The consensus of the working group is that the role of the right ventricle in a spectrum of cardiovascular diseases has been relatively neglected proportionate to its central importance. Advancing knowledge through research about the unique genetic, molecular, cellular, and functional characteristics of the right ventricle and their vulnerability to disease will lead to progress in the treatment of cardiomyopathy, pulmonary arterial hypertension, right ventricular ischemic syndromes, and valvular heart disease. The success in such effort requires collaborations between and among clinical and basic investigators from various disciplines, including those in respiratory/pulmonary and cardiovascular fields as well from neuroscientists, immunologists, endocrinologists, and biomedical engineers. Joint meetings of the American Heart Association and the American Thoracic Society would be appropriate venues to promote the importance of understanding the right ventricle and would help to accelerate the gathering of information leading to better treatment and preventative means to reduce morbidity and mortality associated with right heart failure and left heart failure.

Awareness should be promoted in the pulmonary and cardiology research communities about the lack of knowledge of the right ventricle with well-publicized requests for research proposals. New and established investigators should be encouraged to enter this fruitful area of research.

Videos to this book can be accessed at http://www.springerimages.com/videos/978-1-4939-1064-9


As a physicist, I wonder why it is that biology and medicine seem to have so few new theories—Murray Gell-Mann, Nature 491, 561, 2012.

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