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Pulmonary Function Labs
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To Whom It May Concern:

I am pleased to write in support of the promotion of Dr. Riccardo Pellegrino to the rank of full Professor. I have followed his work over the years and have come to know him personally over the past five years.

Let me speak first to his scientific accomplishments. He had excellent early mentors in Dr. Joseph Rodarte of Baylor College of Medicine and Dr. Vito Brusasco of Genoa. He has an outstanding bibliography of at least 68 publications in excellent, peer-reviewed journals.

A major area of interest has been the effects of a deep breath on airway constriction in patients with asthma and in normal subjects. This work indicates that the difference between patients and normals is not due solely to a loss of the bronchoprotective mechanism in asthma as had been widely believed. It was also found that repeated deep breaths in asthma during exercise could relieve most of the bronchoconstriction.

Along with the above studies was a detailed description of lung mechanics during induced bronchoconstriction. Dr. Pellegrino also studied the effects of varying end-expiratory lung volume on airway responsiveness showing, for example, that chest strapping under certain conditions caused an increase in responsiveness. Since this might mimic obesity, studies of this possibility are underway.

Dr. Pellegrino and colleagues reported a marked increase in dynamic elastance during airway constriction in asthmatic subjects, an indication of heterogeneous obstruction which is now appreciated to be a hallmark of asthma. They also provided evidence using Technegas of non-uniform flow-limitation occurring before flow-limitation was apparent on the standard flow-volume curve. This was the first time this had been demonstrated and probably also occurs in patient with COPD.

Recently, Dr. Pellegrino has been studying the variability of breath-by-breath airway resistance in asthma. This work is being performed in collaboration with Dr. Peter Macklem of McGill University, Montreal. The variability will be studied acutely and also over time using a home-monitoring device.

The above summarizes many, but not all, of his contributions. However, another important aspect of his scientific career are his educational activities. He has delivered many invited lectures on a wide range of topics as well as participating in at least one Post-Graduate Course on an annual basis. This activity also constitutes a significant scientific contribution.

Dr. Pellegrino is recognized internationally as an expert in his field. He has collaborated with individuals in the US and served on international committees. I conclude that Dr. Pellegrino warrants the promotion to full Professor. He certainly would at my Institution.

Respectfully,

Robert E. Hyatt/pm

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