data, not by the belief of the author. The *Journal* editor decides on publication of the questions. Lunkenheimer must advise us how he reached such a pivotal point on the scientific mountain to attain the astounding credibility that frees him to define scientific soundness.

My lecture about nature, the heart, and the human being summarizes my concept of progress. Claude Bernard¹ indicated that "to linger in the anatomic path alone, means lagging behind the progress of science," and that "believing that we can impose scientific principles without experimental verification is a relic of the Scholasticism of the Middle Ages." My basic science report included a description of Lycus of Macedonia, who as noted by Galen did not properly follow the Greek school of science but must be listened to, because he might provide a new and wonderful truth unknown to his predecessors. Lunkenheimer has done this with his unique and creative definition of the spatial collagen scaffolding. I am grateful to him for this contribution. We must now look beyond knowledge of only our focal interest and develop wisdom by synthesizing the interweaving spiral structure of the heart that unveils a cardiac aspect of the astounding spiral harmony of nature.

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Mitral valve in ischemic versus idiopathic dilated cardiomyopathy To the Editor:

The interesting data set reported on by Hueb and coworkers¹ in their article "Ventricular Remodeling and Mitral Valve Modifications in Dilated Cardiomyopathy: New Insights From Anatomic Study" has given us some new insights into the pathologic changes seen in ischemic and idiopathic dilated cardiomyopathy (DCM). The differential changes between these two conditions, however, were not fully explored in the article. As compared with the normal heart, the ratio of relative change in posterior leaflet insertion to anterior leaflet insertion is 3.4-fold in ischemic DCM, versus a 1.7-fold with idiopathic etiology. The impact of these pathologic states on the noncongruence of the fibrous annulus and anterior leaflet insertion is also interesting. One can crudely approximate a difference by a right triangle with the long side equal to the fibrous annulus and the hypotenuse equal to the anterior leaflet insertion. In ischemic DCM this distance is *decreased* 5.4%, whereas in the idiopathic DCM the distance is *increased* 11.1%. More detailed studies on the relative positional changes of the fibrous bodies with respect to the commissures will determine whether this is an asymmetric process (occurring more at the posterolateral commissure) or a symmetric one (occurring equally at both).

We also take this opportunity to strongly disagree with a conclusion by the authors, "... these anatomic data support the use of complete mitral annuloplasty techniques in DCM."¹ Conceptually, an "annuloplasty alone" repair for these disease states is performed by remodeling the annulus to effectively reduce the anteroposterior diameter to improve leaflet coaptation²⁻⁴ and not the lateromedial diameter, which does not seem to lead to mitral regurgitation in ischemic DCM

models.⁵ Although the anatomic data in this study demonstrate pathologic increases in both the anterior leaflet insertion and intertrigonal distances, it is not necessary to equate these changes with the need to fixate the anterior border of the annulus. For ischemic disease, the anterior insertion change is relatively minor when compared with posterior elongation, and for idiopathic changes the intertrigonal increase is accompanied by a 20.3% compensatory increase in the anterior leaflet insertion. We strongly advocate that appropriate valve reconstruction can be performed with an aggressive "trigone to trigone" annuloplasty with a device that fixes anteroposterior diameter. With this approach the annuloplasty device is anchored to the trigones, effectively reducing the anteroposterior diameter while still permitting normal dynamic changes along the base of the anterior mitral annulus.⁶

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