Raman Spectroscopy as a Tool for Detection of AMR and other Clinical Applications — Sandpit

Tuesday 11th December 2018 (10 am - 3.30 pm)

Manchester

FREE

Apply to attend before 28th Nov 2018

FAST HEALTHCARE NETWORKS PLUS

What is this Workshop?

Raman spectroscopy is an optical technique that measures the chemical composition and molecular structure of a sample. The application of Raman spectroscopy and microscopy within biology is rapidly increasing and it has proven to be a valuable analytical tool for various applications. Prof. Anthony Rowbottom has demonstrated the potential clinical applications of Raman to various cancers, AMR, neurodegenerative disease, renal disorders and the diagnosis of primary immunodeficiency. As the use of Raman in the clinical setting increases there will be a need to better characterise and standardise protocols. Whilst the technique is not quantitative there will a requirement to create a reference library and understand the elements that impact on result variations.

Purpose of Sandpit

- To bring together a new group of clinicians, engineers and physical scientists interested in being part of a new National Expert Group on the clinical application of Raman spectroscopy.
- To identify the clinical opportunities for Raman in the short, medium and long-term which the Group could look to address.
- To work up an engineering-focussed mini project to pump prime the Group's activity in the area of detection of antimicrobial resistant pathogens in a clinical setting with £60,000 (fEC) seed funding from the EPSRC FAST Healthcare NetworksPlus.

What is the structure of the Sandpit?

The Sandpit will be divided into three Sessions. Firstly, the background to the application of Raman Spectroscopy will be presented and participants will perform a 'SWOT' analysis. Secondly, a few clinical scenarios to which Raman Spectroscopy may be applied will be presented and participants will put together a simple roadmap for development of the technique. Finally, groups will work up a pump priming project proposal to address the application of Raman Spectroscopy for the detection of antimicrobial resistant pathogens.

Who is speaking?

Confirmed speakers at the Workshop to date include:

- Prof Anthony Rowbottom (Lancashire Teaching Hospitals NHS Foundation Trust)
- Prof Frank Martin (University of Central Lancashire)
- Prof Rasmita Raval (University of Liverpool)

Who should attend?

We welcome participants from across the clinical, the academic engineering and physical sciences and industrial communities to this Workshop. You can apply to attend the workshop at www.fast-healthcare.org.uk . We anticipate demand for places at the Workshop exceeding the number of places which are available. Academic and other non-commercial participants from within the UK will be able to have reasonable travel expenses reimbursed (subject to the University of Cambridge's normal conditions).
The Roadmap from the Workshop and the funded pump priming project will be published after the workshop has taken place.

Who is organising the Workshop?

The Workshop is being put together by Professor Anthony Rowbottom with Professor Andrew Flewitt (Engineering Department, Cambridge University) for the EPSRC Fast Assessment and Treatment NetworksPlus.

Important dates

Application deadline: 28th November, 2018

Workshop takes place: 11th December, 2018

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Apply online at: www.fast-healthcare.org.uk