BIOE 273, MED 273 Biodesign for Digital Health
Fall Quarter – Academic Year 2021/2022

Health care is facing significant cross-industry challenges and opportunities created by a number of factors including: the increasing need for improved access to affordable, high-quality care; growing demand from consumers for greater control of their health and health data; the shift in focus from "sick care" to prevention and health optimization; aging demographics and the increased burden of chronic conditions; and new emphasis on real-world, measurable health outcomes for individuals and populations. Moreover, the delivery of health information and services is no longer tied to traditional "brick and mortar" hospitals and clinics: it has increasingly become "digital," enabled by apps, sensors, wearables, and the cloud; simultaneously, it has been augmented and often revolutionized by emerging digital and information technologies, as well as by the data that these technologies generate. Government initiatives to implement electronic health records (HITECH Act, 2009), firm rules to dramatically expand data interoperability via APIs (21st Century Cures Act Information Blocking Final Rule, 2020), and increased reimbursement for remote monitoring and telemedicine particularly spurred by the needs during the COVID-19 pandemic have all heightened the relevance of digital health solutions. This multifactorial transformation presents opportunities for innovation across the entire cycle of care, from wellness, to acute and chronic diseases, to care at the end of life.

But how can you approach innovation in digital health to address these health care challenges while ensuring the greatest chance of success? At Stanford Biodesign, we believe that innovation is a process that can be learned, practiced, and perfected; and, it starts with a well defined need. In Biodesign for Digital Health, students will learn about digital health and the Biodesign needs-driven innovation process from over 30 industry experts. Over the course of ten weeks, these speakers join the teaching team in a dynamic classroom environment that includes lectures, panel discussions, case studies, and breakout sessions. These experts represent startups, corporations, venture capital firms, accelerators, research labs, health systems, and more. Student teams will take actual digital health challenges and learn how to apply Biodesign innovation principles to research and evaluate needs, ideate solutions, objectively assess them against key criteria for satisfying the needs, and ensure all stakeholders in the ecosystem are addressed. Teams take a hands-on approach with the support of need coaches and mentors from industry. On the final day of class, teams present to a panel of digital health experts and compete for project extension funding.

Enrollment by application only. Applications open Sunday August 1, 2021 and close Thursday September 2, 2021. Acceptance decisions are announced the week of September 7, 2021. Up to 32 students will be admitted into the course. Apply online at: https://stanforduniversity.qualtrics.com/jfe/form/SV_3mxsMA5Z18QSDqW

Please reach out to us about how you’re doing and how the class is going at any time, by email or during virtual office hours. We also encourage you to engage with the support Stanford offers through Counseling and Psychological Services (CAPS), available 24 hours a day at (650) 723-3785.
Units: 3 units

Day/Time/Location: The class starts on September 22, 2021 and ends on December 1, 2021.

**Wednesdays 4:00 – 6:50 pm - In Person**  
Wednesdays will include a combination of lectures, panels, and breakout sessions. We will use a variety of interactive tools to create an engaging and exciting journey through healthcare technology innovation.

**Fridays 12:15-1:15pm via Zoom**  
Fridays are for team project work and workshops. There are five mandatory, specialty workshops that all students must attend.

- **September 24, 2021:** “Team Kickoff”  
  Need assignments and team exercise

- **October 15, 2021:** “Intellectual Property in Digital Health”  
  Jennifer Mikulina and Ahsan Shaikh, Partners, McDermott Will & Emery LLP

- **October 22, 2021:** “Digital Health Regulatory Topics”  
  Stephen W. Bernstein, Partner, McDermott Will & Emery LLP

- **November 5, 2021:** Executive/Investor Presentations  
  Bob Kocher, MD, Partner Venrock Ventures

- **November 12, 2021:** Design Workshop  
  Christine Eun, Ryan Brewster | course alum  
  Ryan and Christine are open to sessions after the workshop to help with your project presentations.

The five mandatory workshops will run from **12:15-1:15pm via Zoom.**

**Course Materials:** No textbook is required. See the reading list at the end of this syllabus for an overview of course reading materials. Access to each reading assignment will be available via Canvas. Students are expected to complete assigned readings before each class session and will be quizzed on their content.
Additional course materials on Canvas include information on guest speakers and templates/worksheets for completing class assignments. Presentation slides from the speakers who give consent will also be posted.

Course Communications: Canvas: Canvas will be used for all formal class communications and the submission of assignments.

GOALS FOR THE COURSE

At the end of this course, students will:
- be able to ask informed questions and apply critical thinking to understand the evolving digital health industry sector;
- be able to recognize, describe and apply the needs-driven Biodesign approach to the creation of innovative concept solutions in digital health;
- have developed the start of a real concept that might merit additional work towards the creation of a solution;
- identify the interests and alignment with all the key stakeholders;
- have developed or refined the soft skills required to work in teams and with the support of external advisers and mentors towards achieving and presenting digital health projects outcomes.

INSTRUCTIONAL METHOD

The Biodesign for Digital Health course is taught by faculty from Stanford University and other organizations, as well as invited speakers from the digital health industry and entrepreneurial community. Students will devote significant time and effort working in teams, with the guidance of need coaches/mentors. The course provides a unique chance to gain real-world insights; to acquire or refine the soft-skills necessary to work in multidisciplinary teams and interact with outside experts; to build a relevant network of digital health enthusiasts and professionals; and to learn about career paths in health innovation.

The typical format of a Wednesday afternoon in the classroom is:
- 4:00 – 4:50 pm  Lecture/Team Activity
- 4:50 – 5:50 pm  Breakout Session
- 5:50 – 6:50 pm  Panel Discussion/Case Studies and Networking

STUDENTS RESPONSIBILITIES

Absences
No more than one unexcused absence is permitted. A second absence may be permitted with written justification by the student and make-up work negotiated with his/her team members on the course project. If you become ill and cannot attend classes live, please inform the instructors so that other
accommodations can be made. Please communicate absences to the TA in advance. **More than two absences will reduce the student's final grade by one full letter grade, unless you have a note from a physician.**

**GRADING**

**3 Units – CR/No CR or Letter Grade**

Students may elect to attend the course for CR/No CR or for a Letter Grade. In addition to attending classes, completing readings, and participating actively in the classroom environment, students are required to complete a class project exploring a need in digital health. See the Class Projects section below for more information.

Grading will be based on:

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>10%</td>
<td><strong>Attendance</strong> in class; no more than 2 absences are allowed (see attendance policy above).</td>
</tr>
<tr>
<td>10%</td>
<td><strong>Class participation and teaching team assessment</strong>: based on preparedness, engagement, and participation in class discussions &amp; breakout sessions.</td>
</tr>
<tr>
<td>10%</td>
<td><strong>Peer evaluations</strong>: via a confidential survey tool, students will be asked to evaluate their teammates for dependability, effort, quality of work, attitude, and initiative. Students will be sent a CATME link to the survey halfway through the semester (10/22) and at the end of the semester (12/3).</td>
</tr>
<tr>
<td>5%</td>
<td><strong>Draft need statement and research plan</strong> due on September 28, 2021 at 11:59pm.</td>
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<tr>
<td>15%</td>
<td><strong>Need presentation</strong> given <strong>October 6, 2021</strong>, due in Canvas on October 5, 2021 at 11:59pm.</td>
</tr>
<tr>
<td>15%</td>
<td><strong>Concept design presentation</strong> given <strong>October 20, 2021</strong>; due in Canvas on October 19, 2021 at 11:59pm.</td>
</tr>
</tbody>
</table>
| 10%        | **Case Study Quizzes** submitted via Canvas:  
- Glooko, Inc. Case Study Quiz: **Due September 28 at 11:59pm**  
- Sandstone Diagnostics Case Study Quiz: **Due October 5 at 11:59pm**  
- Ginger.io Case Study Quiz: **Due October 12 at 11:59pm**  
- Evidation Health Case Study Quiz: **Due October 26 at 11:59pm**  
- Omada Health Case Study Quiz: **Due November 2 at 11:59pm** |
| 25%        | **One-page project summary and culminating presentation** discussed with the faculty and special guests from industry and Biodesign NEXT on December 1, 2021. The faculty and industry experts will provide live feedback during the session. Project teams should share presentation responsibilities. The slide deck (Google Slides) must be submitted in advance and no later than **Tuesday, November 30, 2021 at 11:59pm**. |
CLASS PROJECTS

Prior to the first day of class, students will be matched into cross disciplinary teams of approximately four to six members based on the information they provided on the course application. As a group, the team will choose a project from the need areas that have been sourced by the teaching team. The team will then outline a research plan to evaluate the chosen need area, draft and refine a focused need statement based on primary and secondary research, ideate solution concepts, and objectively assess them against key criteria for satisfying the needs.

Project progress will be tracked via a Google doc “team card” that is updated at regular intervals by the team, in addition to three in-class presentations (Google presentations) that should be linked to the team card. The schedule is outlined below:

- **September 28, 2021** by 11:59 pm - First draft of need statement and research plan (see templates in Canvas) (submit via team card.)
- **October 5, 2021** by 11:59 pm - Need presentation due in Canvas. Team will give the presentation in class on Wednesday, October 6, 2021.
- **October 19, 2021** by 11:59 pm - Concept design presentation due in Canvas. Team will give the presentation in class on Wednesday, November 20, 2021.
- **November 30, 2021** by 11:59 pm - One-page project summary and final presentation (submit via Canvas); to be presented on the last day of class (12/1/2021) in presentation format. *Students must also communicate if they are interested in NEXT funding prior to the final presentation.*

The key criteria we are looking for in the project deliverables are (1) **understanding of the need** and (2) **representation of the biodesign innovation process** from need finding to concept generation and screening. The first is paramount and involves a clearly formulated and well-researched need statement. The second involves a strong process towards solution generation and selection (**originality** and **potential for impact**) will be praised), with attention to opportunities for technical development (**feasibility**) and delivering strategies (**sustainability**, as can be achieved after thorough understanding of the competitive and stakeholder landscape and the market viability).

By focusing on the need and how students have applied the innovation process to address it, teams will demonstrate that their solution has a reasonable likelihood of being accepted by all stakeholders. In evaluating the projects, we will place greater emphasis on evaluating the caliber of the research performed and what students have learned. High quality of content and deliverables is most important, and is always preferred over quantity with limited insight. Additional information on the final presentations and past examples of project papers and slides will be distributed in November.

BIODESIGN NEXT PROGRAM

The top teams chosen by the final presentation panelists are eligible to continue working on their projects through the Biodesign NEXT extension funding program. Students who participate in Biodesign NEXT can
register for additional credit and receive ongoing mentorship, as well as extension funding for 1-2 additional quarters. More information about this opportunity will be provided in class.

INTELLECTUAL PROPERTY / OWNERSHIP

As part of this project-based course, you and your teammates will potentially generate an invention that may be patented or copyrighted. As a general rule, all potentially patentable inventions conceived or first reduced to practice in whole or in part by Stanford’s community in the course of their University responsibilities or with more than incidental use of University resources are owned by the University regardless of the source of funding, if any. Similarly, Stanford holds the copyright for materials developed with the significant use of University resources or personnel. If you and your teammates wish to take your invention forward beyond your time at Stanford, please contact the teaching team and we will help facilitate an introduction to Stanford’s Office of Technology Licensing, which will work with the team to understand your options. Stanford has a long, successful history in technology licensing marked by collaborative relationships with inventors and by flexibility in negotiations. The OTL is committed to helping faculty, staff, and student teams navigate the processes of patenting and licensing with the goal of transferring their research to industry in order to benefit society.

CONTACT INFORMATION

Course Directors
Oliver Aalami, MD  aalami@stanford.edu
Michelle de Haaff  mdehaaff@stanford.edu

Teaching Assistant
Neha Srivathsa  nehasriv@stanford.edu

Course Manager
Shiqin Xu  shiqinxu@stanford.edu

COURSE CULTURE

We are committed to affirming the identities, realities, and voices of all students, especially those from historically marginalized or underrepresented backgrounds. This course values the use of person-centered language and preferred gender pronouns, and respect for the experiences of others.

STUDENTS WITH DOCUMENTED DISABILITIES

Students who may need an academic accommodation based on the impact of a disability must initiate the request with the Office of Accessible Education (OAE). Professional staff will evaluate the request with required documentation, recommend reasonable accommodations, and prepare an Accommodation Letter for faculty dated in the current quarter in which the request is made. Students should contact the OAE as soon as possible since timely notice is needed to coordinate accommodations. The OAE is located at 563 Salvatierra Walk (phone: 723-1066, URL: http://studentaffairs.stanford.edu/oae).

WEDNESDAY CLASS CONTENT: A WEEK-BY-WEEK VIEW
Class 1: September 22, 2021  Introduction; Overview of Biodesign Process and Digital Health

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>4:00PM-4:50pm</td>
<td>LECTURE</td>
<td>Course Overview&lt;br&gt;Digital Health Framework and the Role of Data&lt;br&gt;Biodesign Process Overview</td>
</tr>
<tr>
<td>4.50PM-5.50PM</td>
<td>KEYNOTE</td>
<td>Digital Health Landscape</td>
</tr>
<tr>
<td>5.50PM-6.50PM</td>
<td>PRESENTATIONS</td>
<td>Examples of digital health innovations from past students.</td>
</tr>
</tbody>
</table>

**Lecture**
Oliver Aalami, Stanford Byers Center for Biodesign (intro)<br>Michelle de Haaff, Stanford Byers Center for Biodesign

**Keynote**
Glenn Snyder, Deloitte Medical Technology Practice Leader

**Presentations**
Alumni Guests (All Biodesign NEXT winners and funding recipients):
- Team Village Health BIOE273 2020
- Team CD.AI/RHTM BIO273 2020
- Team Healthy Trees BIO273 2020
- Team NuLeaf BIOE273 2016 (Ryan Brewster)

This week’s Friday workshop via Zoom is:

**September 24, 2021 at 12:15pm:** Workshop: “Team Kickoff”
Needs assignment and working in teams exercise
### Class 2: September 29, 2021

**Digital Health Needs Finding**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>4:00PM-4:50pm</td>
<td>LECTURE</td>
<td>Biodesign Process: Needs Finding and Research Plan</td>
</tr>
</tbody>
</table>
| 4:50PM-5:50PM | BREAKOUT SESSION | Team Activity: Discuss first draft of need statements and refine your research plan  
|             |              | Biodesign Fellows facilitate breakout sessions                               |
| 5:50PM-6:50PM | PANEL       | Digital Health Needs                                                        |

**Lecture**

James Wall, MD, Faculty, Stanford Byers Center for Biodesign (Michelle intro)

**Panel**

**MODERATOR:**
Scott Barclay, Partner Point72, Formerly at Surescripts and CVS Health

**GUEST PANELISTS:**
- Erin Palm, Suki Health, Head of Product
- Julia Hoffman, Psy.D., VP Behavioral Strategy, Livongo
- Pelu Tran, CEO Ferrum Health
Class 3: October 6, 2021

**Socially Conscious Innovation**

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<thead>
<tr>
<th>Time</th>
<th>Activity</th>
<th>Description</th>
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<tbody>
<tr>
<td>4:00PM-4:50pm</td>
<td>LECTURE</td>
<td>Socially Conscious Innovation</td>
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<tr>
<td></td>
<td></td>
<td>(Need Statement and Research Plan Presentations (teams at random)</td>
</tr>
<tr>
<td>4.50PM-5.50PM</td>
<td>BREAKOUT SESSION</td>
<td>Team Activity: Innovation for the Underserved</td>
</tr>
<tr>
<td>5.50PM-6.50PM</td>
<td>CASE STUDY</td>
<td>UNO Health Case Study</td>
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</table>

**Lecture**

Narges Baniasadi, PhD, Social Impact Entrepreneur, Designing for the Disadvantaged (Oliver intro)

**Case Study**

Anna de Paula Hanika, CEO and Cofounder of UNO Health
Class 4  October 13, 2021  Enabling Technologies

<table>
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<tr>
<th>Time</th>
<th>Type</th>
<th>Activity</th>
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<tbody>
<tr>
<td>4:00PM-4:50pm</td>
<td>LECTURE</td>
<td>Biodesign Process: Needs Screening and Criteria Selection</td>
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<tr>
<td></td>
<td></td>
<td>- Determine what case study will flow through</td>
</tr>
<tr>
<td>4.50PM-5.50PM</td>
<td>BREAKOUT SESSION</td>
<td>Team Activity: Develop first draft of need criteria</td>
</tr>
<tr>
<td>5.50PM-6.50PM</td>
<td>PANEL</td>
<td>Need Driven Innovation in Digital Health</td>
</tr>
</tbody>
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**Lecture**
Lyn Denend, Director of Academic Programs, Stanford Byers Center for Biodesign (Michelle intro)

**Panel**
MODERATOR: 
Michelle de Haaff, Stanford Byers Center for Biodesign

GUEST PANELISTS: (whittle down to 4)
- Gloria Lau, Investor DCVC, CEO Alpha Medical
- David Kuraguntla, CEO GraftWorx
- Raj Desai, VP of Product for Kaiser Permanente
- Fabien Beckers, Google

This week’s workshop is:

**October 15, 2021 at 12:15pm:** Workshop “Intellectual Property in Digital Health”
Jennifer Mikulina and Ahsan Shaikh, Partners, McDermott Will & Emery LLP
Class 5  October 20, 2021  Policy

<table>
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<tr>
<th>Time</th>
<th>Event</th>
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</table>
| 4.00PM-5:50PM | TEAM PRESENTATIONS  
Need and need criteria presentations (6 minutes per team, followed by 6 minutes of discussion) |
| 5.50PM-6.50PM | Rap Session  
Digital Health Policy Rap Session |

Digital Health Policy Expert Rap Session (Oliver intro)
- Lucia Savage, Head of Policy at Omada
- Andy Coravos, Co-founder and CEO, Elektra Labs

This week's workshop is:

**October 22, 2021 at 12:15pm**

Workshop “Digital Health Regulatory Workshop”
Stephen W. Bernstein, Partner, McDermott Will & Emery LLP
Lecture (Michelle intro)
Uday Kumar, MD, Founder/Former CEO iRhythm, Adjunct Professor Stanford BioE
Pablo Pantaleoni, Chief Digital Officer, Lifestance Health Present Biodesign NEXT

Panel
MODERATOR:
Pablo Pantaleoni, Chief Digital Officer, Lifestance Health (Pablo to recruit)

GUEST PANELISTS:
- Farzad Azimpour, Vice President, Strategic Innovation, Advanced Technology at Edwards Lifesciences, Stanford Biodesign (maybe)
- Trina Histon, Senior Principal Consultant Prevention, Wellness & Digital Health, Kaiser Permanente
- Clare Purvis, Director, Behavioral Science at Headspace
- Toi Valentine, Co-founder and Chief Product Officer at Find MeTime, ex-IDEO
- Richard Boyle, IDEO
Class 7 November 3, 2021

Concept Generation

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<tr>
<th>Time</th>
<th>Activity</th>
<th>Description</th>
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<tbody>
<tr>
<td>4:00PM-4:50pm</td>
<td>LECTURE</td>
<td>Experiences in the Real World of Digital Health (Alivecor and Google Health)</td>
</tr>
<tr>
<td>4.50PM-5.50PM</td>
<td>BRAINSTORMING DISCUSSION &amp; BREAKOUT SESSION</td>
<td>Team Activity: How Might We.....</td>
</tr>
<tr>
<td>5.50PM-6.50PM</td>
<td>CASE STUDY</td>
<td>Grand Rounds Case Study</td>
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</table>

**Lecture** (Oliver intro)
Jacqueline Shreibati, MD, MS, FACC, Former Medical Director, Alivecor, now at Google Health

**Breakout Session**
Farzad Azimpour, MD, VP, Innovation & Advanced Technology at Edwards Lifesciences, AD Stanford Biodesign
Shiqin Xu, Biodesign Course Manager

**Case Study**
Rusty Hofman, MD Founder, Grand Rounds and Medical Director, Digital Health Care Integration, Stanford Healthcare

This week's Friday workshop over Zoom is:

**November 5, 2021 at 12:15pm**
Workshop: **The Pitch**
Bob Kocher, MD, Partner Venrock Ventures
**Corporate Perspectives**

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<tr>
<th>3.50PM-5:50PM</th>
<th>TEAM ACTIVITY</th>
<th>Concept presentations (6 minutes per team, followed by 6 minutes of discussion)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.50PM-6.50PM</td>
<td>PANEL</td>
<td>Corporate Perspectives</td>
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</table>

Panel: Corporate Perspectives (Michelle intro)

MODERATOR:
Christopher (Topher) Sharp, MD; Chief Medical Information Officer Stanford Hospitals and Clinical Professor of Medicine, Stanford School of Medicine

GUEST PANELISTS:
- Jonathan Wilt, CTO, Innovation, Ochsner, Ochsner Health System, Louisiana
- Vic Tandon, Sr. Manager, Innovation Product Strategy at Blue Shield of California
- Diana Han, MD, Chief Medical Officer, Unilever (self-insured employer)
- Andrew Lockhart, CEO of Fathom Health- AI medical billing coding company (pending)
- Don Mordecai, National Leader for Mental and Behavioral Health, Kaiser Permanente
- Chez Partovi, Chief Innovation & Strategy Officer, Philips (pending)

This week's workshop is:

**November 12, 2021 at 12:15pm "Design Workshop"**

Ryan Brewster, MS3/Former BIOE273 TA/Designer
Christine Eun, Facebook/Apple
### Digital Health Business Models

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.00PM-5:00PM</td>
<td>LECTURE</td>
<td>DH Business Models</td>
</tr>
<tr>
<td>5.00PM-6:000PM</td>
<td>BREAKOUT SESSION</td>
<td>Team Activity: How are you going to get paid?</td>
</tr>
<tr>
<td>6.00PM-6:50PM</td>
<td>PANEL</td>
<td>Who’s Paying for What Today?</td>
</tr>
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**Lecture**  
Michelle de Haaff, Stanford Byers Center for Biodesign

**Panel**  
**MODERATOR:**  
Oliver Aalami, MD, Stanford Byers Center for Biodesign

**GUEST PANELISTS:**
- Bill Evans, Managing Director, Rock Health
- Alex Morgan, Principal, Khosla Ventures
- Vineeta Agarwala, Venture Partner, Google Ventures
- Cheryl Cheng, BlueRun Ventures
- Henry Wei, MD (Google) (pending)
Class 10 December 1, 2021

Final Presentations

| 4.00PM-6.50PM | FINAL PRESENTATIONS | Teams present a full, 10-15 slide presentation of their project to the class and a judging panel. All students must present. Each team will be provided with a 30 minute slot. |

Final Presentation Panelists Include:

- Josh Makower, MD, Director, Biodesign, Former Partner, NEA
- Rick Altinger, Digital Health Start-up Founder
- Soheil Sadaat, GenieMD/ Angel Investor (Healthcare)
- Jessica DaMassa, WTF
- Crissy Farr, OMERS Ventures (pending)
<table>
<thead>
<tr>
<th>Date</th>
<th>Lecture, Team Activity, Workshop</th>
<th>Assignment (indicates assignment &amp; due date)</th>
<th>Panel</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>September (c) 22</strong></td>
<td>What is Biodesign? Digital Health Introduction</td>
<td>Biodesign; The Process of Innovating Medical Technologies: Process Insights pp39-.pp.46  &lt;br&gt; <strong>Why do digital health startups keep failing?</strong> Paul Yock, Fast Company Magazine; 10.17.18</td>
<td>Digital Health Keynote</td>
</tr>
<tr>
<td><strong>September (w) 24</strong></td>
<td>Team Kickoff Workshop</td>
<td><strong>Team: Draft need statement and research plan due on 9/28 at 11:59pm on Canvas.</strong>  &lt;br&gt; Glooko Inc., Case Study and Quiz <strong>Getting the Need Right</strong> (complete on Canvas by September 28th at 11:59pm.)</td>
<td>NA</td>
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</tbody>
</table>

**Team: Need presentation**
<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Resource</th>
<th>Breakdown</th>
</tr>
</thead>
<tbody>
<tr>
<td>October 6</td>
<td>Socially Conscious Innovation</td>
<td><a href="https://www.newyorker.com/magazine/2013/07/29/slow-ideas">Slow Ideas</a>, The New Yorker Magazine; Atul Gawande, JULY 29, 2013</td>
<td>UNO Health</td>
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<tr>
<td>October 13</td>
<td>Needs Screening and Criteria Selection</td>
<td></td>
<td>Enabling Technologies</td>
</tr>
<tr>
<td>October 15</td>
<td>Intellectual Property in Digital Health</td>
<td><a href="https://www.ourhealth.org/">Team: Concept design presentation</a>, given Wednesday, October 20, 2021; due on Tuesday, October 19, 2021 at 11:59pm on Canvas.</td>
<td>NA</td>
</tr>
<tr>
<td>October 20</td>
<td>Team Presentations: Need Presentation Policy Rap Session</td>
<td><a href="https://www.fda.gov">FDA Medical Device Classification Overview</a>, <a href="https://www.fda.gov">Digital Health Software Precertification (Pre-Cert) Program, FDA</a></td>
<td>Policy</td>
</tr>
<tr>
<td>October 22</td>
<td>Digital Health Regulatory Topics</td>
<td><a href="https://www.evidationhealth.com">Evidation Health Case Study and Quiz</a>, Demonstrating Value</td>
<td>NA</td>
</tr>
<tr>
<td>October 27</td>
<td>Concept Generation and Screening - Designing for Digital Health</td>
<td><a href="https://www.alivecor.com">Alivecor Case Study</a>, <a href="https://www.omadahealth.com">Omada Health Case Study and Quiz</a>, Establishing Long-Term Business Viability</td>
<td>Designing for Health</td>
</tr>
<tr>
<td>November 3</td>
<td>Concept Generation</td>
<td><a href="https://www.biodesign.org">Biodesign: The Process of Innovating Medical Technologies: Part II: Invent Section 3.2 Initial Concept Selection pp. 268-279</a></td>
<td>Grand Rounds Case Study</td>
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<tr>
<td>November</td>
<td>05</td>
<td>Giving the Pitch</td>
<td>NA</td>
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<tr>
<td>November</td>
<td>10</td>
<td>Corporate Perspectives</td>
<td>Corporate Perspectives</td>
</tr>
<tr>
<td>November</td>
<td>12</td>
<td>Design workshop</td>
<td>NA</td>
</tr>
<tr>
<td>November</td>
<td>17</td>
<td>Digital Health Business Models</td>
<td>Team: One-page project summary and culminating presentation. The slide deck (Google Slides) and one page project summary must be submitted in advance and no later than Tuesday, December 1st at 11:59pm.</td>
</tr>
<tr>
<td>December</td>
<td>01</td>
<td>Final Team Presentations</td>
<td></td>
</tr>
</tbody>
</table>

**Additional Recommended, but Optional Reading**

**A course offered by:**

STANFORD BYERS CENTER FOR

BIODESIGN

318 Campus Drive, Clark Center, Rm E100, Stanford University, CA 94305-5428
Website: [http://biodesign.stanford.edu](http://biodesign.stanford.edu) Tel: 650-736-1160