



Post-doctoral research opportunity in human cell (cycle) biology

The **De Wulf laboratory** at **Trento University** (Trento, Italy), Department of Cellular, Computational and Integrative Biology (CIBIO) is seeking one highly motivated **post-doctoral researcher** with a strong background **in human cell and molecular biology** to study the role of a new cell cycle kinase/ATPase that regulates chromosome segregation during mitosis. The research is funded by a 3-year European project. This study builds on recent findings published by the lab; Iacovella MG *et al.* (2015), Nature Communications (PMID:25851096), Iacovella MG *et al.* (2018), Nucleic Acids Research (PMID:30011030).

The post-doctoral researcher is sought to dissect the biology of this kinase/ATPase during cell cycle progression (identification of mitotic and chromosome-segregation phenotypes) but also to identify hitherto unknown contributions to whole-cell biology. The scientist is further expected to develop inter- and intra-laboratory collaborations, and to present/publish obtained findings in high-impact scientific conferences and journals.

Requested qualifications of the post-doctoral candidate

- Ph.D. in human cellular and molecular biology, genetics, biochemistry or related disciplines
- Is within five years after obtaining his/her Ph.D. degree
- Additional experiences with live-cell fluorescence imaging, cell cycle studies, global biological analyses (RNA-Seq, ChIP-Seq, protein purifications, and proteomics), *in vitro* protein assays, etc. are a bonus
- Excellent oral and written communication skills
- Has at least 1 first-name authorship and a few co-authorships in peer-reviewed international journals

To apply, please submit a single PDF file containing a statement of your research interest and motivation to join the lab, your CV, representative publications, and contact information of three referees to Peter De Wulf (peter.dewulf@unit.it). The email address can also be used to request additional information about the project. Application deadline is March 31, 2019.

The De Wulf laboratory

The Chromosome Segregation Laboratory directed by Prof. Peter De Wulf studies conserved protein activities that ensure faithful chromosome segregation during mitosis in budding yeast (*Saccharomyces cerevisiae*) and human cells. Specific attention currently goes to an essential and conserved kinase/ATPase that is overexpressed in most cancers. We study how it regulates chromosome segregation at the centromere and kinetochore levels. Also, we also wish to map its activities on a global scale, to understand better how its misexpression and dysregulated activity promotes tumorigenesis and metastasis. In the long term, we wish to establish the enzyme as a novel biomarker and cancer drug target. The laboratory collaborates with leading research groups from around the world. Website: <https://www.cibio.unitn.it/510/laboratory-of-chromosome-segregation-biology>

The University of Trento and the Department of Cellular, Computational and Integrative Biology (CIBIO)

The University of Trento (<https://www.unitn.it/>) ranks first among all Italian state universities. Its biotechnology program at CIBIO is also the most selective (1:10 student entry success rate).

The CIBIO department (<https://www.cibio.unitn.it/>) was founded in 2008 and houses 35 groups that study a most broad spectrum of biological activities (from origin-of-life studies to immunology, virology and microbiology, aging, cell cycle regulation, genetics and genetic disease, neurobiological research, cancer biology and treatment, genomics studies, etc.). CIBIO's research environment is international (faculty and students), and the day-to-day language is English. CIBIO's infrastructure provides cutting-edge facilities for internal use but is also accessible to external institutions and private corporations. They include state-of-the-art next-generation sequencing, advanced imaging, high-throughput compound screening setups, proteomics, biological model systems (*zebrafish*, *Drosophila*, mice, yeast), cell technology and bioinformatics services, etc.. Their availability is a unique asset for any Italian university center and translates into outstanding scientific achievements, as evidenced by CIBIO's high-quality publications.

The City of Trento

Trento is a beautiful town (~120,000 inhabitants) that lies near the Dolomites (UNESCO world heritage site). It is surrounded by spectacular nature (hills, mountains and many lakes, including Lago di Garda) and lies near the beautiful historic cities of Bolzano, Verona, and Venice as well as near world-famous ski resorts (Madonna del Campiglio, etc.). Trento can easily be reached by plane (Verona Airport lies at 50 minutes by car) and train. Trento has a vibrant University city life and ranks on top of Italian cities for quality of life, standard of living, high-quality school systems, business and job opportunities. The city and its surroundings allow for many sports events and activities including running, hiking, skiing, mounting biking, mountain climbing, swimming, windsurfing, sailing, canoeing, rafting, paragliding, etc. The city offers many restaurants and nightlife venues, and is known for its excellent cuisine and locally produced wines and beers. For more information, please visit <https://www.visittrentino.info/en>, <https://www.discovertrento.it/en/home>