



Deniz Ragipoğlu

My research focuses on molecular mechanisms involved in fracture healing under healthy and inflammatory conditions, and bone homeostasis.

Research Areas of Interest: Tissue engineering, fracture healing, osteoporosis, immunology, experimental research methods in orthopedics and trauma, biomaterials, cancer, bone metastasis

Work/Research Experience

▪ **01 November 2022 - Present : German Cancer Research Center (DKFZ)**

*Cancer and bone metastasis

▪ **01 November 2017 – 31 December 2021: Institute of Orthopaedic Research and Biomechanics (Fracture Healing Group- Ignatius)**

*PhD Thesis: The Role of Mast Cells during Impaired Fracture Healing in Osteoporosis and Trauma

▪ **22 June 2019 – 30 June 2019: Institute for Molecular and Clinical Immunology (Dudeck Lab) (Internship)**

*Tissue Clearing Technique

▪ **10 October 2016 – 10 August 2017: Center for Regenerative Therapies Dresden (CRTD), (Knopf/Brand Lab)**

*3rd Semester Lab Project and Master Thesis: Injury- Induced Osteoblast Dedifferentiation in Mice

▪ **15 September 2014 – 3 June 2015 : Yeditepe University Tissue Engineering Group (YUTEG)**

*Bachelor's Thesis: Effect of Human Cancellous Bone Graft Soluble Molecules onto Differentiated Human Adipose Derived Mesenchymal Stem Cells Towards Osteogenic Lineages

▪ **30 June – 25 July 2014 : Acibadem Genetic Diagnosis Center (as intern)**

*Molecular Genetics

▪ **16 June - 25 July 2013: Çanakkale Onsekiz Mart University, Faculty of Medicine Department of Medical Genetics (as intern)**

*Molecular Genetics *Cytogenetic

Languages:

Turkish (Native)

English (Fluent)

German (B1-B2)



Education

- **Ulm University (2018 April – 2022 April)**
PhD in Molecular Medicine
- **TU Dresden Technical University (2015 October – 2017 September)**
MSc in Molecular Bioengineering
- **Yeditepe University, Istanbul (2010 September - 2015 July)**
Academic English Preparatory School (2010-2011)
Department of Genetics and Bioengineering (2011-2015)
- **Çağrıbey Anatolian High School, Istanbul (2006-2010)**

Research and Technical Skills

- Opened Fracture Surgery with External Fixation
- Bilateral Ovariectomy Surgery
- Animal handling for in vivo experiments
- Immunohistochemistry
- Micro-computed Tomography (μ CT)
- 3-Point Bending Test (Biomechanical Testing)
- Cryosectioning
- Histology (Bone and Lung Tissues)
- Multiplex ELISA
- PCR Assays (Real Time-PCR, qPCR)
- Cell Culture
- Cancer models in preclinical research
- Bioluminescence imaging

Training Certificates

- **Practical Course on Using Zebrafish in Research**
3-7 April 2017, Center for Regenerative Therapies/TU Dresden
- **Tierschutz/Tierversuche: Gesetzliche Grundlagen in Deutschland'**
(Animal welfare/animal experiments: Legal basis in Germany')
- **Certificate of Animal Use in Experimental Research**
16-25 January 2014, Yeditepe University

Publications

1. Engelmann, J., **Ragipoglu, D.**, Ben-Batalla, I., Loges, S. (2023) 'The Role of TAM Receptors in Bone'. Int J Mol Sci. (under review)
2. Vargas-Delgado, M.E., Meier, L., Waizenegger, J.S., Paus, B., Oberbauer, J., Berenbrok, N., **Ragipoglu, D.**, Engelmann, J., et al. (2023) 'Presence of Androgens Improves Efficacy of PD1 Blockade'. (submission process)
3. Fischer, V., Bülow, J.M., Krüger, B.T., **Ragipoglu, D.**, et al. (2023) 'Role of Mast-Cell-Derived RANKL in Ovariectomy-Induced Bone Loss in Mice'. Int J Mol Sci. 2023;24(11):9135. <https://doi.org/10.3390/ijms24119135>
4. Haffner-Luntzer, M., **Ragipoglu, D.**, Ahmad, M., Schoppa, A., Steppe, L., Fischer, V., Yorgan, T., Amling, M., Schinke, T., Ignatius, A. (2023) 'Wnt1 Boosts Fracture Healing by Enhancing Bone Formation in the Fracture Callus.' J Bone Miner Res. <https://doi.org/10.1002/jbmr.4797>
5. **Ragipoglu, D.**, Bülow, J., Hauff, K., Voss, M., Haffner-Luntzer, M., Dudeck, A., Ignatius, A., Fischer, V. 'Mast cell deficiency improves compromised fracture healing after severe trauma'. (2022) Bone Reports Vol16, Abstract of the ECTS 2022 Congress
6. **Ragipoglu, D.**, Bülow, J., Hauff, K., Voss, M., Haffner-Luntzer, M., Dudeck, A., Ignatius, A., Fischer, V. (2022) 'Mast cells drive systemic inflammation and compromised bone repair after trauma'. Front. Immunol. <https://doi.org/10.3389/fimmu.2022.883707>

Publications

7. Fischer, V., **Ragipoglu, D.**, Diedrich, J., Steppe, L., Dudeck, A., Schütze, K., Kalbitz, M., Gebhard, F., Haffner-Luntzer, M. and Ignatius, A. (2021), Mast cells trigger disturbed bone healing in osteoporotic mice. *J Bone Miner Res.* <https://doi.org/10.1002/jbmr.4455>
8. Fischer, V., **Ragipoglu, D.**, Diedrich, J., Dudeck, A., Kalbitz, M., Gebhard, F., Haffner-Luntzer, M. and Ignatius, A. (2021), Mast cells critically regulate bone repair and osteoclast activity under estrogen-deficient conditions, *Bone Reports*, Vol14 *Abstracts of the ECTS Congress 2021*. <https://doi.org/10.1016/j.bonr.2021.100818>
9. **Ragipoglu, D.**, Dudeck, A., Haffner-Luntzer, M., Voss, M., Kroner, J., Ignatius, A. and Fischer, V. (2020), The Role of Mast Cells in Bone Metabolism and Bone Disorders. *Front. Immunol.* 11:163. doi:10.3389/fimmu.2020.00163
10. **Ragipoglu, D.**, Fischer, V., Dudeck, A., Ignatius, A., and Haffner-Luntzer, M. (2019), The role of mast cells in ovariectomy-induced delayed bone repair, *Osteologie, Abstracts of the 1. MuSkITYR Symposium*, 28(04): 292 DOI: 10.1055/s-0039-1700641

Congress / Symposia

- **2-3 December 2019: MuSkITYR Symposium 2019, Günzburg-Germany** – Chair of Endocrinology and Bone Integrity Abstract Session, Oral presentation ‘The role of mast cells in ovariectomy-induced delayed bone repair’
- **29-30 July 2019: Knopf Group - Minisymposium ‘Current approaches to tissue regeneration in zebrafish and mice’, Dresden-Germany** – Guest Speaker The Role of Mast cells in Compromised Fracture Healing after Severe Trauma’
- **1-4 September 2018: ECTS PhD Training Course, Lage Vuursche-Netherlands** – Oral Presentation ‘The Role of Mast cells in Compromised Fracture Healing after Severe Trauma’

Honors and Awards

- **2017:** Best Translational Poster Award at Summer Conference of CRTD, Dresden
Title: Reactivation of terminally differentiated osteoblasts upon injury
- **2015:** Qualified by graduating with honors and ranking 3rd among Genetics and Bioengineering major at Yeditepe University

Professional Affiliations

- **SciGether (Science and Technology Platform, 2020-Present):** Founder
- **Muskityr** (2019- Present)
- **ECTS** (2018-2019)
- **Yeditepe University Biotechnology Society (2012 – 2015):** Chairman

Computer Skills

- **Microsoft Office** (Word, Excel, PowerPoint)
- **Fiji/ImageJ**
- **GraphPad Prism**
- **Adobe (Photoshop, Illustrator)**
- **µCT Softwares** (NRecon, Data viewer, CTAn)
- **Osteomeasure Software** (Histomorphometrical analysis)
- **MetaMorph Software** (Histomorphometrical analysis)
- **MATLAB /Phyton** (Beginner level)