

# UNLOCKING THE SECRETS OF THE IMMUNE SYSTEM

AS CHIEF MEDICAL OFFICER AT A BIOTECHNOLOGY COMPANY, SHEILA GUJRATHI LED INNOVATION AT THE INTERSECTION OF MEDICINE, ENGINEERING, AND BUSINESS

Throughout her career, Sheila Gujrathi ('92, MD '96) has focused on blending engineering, medicine, and business, though her passion lies in immunology.

"I'm fascinated with the body's immune system," she says. "It's a beautiful, elegant, intrinsic system. The practical applications of it were intriguing to me because it seems to be the center point of preventing or treating a number of different diseases."

Gujrathi stood at the center of immunology research as chief medical officer at Receptos, a biopharmaceutical company developing therapeutic candidates for the treatment of immune and metabolic diseases. The opportunity to help grow the business drew her to Receptos in 2011 after serving as vice president of the Immunology therapeutic area at Bristol-Myers Squibb.

"I was looking for an entrepreneurial environment, and I wanted to be part of building a company—that was really exciting," she shares. "The science drew me to Receptos in particular. It has an excellent scientific platform and a great group of scientists."

## A clear focus on improving lives

Early in her career, as a management consultant at McKinsey & Company, she provided strategic advice on projects in the healthcare and pharmaceutical industry. She then held roles of increasing responsibility at Genentech in the immunology and tissue growth and repair clinical development group.

Then, as chief medical officer at Receptos, she continued down that path focused on expanding the body of knowledge about the nature of human response to disease. "It's definitely cutting-edge science," she

says. "We learn more about the immune system every day. I'm able to contribute to that evolution of our understanding."

Because scientists can only rely so much on animal models and in vitro experiments, human clinical trials are vital to understanding how the immune system works in patients, says Gujrathi. She also acknowledges the incredible challenges associated with designing the best possible clinical trials: ensuring safety and efficacy while keeping in mind global regulatory requirements and health insurance factors. Applying the lessons she learned at McCormick has been key to confronting those challenges every day.

"It requires a lot of strategic and analytical thinking," she says. "The engineering background paid off tenfold in my understanding of how to look at a problem, break it down analytically, and address each part of it to ultimately solve the entire equation. I still use those basic problem-solving and analytical skills on a daily basis."

For Gujrathi, using her engineering training to help others has proven incredibly satisfying. "When you develop the therapy and have a positive clinical trial; when you actually see that a compound is working, and patients can benefit from it; when you're fulfilling unmet needs for those patients and helping make their lives better, those are the top three reasons I find working in biotechnology so rewarding."

With the recent purchase of Receptos by biotechnology company Celgene Corp., Gujrathi is consulting for Celgene during the transition while she considers where her love for immunology will take her next.

SARA LANGEN



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