Dr. Pinchuk’s teams of chemists and engineers have been involved in the development of the fundamental tools that changed radiology and cardiology from a diagnostic discipline to the therapeutic interventional radiology and cardiology that is practiced today. They introduced the first commercially successful angioplasty balloon in the mid 1980’s which demonstrated a success rate of 60%, which led to the development of the coronary stent which incrementally increased the success rate to 67%. The discovery that restenosis was caused by traumatization of the smooth muscle cells in the arterial wall by these interventions, led to the development of the drug-eluting stent which improved the success rate to almost 100%. The most successful drug-eluting stent (TAXUS®) uses SIBS as the carrier for the drug, paclitaxel. The introduction of SIBS in medicine was an overwhelming successful result which superseded many years of frustration working with polymers that were never designed to be used in the body. The success of SIBS in the cardiovascular system led to the development of the InnFocus MicroShunt®, a micro-conduit used to treat glaucoma by diverting aqueous humor from the anterior chamber of the eye to a flap formed under the conjunctiva. The MicroShunt is currently changing the way advanced glaucoma is treated world-wide.