Strategic plan for Section of research and development, Medical genetics (AMG), FoU 2023-2025

Innovating Today for a Healthier Tomorrow: Bridging Research, Technology, and Care in Department of Medical Genetics

- 1. Invest and maintain Advanced Research Infrastructure:
 - Upgrade laboratory equipment with the latest technology to stay at the forefront of research capabilities.
 - Ensure robust IT infrastructure to support data-intensive research activities.
- 2. Integrate Advanced Data Analytics and Machine Learning:
 - Beyond AI for diagnostics, leverage machine learning for predictive analytics in disease trends, patient outcomes, and treatment efficacy.
 - Implement real-time data analytics for variant calling.
- 3. Continue the focus on Personalized Medicine:
 - Lead in genomics and collaborate with other core facilities (proteomics, bioinformatics, stem cell etc.) to drive personalized medicine approaches in diagnostics and treatment.
 - Partner with the clinical and genetic counseling services to integrate these insights into patient care.
- 4. Enhance Collaborative Research Platforms:
 - Develop digital platforms for seamless collaboration among researchers, clinicians, and external partners. Use of Teams, electronic journal, ehåndbook.
 - Maintain the regular interdisciplinary section and department meeting or webinars to foster knowledge exchange and collaboration.
- 5. Expand Internal and External Partnerships:
 - Intensify collaboration between research groups and clinical units (speed dating, Genomic Technology Group)
 - Form strategic alliances with technology companies, academic institutions, and healthcare providers to access new technologies and broaden research scope (Biobank Norway, etc).
 - Engage in public-private partnerships to facilitate the translation of research findings into clinical practice (DNV, Oslo Cancer Cluster, Center for rare diseases, etc).
- 6. Sustainable Practices in Research:
 - Maintain sustainable and eco-friendly practices in laboratories and research facilities.
 - Promote research into cost efficient laboratory medicine.
- 7. Enhance Career Development Programs:
 - Develop mentorship programs pairing experienced researchers with newcomers.
 - Offer workshops and training in emerging technologies and methodologies.
 - Maintain LabForum (engineer stab) and Journal club (PhD students and postdocs).
- 8. Public Engagement and Awareness:
 - Increase public engagement through community outreach programs, educational seminars, and open days.
 - Use social media and digital platforms to raise awareness about the importance of laboratory medicine in disease prevention and treatment.
- 9. Ethical and Regulatory Compliance:
 - Strengthen the focus on ethical considerations in research, particularly in AI and data usage.
 - Stay updated with and adhere to international standards and regulations in research and data management.
- 10. Foster a Culture of Innovation:
 - Encourage a culture that rewards creativity, risk-taking, and innovative thinking among researchers and staff.
 - Set up an internal grant system to fund promising but unconventional research ideas.