

Prof. Jörg C. Kalff, MD

Department of Surgery



Rheinische Friedrich-Wilhelms-Universität Bonn

Department of Surgery, Director

E-Mail: kalff@uni-bonn.de

Research Expertise

The focus of research are the immunological consequences of operative trauma and their recognition and regulation in post-operative dysfunction of the gastrointestinal tract. The group described and elucidated the immunological pathomechanism of postoperative ileus. Furthermore, the group found that the gastrointestinal field effect - a panenteric inflammation following localized abdominal surgery - is mediated by an immunological response involving resident intestinal macrophages, mesenteric dendritic cells and memory TH1 cells.

Education / Training

University of Bonn, Germany, Surgery, Habilitation, 1999

University of Aachen, Germany, Intensive Care, MD thesis, 1988

University of Aachen, Germany, Clinical Medicine, MD, 1987

Appointments / Positions Held

2010 - present

Full Professor and Head, Dept. of Surgery, University of Bonn, Germany

2009

Head, Division of Transplant Surgery, University of Bonn, Germany

2003

Professor of Surgery, University of Bonn, Germany

1999 - 2001

Visiting Research Professor, Dept. of Medicine, University of Pittsburgh, USA

1995 - 1998

Research Fellow, Department of Surgery, University of Pittsburgh, USA

1995

Clinical Fellow, Department of Surgery, University of Bonn, Germany

1989

Resident, Department of Surgery, University of Bonn, Germany

Honors / Awards

2006

Fellow of the American College of Surgeons (FACS)

2003

Elected Speaker of the KFO 115

2000

Ferdinand Sauerbruch Award, Berlin, Germany

2000

Young Investigator Award, American Motility Society

2000

BONFOR Young Investigator Research Award

10 Most Relevant Publications for Prof. Jörg C. Kalff

1. Pantelis D, Beissel A, Kahl P, Vilz TO, Stoffels B, Wehner S, **Kalff JC**. 2011. Colonic anastomotic healing in the context of altered macrophage function and endotoxemia. *Int J Colorect Dis* 26:737-46.
2. Engel DR, Koscielny A, Wehner S, Maurer J, Schumak B, Limmer A, Sparwasser T, Hirner A, Knolle P, **Kalff JC***, Kurts C* (*joined corresponding authorship). 2010. T helper type 1 memory cells disseminate postoperative ileus over the entire intestinal tract. *Nat Med*. 16:1407-13.
3. Wehner S, Buchholz BM, Schuchtrup S, Rocke A, Schaefer N, Lysson M, Hirner A, **Kalff JC**. 2010. Mechanical strain and TLR4 synergistically induce cell-specific inflammatory gene expression in intestinal smooth muscle cells and peritoneal macrophages. *Am J Physiol Gastrointest Liver Physiol* 299:G1187-97.
4. Pantelis D, Kabba MS, Kirfel J, Kahl P, Wehner S, Buettner R, Hirner A, **Kalff JC**. 2010. Transient perioperative pharmacologic inhibition of muscularis macrophages as a target for prophylaxis of postoperative ileus does not affect anastomotic healing in mice. *Surgery* 148:59-70.
5. Wehner S, Straesser S, Vilz TO, Pantelis D, Sielecki T, de la Cruz VF, Hirner A, **Kalff JC**. 2009. Inhibition of p38 mitogen-activated protein kinase pathway as prophylaxis of postoperative ileus in mice. *Gastroenterology* 136:619-29.
6. Wehner S, Behrendt FF, Lyutenski BN, Lysson M, Bauer AJ, Hirner A, **Kalff JC**. 2007. Inhibition of macrophage function prevents intestinal inflammation and postoperative ileus in rodents. *Gut* 56:176-185.
7. Wehner S, Schwarz NT, Hundsdoerfer R, Hierholzer C, Tweardy DJ, Billiar TR, Bauer AJ, **Kalff JC**. 2005. Induction of IL-6 within the rodent intestinal muscularis following intestinal surgical stress. *Surgery* 137:436-46.
8. Schwarz NT, **Kalff JC**, Turler A, Speidel N, Grandis JR, Billiar TR, Bauer AJ. 2004. Selective jejunal manipulation causes postoperative pan-enteric inflammation and dysmotility. *Gastroenterology* 126:159-69.
9. **Kalff JC**, Turler A, Schwarz NT, Schraut WH, Lee KKW, Tweardy DJ, Billiar TR, Simmons RL, Bauer AJ. 2003. Intra-abdominal activation of a local inflammatory response within the human muscularis externa during laparotomy. *Ann Surg* 237:301-15.
10. Schwarz NT, Engel BM, Eskandari M, **Kalff JC**, Grandis JR, Bauer AJ. 2002. Lipopolysaccharide preconditioning and cross-tolerance: the induction of protective mechanisms for rat intestinal ileus. *Gastroenterology* 123:586-98.