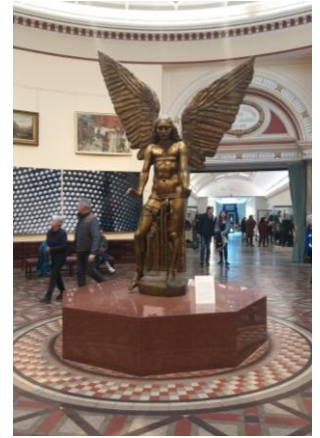


I have been granted COST CA19105 – Pan-European Network in Lipidomics and EpiLipidomics call, and performed a study as a visiting PhD student at Aston University, Birmingham, UK in May 2022. The STSM was a marvelous experience for me! Thanks to COST, I have done my scientific study in a qualified laboratory, besides, I met great people and experienced 1-month living in Birmingham. This opportunity introduced me to another chapter of my life. I strongly advise every single PhD student to try their chance for STSM.



I loved Birmingham and Aston University. On weekends, I tried to get to know Birmingham by walking outside alone, visiting some historical and cultural places and public gardens throughout the canal side in the city center, and breathing the Birmingham soul.



Thanks to this activity by the COST association's STSM Grant, I have done my study entitled "Lipid signatures of the neoplastic transformation of the cervix", for my PhD thesis, and I met with Dr. Irundika Dias, who is a very kind, generous, friendly, and exemplary scientist at Aston. And now, (3 months later of ending my STSM), I have been accepted for an international conference to present my study.



We currently are getting ready for that conference presentation, also started writing the research article. Thanks to everyone who contributed to this achievement!



**Lipid signatures of the neoplastic transformation of the cervix**  
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**ABSTRACT**

Cervical cancer represents the global health burden of Human Papillomavirus (HPV) related cancers and is the fourth most common cancer in women. Recent findings indicate that enhanced lipid peroxidation levels are associated with oxidative injuries and reactive carcinogenesis of the cervix. The integration of the viral genome of the cervical cancer causative agent, HPV, into the cervical tissue, results in the overexpression of viral oncoproteins E6 and E7 which trigger cellular transformation by inhibiting the expression/activity of tumor suppressor proteins. This integration is facilitated by increased oxidative stress. Given that cancer is a metabolic disease, metabolic profiling of the cervicovaginal microenvironment has the potential to reveal the functional effects of this oxidative stress. In many human diseases, deregulated lipid metabolism plays an important role, moreover, it is a known fact that altered lipid metabolism can even promote carcinogenesis.