Justus-Liebig-Universität Gießen •
Med. Klinik V • Innere Medizin, Infektiologie und experimentelle Pneumologie
Center for Infection and Genomics of the Lung (CIGL)
Aulweg 132 • D-35392 Gießen

Univ.-Prof. Dr. med. Susanne Herold, PhD
Direktorin, Med. Klinik V für Innere Medizin m. S.
Infektiologie und Krankenhaushygiene
Lehrstuhl für Innere Medizin, Infektiologie und experimentelle Pneumologie

Center for Infections and Geonomics of the Lung (CIGL)

☎ **(0641) 985 – 57061 (Sekretariat)**
✉ **Aulweg 132**
D-35392 Gießen

Justus Liebig Universität Gießen
Universities of Giessen and Marburg Lung Center (UGMLC)
Deutsches Zentrum für Lungenforschung (DZL)
Deutsches Zentrum für Infektionsforschung (DZIF)
Institut für Lungengesundheit (ILH)
Exzellencluster „The Cardipulmonary Institute“ (CPI)

Susanne.herold@innere.med.uni-giessen.de

Gießen, 9th August 2024

Subject: Nomination Letter for Dr. Balachandar Selvakumar

Dear Members of the Selection Committee,

I am pleased to nominate Dr. Balachandar Selvakumar (U1722064) for the Sun Pharma Science Foundation Research Award 2024, for his outstanding research on the role of Plet1 in lung epithelial repair. Dr. Selvakumar's recent publication, entitled *"Alveolar macrophage-expressed Plet1 is a driver of lung epithelial repair after viral pneumonia,"* demonstrated an innovative mechanism of macrophage-mediated epithelial repair that is key to survive IAV-induced lung injury. It has to be emphasized that local administration of recombinant Plet1 reproduced the epithelial-protective and regenerative effects driven by Plet1+ macrophage populations, and rescued 85% of mice from fatal influenza. Remarkably, in broncho alveolar lavage fluid (BALF) of a small cohort of patients with influenza A virus (IAV)-induced acute respiratory distress syndrome (ARDS), PLET1 concentrations negatively correlated with a marker of alveolar injury, underscoring Plet1 administration as a putative therapeutic approach in patients with virus-induced lung injury and beyond, that are urgently needed to date.

Dr. Selvakumar initiated this project and has made substantial contributions through his dedication and persistence. Recently, this work was recognized and nominated for the German Lung Research Foundation Award. This work was also previously recognized with a distict poster award at the European Respiratory Society (ERS) meeting in Lisbon, Portugal, in 2014. His dedicated contribution in designing several key experiments ended up in discovery of Plet1 protein association with maturation of alveolar macrophages and its role in resolving IAV induced lung inflammation in *in vivo* studies using transgenic Plet1 mice, as well as in lung organoid models developed in our lab. This research work was recently published in the reputed journal, *Nature communications* (PMID: 38167746).

Dr. Selvakumar's contribution to this work has attracted extensive interest among scientists in the field to further study the role of Plet1 expression, which has previously not been associated with immune cell maturation and epithelial repair mechanisms. His dedicated efforts, particularly during the challenging phases of experimental design and *in vivo* studies, were crucial in completing this research. His work has set a new benchmark in the field and has the potential to translate into clinical applications for treating virus-induced ARDS.

I, therefore, strongly support Dr. Balachandar Selvakumar for the Sun Pharma Science Foundation Research Award 2024, given the profound impact of his research and its potential to advance clinical therapies.

Thank you for considering this nomination.

Sincerely,

Prof. Dr. med. Susanne Herold, PhD