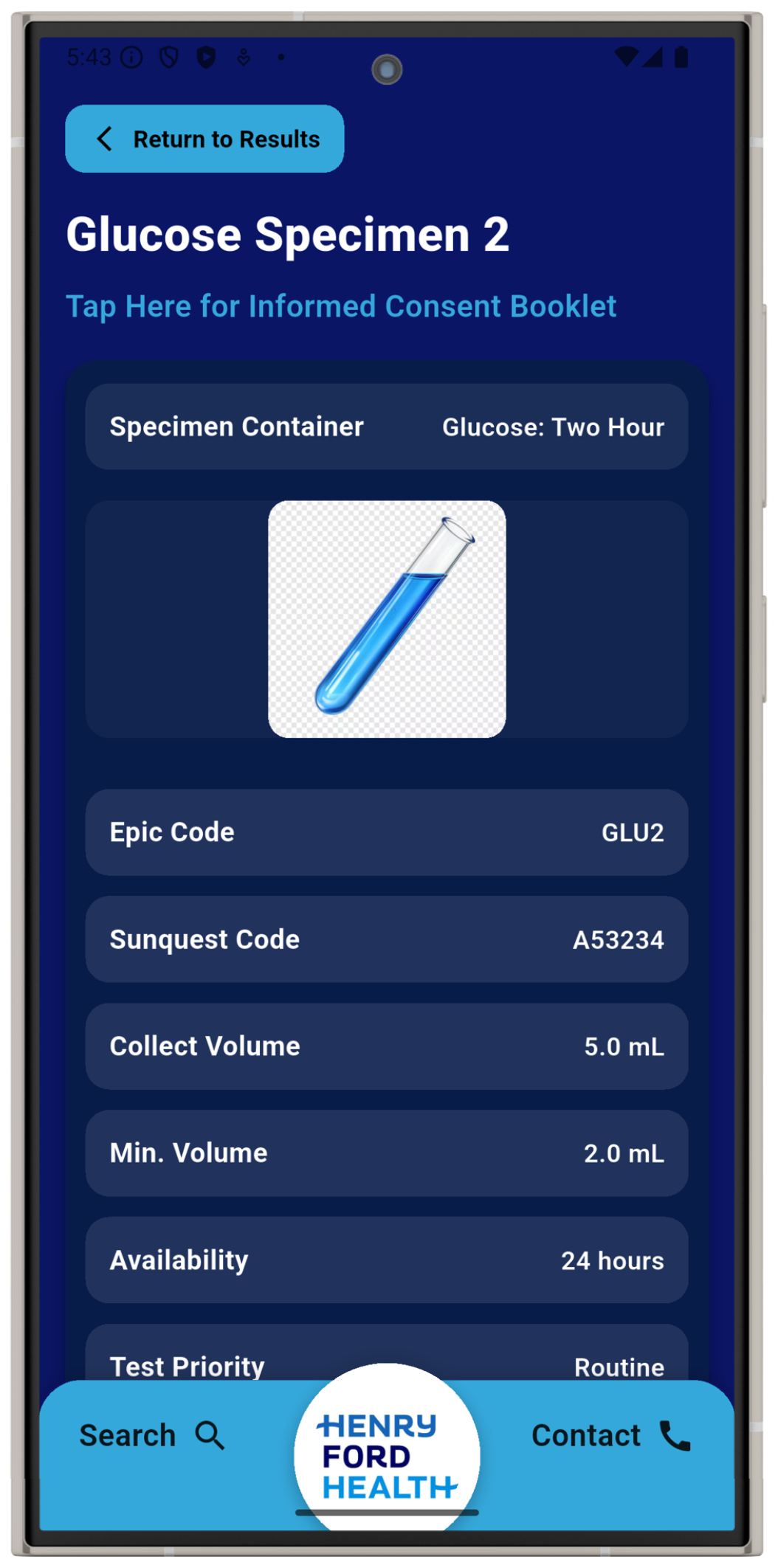
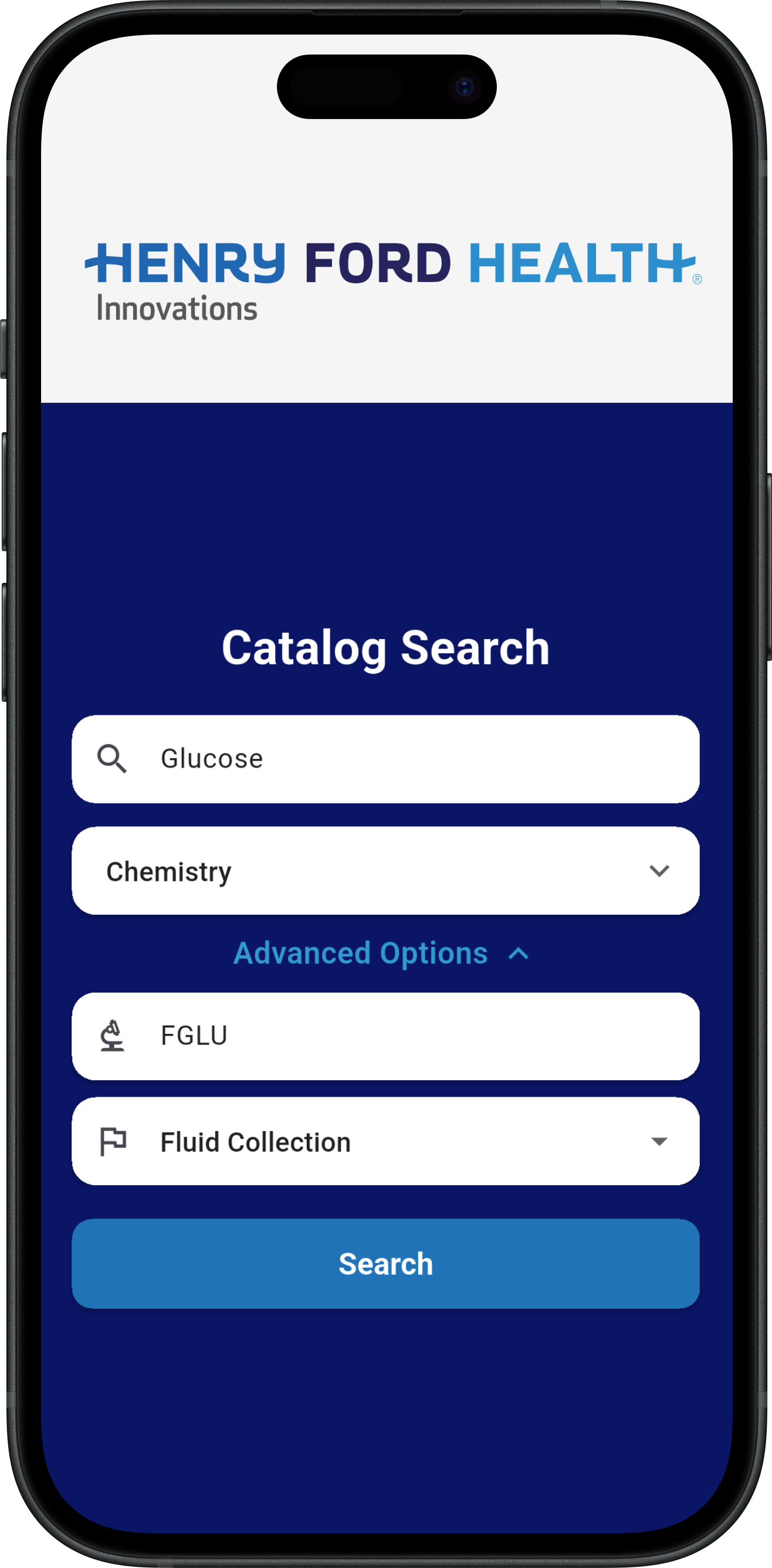
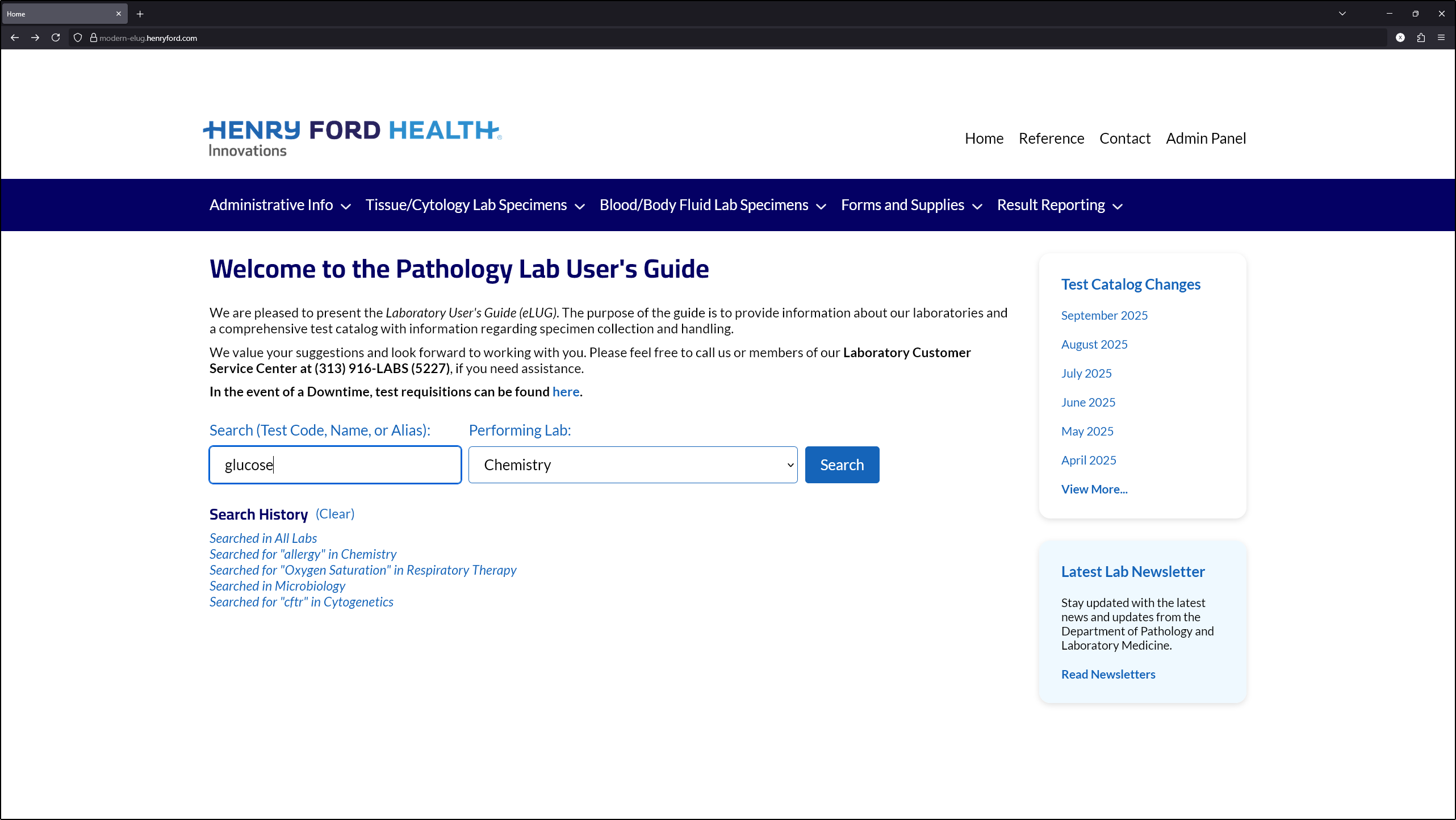
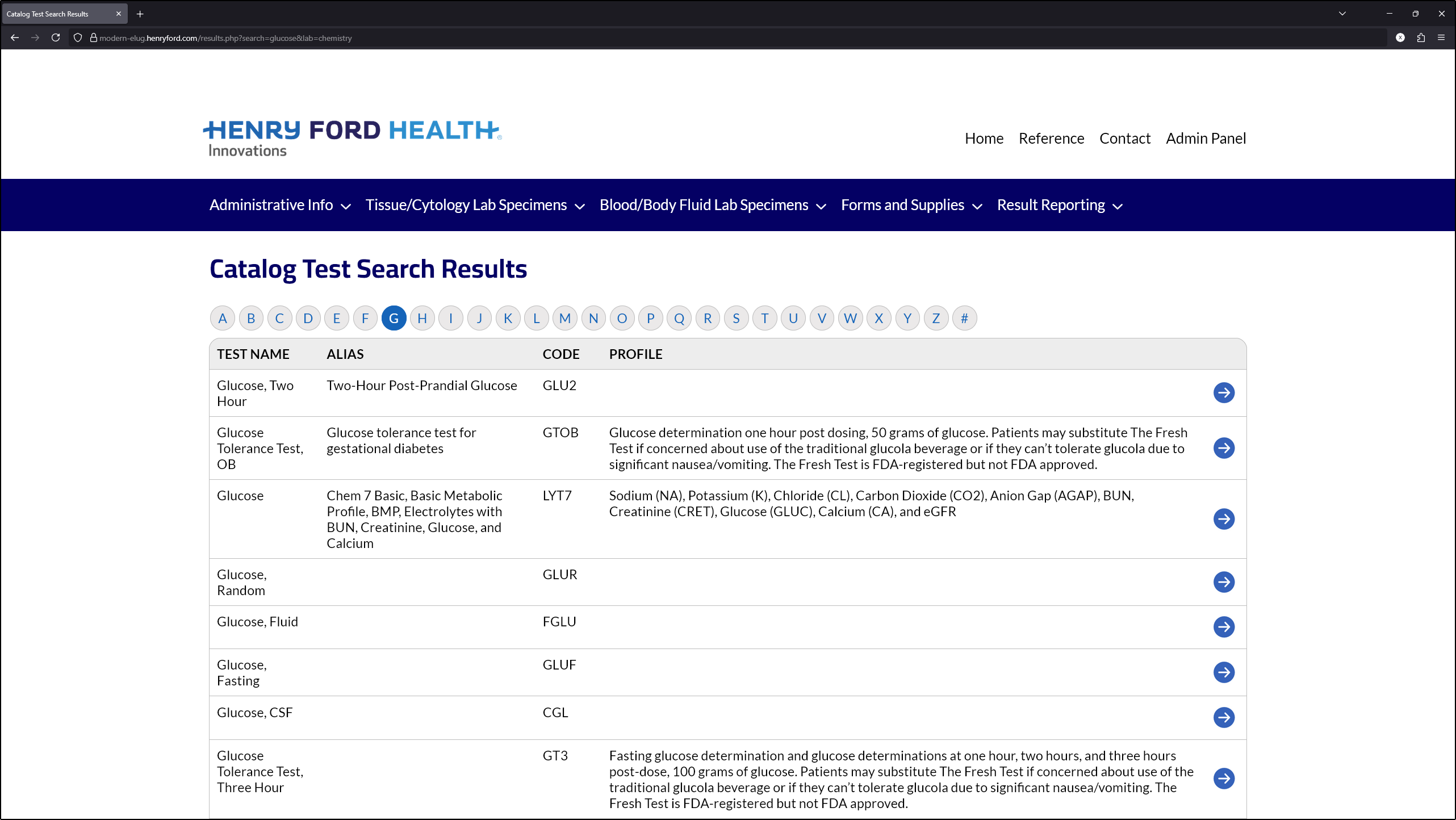
Design Day Booklet Team Page









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Henry Ford Innovations eLUG

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Based in Detroit, Michigan, Henry Ford Health is a leading health system and academic institution that has brought clinical innovation and research to healthcare since its beginnings in 1915. With over 50,000 team members, 13 hospitals and 6,000 research projects per year, Henry Ford Health is dedicated to making breakthrough discoveries to innovate healthcare and improve outcomes for all patients.

For Henry Ford Health’s Department of Pathology, clearly defined and accessible testing procedures are critical. The software they use to achieve this is their Electronic Laboratory User’s Guide (eLUG). The eLUG features a lab testing catalog with information on collection instructions and specimen submission requirements for specific tests.

The eLUG’s existing web application has not had a major overhaul since 2003, necessitating a modern design for both improved usability and maintainability.

Our new eLUG software provides clinicians and staff with improved usability through a completely redesigned user interface and a cross-platform mobile application. The improved maintainability comes from a new database structure with increased integration.

Security is vital for healthcare systems. To secure the applications, we developed a management utility that uses multiple layers of permissions to restrict access to certain data. This requires that users be internally authenticated to perform specific tasks.

Our web application is built using a Windows Server technology stack. The front end consists of dynamic HTML pages, CSS and JavaScript. The back end uses Microsoft IIS and PHP, connected to a Microsoft SQL Server database. The mobile application uses the same back end, but with Flutter as the front end.

3200/3300 Hallway | Third Floor, Computer Science and Engineering 8:00 a.m. – Noon | CSE498

Henry Ford Innovations

Electronic Laboratory User’s Guide (eLUG) 2.0