

Timothy Weihs from Johns Hopkins University, USA: Semester 2 2018

Where have you come from, and what do you teach?

I am on sabbatical leave from Johns Hopkins University where I teach and perform research in the Department of Materials Science and Engineering. Here at UC I am teaching an elective course to 4th year Mechanical Engineering students and it is entitled: The Mechanical Properties of Biomaterials. We focus on bone, enamel, cartilage, ligaments, tendons, and cells, and how the unique microstructure in these materials control their impressive mechanical properties. We also explore how their microstructures and hence their properties degrade with age. Lastly, we review possible replacement materials.

What interested you in the Erskine Programme/why did you want to come to UC?

My family and I wanted to spend our sabbatical leave in New Zealand and the University of Canterbury looked to be, and has been, a wonderful choice. Given the Mechanical Engineering Department's generosity in hosting me for the year (4 months of which is funded by the Erskine Programme), I wanted offer something back by teaching a course. Thus, the Erskine Programme was a natural and very supportive fit.



What have you been doing at UC?

In addition to teaching and keeping up with my research group back in the US, I have been exploring bio-degradable Mg alloys that can serve as scaffolds for bone replacement and as plates and screws for bone fixation. There is some strong activity in this area at UC, led by Dr. Mark Staiger and his group. I also enjoy attending the weekly material meetings or seminars.

What have you most enjoyed about your time here at UC/Christchurch?

The people and the country are wonderful. Wherever my family and I go, either on or off campus, we meet nice, friendly people and see beautiful sights.