Supervisor Project Idea

Supervisor

Insert a brief CV and/or external link, the total number of publications, the ORCID link, 5 of the most significant/recent publications, and a list of funded projects and awards. max 300 words

CV Engl_FM_Feb 2024.docx; ORCID: https://orcid.org/0000-0003-1887-5377;

1. F. Gonnelli, W. Hassan, M. Bonifazi, V. Pinelli, EO Bedawi, JM. Porcel, NM Rahman, **F. Mei.** Malignant pleural effusion: current understanding and therapeutic approach. **Respiratory Research (2024) 25:47**
2. **Mei, F.,** Tamburrini, M., Gonnelli, F. Morandi L, Bonifazi M, Sediari M, Berardino ADM, Barisione E, Failla G, Zuccatosta L, Papi A, Gasparini S, Marchetti G. Management of malignant pleural effusion in Italian clinical practice: a nationwide survey**. BMC Pulm Med 23, 252 (2023)**
3. Faverio P, Ronco R, Monzio Compagnoni M, Franchi M, Franco G, Bonaiti G, Bonifazi M, **Mei F**, Luppi F, Pesci A, Corrao G. Effectiveness and economic impact of Dupilumab in asthma: a population-based cohort study. **Respir Res. 2023 Mar 7;24(1):70.** doi: 10.1186/s12931-023-02372
4. Sundaralingam A, Aujayeb A, Jackson KA, Pellas EI, Khan II, Chohan MT, Joosten R, Boersma A, Kerkhoff J, Bielsa S, Porcel JM, Rozman A, Marc-Malovrh M, Welch H, Symonds J, Anevlavis S, Froudrakis M, **Mei F**, Zuccatosta L, Gasparini S, Gonnelli F, Dhaliwal I, Mitchell MA, Fjaellegaard K, Petersen JK, Ellayeh M, Rahman NM, Burden T, Bodtger U, Koegelenberg CFN, et al. Investigation and outcomes in patients with nonspecific pleuritis: results from the International Collaborative Effusion database. **ERJ Open Res. 2023 Apr 11;9(2)** doi: 10.1183/23120541.00599-2022. eCollection 2023 Mar.
5. **Mei F**, Rota M, Bonifazi M, Zuccatosta L, Porcarelli FM, Sediari M, Bedawi EO, Sundaralingam A, Addala D, Gasparini S, Rahman NM. Efficacy of Small versus Large-Bore Chest Drain in Pleural Infection: A Systematic Review and Meta-Analysis. **Respiration. 2023 Jan 24:1-10. doi: 10.1159/000529027.**

Committees:

- European Respiratory Society Clinical Research Collaboration "International Collaborative Effusions – ICE database" – 2022 to present
- European Respiratory Society Benign Effusion Taskforce (Member) – 2021 to present
- European Respiratory Society Ultrasound-guided intervention Taskforce (Member) – 2023 to present

Research Group Description

Provide the name the reference department and a brief description of the research group, including external links, and available instrumentations and infrastructures. max 300 words

The Department of Biomedical Sciences and Public Health

Was established on the 1st July 2011, following a process of reorganization of the University,

The Department is a self-managing organizational branch of the University, which is dedicated to scientific research, teaching, and contributing to the so called Third Mission of the Higher Education Institution through the dissemination of scientific research findings amongst the community.

Its main aims are to plan, organize and regularly assess the quality of the research activity carried out in the scientific sectors and disciplines under its jurisdiction; to plan, organize and manage first level and master courses of the Faculty of Medicine and, last but not least, to provide cultural and educational activities and contribute to training and guidance activities according to the students needs in collaboration with the medical association.

It was awarded with "Department of Excellence" position in 2018 by Ministry of University and Research

Title and goals

Provide the title of the topic and a short summary of the project idea. max 200 words

MUST study: MUlti-omics phenotyiping of non-Specific pleuriTis

Diagnosis in pleural diseases often hinges upon the findings following pleural biopsy. However, in approximately 40% of cases, the histological findings show non-specific patterns of inflammation and fibrosis (non-specific pleuritis, NSP), including a heterogenous group of pathologic conditions that remain poorly understood. Therefore, there are still significant uncertainties for both patients and clinicians in diagnostic work-up and subsequent management, due to the lack of an accurate identification of underlining etiology. Most of the research have focused on identification of a limited subgroup of patients with NSP who eventually develop malignancy, mainly malignant pleural mesothelioma (MPM), leaving the large majority of patients with no diagnosis, besides an heterogenic and empirical treatment, and a protean investigation approach.

Therefore, a definitive assessment of yet unmet needs in NSP is required. These include the need for standardized investigation protocols and for a better understanding of biological and mechanistic pathways responsible for the different clinical characteristics and evolution observed in patients all labeled with the broad name of NSP.

The MUST study, allied to our research network (EPIC: European Pleural disease Investigators Collaboration), aims to conduct a prospective longitudinal study creating a translational platform. We will conduct multi compartment sampling and omics analysis with the aim to identify disease endotypes, treatable traits and future targets for precision medicine (including repurposing of currently available medications).

Contact details (*including email address of the supervisor*)

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