Project code: 2022-1-IT02-KA171-HED-000073309

Name and Surname: Nicola Sargentoni
Home Institution: University of Camerino – School of Advanced Studies
Host Institution: University of Cincinnati – Vontz Center
Type of mobility: Short-term doctoral Mobility

Description of the activities:

During the short mobility of my Erasmus+ KA171, I had the incredible opportunity to immerse myself in both academic and cultural experiences in the United States, specifically in Cincinnati, Ohio. This program allowed me to work on a highly specialized project involving lung cancer research and see for myself how the gold compounds we synthesize at my university are then applied as anti-cancer drugs. On the other side, I've had plenty of time to enjoy the American culture, to visit Cincinnati and enjoy the city life.

Academically, I worked in a highly competent research team at the University of Cincinnati, focusing on lung cancer cell lines. In the first part of this project, our group at the University of Camerino synthesized and characterized the gold complex, which was then encapsulated in a poly-lactic-co-glycolic acid (PLGA) polymer, thanks to our collaborators at the University of Ancona. At the University of Cincinnati, both the nude gold complex and the PLGA-gold nanocomposite were tested against four different lung cancer cell lines, with either mutant or non-mutant KRAS genes: two without the mutant KRAS gene (H661 and H522) and two with the mutant KRAS gene (H460 and H522-KRAS) The hands-on experience I gained from performing MTT assays, analysing data, and collaborating with experts in the field was invaluable. This allowed me to deepen my understanding of cancer biology and experimental techniques in a biological laboratory setting.

Beyond the scientific work, the Erasmus+ experience gave me the chance to explore American society and culture. Cincinnati, with its very interesting history starting from a German colony, became my home for two weeks. I had the opportunity to engage with locals, try new foods, and participate in cultural events that showcased the life in the U.S. This exchange allowed me to appreciate the American society, and I returned home with a stronger perspective on global collaboration.

In summary, my Erasmus mobility to the University of Cincinnati was an unforgettable experience. It strengthened my academic skills, expanded my cultural understanding, and fostered new friendships and professional connections. I want just to end this report by saying that I really appreciated this Erasmus+ call and it is counted among the best experiences of my life. I'll never thank enough the Erasmus+ program for the people I encountered and knew, starting from the very first person I met, a very competent one in the administration, who helped me and guide me thought all the bureaucratic process. A special thanks must go to Cristina and Caterina too, the coordinators at the receiving institution.

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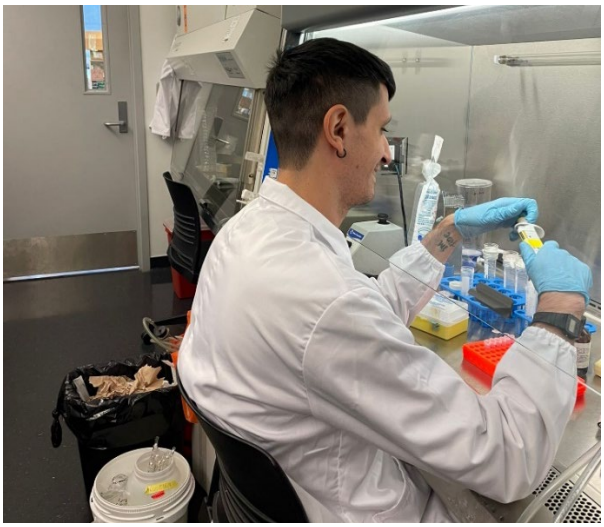

Erasmus + KA171/2022 –
Project n. 2022-1-IT02-KA171-HED-000073309
Academic Year 2023-2024

Exploring PLGA nanoparticle to deliver azolate gold compounds in lung cancer cells

Nicola Sargentoni

PhD Candidate

University of Camerino

next lives here

Friday 20, 2024
1:00-2:00 pm

Vontz Center for Molecular Studies
Conference Room 2118

University of CINCINNATI