# MD ABDUS **SATTAR**

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## **WORK EXPERIENCE**

MARCH 2022 - TODAY

#### PHD RESEARCHER | UNIVERSITY HOSPITAL RWTH AACHEN

**Project:** Osteogenic potential of adipose stem cells in periodontal tissue engineering.

Isolation of primary adipose stem cells from human and mouse adipose tissue, stem cell differentiation, ELISA, RT-qPCR.

MARCH 2021 - SEPTEMBER 2021

#### **RESEARCH ASSISTANT | UNIVERSITY OF LEIPZIG**

Project: Molecular control of G-coupled protein receptor signaling.

Molecular cloning of C.elegans arrestin-1 by site-directed mutagenesis, PCR, gel electrophoresis, DNA transfection with Lipofectamine 2000, BRET assay, ligand-receptor interaction by fluorescence microscopy.

MAY 2020 - NOVEMBER 2020 AND FEBRUARY 2022 - MAY 2022

### RESEARCH ASSISTANT | HELMHOLTZ CENTER POTSDAM

Development of web content, creation of a literature database, database management.

MARCH 2019 - MARCH 2021

## STUDENT ASSISTANT | CHARITÉ - UNIVERSITY MEDICINE BERLIN

Conception and implementation of a process for the central recording of laboratory animal numbers, data analysis, evaluation and presentation of data on animal experiments, scientific research and literature research.

#### **EDUCATIONAL BACKGROUND**

AUG 2020

MASTER OF SCIENCE IN TOXICOLOGY | UNIVERSITY OF POTSDAM, GERMANY

JANUARY 2014

BACHELOR OF PHARMACY | DHAKA INTERNATIONAL UNIVERSITY, BANGLADESH

### INTERNSHIP/RESEARCH PROJECTS

JUN 2019 - JAN 2020

### **MASTER'S THESIS** | UNIVERSITY OF POTSDAM

**Project:** Association between plasma polyphenol measurements and metabolic syndrome and its components: analysis within the EPIC cohort.

Epidemiological study design, statistical analysis in SAS, random forest imputation in R, multivariate logistic regression, restricted cubic splines regression.

JAN 2019 - MAR 2019

## **INTERNSHIP PROJECT** | UNIVERSITY OF POTSDAM

**Project:** Post-translational protein modification in human diseases.

HepG2 cell culture, immunoprecipitation, western blot, MALDI-ToF MS

OCT 2018 - NOV 2018

## **INTERNSHIP PROJECT** | UNIVERSITY OF POTSDAM

**Project:** Phytochemical-protein adducts

Cell culture, protein purification, analysis of alliin-protein interaction (MALDI-ToF MS).

JUL 2018 - AUG 2018

## **INTERNSHIP PROJECT** | UNIVERSITY OF POTSDAM

**Project:** Toxicological Characterization Of T-BOOH

Cell culture, cytotoxicity (CASY, LDH, Resazurin), global DNA methylation (LC-MS/MS), genotoxicity (Alkaline Comet Assay). C.elegans culture, handling and synchronization (bleaching technique).

NOV 2017 - DEC 2017

## **INTERNSHIP IN THE LABORATORY** | UNIVERSITY OF POTSDAM

- Mass spectrometric determination of sulfotransferase activity in HepG2 cells
- · Cytosol isolation and preparation of S9 mixture from rat liver and GST induction measurement
- Quantitation of glutathione by an enzymatic recycling assay
- Induction of CYP3A4 in HepG2 cells by Western blotting
- Genotyping of N-acetyltransferase 2

DEC 2017 - JAN 2018

# LABORATORY ANIMAL SCIENCE/FELASA B-TRAINING | UNIVERSITY OF POTSDAM

The theoretical part (2 credits, 18 hours) with the exam and the practical part (37 hours) on laboratory animal science. Certified with **FELASA B**.

JUN 2014 - DEC 2014

IN-PLANT TRAINING | BIOPHARMA LIMITED, DHAKA, BANGLADESH

#### **LABORATORY SKILLS**

- Primary Cell Isolation and Culture
- Metabolic activity / toxicological tests
- differentiation of stem cells
- Molecular Cloning / Mutagenesis
- PCR and gel electrophoresis
- RNA isolation and RT-qPCR

- BRET/FRET Assay
- ELISA, Western Blot and MALDI-ToF
- Light and fluorescence microscopy
- Data analysis on Excel, GraphPad Prism, SPSS, R and SAS.

### LINGUISTIC PROFICIENCY

English (Fluent / C1)
German (very good / B2)

## **WORKSHOPS/EVENT/WEBINARS**

06/05/2023 - 06/07/2023 | CAMARADES Berlin Preclinical Systematic Review & Meta-Analysis

Workshop - Introduction to Systematic Review and Meta-analysis

09/13/2022 - 09/16/2022 | Munsterland, Munster

Scientific Event - The 10th GSCN Conference

07.12.2021 | On-line

Webinar - The principles of the 3Rs: Lessons Learned from History

12/03/2019 – 03/04/2019 | German Institute for Human Nutrition (DIfE), Bergholz-Rehbrücke, Potsdam

Workshop – Then and Now in nutritional assessment: experiences across Europe

17.12.2019 | Charité - University Medicine Berlin

Scientific Event – One year Charité 3R: Results and perspectives

# **MEMBERSHIP/OTHERS**

- Member of the German Stem Cell Network (GSCN)
- Former member of the Buddy Program at the University of Potsdam
- President of the Bangladeshi Students Alumni Association in Potsdam.
- Website creation on WordPress and Typo3
- First aid course
- Living in Germany integration course on the German legal, social and political system.
- Driving license class B

## **PUBLICATIONS (SUBMITTED)**

**Md Abdus Sattar**, LL, Gerrit Freund, Vincent GJ Guillaume, Tim Ruhl, Justus P. Beier and Rebekka Götzl. Association between donor age and osteogenic potential of adipose - derived stem cells in bone tissue engineering: an updated review. J. Pers. Med. 2023

Md Abdus Sattar, Wolfgang Mende, LL, Gerrit Freund, Vincent GJ Guillaume, Tim Ruhl, Justus P. Beier and Rebekka Götzl. *The osteogenic potential of adipose - derived stem cells isolated from the subcutaneous fat of female donors remains unaffected by age.* J. Pers. Med. 2023