

## Dr. Sergiy Borysov

At the heart of teaching and research are the moments that surprise, challenge, and even change the way we view our own work. In this inaugural Faculty Voices spotlight, Dr. Borysov reminds us that “Teaching is an art of connection with others. Our purpose is to provide others with useful knowledge through guided content and delivery.” With this philosophy, every class and project becomes an opportunity to connect, inspire, and create lasting impact.

“Emotional engagement with learning material expands and enhances how the brain perceives it, making it ‘interesting.’ Remembering this principle opens an endless well of creativity in teaching,” shared Dr. Borysov. “Just today, my students were learning how to use heat shock to transform bacteria. So why not add an emotional element to the procedure by additionally ‘shocking’ bacteria with scary Halloween music and sounds from YouTube? I bet students have already forgotten what the temperature in Celsius is good for shocking. Yet they’ll remember those sounds. The lesson is learned: it is the shock that enables the transformation of bacteria. The students will remember that. Even in their nightmares! :-)”

That same spirit of innovation guides Dr. Borysov’s research. “I am so proud that here at Saint Leo University, we patented compounds that promise to hit ‘the Achilles heel’ of cancer. Typically, anti-cancer drugs target cancer at its strong side. Hitting it with force also damages normal healthy cells, leading to a myriad of side effects and amplification of suffering. We have a different approach: we want to get rid of cancer by pushing it at its weak spot so gently that normal cells do not even notice it.”