

## Meet our 2023 Annual Meeting Keynote Speaker

**Krzysztof "Kris" Laudanski, MD, Ph.D.**, is a Professor in the Department of Anesthesiology and Perioperative Care at the Mayo Clinic. His research interests focus on regulating DNA expression in survivors after critical care illnesses, healthcare operations/medical decision-making processes, and healthcare innovation (artificial intelligence, nanotechnology). He is a PI on the NIH-funded grant investigating abnormalities in gene regulation after critical care insult. Dr. Laudanski founded a start-up, Qbimm Diagnostic, a company oriented at diagnosing immune disorders using nanotechnology. He is also a President of the Society for HealthCare Innovation. Since his research showed that suboptimal decision-making processes might expose patients to unnecessary risks and have negative economic consequences for hospital systems, he suggested, developed, and implemented artificial algorithms in critical care settings integrating AI with wearable biosensors and predictive diagnostics. Adjusting healthcare operations and delivery based on availability, cultural specificity, and local demands is another area of interest that Kris frequently pursued. He is a committed mentor, with several of his mentees attaining positions in academia (Stanford, Yale), private companies (Merck), or being awarded prestigious scholarships (NSF).



As a practicing anesthesiologist and critical care physician, I believe translational research starts from patients and follows implementation in order to see my patients enjoying their lives and families, engaging in their communities, and improving their lives. Consequently,

I am an Assistant Professor in the Department of Anesthesiology and Critical Care & Department of Neurology at the University of Pennsylvania as well as a Senior Fellow at the Leonard Davis Institute for Healthcare Economics. I am the Lead Physician for Quality and Implementation at Penn eLert. I am PI on the NIH-funded grant investigating abnormalities in gene regulation after critical care insult. My teaching responsibilities include being Senior Research Liaison to Fellowship Program, Drexel Coop Coordinator, and mentor. I am the Lead in implementing artificial algorithms in critical care settings integrating AI with wearable biosensors and predictive diagnostics.

demonstrated abnormal gene regulation leading to persistent immune and metabolic abnormalities after heart surgery, *Drosophila melanogaster* sepsis, COVID-19 patients, and humanized mice surviving septic shock, suggesting acquisition of allostasis instead of the recovery of homeostasis. My research also illustrates how artificial intelligence, telemedicine, education can be implemented to support decision-making processes in the ICU, reducing patient harm and bringing new value for all healthcare stakeholders in a cultural- and context-sensitive manner. The ultimate goal of what I do is to see my patients enjoying their lives and families, engaging in their communities, and improving their lives. I am a committed mentor with several of my mentees attaining positions in academia (Stanford, Yale), private companies (Merck), or were awarded prestigious scholarships (NSF).

My research demonstrated persistence of abnormalities focuses on regulating DNA expression in survivors after critical care illnesses, health care operations/medical decision-making processes, and healthcare innovation (artificial intelligence, nanotechnology). I am a PI on the NIH-funded grant investigating abnormalities in gene regulation after critical care insult. I also founded of a start-up, Qbimm Diagnostic, a company oriented at diagnosing immune disorders using nanotechnology. He is also a President of the Society for HealthCare innovation.

## Published Research

- [Inflammation](#)
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