



Profile

Monica Bertagnolli: Director of the National Institutes of Health

Monica Bertagnolli, the new Director of the US National Institutes of Health (NIH), brings unique experience to this leadership role: as a surgical oncologist, an NIH-funded researcher, a cancer patient, and a participant in an NIH clinical trial. She is also the first surgeon and only the second woman to take the helm at the NIH. And she may be the only NIH Director who grew up on a US sheep and cattle ranch, which her family has run in central Wyoming for three generations.

Bertagnolli spent her summers with her family working on the ranch, about 95 miles from Rock Springs, the nearest town. The rest of the year, her family lived in town so that she and her three siblings could attend school. Growing up in a rural community, she saw first-hand the problems of getting health care: her father's cancer treatment required an 8-h drive round-trip. Her uncle, a primary care physician, "literally travelled the whole state to take care of veterans who needed care, and I really admired him", she recalled.

But she never thought she'd become a surgeon, let alone a cancer researcher herding large clinical trials instead of cattle. She graduated from Princeton University, NJ, in 1981 with a degree in biomedical engineering. At the University of Utah Medical School, UT, she was initially interested in immunology. That changed when, as a third-year medical student, she first entered an operating room. "I was absolutely enthralled by what surgery could do", she said. "Maybe it was a little bit of the engineer in me", she added. "You can use your craft, and help someone immediately in the operating room with a very physical act. So I was just captivated by it, and from then on—no going back—I wanted to be a surgeon."

As Chief of the Division of Surgical Oncology from 1999 to 2022 at Brigham and Women's Hospital and the Dana-Farber Cancer Institute at Harvard Medical School in Boston, MA, Bertagnolli "was the person to go to for the tough surgical problems", said Eugene Braunwald, Distinguished Professor of Medicine at Brigham and Women's Hospital's Department of Medicine. As she spent more time as a clinical investigator studying gastrointestinal cancer prevention and treatment, Braunwald said she never lost sight of the individual patient. "As the Director of the world's largest biomedical research institute, Dr Bertagnolli is driven to support fundamental biomedical science and its translation into clinical care", he said.

That focus on the patient "is what characterises her career, her accomplishments, and her goals", said Richard Schilsky, Emeritus Professor of Medicine at the University of Chicago Medical School, IL, who served as Chief Medical Officer at the American Society of Clinical Oncology (ASCO) from 2013 to 2021 when Bertagnolli was ASCO's President and Board Chair. Until her appointment as Director of the National Cancer Institute (NCI) in 2022, Bertagnolli was the President of the Alliance for Clinical Trials in Oncology, a large network

of medical institutions she helped create "to do an array of clinical trials that would not have been able to be done with the NCI funding that she had available", Schilsky said. "It's a complex organisation but Monica could move seamlessly across all of those different areas of cancer specialisation."

A respected researcher, she has published more than 195 papers, including on tumour immunology, the genetics of gastrointestinal cancer, and how inflammation contributes to cancer development. She has also led dozens of large clinical trials, coordinating community, industry, government, and academic participants. "Science and research can take the failures that we have today and transform those into new treatments and new cures", she said. "It's all about helping people live long and healthy and active lives."

At the 2023 hearing on her nomination for NIH Director, she assured a US Senate committee that her 2022 breast cancer was diagnosed early, and her prognosis is excellent. The experience deepened her appreciation of the NIH. "Every treatment I received was supported by NIH-funded research", she said. During her treatment she participated in clinical research, this time as a patient instead of an investigator.

Atul Gawande, a surgeon, medical writer, and current Biden global health official, was a colleague of Bertagnolli's at Brigham and Women's Hospital. "She brings enormous soul to this work and that's the part that doesn't come through on the résumé", said Gawande, now Assistant Administrator for Global Health at the US Agency for International Development. "This is a person who is extraordinary, in part because of how brilliant she is, and how much experience she's bringing to the table. But it's also because she did not have a pedigreed upbringing. She has had significant struggles along the way with health issues for herself and her family. I've seen how that is what keeps her completely centred, understanding every day what really matters."

Bertagnolli's career and life experience has prepared her to address the challenges she will face in her new role, including making biomedical research more inclusive and improving access to health care. "Our work at NIH is not finished when we deliver scientific discoveries; our work is finished when all people are living long and healthy lives", she said. "One of my key priorities is to increase opportunities for people to participate in and benefit from NIH research, especially those who remain under-represented in clinical research. I imagine a health-care system where clinical decisions are informed in real time by current research data. And one where patients have the opportunity to both contribute their data for research and get back research results so that they can experience the best that science has to offer."

Susan Jaffe



National Institutes of Health