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# MAI Motion: The Future of Musculoskeletal Health and Movement

An overview of markerless, single-camera motion analysis as a practical route to earlier functional detection, personalised rehabilitation and objective monitoring in musculoskeletal care.

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| EVENT   | United European Academy Conference, Casablanca                                          |
| AUTHORS | Paul Y. Lee; Tanvi Verma — MSK Doctors, UK; United Lincolnshire Hospitals NHS Trust, UK |
| THEMES  | Markerless motion analysis · Computer vision · Personalisation · Preventative care      |

## Scientific focus

The presentation describes the gap between subjective movement observation and scalable objective measurement. MAI Motion is presented as an AI-powered, markerless platform designed to quantify control, symmetry and flow from a single-camera recording without a specialist motion laboratory. Repeated measurements can provide clinicians and patients with visual, numerical feedback on movement quality over time.

## Why it matters

The translational proposition is that measurable function can support earlier recognition of decline, more personalised rehabilitation and clearer monitoring of recovery or risk. The conference page places the work at the intersection of biomechanics, artificial intelligence, regenerative medicine and preventative care. It also identifies support from MSK Doctors, the University of Lincoln and Innovate UK, and describes expanding European collaboration.