

Culturon-Bringing simple covalent biomolecule attachment to well plates to the world

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Biomedical and life science researchers worldwide are struggling to manufacture surfaces that rapidly and strongly bind to functional biomolecules, such as proteins, nucleic acid, carbohydrates and lipids, to generate new diagnostic tools and improve substrates for cell culture. Culturon has broken through this barrier to progress by commercialising plasma-activated coatings (PAC) of multiwell plates such as cell culture and ELISA plates. This technology, developed by Prof Marcela Bilek and colleagues at the University of Sydney, generates a nanometres-thin coating on the bottom of the polystyrene well plates that allows for simple, rapid, reagent-free covalent attachment of biomolecules to surfaces while maintaining function and in some cases enhancing protein stability. Culturon® PAC-plates improve human iPSC differentiation into cardiomyocytes by covalently binding and stabilising laminin isoforms to the plate surface. Culturon® plates can also improve binding of antigens to the surface of ELISA plates. Dr Stuart Fraser is Founder, CEO and CSO of Culturon and will describe not only how this game-changing technology can improve scientific research and product development, but will also discuss his transition from an academic position to starting in a biotechnology company under challenging economic settings.