Dear Members of the International Society of Pharmacometrics,

I am honored to be considered for election to the ISoP Board of Directors.

I have nearly 20 years of experience in quantitative analytics, pharmacometrics, and pharmacology for the biopharmaceutical industry. In my role at AstraZeneca, I lead pharmacometrics in late phase metabolic/renal diseases (e.g., diabetes, chronic kidney disease, hyperkalemia). Prior to this, I served as Associate Director in clinical pharmacometrics for critical care therapies (cardiovascular) at Novartis. I am not a "traditional" pharmacometrician, having trained at Duke University as a biomedical engineer (itself a multidisciplinary field) under a US Department of Energy Computational Science Fellowship focusing on large scale cellular, tissue and organ-level biophysical modeling & simulation for understanding cardiac physiology in normal and diseased hearts. My first role in industry, at translational modeling fore-runner Physiome Sciences, was "QSP" years before it was called "QSP". Regardless of name, my focus was and remains solving biopharmaceutical development challenges by merging multi-disciplinary quantitative expertise across analysis methodologies with deep understanding of the biological mechanisms at work.

Like my mentors, I believe "Leadership is Service" and is a way to give back to a community that has helped me. I found a home in pharmacometrics, a discipline that demands an inquisitive, problem solving personality coupled with adaptive, highly evolved communication skills and rewards us by impacting decisions that influence human health. To the greater Boston pharmacometrics / predictive modeling communities, I have committed myself and grown as an organizer, now Chair for ISoP New England. If elected to the ISoP board, I look forward to serving the committees and initiatives most in need of, and matched with, my skills; for example, Membership. I would enjoy adapting the lessons we have learned growing the New England chapter to other regions to develop and sustain energetic pharmacometric communities unique to their membership.

Pharmacometrics is an integrative science. For decades, we have sought out and combined data, information, and methods to drive rational decision making in drug discovery and development. Every year, we impact more decisions and this success multiplies the demand, often with newer information, data types and methodologies needing to be understood. All the while, the therapeutic areas and treatment modalities we work on are shifting rapidly. No longer can we split the biopharma world into small and large molecules. A key horizon for pharmacometrics is that of "new modalities" like proTACs, mRNA, ever advancing delivery methods, nucleotide-based therapeutics, and cell/gene therapies. In 2017, I organized a local chapter symposium on "Pharmacometrics of New Modalities" and asked the question "What does 'dose/pk/pd' even mean for these 'drugs'?" As a board member, I will foster thoughtful guidance on these topics, encouraging our members to lead this evolving field.

We are all thankful that ISoP has strengthened our natural bonds with clinical pharmacology, statistics, and various engineering disciplines. In the future, our estate will grow further: linked in the latest stages with health economics and medical evidence generation, and in the earliest stages, with cutting-edge biotechnology generating new data and fueling deeper knowledge of human biology. My own career spans that range – from discovery to the market – and enables me to work effectively with partners across that spectrum.

As a society, ISoP should provide a home for those practicing it, a community to learn from, both technically and professionally. As a community of professionals, I will support ISoP pursuing a core set of principles that embody how we should go about our work, not what is or is not "pharmacometrics." Colleagues have supported my commitment to and leadership of the local chapter, providing time, energy, and resources to build a community unique to New England, but whose impact now can be felt remotely (e.g., hosting SIG events). I am eager and ready to embark on a greater commitment to ISoP as a board member.

Respectfully yours,

Robert C. "Chris" Penland, PhD