

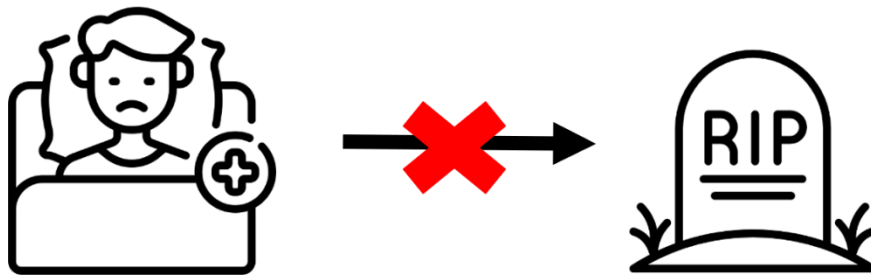
Research Project - SensAL

Postoperative complications are among the leading causes of morbidity and death following gastrointestinal surgery. A significant factor behind this is the delayed detection provided by existing diagnostic methods. At The Ingenuity Lab, we are dedicated to addressing these challenges and revolutionizing the landscape of postoperative diagnostics. Our approach centers on pioneering novel materials and devices tailored for this precise purpose.

Current methods for postoperative monitoring are often time-consuming and labor-intensive. These methods also tend to lag in identifying serious complications like anastomotic leaks and sepsis. In response, the Ingenuity Lab is dedicated to developing innovative approaches that meet clinical needs. We do so by developing novel materials as well as devices that are specifically tailored to the problems encountered in state-of-the-art clinical practice. The project involves the synthesis and implementation of a molecular sensor (SensAL) that can be incorporated to monitor a patient's disease status. A variety of different tasks need to be accomplished ranging from molecule synthesis to material integration and diagnostic performance evaluation. As a result, we are actively seeking students (for semester projects as well as MSc/BSc. Thesis) from diverse academic disciplines, spanning from chemistry via biomedical engineering and material science to mechanical engineering. We are particularly interested in individuals with a robust inclination towards chemistry and translational medicine preferably with a basic knowledge of chemical synthesis procedures, complemented by hands-on familiarity within a chemistry laboratory setting.

We offer the opportunity to work in a vibrant multidisciplinary team that includes everything from physicists to physicians with state-of-the-art facilities all over Zurich.

By joining our team, you can be part of a dynamic endeavor focused on developing innovative materials capable of effectively addressing real-world challenges in the realm of postsurgical diagnostics. Your involvement could significantly impact patient outcomes and influence clinical practices, so join now!



Details:

Earliest start: February 2024

Duration: Variable

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