Clemens Falker-Gieske
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Born February 16th 1984 in Marburg, Germany

QUALIFICATIONS

- Over 10 years of relevant experience in molecular biology and cell biology including gene editing techniques and cellular models
- Over 5 years of intense research activities in the fields of computational biology, applied bioinformatics, and quantitative genetics with a major focus on animal health and diseases
- Over 5 years of teaching experience in Master's and Ph.D. programs

EDUCATION

11/2011 – 2/2015	Dr. rer. nat. in "Biology" at the University of Hamburg
04/2009 – 10/2010	Master of Science in "Molecular Life Sciences" at Humboldt University Berlin
10/2008 – 04/2009	Master of Science in "Molecular and Cellular Biology" at Philipps University Marburg
10/2005 – 10/2008	Bachelor of Science in "Biology" at the University of Hamburg

EXPERIENCE

Postdoctoral researcher   **5/2017 – present**
Division Functional Breeding, Department of Animal Sciences, Georg-August-University Göttingen

- Established cell culture and molecular biology laboratories with a major focus on cellular disease models
- Developed pipelines and custom workflows for the analysis of high-throughput genomic and transcriptomic sequencing data

Guest scientist   **3/2016 – 9/2016**
Next Generation Sequencing Core Facility, University Medical Center Hamburg-Eppendorf

- Acquired basic skills in applied bioinformatics and the analysis of second-generation sequencing data

Doctoral researcher   **11/2011 – 4/2015**
Institute of Neuropathology, University Medical Center Hamburg-Eppendorf

- Established gene editing for gene knockout in neuronal cell lines using TAL Effector Nucleases
- Applied and established numerous biochemical techniques for the analysis and characterization of amyloid proteins

Guest scientist   **10/2013 – 12/2013**
Consiglio Nazionale delle Ricerche (CNR), Institute of Neuroscience, Milan, Italy

- Acquisition of molecular techniques to measure cell toxicity in neurons

Research assistant and master's student   **10/2009 – 10/2010**
Institute of Molecular Parasitology, Humboldt University Berlin

- Developed and established a gene editing approach in the obligate intracellular parasite *Toxoplasma gondii* by designing a dominant negative isoform of the DNA repair protein Ku80

SKILLS
Laboratory: Gene editing, cellular models, molecular cloning, nucleic acid analysis, protein analysis, cell toxicity analysis
Optical methods: Confocal microscopy, live cell imaging, nanoparticle tracking analysis, dynamic light scattering, fluorescence activated cell sorting (FACS)
Programming languages: Python, Linux Bash, R, high-performance computing with SLURM
Bioinformatics: Genomics, transcriptomics, genotype imputation, GWAS, eQTL analysis, metagenomics

ACADEMIC SELF-ADMINISTRATION

Member of the appointment committee for the professorship "Economics of Sustainable Agri-Food Systems"	**05/2022 – 06/2023**
Member of the executive board, Department of Animal Sciences	**04/2022 – present**
Member of the board for selection of candidates for the master's program "Integrated Plant and Animal Breeding (iPAB)"	**01/2022 – present**
Member of the appointment committee for the professorship "Animal Breeding and Genetics"	**01/2022 – 07/2022**

OFFICES

Substitute project leader according to § 15 GenTSV	**08/2018 – present**
Substitute project leader according to §2 TierSeuchErV	**09/2020 – present**

COURSES AND CERTIFICATES

Back to the basics (A/B) - Teaching in Higher Education, Georg-August University School of Science, 2023
Programming with CUDA, Gesellschaft für wissenschaftliche Datenverarbeitungen mbH Göttingen, 2022
ABG01x: Genetic Models for Animal Breeding, edx course, Wageningen University & Research, 2021
Statistics in R for participants with prior knowledge – from analysis to report, Gesellschaft für wissenschaftliche Datenverarbeitungen mbH Göttingen, 2017
Parallel programming with MPI, Gesellschaft für wissenschaftliche Datenverarbeitungen mbH Göttingen, 2017
Introduction to R and RNA-Seq Analysis, Statistical Bioinformatics, University Medical Center Göttingen, 2017
RNA-Seq Data Analysis using Galaxy, Statistical Bioinformatics, University Medical Center Göttingen, 2017

LANGUAGES
German: native
English: fluent
Spanish: conversational