



PhD in FISICA / PHYSICS - 37th cycle

THEMATIC Research Field: OPTICAL PROBES FOR BIOPHYSICS

Monthly net income of PhDscholarship (max 36 months)

€ 1300.0

In case of a change of the welfare rates during the three-year period, the amount could be modified.

Context of the research activity

Motivation and objectives of the research in this field	The aim of the project is to develop new tools for measuring observables relevant to biology, such as plasma membrane electrical and structural properties, muscle cell contraction, membrane potential.
Methods and techniques that will be developed and used to carry out the research	Experiments will be carried out on artificial membranes or cells in vitro. Steady state and time resolved, non linear techniques will be applied, such as transmission, absorption, reflection, IR, Raman, time resolved PL, pump probe, Second Harmonic Generation.
Educational objectives	To provide a background in physics, materials science and bio physics. To provide problem solving skills and teach team work. The project will be carried out within a broad interdisciplinary collaboration that involved chemists, biologists, neuroscientists and medical doctors.
Job opportunities	R&D positions in high tech companies operating in the bio medical field.
Composition of the research group	1 Full Professors 0 Associated Professors 4 Assistant Professors 3 PhD Students
Name of the research directors	Guglielmo Lanzani

Contacts

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Additional support - Financial aid per PhD student per year (gross amount)	
Housing - Foreign Students	--
Housing - Out-of-town residents (more than 80Km out of Milano)	--

Scholarship Increase for a period abroad	
Amount monthly	564.01 €
By number of months	6

Additional information: educational activity, teaching assistantship, computer availability, desk availability, any other information

Educational activities per year :

1st year: 0

2nd year: 1534 euros per student

3rd year: 1534 euros per student.

or 1022 euros per student for each year.

Teaching assistantship:

There are various forms of financial aid for activities of support to the teaching practice.

The PhD student is encouraged to take part in these activities, within the limits allowed by the regulations.

Computer and Desk availability: shared use.