

**P009** Directed evolution of PETN reductase to improve utility as a REDOX biocatalyst

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Biocatalysts have great potential in the synthesis of chiral chemical intermediates. However, in nature it is rare to find enzymes that combine the desired substrate and stereochemical profile with the desired catalytic efficiency. The aim of this project is to explore the potential of PETN reductase as a stereoselective biocatalyst for a variety of REDOX reactions using directed evolution approaches allied to a powerful colorimetric robotic screen.