**Coordinator**  
Professor Lucio Cocco – Department of Biomedical and Neuromotor Sciences (DIBINEM) - Via Irnerio, 48 – Bologna - lucio.cocco@unibo.it

**Website**  
http://www.dibinem.unibo.it/it/attivita-didattica/dottorato-di-ricerca/index.html

**Duration**  
3 years

**Academic year**  
2013/2014

**Programme start date**  
01/01/2014

**Programme held in**  
English (first language) - Italian

### Main Department

Department of Biomedical and Neuromotor Sciences (DIBINEM)

### Associated Unibo Departments

Department of Medical and Surgical Sciences (DIMEC)  
Department of Experimental, Diagnostic and Specialty Medicine (DIMES)

### Partner Institutions

- Policlinico Universitario S. Orsola Malpighi - Bologna  
- IRCCS Istituti Ortopedici Rizzoli - Bologna  
- Harvard Medical School, USA - Department of Systems Biology, BIDMC Division of Signal Transduction  
- Karolinska Institutet, Sweden - The Rolf Luft Research Center  
- The Ohio State University, USA - Comprehensive Cancer Center, College of Medicine and Public Health  
- University of Zurich, Switzerland - Institute of Pharmacology  
- Claude Bernard University, Lyon, France - UCBL, Faculté de Médecine  
- University of Berlin, Germany - Max Delbruck Center for Molecular Medicine, Berlin Buch  
- University of Western Ontario, London, Ontario, Canada  
- Ludwig Maximilians University Munich, Germany - Institute of Physiology  
- University of California, San Francisco, CA, U.S.A - Ernest Gallo Clinic and Research Center  
- University of Otago, Dunedin (New Zealand)  
- Oregon Health and Science University, Beaverton, Oregon, U.S.A. - Neurological Sciences Institute  
- Tsukuba Graduate School of Comprehensive Human Sciences Institute of Basic Medical Sciences, Japan

### Research topics

- Morphology and function of nuclei and chromosomes.  
- Gene regulation.  
- Morphogenesis and organogenesis differentiation.  
- Neuro-endocrine system.  
- Stem cells.  
- Biology and pathology of lymphoproliferative disorders.  
- Myeloproliferative disorders.  
- Experimental pathophysiology.  
- Neuropathology and neuropharmacology.  
- Clinical pathophysiology.  
- Medical biotechnology.  
- Biomaterials.  
- Cellular and molecular aspects of the nervous function.  
- Physiological regulation during the wake/sleep cycle.  
- Nervous correlates of sensory, motor and cognitive processes.

### Requirements and admission procedures

#### Requirements

An Italian university degree (laurea specialistica/ magistrale - 3+2 years) or pre-reform degree (vecchio ordinamento - 4 years) or an equivalent degree obtained abroad. Also applicants whose degree will be awarded no later than December 31, 2013 can participate to the selection procedures.

#### Admission procedures

- Assessment of qualifications and research project
- Oral examination

Note: The oral examination can be held only in presence of the applicant. No oral examination via Skype/webcam is allowed.

#### Mandatory documents to be enclosed with the online application (failure to comply with such requirements will result in the exclusion from the competition)

1. CV  
2. copy of Bachelor's and Master's degree, list of exams taken with grades and final mark (in Italian or English)  
3. only for those who do not hold a Master's degree when submitting the application: copy of the exams taken with grades

**For documents listed at points 2. and 3., please note that:**

- for degrees obtained in Italian Universities: upload a SIGNED self-declaration;  
- for degrees obtained in non-EU Countries: upload the degree certificate issued by the relevant University;  
- for degrees obtained in EU countries (except Italy): you can either upload a SIGNED self-declaration or the degree certificate issued by the relevant University, translated in Italian or English;  
- all documents must contain the following information: personal data, name of the University, degree name, final score, transcript (see art. 2 of the call).

4. Research project that the applicant would conduct during the PhD Programme (maximum 10.000 characters, in English). Such a project will not necessarily be the subject of the successful applicant's doctoral studies. The research project must deal with one of the Programme's Curricula: 1. Medical Biotechnology; 2. Biochemistry and Clinical Biochemistry; 3. Clinical and experimental hematology and hemapathology; 4. Applied Physiology and Pathophysiology; 5. Neurophysiology; 6. Human and molecular morphological sciences.

5. Up to 2 reference letters from university lecturers (to be sent through the procedure available at this URL: http://studenti.unibo.it)
Other documents to be enclosed, if available
- Publications in extenso
- Any other relevant document (graduation thesis, scholarships, awards, attendance of courses, participation to Erasmus or other exchange programs, documented internships, etc.)

Agenda

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<thead>
<tr>
<th>Description</th>
<th>When</th>
<th>Where</th>
<th>Time</th>
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<tbody>
<tr>
<td>Oral examination</td>
<td>15/11/2013</td>
<td>Department of Biomedical and Neuromotor Sciences - Sede Operativa Anatomia Umana, Via Irnerio, 48 Bologna</td>
<td>1 p.m.</td>
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Assessment criteria

Total score: 100/100

1. Assessment of qualifications and research project
   - minimum score required for the admission to the oral exam: 30
   - maximum score: 50
   Score is assigned as follows:
   - evaluation of the final grade (in the case of applicants who have a degree / master's degree or Master's course or graduation old system) or evaluation of marks obtained in the course of university studies (in the case of applicants not owing the degree, but will get it by December 2013): maximum score 5
   - graduation thesis: maximum score 3
   - research project: maximum score 30
   - publications in extenso: maximum score 10
   - other qualifications: maximum score 2 points
   The results of the evaluation of qualifications and research project will be published by 13/11/2013; the results will be posted on the bulletin board of the Department and on the site [http://studenti.unibo.it](http://studenti.unibo.it), restricted access by University credentials (by selecting: sintesi delle richieste in corso → vedi dettaglio → risultati prova).

2. Oral examination
   - minimum score required in order to be listed in the final ranking: 30
   - maximum score: 50
   The oral examination will focus on the explanation and discussion of the applicant’s research project. The oral examination will assess the applicant’s aptitude for scientific research, as well as her/his general knowledge about the research topics of the PhD Programme.
   The results of the oral examination will be posted on the bulletin board of the Department and on the site [http://studenti.unibo.it](http://studenti.unibo.it) (by selecting: sintesi delle richieste in corso → vedi dettaglio → risultati prova2).

The final ranking with details of winners will be published on the site [http://studenti.unibo.it](http://studenti.unibo.it), restricted access by University credentials.

Language requirements

The oral exam will be held in English.
For foreign applicants the knowledge of Italian is not required.

Positions and scholarships

Total number of positions: 18, of which:
- 7 positions with scholarship granted by University of Bologna (one scholarship is made available with funds provided in part by the Department of Biomedical and Neuromotor Sciences)
- 1 position with scholarship "Fondo Giovani 2012" granted by MIUR, committed to the Scope of Investigation 1 "Human health (study and treatment of cancer and degenerative diseases: new approaches based on knowledge of the human genome)"
- 10 positions without scholarship

Extra-quota positions: 4