



# RESEARCH2REALITY

Shining a light on research & innovation.

## This is the House That Collaboration is Building

An interview with University of British Columbia researchers:

**Peter Zandstra**, Biomedical Engineer, Director, UBC School of Biomedical Engineering

**Dena Shahriari**, Biomedical Engineer, Assistant Professor, UBC School of Biomedical Engineering

and **Kelly McNagny**, Biomedical Engineer, Professor, UBC School of Biomedical Engineering

### Peter Zandstra

Biomedical engineering is an evolving discipline that brings together fundamentals in biology, technology, engineering, design, and mathematics to solve real world problems — whether it's image analysis for better diagnostics, or rehabilitation to assist with head injuries, or the design of a cell to better target a cancer. And one of the really unique things about biomedical engineering at UBC is that we're bringing solutions to these problems across scales, and we're able to do that because of this partnership between engineering and medicine that has really catalyzed the creation of the School.

### Dena Shahriari

The new facility that the School of Biomedical Engineering is working on, and really rapidly building and establishing, is going to bring in a lot of power lines with different disciplines. And that is really what makes biomedical

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engineering strong, where people have different backgrounds and different passion. And then you bring them together and they're now in one unique place with state-of-the-art equipment.

### **Kelly McNagny**

Traditionally you found that engineers were over in one silo, biologists were over in another silo, and they really didn't speak the same language. What SBME does is it brings these two groups together and they learn how to speak languages that they can each understand.

The other thing is we're hoping we'll bring in a lot of clinicians, because the current gap is between getting engineers and biologists to talk more to the clinical people, find out what are the subtleties of the real-world problems that they can help with. Then I think you're going to see technologies that help cure disease much more rapidly than we ever have seen in the past.

### **Peter Zandstra**

This new building is really going to be a flagship building for UBC and Canada. Whether you're from industry and you want to interact with academia, or you're with academia and you want to meet community members, this is the place where those collisions will happen. So this is the interface between what we're doing in the School and how that the impact of that comes out into society.