



FOOD INTOLERANCES AND GLUTEN LINKED DISORDERS

INTERNSHIP PROJECT 2017/18

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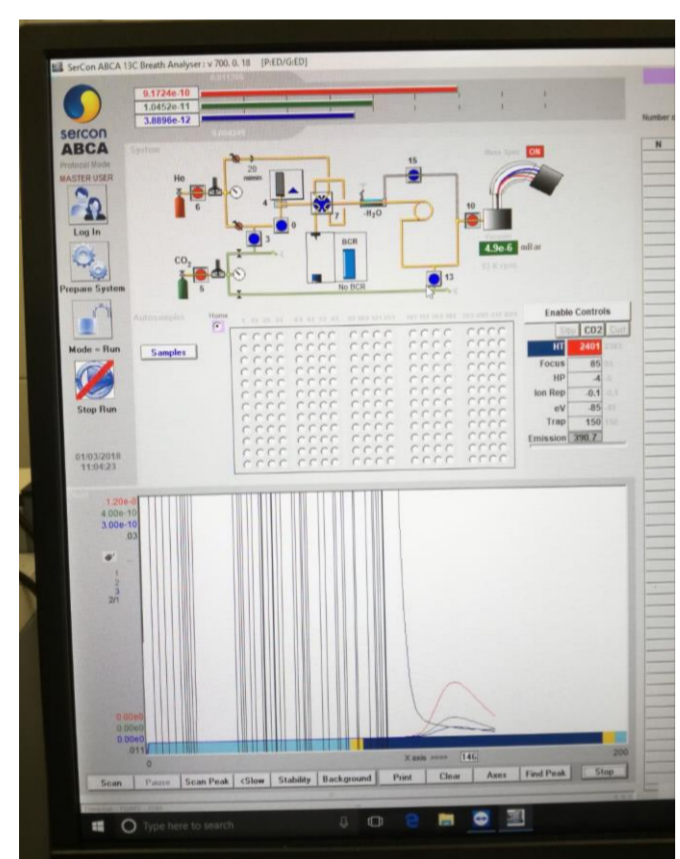
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INTRODUCTION: In the last few years gastrointestinal pathologies, in particular food intolerances and immune-mediated reactions like celiac disease, got a considerable relevance in terms of healthcare and research. So, great importance has gained the methodology to diagnose them.

AIMS: a) The study of gastrointestinal diseases and food intolerances by contemporary learning the methodology for their therapy and diagnosis. B) To integrate welfare activities with basic and translational research.



Learning objectives:

Breath test: a non-invasive analysis which allows the diagnosis of Helicobacter infection or intolerance using ^{13}C to mark the urea assumed by the patient

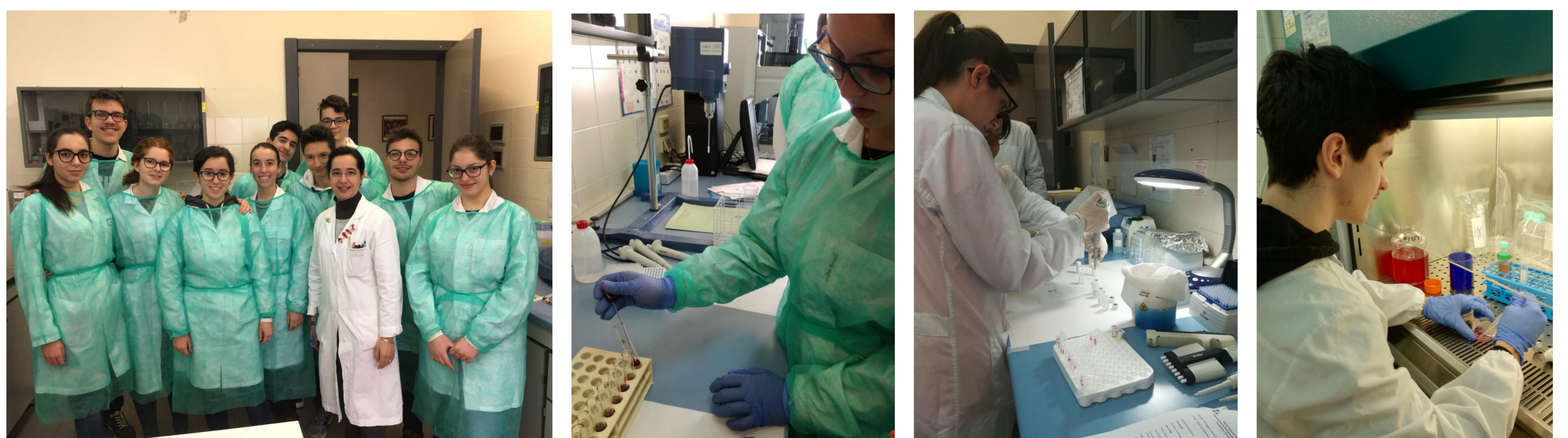
HPLC: High Pressure Liquid Chromatography that allows the division and the identification of multiple substances.

Lymphomonocitary separation: a procedure that uses "Ficoll" to divide the plasma, the lymphomonocitary ring and the «erythrocyte porridge» to study different diseases of the gastrointestinal system.

Cell cultures : Cell cultures consist of allowing the growth in a controlled artificial environment of various animal, plant or embryonic stem cells to study their behaviour following the administrations of nutrients, drugs or probiotics.

Research Methodology: Discussion on the development of the modern scientific research.

RESULTS: The results of this experience are: 1) the learning of the main research methodologies, 2) the awareness of the importance of gastrointestinal diseases related to intolerances, 3) the various phases of the translational research, 4) the value of the concept of teamship as well as 5) gaining information for our future professional choices.



STUDENTS'S COMMENTS: «We found the project very interesting and formative and this allowed us to complete it with enthusiasm. The presence of an excellent team of doctors guided us in learning important laboratory methodologies. This team let us to know a rigorous and dynamic scientific working environment based on the collaboration. We were satisfied with this experience, since we all have gained actual awareness of the functioning and the importance of the research activity.»