

**About our guest****Beth Webb, PhD**Post-Doctoral Research Fellow
University of LeedsSPEAKING OF
MOL BIO

No nucleus, no problem—platelet biology and scientific communication

Season 3, Episode 13

Episode notes

In this episode of Speaking of Mol Bio, Dr. Beth Webb takes us deep into the world of platelets, often misunderstood components of blood that punch far above their weight in both physiological and pathological processes. As a postdoctoral researcher at the University of Leeds, Dr. Webb explores how endothelial signals influence platelet activity, and how these anucleate cell fragments play roles not only in clotting, but also in immune responses, inflammation, and diseases like cardiovascular disorders and COVID-19.

Beth unpacks the technical challenges of isolating and analyzing platelets—particularly in RNA sequencing and qPCR—while stressing the importance of sample purity and the presence of platelet subpopulations. The conversation also touches on the hope of personalized medicine through platelet-based diagnostics and tailored antiplatelet therapies.

Beyond the lab, Dr. Webb is an active science communicator, sharing tips on engaging broader audiences through social media, blogs, and video. She emphasizes the importance of resilience, creativity, and starting small when communicating science. Whether you're a cell biologist, a hematology enthusiast, or a fellow communicator, this episode offers something for everyone.

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Beth's recent publications

1. Sagar RC, Yates DM, Pearson SM, Kietsiriroje N, Hindle MS, Cheah LT, Webb BA, Aijjan RA, Naseem KM. [Insulin resistance in type 1 diabetes is a key modulator of platelet hyperreactivity](#). Diabetologia. 2025 Apr 30. doi: 10.1007/s00125-025-06429-z
2. Xu RG, Tiede C, Calabrese AN, Cheah LT, Adams TL, Gauer JS, Hindle MS, Webb BA, Yates DM, Slater A, Duval C, Naseem KM, Herr AB, Tomlinson DC, Watson SP, Ariëns RAS. [Affimer reagents as tool molecules to modulate platelet GPVI-ligand interactions and specifically bind GPVI dimer](#). Blood Adv. 2024 Aug 13;8(15):3917-3928. doi: 10.1182/bloodadvances.2024012689

“The interesting thing about platelets is that they don't have a nucleus, which is kind of like the brain of a cell, but they behave like a cell. I liken them to the jellyfish in the sea that they respond to different stimuli, but they don't necessarily have the brain that's controlling them.”