

## Curriculum Vitae **Sven Flemming**

### Personal Data

|                                         |                                                                                                                                                 |
|-----------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|
| Title                                   | PD Dr. med.                                                                                                                                     |
| First name                              | <b>Sven</b>                                                                                                                                     |
| Name                                    | <b>Flemming</b>                                                                                                                                 |
| Current position                        | Surgical senior consultant, head of Interdisciplinary Center of Robotic Surgery, head of IBD surgery (permanent)                                |
| Current institution(s)/site(s), country | Department of General, Visceral, Transplantation, Vascular and Pediatric Surgery, Center of Operative Medicine, University Hospital of Würzburg |
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### Selection of peer-reviewed research articles:

1. Hörner M, Burkard N, Kelm M, *et int*, **Flemming S**<sup>#</sup>, Schlegel N<sup>#</sup>. Glial cell line derived neurotrophic factor (GDNF) induces mucosal healing via intestinal stem cell niche activation. *Cell Prolif*. 2025 Feb;58(2):e13758. doi: 10.1111/cpr.13758.
2. **Flemming S**<sup>\*</sup>, Luissint AC<sup>\*</sup>, Kusters DHM, *et int*, Nusrat A. Desmocollin-2 promotes intestinal mucosal repair by controlling integrin-dependent cell adhesion and migration. *Molecular biology of the cell*. 2020 Mar 15;31(6):407-418. doi: 10.1091/mbc.E19-12-0692.
3. Raya-Sandino A, *et int*, **Flemming S**, *et int*, Nusrat A. Regulation of intestinal epithelial intercellular adhesion and barrier function by desmosomal cadherin desmocollin-2. *Molecular biology of the cell*. 2021 Apr 15;32(8):753-768. doi: 10.1091/mbc.E20-12-0775.
4. **Flemming S**, Luissint AC, Nusrat A, Parkos CA. Analysis of leukocyte transepithelial migration using an in vivo murine colonic loop model. *JCI Insight*. 2018 Oct 18;3(20):e99722. doi: 10.1172/jci.insight.99722.
5. Spindler V, Meir M, Vigh B, **Flemming S**, *et int*, Schlegel N. Loss of Desmoglein 2 Contributes to the Pathogenesis of Crohn's Disease. *Inflamm Bowel Dis*. 2015 Oct;21(10):2349-59. doi: 10.1097/MIB.0000000000000486.
6. Garcia-Hernandez V, Raya-Sandino A, Azcutia V, *et int*, **Flemming S**, *et int*, Nusrat A. Inhibition of Soluble Stem Cell Factor Promotes Intestinal Mucosal Repair. *Inflamm Bowel Dis*. 2023 Jul 5;29(7):1133-1144. doi: 10.1093/ibd/izad003.
7. Luissint AC, Williams HC, Kim W, **Flemming S**, *et int*, Parkos CA. Macrophage-dependent neutrophil recruitment is impaired under conditions of increased intestinal permeability in JAM-A-deficient mice. *Mucosal Immunol*. 2019 May;12(3):668-678. doi: 10.1038/s41385-019-0143-7.
8. Azcutia V, Kelm M, Luissint AC, *et int*, **Flemming S**, *et int*, Parkos CA. Neutrophil expressed CD47 regulates CD11b/CD18-dependent neutrophil transepithelial migration in the intestine in vivo. *Mucosal Immunol*. 2021 Mar;14(2):331-341. doi: 10.1038/s41385-020-0316-4.
9. Meir M, Burkard N, Ungewiß H, *et int*, **Flemming S**, *et int*, Schlegel N. Neurotrophic factor GDNF regulates intestinal barrier function in inflammatory bowel disease. *J Clin Invest*. 2019 Jun 17;129(7):2824-2840. doi: 10.1172/JCI120261.
10. Meir M, **Flemming S**, Burkard N, *et int*, Schlegel N. Glial cell line-derived neurotrophic factor promotes barrier maturation and wound healing in intestinal epithelial cells in vitro. *Am J Physiol Gastrointest Liver Physiol*. 2015 Oct 15;309(8):G613-24. doi: 10.1152/ajpgi.00357.2014.