

## **Confusion and Direction in Diagnostic Doppler Sonography**

Diagnostic doppler sonography is a very useful and important tool in the diagnosis of many situations in medicine. Despite its successes, it has also caused confusion and miss-diagnosis due to the lack of official standards for directional displays. The AIUM offers guidelines on documentation and on transcranial Doppler, but there is no statement regarding education for those performing the exams and on stating the directional display used. The most commonly used method in color doppler is to use red to indicate flow towards the transducer, while blue indicates away. This method is operator dependent, and can be inverted to show the opposite. This inversion can lead to confusion for the interpreting physician and can lead to serious consequences for the patient and sonographer. The sonographer must be fully educated and informed on how to accurately perform Doppler, using parameters such as field of view, transducer placement, and reading a color map in order to create a diagnostic image. An informed sonographer may be able to reduce the amount of miss-diagnosed cases based on directional confusion.