Dr Georg Ramm
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Cancer Program

Selected significant publications:


Our lab is focused on the regulation of autophagy, a major intracellular degradation process. In cancer, autophagy plays complex roles and can suppress tumours, but also helps tumour cells survive in other cases. Autophagy delivers cellular and cytoplasmic structures to the lysosome, where they are degraded. This process is tightly linked to cellular metabolism and is an evolutionary conserved survival mechanism that helps cells cope with nutrient starvation. We have recently discovered a link between metabolic control and the Serine/Threonine kinase ULK1, a key regulator of autophagy. We aim to develop a detailed understanding of how these regulatory networks are causing changes in intracellular membrane trafficking during autophagy.

Research Projects

1. High-resolution imaging of the mitophagy pathway

2. Autophagy and Cancer