

# Curriculum vitae 30<sup>th</sup> of September 2019

## 1) Personal information

**Web of Knowledge:** Researcher ID: L-7193-2016  
**ORCID ID :** <http://orcid.org/0000-0002-8719-5175>  
**Google Scholar:** <https://scholar.google.ch/citations?user=2j3dSZ0AAAAJ&hl=en>

**Name** Benjamin Misselwitz  
[benjamin.misselwitz@insel.ch](mailto:benjamin.misselwitz@insel.ch)

**Current Address** Dept. of Visceral Surgery and Medicine  
Inselspital Bern  
Freiburgstr. 16, 3010 Bern, Switzerland

## 2) Education

1998 - 2001 Medical school, Leipzig-University, Germany  
Final examination (Staatsexamen) 24.10.2001.  
Medical license (Approbation) 11.05.2009  
1992 - 1995 Medical school, Erlangen-University, Germany  
1979 - 1991 High school, Jena, Germany

## 3) Professional experience

**Current position:** **Staff physician (Oberarzt I), Gastroenterology**  
**Department of Visceral Surgery and Medicine, Inselspital Bern**  
*Specializing in the treatment of inflammatory bowel diseases*

April 2013 “Habilitation” University Hospital Zurich

January – December 2014 Deputy Head/ Head of Physiology and Manometry Laboratory  
(Funktionslabor), Division of Gastroenterology and Hepatology, USZ, CH

Oct. 2012-Oct. 2018 Staff physician (Oberarzt) in Gastroenterology  
Division of Gastroenterology and Hepatology, USZ, CH  
*Since 2015: Specializing in the treatment of inflammatory bowel diseases*

October 2012 **Board certification** “Gastroenterology”

April 2011 – September 2012 **Residency in Gastroenterology**, USZ, CH

April 2010 – March 2011 **Residency in Gastroenterology**, Triemli Hospital Zurich, CH

July 2009 **Board certification** “Internal Medicine”

July 2006 – March 2010 **Laboratory of Wolf-Dietrich Hardt**  
Institute of Microbiology, ETH Zurich, CH  
Post-doc, since 2008-2010 Senior Post-doc  
*Working on the invasion of Salmonella Typhimurium into epithelial cells. We performed a genome scale siRNA-screen and studied the docking process of S. Typhimurium in detail. We developed software for automated image analysis on high performance computers for detailed analysis of bacterial invasion.*

2005 (January – June) **Laboratory of Alexandra Trkola**  
Division of Infectious Diseases, USZ, CH  
*Working on the humoral immune response towards HIV*

2003 – June 2006 **Residency in Internal Medicine**, University Hospital Zürich (USZ), CH

2002 **Residency in Internal Medicine**, Kantonsspital Münsterlingen, CH

1995 - 1998 **Laboratory of Tom A. Rapoport**  
Department of Cell Biology, Harvard Medical School, Boston, USA

*Working on the function of BiP during posttranslational protein transport through the membrane of the endoplasmic reticulum*

**4) Current clinical tasks**

- Clinical care of gastroenterological patients with a focus on inflammatory bowel diseases
- Clinical care of hospitalized patients and patients with gastroenterological emergencies
- Investigations (e.g. gastroscopy, colonoscopy, abdominal ultrasound, liver biopsy)
- Supervision and teaching of residents in Gastroenterology and Internal medicine

**5) Funding**

- 2019 Grant Stiftung zur Förderung der Ernährungsforschung in der Schweiz (SFEFS)  
(joint application with W.D. Hardt)
- 2019 Grant IBD-NET (joint application with Leonil Katzidsira)
- 2017 Research Grant from MSD
- 2016 Hartmann-Müller Foundation
- 2015 Intern. Organization for the Study of Inflammatory Bowel Diseases (IOIBD)
- 2014 – 2018 Swiss National Science Foundation (SNF)
- 2014 Hartmann-Müller Foundation
- 2013 – 2015 Horten-Foundation
- 2013 – 2016 Swiss Cancer League (Krebsliga) Switzerland
- 2006 – 2009 UBS foundation (joint application with W.D. Hardt)
- 2006 – 2008 Bonizzi-Theler Foundation (joint application with W.D. Hardt)

**6) Supervision**

- **PhD students:** 2 students completed; supervision performed jointly with Prof. Rogler, USZ
- **MD students:** 2 students completed, 1 student ongoing
- **Master students:** current and past supervision of 21 medical master students

**7) Teaching**

Clinical courses in Internal medicine/ Gastroenterology for 3<sup>rd</sup> and 6<sup>th</sup> year medical students

**11) Awards and Scholarships**

1993 – 2001 Scholarship of the German National Academic Foundation (Studienstiftung des deutschen Volkes)

## List of Publications Benjamin Misselwitz

27<sup>th</sup> of September 2019

**Web Of Knowledge:** Researcher ID: L-7193-2016

**ORCID ID:** <http://orcid.org/0000-0002-8719-5175>

**Google Scholar:** <https://scholar.google.ch/citations?user=2j3dSZ0AAAAJ&hl=en>

Number citations: 2925 (Google Scholar)

h-index: 26 (Google Scholar)

### Original articles

1. T. Raselli, T. Hearn, A. Wyss, K. Atrott, A. Peter, I. Frey-Wagner, M.R. Spalinger, E. M. Maggio, A.W. Sailer, J. Schmitt, P. Schreiner, A. Moncsek, J. Mertens, M. Scharl, William J. Griffiths, M. Bueter, A. Geier, G. Rogler, Y. Wang, and B. Misselwitz. Elevated oxysterol levels in human and mouse livers reflect non-alcoholic steatohepatitis (2019). *Journal of Lipid Research*, 60:1270
2. R. Frei, N. Fournier, J. Zeitz, M. Scharl, B. Morell, T. Greuter, P. Schreiner, B. Misselwitz, E. Safroneeva, A.M. Schoepfer, S.R. Vavricka, G. Rogler and L. Biederman (2019) Early initiation of anti-TNF is associated with favourable long-term outcome in Crohn's disease: 10-year follow-up data from the Swiss IBD cohort study. *J. Crohns Colitis*, in press
3. T. Raselli, A. Wyss, M.N. Gonzalez Alvarado, B. Weder, C. Mamie, M.R. Spalinger, W. T. van Haaften, G. Dijkstra, A.W. Sailer, P.H. Imenez Silva, C.A. Wagner, V. Tosevski, Sebastian Leibl, M. Scharl, G. Rogler, M. Hausmann\* and B. Misselwitz\* (2019) The oxysterol synthesizing enzyme CH25H contributes to the development of intestinal fibrosis. *J. Crohns Colitis*, 13:1186  
\* shared last authors
4. A. Wyss, T. Raselli, N. Perkins, F. Ruiz, G. Schmelczer, G. Klinke, A. Moncsek, R. Roth, M.R. Spalinger, L. Hering, K. Atrott, S. Lang, I. Frey-Wagner, M Scharl, A.W. Sailer, O. Pabst, M. Hersberger, C. Pot, G. Rogler, B. Misselwitz (2019) The EBI2-oxysterol axis promotes the development of intestinal lymphoid structures and colitis. *Mucosal immunology*, 12:733
5. I.V. Tcymbarevich, J.J. Eloranta, J.B. Rossel, N. Obialo, M. Spalinger, J. Cosin-Roger, S. Lang, G.A. Kullak-Ublick, C.A. Wagner, M. Scharl, K. Seuwen, P.A. Ruiz, G. Rogler, C. de Vallière\*, B. Misselwitz\* (2019) The impact of the rs8005161 polymorphism on G protein-coupled receptor GPR65 (TDAG8) pH-associated activation in intestinal inflammation. *BMC Gastroenterology*, 19:2  
\* shared last authors
6. S. Bütikofer, S. Jordan, M. Sauter, M. Hollenstein, H. Heinrich, N. Freitas-Queiroz, T. Kuntzen, M. Oberacher, B. Maurer, W. Schwizer, M. Fox, O. Distler\* and B. Misselwitz\* (2019). Abnormal esophageal motility during a solid test meal in systemic sclerosis-detection even in very early disease and association with disease progression. *Neurogastroenterology and Motility*, 31:e13480  
\* shared last authors

7. T. Ran, C.Y. Cheng, B. Misselwitz, H. Brenner, J. Ubels, M. Schlander (2019) Systematic Review of Cost-Effectiveness of Colorectal Cancer Screening Strategies: An Update. *Clin. Gastroenterol. Hepatol.*, 17:1969
8. F. Humbel, J. Harrell Rieder, Y. Franc, P. Juillerat, M. Scharl, B. Misselwitz, P. Schreiner, S. Bègré, A.J. Macpherson, G. Rogler, R. von Känel, B. Yilmaz and L. Biedermann (2019) Association of Mucosa-Associated Microbial Alterations with Impairment in Psychological Functioning in IBD Patients in Remission. *Clin. Gastroenterol. Hepatol. in press*
9. P. Schreiner, B. Yilmaz, J.B. Rossel, Y. Franc, B. Misselwitz, M. Scharl, J. Zeitz, P. Frei, T. Greuter, S.R. Vavricka, V. Pittet, A. Siebenhüner, P. Juillerat, R. von Känel, A.J. Macpherson, G. Rogler and L. Biedermann (2019) Vegetarian or gluten-free diet in patients with IBD – associated with lower psychological well-being and a different gut microbiota but no beneficial effects on the course of the disease. *United European Gastroenterol. J.* 7:767
10. D. Egli-Spichtig, P.H. Imenez Silva, B. Glaudemans, N. Gehring, C. Bettoni, M. Zhang, E. Pastor Arroyo, D. Schönenberger, M. Rajski, D. Hoogewijis, F. Knauf, B. Misselwitz, I. Frey-Wagner, G. Rogler, D. Ackermann, B. Ponte, M. Pruijm, A. Leichtle, G.M. Fiedler, M. Bochud, V. Ballotta, S. Hofmann, F. Perwad, M. Föller, F. Lang, R.H. Wenger, I. Frew, C.A. Wagner (2019). Antibody mediated TNF neutralization decreases FGF23 levels in animal models of chronic kidney disease and non-renal inflammation. *Kidney international*, 96:890
11. L. Bon, S. Scharl, S.R. Vavricka, G. Rogler, N. Fournier, V. Pittet, M. Scharl, T. Greuter, P. Schreiner, P. Frei, B. Misselwitz, L. Biedermann and J. Zeitz (2019). Association of IBD specific treatment and prevalence of pain in the Swiss IBD cohort study. *PLoS One*, 14:e0215738
12. S. Scharl, C. Barthel, J.B. Rossel, L. Biedermann, B. Misselwitz, S.R. Vavricka, G. Rogler, M. Scharl and T. Greuter (2019). Malignancies in Inflammatory Bowel Disease: Frequency, Incidence and Risk Factors-Results from the Swiss IBD Cohort Study (2018), *American Journal of Gastroenterology*, 114:116
13. S.Y. Wotzka, M. Kreuzer, L. Maier, M. Zünd, M. Schlumberger, B. Nguyen, M. Fox, D. Pohl, H. Heinrich, G. Rogler, L. Biedermann, M. Scharl, S. Sunagawa\*, W.D. Hardt\*, B. Misselwitz\* (2018). Microbiota stability in healthy individuals after single-dose lactulose challenge - a randomized controlled study. *PLoS One*, 13:e0206214  
\* shared last authors
14. B.M. Lang, L. Biedermann, W. T. van Haften, C. de Vallière, M. Schuurmans, S. Bègré, J. Zeitz, M. Scharl, M. Turina, T. Greuter, P. Schreiner, H. Heinrich, T. Kuntzen, S. R. Vavricka, G. Rogler, N. Beerenwinkel\*, B. Misselwitz\* (2018).. Genetic polymorphisms associated with smoking behaviour predict the risk of surgery in Crohn's disease patients (2018). *Alimentary Pharmacology & Therapeutics*, 47:55  
\* shared last authors
15. S.R. Vavricka, H. Heinrich, S. Bütikofer, F. Breitenmoser, E. Burri, X. Schneider-Yin, J. Barman, L. Biedermann, M. Scharl, J. Zeitz, G. Rogler, B. Misselwitz\*, M. Sauter\* (2018). The Vampire Study: Significant elevation of faecal calprotectin in healthy volunteers after 300 ml blood ingestion mimicking upper gastrointestinal bleeding. *UEG-Journal*, 6:1007  
\* shared last authors

16. C. Kadelka, T. Liechti, H. Ebner, M. Schanz, P. Rusert, N. Friedrich, E. Stiegeler, D. Braun, M. Huber, A. Scherrer, J. Weber, T. Uhr, H. Kuster, B. Misselwitz, M. Cavassini, E. Bernasconi, M. Hoffmann, A. Calmy, M. Battegay, A. Rauch, S. Yerly, V. Aubert, T. Klimkait, J. Boeni, R. Kouyos, H. Günthard, A. Trkola (2018). Distinct, IgG1-driven antibody response landscapes demarcate individuals with broadly HIV-1 neutralizing activity. (2018). *JEM*, 215:1589
17. S.A. Käser, A. Rickenbacher, D. Cabalzar-Wondberg, M. Schneider, D. Dietrich, B. Misselwitz, and M. Turina (2018). The Growing Discrepancy Between Resident Training in Colonic Surgery and the Rising Number of General Surgery Graduates. *Int. J. Colorectal. Dis.* 34:423
18. S. Hutter, W.T. van Haaften, A. Hünerwadel, K. Baebler, T. Raselli, C. Mamie, B. Misselwitz, G. Rogler, B. Weder, G. Djikstra, C. Meier, C. de Vallière, A. Weber, C.A. Wagner, I. Frey, P.A. Ruiz, M. Hausmann (2018). Intestinal Activation of pH-Sensing Receptor OGR1 [GPR68] Contributes to Fibrogenesis. *Journal of Crohn's and Colitis*, 12:1348
19. I. Tcymbarevich, S.M. Richards, M. Spalinger, G. Russo, J. Kühn-Georgijevic, J. Cosin-Roger, K. Baebler, S. Lang, S. Bengs, K. Atrott, S. Gruber, I. Frey-Wagner, M. Scharl, B. Misselwitz, C.A. Wagner, K. Seuwen, G. Rogler, P.A. Ruiz, C. de Vallière (2018). Lack of the pH-sensing receptor TDAG8 (GPR65) in macrophages plays a detrimental role in murine models of inflammatory bowel disease. *Journal of Crohn's and Colitis*, 13:245
20. L. Parragi, N. Fournier, J. Zeitz, M. Scharl, T. Greuter, P. Schreiner, B. Misselwitz, E. Safroneeva, A.M. Schoepfer, S.R. Vavricka, G. Rogler, L. Biedermann (2018). Colectomy rates are low and decreasing in ulcerative colitis in Switzerland: 10-year-follow-up data from the Swiss IBD cohort study. *Journal of Crohn's and Colitis*, 12:811
21. T. Greuter, Y. Franc, M. Kaelin, A.M. Schoepfer, P. Schreiner, J. Zeitz, M. Scharl, B. Misselwitz, A. Straumann, R. von Känel, Stephan R. Vavricka, G. Rogler, and L. Biedermann (2018). Low serum zinc levels predict presence of depression symptoms, but not overall disease outcome regardless of ATG16L1-genotype in Crohn's disease patients. *Therapeutic Advances in Gastroenterology*, 11:1756283X18757715
22. S.R. Vavricka, T. Stelzer, J. Lattmann, M. Stotz, R. Lehmann, J. Zeitz, M. Scharl, B. Misselwitz, D. Pohl, M. Fried, R. Tutuian, A. Fasano, A. M. Schoepfer, G. Rogler, L. Biedermann, T. Greuter (2018) Celiac disease is misdiagnosed based on serology only in a substantial proportion of patients. *J. Clin. Gastroenterol.*, 52:25
23. M. Hollenstein, P. Thwaites, S. Bütikofer, H. Heinrich, M. Sauter, I. Ulmer, D. Ang, D. Pohl, D. Eberli, W. Schwizer, M. Fried, O. Distler, M. Fox\*, B. Misselwitz\* (2017). Pharyngeal swallowing and esophageal motility during a solid test meal assessed by High Resolution Manometry: a case-control study in healthy volunteers and patients with major motility disorders. *Lancet Gastroenterology*, 2:654  
\* shared last authors
24. D. Ang\*, B. Misselwitz\*, M. Hollenstein; K. Knowles, J. Wright, E. Tucker, R. Sweis, Mark Fox (2017). High resolution manometry with a solid test meal increases diagnostic sensitivity for clinically relevant, symptomatic oesophageal motility disorders. *Lancet Gastroenterology*, 2:644  
\* shared first authors

25. S. Fagagnini, J.B. Rossel, L. Biedermann, P. Frei, J. Zeitz, H. Heinrich, M. Spalinger, E. Battagay, L. Zimmerli, S. Vavricka, G. Rogler, M. Scharl\*, B. Misselwitz\* (2017). Risk factors for gallstones and kidney stones in a cohort of patients with inflammatory bowel diseases. *PLoS One*, 12:e0185193  
\* shared last authors
26. M. Sauter, S.R. Vavricka; G. Keilholz, H. Heinrich, T. Winder, H. Kranzbuehler; N. Lombriser, B. Misselwitz (2017). Surveillance of anal carcinoma after radio-chemotherapy: a retrospective analysis of 80 patients. *Strahlentherapie und Onkologie*, 193:639
27. S. Schüle, J. B. Rossel, D. Frey, L. Biedermann, M. Scharl, J. Zeitz, N. Freitas-Queiroz, T. Greuter, S. R. Vavricka, G. Rogler, B. Misselwitz (2017). Widely differing screening and treatment practice for osteoporosis in patients with inflammatory bowel diseases in the Swiss IBD cohort study. *Medicine*, 96:e6788
28. M. K. Prakash, B. Lang, H. Heinrich, P. Valli, P. Bauerfeind, A. Sonnenberg, N. Beerenwinkel and B. Misselwitz (2017). CMOST: an open-source framework for the microsimulation of colorectal cancer screening strategies. *BMC Medical Decision Making*, 17:80.
29. C. Lutz, B. Weder, A. Hünerwadel, S. Fagagnini, B. Lang, N. Beerenwinkel, J.B. Rossel, G. Rogler, B. Misselwitz, and M. Hausmann (2017). Myeloid differentiation primary response gene (MyD) 88 signalling is not essential for intestinal fibrosis development. *Scientific Reports*, 7:17678
30. Rogler G., Vavricka S., Schoepfer A., Spasojevic M., Seibold F., Borovicka J., Frei P., Zeitz J., Greuter T., Manser C., Scharl M., Misselwitz B., Straumann A., Michetti P., Biedermann L. (2017). Long-term Efficacy and Safety of Certolizumab Pegol in an Unselected Crohn's Disease Population: the FACTS III Survey. *Digestive Diseases*, 35:423
31. S.R. Vavricka, M. Gubler, C. Gantenbein, M. Spoerri, F. Froehlich, F. Seibold, M. Protic, P. Michetti, A. Straumann, N. Fournier, P. Juillerat, L. Biedermann, J. Zeitz, B. Misselwitz, M. Scharl, H. Heinrich, C. Manser, E. Safroneeva, R. Affendi R. Ali, G. Rogler; A.M. Schoepfer, T. Greuter (2017). Anti-TNF Treatment for Extraintestinal Manifestations of Inflammatory Bowel Disease in the Swiss IBD Cohort Study. *IBD*, 23:1174
32. J. Zeitz, N. Fournier, C. Labenz, L. Biedermann, P. Frei, B. Misselwitz, S. Scharl, S.R. Vavricka, M.C. Sulz, M. Fried, G. Rogler, M. Scharl (2017). Risk factors for the development of fistulae and stenosis in Crohn's disease patients in the Swiss IBD Cohort *Inflammatory Intestinal Diseases* 1:172
33. M. Bonani, R. Pereira, B. Misselwitz, T. Fehr, R. Wüthrich, D. Franzen (2017). Chronic norovirus infection as a risk factor for secondary lactose maldigestion in renal transplant recipients: a prospective parallel cohort pilot study. *Transplantation* 101:1455
34. D. Jasper, N. Freitas-Queiroz, M. Hollenstein, B. Misselwitz, P. Layer, T. Navarro-Rodriguez, M. Fox, J. Keller (2017). Prolonged measurement improves the assessment of the barrier function of the esophago-gastric junction by high-resolution manometry. *Neurogastroenterology and Motility*. 29:e12925.
35. D. Ang, M. Hollenstein, B. Misselwitz, K. Knowles, J. Wright, E. Tucker, R. Sweis, M. Fox (2017). Rapid drink challenge in high-resolution manometry: an adjunctive test for detection of esophageal motility disorders. *Neurogastroenterology and Motility*. 29:e12902.

36. T. Greuter, F. Bertoldo, R. Rechner, A. Straumann, L. Biedermann, J. Zeitz, B. Misselwitz, M. Scharl, G. Rogler, E. Safroneeva, R.A. Ali, C. Braegger, K. Heyland, P. Mueller, A. Nydegger, L.M. Petit, S. Schibli, Raoul I. Furlano, J. Spalinger, M. Schäppi, S. Zamora, F. Froehlich, D. Herzog, A. M. Schoepfer, S. R. Vavricka (2017). Extraintestinal Manifestations of Pediatric Inflammatory Bowel Disease: Prevalence, Presentation and anti-TNF Treatment *Journal of Pediatric Gastroenterology and Nutrition*, 65:200
37. S. Schuele, J.B. Rossel, D. Frey, L. Biedermann, M. Scharl, J. Zeitz, N. Freitas-Queiroz, V. Pittet, S.R Vavricka, G. Rogler, B. Misselwitz (2016). Prediction of low bone mineral density in patients with inflammatory bowel diseases *UEG Journal* 4:669
38. M. Sulz, A. Kröger, M. Prakash, C. Manser, H. Heinrich, B. Misselwitz (2016). Meta-analysis of the effect of bowel preparation on adenoma detection: early adenomas affected stronger than advanced adenomas *PLoS One* 11:e0154149
39. M. Sauter, G. Keilholz, H. Kranzbühler, N. Lombriser, M. Prakash, S. Vavricka, B. Misselwitz (2016). Presenting symptoms predict local staging of anal cancer: a retrospective analysis of 86 patients. *BMC Gastroenterology* 16:46
40. T. Greuter, S. Schmidlin, J. Lattmann, M. Stotz, R. Lehmann, J. Zeitz, M. Scharl, B. Misselwitz, D. Pohl, M. Fried, R. Tutuian, A. Fasano, A. M. Schoepfer, G. Rogler, L. Biedermann, S. R. Vavricka (2016). The perspective of celiac disease patients on emerging treatment options and non-celiac gluten disease sensitivity. *Dig. Dis. Sci* 49:268
41. H. Heinrich, A. Neuenschwander, S. Russmann, B. Misselwitz, C. Benden, M. M. Schuurmans (2016). Frequency of gastrointestinal dysmotility and complications detected by abdominal plain films after lung transplantation: a single center cohort study. *BMJ Open Respiratory Research*. e000162
42. D. Andritschke, S. Dilling, M. Emmenlauer, T. Welz, F. Schmich, B. Misselwitz, P. Rämö, K. Rottner, E. Kerkhoff, T. Wada, J.M. Penninger, N. Beerenwinkel, P. Horvath, C. Dehio, W.D. Hardt (2016) A genome-wide siRNA screen implicates Spire1/2 in SipA-driven Salmonella Typhimurium host cell invasion. *PLoS One*; 11:e0161965.
43. S. R. Vavricka, N. Vadasz, M. Stotz, R. Lehmann, D. Studerus, T. Greuter, P. Frei, J. Zeitz, M. Scharl, B. Misselwitz, D. Pohl, M. Fried, R. Tutuian, A. Fasano, A. M. Schoepfer, G. Rogler, L. Biedermann (2016). Celiac disease diagnosis is still significantly delayed – doctors but not patient’s delay responsive for the increased total delay in women. *Dig. Liver Dis*; 48:1148
44. C. de Vallière J. Cosin-Roger, S. Simmen, H. Melhem, J. Zeitz, M. Madanchi, I. Tcymbarevich, M. Fried, G. A. Kullak-Ublick, S. R. Vavricka, B. Misselwitz, K. Seuwen, C. A. Wagner, J. J. Eloranta, G. Rogler, P. A. Ruiz (2016) *Cellular and Molecular Gastroenterology and Hepatology*. 2:796
45. L. Biedermann, N. Fournier, B. Misselwitz, P. Frei, J. Zeitz, C. Manser, V. Pittet, P. Juillerat, R. von Käenel, M. Fried, S. Vavricka, G. Rogler (2015). High rates of smoking especially in female Crohn’s disease patients and low use of supportive measures to achieve smoking cessation – Data from the Swiss IBD cohort study *J. Crohns and Colitis* 9:819
46. M. Prakash, R. Fried, O. Götze, F. May, P. Frings-Meuthen, E. Mulder, J. Valentini, M. Fox, M. Fried, W. Schwizer, B. Misselwitz (2015). Microgravity simulated by the

- 6° head-down tilt bed rest test increases intestinal motility but fails to induce gastrointestinal symptoms of space motion sickness. *Dig Dis Sci* 60:3053
47. H. Heinrich, M. Sauter, M. Fox, D. Weishaupt, M. Halama, B. Misselwitz, S. Bütikofer, C. Reiner, M. Fried, W. Schwizer, H. Frühauf (2015). Assessment of obstructive defecation by High Resolution Anorectal Manometry compared to Magnetic Resonance Defecography. *Clin. Gastroenterol. Hepatol.* 13:1310
  48. M. Sauter, H. Heinrich, M. Fox, B. Misselwitz, M. Halama, W. Schwizer, M. Fried, H. Frühauf (2014). Toward more accurate measurements of anorectal motor and sensory function in routine clinical practice: validation of high-resolution anorectal manometry and Rapid Barostat Bag measurements of rectal function. *Neurogastroenterol Motil.* 26:685
  49. P. Frei, B. Misselwitz, M. K. Prakash, A. M. Schoepfer, B. M. Prinz Vavricka, B. Müllhaupt, M. Fried, K. Lehmann, R. W. Ammann, S. R. Vavricka (2014). Late biliary complications in human alveolar echinococcosis are associated with high mortality. *World J. Gastroenterol.* 20:5881
  50. S. Vavricka, G. Rogler, S. Maetzler, B. Misselwitz, E. Safroneeva, P. Frei, C. Manser, L. Biedermann, M. Fried, P. Higgins, K. Wojtal, A. Schoepfer (2014). High altitude journeys and flights are associated with an increased risk of flares in inflammatory bowel disease patients. *J. Crohns and Colitis.* 8:191
  51. J. Yang, Y Deng, H. Chu, Y. Cong, J. Zhao, D. Pohl, B. Misselwitz, M. Fried, N. Dai, M. Fox (2013). Prevalence, presentation and effects on intake of dairy products of lactose intolerance in healthy subjects and patients with irritable bowel syndrome. *Clin Gastroenterol Hepatol.* 11:262
  52. B. Misselwitz\*, N. Barrett\*, S. Kreibich, P. Vonaesch, D. Andritschke, S. Rout, K. Weidner, M. Sormaz, P. Songhet, P. Horvath, M. Chabria, V. Vogel, D. Spori, P. Jenny, W.D. Hardt (2012). Near surface swimming of Salmonella Typhimurium explains target-site selection and cooperative invasion. *PLoS Pathog.* 8:e1002810  
\* shared first authors
  53. J. Siebourg, G. Merdes, B. Misselwitz, W.D. Hardt, N. Beerenwinkel (2012). Stability of gene rankings from RNAi screens. *Bioinformatics.* 28:1612
  54. J.W. Deuel, H.U. Lutz, B. Misselwitz, J.S. Goede (2012). Asymptomatic elevation of the hyperchromic red blood cell subpopulation is associated with decreased red cell deformability. *Ann Hematol.* 91:1427
  55. K. Endt, L. Maier, R. Käppeli, M. Barthel, B. Misselwitz, M. Kremer, W.D. Hardt (2012). In a mouse model for *S. Typhimurium* diarrhea, peroral ciprofloxacin-therapy impairs the generation of a protective immune response, while parenteral ceftriaxone-therapy does not. *Antimicrob Agents Chemother.* 56:2295
  56. B. Misselwitz, E.B. Bachli, P. Kaiser, J. Fehr, J.S. Goede (2012). Diagnosis of hypersplenism with the epinephrine stimulation test, 23 years of experience at a tertiary care hospital. *Swiss Med. Wkly.* 141:w13324
  57. M.C. Truttmann, B. Misselwitz, W.D. Hardt, D.R. Critchley, C. Dehio (2011). Bartonella henselae engages inside-out and outside-in signaling via integrin b1 and talin1 during invasome-mediated bacterial uptake. *J. Cell Sci.* 124:3591
  58. B. Misselwitz, S. Dilling, P. Vonaesch, R. Sacher, B. Snijder, M.C. Schlumberger, S. Rout, M. Stark, C. von Mering, L. Pelkmans, W.D. Hardt (2011). RNAi screen of Salmonella invasion shows role of COPI in membrane targeting of cholesterol and



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## Software Projects

**Enhanced CellClassifier**, a free and open source software for classification of biological objects. <http://gitlab.com/misselwb/cellclassifier>

**Colon modeling open source tool (CMOST)**, a free and open software for modeling the natural history of colorectal carcinoma and colonoscopy screening. <https://gitlab.com/misselwb/CMOST>