

## I Am Totally Bionic

*The latest technology for creation of the bionic man*

It was just a half century ago, when science fiction prepared us for a future where bionic beings survive the very threats of human nature and artificial creatures rise up against their creators. Although science looks toward technological development only to benefit man, will the day come when humans are replaced by machines? **By María Teresa Hernández Reyes**

Look closely at all the details you see when you stop in front of a mirror. Memorize them. Take a picture of them. Look at yourself, too—the hands, legs, and every organ you think makes you “human”. Only then will you be ready to avoid confusing yourself with the robotic copies that scientific experts will create in an effort to transcend themselves. These artificial doubles will have a first and last name, just like you and me, but under the false skin will be no hidden, fragile breakable bones and muscles. Inside these failure-immune creatures will be pain-resistant materials and the skeletons of perfect beings that will perform tasks, just like man, that would be impossible for you to achieve.

“IF A MACHINE CAN IMITATE US SO PRECISELY THAT WE AREN’T AWARE IT’S A MACHINE, IS IT STILL A MACHINE?” - MARTHA PEIRANO IN THE BOOK "THE RIVAL OF PROMETHEUS: LIVES OF ILLUSTRIOUS AUTOMATONS"

### HEART

MANUFACTURER SynCardia Systems, Inc.

ORIGIN United States

The idea of traveling the yellow brick road and asking the Wizard of Oz for a heart sounds humorous. In the real world, this organ is needed when it doesn't pump enough blood to keep the body alive. And, even though the solution for this problem is a transplant, the supply of hearts is inadequate. So, the implant of an artificial one represents a "bridge" to keep a patient alive while waiting for a donor. With the Total Artificial Heart, “you don’t have to wait for someone to die or use drugs to suppress the immune system for it to work,” says Dr. Richard Smith, co-founder and Technical Director of SynCardia Systems. The device, which is handmade, takes over a month to fabricate completely and is made from a plastic similar to latex. By being **biocompatible**, chances that the body will reject it are minimal. When it is implanted in a surgery lasting four to five hours, the old heart is removed and this mechanism put into its place. Although it needs a driver, or strong external energy source, to work, according to Smith the short-term goal is to create smaller batteries and ones that work longer without needing to be recharged. **THE FUTURE** For experts, the goal is for these devices to operate automatically in the body.