





# Use of microCT technique for biological applications

Company RMI, s.r.o. would like to invite you to an educational workshop **"Use of microCT technique for biological applications**" that will be held with in cooperation with Czech centre for Phenogenomics (CCP) in BIOCEV building on address: Průmyslová 595, 252 42 Vestec on Tuesday **March**, **27**<sup>th</sup> **2018**.



Workshop will focus on getting the participants familiar with the microCT technique (computed tomography), that allows nondestructive analysis of inner structure of samples with high resolution. This technique has recently been gaining significance in preclinical research (bio applications), including in-vivo (live animal scanning) or ex-vivo applications (characterization of bones, bone implants, embryos, lung, liver, kidney, heart, spleen, fat etc.).

Workshop will focus primarily on applications - sample preparation procedures, methods used and results of scanning live animals and other samples. The participants will get acquainted with the latest developments in instrumentation and their benefits. Part of the workshop will also be talks by users of microCT instruments from Czech Republic. Two main application talks will be presented by application specialist from Bruker microCT company - Phil SALMON, Ph.D. from Belgium. At the end of the workshop, demonstrations of real measurements will be performed for participants who will be interested. In -vivo scanner Skyscan 1176 and high resolution ex-vivo instrument SkyScan 1272 will be presented. For Skyscan 1272 it is possible to arrange a detailed presentation with participants own sample measurement.

### Workshop program

10:00 - 10:05	Opening of the workshop, introduction of RMI, s.r.o. and Bruker microCT companies
10:05 - 10:35	MicroCT instruments for in-vivo biological applications (live animal scanning): Martin Munzar, RMI, s.r.o.
10:35 - 11:20	In-vivo microCT applications (practical results demonstration): Phil Salmon, Bruker microCT
11:20 - 11:45	Using in-vivo microCT for systematic phenotype analysis: Jan Prochazka/Frantisek Spoutil, CCP Praha
11:45 - 12:00	3D imaging of parasites inside their hosts: Jana Bulantová, PřF UK Praha
12:00 - 12:15	Fossil Palaeoaldrovanda spelndens, not a seed of a carnivorous plant, but an egg of an insect: Zuzana Heřmanová, National museum Prague
12:15 - 13:20	Lunch break
13:20 - 13:35	Micro-CT application in tissue engineering scaffolds - visualization and 3D analysis: Martin Bartoš, 1. LF UK Praha
13:35 - 14:05	MicroCT instruments for ex-vivo biological applications (bones, soft tissues, embryos): Martin Munzar, RMI, s.r.o.
14:05 - 14:45	Ex-vivo microCT applications (practical results demonstration): Phil Salmon, Bruker microCT
14:45 - 15:05	Monitoring metabolic disorders using in-vivo microCT: Nicole Chambers/Frantisek Spoutil, CCP Praha
15:05	Open Discussion, end of workshop, demonstration of measurement on Skyscan 1176 and Skyscan 1272

### Registration

We kindly ask those interested in the workshop to register on e-mail **sale@rmi.cz before 20.3.2018**, number of participants is limited. Please state, if you are interested in a demonstration of measurement on the instruments.

# Venue: Biotechnology and Biomedicine Center of the Academy of Sciences and Charles University in Vestec (BIOCEV)

lecture room 249 (the room and a path to it will be marked)

### How to get to the venue:

#### Public transport

subway to Opatov station (line C) - then by bus number 326 in the direction Jesenice, station Vestec, BIOCEV.

#### By car

Address: Průmyslová 595, 252 42 Vestec GPS Loc: 49°58'56.189"N 14°29'12.540"E (entrance to the premises) GPS Loc: 49°58'49.968"N 14°29'17.600"E (building, where the workshop will take place)

Below are maps showing the location of the building where the workshop will take place and its photo.





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