



ALMA MATER STUDIORUM
UNIVERSITÀ DI BOLOGNA

Biologia Cellulare e Molecolare PhD Program

Communicating science: languages, narratives, and tools

Learning outcomes and Course contents

Communicating science effectively is not easy: the uncertainty that accompanies the scientific process is amplified by the apparent disagreement among experts in their interactions with the public. Communication is often superficial, as it tends to prioritize the click bait over critically analyzing and accurately reporting information. The aim of this course is to provide a thorough analysis of how science is communicated today, particularly in the biological, pharmaceutical, and biomedical fields. Students will gain knowledge about different types of audiences, how to engage with them, and which languages, narratives, and tools should be used to achieve an effective public engagement. They will assess the role and consequences of science communication in society and reflect on the responsibility of scientists when disseminating their research activities. Finally, students will gain insights into potential career opportunities in science communication.

The content of the course is:

- 1) The Construction of Scientific Consensus: From Scientific Publications to Society
- 2) Science Communication in Institutions and Universities
- 3) Cognitive bias and bubbles and their impact on science communication
- 4) Science Communication on the Web
- 5) Creating a Communication Product for the Web

Teaching methods

The course will be conducted through lectures and laboratories, preferably in presence. For students who are unable to attend in person, an online connection will be setup through Zoom or Teams. The lectures will be in English, with the exception of some presentations by external speakers who are part of Italian science communication landscape and who might present in Italian. Some lab activities and the final essay can be performed by the students either in Italian or English.

Assessment methods

Each PhD student will prepare an Instagram post, using a template provided by the Professor, in which they will describe their own research project. Among the posts created, some might be selected for publication on [Uniboper](https://www.unibo.it/uniboper), the University of Bologna outreach channel on Instagram.

How to attend

The course is aimed preferably to second and third years PhD students.

Students that are willing to attend the course should write to barbara.zambelli@unibo.it before June 25th, 2025. In the email, they should indicate if they are following the course in presence or online, and if they can speak Italian or only English. The latter will be useful to better organize lab activities.