



Genotype and Machine Learning Based Blood Matching: Towards Improved Transfusion Outcomes

April 2nd | 10:30 AM – 12:30 PM | Location: Hringssalur, Landspítali



GUEST SPEAKER

Nicholas Gleadall on behalf of the Blood Transfusion Genomics and Haem-Match Consortium
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The Blood Transfusion Genomics Consortium (BGC), a consortium of 15 major blood supply organizations, has developed the Universal Blood Donor Typing (UBDT) array, a high-throughput genotyping technology enabling automated, simultaneous typing of human erythroid, platelet, and leukocyte antigens (HEA, HPA, and HLA). In parallel, the Haem-Match Consortium has developed machine-learning-based solutions to optimize blood

allocation using extended matching criteria. Together, these innovations offer blood services the ability to enhance **transfusion outcomes**, reducing **alloimmunization risk** while **improving blood supply logistics**.

This talk will offer valuable insights into the **future of genotyping blood donors and patients**, as well as the **advancement and expansion of blood bank genomic services** to better serve patients in Iceland.

