## PRIME Program on October 13th, 2019

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tr>
<td>08:00 - 09:00</td>
<td>Registration</td>
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<tr>
<td>09:15 - 09:30</td>
<td>Introduction and Welcome</td>
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<tr>
<td>09:30 - 10:45</td>
<td><strong>Oral Session 1</strong></td>
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| 09:30 - 09:45 | **O1** (09:30 - 09:45): TADPOLE Challenge: Accurate Alzheimer’s disease prediction through crowdsourced forecasting of future data  
| 09:45 - 10:00 | **O2** (09:45 - 10:00): Modeling Disease Progression In Retinal OCTs With Longitudinal Self-Supervised Learning  
Antoine Rivail, Ursula Schmidt-Erfurth, Wolf-Dieter Vogel, Sebastian M. Waldstein, Sophie Riedl, Christoph Grechenig, Zhichao Wu, Hrvoje Bogunovic |
| 10:00 - 10:15 | **O3** (10:00 - 10:15): Deep Learning via Fused Bidirectional Attention Stacked Long Short-term Memory for Obsessive-Compulsive Disorder Diagnosis and Risk Screening  
Chiyu Feng, Lili Jin, Chuangyong Xu, Peng Yang, Tianfu Wang, Baiying Lei  
Tianfu Wang, Ziwen Peng |
| 10:15 - 10:30 | **O4** (10:15 - 10:30): Diagnosis of Parkinson’s Disease in Genetic Cohort Patients via Stage-wise Hierarchical Deep Polynomial Ensemble learning  
Haijun Lei, Hancong Li, Ahmed Elazab, Xuegang Song, Zhongwei Huang, Baiying Lei |
| 10:30 - 10:45 | **O5** (10:30 - 10:45): Generative Adversarial Irregularity Detection in Mammography Images  
Milad Ahmadi, Mohammad Sabokrou, Mahmood Fathy, Reza Berangi, Ehsan Adeli |
| 10:45 - 11:30 | **Keynote Speech 1**                                                 |
|              | Speaker: Prof Le Lu (Bethesda Research Lab)  
Title: “Towards deep radiomics and deep clinical informatics in oncology imaging: an evolving Deep Lesion benchmark to achieve patient care significance!” |
| 11:30 - 14:00 | **Lunch and Poster Session**                                         |
|              | **P1**: Inter-fractional Respiratory Motion Modelling from Abdominal Ultrasound: A Feasibility Study  
Alina Giger, Christoph Jud, Damien Nguyen, Miriam Krieger, Ye Zhang, Antony J. Lomax, Oliver Bieri, Rares Salomir, Philippe C. Cattin |
<p>|              | <strong>P2</strong>: Adaptive Neuro-Fuzzy Inference System-based Chaotic Swarm Intelligence Hybrid Model for Recognition of Mild Cognitive Impairment from Resting-state fMRI |</p>
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| **P3:** Predicting Response to the Antidepressant Bupropion using Pretreatment fMRI  
  Kevin P. Nguyen, Cherise Chin Fatt, Alex Treacher, Cooper Mellema, Madhukar H. Trivedi, Albert Montillo |   |
| **P4:** Computed Tomography Image-Based Deep Survival Regression for Metastatic Colorectal Cancer using a Non-Proportional Hazards Model  
  Alexander Katzmann, Alexander Muhlberg, Michael Suhling, Dominik Norenberg, Stefan Maurus, Julian Walter Holch, Volker Heinemann, Horst-Michael Gro |   |
| **P5:** 7 years of Developing Seed Techniques for Alzheimer’s Disease Diagnosis using Brain Image and Connectivity Data Largely Bypassed Prediction for Prognosis  
  Mayssa Soussia, Islem Rekik |   |
| **P6:** Prediction of Clinical Scores for Subjective Cognitive Decline and Mild Cognitive Impairment  
  Aojie Li, Ling Yue, Manhua Liu, Shifu Xiao |   |
| **P7:** Predicting High-Resolution Brain Networks Using Hierarchically Embedded and Aligned Multi-Resolution Neighborhoods  
  Kubra Cengiz, Islem Rekik |   |
| **P8:** Support Vector based Autoregressive Mixed Models of Longitudinal Brain Changes and Corresponding Genetics in Alzheimer’s Disease  
  Qifan Yang, Sophia I. Thomopoulos, Linda Ding, Wesley Surento, Paul M. Thompson, Neda Jahanshad |   |
| **P9:** Treatment Response Prediction of Hepatocellular Carcinoma Patients from Abdominal CT Images with Deep Convolutional Neural Networks  
  Hansang Lee, Helen Hong, Jinsil Seong, Jin Sung Kim, Junmo Kim |   |

**14:15 - 15:00**  
**Keynote Speech 2**  
**Speaker:** Prof Jong Chul Ye (KAIST)  
**Title:** “Geometrical Understanding of CNN for Biomedical Image Reconstruction”

**15:00 - 15:30**  
**Oral Session 2**  
**O6 (15:00 – 15:15):** Hierarchical Adversarial Connectomic Domain Alignment for Target Brain Graph Prediction and Classification From a Source Graph  
  Alaa Bessadok, Mohamed Ali Mahjoub, Islem Rekik

**O7 (15:15 – 15:30):** Automatic Detection of Bowel Disease with Residual Networks  
  Robert Holland, Uday Patel, Phillip Lung, Elisa Chotzoglou, Bernhard Kainz

**15:30 - 16:00**  
**Coffee Break**

**16:00 - 16:45**  
**Keynote Speech 3**  
**Speaker:** Prof. Daniel Rueckert (Imperial College London)  
**Title:** “Learning clinically useful information from medical images”
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<th>Time</th>
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<th>Authors</th>
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<tr>
<td>16:45 - 17:15</td>
<td>Oral Session 3</td>
<td><strong>O8 (16:45–17:00):</strong> Catheter Synthesis in X-Ray Fluoroscopy with Generative Adversarial Networks</td>
<td>Ihsan Ullah, Philip Chikontwe, Sang Hyun Park</td>
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<td><strong>O9 (17:00 - 17:15):</strong> Progressive Infant Brain Connectivity Evolution Prediction from Neonatal MRI using Bidirectionally Supervised Sample Selection</td>
<td>Olfa Ghribi, Gang Li, Weili Lin, Dinggang Shen, Islem Rekik</td>
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<td>17:15 - 17:30</td>
<td>Closing Remarks</td>
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<td>Best Paper Award</td>
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