Radboudumc

Vacancy

Tenure track 'Group leader translational tumor bioinformatics'

<u>https://www.radboudumc.nl/en/vacancies/96641-tenure-track-group-leader-translational-tumor-</u> <u>bioinformatics</u>

About the vacancy

- 36 hours per week
- Temporary
- 4 years with prospects on a permanent position
- Schaal 11
- min € 3922 max € 5383 gross per month at full employment
- Deadline: 29 April 2021

Job description

The Laboratory tumor genetics (LTG) seeks a junior scientific group leader in bioinformatics with a focus on translational tumor genetics.

The group leader translational tumor bioinformatics will be responsible for:

- Jointly coordinating the work of the tumor bioinformatics group.
- Development of innovative bioinformatic analyses methods and workflows for somatic genetic analyses.
- Development of a tumor bioinformatics research line.

The junior group leader will closely collaborate with two bioinformaticians who are dedicated to the development and implementation of novel analyses for tumor diagnostic applications to identify acquired aberrations and will be embedded in the bioinformatics team of the department of Human Genetics that mainly focuses on constitutional genetic aberrations.

LTG is a collaborative effort between the departments of Pathology and Human Genetics, that offers the latest genetic technologies for the diagnosis and treatment selection of cancer patients and performs internationally recognized research on tumor genetics. LTG and the cancer genomics research group of dr. Richarda de Voer offer access to large and unique sample cohorts, specifically for patients with metastasized disease and/or patients with a putative genetic predisposition.

LTG works closely with the diagnostics division of the department of human genetics for the use of innovative genetics technology such as short and long-read sequencing technology. LTG and the diagnostics division are internationally recognized for applying the latest genetic technologies in patient diagnostics and for their expertise in cancer molecular diagnostics, sequencing technologies and bioinformatics.

Tasks and responsibilities

- Development of innovative technologies and bioinformatics for tumor diagnostics in close collaboration with laboratory specialists.
- Development of a research line in tumor bioinformatics.
- Academic supervision of bioinformaticians responsible for the implementation of innovative tumor diagnostics.
- Development of research collaborations with related research groups.

Profile

Do you have the ambition to become a research group leader in the field of translational tumor bioinformatics? We are looking for a new colleague with the drive to optimize patient care through development and implementation of innovative bioinformatic solutions in close collaboration with laboratory specialists and other members of the bioinformatic team. You have effective communication skills, which includes an ability to engage in technical conversations across disciplines, notably including medical disciplines.

Furthermore:

- PhD in bioinformatics or tumor genetics.
- Proven experience in bioinformatic analyses of tumor genetics data to identify acquired aberrations.
- Effective and successful leadership experience, preferably in a scientific or technical team, group, or project setting.
- Experience in mentoring, supervising, and facilitating the technical work of scientific researchers and bioinformaticians.
- An excellent scientific publication record.
- The mentality of a team player who inspires and gets inspired.

Terms of employment

Selected candidates are invited to jointly apply for the Radboud Hypatia initiative that provides an excellent prospects for tenure track (i.e. faculty position with permanent contract) and financial rewards for meeting excellent research criteria. For more information see the Radboud Excellence initiative and the Radboud Hypatia initiative.

Working at Radboud university medical center means that you are ahead of the curve and working together on the healthcare of the future. But there is more. Our secondary terms of employment are impressive. These are fully tailored to you thanks to our Employment Conditions Selection Model. At Radboud university medical center, you will be given trust, and you will take the responsibility to handle everything together. We provide annual courses, both professional and personal.

- In addition to your monthly salary and an annual vacation allowance of 8%, you will receive an endof-year bonus of 8.3%.
- If you work irregular hours, you will receive an allowance (47% or 72%) for this.
- As a full-time employee, you are entitled to approximately 168 vacation hours (over 23 days) per year.
- Radboud university medical center pays 70% of the pension premium. You pay the rest of the premium with your gross salary.
- You get a discount on health insurance as well: you can take advantage of two group health insurance plans. UMC Zorgverzekering and CZ collectief.

In addition to our terms of employment, we also offer employees various other attractive facilities, such as childcare and sports facilities. Want to learn more? Take a look at the CAO UMC.

Department

Radboudumc departments of Human Genetics and Pathology closely collaborate in the laboratory of tumor genetics (LTG), that consists of 9 laboratory specialists, 40 technicians and has a close collaboration with the PI groups of Richarda de Voer and Marjolijn Ligtenberg with currently 10 PhD students. LTG provides clinical molecular diagnostics, both somatic and germline, for diagnostic and predictive purposes.

The department of Human Genetics consists of a diagnostics, research and clinical division. Within the diagnostics division (135 FTE) the bioinformatics group (15 FTE) is responsible for developing and maintaining bioinformatics workflows for the analysis of exome, genome and long-read sequencing data. Within this group, currently two bioinformaticians are dedicated to the development and implementation of novel analyses for tumor diagnostic applications. This includes the analysis of TSO500, WES on tumor tissue and of WGS and targeted panels for liquid biopsies.

The bioinformatics group offers access to a complete development setup, based on the Atlassian stack and Java. In addition, there is a large knowledge base on exome and genome analysis, statistics methodology, R, Python, Java, machine learning and other bioinformatic related topics. The development of novel analyses methods is conducted on a high-performance compute environment (>600 cores, 2.5Pb storage) that supports large-scale genome analyses and the setup of diagnostic workflows.

The LTG and the bioinformatics group collaborate with the Radboud Genome Technology Center Genomics for applying novel sequencing technologies in tumor diagnostics. CGAL hosts the latest genome technologies such as exome and genome, TSO500 and Molecular inversion probe (MIPs) technology through Illumina NextSeq 500 or NovaSeq, long-read sequencing through PacBio Sequel Ile instruments. In addition, the laboratory hosts a Bionano Saphyr instrument for the detection of complex structural genome variation.

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Radboud university medical center is a university medical center for patient care, scientific research, and education in Nijmegen. Radboud university medical center strives to be at the forefront of shaping the healthcare of the future. We do this in a person-centered and innovative way, and in close collaboration with our network. We want to have a significant impact on healthcare. We want to improve with each passing day, continuously working towards better healthcare, research, and education. And gaining a better understanding of how diseases arise and how we can prevent, treat, and cure them, day in and day out. This way, every patient always receives the best healthcare, now and in the future. Because that is why we do what we do.

Read more about our strategy and what working at Radboud university medical center means. Our colleagues would be happy to tell you about it. **#weareradboudumc**

Contact

All additional information about the vacancy can be obtained from Prof. Marjolijn Ligtenberg, Head of the Laboratory Tumor Genetics, via (+31) 24 361 77 49 or from Dr. Christian Gilissen, Head of the bioinformatics unit of the Department of Human Genetics via (+31) 24 366 89 40. Use the Apply button to submit your application.

We would like to receive your application before **29 April 2021.**

What else can you expect?

When you join us, we require a certificate of conduct (Verklaring Omtrent het Gedrag, VOG) and there will be, depending on the type of job, a screening based on the provided cv. You do not have to do anything for this; we will tell you more later. Read more what our International Office can do for you when moving to the Netherlands, about the application process or view our frequently asked questions.

Recruitment agencies are asked not to respond to this job posting.