



**UNIVERSITÀ  
DI TORINO**

Dipartimento  
Biotecnologie Molecolari  
e Scienze per la Salute



## Course for PhD students

### *Tools to Study Splicing Dysregulation in Cancer and Neurodegenerative Diseases*

June 8, 14-17, Aristotele hall: Molecular mechanisms of splicing dysregulation

June 9, 14-17, Mendel hall: Practical tools and methods for investigating splicing dysregulation

#### by Matteo Ruggiu

Associate Professor, St. John's University, Department of Biological Sciences, Queens, NY; Visiting Professor at the Department of Molecular Biotechnology and Health Science of UniTO

#### Summary

In metazoans, alternative splicing plays a crucial role in regulating post-transcriptional gene expression, contributing to organismal complexity. Dysregulation of splicing, caused by mutations in cis-acting elements or trans-acting factors, is a key contributor to the pathology of various human diseases.

This course provides students with a comprehensive understanding of the molecular biology of diseases that affect post-transcriptional RNA processing. Through lectures, presentations, and tutorials, students will gain mechanistic insights into the practical use of tools and methods for studying splicing dysregulation in cancer and neurodegenerative diseases.

#### Objectives

Equip students with knowledge about the molecular mechanisms of splicing dysregulation. Teach students practical tools and methods for investigating splicing dysregulation.

The course is open to all cycles PhD students from the Molecular Medicine and Biomedical Science and Oncology Doctorate Schools, as well as to graduate students in Molecular Biotechnology.

If interested to meet with Prof. Ruggiu, please contact Prof. Roberto Piva ([roberto.piva@unito.it](mailto:roberto.piva@unito.it)) to set up a schedule.



#### Università degli Studi di Torino

Dipartimento di Biotecnologie Molecolari e Scienze per la Salute

Direttore: Prof. Francesco Novelli

Vice-Direttrice Didattica e Vicaria Prof.ssa Marina Marchisio – Vice Direttore Ricerca Prof. Paolo E. Porporato

Sede Dipartimento: Via Nizza 52, 10126 Torino – C.F. 80088230018 – P.IVA IT02099550010

E-mail: [direzione.biotec@unito.it](mailto:direzione.biotec@unito.it) – PEC: [biotecnologie@pec.unito.it](mailto:biotecnologie@pec.unito.it)