Extracellular vesicles

Researching the potential of extracellular vesicles (EVs), from basic biology to medical use.

Extracellular vesicles are small (50-1000nm), membrane-enclosed vesicles released by cells. They are categorised by the way they form and include exosomes, microvesicles, and apoptotic bodies. EVs can carry ‘cargo’ such as proteins, RNA molecules, lipids, metabolites, and even DNA – opening up exciting potential for therapeutic and other applications.

Oxford Brookes hosts a vibrant and active team researching EVs. Areas of research include EV uptake and release of their ‘cargo’, identifying proteins that regulate EV biogenesis, how cells respond to stress using EVs to communicate and co-ordinate a tissue-wide response, the role of EVs in cancer drug resistance and metastasis, and the potential of EVs as biomarkers.

The EV research team is open to collaboration, and can provide consultancy and general advice on EVs, and the commercial application of this research.

For more information about the research or to discuss collaborations, investment or consultancy, contact Dave Carter: dcarter@brookes.ac.uk, @DaveCarter1234

About the project:
- The EV research field is young but growing rapidly.
- The Oxford Brookes team are researching the role of EVs during stress response, their routes of cellular uptake, and their value as biomarkers of disease.
- The team is actively exploring commercial applications and opportunities.