

Elizabeth J. Kovacs - SLB Legacy Award 2025



Dr. Elizabeth J. Kovacs is a tenured professor and Vice Chair of Research in the Department of Surgery at the University of Colorado School of Medicine. Research in her lab centers on inflammation and innate immunity in humans and in murine models of tissue injury. Her favorite cell is the macrophage and, through the years, the lung has always been Dr. Kovacs's favorite inflatable organ. In spite of her love of alveolar macrophages and lungs, her lab has also worked extensively on the skin, gut, liver, and more recently the brain. Much of this research involves traumatic injury and includes clinically relevant "second hits," such as alcohol intoxication and infection, along with advanced age. Examining end-organ damage, the lab has established the role of the gut-liver axis in the development of lung inflammation after burn injury and is now expanding this "above the neck" to include the gut-brain axis (neuroinflammation and cognitive function).

Dr. Kovacs received a BA in Biology from Reed College in 1978 and a PhD in Cell Biology from the University of Vermont in 1984. She was a postdoctoral fellow at the National Institutes of Health (NIH) in the Biological Response Modifiers Program prior to joining the faculty in the Department of Cell Biology, Neurobiology and Anatomy at Loyola University Chicago in 1987. At Loyola, she moved through the ranks to full professor and then joined the Department of Surgery as Vice Chair of Research. She was the Director of the Alcohol Research Program and the Director of Research of the Burn and Shock Trauma Institute before relocating her laboratory to the University of Colorado Denver Anschutz Medical Campus in 2016.

Dr. Kovacs was a fellow in the Executive Leadership in Academic Medicine (ELAM) Program for Women, Drexel University, Philadelphia, PA. She was President of the Society for Leukocyte Biology (SLB) and the Shock Society. Additionally, she served as the Chair of the Committee on Public Affairs for the American Association of Immunology (AAI) and received the Distinguished Service Award from AAI in 2015. Moreover, she received the Lifetime Achievement Award for Excellence in Leukocyte Biology Research from SLB in 2018. Dr. Kovacs was the recipient of the first Senior Scientist Award at Loyola University Medical Center in 2018 and the Distinguished Graduate Alumni Award from the Larner College of Medicine and the University of Vermont in 2022. She is currently a member of the Board of Directors of the Federation of American Societies for Experimental Biology (FASEB).

To fund her research, Dr. Kovacs has been funded continuously by the National Institutes of Health since 1996 and she also received grants from other federal agencies and foundations. She has served as a member of dozens of NIH and other grant review panels and is on several journal editorial boards. Her laboratory has published 290 manuscripts and review articles and she is internationally recognized for her work in both alcohol & immunity and aging & inflammation.

In spite of these feats, Dr. Kovacs believes that by far her greatest accomplishment is her daughter, Cathy, and after that being responsible for the training of more than 130 individuals ranging from high school students to visiting professors, and mentoring countless junior faculty across the country.