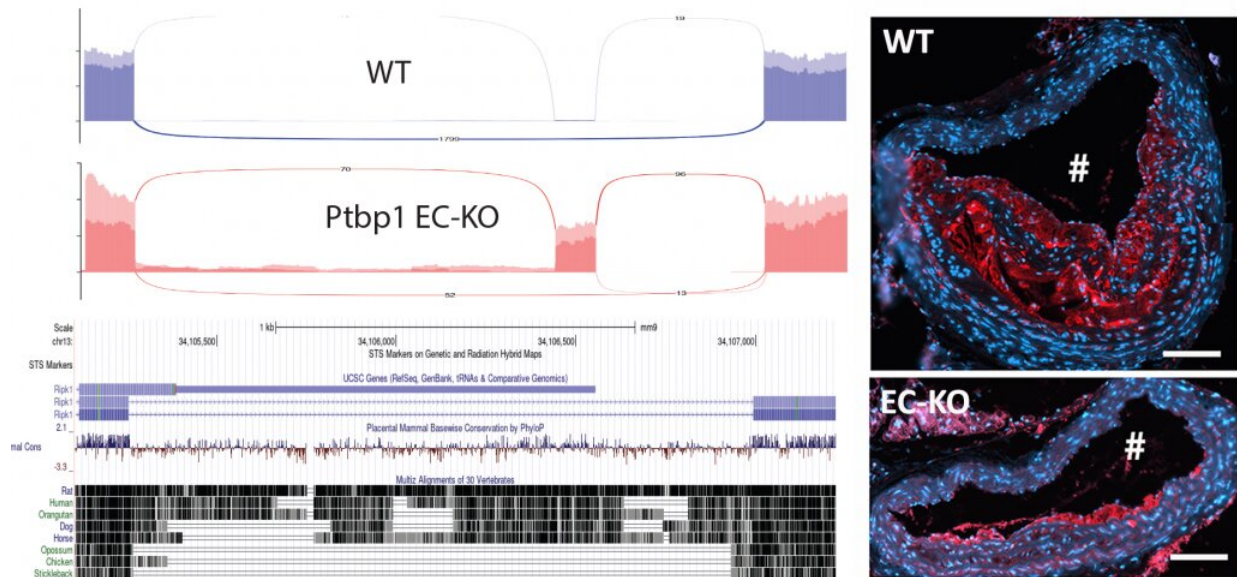


Removing protein makes non-stick arteries

August 9 2022, by Kim Krieger



Credit: Patrick Murphy

Stray platelets from our blood can stick to the linings of our blood vessels, eventually causing clogs, heart attacks and strokes. But platelets make poor targets for heart disease drugs; making platelets less prone to clogs makes the owner of the platelets more prone to bleeding and infections.

Now, a team of UConn School of Medicine immunologists led by Patrick Murphy and members of the ImmunoCardiovascular Group, Anthony Vella and Annabelle Rodriguez, show that the lining of blood

vessels is a much better drug target. They report in the 18 July issue of *PNAS* that removing a [specific protein](#), Ptbp1, prevents the lining from becoming sticky and inflamed and forming the plaques of platelets linked to [heart attack](#) and stroke.

The image shows that the arteries of mice that do not express Ptbp1 (bottom) have much less plaque (red) than the arteries of typical mice (top). The researchers plan to continue examining how proteins affect [platelets](#) in the blood vessel lining, and how this in turn affects cardiovascular and neurodegenerative disease.

More information: Jessica A. Hensel et al, Splice factor polypyrimidine tract-binding protein 1 (Ptbp1) primes endothelial inflammation in atherogenic disturbed flow conditions, *Proceedings of the National Academy of Sciences* (2022). [DOI: 10.1073/pnas.2122227119](#)

Provided by University of Connecticut

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