



Photo courtesy of Christine Morykwas

# Michael Morykwas

## Vacuum Assisted Closure® (V.A.C.®)

U.S. PATENT NO. 5,645,081: Method of treating tissue damage and apparatus for same

**Inducted in 2026** Born: May 2, 1956

### Primary Connections:

- Renovo Concepts Inc.: Co-Founder, President, Chief Science Officer, 2017-present
- Wake Forest University School of Medicine: Department of Plastic and Reconstruction Surgery, Professor (now emeritus), 1988-2022
- University of Michigan: Research Associate, Plastic Surgery, 1982-88

### Education:

- Michigan Technological University
- University of Detroit: B.S., Biology, 1981
- University of Michigan: M.S., Bioengineering, 1983; Ph.D., Bioengineering, 1988

### Key Memberships/Awards:

- Wound Healing Foundation-Thomas K. Hunt Keystone Lecture, 2025
- Mona Shores Education Foundation Hall of Fame, 2016
- Wake Forest University: Medallion of Merit, 2015

Michael Morykwas and Louis Argenta developed Vacuum Assisted Closure (V.A.C.), the revolutionary medical device that uses controlled suction to draw excess fluid from a wound, enable its closure and healing, and encourage new tissue growth. V.A.C. therapy has been used to treat millions of patients worldwide with a range of difficult-to-heal wounds.



**Full Bio:** <https://www.invent.org/inductees/michael-morykwas>

### Things You Should Know:

- Morykwas was born in Detroit in 1956, and he spent much of his childhood in Muskegon, Michigan.
- He has always loved nature, and when he was growing up, he spent a lot of time in his family's cottage in the woods.
- He originally planned to be a dentist but changed course three years into dental school when he realized he was more interested in biomaterials.
- In 1988, he joined the department of plastic surgery at Wake Forest University, where he was hired by his future co-inventor.
- In late 1988, Morykwas developed a prototype for the V.A.C. after Argenta brought him his initial idea for the invention.
- The V.A.C. was certified by the Food and Drug Administration in 1995 and patented in 1997.
- V.A.C. therapy has been used to treat more than 20 million patients, and the V.A.C. was commonly used on traumatic wounds of U.S. military personnel in Iraq and Afghanistan.
- The V.A.C. is used for a wide variety of serious and challenging wounds, from surgical wounds to diabetic ulcers and burns.
- In 2017, Morykwas and Argenta co-founded Renovo Concepts Inc. to develop devices for treating brain and heart injuries.
- Morykwas has served on the board of the National Multiple Sclerosis Society and on the boards of charitable organizations in the Winston-Salem, North Carolina, area.