

Measuring Metabolic Engines and Fuels

with the Agilent Seahorse XF Analyzer

July 17th/18th, 2018

Universitätsklinik für Kinder- und Jugendmedizin Ulm

Sektion Pädiatrische Endokrinologie und Diabetologie

Eythstr. 24, 89075 Ulm

Room: 00.01 (Konferenzraum Kinderklinik)



Presenter:

Prof. Dr. Pamela Fischer-Posovszky

Universitätsklinik Ulm

Dr. Daniel Tews

Universitätsklinik Ulm

Dr. Daniel Gebhard

Agilent Technologies, Inc.

Agenda

July 17th

09:30-09:45 **Introduction to the Core Facility XF Analyzer**

Pamela Fischer-Posovszky

09:45-10:15 **Introduction Seahorse Technology**

Daniel Gebhard

10:15- 10:45 **Precise measurement of ATP kinetics with the Seahorse XF analyzer**

Daniel Gebhard

10:45-11:00 Coffee break

11:00-11:30 **Determination of proton leak respiration in adipocytes**

Daniel Tews

11:30-13:00 Lunch break

13:00-15:00 **Wet-lab group 1**
(limited attendees!)

July 18th

10:00-12:00 **Wet-lab group 2**
(limited attendees!)

12:00-14:00 **Assay analysis workshop**
(You are very welcome to bring your own data files!)

FREE WORKSHOP

Metabolism is the key to understanding cell function

In living cells, most of the energy produced is derived from three fuel sources: glucose, glutamine, and fatty acids. Mitochondrial access to these fuels impacts a wide variety of biological processes.

Use the Agilent Seahorse XF Analyzer to:

- Identify fuel dependencies to uncover cancer cell vulnerabilities.
- Explore how fuel preferences lead to cell fate decisions for differentiation and immune cell activation.
- Determine whether/how cells can adjust fuel oxidation to match nutrient availability while meeting energy demand.
- Distinguish metabolic adaptations due to genetic changes vs. those that take place due to nutrient deprivation.

For registration

Please contact daniel.tews@uniklinik-ulm.de until July 9th for registration and indicate whether you would like to join the wet-lab.



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