In our laboratory we study the mechanisms controlling cell division and chromosome segregation in human tissue culture cells. Our aim is to understand how cells build up a mitotic spindle, control chromosome movements and ensure faithful chromosome segregation. In parallel we analyze how these mechanisms are deregulated in cancer cells leading to chromosome gain or loss (aneuploidy), with the aim to identify new anti-cancer targets. Our methodology combines quantitative high-resolution light microscopy, cell biology, genetic (RNAi, CRISPR/Cas9) and chemical perturbations as well as biochemistry. We are looking for motivated biology master students; the current project aims to understand the forces and the proteins that ensure that the chromosomes are placed in the middle of the mitotic spindle. Interested students should contact:

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For more information we recommend the following reading list:
