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ASIA EDITION

Australia launches new GPCR biotech firm with AUD$140 M in financing

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Septerna has developed a proprietary technology- the GPCR Native Complex Platform



Two researchers from the Monash Institute of Pharmaceutical Sciences (MIPS) in Australia are amongst the co-founders of a new biotechnology company dedicated to discovering and advancing novel small molecule medicines targeting G protein-coupled receptors (GPCRs).

Professor Arthur Christopoulos, Dean of the Faculty of Pharmacy and Pharmaceutical Sciences, and Professor Patrick Sexton, Director of the ARC Centre for Cryo-electron Microscopy of Membrane Proteins, join Nobel laureate, Professor Robert Lefkowitz, from Duke University, as scientific founders of Septerna Inc., which has attracted $100 million (AUD$140 million) Series A financing. Associate Professor Denise Wootten from MIPS will join the team of Scientific Advisors for Septerna.

GPCRs are the largest and most diverse family of cell membrane receptors. They have been widely studied as drug targets and are the largest family of proteins targeted by approved drug products. An estimated 700 approved drugs target GPCRs, representing approximately one-third of all currently approved drugs. However, despite the success of GPCRs as a drug class to date, the large majority of potential therapeutic GPCR targets remain undrugged. The complexity and transmembrane nature of GPCRs have made them difficult to isolate outside of the cell and inaccessible to modern small molecule drug discovery approaches.

Septerna has developed a proprietary technology, the GPCR Native Complex^{TM} Platform, to overcome historic challenges involved in reaching the vast untapped potential of GPCR drug targets for a wide range of diseases. The Native Complex™ platform recapitulates GPCRs with their native structure, function, and dynamics outside of the cellular environment. This enables industrial-scale drug discovery using novel screening technologies and structure-based drug design for the first time.