LEARN HOW TO APPLY AI TO LARGE-SCALE DATASETS, CO-CREATE GROUNDBREAKING RESEARCH PROPOSALS AND USE AI TO SECURE FUNDING AND TRANSFORM HEALTHCARE.

Biomedical AI Bootcamp

Empowering biomedical scientists and clinicians to drive medical breakthroughs

exquAIro
Medical breakthroughs are waiting

About exquAIro

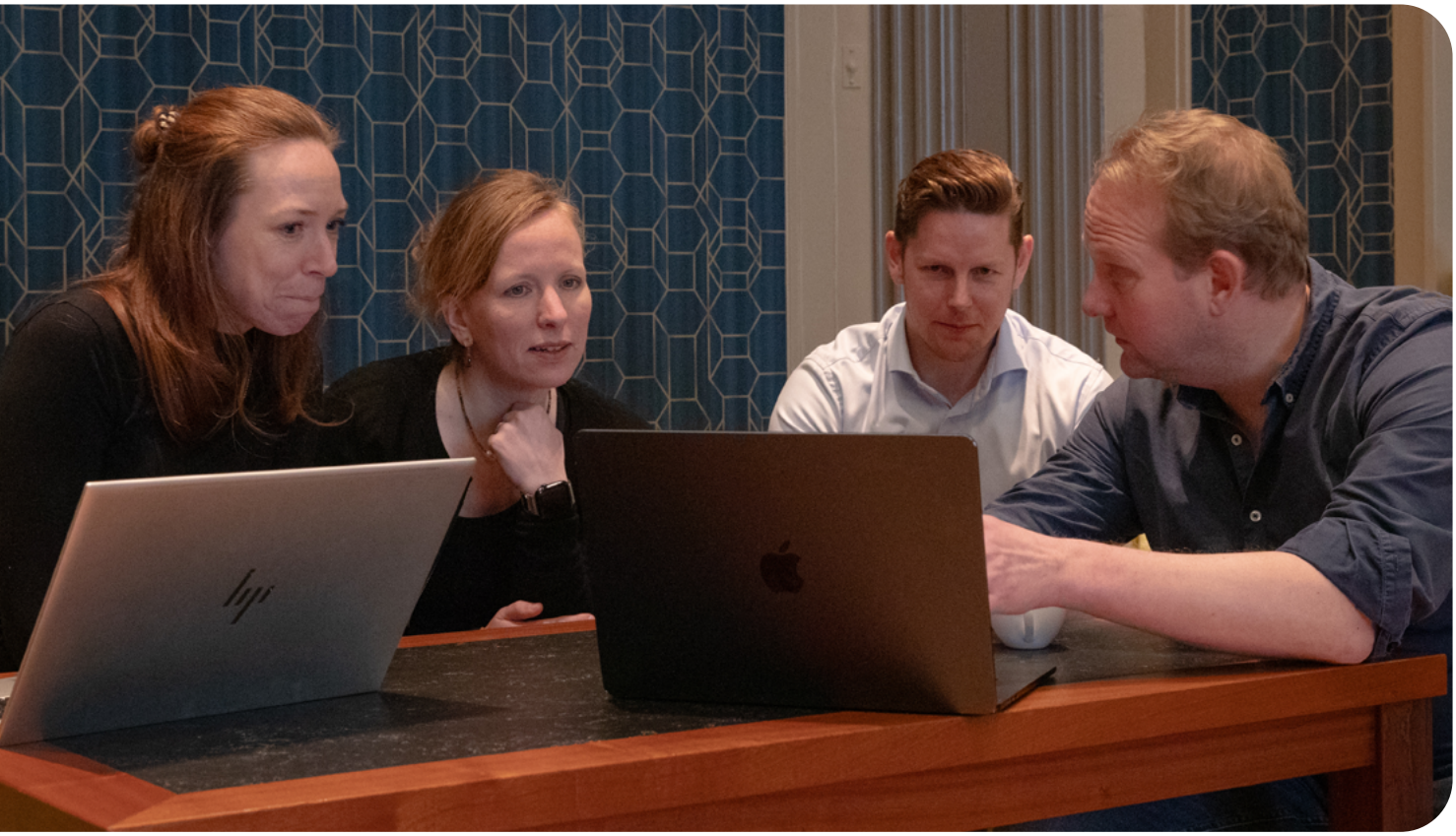
exquAIro is a non-profit foundation that aims to accelerates medical breakthroughs by training biomedical scientists, clinicians and researchers to use AI responsibly and effectively and develop ambitious AI research proposals. We also help secure the funding needed to turn promising research into real-world impact.

exquAIro is a non-profit organization, initiated by University Medical Center Groningen (UMCG) and Rewire, an international data and AI consultancy.

It's all in the data

AI is transforming healthcare and scientific research. Vast amounts of data are already available, yet much of its value remains untapped. AI can help unlock valuable insights.

But successfully applying AI to complex disease data requires deep medical and scientific expertise. Clinician-scientists and biomedical researchers are well placed to identify where AI can make a difference, develop powerful algorithms, and build support for their research.



The hands-on Biomedical AI Bootcamp helps you take the next step. You will gain a clear understanding of the AI tools available to researchers and learn how to apply these to biomedical data. You will also learn how to turn your ideas into strong grant proposals that could qualify for funding through exquAIro.

About the Bootcamp

What

- An intensive six-week bootcamp focused on AI applications in medical research.
- A grant proposal development pipeline, supported by senior medical and industry leaders.
- Funding opportunities offered by or facilitated through exquAIro.

How

- Hands-on workshops on different types of AI, ranging from traditional machine learning to image recognition and generative AI.
- Inspiring case studies from business and medicine.
- Interactive workshops on creating impact, translated to your own data and grant proposal.

Why

- Develop robust algorithms.
- Gain a deep understanding of the latest AI methods.
- Learn how to secure funding to bring new, data-driven medical research to life.

Week 1 Build a strong data foundation for machine learning
Week 2 Apply core machine learning algorithms
Week 3 Create and present a robust plan on your own data

Week 4 Improve and refine your modelling pipeline
Week 5 Explore the possibilities of image recognition & GenAI
Week 6 Generate innovative breakthroughs as a team

Information

- **Duration:** 2 x 3 weeks, with several months in between.
- **Location:** Off-premise training location in Groningen
- **Costs:** €20,500 per participant (price for 2027, Classes 6 & 7)

Earn CME Credits

- This bootcamp is officially accredited. Attendees will earn 40 CME credits toward their annual re-registration requirements.

Dates

- **Class 6:** 5-24 April 2027 and 6–24 September 2027
- **Class 7:** 1-19 November 2027 and 31 January-18 February 2028
- **Class 8:** 3-21 April 2028 and 4–22 September 2028



What's next?

After the bootcamp you can deepen your AI knowledge through our four-year development track. In the Advanced programme, you will learn to develop algorithmic use case solutions. The Innovator programme helps you create an AI roadmap.

Each programme includes ten two-day blocks, spread over 2 years each.

Stephanie Klein Nagelvoort - Schuit
Professor of Future Healthcare at the University of Groningen, internist in acute medicine, Vice Chair (becoming Chair per April 2027) of the Board of Directors of the UMCG and board member of the exquAIro foundation.

'The speed of the current AI transformation is orders of magnitude faster than other digital transitions.'



Is the Biomedical AI Bootcamp for you?

This bootcamp is designed for

- Clinician-scientists who want to apply machine learning, image recognition or generative AI models to their research.
- Biomedical researchers who want to strengthen their data science skills and accelerate their research.
- Pharmacologists with an analytical background who want to explore AI applications in drug development.

Where do participants work?

Our participants work at leading medical, pharmaceutical and academic institutions. Many come from university medical centres. This mix of expertise creates valuable opportunities for collaboration and networking. Join a growing community of professionals using AI to advance healthcare.

exquAIro

Board Members and key trainers of exquAIro



Gerard Koppelman, Chair board exquAIro, Professor in Pediatric Pulmonary Diseases at the UMCG



Marnix Bügel,
Board member exquAIro,
Founder of Rewire



Ilya Petoukhov,
Board member exquAIro,
Founder of abeta.world

Scientific board of exquAIro



Niels van Royen,
Professor of Cardiology, Head of the Department of Cardiology at Radboud University Medical Center (Radboudumc)



Wiro Niessen,
Professor of AI in Medical Imaging and Health, Dean of Faculty Medical Sciences of the University of Groningen, Member Board of Directors of the UMCG



John Holloway,
Professor of Allergy and Respiratory Genetics, Associate Vice-President (Interdisciplinary Research), University of Southampton, UK

'exquAIro teaches to create opportunities by applying AI to the underused wealth of data in the medical field.'
- ***Wiro Niessen***

10 reasons to join

1. **Gain hands-on AI-experience using (your own) medical datasets.**
2. **Explore every key AI topic across 21 one- or two-day modules, from machine learning and image recognition to grant writing and GenAI.**
3. **Learn from experienced trainers and leaders in AI, healthcare and business.**
4. **Follow a proven learning method with exams and international certification.**
5. **Develop your own AI-powered breakthrough research proposal.**
6. **Learn alongside 10 to 12 selected, like-minded participants.**
7. **Gain access to funding opportunities.**
8. **Strengthen your career prospects with practical AI expertise.**
9. **Learn to identify AI opportunities and guide teams in bringing them to life.**
10. **Get support to turn your ideas into clinical practice, including valorisation.**



Benefits for your department

After 6 weeks

- Enhanced expertise: you can guide others in using AI tools correctly, including when and how to use machine learning, deep learning and generative AI.
- Research outcomes: you will advance your own research by applying AI to your own data, potentially leading to new publications.
- Grant funding: you will strengthen your grant writing skills and learn how to turn your AI idea into a strong funding proposal, with the potential to secure funding.
- Future growth: your team will build a strong network with colleagues from your own and other UMCs, focused on AI and machine learning.

After 4 years*

- Your department stays at the forefront of innovation in medical research, with visionary experts who can translate available tools to practical applications.
- Deep knowledge of algorithms and how their implementation can enable more accurate diagnoses, personalised treatments and faster interventions for better patient care.
- Cross-border collaborations with public and private partners fuel new research opportunities.

*** If you join exquAIro's follow-up development tracks.**

Benefits for you

After 6 weeks

- The ability to apply AI methods and principles to your own biomedical research.
- The skills to guide your department's AI implementation.
- Access to funding for your research proposal and the opportunity to apply for exquAIro's Pilot Grants.

After 4 years*

- The knowledge and skills to implement algorithms and translate them into better patient care.
- Full understanding of the modern AI toolkit for handling even the most complex datasets.
- Vision and skills to lead data-driven innovation in your department.



Participants about the bootcamp

'The exquAIro Bootcamp was incredibly valuable to me. It provided critical AI insights that played a key role in securing over €4.6 million in funding in 2024.'

Martin de Borst, Professor of Nephrology at UMCG

'The training of exquAIro was essential for my use of AI in cardiac medical imaging. This practical knowledge is now enhancing our research on diagnostics for children with congenital heart disease that may have great impact on patient care.'

Menno Douwes, Paediatric Cardiologist at UMCG

'The exquAIro bootcamps offers a clear roadmap – from designing studies to running models and presenting results – for effectively applying machine learning in biomedical science.'

Elin Kersten, Pediatric Pulmonologist at UMCG

'By providing a solid foundation, offering insights into key challenges and opportunities, and allowing me to envision how AI will transform healthcare, the AI & Data Bootcamp helped me map out a clear strategy to achieve that vision.'

Tom van der Laan, Chief Medical Information Officer | ENT-surgeon at UMCG

'As an oncological surgeon focused on pancreatic cancer, I was seeking ways to integrate AI into my work. The exquAIro Bootcamp in Groningen provided an ideal setting with its small group format, a perfect balance of theory, practical examples, and hands-on sessions. I gained a solid in-depth understanding of AI concepts and learned invaluable tools for direct implementation. This training will also be highly instrumental in advancing my research on fluorescence tumor-specific imaging and its application in surgery.'

Sven Mieog, Oncological Surgeon at Leiden University Medical Center

'My background is in bioinformatics and genetics. I already worked extensively with data infrastructures, but my knowledge of statistics and machine learning was limited. The bootcamp provided exactly the in-depth training I was missing.'

Joeri van der Velde, Assistant Professor in the Systems Genetics section at the University Medical Center Groningen (UMCG)

'The bootcamp has changed my position in AI research. I can now participate more easily in discussions about analyses and models, ask better questions and assess whether certain choices make sense. As a clinician, understanding AI well enough to actively contribute and generate new ideas is incredibly valuable.'

Kristel Muijs, Radiation Oncologist at the UMCG





You may be wondering...

Do I need Python knowledge?
No. You'll learn the necessary Python skills during the preparation and bootcamp. We encourage you to practise beforehand so we can focus on applying Python to biomedical AI rather than learning the language itself.

Do I need prior machine learning knowledge?
No. We start with the basics and cover the key techniques within each domain, including how they can be generalised and applied to other approaches.

Can I participate if I already have knowledge of ML or deep learning?
Absolutely. If you already have ML or deep learning experience, you can develop a broader, more all-round understanding of biomedical AI. The curriculum also covers skills beyond AI modelling, with opportunities to strengthen your impact skills.

How much time does the bootcamp require?
Approximately 40 hours of classroom study per week, plus 1–2 hours of self-study. Additionally, we ask people to do extensive Python pre-work, amounting to 15-20 hrs, before the bootcamp starts.

What are the cancellation terms?
Please check our cancellation policy on our **website**

What study materials are provided?
All training materials are provided digitally through the exquAIro Learning Management System.

What qualifications can I obtain?
You can earn a Bootcamp Badge and topic-specific badges by successfully completing the corresponding assessments.

Are there any central or external exams?
No. There are no central or external exams.

How many exams are there, and can I retake them?
You complete short examinations for the relevant badges.

exquAIro

Together, we can accelerate medical breakthroughs with AI.

Contact us today

info@exquairo.com | exquairo.com

Or register directly

Our admissions process is simple and streamlined. You can register online for yourself or your team members.

Register now

exquAIro













Recognised as an ANBI and registered with CRKBO

Algemeen Nut Beogende Instelling ANBI

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