

**European Workshop on Label Free Particle Sorting, 5-6 September 2017, Lund, Sweden**  
**Medicon Village, Lund, Sweden**

**Monday 4 SEP 2017**

17:00 Facilities open for preparations. Setup of posters, demos and exhibits.

**Tuesday 5 SEP 2017**

09:00 - 09:45 Registration

09:45 - 10:00 Welcome and Introduction, Prof Jonas Tegenfeldt, Lund University, Lund

**Chair - Prof Jonas Tegenfeldt, Lund University, Sweden**

***Sorting rare cells at high throughput***

10:00 - 10:40 **Prof Mehmet Toner, Harvard University, USA**

KEYNOTE

*Size and deformation-based cell sorting using deterministic lateral displacement  
– prospects for skeletal stem cell isolation from bone marrow*

Contributed

10:40 - 11:00 Miguel Xavier, University of Southampton, UK

*Single-cell printer as a versatile tool for cell line development and  
single-cell analysis*

Contributed

11:00 - 11:20 Dr. Stefan Zimmermann, University of Freiburg, Germany

**11:20 - 11:40 Refreshments**

*Towards rapid and minimally manipulative enrichment of human mesenchymal  
stromal cells for autologous cell therapy*

Contributed

11:40 - 12:00 Africa Smith de Diego, University of Leeds, UK

*Label-free single-cell analytics and manipulation on 3D electrode arrays*

Contributed

12:00 - 12:20 Prof. Carlotta Guiducci, EPFL, Lausanne, Switzerland

**12:20 - 13:50 Lunch**

**Dessert and coffee in the poster area**

**Chair - Dr Lisa Ranford Cartwright, Glasgow University, UK**

***Recent progress and current challenges on neglected tropical diseases***

KEYNOTE

13:50 - 14:30 **Prof Michael Barrett, Glasgow University, UK**

*Biophysical characterization of Leishmania mexicana infected macrophages*

Contributed

14:30 - 14:50 Clement Regnault University of Glasgow, UK

**14:50 - 15:10 Refreshments at the posters**

**Chair - Prof Michael Barrett, Glasgow University, UK**

***Development and evaluation of diagnostic tools for African trypanosomiasis***

INVITED

15:10 - 15:50 **Dr Veerle Lejon, Institute of Research for Development, Montpellier, France**

*Study of deformability of P. falciparum infected cells using real-Time  
deformability cytometry (RT-DC)*

Contributed

15:50 - 16:10 Laura Ciuffreda, University of Glasgow, UK

*Identification and dielectric characterisation of malaria-infected red blood cells  
using fluorescence coupled impedance cytometry*

Contributed

16:10 - 16:30 Carlos Honrado, University of Southampton, UK

**16:30 - 18:30 Posters and Snacks**

**19:00 - Conference Dinner**

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**Wednesday 6 SEP 2017**

**Chair - Prof Gerhard Gompper, Forschungszentrum Juelich, Germany**

***Modelling and theory***

KEYNOTE

09:30 - 10:10

**Prof Henrik Bruus, Technical University of Denmark, Kongens Lyngby, Denmark**

*Sorting red blood cells in deterministic lateral displacement devices*

Contributed

10:10 - 10:30

Dr. Zunmin Zhang, Forschungszentrum Juelich, Germany

*Shape and dynamics of red blood cells in microchannels*

Contributed

10:30 - 10:50

Dr. Dmitry A Fedosov, Forschungszentrum Juelich, Germany

**Refreshments at the posters**

10:50 - 11:20

*Dynamics of inertial migration of particles in straight channels*

11:20 - 11:40

Indradumna Banarjee, Royal Institute of Technology, Stockholm, Sweden

Contributed

*Neural network triggered image-based cell sorting*

11:40 - 12:00

Gregor Holzner, ETH Zürich, Switzerland

Contributed

*Biophysical profiling of immune cell activation via label-free size discrimination*

12:00 - 12:20

Dr. Kerwin Kwek Zeming, Singapore-MIT Alliance for Research and Technology (SMART); National University of Singapore

Contributed

12:20 - 13:50

**Lunch**

**Dessert and coffee in the poster area**

**Chair - Prof Thomas Laurell, Lund University, Sweden**

***Label-free monitoring of cell function by morpho-rheological phenotyping***

KEYNOTE

13:50 - 14:30

**Prof Jochen Guck, TU Dresden, Dresden, Germany**

*Mechanical phenotyping and sorting of cells*

14:30 - 14:50

Dr. Ahmad Ahsan Nawaz, TU Dresden, Germany

Contributed

*Label-free enrichment of mononuclear cells from blood using acoustophoresis*

14:50 - 15:10

Anke Urbansky, Lund University, Sweden

Contributed

15:10 - 15:30

**Refreshments at the posters**

**Chair – Prof Hywel Morgan, University of Southampton, UK**

***Infectious disease and antimicrobial resistance***

INVITED

15:30 - 16:10

**Dr Mark Sutton, Public Health England, UK**

16:10 - 16:30

**Concluding remarks - Prof Jonas Tegenfeldt, Lund University, Sweden**

16:30

**Adjourn (poster area open and available for final discussions and for removal of posters until 19:00)**