



## 2021 NATIONAL INVENTORS HALL OF FAME INDUCTEE

**Born:** June 10, 1948

### Primary Connections:

- Western Clinical Engineering Ltd.: Founder, President
- Delfi Medical Innovations Inc.: Founder, Chair
- Vancouver Hospital & Health Sciences Centre: Director, Biomedical Engineering Department, 1975-90

### Education:

- University of British Columbia: BAsC, Electrical Engineering, 1971; Ph.D., Electrical/Biomedical Engineering, 1975

### Key Memberships/Awards:

- Officer of the Order of Canada, 2011
- Canadian Medical and Biological Engineering Society: Fellow, 2006
- Ernest C. Manning Awards Foundation: Principal Award, 1997

## 10 Things You Need to Know About

# James McEwen

## Inventor of the Automatic Surgical Tourniquet

U.S. PATENT NO. 4,469,099

1. McEwen's father contracted polio and became a paraplegic when McEwen was 6 years old. He continued to work despite his condition and took up electronics as a hobby. McEwen credits his father for sparking his interest in electronics, and for showing him how to respond to challenges and how to innovate.
2. His father also made components that McEwen incorporated into the first automatic surgical tourniquet prototype.
3. McEwen was such a keen reader as a child that the local public library appointed him to review books that would be kept at the library.
4. McEwen notes that he was born around the time the transistor was invented, received an electrical engineering degree the year the microprocessor was invented, and earned a doctorate around the time the personal computer came into being.
5. He is a Fellow of the Canadian Medical and Biological Engineering Society.
6. He has received honorary degrees from the University of British Columbia and Simon Fraser University.
7. In 2011, McEwen was appointed as an Officer of the Order of Canada for his contributions to biomedical engineering.
8. He is a trustee and vice president of the Board of Trustees of the Ernest C. Manning Awards Foundation.
9. He says, "A patent application is the great equalizer. It was a valuable tool to obtain investment, be entrepreneurial and take that innovation where it could go."
10. McEwen is named on more than 80 U.S. patents.