|   | Monday 22 January   | Tuesday 23 January  | Wednesday 24 January   | Thursday 25 January   | Friday 26 January   |
|---|---|---|--|---|---|
| 07:45 - 08:45<br>08:45 - 08:50  |   |   | breakfast  |   |   |
| 08:50 - 08:55<br>08:55 - 09:00<br>09:00 - 09:05<br>09:05 - 09:10<br>09:10 - 09:15<br>09:15 - 09:20<br>09:20 - 09:25<br>09:25 - 09:30                  | Welcome   Bertrand Tavitian   | Measuring glucose by CEST MRI: Perfusion or metabolism? Xavier Golay, London  | PET/CT imaging prediction of response to checkpoint blockade in advanced non-small cell lung cancer patients.  Bob Gillies, Tampa  | PET radiochemistry<br>Bert Windhorst, Amsterdam   | Cardiovascular Metabolism.<br>Craig Malloy, Dallas  |
| 09:30 - 09:35<br>09:35 - 09:40<br>09:40 - 09:45<br>09:45 - 09:50<br>09:50 - 09:55<br>09:55 - 10:00  | CARDIOVASCULÁR METABOLISM  Craig Malloy, Dallas                                   | Imaging tumor acidosis as a potential biomarker for assessing the early response to dichloroacetate by MRI-pH CEST approach.  Annasofia Annemone, Torino  Imaging glucose metabolism at the subcellular level in a glioma | Immediate early gene mapping demonstrates stronger correlation with brain activation induced metabolic changes compared to hemodynamic responses.  Mario Amend, Tübingen  Acute changes in rat brain metabolism after intravenous drug | Nitrogen-13 labelled amino acids [13N]L-alanine and [13N]glycine appropriate for studying prostate cancer metabolism. Luka Rejk, San Sebastián Combined imaging of myocardial metabolism and tissue stiffness | Cardiac metabolic deregulation induced by the tyrosine kinase receptor inhibitor sunitinib is rescued by endothelin receptor antagonism.  Thomas Viel, Paris  PET-UUI shows a double mechanism of escape from anti- |
| 10:00 - 10:05<br>10:05 - 10:10<br>10:10 - 10:15   |   | orthotopic mouse model. Arnaud Comment, Lausanne  | administration: A simultaneous dynamic 1H-MRS and continuous infusion 18FDG study.  Uwe Himmelreich, Leuven  | using Positron emission tomography and ultrafast ultrasound after<br>myocardial infarction in the rodent heart.<br>Bertrand Tavitian, Paris   | angiogenic treatment in a mouse model of paraganglioma.<br>Caterina Facchin, Paris  |
| 10:15 - 10:20<br>10:20 - 10:25<br>10:25 - 10:30<br>10:30 - 10:35<br>10:35 - 10:40<br>10:40 - 10:45<br>10:45 - 10:50<br>10:50 - 10:55<br>10:55 - 11:00 |   |   | coffee break   |   |   |
| 11:00 - 11:05<br>11:05 - 11:10<br>11:10 - 11:15<br>11:15 - 11:20<br>11:20 - 11:25   | Introductory Lecture II<br>BRAIN METABOLISM                                       | Metabolic reprogramming in mutant IDH1 glioma.<br>Sabrina Ronen, San Francisco  | High field proton NMR spectroscopy in the human brain.  Anke Henning, Tubingen   | Emerging positron emission tomography radiotracers to probe cancer metabolism.  Tim Witney, London  | best poster presentation I  |
| 11:25 - 11:30<br>11:30 - 11:35<br>11:35 - 11:40   |   |   |  |   | best poster presentation II   |
| 11:40 - 11:45<br>11:45 - 11:50<br>11:50 - 11:55<br>11:55 - 12:00  | Anke Henning, Tubingen  | Imaging inhibition of the warburg effect by the EGFR inhibitor<br>cetuximab in patient-derived Head & Neck xenografts<br>Bénédict Jordan, Brussels  | Imaging of hyperpolarized 13C substrates in the brain after blood-<br>brain barrier disruption with focused ultrasound.<br>Tom Peeters, Nijmegen   | In Vivo Imaging of Tumor Senescence with a novel β-Galactosidase specific PET Tracer Marcel Krüger, Tübingen  | Highlights, Looking into the Future and Farewell<br>Bertrand Tavitian, Paris  |
| 12:00 - 12:05<br>12:05 - 12:10<br>12:10 - 12:15<br>12:15 - 12:20  |   | Lactate production in inflamed ankles was revealed in a mouse<br>model of arthritis using Hyperpolarized 1-13C-Pyruvate MRS.<br>Marie-Aline Neveu, Tübingen   | PROgressive saturation for Quantifying Exchange Rates using<br>Saturation Times (PRO-QUEST) in Chemical Exchange Saturation<br>Transfer (CEST) improves image specificity in stroke.<br>Eleni Demetriou, London                        | Evaluation of 2-[18F], 2-difluoropropionic acid as an alternative<br>tracer of 1-[11C] acetate PET.<br>Robert Bielik, Cambridge   |   |
| 12:20 - 12:25<br>12:25 - 12:30<br>12:30 - 13:00   |   |   | Lion Demond, London  |   | LUNCH   |
| 13:00 - 16:15   |   |   |  |   |   |
| 16:15 - 16:20<br>16:20 - 16:25<br>16:25 - 16:30<br>16:30 - 16:35<br>16:35 - 16:40<br>16:40 - 16:45<br>16:45 - 16:50<br>16:50 - 16:55                  | Introductory Lecture III CANCER METABOLISM  Matthew van der Heiden, Cambridge MA  | Contraction performance at the cellular level.<br>Martial Balland, Grenoble   | The secret life of 18F-fluorodeoxyglucose.<br>Guillem Pratx, Stanford  | Imaging of beta cells.<br>Martin Gotthardt, Nijmegen  |   |
| 17:00 - 17:05<br>17:05 - 17:10<br>17:10 - 17:15<br>17:15 - 17:20  |   |   | Acute stress induces rapid region-specific changes in brain energy consumption and synaptic glucose metabolism.  Rosa Maria Moresco, Segrate   | Effect of lactate administration on brain lactate concentrations during hypoglycemia in patients with type 1 diabetes.  Evita Wiegers, Nijmegen   |   |
| 17:20 - 17:25<br>17:25 - 17:30<br>17:30 - 17:35<br>17:35 - 17:40<br>17:40 - 17:45<br>17:45 - 17:50<br>17:50 - 17:55<br>17:55 - 18:00                  | coffee break  | poster session 1  Cancer Metabolism  Poster #01-09  Coffee Break  | poster session 2<br>Obesity & Diabetes<br>Brain, and Cardiovascular Metabolism<br>Poster #12-19  | coffee break  |   |
| 18:00 - 18:05<br>18:05 - 18:10<br>18:10 - 18:15<br>18:15 - 18:20<br>18:20 - 18:25<br>18:25 - 18:30  | Introductory Lecture IV DIABETES & OBESITY METABOLISM  Martin Gotthardt, Nijmegen |   | Coffee Break   | PET imaging during insulin-induced hypoglycemia to study adipose tissue metabolism in people with type 2 diabetes.  Marti Boss, Nijmegen  |   |
| 18:30 - 18:35<br>18:35 - 18:40<br>18:40 - 18:45<br>18:45 - 18:50<br>18:50 - 18:55   |   | Understanding the relationship between altered metabolism and sensitivity to cancer therapy.  | More than pictures: when mass spectrometry imaging meets histology in plants.  | Optoacoustic assessment of endothelial-dependent flow-mediated dilatation of the radial artery. Karlas Angelos, Munich  |   |
| 18:55 - 19:00<br>19:00 - 19:05<br>19:05 - 19:10<br>19:10 - 19:15<br>19:15 - 19:30   | Reception by the Ecole de Physique  | Matthew van der Heiden, Cambridge MA  | Asaph Aharony, Rehovot   | Optoacoustic imaging of blood oxygenation in FXIII overexpressing murine placentae reveals decreased hemoglobin levels in placental circulation.  Sima Stroganov, Rehovot                                     | Contact office@e-smi.eu   |
| 19:15 - 19:30   |   | Dinner  |  | "Savoyard dinner" by the Ecole de Physique  |   |