

Course for PhD Students  
“HOW TO WRITE A WINNING GRANT APPLICATION”

**Instructor**

Chiara Gabbi, M.D., Ph.D.

**Description**

Writing competitive grant proposals is nowadays a fundamental task for scientists. Funded research projects are crucial to ensure scientific excellence, professional growth, as well as meritocracy.

This course is a comprehensive, hands-on, interactive overview of the fundamental concepts of grant writing. Lectures will cover the complete grant development process from researching funding sources to developing, submitting and reviewing grant proposals. The overall goal of this course is to enable each participant to develop a competitive application, step-by-step.

**Learning Outcomes**

At the end of the course, students should be able to:

- understand and apply the basic concepts of a grant application;
- develop a well structured research plan with clear and testable hypothesis, clear aims (specific objectives and long term goals), adequate background information from the literature, appropriate and feasible methodologies;
- show that the research proposal is highly innovative and significant for human health and society;
- calculate costs and set up a reasonable budget;
- find suitable national and international funding opportunities;
- understand the review process;
- develop an outreach plan for public engagement;
- draft support letters.

**Target Audience**

This course is designed for PhD students in biomedical disciplines.

**Course Structure**

The course is composed of two teaching modules:

- i. frontal lectures*: fundamental concepts of grant writing are explained and discussed in detail.
- ii. one-to-one meetings*: in individual meeting with the instructor, students will have the opportunity to be mentored on their own research projects and get suggestions on how to elaborate them into a grant proposal. Indications on possible funding agencies will also be given. One-to-one meetings are not mandatory. Students will be able to book a time for the meetings using an online platform.

## Studying Material

A syllabus will be posted online in pdf format at the end of the course.

## Language

All lectures and individual meetings will be held either in Italian or in English.

## About the Instructor

Dr. Gabbi is a Medical Doctor, specialized in Internal Medicine, PhD in Medical Science. She has experience as scientist and faculty both in Europe (Karolinska Institutet) and USA where she was Research Assistant Professor at the University of Houston and *Scholar* at Harvard Medical School.

She has been reviewer and jury member for national and international funding agencies. From 2010 to 2015 she served as a reviewer for the Italian Ministry of Health, being in 2012 *Member* and in 2013 *President* of the final Young Researcher Evaluation Committee. In 2014, Dr Gabbi was selected as *Early Career Reviewer*, at the Center for Scientific Review, NIH, USA. Since 2017 she is *Expert Reviewer* for the European Commission Horizon2020 program.

## Agenda

Time			Topic	Location
February 12, 2020	14:00	14:15	Introduction	Lecture Room CS0.4 Policlinico Modena
	14:15	14:45	<i>Funding opportunities for Young Investigators in Italy and Europe</i>	
	14:45	15:15	<i>How to develop an Irresistible idea for a grant application - The writing schedule</i>	
	15:15	15:30	Break	
	15:30	16:00	<i>Understanding the review process: writing for success</i>	
	16:00	16:45	<i>Background and Review of Literature: The Gap of Knowledge</i>	
	16:45	17:15	Discussion and conclusion of the first day	

Time			Topic	Location
February 13, 2020	9:00	9:15	Introduction	Lecture Room CS0.4 Policlinico Modena
	9:15	10:00	<i>Hypothesis and Aims of the Study</i>	
	10:00	10:45	<i>Preliminary Results - Study Design</i>	
	10:45	11:00	Break	
	11:00	11:45	<i>Power Analysis and Sample Size Calculation</i>	
	11:45	12:15	<i>Experimental Design and Methods</i>	
	12:15	13:45	Lunch	
	13:45	14:30	<i>Potential Pitfalls and Alternative Strategies - Expected Outcomes - Future Directions</i>	

	14:30	15:15	<i>Principal Investigator Profile and Team</i>	
	15:15	15:30	Break	
	15:30	16:00	<i>Facilities and Infrastructures</i>	
	16:00	16:30	Discussion and conclusion of the second day	

Time		Topic		Location
February 17, 2020	9:00	9:15	Introduction	Lecture Room CS0.3 Policlinico Modena
	9:15	10:00	<i>The budget and its Justification</i>	
	10:00	10:30	<i>The title - Abstract</i>	
	10:30	10:45	<i>Timetable – Milestones - Deliverables</i>	
	10:45	11:00	Break	
	11:00	11:45	<i>Significance - Innovation - Relevance for the National Healthcare System</i>	
	11:45	12:30	<i>Training and Tutorials – Dissemination- Letters of Support</i>	
	12:30	14:00	Lunch	
	14:00	14:15	<i>Format your grant - presubmission review</i>	
	14:15	14:45	<i>How to deal with resubmissions</i>	
	14:45	15:15	<i>You got funded! And now?</i>	
	15:15	15:45	Discussion and Final Remarks	

Time		Topic		Location
February 20, 2020	9:00	9:45	<i>One-to-one meeting 1</i>	Meeting Room "Scalera" (Physiology) Istituti Biologici
	9:45	10:30	<i>One-to-one meeting 2</i>	
	10:45	11:30	<i>One-to-one meeting 3</i>	
	11:30	12:15	<i>One-to-one meeting 4</i>	
	13:30	14:15	<i>One-to-one meeting 5</i>	
	14:15	15:00	<i>One-to-one meeting 6</i>	
	15:15	16:00	<i>One-to-one meeting 7</i>	

Time		Topic		Location
February 21, 2020	9:00	9:45	<i>One-to-one meeting 8</i>	Meeting Room 1,60 Ex Ospedale Spallanzani Reggio Emilia
	9:45	10:30	<i>One-to-one meeting 9</i>	
	10:45	11:30	<i>One-to-one meeting 10</i>	
	11:30	12:15	<i>One-to-one meeting 11</i>	
	13:30	14:15	<i>One-to-one meeting 12</i>	
	14:15	15:00	<i>One-to-one meeting 13</i>	
	15:15	16:00	<i>One-to-one meeting 14</i>	