

Jelena M. Janjic, PhD

Associate Professor Pharmaceuticals Duquesne University Prolonged Analgesia in Neuromuscular Trauma with a Single Dose of Non-Opioid Nanomedicine in Rodents and Non-Human Primates

Jelena M. Janjic, PhD, also known as "Dr. J", is a tenured Associate Professor of Pharmaceutics and Founder/Co-Director of the Chronic Pain Research Consortium (CPRC, www.duq.edu/pain [duq.edu]) at Duquesne University in Pittsburgh, USA. She received her pharmacy degree at Belgrade University, Form. Yugoslavia in 1998 and her Ph.D. at the University of Pittsburgh School of Pharmacy in 2005. She completed her post-doctoral training at Scripps Florida (2006) and Carnegie Mellon University (2009). The primary focus of her research is the implementation of Quality by Design to the manufacture of nanomedicines for imaging-supported drug delivery. In her 17-year long career in nanotechnology, she has developed multiple imaging and drug delivery platforms and biomaterials, which resulted to date in 3 patents, more than 60 publications, and numerous invited presentations at national and international meetings. Her research interests lie at the intersection of immunology and neuroscience in control of neuroinflammation in pain, trauma, and regenerative medicine. Specifically, her work has focused on nanomedicines, which simultaneously image and modulate immune cells for therapeutic intervention in trauma and post-surgical pain, pain following neuromusculoskeletal injuries, neuropathic and chronic inflammatory pain. She also works in organ transplantation and rejection control, regenerative medicine, and organ preservation. Her designs have been successfully validated in experimental small and large animal models of transplant rejection, neuroinflammation, neuroregeneration, and pain. She is the inventor of the first nanoparticle-based oxygen delivery agent tested on human organ/tissue preservation, and the inventor of the first neuroinflammation-