

10<sup>th</sup> International Conference on **HYPERTENSION AND HEALTHCARE**

March 24, 2022 | Webinar

**Artificial intelligence applications in Pulmonary Hypertension Medical Imaging diagnosis****Samar El-Farra***SFHEA, Senior Fellow CMRITO member, Mentor at the WHO, Emirates Medical Association EMA- RASE Vice President board of directors Manager Assessment office*

Pulmonary Hypertension (PH) is a heterogeneous, life-limiting condition that might result in right ventricular failure and death if left untreated. The current classification of PH identifies five groups, each with overlapping pathophysiological characteristics in many patients. The recommended managements of the different groups are contradictory in clinical practice and to further complicate patient management, some patients do not fit into those divergent categories. The co-presence of lung interstitial conditions is one of the clinical dilemma instances where phenotyping becomes a challenge that has the potential to affect the patient's outcome. Accurate phenotyping of PH suspected patients is consequential in the classification, thus, treatment and prognosis. Medical imaging plays an important role in the diagnosis of patients with suspected PH when assessing for parenchymal lung disease, but they are limited by the mainly qualitative and subjective nature. Artificial Intelligence approaches have the potential to facilitate rapid and reproducible quantitative assessments with higher accuracy. The potential for diagnostic information "hidden" beyond visual assessment alone enhances the clinical benefits of improved phenotyping and prediction of treatment response and PH patient survival potential. Artificial intelligence can also aid in identifying those rather challenging homogeneous subgroups of patients with lung disease. Finally, hypertension like any other field in medicine is at the verge of reaping substantial benefits of precision medicine and Big Data analysis - not only from medical imaging but also genetics, immunology, histology, etc.- for a more targeted and individualized therapies to patients with suspected PH.

**Biography**

Samar El-Farra is well known in SFHEA, Senior Fellow CMRITO member, Mentor at the WHO, Emirates Medical Association EMA- RASE Vice President board of directors Manager Assessment office

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