## PhD course in Translational Specialistic Medicine 'G.B. Morgagni'

"Shaping a World-Class University"

**ARTIFICIAL INTELLIGENCE IN BIO-MEDICAL RESEARCH IN AFRICA. SHAPING THE FUTURE OF SCIENCES**

**October 17-20, 2023**

### October 17, 2023 – 04:00-06:20 pm C.E.S.T. Time

<table>
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<tr>
<th>Time</th>
<th>Talk</th>
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| 04:00-04:30 pm   | Talk 1: “The policy of the University of Padova for international collaborations with emerging countries: a bridge to Africa”  
**Piergiorgio Sonato**, Advisor for Africa and International Cooperation, Full Professor, University of Padova |
| 04:30-05:00 pm   | Talk 2: “The global experience from CUAMM”  
**Don Dante Carraro**, Doctors with Africa CUAMM, IT |
| 05:00-05:30 pm   | Talk 3: “The African experience in research”  
**Francesca Tognon**, Doctors with Africa CUAMM, IT |
| 05:30-06:00 pm   | Talk 4: “Artificial Intelligence, Machine Learning in a limited resource bio-medical research setting”  
**Dario Gregori**, Full Professor of Medical Statistics – University of Padova, IT |
| 06:00-06:20 pm   | Floor discussion |

**Moderators:**
- **Corrado Lanera**, Assistant Professor - University of Padova, IT
- **Alberto Zanatta**, Assistant Professor - University of Padova, IT

**Initial greetings:**
- **Cristina Basso**, Vice Rector for International Relations, University of Padua Professor of Pathology, University of Padua - Director, Cardiovascular Pathology Unit - Azienda Ospedaliera, IT
### October 18, 2023 – 04:00-06:00 pm C.E.S.T. Time

**Topic 2: “Artificial Intelligence in Geographical Epidemiology”**

**Moderators:**
- **Annibale Biggeri**, Professor of Medical Statistics – University of Padova, IT
- **Giovanni Putoto, Francesca Tognon**, Doctors with Africa CUAMM, IT
- **Elena Pegoraro**, Professor of Neuroscience, University of Padova, IT

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<tr>
<td>04:00-04:30 pm</td>
<td>Talk 1: “Increasing the Clinical Relevance of Observational, Population-based Studies using Machine Learning in Genomics”</td>
<td><strong>Luca Vedovelli</strong>, Assistant Professor, University of Padova, IT</td>
<td>University of Padova, IT</td>
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<td>04:30-05:00 pm</td>
<td>Talk 2: “Picturing spread of diseases: the contribution of machine learning to geo-spatial modeling”</td>
<td><strong>Dolores Catelan</strong>, Associate Professor, University of Padova, IT</td>
<td>University of Padova, IT</td>
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<td>05:00-05:30 pm</td>
<td>Talk 3: “Pollution and health monitoring via machine learning: thinking big on a large scale”</td>
<td><strong>Cristina Canova</strong>, Associate Professor, University of Padova, IT</td>
<td>University of Padova, IT</td>
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<td>05:30-06:00 pm</td>
<td>Floor discussion</td>
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### October 19, 2023 – 04:00-06:00 pm C.E.S.T. Time

**Topic 3: "Artificial Intelligence in Cardiac and Pulmonary Pathology: Clinics and Research”**

**Moderators:**
- **Honoria Ocagli**, Post-Doc Researcher, University of Padova, IT
- **Tawadod Abdelgader Abdalla Mohamed**, Scholar at Risk fellow, DCTV, University of Padova, IT

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<td>04:00-04:30 pm</td>
<td>Talk 1: Digital pathology and AI in cardiovascular pathology”</td>
<td><strong>Annalisa Angelini</strong>, Professor of Cardiovascular Pathology – University of Padova, IT</td>
<td>University of Padova, IT</td>
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<td>04:30-05:00 pm</td>
<td>Talk 2: “AI in Pulmonary Medicine: Current Status and Future Directions”</td>
<td><strong>Muhammad Lawan Jibril</strong>, University of Kashere, Gombe-Nigeria</td>
<td>University of Kashere, Gombe-Nigeria</td>
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<td>05:00-05:30 pm</td>
<td>Talk 3: “AI for Health Equity: Addressing Bias and Diversity in Cardiology and Pneumology”</td>
<td><strong>Christian Domilongo Bope</strong>, University of Kinshasa, DR Congo</td>
<td>University of Kinshasa, DR Congo</td>
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<td>05:30-06:00 pm</td>
<td>Floor discussion</td>
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### October 20, 2023 – 04:00-06:00 pm C.E.S.T. Time

**Topic 4: "Ph.D. Students meet Africa”**

**Moderators:**
- **Annalisa Angelini**, Professor of Cardiovascular Pathology – University of Padova, IT
- **Dario Gregori**, Professor of Medical Statistics – University of Padova, IT

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<td>04:00-04:20 pm</td>
<td>Talk 1: &quot;Machine learning models to create an Expert system to predict major cardiac events in monitoring heart transplant</td>
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Diego Perazzolo, Ph.D. Student, PhD Course in Translational Specialistic Medicine "G.B. Morgagni", University of Padova, IT

04:20-04:40 pm  Talk 2: “Monitoring sedation of children during anesthesia: hybrid approaches between biostatistics and machine learning”
Noor Muhammad Khan, Ph.D. Student, PhD Course in Translational Specialistic Medicine “G.B. Morgagni”, University of Padova, IT

04:40-05:00 pm  Talk 3: “Machine Learning for Omics Data Analysis in Neuroscience (GWAS for DMD)”
Sara Ahsani-Nasab, Ph.D. Student, PhD Course in Translational Specialistic Medicine "G.B. Morgagni", University of Padova, IT

05:00-05:20 pm  Talk 4: “The effectiveness of the maternity waiting home in reducing perinatal mortality. A case-control in study in Ethiopia”
Teresa Dalla Zuanna, Ph.D. Doctor, PhD Course in Translational Specialistic Medicine "G.B. Morgagni", University of Padova, IT

05:20-05:40 pm  Talk 5: “Improving risk stratification in pediatric intensive care units: a head-to-head comparison between classical models and machine learning”
Maria Vittoria Chiaruttini, Ph.D. Student, PhD Course in Translational Specialistic Medicine “G.B. Morgagni”, University of Padova, IT

05:40-06:00 pm  Floor discussion