



Two undergraduate student positions are available at the University of Rome Tor Vergata to study DNA recombination in meiotic cells and germ cell tumors. The aims of the research are to study

1) the post translational modifications of the protein SPO11 required in meiosis for double strand breaks formation and crossover formation. The project aim is to elucidate the coordination between cell cycle progression and programmed double strand breaks formation in mouse meiotic germ cells. Candidates are request to work with several knockout mice model available in the laboratory.

2) analyze the role of ATM/ATR kinases during meiotic recombination in mammals. ATM/ATR kinases are well known regulators of DNA damage response in mitotic cells. These proteins play an important function also during meiotic recombination; however the molecular mechanisms at the base of their functions are not clear. The aim of this project is to study ATM/ATR targets in mammalian meiotic cells

3) study DNA recombination pathways efficiency in cancer testis cell lines. This project will require the candidate work with cell lines and Flow Cytometry.

Applicants are invited to contact DR. MARCO BARCHI
University of Rome TOR VERGATA,
Via montpelier n.1 00133, Rome, Italy.

Tel. +39 06 72596266

Email: marco.barchi@uniroma2.it