



## Ben J. Lipps

President and CEO  
Fresenius Medical Care,  
North America  
Chairman, Management  
Board  
Fresenius Medical Care, AG  
BSChE '62

*For his ground-breaking discoveries in hemodialysis and his success in building an integrated health-care products and services corporation*

### Fields of Dreams

“Purdue was a great foundation,” says Ben Lipps. “My time at Purdue was much more than studying engineering and planning for the future. However, by succeeding academically in chemical engineering at Purdue, I was able to participate in this whole new field.”

Lipps grew up in Connersville, Indiana, and spent his college-year summers running the family farm, learning how to manage a business and solve problems every day. “I think if you grow up in Indiana on a farm,” says Lipps, “there isn’t a day that goes by that you don’t have to deal with something unexpected. As a student, I never really thought about my career. I focused on what needed to get done; then I thought about what to do next.”

Lipps graduated from Purdue with highest honors and was selected as one of the Top Ten Chemical Engineering Bachelor of Science Graduates in the United States. He received a National Institutes of Health fellowship to Massachusetts Institute of Technology, where bioengineering was just beginning.

“The fundamentals that I learned at Purdue gave me a more balanced academic training compared to what other engineering schools provided. Purdue

clearly afforded me a blend of reality and science,” says Lipps. “I was well prepared for graduate school but needed to continue to sharpen my skills in mathematics and physics. Of course, the bioengineering was very practical, and I was able to make the transition very easily.”

### A Life-Giving Technology

Lipps received his master’s and doctoral degrees in chemical engineering from MIT. His thesis topic, “Design of Hollow Fiber Artificial Kidney & Non-Thrombogenic Surface,” helped him earn a position at Dow Chemical as part of a research team that ultimately led to the development of the first hollow fiber dialyzer.

“Dow is and was a great company,” says Lipps. “We took the chemical engineering fundamentals and combined them with the physiology of the body, and we figured out how to keep people with kidney disease alive. But in the early ’60s, funding for chronic end-stage renal disease was limited. It wasn’t until the 1970s that our technology could find a broader application, which was about the time when a law was passed by Medicare to provide reimbursement for chronic end-stage renal disease.”

Since 1988, Lipps has been chief executive with Fresenius USA and, since it was

formed in 1996, has also been chief executive with Fresenius Medical Care. Fresenius Medical Care is the world’s largest fully integrated dialysis products and services company. The company engages in clinical research and product development and also provides direct patient care through its network of approximately 1,450 dialysis clinics to over 110,000 patients around the world.

“We are focusing now on how to provide the best possible life for our patients,” says Lipps. “The main thing is always the quality of care, but you also have to balance that with the needs of employees and shareholders and discover how, in the long term, you can improve the quality of life.

“We are now reaching a point where we can keep people alive for a long period of time. But our population is growing older. How do you make the technology simpler and less obtrusive? Do you have patients spend the night in clinics? Can Internet technology allow you to perform therapy and monitor patients in their homes? These are the questions we are focusing on.”

### Education and Change

“I have to say that the entire four years I spent at Purdue, I felt at home,” says Lipps. “It was a very comfortable time, but it was a very busy time, too. Everyone goes into

a field they find interesting. However, I think education must be oriented to provide background and skills to the students, not only to advance the knowledge base in the field but also to provide a basis for a successful career.”



- 1999– Chairman of the Managing Board, Fresenius Medical Care AG
- 1996– President and Chief Executive Officer, Fresenius Medical Care, North America
- 1987– President and Chief Executive Officer, Fresenius USA Inc.
- 1982– President and Chief Executive Officer, Seratronics Inc.
- 1975–82 Vice President of Research and Development and Site Manager, Cordis Dow
- 1969–74 Research Manager, Industrial and Medical Membrane Devices, Dow Chemical Company. Managed research projects in reverse osmosis, medical membranes, blood oxygenation, artificial kidneys, and industrial membranes for sodium sulfur batteries.
- 1966–69 Research Engineer, Dow Chemical Company. Developed first commercial hollow fiber artificial kidney. Principal investigator for numerous government research contracts in membrane and medical field.

BSChE '62, Purdue; MSChE '63, PhD '66, MIT