

CASE STUDY:

# FLOW CYTOMETRY



**CORE TECHNOLOGIES**  
at UCD Conway Institute

## Research Question

Can we make sensitive and quantitative measurements of intracellular calcium release in transfected cells?

## Our Approach

We wanted to characterise the effects of a regulator of G-protein signalling on the release of calcium from intracellular stores. For this, measurements of thrombin induced calcium release needed to be established in HEK293 cells. Importantly, calcium measurements had to be combined with the sensitive detection and selection of transfected cells.

## Resulting Publication

*Gegenbauer et al. Regulator of G-protein signalling 18 integrates activating and inhibitory signalling in platelets. Prepublished online as Blood First Edition paper, Jan 10 2012; DOI 10.1182/blood-2011-11-390369*

'The flow cytometry core has been very helpful in all aspects of the project, including the experimental setup, optimisation of measurements and data evaluation. This support has led to the successful generation of very clear and important new data.'

**Dr Albert Smolenski**  
UCD

