NIH Award from the National Heart, Lung, and Blood Institute

Principal investigator: Jacob Sznajder, medicine: pulmonary, Feinberg School of Medicine

- Project: Recruitment of New Faculty to Enhance Research in Lung Biology
- Start Date: September 30, 2009
- Total Award Amount: $440,700

How the results of this project will benefit society:
Mortality of patients with chronic lung diseases continues to increase in the United States. Understanding the mechanisms of how the lung responds to injury and how this leads to abnormal lung healing is key to the development of novel therapeutic strategies to treat fibrotic diseases in the lung. The goal of our program at the Division of Pulmonary and Critical Care Medicine is to foster the career development of young investigators to focus on lung biology and to advance the understanding and treatment of pulmonary disorders. This interdisciplinary focus is reflected in the breadth of the lung disease research performed by our faculty members.

The problem the project is trying to solve:
Our program seeks to encourage young faculty to translate the rapid advances in molecular medicine to the bedside of patients with lung disease. To this goal, we are proposing this program to provide support for the hiring of new tenure-track faculty with a commitment to advancing their academic career; provide mentorship by senior investigators who are experts in their field; provide the laboratory facilities, foster collaborative relationships, and skilled supervision required for the advancement of independent investigators; and create an administrative structure that facilitates the new faculty’s acquisition of independent extramural funding.

How the project will work:
To further the research in lung biology, we propose the recruitment of Dr. Lam to our Division. Dr. Lam is a new investigator who is collaborating with several investigators in the Division of Pulmonary and Critical Care Medicine of Northwestern University and providing some of the seminal research in understanding the role of the canonical Wnt/p-catenin pathway in adult lung response to injury and repair. The Division of Pulmonary and Critical Care Medicine of Northwestern University is a center for innovative research into the mechanisms of lung injury, the addition of Dr. Lam and her research on the role p-catenin signaling in abnormal wound repair will not only complement but also elevate the scientific capacity of the Division. Understanding the mechanisms by which p-catenin signaling effects fibroproliferative diseases in the lung will have significant impact not only upon the understanding of fundamentals lung biology but also upon strategies for treatment and prevention of these devastating diseases. Lung diseases are on the rise in the United States and around the world. Understanding how the lung responds to injury and how aberrant healing leads to lung scarring is vital in order to develop preventive and treatment measures. To this goal, new investigators need to be recruited to develop collaborative, multidisciplinary research that will facilitate rapid advances in molecular medicine to the bedside.

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