

Formulation and drug delivery research theme

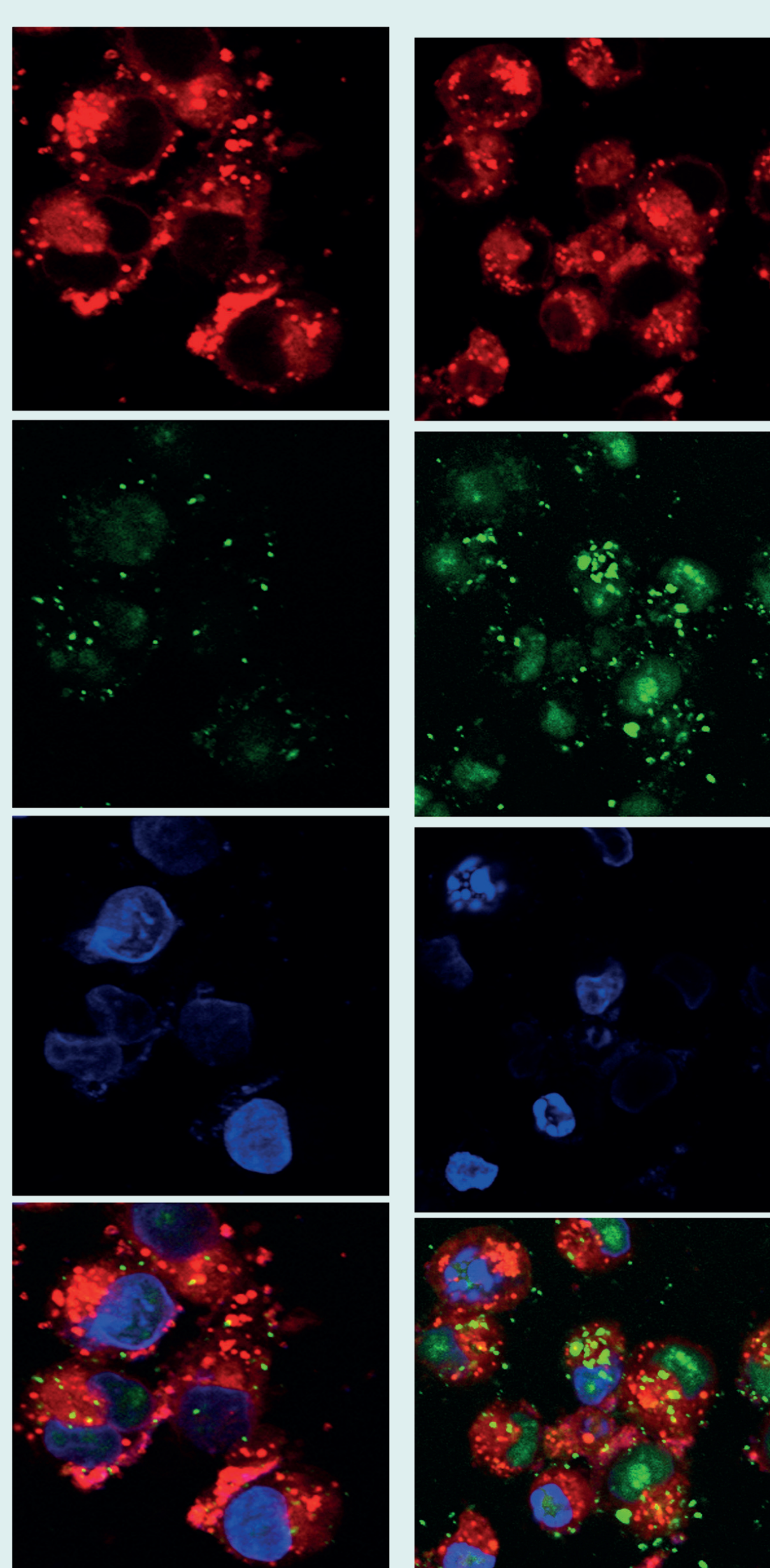
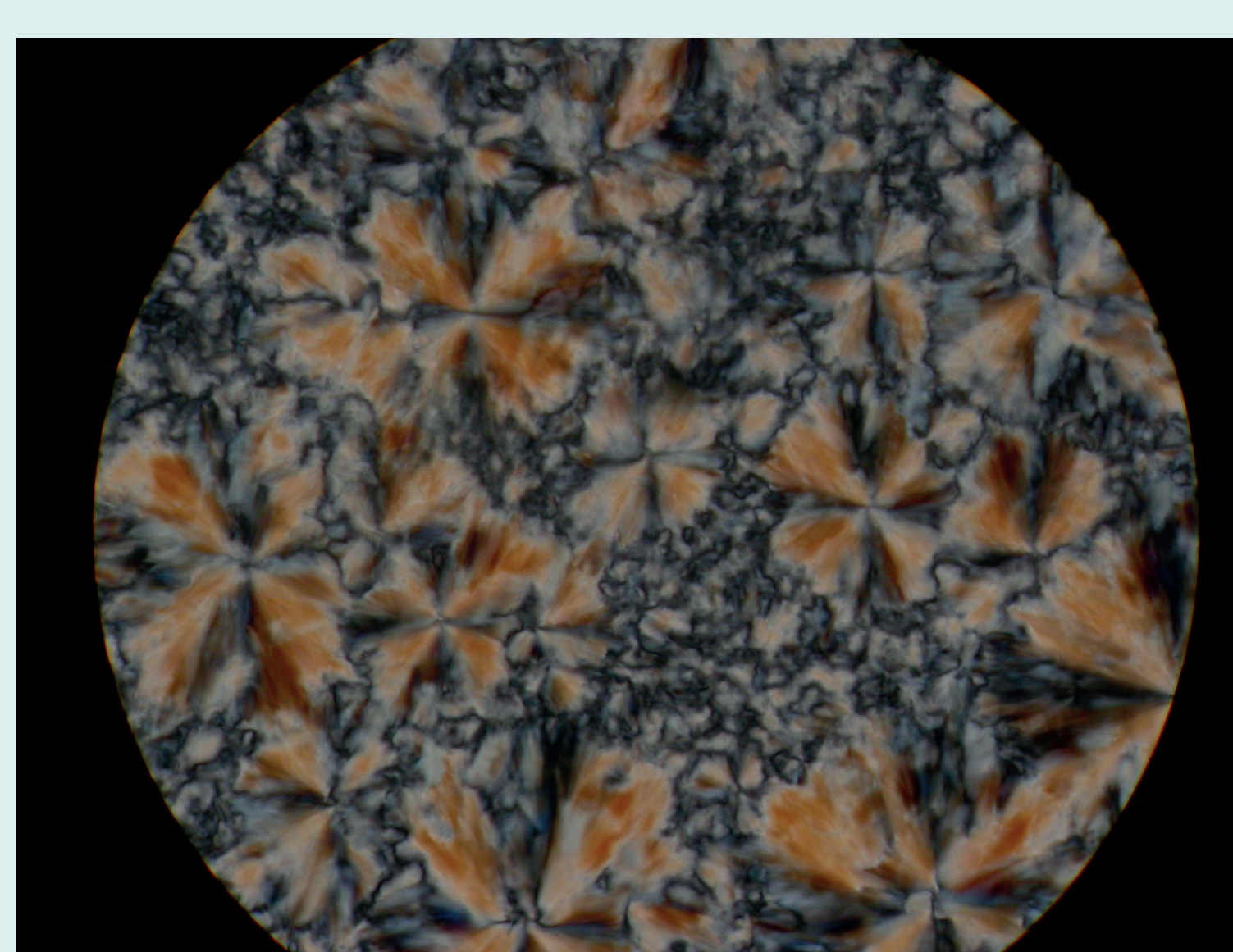
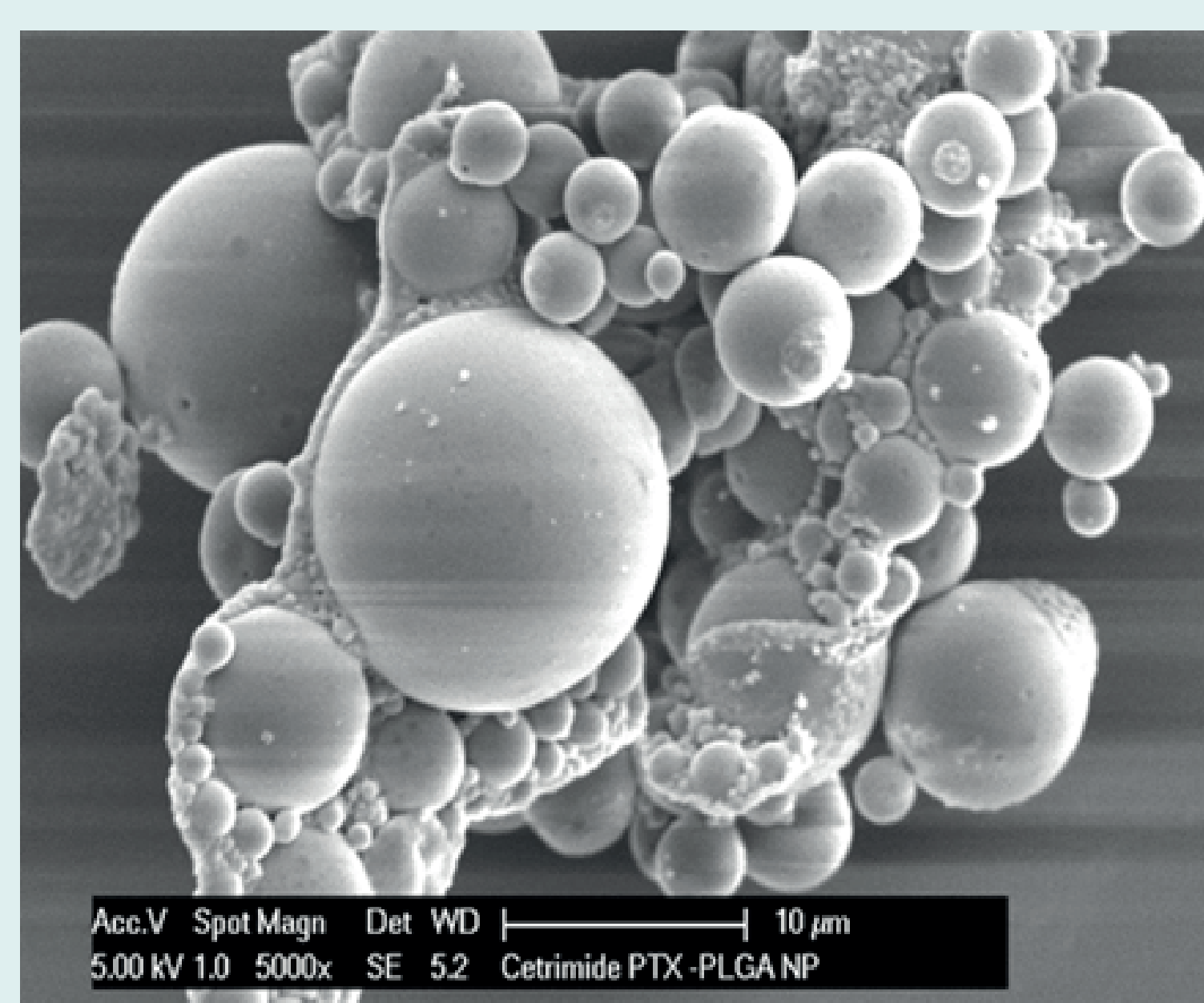
School of Pharmacy, the University of Auckland, Auckland, New Zealand

Aim

To improve the therapeutic effectiveness of bioactives through the development of fit-for-purpose formulations.

Representative areas

1. Targeting chemotherapeutics direct to tumours using nano-sized carriers to increase effect and reduce side effects.
2. Using drug delivery science to overcome hurdles in the drug discovery pipeline, including poor solubility, poor bioavailability, non-specificity and rapid metabolism.
3. Developing implantable delivery systems which can release a drug over days to months and localise treatment to desired sites in the body.
4. Using cutting-edge delivery technologies to deliver drugs across the blood brain barrier (BBB).
5. Provision of services to commercial partners, developing custom carrier systems for cosmetic and nutraceutical science industries.



A/Professor Jingyuan Wen

A/Professor Jingyuan Wen is the theme leader and an expert in enhancing drug bioavailability, drug targeting across gastrointestinal tract, blood brain barrier and skin barriers using advanced technology and delivery systems.

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A/Professor Zimei Wu

A/Professor Zimei Wu's research focuses on design of functionalised liposomes for 'intracellular delivery' in cancer therapy and understanding their cellular trafficking process. She also researches strategies for transdermal delivery.

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A/Professor Darren Svirskis

A/Professor Darren Svirskis's research uses implantable biomaterials and drug releasing platforms applied to neural interfaces, and for postoperative applications.

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Dr Manisha Sharma

Dr Manisha Sharma has research interests in the polymeric implantable and stimuli-responsive drug delivery systems. Her research interest also lies in developing analytical methods for diagnostic application.

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Dr Sara Hanning

Dr Sara Hanning's research interests remain at the interface between pharmaceuticals and clinical practice, with a focus on the development of safe and effective dosage forms for children.

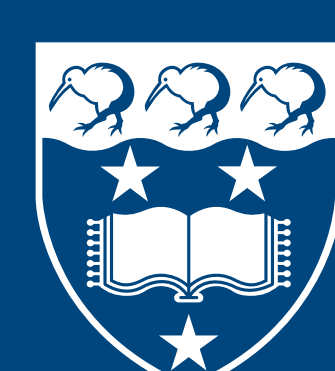
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Dr Sachin Thakur

Dr Sachin Thakur's research focuses on developing and evaluating lipid-based and polymeric nanoformulations and gel systems. He is particularly interested in investigating how drug delivery from these systems can be controlled using external stimuli such as ultrasound.

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