

MAXIMILIAN HERBERT DRESSLER

막시밀리안 헤르베르트 드레슬러

State Examination in Medicine (Completed December 2025) · Dr. med. Candidate

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RESEARCH PROFILE

German physician-scientist with surgical AI research experience: co-first author with Prof. Hyuk-Joon Lee (Seoul National University Hospital) and principal research coordinator for 80-patient RCT. Research focus: validation methodology for surgical AI, emphasizing calibrated decision support and outcome-level evidence in KLASS-standardized gastrectomy.

EDUCATION

State Examination in Medicine (Staatsexamen) Oct 2018 - Dec 2025

Mannheim Medical Faculty, University of Heidelberg

- Six-year graduate medical program (360 ECTS) culminating in German medical licensure
- Dean's Letter of Recommendation received

Doctor of Medicine (Dr. med.) — in progress Since Oct 2023

Mannheim Medical Faculty, University of Heidelberg

- Thesis:** "Enhanced Non-invasive Monitoring for Individualized Anesthesia Management in Robot-Assisted Laparoscopic Nephrectomy (ENiMoN-RALN)"
- Design:** Randomized controlled trial (n=80); principal research coordinator
- Supervisors:** Prof. Dr. med. G. Beck & Dr. med. D. Ghezel-Ahmadi

RESEARCH EXPERIENCE

Research Scholar Feb - Apr 2025 (11 weeks)

Seoul National University Hospital, Department of Gastrointestinal Surgery — Prof. Hyuk-Joon Lee, MD, PhD

- Co-first author publication on bariatric surgery outcomes in Prader-Willi Syndrome (JMBS 2025)
- Observed 97 advanced surgical procedures (82 gastric cancer, 8 subepithelial tumor resections, 5 hernia repairs, 2 bariatric)
- Scrubbed as assistant surgeon in 3 wedge resections; completed Da Vinci robotic system console training
- Attended 11 weekly lab meetings and 3 multidisciplinary tumor boards
- Conferences: SISSO 2025 (Seoul), 97th Annual Meeting JGCA (Nagoya)

Principal Research Coordinator, ENiMoN Trial Oct 2023 - present

Mannheim Medical Faculty, University of Heidelberg

- Coordinated 80-patient RCT evaluating BIS/NOL/TOF-guided anesthesia in robot-assisted nephrectomy
- Patient recruitment, perioperative data collection, regulatory documentation, IRB compliance

Scientific Research Assistant Oct 2020 - Dec 2023

Mannheim Medical Faculty, University of Heidelberg

Laboratory research in molecular biology; two poster presentations at institutional symposia

PUBLICATIONS

Dressler MH*, Choi JH*, Park K, Kong SH, Park DJ, Lee HJ. [Bariatric Surgery in Patients With Prader-Willi Syndrome](#). *J Metab Bariatr Surg*. 2025;14(2):85-96. doi:10.17476/jmbs.2025.14.2.85 — *Co-first authorship

Dressler MH, Ghezel-Ahmadi D, Beck G. **Enhanced Non-invasive Monitoring for Individualized Anesthesia in Robot-Assisted Nephrectomy: Results from the ENiMoN-RALN Trial**. *In preparation*.

CLINICAL EXPERIENCE

Physician, Obstetrics & Gynecology Feb - May 2026

University Hospital Mannheim

Ward and emergency patient care, surgical assistance in abdominal/laparoscopic procedures, on-call experience

Surgical Residency (upcoming) Starting Jul 2026

Würzburg, Germany

Practical Year (PJ) Nov 2024 - Nov 2025

University Hospital Mannheim

- Surgery (Bariatric):** 2nd assistant in 35+ laparoscopic sleeve gastrectomies and bypasses
- OB/GYN:** 2nd assistant in 65+ open/laparoscopic procedures
- Cardiology:** Diagnostic procedures, ICU patient management
- Ambulatory:** 150+ comprehensive patient evaluations

COVID ICU Healthcare Assistant Dec 2021 - Dec 2022

University Hospital Mannheim

Critical care support during pandemic surge; 50+ night shifts with ventilated and ECMO patients

TECHNICAL PROJECTS (GITHUB.COM/HERBERT-RESEARCH)

PROJECT	DESCRIPTION	METHODS
Surgical AI Calibration Benchmark	Validation framework for surgical AI calibration benchmarking	Brier score, ECE, Platt/isotonic scaling
Gastric Cancer Staging Analysis	TCGA STAD cohort (n=421) survival analysis validating AJCC staging gradients	Kaplan-Meier, Cox PH
Surgical Video Segmentation	Surgical-video segmentation: CholecSeg8k CV plus SISVSE transfer evidence (fine-tuned macro IoU 0.491 on 480 public robotic-gastrectomy frames)	PyTorch, DeepLabV3-ResNet50
Gastric Cancer Cox Nomogram	Implementation of published Cox survival nomograms with sensitivity analysis	Python, scikit-learn

SKILLS

Languages:	German (native), English (C1), Korean (studying, TOPIK 3 target by 2027)	Programming:	Python (pandas, NumPy, matplotlib, lifelines, scikit-learn, PyTorch)
Research:	RCT design, pre-registration, survival analysis, REDCap, GDPR compliance	Membership:	International Gastric Cancer Association (IGCA), member since 2025