SOCIETE FRANÇAISE DE PATHOLOGIE
POST-GRADUATE COURSE 2021

ARTIFICIAL INTELLIGENCE IN PATHOLOGY (*in English*)

Course Directors: Pr. J. CALDERARO (Creteil, France) - Dr JN KATHER (Aachen, Germany)

TIME   **From 31/05/2021 (9: AM) to 04/06/2021 (2: PM)**: 4 ½ days course

LOCATION   **ONLINE COURSE**

ABOUT THE COURSE
This 4 ½ days course will provide a hands-on introduction to histological image processing and analysis using artificial-intelligence approaches such as convolutional neural networks/deep learning. It is aimed at pathologists, clinicians and data scientists in any stage of their training.
- *Pathologist / clinician track*: this track will provide pathologists and clinicians an introduction on how artificial intelligence technologies work, their strengths and weaknesses and how a study involving image analysis should be designed.
- *Data scientist track*: this track aims to provide data scientist medical and scientific basics regarding the different steps involved in the microscopic examination of human tissues, an introduction on how artificial intelligence technologies work, their strengths and weaknesses and how a study involving image analysis should be designed.
Interactive talks are scheduled to take on mornings, and afternoons will be dedicated to hands sessions, including the design of networks and image analysis pipeline.

AIM AND GOALS
The aim of the course is to introduce the basic concepts of AI based pathology.
Participants will be able to design their own study, and will learn:
1) to transform their dataset with augmentation and normalization techniques,
2) to build effective neural networks for histological images classification
3) to assess the performance of their models.
Data scientists will also be introduced to the main aspects of histology and modern oncology. This will allow them to build high quality datasets and design studies and models that are relevant from a clinical point of view.

NUMBER OF PARTICIPANTS: 30

Participants are required to send before registration a short CV with Cover Letter explaining why they wish to apply, at both mail: julien.calderaro@aphp.fr and jakob.kather@gmail.com

PRICE

- S.F.P 's Member.. 320 €
- No-member of the S.F.P (academic / no-academic) .... 400 / 600 €
- Assistant Pathologist (AHU) & young Pathologist (graduate < 2 years) ……………… ½ Price
- Pathologist resident last year of internship……………………………………………. 128 €