



UNIVERSITÀ  
DI SIENA  
1240

DIPARTIMENTO DI  
MEDICINA MOLECOLARE  
E DELLO SVILUPPO  
— DMMS

# PhD program in Molecular Medicine

*PhD Day*

Firenze, January 29, 2026

09:00-17:30

Aula Magna

Padiglione 6 (ex presidenza di Medicina)

[Largo Brambilla 3, 50134 Firenze](#)

## IMPORTANT NOTES FOR THE DAY

- Third-year PhD candidates will present their work through an oral presentation
- Second-year PhD candidates will present their work via a poster presentation
- First-year PhD candidates will introduce themselves to the Board and to their colleagues through a flash talk, outlining the research topics they will develop

*Oral and poster presentations, and flash talks will be held in English*

1. *Oral presentations by PhD students of the 39<sup>th</sup> cycle should not exceed 10 minutes to allow at least 5 minutes for discussion. Speakers are requested to upload their presentation before the start of the first oral session (09:00-09:45)*
2. *PhD students of the 40<sup>th</sup> cycle are free to choose their preferred poster dimensions. However, a vertical orientation is recommended, with a size not exceeding 140 cm in height and 90 cm in width (suggested 100 x 80).*
3. *PhD students of the 41<sup>st</sup> cycle, in their dedicated session, will have max 3 minutes each to briefly present their research projects. They may use a maximum of 2 slides.*
4. *PhD students of the 40<sup>th</sup> and 41<sup>st</sup> cycle will evaluate the oral presentations of their peers, assigning three different scores for "clarity of presentation", "aesthetic quality of the presentation," and "answers to questions".*
5. *PhD students of the 39<sup>th</sup> and 41<sup>st</sup> cycle will evaluate the posters of their peers, assigning two different scores for "clarity of presentation" and "aesthetic quality" of the poster.*
6. *For the evaluation forms... we're getting organized... stay tuned!!!*
7. *The rankings resulting from the assessments in points 5 and 6 will determine the best oral presentation and the best poster of the PhD day 2026. Two additional awards will be granted by the Board for active participation in the discussion. Winners will be announced at the end of the day.*
8. *PhD students assigned the role of Chair, as per the program, are responsible for introducing the speakers in their relevant session and ensuring that the timing of each oral presentation and its discussion is adhered to.*

## Schedule of the day

**09:00-09:30 Arrival of participants (upload of PPTs for oral presentations)**

**09:30-09:35 Welcome and introduction to the day**

Prof. Vincenzo Sorrentino, Coordinator of the PhD program in Molecular Medicine

**09:35-10:20 Session 1 - Oral Presentations**

Chairs: Balzano Mariano, Girolamo Francesca

**Vitale Claudia (UniFI)**

In vitro chemo- and optogenetic studies for the development of innovative therapies aimed at the treatment of Obstructive Sleep Apnea (OSA)

**Malerba Chiara (UniSI)**

Study of the effects of ANK1 P2 promoter deletion in skeletal muscle

**Di Marsico Lorenza (UniPI) (online from Stockholm)**

β3-Adrenergic Signaling in Retinal Stress Responses: Evidence from the Oxygen-Induced Retinopathy Model

**10:20-11:05 Session 2 - Oral Presentations**

Chairs: Renna Giorgia Maria, Vitale Claudia

**Trovini Giada (UniSI)**

Evaluation of the effectiveness of Methylphenidate treatment on emotional dysregulation in patients with ADHD comorbid with Borderline Personality Disorder

**Pranzo Carlotta (UniSI)**

Loss of CCDC78 impairs muscle force in a knockout mouse model

**Parri Giulia (UniPI)**

Genetic and epigenetic alterations in bone marrow aspirates and peripheral blood of multiple myeloma patients: identifying precursor markers

**11:05 -11:30 Coffee break (poster installation)**

## 11:30-12:15 Session 3 - Oral Presentations

Chairs: Trovini Giada, Pranzo Carlotta

**Mori Sara (UniPI)**

**CRISPR-Based Targeting of the NRAS Q61R Mutation in RAS-Driven Tumors**

**Allegro Giada (UniFI) (online from Montpellier)**

**From rare to common arrhythmias: a potential role for miR-182**

**Girolamo Francesca (UniSI)**

**Male infertility: genetic factors and lifestyle. Effects of endocrine-disrupting chemicals (EDCs)**

## 12:15-13:15 Session 4 - Oral Presentations

Chairs: Parri Giulia, Mori Sara

**Balzano Mariano (UniFI)**

**Passive and active mechanical properties of titin studied in fast and slow skinned muscle fibres of rabbit upon inhibition of myosin motors**

**Liguori Laura (UniSI)**

**Caffeic Acid Supplementation to Human Semen: Effects on Oxidative Stress, Sperm Motility, DNA Integrity, Acrosomal Status and Nrf2 Molecular Pathway**

**Ricciardi Chiara (UniSI)**

**Optimization and application of an AAV-based gene delivery approach for the overexpression of miR-486 in mouse models of RYR1-related myopathies**

**Renna Giorgia Maria (UniSI)**

**Endoplasmic Reticulum oxidoreductin 1 (ERO1) as a key driver of mult-minicore myopathy**

## 13:15 -13:45 Meeting of the Faculty Board

## 13:45 -14:30 Light Lunch

## 14:30-15:30 Session 5 - Poster Presentations

**P1 Bardotti Massimo (UniSI) (currently in Bellinzona; not for award)**

Hypoxia-driven metabolic remodeling in human dendritic cells

**P2 Cantini Pietro (UniFI)**

Genetic Characterization of Bicuspid Aortic Valve

**P3 Katsigiannis Theodoros (UniSI)**

Sex-specific neuroimmune responses elicited by early stress exposure in MAO-A hypomorphic mice

**P4 Lombardi Martina (UniSI)**

Analysis of differentially expressed genes in a mouse model of Central Core Disease

**P5 Magrini Martina (UniPI)**

Long-read sequencing approaches for mapping viral integration in pancreatic ductal adenocarcinoma

**P6 Mejia Monroy Mariela (UniFI)**

Effect of red radish sprout extract on cardiac pacemaker function

**P7 Narducci Chiara (UniSI)**

Predictors of Methylphenidate Response in Children and Adolescents with ADHD, With and Without Comorbidities

**P8 Paccagnella Melanie (UniPI)**

Preclinical In Vivo Assessment of a Novel DNA Vaccine for Melanoma

**P9 Sturlese Verduri Arianna (UniPI)**

Agonism approach to unveiling the role of Beta 3 adrenoceptor in human glioblastoma: friend or foe

**P10 Ullah Saif (UniSI)**

Study of glucose handling in the  $Ryr1^{Y524S/+}$  mouse model

## 15:30-16:15 Session 6 - Flash talks

**Chairs: Ricciardi Chiara, Liguori Laura, Malerba Chiara**

**Barhoumi Mayssa (UniSI)**

Cellular, molecular, and omics determinants of female fertility: A multiparametric translational study of oogenesis across lifespan, disease states, and environmental influences

**Barsotti Gaia (UniPI)**

Effects of drugs targeting the  $\beta$ -adrenergic system on retinal neovascularization

**Basso Francesca (UniFI)**

Relationship between genetic background and clinical phenotype in hypercholesterolemic patients

**Cappiello Laura (UniSI)**

T-Cells and Nanomedicine: characterization of the cellular uptake of metallic nanoparticles

**Costantini Eugenia (UniSI)**

Anticipating Endometriosis and Adenomyosis: New Pathways for Early Diagnosis

**Galeone Agnese (UniPI)**

Molecular crosstalk between galectin-3, calponin-3, and YAP/TAZ pathway in anaplastic thyroid carcinoma

**Giacomelli Natasha (UniFI)**

Mechanical Dysfunction and Pathogenesis of Dilated Cardiomyopathy

**Laliam Mona (UniFI)**

The role of titin in activation of mammalian skeletal muscle and the basis of myopathy caused by mutations in titin

**Leoni Elena (UniSI)**

Nrf2 molecular pathway in spermatozoa from infertile men

**Panichella Giorgia (UniFI)**

Translational research in hypertrophic cardiomyopathy: from bench to bedside

**Pardossi Simone (UniSI) (online from Barcelona)**

Effects of Bright Light Therapy on Depressive Symptoms and Sexual Dysfunction in Psychiatric Patients: Clinical and Hormonal Outcomes

**Santoriello Alessia (UniSI)**

Characterization of a CCDC78 knockout mouse model

**Yassine Mohamed (UniSI)**

Studies of recessive models of RYR1 related myopathies

**16:15-16:30 Announcement of Best Oral Presentation and Best Poster**

**16:30-17:30 General discussion and concluding remarks**

**Moderators: Chiara Ricciardi, Enrico Pierantozzi, Federica Gemignani, Giulia Parri, Mariano Balzano, Nicoletta Piroddi, Vincenzo Sorrentino**