

Curriculum Vitae – ao Univ.-Prof. Dr. med. Univ. Christoph Högenauer

1 – Person / Allgemeine Angaben

Name	Christoph Högenauer, aoUniv.-Prof. Dr. med. univ., *12.02.1971, male
Nationality	Austria
Address	Department of Internal Medicine, Division of Gastroenterology and Hepatology, Medical University of Graz, Auenbruggerplatz 15, 8036 Graz, Austria Phone: +43 (0) 316 385 81786, E-Mail: christoph.hoegenauer@medunigraz.at
Position	associate professor, attending physician for Gastroenterology and Hepatology

2 – Academic Education / Akademische Ausbildung mit Abschluss

1990 - 1997	School of Medicine (Rigorosensstudium Medizin O201), Karl-Franzens University Graz
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3 – Scientific Degrees / Wissenschaftliche Abschlüsse

2005	Habilitation (Internal Medicine), Medical University of Graz
1997	Promotion (Dr. med. univ.), Karl-Franzens University Graz

4 – Academic Appointments / Beruflicher Werdegang ab Studienabschluss

since 2012	Head of the “Theodor Escherich research unit for microbiome research” at the Medical University of Graz
2010	Board certification for Intensive Care Medicine
2007	Board certification for Gastroenterology and Hepatology
2005	Board certification for Internal Medicine
since 2005	Associate Professor and Attending Physician, Division of Gastroenterology and Hepatology, Department of Internal Medicine, Medical University of Graz, Austria
2000 - 2005	Fellow, Division of Gastroenterology, Department of Internal Medicine, Karl-Franzens University Graz, Austria. Chairman: Guenther Krejs, M.D.
1998 - 2000	Clinical Research Fellow for Gastroenterology, Baylor University Medical Center, Department of GI-Research, Dallas, TX, USA. Chairman: J.S. Fordtran, M.D.
1997 - 1998	Resident, Institute of Pathology and Department of Internal Medicine, University Graz, and Department of Psychiatry, Wagner Jauregg Hospital Linz, Austria

5 – Additional information / Sonstiges

since 2015	Head of the inflammatory bowel disease working group of the Austrian Society for Gastroenterology and Hepatology (ÖGGH)
since 2013	National representative of Austria for the European Crohn’s and Colitis Organisation (ECCO)

2007-2011 Head of the infectious diseases working group of the Austrian Society for Gastroenterology and Hepatology (ÖGGH)

6 – Honors ▪ Awards / Preise und Auszeichnungen

2007 Paracelsus-award, Austrian Society for Internal Medicine

7 – Externally funded projects / geförderte Drittmittelprojekte

Principal Investigator:

- 2015 - ongoing Industrial sponsored academic research supported by industrial partner: Seres Therapeutics Inc., Cambridge USA
Fecal Microbiota Transplantation for Ulcerative Colitis
total amount of funding: € 233.300
- 2011 – 2014 Stand-alone project, project number: 14321, anniversary funds of the Österreichische Nationalbank: Typing of *Klebsiella oxytoca* Strains in Relation to Toxin-Production and their Association with Colitis
total amount of funding: € 109.600
- 2007 – 2009 Stand-alone project: Hygiene Fonds Medical University of Graz : Role of *Klebsiella oxytoca* in the pathogenesis of antibiotic-associated colitis and other types of diarrhea and colitis
total amount of funding: € 82.000

Co-Investigator:

- 2015- current FWF- Programme Clinical Research: Colonic bacterial dysbiosis as a cause of infant proctocolitis. A prospective controlled study (P.I.: Karl Martin Hoffman, M.D. Department of Paediatrics, Medical University of Graz: € 244.000)
- 2016- current FWF- Programme Clinical Research: GPR55 and its lysophospholipid ligand: a potential proinflammatory and oncogenic axis in the colon (P.I.: Rudolf Schicho, Ph.D. Institute of Experimental and Clinical Pharmacology, Medical University of Graz: € 218.200)

8 – Publications / Publikationen

- Krause R, Halwachs B, Thallinger GG, Klymiuk I, Gorkiewicz G, Hoenigl M, Prattes J, Valentin T, Heidrich K, Buzina W, Salzer HJ, Rabensteiner J, Prüller F, Raggam RB, Meinitzer A, Moissl-Eichinger C, **Högenauer C**, Quehenberger F, Kashofer K, Zollner-Schwetz I. Characterisation of *Candida* within the Mycobiome/Microbiome of the Lower Respiratory Tract of ICU Patients. PLoS One. 2016 May 20;11(5):e0155033. doi: 10.1371/journal.pone.0155033
- Zollner-Schwetz I, Leitner E, Plieschnegger W, Semlitsch G, Stepan V, Reiter L, Reicht G, Mörth E, Pavek J, Parsché P, Betterklierer C, Atzmüller D, Krause R, **Högenauer C**. Primary resistance of *Helicobacter pylori* is still low in Southern Austria. Int J Med Microbiol. 2016 Jun;306(4):206-11. doi: 10.1016/j.ijmm.2016.04.003
- Prattes J, Raggam RB, Vanstraelen K; Rabensteiner J, **Högenauer C**, Krause R, Prüller, F, Wölfler A, Spriet I, Hoenigl M. Chemotherapy-Induced Intestinal Mucosal Barrier Damage: a Cause of Falsely Elevated Serum 1,3-Beta-d-Glucan Levels? J Clin Microbiol. 2016; 54(3):798-801
- Novacek G, Dejaco C, Gröchenig HP, **Högenauer C**, Knoflach P, Miehsler W, Moschen A, Petritsch W, Vogelsang H, Tilg H. Vedolizumab in der Behandlung der Colitis ulcerosa und des Morbus Crohn - ein Konsensus der Arbeitsgruppe "Chronisch Entzündliche Darmerkrankungen" der Österreichischen Gesellschaft für Gastroenterologie und Hepatologie. Zeitschrift für Gastroenterologie 2016 May;54(5):456-67. doi: 10.1055/s-0042-103694.

- Radnai B, Sturm EM, Stančić A, Jandl K, Labocha S, Ferreirós N, Grill M, Hasenoehrl C, Gorkiewicz G, Marsche G, Heinemann Á, **Högenauer C**, Schicho R. Eosinophils contribute to intestinal inflammation via chemoattractant receptor-homologous molecule expressed on Th2 cells, CRTH2, in experimental Crohn's disease. *Journal of Crohns and Colitis* 2016 Feb 29. pii: jjw061. [Epub ahead of print]
- Stadlbauer V, Leber B, Lemesch S, Trajanoski S, Bashir M, Horvath A, Tawdrous M, Stojakovic T, Fauler G, Fickert P, **Högenauer C**, Klymiuk I, Stiegler P, Lamprecht M, Pieber TR, Tripolt NJ, Sourij H. *Lactobacillus casei* Shirota Supplementation Does Not Restore Gut Microbiota Composition and Gut Barrier in Metabolic Syndrome: A Randomized Pilot Study. *PLoS One*. 2015 Oct 28;10(10):e0141399. doi: 10.1371/journal.pone.0141399
- Bashir M, Prietl B, Tauschmann M, Mautner SI, Kump PK, Treiber G, Wurm P, Gorkiewicz G, **Högenauer C**, Pieber TR. Effects of high doses of vitamin D3 on mucosa-associated gut microbiome vary between regions of the human gastrointestinal tract. *European Journal of Nutrition* 2016 Jun;55(4):1479-89. doi: 10.1007/s00394-015-0966-2.
- Zollner-Schwetz I, Herzog KA, Feierl G, Leitner E, Schneditz G, Sprenger H, Prattes J, Petritsch W, Wenzl H, Kump P, Gorkiewicz G, Zechner E, **Högenauer C**. The Toxin-Producing Pathobiont *Klebsiella oxytoca* Is Not Associated with Flares of Inflammatory Bowel Diseases. *Digestive Diseases and Science* 2015;60:3393-8 doi: 10.1007/s10620-015-3765-y.
- Leitner E, Zarfel G, Luxner J, Herzog K, Pekard-Amenitsch S, Hoenigl M, Valentin T, Feierl G, Grisold AJ, **Högenauer C**, Sill H, Krause R, Zollner-Schwetz I. Contaminated handwashing sinks as the source of a clonal outbreak of KPC-2-producing *Klebsiella oxytoca* on a hematology ward. *Antimicrobial Agents and Chemotherapy* 2015 Jan;59(1):714-6. doi: 10.1128/AAC.04306-14.
- Wenzl HH, Primas C, Novacek G, Teml A, Offerlbauer-Ernst A, **Högenauer C**, Vogelsang H, Petritsch W, Reinisch W. Withdrawal of Long-Term Maintenance Treatment with Azathioprine Tends to Increase Relapse Risk in Patients with Crohn's Disease. *Digestive Diseases and Science* 2015 May;60(5):1414-23. doi: 10.1007/s10620-014-3419-5.
- Durchschein F, Schreiber F, **Högenauer C**. Video capsule endoscopy in familial adenomatous polyposis: capsule entrapment in an anal stenosis. *Endoscopy* 2014;46 Suppl 1:E529-30. doi: 10.1055/s-0034-1377640
- Kump P, Krause R, Steininger C, Gröchenig HP, Moschen A, Madl C, Novacek G, Allerberger F, **Högenauer C**. Empfehlungen zur Anwendung der fäkalen Mikrobiotatransplantation „Stuhltransplantation“: Konsensus der Österreichischen Gesellschaft für Gastroenterologie und Hepatologie (ÖGGH) in Zusammenarbeit mit der Österreichischen Gesellschaft für Infektiologie und Tropenmedizin (OEGIT). *Zeitschrift für Gastroenterologie* 2014;52:1485-92. doi: 10.1055/s-0034-1385562
- Kump PK, Krause R, Allerberger F, **Högenauer C**. Fecal microbiota transplantation - the Austrian approach. *Clinical Microbiology and Infection* 2014;20: 1106-11. doi: 10.1111/1469-0691.12801.
- Schneditz G, Rentner J, Roier S, Pletz J, Herzog KA, Bückner R, Troeger H, Schild S, Weber H, Breinbauer R, Gorkiewicz G, **Högenauer C**, Zechner EL. Enterotoxicity of a nonribosomal peptide causes antibiotic-associated colitis. *Proceedings of the National Academy of Science of the United States of America* 2014;111:13181-6. doi: 10.1073/pnas.1403274111.
- Högenauer C**, Kump PK, Krause R. Tempered Enthusiasm for Fecal Transplantation? *Clinical Infectious Diseases* 2014;59:1348-9 doi: 10.1093/cid/ciu567.
- Jahnel J, Fickert P, Hauer AC, **Högenauer C**, Avian A, Trauner M. Inflammatory bowel disease alters intestinal bile acid transporter expression. *Drug Metabolism & Disposition* 2014;42:1423-31. doi: 10.1124/dmd.114.058065.

- Sturm EM, Radnai B, Jandl K, Stančić A, Parzmair GP, **Högenauer C**, Kump P, Wenzl H, Petritsch W, Pieber TR, Schuligoi R, Marsche G, Ferreirós N, Heinemann A, Schicho R. Opposing Roles of Prostaglandin D2 Receptors in Ulcerative Colitis. *Journal of Immunology* 2014;193:827-39. doi: 10.4049/jimmunol.1303484.
- Klymiuk I, **Högenauer C**, Halwachs B, Thallinger GG, Fricke WF, Steininger C. A physicians' wish list for the clinical application of intestinal metagenomics. *PLoS Medicine* 2014;11:e1001627. doi: 10.1371/journal.pmed.1001627.
- Herzog KA, Schneditz G, Leitner E, Feierl G, Hoffmann KM, Zollner-Schwetz I, Krause R, Gorkiewicz G, Zechner EL, **Högenauer C**. Genotypes of *Klebsiella oxytoca* isolates in nosocomial pneumonia are distinct from antibiotic-associated hemorrhagic colitis isolates. *Journal of Clinical Microbiology* 2014; 52:1607-16. doi: 10.1128/JCM.03373-13.
- Stallinger S, Eller N, **Högenauer C**. Non-interventional Study Evaluating Efficacy and Tolerability of Rifaximin for Treatment of Uncomplicated Diverticular Disease. *Wiener Medizinische Wochenschrift* 2014; 126:9-14. doi: 10.1007/s00508-013-0447-7.
- Heitzer E, Lax S, Lafer I, Müller SM, Pristauz G, Ulz P, Jahn S, **Högenauer C**, Petru E, Speicher MR, Geigl JB. Multiplex genetic cancer testing identifies pathogenic mutations in TP53 and CDH1 in a patient with bilateral breast and endometrial adenocarcinoma. *BMC Medical Genetics* 2013;14:129. doi: 10.1186/1471-2350-14-129. doi: 10.1186/1471-2350-14-129.
- Gorkiewicz G, Trajanoski S, **Högenauer C**. Missing Detection of *Bradyrhizobium Enterica* in a Patient with Crohn's Colitis Syndrome. *New England Journal of Medicine*, 2013; 369:1866-7. doi: 10.1056/NEJMc1311318#SA1.
- Tauschmann M, Prietl B, Treiber G, Gorkiewicz G, Kump P, **Högenauer C**, Pieber TR. Distribution of T cell-subtypes, including regulatory T cells, in the upper and lower gastrointestinal tract in healthy young subjects. *PLoS One* 2013;8(11):e80362. doi: 10.1371/journal.pone.0080362.
- Kump PK, Gröchenig HP, Lackner S, Trajanoski S, Reicht G, Hoffmann KM, Deutschmann A, Wenzl HH, Petritsch W, Krejs GJ, Gorkiewicz G, **Högenauer C**. Alteration of Intestinal Dysbiosis by Fecal Microbiota Transplantation does not Induce Remission in Patients with Chronic Active Ulcerative Colitis. *Inflammatory Bowel Diseases* 2013;10:2155-2165. doi: 10.1097/MIB.0b013e31829ea325.
- Setaffy L, **Högenauer C**, Lemmerer M, Langner C. Large serrated polyp with KRAS mutation in inflammatory bowel disease: a "nondysplastic dysplasia-associated lesion or mass (DALM)"? *Endoscopy* 2013 Aug;45 Suppl 2:E235-6. doi: 10.1055/s-0033-1344321.
- Bareck E, Ba-Ssalamah A, Brodowicz T, Eisterer W, Häfner M, **Högenauer C**, Kastner U, Kühr T, Längle F, Liegl-Atzwanger B, Schoppmann SF, Widmann G, Wrba F, Zacherl J, Ploner F. Gastrointestinal stromal tumors: diagnosis, therapy and follow-up care in Austria. *Wiener Medizinische Wochenschrift* 2013;163:137-52. doi: 10.1007/s10354-013-0187-3.
- Oberauer L, Zachow C, Lackner S, **Högenauer C**, Smolle KH, Berg G. The ignored diversity: complex bacterial communities in intensive care units revealed by 16S pyrosequencing. *Nature Scientific Reports* 2013;3:1413. doi: 10.1038/srep01413.
- Gorkiewicz G, Thallinger GG, Trajanoski S, Lackner S, Stocker G, Hinterleitner T, Gully C, **Högenauer C**. Alterations in the colonic microbiota in response to osmotic diarrhea. *PLoS One* 2013;8:e55817 doi: 10.1371/journal.pone.0055817.
- Kump PK, **Högenauer C**, Wenzl HH, Petritsch W. A case of opportunistic skin infection with *Mycobacterium marinum* during adalimumab treatment in a patient with Crohn's disease. *Journal of Crohns and Colitis* 2013;7:e15-8. doi: 10.1016/j.crohns.2012.04.015.
- Petritsch, W; Fuchs, S; Berghold, A; Bachmaier, G; Högenauer, C; Hauer, AC; Weiglhofer, U; Wenzl, HH. Incidence of inflammatory bowel disease in the province of Styria, Austria,

- from 1997 to 2007: A population-based study. *Journal of Crohns and Colitis* 2013; 7(1):58-69. doi: 10.1016/j.crohns.2012.03.012.
- Hoffmann KM, Grillitsch M, Deutschmann A, **Högenauer C**, Stojakovic T, Hauer AC. Serum macromolecular creatine kinase type 1 as a diagnostic clue in inflammatory bowel disease? *European Journal of Pediatrics* 2013;172:699-701. doi: 10.1007/s00431-013-1935-5.
- Wolf EM, **Högenauer C**, Asslaber M, Langner C. Inflammatory esophageal polyp with bizarre stromal cells : Possible diagnostic pitfall. *Pathologie* 2013;34:159-61. doi: 10.1007/s00292-012-1715-4.
- Eser A, Thalhammer F, Burghuber F, **Högenauer C**, Stockenhuber F, Wenisch C, Widhalm K, Reinisch W. Probiotics for the prevention of antibiotic-induced diarrhea. *Zeitschrift für Gastroenterologie* 2012;50:1089-95. doi: 10.1055/s-0032-1312950.
- Schwetz V, Uhrig S, Spuller E, Deutschmann A, **Högenauer C**. Manifestations of juvenile polyposis syndrome in SMAD4 mutation carriers of a kindred. *European Journal of Gastroenterology and Hepatology* 2012;24:988-94. doi: 10.1097/MEG.0b013e328354f43e.
- Krones E, **Högenauer C**. Diarrhea in the Immunocompromised Patient. *Gastroenterology Clinics of North America* 2012; 41:677-701. doi: 10.1016/j.gtc.2012.06.009.
- Eherer AJ, Netolitzky F, **Högenauer C**, Puschnig G, Hinterleitner TA, Scheidl S, Kraxner W, Krejs GJ, Hoffmann KM. Positive Effect of Abdominal Breathing Exercise on Gastroesophageal Reflux Disease: A Randomized, Controlled Study. *American Journal of Gastroenterology* 2012;107:372-8. doi: 10.1038/ajg.2011.420.
- Amrein K, **Högenauer C**, Spreizer C, Spuller E, Langner C. Pneumatosis coli--an underrecognized lesion mimicking neoplastic disease. *Wiener Klinische Wochenschrift* 2011;123:515-8. doi: 10.1007/s00508-011-0007-y.
- Amrein K, Posch U, Langner C, Gorkiewicz G, **Högenauer C**. Transfusion-associated graft-versus-host disease presenting as severe high-volume diarrhoea in a patient with Goodpasture's syndrome. *Intensive Care Medicine* 2010;36:1271-2. doi: 10.1007/s00134-010-1881-x.
- Joainig MM, Gorkiewicz G, Leitner E, Weberhofer P, Zollner-Schwetz I, Lippe I, Feierl G, Krause R, Hinterleitner T, Zechner EL and **Högenauer C**. Cytotoxic effects of *Klebsiella oxytoca* strains isolated from patients with antibiotic-associated hemorrhagic colitis or other diseases caused by infections and from healthy subjects. *Journal of Clinical Microbiology* 2010;48:817-24. doi: 10.1128/JCM.01741-09.
- Hoffman KM, Deutschmann A, Weitzer C, Joainig M, Zechner E, **Högenauer C**, Hauer AC. Antibiotic-associated colitis caused by cytotoxin-producing *Klebsiella oxytoca* in an adolescent patient. *Pediatrics* 2010;125:e960-3. doi: 10.1542/peds.2009-1751.
- Jahnel J, Fickert P, Langner C, **Högenauer C**, Silbert D, Gumhold J, Fuchsbichler A, Trauner M. Impact of experimental colitis on hepatobiliary transporter expression and bile duct injury in mice. *Liver International* 2009; 29:1316-25. doi: 10.1111/j.1478-3231.2009.02044.x.
- Zollner-Schwetz I, **Högenauer C**, Joainig M, Weberhofer P, Gorkiewicz G, Valentin T, Hinterleitner TA, Krause R. Role of *Klebsiella oxytoca* in antibiotic-associated diarrhea. *Clinical Infectious Diseases* 2008; 47:e74-8. doi: 10.1086/592074.
- Högenauer C**, Eherer A, Pfeifer J, Langner C. Chronic longitudinal NSAID-related ulcer of the colon ("colon single-stripe sign") in Munchausen syndrome. *Endoscopy* 2008;40 Suppl 2:E233. doi: 10.1055/s-2007-995800.

- Högenauer C** and Hinterleitner T. *Klebsiella oxytoca* as a cause of antibiotic-associated colitis. Scheld WM, Hammer SC, and Hughes JM, eds. *Emerging Infections* 8, ASM press 2008, Washington, DC. 2008: pp293-311
- Rahner N, Höfler G, **Högenauer C**, Lackner C, Steinke V, Sengteller M, Friedl W, Aretz S, Propping P, Mangold E, Walldorf C. Compound heterozygosity for two MSH6 mutations in a patient with early onset colorectal cancer, vitiligo and systemic lupus erythematosus. *American Journal of Medical Genetics* 2008;146:1314-9. doi: 10.1002/ajmg.a.32210.
- Gurakuqi GC, Stadlbauer V, Portugaller HR, **Högenauer C**, Trauner M, Stuaber RE. Fatal hemobilia resulting from an iatrogenic arteriohepatic fistula as a rare complication of transjugular liver biopsy. *European Journal of Gastroenterology and Hepatology* 2008; 20:83-6.
- Winkler, A, Hinterleitner TA, **Högenauer C**, Hauser H, Langner C. Juvenile polyposis of the stomach causing recurrent upper gastrointestinal bleeding. *European Journal of Gastroenterology and Hepatology* 2007, 19:87-90.
- Obermayer-Pietsch BM, Gugatschka M, Reitter S, Plank W, Strele A, Walter D, Bonelli C, Goessler W, Dobnig H, **Högenauer C**, Renner W, Fahrleitner-Pammer A. Adult-type hypolactasia and calcium availability: decreased calcium intake or impaired calcium absorption? *Osteoporosis International* 2007, 18:445-51
- Högenauer C**, Langner C, Beubler E, Lippe ITH, Schicho R, Gorkiewicz G, Krause R, Gerstgrasser N, Krejs GJ, Hinterleitner TA. *Klebsiella oxytoca* as a causative organism of antibiotic-associated hemorrhagic colitis. *New England Journal of Medicine*, 2006, 355: 2418-26.
- Hoier S, Aberle SW, Langner C, Schnedl W, **Högenauer C**, Reisinger EC, Krejs GJ, Krause R. Puumala virus RNA in patient with multiorgan failure. *Emerging Infectious Diseases* 2006; 12: 356-357
- Högenauer C**, Hammer HF, Mellitzer K, Renner W, Krejs GJ, Toplak H. Evaluation of a new DNA test compared to lactose hydrogen breath test for the diagnosis of lactase non-persistence. *European Journal of Gastroenterology and Hepatology* 2005, 17:371-376.
- Fritz E, Hammer HF, Lipp RW, **Högenauer C**, Stauber R, Hammer J. Effect of lactulose and polyethylene glycol on colonic transit. *Alimentary Pharmacology and Therapeutics* 2005; 21:259-268.
- Wenzl HH, **Högenauer C**, Fickert P, Petritsch W. Thioguanine-induced symptomatic thrombocytopenia. *American Journal of Gastroenterology* 2004; 99: 1195.
- Coates SW, **Högenauer C**, Santa Ana CA, Rosenblatt RL, Emmett M, Fordtran JS. Inhibition of neutral sodium absorption by a prostaglandin analogue in patients with cystic fibrosis. *Gastroenterology* 2004; 127: 65-72.
- Högenauer C**, Wenzl HH, Hinterleitner TA, Petritsch W. Effect of oral tacrolimus (FK 506) on steroid-refractory moderate/severe ulcerative colitis. *Alimentary Pharmacology and Therapeutics* 2003; 18: 415-423.
- Russo MA, **Högenauer C**, Coates SW Jr, Santa Ana CA, Porter JL, Rosenblatt RL, Emmett M, Fordtran JS. Abnormal passive chloride absorption in cystic fibrosis jejunum functionally opposes the classic chloride secretory defect. *Journal of Clinical Investigation* 2003; 112: 118-125.
- Guirl MJ, **Högenauer C**, Santa Ana CA, Porter JL, Little KH, Stone MJ, Fordtran JS. Rapid intestinal transit as a primary cause of severe chronic diarrhea in patients with amyloidosis. *American Journal of Gastroenterology* 2003; 10: 2219-2225.
- Högenauer C**, Langner C, Lipp RW, Hofler G, Krejs GJ, Hinterleitner TA. Complete remission of a metastatic gastrointestinal stromal tumour with the tyrosine kinase inhibitor

imatinib (STI 571): effect of low dosage in an advanced tumour with exon 11 mutation. *European Journal of Gastroenterology and Hepatology* 2003; 15: 323-327.

Högenauer C, Aichbichler BW, Santa Ana CA, Porter JL, Fordtran JS. Effect of octreotide on fluid absorption and secretion by the normal human jejunum and ileum in vivo. *Alimentary Pharmacology and Therapeutics* 2002; 16: 769-777.

Högenauer C, Meyer RL, Netto GJ, Bell D, Little KH, Ferries L, Santa Ana CA, Porter JL, Fordtran JS. Deficiency of cholecystokinin causing malabsorption in a patient with autoimmune polyglandular syndrome type 1. *New England Journal of Medicine* 2001; 344: 270-274.

Högenauer C, Santa Ana CA, Porter JL, Fordtran JS. Discrepancies between effects of recombinant human growth hormone on absorption and secretion of water and electrolytes on the human jejunum compared to results reported on rat jejunum. *Digestive Diseases and Sciences* 2000; 45: 457-461.

Högenauer C, Santa Ana CA, Porter JL, Millard M, Gelfand A, Rosenblatt RL, Prestidge CB, Fordtran JS. Active intestinal chloride secretion in human carriers of cystic fibrosis mutations: an evaluation of the hypothesis that heterozygotes have subnormal active intestinal chloride secretion. *American Journal of Human Genetics* 2000; 67: 1422-1427.

Högenauer C, Hammer HF, Krejs GJ, Reisinger EC. Mechanisms and management of antibiotic-associated diarrhea. *Clinical Infectious Diseases* 1998; 27: 702-710.

9 – Selected oral presentations (invited only) / ausgewählte Vorträge (nur Einladungen)

“Any future for fecal transplant as treatment strategy for IBD?”. Falk Symposium 201; Gut-Liver Interactions: From IBD to NASH, March 11 – 12, 2016, Innsbruck, AUSTRIA

“Mikrobiom, mukosales Immunsystem und Stuhltransplantation bei CED”. IBD Dach - in Diskussion; 15.-16. January 2016; Berlin, GERMANY. 2016.

“The true test – distinguishing CDI from an IBD flare”. United European Gastroenterology Week (UEGW); October 15-19, 2015; Barcelona, SPAIN.

“Why do we need to down-manipulate gut microbiota in diverticular disease?”. EAGEN Postgraduate course - advance on gut microbiota and fecal microbiota transplantation; September 10-11, 2014; Rome, ITALY..

“Fecal Transplantation - Procedure and Technical Issues”. EAGEN Postgraduate course - advance on gut microbiota and fecal microbiota transplantation; September 10-11, 2014; Rome, ITALY.

“Fecal transplantation in IBD”. 4th Postgraduate Course in IBD, Swiss IBD Net; November 20-22, 2014; Ermatingen, SWITZERLAND.

„Veränderungen der Darmmikroflora beim Reizdarmsyndrom“. 69. Jahrestagung der Deutschen Gesellschaft für Gastroenterologie, Verdauungs- und Stoffwechselkrankheiten; September 17-20, 2014; Leipzig, GERMANY

“*Klebsiella oxytoca* as a Cause of Antibiotic-Associated Colitis”. Infectious Diseases Society of America (IDSA) annual meeting, October 4-7, 2007 an Diego, USA