Research Interests

My main research areas are in haemato-oncology: B-cell malignancies, the B-cell receptor and intracellular signalling.

I study the role of **B-cell receptor** (BCR) in the development of B-cell malignancies.
The immunoglobulin (Ig) – the main component of BCR – is a key molecule for B-cells. Individually constructed during specific genetic changes, this receptor is "designed" to recognise a specific antigen.
The status of the Ig genes allows us to reveal a **clonal history** of a B-cell. For B-cell malignancies, this presents an opportunity to track down a cell of origin.

My research group focuses on:

- The role of B-cell receptor in the development of B-cell malignancies.
- The targeting of B-cell receptor signalling in treatment of B-cell malignancies.

Major Funders

• Higher Education Funding Council for England

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Recent Publications

- Coelho V, **Krysov S**, Steele A, Sanchez Hidalgo M, Johnson PW, Chana PS, Packham G, Stevenson FK, Forconi F. Identification in CLL of circulating intraclonal subgroups with varying B-cell receptor expression and function. *Blood*. 2013;122(15):2664-72

- **Krysov S**, Dias S, Paterson A, Mockridge CI, Potter KN, Smith KA, Ashton-Key M, Stevenson FK, Packham G. Surface IgM stimulation induces MEK1/2-dependent MYC expression in chronic lymphocytic leukemia cells. *Blood*. 2012;119(1):170-9.

- Paterson A, Mockridge CI, Adams JE, **Krysov S**, Potter K, Cook SJ, Stevenson FK, Packham G. Mechanisms and clinical significance of BIM phosphorylation in chronic lymphocytic leukaemia. *Blood*. 2012;119(7):1726-36.

- Stevenson FK, **Krysov S**, Davies AJ, Steele AJ, Packham G. B-cell receptor signaling in chronic lymphocytic leukemia. *Blood*. 2011;118(16):4313-20.

- Coelho V, **Krysov S**, Ghaemmaghami AM, Emara M, Potter KN, Johnson P, Packham G, Pomares LM, Stevenson FK. Aberrant glycosylation of surface Ig of human follicular lymphoma creates a functional bridge to lectins of innate immunity. *PNAS*, 2010;107(43):18587-92.

- **Krysov S**, Potter K, Mockridge CI, Coelho V, Packham G, Stevenson FK. Surface IgM of chronic lymphocytic leukaemia cells displays unusual glycans indicative of engagement of antigen *in vivo. Blood.* 2010;115(21):4198-205.