply and receive funding, licensing, and alternative pathways. Upon completion of the TMC Biodesign program, Fellows will be able to address common hurdles associated with the commercialization of new technology and understand how to cultivate innovative solutions into viable ventures.