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Full Reference:

Abstract 1: Ali Azimi^{1,2}, Ellis Patrick^{3,4,5}, Rachel Teh^{1,2,3}, Jennifer Kim^{1,3,6}, Pablo Fernandez-Penas^{1,2}. *Proteomic Profiling of Cutaneous Melanoma Explains the aggressiveness of distant organ metastasis*

Abstract 2: Ali Azimi^{1,2}, Hafsa Qureshi^{1,2}, Pablo Fernandez-Penas^{1,2}. *Unveiling the Proteome of Mycosis Fungoides using a non-invasive approach Proteomics for the Non-invasive Diagnosis and Molecular Pathway Analysis of Mycosis Fungoides*

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Conference/Meeting Name: 21st World Congress of the Human Proteome Organization (HUPO 2022)

Location: Cancun, Mexico

Dates: 4-8 December 2022

Presentation Type: Posters



Photo: Visiting the restored step-pyramid & Maya temple at the Chichen Itza archaeological site, Mexico.

The HUPO Annual Congress is a unique international event that provides a platform for translational and clinical proteomic scientists to learn about advancements in clinical proteomics, share their works and discuss future collaborations. Proteomic is defined as large-scale studies of proteins in cells and tissues. The HUPO congress offers multiple pre- and post-congress workshops and commercialization courses as well as ECR mentoring events that are filled with up-to-date training opportunities on emerging proteomic data analysis, data interpretation, and translation.

After 2 years in lockdown, attending HUPO-2022 provided me with the opportunity to meet some of the internationally renowned experts in proteomics whom I had only interacted with through emails. I also had the opportunity to meet industry experts and discuss recent methods in proteomics and proteomics sample preparation. Particularly, I met the CEO of PROTIFI, a company that makes specialised kits that can be used to prepare samples for proteomic analysis in under three hours. Currently, our team is spending two days on sample preparation. After explaining my needs, the CEO agreed to send me some evaluation kits so I could apply them on my samples. I am hoping that a successful evaluation of this new method will save our team hundreds of lab hours each year while significantly reducing the costs.

Another important aspect of my proteomic research work involves the translation of my findings into the clinic to benefit the patients. Attending the HUPO22 workshops on clinical proteomics allowed me to understand the translational challenges of proteomic findings and approaches to overcome them. I enjoyed the talk given by A/Professor Sraha Parker from Cedars-Sinai Medical Center, who talked about why and how proteomic researchers need to move from “**always a candidate, never a clinical biomarker**” to a translational and clinical implementation phase. It is true that proteomic research has generated huge amount of data that need to be mined further, and their findings translated to the clinic.

The HUPO-22 was held in Cancun, Mexico. Cancun is a 3-hour drive from one of the most important city-states in pre-Hispanic America, Chichen Itza. It is one of the most visited archaeological sites in Mexico today, and one of the seven wonders of the world. Therefore, I had the opportunity to visit Chichen Itza along with three other proteomic researchers I met at the conference. It was very interesting to talk to some of the Maya people, learn about their tradition and rich history, and more importantly, understand the way their calendar system worked.