CHINESE-AMERICAN LUNG ASSOCIATION

2020 CALA Happy Friday Seminar

June 5th, 2020

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Meeting ID: 998-9099-1991
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Time: EST 10:30 am; PST: 7:30 am; Beijing time: 10:30 pm

Novel Mechanisms and Targets in Pulmonary Arterial Hypertension

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Abstract: Pulmonary artery hypertension (PAH) is characterized by progressive increase in pulmonary vascular resistance and obliterative pulmonary vascular remodeling that results in right heart hypertrophy and failure and premature death. Recently, we have reported the first mouse model of PAH [*Egln1*^{Tie2Cre} mice] with progressive obliterative vascular remodeling including vascular occlusion and plexiform-like lesion and right heart failure, which recapitulates many features of clinical PAH. Using this unique model, we defined several novel molecular and cellular pathways (including smooth muscle cell hyperproliferation, augmentation of nitrative stress, dysregulation of lipid metabolism) that mediate the obliterative vascular remodeling of PAH, and identified several therapeutic targets (HIF-2a, FoxM1) that potentially treat the patients with PAH. Dr. Dai graduated from Sun Yat-sen University, China, and completed his postdoctoral training at University of Illinois at Chicago and Northwestern University. The lab is funded by NHLBI Pathway to Independence Award (Parent K99/R00) and ATS Foundation Research Program.