



Statement of individual author contributions to figures/tables of manuscripts included in the dissertation

Manuscript 1: Research Article (published)

Martin Kuric (MK), Susanne Beck (SB), Doris Schneider (DS), Wyonna Darleen Rindt (WDR), Marietheres Evers, Jutta Meißner-Weigl, Sabine Zeck (SZ), Melanie Krug, Marietta Herrmann (MH), Tanja Nicole Hartmann, Ellen Leich, Maximilian Rudert, Denitsa Docheva, Anja Seckinger, Dirk Hose, Franziska Jundt, Regina Ebert (RE) (2024): Describing Myeloma Dissemination *in vitro* with hMSC-Interacting Subpopulations and their Aggregation/Detachment Dynamics, **Cancer Research Communications**, <https://doi.org/10.1158/2767-9764.CRC-23-0411>

| Figure | Author Initials, Responsibility decreasing from left to right | | | | |
|--------|---|----|-----|----|----|
| 1 | <u>MK</u> | DS | RE | | |
| 2 | <u>MK</u> | DS | RE | | |
| 3 | <u>MK</u> | DS | WDR | SZ | RE |
| 4 | <u>MK</u> | DS | SB | RE | |
| 5 | <u>MK</u> | SB | RE | | |
| 6 | <u>MK</u> | SB | | | |
| 7 | <u>MK</u> | RE | | | |
| S1 | <u>MK</u> | DS | WDR | SZ | RE |
| S2 | <u>MK</u> | MH | DS | RE | |
| S3 | <u>MK</u> | DS | SZ | RE | |
| S4 | <u>MK</u> | RE | | | |
| S5 | <u>MK</u> | RE | | | |
| S6 | <u>MK</u> | SB | RE | | |
| Table | Author Initials, Responsibility decreasing from left to right | | | | |
| 1 | <u>MK</u> | SB | RE | | |
| 2 | <u>MK</u> | SB | RE | | |
| S1 | <u>MK</u> | DS | RE | | |
| S2 | <u>MK</u> | SB | RE | | |
| S3 | <u>MK</u> | RE | | | |
| S4 | <u>MK</u> | DS | RE | | |

Manuscript 2: Data Analysis Software (published)

Martin Kuric, Regina Ebert (2024): plotastic: Bridging Plotting and Statistics in Python, **Journal of Open Source Software**, 9(95), 6304, <https://doi.org/10.21105/joss.06304>

| Figure | Author Initials, Responsibility decreasing from left to right | | | | |
|---------------|---|----|--|--|--|
| 1 | <u>MK</u> | RE | | | |
| Table | Author Initials, Responsibility decreasing from left to right | | | | |
| 1 | <u>MK</u> | | | | |
| 2 | <u>MK</u> | | | | |
| Documentation | Author Initials, Responsibility decreasing from left to right | | | | |

| | | | | | |
|------------------------|--|--|--|--|--|
| README | <u>MK</u> | | | | |
| Example Gallery | <u>MK</u> | | | | |
| Features | <u>MK</u> | | | | |
| Testing | Author Initials, Responsibility decreasing from left to right | | | | |
| Test-Code (Pytest) | <u>MK</u> | | | | |
| Continuous Integration | <u>MK</u> | | | | |

Explanations: All files are available on GitHub (<https://github.com/markur4/plotastic>) and installable via pypi.com. Documentations are found in the Readme, including example gallery and feature explanation. Software tests was written using pytest. Coverage of code by tests is reviewable with codecov (<https://app.codecov.io/gh/markur4/plotastic>). Continuous Integration is implemented using GitHub actions.

Manuscript 3: Research Letter (published)

Daniela Simone Maichl (DSM), Julius Arthur Kirner, Susanne Beck (SB), Wen-Hui Cheng, Melanie Krug, Martin Kuric, Carsten Patrick Ade, Thorsten Bischler, Franz Jakob, Dirk Hose, Anja Seckinger, Regina Ebert & Franziska Jundt (2023): Identification of NOTCH-driven matrisome-associated genes as prognostic indicators of multiple myeloma patient survival, **Blood Cancer Journal**, 13:134, <https://doi.org/10.1038/s41408-023-00907-6>

| Figure | Author Initials, Responsibility decreasing from left to right | | | | |
|--------|---|--|--|----|-----------|
| 1 a | DSM | | | SB | |
| 1 b | DSM | | | SB | |
| 1 c | DSM | | | SB | <u>MK</u> |
| 1 d | DSM | | | SB | <u>MK</u> |
| Table | Author Initials, Responsibility decreasing from left to right | | | | |
| 1 | DSM | | | | |

Explanations: This co-authorship is not a chapter in this dissertation. Martin Kuric plotted multidimensional diagrams using python and fine-adjusted them using professional design software (Affinity Publisher, Serif Ltd).

Manuscript 4: Research Paper (under peer-review)

Wyonna Darleen Rindt (WDR), Susanne Beck, Melanie Krug, Shuntaro Yamada (SY), Franziska Sennefelder (FS), Louisa Belz (LB), Wen-Hui Cheng, Azeem Muhammad, Martin Kuric (MK), Marietheres Evers, Ellen Leich, Tanja Nicole Hartmann, Ana Rita Pereira, Marietta Hermann, Jan Hansmann, Mohammed Ahmed Yassin (MAY), Kamal Mustafa, Regina Ebert, and Franziska Jundt (FJ) (2024): A 3D bioreactor model to study osteocyte differentiation and mechanobiology under perfusion and compressive mechanical loading, **Acta Biomaterialia**

| Figure | Author Initials, Responsibility decreasing from left to right | | | | | |
|--------|---|----|-----------|-----------|-----------|-----------|
| 1 | WDR | FJ | SY | RE | <u>MK</u> | |
| 2 | WDR | FJ | MAY | | | |
| 3 | WDR | FJ | FS | LB | RE | <u>MK</u> |
| 4 | WDR | FJ | <u>FS</u> | LB | RE | <u>MK</u> |
| 5 | WDR | FJ | <u>FS</u> | LB | RE | <u>MK</u> |
| 6 | WDR | FJ | <u>SY</u> | RE | <u>MK</u> | |
| 7 | WDR | FJ | <u>RE</u> | <u>MK</u> | | |

Explanations: This co-authorship is not a chapter in this dissertation. Martin Kuric contributed by counseling on experimental procedures and data analysis, such as quantifying normalized fluorescence intensity of immunohistochemistry and qPCR.

Manuscript 5: Research Letter (published)

Marietheres Evers (ME), Martin Schreder, Thorsten Stühmer, Franziska Jundt, Regina Ebert, Tanja Nicole Hartmann, Michael Altenbuchinger, Martina Rudelius, Martin Kuric (MK), Wyonna Darleen Rindt, Torsten Steinbrunn, Christian Langer, Sofia Catalina Heredia-Guerrero, Hermann Einsele, Ralf Christian Bargou, Andreas Rosenwald, Ellen Leich (EL) (2023): Prognostic value of extracellular matrix gene mutations and expression in multiple myeloma, **Blood Cancer J.**, 13(1):43, <https://doi.org/10.1038/s41408-023-00817-7>

| Figure | Author Initials, Responsibility decreasing from left to right | | | | |
|--------|---|----|--|--|--|
| 1 | ME | EL | | | |
| 2 | ME | EL | | | |

Explanations: This co-authorship is not a chapter in this dissertation. Martin Kuric contributed indirectly through counseling and feedback on drafted manuscript.

I also confirm my primary supervisor's acceptance.

Doctoral Researcher's Name

Date

Place

Signature