

TEACHING BIOTECHNOLOGY IN THE LAB THROUGH FORENSIC SCIENCE

Forensic science supports traditional investigations with increasingly refined scientific techniques and methodologies in order to verify a crime or anti-social behavior. The field of forensic science is vast and multidisciplinary. The increasing demand for forensic science analysis has been correlated with the rising demand for professionals with this level of expertise.

The course is therefore aimed at showing some of the different biotechnological techniques used in forensic science in order to support teachers to design Stem activities for their students with the lab experimentation as a core. It offers an immersive training opportunity with an inquiry-based learning approach in the equipped biology and genetics laboratories of Fondazione Golinelli. The laboratory practises allow teachers to have a more accurate approach to the subject, applying modern tools and scientific investigation techniques normally used in international research centers.

Contents and training are designed by [Fondazione Golinelli](#), an Institution accredited by the Italian Ministry of Education for teachers training. It offers innovative training paths for young people and educators, interdisciplinary research and the support for new business activities. In particular Fondazione Golinelli supports Italian schools in developing the steam curriculum and it takes part in many European projects on science and digital competences.

When: Tuesday 11th June to Thursday 13th June 2024

Cost: 280€/person, including training activities and coffee breaks

Location: Bologna, Opificio Golinelli

N: min 12-max 28

Programme

Tuesday 11th June

From 10 a.m to 1 p.m and from 2 p.m to 5 p.m

- Registration and get to know workshop
- Inspection of the Crime scene: experimentation in the lab;
- How to create an escape room on a crime scene for students.

Wednesday 12th June

From 9 a.m to 1 p.m and from 2 p.m to 5 p.m

- Forensic Genetics and DNA analysis: experimentation in the lab;
- DNA analysis in a virtual laboratory (participants use an Oculus Quest 2 to experience virtual reality).

Thursday 13th June

From 9 a.m to 1 p.m and from 2 p.m to 5 p.m

- Anthropology: lecture and experimentation in the lab
- Ideation Design Workshop: discussion and ideas for creating student activities
- Conclusion