



Looking for a Cure

855 North Wolfe Street, Suite 627
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www.cureveda.com



Fast Facts

Founders:	Shyam Biswal, Christy Wyskiel, Rajesh Thimmulappa
Date Founded:	2010
Employees:	2
Headquarters:	Baltimore, MD
Revenue:	N/A
University:	Johns Hopkins University
Federal Funding Agency:	National Institutes of Health (National Institute of General Medical Sciences; the National Heart, Lung and Blood Institute; the National Cancer Institute and the National Institute of Diabetes and Digestive and Kidney Diseases)
Initial Research Funding:	\$2M

Cureveda LLC is a biopharmaceutical company developing medicines that stimulate natural antioxidant pathways to treat autoimmune, inflammatory and neurodegenerative diseases with a significant unmet need for new therapies. The Company is currently focusing on several disease indications, including Chronic Obstructive Pulmonary Disease (COPD) and Ulcerative Colitis.

The Story Behind the Company

Cureveda was founded based on work conducted in the laboratory of Dr. Shyam Biswal, professor of environmental studies at the Johns Hopkins University Bloomberg School of Public Health. Company co-founder Rajesh Thimmulappa, a faculty member of the Bloomberg School of Public Health, joined Dr. Biswal's lab in 2001 as a post-doctoral fellow studying the host factors that modulate inflammatory signaling responses and protect from immune-inflammatory disorders caused by environmental toxicants and pathogens.

Dr. Biswal's group discovered that antioxidant defense pathways that counteract oxidative stress determine the susceptibility to cigarette smoke-related emphysema in mouse models. His research further showed that defects in antioxidant regulatory pathways are associated with progression of COPD with increased oxidative stress and inflammation. Dr. Biswal and collaborators have completed proof of concept preclinical studies targeting such regulatory pathways to cure various lung diseases such as COPD, Asthma and ARDS. The work in his lab has been supported by the National Institutes of Health, including grants from the National Institute of General Medical Sciences, the National Heart, Lung and Blood Institute and the National Cancer Institute.

In 2010 Cureveda initiated a collaboration with GlaxoSmithKline (GSK) to develop drugs for the treatment of COPD. Recently, Cureveda was awarded a Phase I Small Business Technology Transfer (STTR) Grant from the National Institute of Diabetes and Digestive and Kidney Diseases of the NIH, to develop its compound VEDA-1209 for the treatment of Ulcerative Colitis.



Technology Advancement Building
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Fast Facts

Founders:	Carol Espy-Wilson
Date Founded:	2009
Employees:	7
Headquarters:	College Park, MD
Revenue:	N/A
University:	University of Maryland, College Park
Federal Funding Agency:	National Science Foundation National Institutes of Health
Initial Research Funding:	\$916,809

OmniSpeech is an innovative software technology company that aims to revolutionize the enhancement of voice communication in digital mobile devices and server-based applications. OmniSpeech takes a novel approach to the challenge of ensuring clear speech in noisy environments. In a departure from traditional approaches that focus primarily on noise suppression, OmniSpeech instead focuses on speech extraction.

OmniClear™ technology successfully extracts speech from stationary and non-stationary noise, thereby significantly improving the overall voice experience. OmniClear™ offers superior and natural voice quality and intelligibility in a software-only solution, enabling users of IP communications, speech recognition applications and mobile devices, to experience enhanced voice clarity in noisy environments.

The Story Behind the Company

The groundbreaking research on the physiology of human speech by University of Maryland professor of electrical and computer engineering Dr. Carol Espy-Wilson led to the creation of OmniSpeech LLC. Dr. Espy-Wilson wanted to solve the problem of making speech technologies perform robustly in everyday environments. She started with a model of how the ear detects tones in noise, and expanded on this approach to deal with speech (many tones) in noise. Espy-Wilson found that some of her feature extraction techniques combined with the speech model gave even better performance. Later, she focused on the problem of two speakers at the same time where the target and the noise are both speech. The discovered technology is the first single-channel solution that can deal effectively with non-stationary noise.

The initial research conducted by Espy-Wilson that led to OmniSpeech was supported by the National Science Foundation and the National Institutes of Health.