ALEXANDER SIEBERATH

(Ph.D.)

Department of Experimental Surgery – Department of Surgery

Centre for Clinical Research at Ruhr University Bochum

Knappschaft Kliniken Universitätsklinikum Bochum

Universitätsklinikum der Ruhr-Universität Bochum

Universitätsstraße 150, 44801 Bochum, Germany

UNIVERSITY EDUCATION:

B.Sc. **Biology, 2015** Ruhr University Bochum, Bochum, Germany

M.Sc. **Developmental and Molecular Stem Cell Biology, 2017** Ruhr University Bochum, Bochum, Germany

M.Sc. **Regenerative Medicine, 2019** Jinan University, Guangzhou, China

Ph.D. **Doctor of Philosophy in additive manufacturing and 3D printing, 2022**
Thesis entitled: Development of a 3D osteoporosis in vitro disease model. Supervisor: Prof. K. Dalgarno, Newcastle University, United Kingdom

PROFESSIONAL HISTORY:

2022 - Post-doctoral researcher at Department of Experimental Surgery/ Department of Surgery

Knappschaft Kliniken Universitätsklinikum Bochum – Hospital of the Ruhr University Bochum, Centre for Clinical Research, Bochum, Germany.

10/2021-01/2022 **Innovation to Commercialisation of University Research (ICURe) Programme**
- Accepted in the competitive ICURe programme, a customer discovery programme designed using lean start-up methodology. Secured innovate UK funding of £35,000.

PUBLICATIONS:

1) Sieberath A, Eglin D, Sprecher CM, et al. Developing a Bone-Mimicking Microenvironment: Surface Coating Method for Investigating Bone Remodeling *in Vitro*. *ACS Biomater Sci Eng*. 2025;11(5):2690-2704. doi:10.1021/acsbiomaterials.4c02330.
2) Zhu M, Xu M, Bertheloot D, et al. Arcyriaflavin A Alleviates Osteoporosis by Suppressing RANKL-Induced Osteoclastogenesis. *Int J Mol Sci*. 2025;26(5):2141. Published 2025 Feb 27. doi:10.3390/ijms26052141.
3) Brom VC, Strauss AC, Sieberath A, et al. Agonistic and antagonistic targeting of immune checkpoint molecules differentially regulate osteoclastogenesis. *Front Immunol*. 2023;14:988365. Published 2023 Feb 2. doi:10.3389/fimmu.2023.988365.
4) Sieberath A, Della Bella E, Ferreira AM, Gentile P, Eglin D, Dalgarno K. A Comparison of Osteoblast and Osteoclast In Vitro Co-Culture Models and Their Translation for Preclinical Drug Testing Applications. *Int J Mol Sci*. 2020;21(3):912. Published 2020 Jan 30. doi:10.3390/ijms21030912.