



RECRUITMENT - POSTDOC POSITION

To be part of an exciting (inter)national consortium with interdisciplinary collaboration

Epi-Guide-Edit consortium, NWO Key Technology call Prof. dr. Pernette Verschure (program coordinator)

Are you looking for an exciting postdoc opportunity in the field of epigenetics and gene regulation? Our group at the Swammerdam Institute for Life Sciences and the Amsterdam University Medical Centers (AUMC), University of Amsterdam (UvA), NL, is seeking a highly motivated and enthusiastic researcher to join our team. We are looking for a candidate who is passionate about epigenetic gene regulation, with a strong background in **data analysis and bioinformatics**.

At our lab in the **group of prof. Verschure**, we study the epigenetic dynamics of cells to understand how variability in epigenetics and transcription timing control cell responsiveness. Our research focuses on gene-specific epigenetic modulation using the CRISPR/dCas platform, i.e. epigenetic editing, which provides a flexible system for epigenetic reprogramming. With the [Epi-Guide-Edit consortium](#) funded by the [NWO Key Technology call](#), we aim to develop and apply the rules and tools for sustained epigenetic editing as a key technology across different applications, including health, medical, and agricultural implementation. To achieve our goal, we will leverage project-generated single-cell epigenetic CRISPR/dCas screening and dedicated data processing, combined with an integrative epigenome analysis of existing -omics data, to distill a prediction model for sustained epigenetic editing. Epi-Guide-Edit brings together a diverse group of academic, industrial and societal partners, including institutions such as UvA, AUMC, UMCG, ErasmusMC, NKI, WUR, industrial co-funding partners Unilever, Bristol Myers Squibb, plant breeding, technical and societal partners Rathenau Institute and Science Matters.

The ideal candidate has

The ideal candidate should have a PhD in Cell/Molecular Biology, Life Sciences or Genetics with Bioinformatics/Data science as a major focus. You should have a passion for epigenetics and gene regulation with a data analysis point of view. Advanced skills in data analysis, bioinformatics, and computational tools using R, MATLAB, Python or Bash, preferably of single-cell RNA-seq data, are required. Affinity/experience with experimental research, (single cell) -omics, e.g. RNA-seq, pooled CRISPR screens, and a solid publication track record with contributions to online depositories such as GEO or GitHub, are preferred. You should have excellent communication skills, both oral and written in English, and be able to work independently as well in an interdisciplinary environment.

What your role will be

As a postdoctoral researcher in our lab, you will play a central role in predicting which genes respond to induced epigenetic changes. You will apply state-of-the-art in silico tools to identify from single-cell resolution pooled epigenetic CRISPR/dCas screens the ground rules of sustained changes in gene functioning with a hit-and-run epigenetic editing approach. You will also work closely with experts in data analysis, including **Dr. Perry Moerland** from the Bioinformatics Lab at the AUMC, and **Dr. Remco Loos** from Informatics & Predictive Sciences at Bristol Myers Squibb, Spain.

What we offer

We offer a temporary employment contract for 0,8 (1) fte for 12 months, which will be extended upon satisfactory performance for a contract of 4 (3) years in total. The gross monthly salary, based on 38 hours per week and dependent on relevant experience, ranges between € 2,960 to € 4,670 (scale 10). You will have access to cutting-edge technology and equipment, a supportive research environment, and opportunities for career development.

If you are a highly motivated and enthusiastic researcher with a strong interest in epigenetics and gene regulation, we encourage you to apply for this exciting postdoctoral position. Please contact Prof. dr. Pernette J. Verschure, UvA, Program coordinator (p.j.verschure@uva.nl) for more information.

<https://www.rathenau.nl/en/nauwkeurig-en-gericht-bewerken-van-het-epigenoom>

<https://www.nwo.nl/en/news/eight-projects-awarded-within-kic-call-key-technologies>