Medical Devices

• Diagnostics
  Developing laser-based diagnostics for musculoskeletal applications. The first technology for fracture risk, Osentia®, was patented by Towler and launched commercially (UK, 2016) by Crescent Ops (www.osentia.co.uk).

• Bioadhesives
  A bioadhesive for a range of skeletal applications (sternal fixation, bone void filling) is being developed with orthopedic surgeons. The first two patented iterations, and a patented procedural kit to deliver the adhesives to the surgical site, have been evaluated in large animal trials.

• Bioadhesives
  A mesoporous glass-based hemostat for trauma applications is being developed. This patented composition of matter is both physically and chemically hemostatic.

Liver cut
Bleeding stops <2 mins
Blood clot

Glass-based hemostat employed to staunch a liver bleed in a porcine model

Keywords:
Medical Devices, Biomaterials, Musculoskeletal disease, trauma

Publications and Recognitions:
• Author of over 170 peer reviewed publications
• Inventor/co-inventor of eight granted patents

PoC
• Mark Towler, Professor
• E-Mail: mtowler@mst.edu
• Website: in progress
• Phone: 5733417632

Funding
• Funding agencies: CIHR, NSERC, MITACS (all Canada).
• Private Equity
• Industry.

Funding
• Funding agencies: CIHR, NSERC, MITACS (all Canada).
• Private Equity
• Industry.

CBR Research