## **Emerging Spinecare Trends**

## **Redefining and Restaging Disease**

## Redefining and Restaging Disease

Advances in spine research and molecular imaging will redefine early stage spine disease. In vivo molecular imaging will also change the way we stage spine disease including spinal tumors. Emphasis will shift from anatomical (structural) imaging to integrated anatomical and in vivo biochemical imaging. Biochemical evidence of spine disease will likely precede structural pathology and classic signs and symptoms. Molecular imaging will be used to identify the molecular (biochemical) borders of tumors/lesions in contrast to focusing on structural boundaries of pathology. In most cases the biochemical borders of a lesion will extend beyond the more obvious structural borders seen on routine imaging studies. The future will bring about a more aggressive search for chemical and genetic biomarkers of disease. This will include biomarkers acquired through lab work, imaging and biopsies. Disease biomarkers will be correlated to help stratify the stages of spine disease.