

Editorial

Special Tutorial on Imaging



In this issue we are pleased to publish a special tutorial article on brain imaging, prepared for *JAAA* by Anthony Cacace and his colleagues, Talin Tasciyan and Joseph Cousins of Sensor Systems of Sterling, Virginia and the Albany Medical College, Albany, New York.

Initial sections on the basic principles of magnetic resonance and imaging are followed by detailed consideration of the various magnetic resonance imaging techniques either in current use or on the drawing board. This is followed by a discussion of the broad spectrum of applications already yielding important “insights into the fundamental properties of human sensory, motor, and cognitive function in both normal and pathologic states.” Of particular interest to audiologists is the fact that, in addition to the ability to study perceptual and cognitive

processes, functional magnetic resonance imaging shows interesting promise as an experimental tool for gaining a better understanding of phantom sensory events such as tinnitus.

The authors have sought to accomplish the very difficult task of making a complex topic understandable, and yet preserving the very necessary technical details. Although most readers will find much of this tutorial fairly heavy going, we think it is important that audiologists and hearing scientists understand the basic concepts underlying these relatively new and increasingly important techniques for localizing the actual sites of brain activity during human listening.

James Jerger
Editor-in-Chief