Leopoldina
Nationale Akademie
der Wissenschaften

# Curriculum Vitae Professor Dr Soni Pullamsetti

Image: Rolf K. Wegst | JLU Gießen

**Name:** **Soni Savai Pullamsetti**
**Born:** **4 Juli 1976**

**Research Priorities: Pulmonary diseases, pulmonary hypertension, cardiopulmonary diseases, epigenetics**

Soni Pullamsetti is an Indian molecular biologist and pulmonary researcher. She studies how epigenetic mechanisms and transcription factors influence gene regulation. With that she wants to lay the groundwork for novel treatment strategies for pulmonary diseases – especially for pulmonary hypertension, right heart failure, and lung fibrosis.

**Academic and Professional Career**

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| since 2020 | Professor of Lung Vascular Epigenetics, Justus Liebig University (JLU) Gießen, Gießen, Germany |
| since 2018 | Head, Research Group “Lung Vascular Epigenetics”, Herz-Lunge-Exzellenzcluster “Cardiopulmonary Institute” (CPI), JLU Gießen, Gießen, Germany |
| 2017 - 2020 | Adjunct Professor, JLU Gießen, Gießen, Germany |
| since 2014 | Head, Section Pulmonary Hypertension (PH), German Center for Lung Research (DZL), Gießen, Gießen, Germany |
| 2011 - 2020 | Head, Research Group “Molecular Mechanisms of Pulmonary Vascular Diseases”, Max Planck Institute for Heart and Lung Research (MPI-HLR), Bad Nauheim, Germany |
| 2010 - 2011 | Maternal Leave |
| 2008 - 2010 | Research Associate, Section Lung Development and Remodelling, MPI-HLR, Bad Nauheim, Germany |
| 2006 - 2008 | Postdoctoral Researcher, Medizinische Klinik und Poliklinik IV/V, JLU Gießen, Gießen, Germany |

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| 2006 | PhD, JLU Gießen, Gießen, Germany |
| 2002 - 2006 | Graduate Programme, JLU Gießen, Gießen, Germany |
| 1999 | M.Sc in Biotechnology, Central University, Chhattisgarh, India |
| 1997 | B.Sc in Microbiology, Osmania University, Hyderabad, India |

**Functions in Scientific Societies and Committees**

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|---|---|
| 2023 | Scientific Coordinator, Pulmonary Hypertension (PH), German Center for Lung Research (DZL), Gießen, Germany |
| 2023 | Member, Steering Board, Cardio-Pulmonary Institute (CPI), Gießen, Germany |
| 2022 | Coordinator “Gene and Cell Therapy initiative across German Centers for Health Research”, DZL, Gießen, Germany |
| 2022 | Member, Task Force, 7th world symposium on pulmonary hypertension, PHA Europe |
| 2022 | Member, Pulmonary Perspective – American Journal of Critical Care and Pulmoanry Medicine (AJRCCM) |
| 2022 | Head, National Epigenomic Studies of COVID Samples, Nationales Pandemie Kohorten Netz (NAPKON), Germany |
| since 2021 | Member, Working Group Committee “Fellowships and Awards”, European Respiratory Society (ERS) |
| 2021 - 2027 | Member, Academy Committee, CPI, Gießen, Germany |
| 2018 - 2021 | Member, Early Career Committee, American Heart Association (AHA), USA |
| 2018 | Member, Scientific Organizing Committee, 13th PVRI Annual World Congress on PVD, Pulmonary Vascular Research Institute (PVRI), Canterbury, UK |

**Project Coordination, Membership in Collaborative Research Project**

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| 2020 - 2025 | Principal Investigator, Consolidator Grant „Pulmonary hypertension: ‘aberrant’ mimicry of lung vascular morphogenesis?”, European Research Council (ERC) |
| 2019 - 2024 | Participating Researcher, Clusters of Excellence (EXC) 2026 “Cardio-Pulmonary Institute (CPI)”, German Research Council (DFG), Germany |
| since 2016 | Head, Subproject “Regulatory network of histone modifications in human pulmonary arterial hypertension”, Collaborative Research Centres (SFB) 1213, DFG, Germany |
| since 2016 | Head, Subproject “FoxO transcription factors in PH: critical integrators of multiple signaling pathways driving pulmonary vascular and right ventricular remodeling”, SFB 1213, DFG, Germany |

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| 2013 - 2016 | Eurostars, EUREKA, European Union |
| 2009 - 2014 | PArticiapating Researcher, International Research Training Group (IRTG) 1062: “Signaling mechanisms in lung physiology and disease”, DFG, Germany |
| 2007 - 2011 | Applicant, “Subproject Role of Phosphodiesterases in Lung Fibrosis – Pathogenetic Mechanisms and Therapeutic Options”, Clinical Research Units (KFO) 118, DFG |

**Honors and Awarded Memberships**

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| since 2023 | Member, German National Academy of Sciences Leopoldina, Germany |
| since 2023 | Member, American Heart Association (FAHA), USA |
| 2017 | Romain Pauwels Research Award, European Respiratory Society (ERS), London, UK |
| 2015 | Research Award, German Respiratory Society (DGP), Berlin, Germany |
| 2015 | Dr. Herbert-Stolzenberg-Preis, JLU Gießen, Gießen, Germany |
| 2013 | Young Investigator Award, World Symposium on Pulmonary Hypertension (WSPH), Nizza, France |
| 2012 | Excellent Investigator Award, International Conference on Global Meet of Biologists, India |
| 2011 | Start-up Grant, Excellence Cluster Cardio-Pulmonary System (ECCPS), JLU Gießen, Gießen, Germany |
| 2008 | EtRA Young Scientist Award, Encysive Pharmaceuticals, Pfizer, New York City, USA |
| 2007 | International Trainee Travel Award, American Thoracic Society (ATS), USA |
| 2007 | FEBS Award, Advanced Practical and Lecture Course „Viral Expression Vectors for Research and Biotechnology”, University of Tartu, Tartu, Estonia |
| 2007 | Travel Award, Wissenschaftlicher Lungentag, Graz, Österreich |
| 2005 | Research Award, René-Baumgart-Stiftung, Rheinstetten, Germany |
| 1999 | Gold Medal for Highest Score (MSc), Central University, Cattisgath, India |
| 1997 | Gold Medal for Best Final Grade (BSc), Osmania University, Hyderabad, India |
| 1991 - 1999 | National Merit Scholarship, India |

**Research Priorities**

Soni Pullamsetti is an Indian molecular biologist and pulmonary researcher. She studies how epigenetic mechanisms and transcription factors influence gene regulation. With that she wants to lay the groundwork for novel treatment strategies for pulmonary diseases – especially for

pulmonary hypertension, right heart failure, and lung fibrosis.

A focus of Soni Pallumsetti's research is pulmonary hypertension. This condition is currently uncurable. During pulmonary hypertension the cells of the vascular walls of lung arteries are chronically activated and proliferate. Thus, the vascular walls increase in thickness while the diameter of the vessels decreases. This leads to a heightened blood pressure. Soni Pallamsetti researches the epigenetic base of this condition and how the activated vascular walls can be influenced in such a way that stops the chronic cell activation and proliferation. Thus, she discovered growth and transcription factors that serve as a base for the development for medicines.

In the further course of the disease, pulmonary hypertension can lead to remodelling processes in the right ventricle that impair heart function. Together with her team, Soni Pallumsetti was able to identify genes that are activated during the rebuilding process. Building on these findings, she was able to detect proteins in the blood that might be viable biomarkers to assess the condition of the right heart chambre. In future these could help to sooner predict the course of the disease and generate new therapeutic approaches against pulmonary hypertension and its associated cardiovascular problems.

Soni Pullamsetti furthermore studies dyspnoea as a late complication of COVID-19. Here, too, the aim is to find better diagnostic options and to test new treatment approaches.