

# Dr. Martine Rothblatt

Honorary Degree Recipient 2019  
University of Victoria  
Nominated by the Chair in Transgender Studies

Martine Rothblatt, PhD, MBA, JD, is a dual Canadian/American citizen, who is an entrepreneur, lawyer, author, supporter of the [Chair in Transgender Studies](#), and a tremendously accomplished trans woman. Rothblatt has a stellar record of creating new advances that have enhanced the lives of people around the globe. As a renaissance thinker, trailblazing innovator, and pioneering leader, she has spent decades at the forefront of satellite communications, and life-saving pharmaceuticals and biotechnology.

There are only a handful of entrepreneurs who create not just one strong business, but multiple pioneering businesses. As described by the [Financial Times](#), in addition to Steve Jobs and Elon Musk, this short list of brilliant innovators must include Martine Rothblatt. Included on the [Forbes Magazine](#) “100 Greatest Business Minds” list, Rothblatt continues to rank among the top-earning female CEOs in the United States.

In the 1980s she served as the President/CEO of [GEOStar](#), the GPS-based satellite navigation company which spearheaded the concept of installing satellites in consumer-level vehicles. During her time with the company, Rothblatt revolutionized satellite technology by creating more powerful satellites, shrinking receiving antennas, and digitally strengthening audio signals. Rothblatt further refined her concept of satellite communication by combining the technology with the marketplace theory of [long tail marketing](#) to enable the company to



beam a wide variety of niche radio channels to a huge number of geographically-dispersed individual customers. In 1990, Rothblatt used this refinement as the basis for founding *Sirius Satellite Radio*, now [SiriusXM](#), the world leader in satellite broadcast radio technology, and served as the company’s first Chairwoman and CEO.

In 1996, when her then-eight-year-old daughter, JGenesis, was diagnosed with a fatal lung disease, Rothblatt’s life took a dramatic turn. Realizing that there was no viable treatment for the disease, Rothblatt began to study biology and returned to school to obtain a Medical Ethics PhD from the [Royal London School of Medicine & Dentistry](#). Afterwards, she founded the biotech company, [United Therapeutics \(UT\)](#), and purchased an orphan drug which held promise for treating her daughter’s deadly disease. *UT* researched and developed the drug that subsequently saved not only her daughter’s life, but also the lives of thousands of other lung-disease sufferers. Rothblatt currently serves as chairperson and chief executive of *UT*, which provides the drug for free to patients who can’t afford it.

Developing an accessible life-saving lung disease pharmaceutical sparked a deep passion in Rothblatt and motivated her to revolutionize the field of regenerative lung technology. *UT* subsidiaries are now developing the next frontier of regenerative organs. One subsidiary is sequencing the pig genome with a goal of providing an abundant supply of organs that can be harvested from pigs and safely transplanted into humans. Hearts, kidneys, and lungs from genetically engineered pigs have already been successfully transplanted into baboons.

Another subsidiary refurbishes lungs from human organ donors that would otherwise have been discarded due to being substandard. As of June 2018, approximately 250 people have received life-saving lung transplants from organs that would otherwise have been designated as medical waste.

Rothblatt's *UT* is also currently developing a 3-D printer capable of manufacturing the framework for lungs' infrastructure. The vision is that the framework and stem cells from a patient awaiting a lung transplant can then be used to grow lungs that can be transplanted into the patient without fear of rejection. Rothblatt believes that an endless supply of organ transplants resistant to human rejection is possible within the next decade.

In order to expedite the extremely time-sensitive transportation of organs for transplantation, and to be respectful of the environment, in 2017 Rothblatt built the first fully-electric helicopter capable of delivering organs in a non-polluting, safe, and quiet manner.

Rothblatt is also a transhumanist who experiments with robotics and artificial intelligence (AI). Her [Terasem Movement Foundation](#) helps anyone upload records of their lives into secure computer storage in order to prepare for a future when the "mind clones" created from these files will live on indefinitely as versions of their creators. The first "proof of concept" model has already been completed. "BINA48" (Breakthrough Intelligence via Neural Architecture 48), is an intelligent robot based on the "mind files" and likeness of her wife, Bina Rothblatt. BINA48, who is able to converse with humans has been featured and interviewed by [The New York Times](#), [TedxHabana](#), and ABC's [The View](#), to name a few.

Rothblatt has authored over 60 book chapters, journal articles, and papers in proceedings. Among her six books are, *The Apartheid of Sex* (1995), *From Transgender to Transhuman: A Manifesto on the Freedom of Form* (2011), and *Unzipped Genes* (1997), and *Virtually Human: The Promise – and the Peril – of Digital Immortality* (1997).

