Guillaume Chanfreau

Specific and timely regulation of gene expression is essential to the processes of cell differentiation, development and is often perturbed during pathological processes. A precise regulation of gene expression requires the integrated coordination of transcription and post-transcriptional processes to ensure that genes are properly expressed in time and space. Our research group focuses on using systems-wide approaches to understand how transcription and post-transcriptional processes are integrated to tightly control the expression of eukaryotic genes. By analyzing gene expression using a combination of original genome-wide approaches, we have discovered novel pathways that ensure the quality control of gene expression and uncovered how RNA degradation eliminate aberrant RNA species that are generated by errors made by the gene expression machinery.

Margot Quinlan

We are using biochemistry, microscopy and genetic approaches to study dynamics of the actin cytoskeleton. We are currently focusing on Spire and Cappuccino, two proteins that collaborate to build an actin network essential for early body axis development in Drosophila. Combining an in vitro understanding of the mechanism of Spir and Capu with in vivo studies of oogenesis will provide insight into how the actin cytoskeleton is regulated and a broader understanding of cell polarity.

Friday, November 9, 2018
3440 Molecular Sciences
3:30 pm

Please contact Marla Gonzalez, marla@chem.ucla.edu, x57071 for additional information.