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Research Interests:



My current research investigates the role of Zn^{2+} in shaping cellular Ca^{2+} responses in cardiac muscle. My research has shown that dysregulated Zn^{2+} homeostasis alters the function of intracellular Ca^{2+} release channels, resulting in diastolic Ca^{2+} leak, which underpins the pathology of heart failure and the generation of fatal arrhythmias. I run a multidisciplinary research laboratory combining specialist electrophysiological techniques with molecular biology and cardiac live cell imaging. By exploring new mechanisms involved in regulating intracellular Ca^{2+} release channels in cardiac tissue, the aim of my research is to uncover potential therapeutic targets in the fight against the failing heart. Being part of the ISZB has helped shape my research and connected me with zinc experts around the globe.

[Pitt lab website](#)

ISZB statement:

I am honoured to be nominated by several colleagues to be considered as a candidate for president-elect. I have been an active participant within the ISZB community since 2014. I have participated in all ISZB meetings and from 2019, I have served the ISZB as a board member. The importance of zinc in biological systems is gaining traction, and it really is an exciting time to be working in this emerging field.

My vision for ISZB is to:

Connect our community by increasing the number of members, especially early career researchers.

Help zinc biology flourish by raising the profile of ISZB and advocating for the interests of our Members.

Fundraise for the Society by further engagement with industry to help reduce participant fees and increase the number of prizes and travel grants.

Ensure ISZB meets the needs of the next generation of zinc biologists.

Promote diversity and ensure true equality and inclusion.