Researchers at the University of South Florida have developed an innovative tool to augment the clinical diagnosis of musculoskeletal diseases.

“Arthur” is a unique, virtual, interactive program that teaches joint pattern recognition for common musculoskeletal diseases which incorporates multiple learning styles. Recognizing the pattern of joint involvement is integral to establishing a differential diagnosis and determining appropriate management of patients with rheumatic diseases. A study of internal medicine residents found 66% failed basic competency in musculoskeletal disease diagnosis based on an anonymous exam. Additional studies have also reported educational deficiencies in musculoskeletal medicine.

The concept of “Arthur” was developed from one of our faculty's unique teaching style of introducing trainees to the specialty of Rheumatology by highlighting the different pattern of joints that may be involved in various arthropathies in stick figures. The Rheumatology Division of Internal Medicine in conjunction with the Education department designed thirty unique cases illustrating rheumatic disorders and their differential diagnosis.

This tool is designed to be interactive so that the clinical scenario is illustrated and multiple potential diagnoses are selected from drop down menus. Both PowerPoint and user interactive formats are available for ease of teaching and learning. The tutorial also includes explanations for the incorrect or correct answer making "Arthur" a complete educational tool for the diagnosis of musculoskeletal diseases.

**ADVANTAGES:**
- Interactive
- Seamless
- Conducive to facilities with limited access to specialty resources

**30 + Unique, Fully Interactive Case Studies**

**Example clinical scenarios of virtual muscular skeletal diseases**

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