

JULIAN SCHULZE ZUR WIESCH

I. Medizinische Klinik
Zentrum für Innere Medizin
Universitätsklinikum Eppendorf
Martinistr. 52
Hamburg, Germany D-20246
phone:+49-152-2816113 (work)
j.schulze-zur-wiesch@uke.uni-hamburg.de



home:
Osdorfer Landstr. 275
D-22589 Hamburg
phone+49-40- 805554
email: julianszw@gmail.com

CLINICAL APPOINTMENTS

- 2010-present **University Medical Center Hamburg-Eppendorf**
Outpatient Clinic Viral-Hepatitis
Specialist/Co-Director
- 2010-present **University Medical Center Hamburg-Eppendorf**
Interdisciplinary Endoscopy (Prof. T. Rösch)
Senior Clinical Fellow
- 2001-present **First Department of Internal Medicine Gastroenterology**
Infectious Diseases and Tropical Medicine (Prof. A. Lohse)
Clinical and Research Fellow
- 2009-present **Heinrich Pette Institute**
Leibniz-Institute for Experimental Virology (Prof. J. Hauber)
Guest Scientist

POSTDOCTORAL TRAINING

- 2003-2006 **Harvard University, Massachusetts General Hospital**
Partners AIDS Institute
Postdoctoral Research Fellow (Prof. Bruce Walker)

FACULTY ACADEMIC APPOINTMENTS

- 2009-present **University of Hamburg**
Instructor/Senior Clinical and Research Fellow

EDUCATION

- 1994-2000 **M.D., University of Hamburg, School of Medicine**
- 2000 **Clinical Internship, Liver Unit, University of Edinburgh**
- 1997-2000 **PhD (Dr. med.), University of Hamburg, School of Medicine**
Department of Microbiology
“The non-structural protein 3 of HCV inhibits protein kinase C”
Magna cum laude

QUALIFICATION

- 2009 German Internal Medicine, board certified
- 2004 USA ECFMG Certification, USLME Step 3

EDITORIAL ACTIVITIES

Reviewer: *Journal of Hepatology, Clinical Infectious Diseases, Journal of Infectious Diseases, Journal of Virology, Journal of Medical Virology, Antiviral Research, Plos one, Travel Medicine and Infectious Diseases, Medical Microbiology and Immunology*

FUNDED PROJECTS, HONORS & AWARDS

- 1998-2001 Fritz-ter-Meer Study Foundation Stipend, Bayer Leverkusen
- 2002 Novartis Graduate Stipend (6.000 €)
- 2003 NATO Post-Doc Stipend, German Academic Exchange Service (DAAD)
- 2004 Travel Grant, 10th International meeting on Hepatitis C virus, Kyoto, Japan
- 2005 Travel Grant, 11th International meeting on Hepatitis C virus, Heidelberg
- 2007 Travel Bursary EASL Conference 2007, Barcelona
- 2007 Free Research Year (Research Promotion Fund FFM), University Medical Center Hamburg-Eppendorf
- 2007 MSD Research Scholarship in HIV, (10.000 €)
- 2007-2008 Werner Otto Stipend HIV-HCV Co-infection (36.000 €)
- 2008 Young Investigator Travel Award, CROI Conference 2008 Boston
- 2009 FFM Young Investigators Promotion, University Medical Center (50.000 €)
- 2009 German Research Agency (DFG) single Application Sch2482-1/1, *Characterization of Hepatitis C Virus specific CD4+ T cell responses. (ca. 230.000 €)*
- 2010-present Project leader within DFG cooperative grant SFB 841, *Dys-regulation of the HCV CD4+ T cell response (400.000 €)*
- 2011- Werner Otto Foundation: “ γ/δ cells in HIV” (42.000 €)
- 2012-2013 DZIF Clinical Leave Stipend, *Analysis of correlates of viral control and immune T cell exhaustion in a transgenic humanized murine HIV infection model* (salary for 18months +22.500€)
- 2013-2015 *Assessment of the severity of metabolic-related liver injuries in a European Cohort of aging HIV monoinfected patients* (ECHAM) Van Lunzen/Schulze zur Wiesch (ca. 350.000 €)
- 2013-2015 *Innate and adaptive immune responses in elite controllers and acute phase HIV infection* (DZIF/BMBF) van Lunzen/Schulze zur Wiesch (122.000€)
- 2012 Brauns Melsungen foundation (10.000 €) „*Comparative characterization of the Dysfunction of CD4+ T cell responses in different viral infections (HIV, CMV, EBV, HCV and HBV) via MHC class II tetramer technology.*“

TEACHING EXPERIENCE

Teaching of Students in Courses

- 2002-present University of Hamburg, School of Medicine
Bedside teaching: internal medicine, problem-oriented medicine
Courses: *Gastroenterology, Endoscopy, Infectious Diseases*
- 2010-present Technical University of Hamburg: *Medicine for Engineers*

Formal Supervision of Student Research

2006-present 1 master student thesis (Biology)
4 MD/PhD students theses
1 PhD student (Biology)
3 international summer students
2 POST-docs

PUBLICATIONS/MANUSCRIPTS

ORIGINAL RESEARCH PAPERS:

FIRST /SENIOR AUTHORS

1. Hartjen P, Höchst B, Heim D, von der Kammer H, Lucke J, Reinholz M, Baier A, Smeets R, Wege H, Borowski P, **Schulze Zur Wiesch J**. The NTPase/helicase domain of hepatitis C virus nonstructural protein 3 inhibits protein kinase C independently of its NTPase activity. **Cell Mol Biol Lett**. 2013 Sep;18(3):447-58.

2. Toth I, Le A, Hartjen P, Thomssen A, Matzat V, Lehmann C, Scheurich C, Beisel C, Busch P, Degen O, Lohse A, Eiermann T, Fatkenheuer D, Meyer-Olson D, Bockhorn M, Hauber J, van Lunzen J, **Schulze Zur Wiesch J** 2013. Decreased frequency of CD73+CD8+ T cells of HIV-infected patients correlates with immune activation and T cell exhaustion. **Journal of leukocyte biology** 2013. Published online ahead of print.

3. **Schulze zur Wiesch J***, Ciuffreda D*, Lewis-Ximenez L, Kasprovicz V, Nolan BE, Streeck H, Aneja J, Reyor LL, Allen TM, Lohse AW, McGovern B, Chung RT, Kwok WW, Kim AY, Lauer GM. Broadly directed virus-specific CD4+ T cell responses are primed during acute hepatitis C infection, but rapidly disappear from human blood with viral persistence. **J Exp Med**. 2012 16;209(1):61-75.

* shared authorship

4. Benten D*, **Schulze zur Wiesch J***, Sydow K, Koops A, Buggisch P, Böger R, Gaydos CA, Won H, Franco V, Lohse AW, Ray SC, Balagopal A. The transhepatic endotoxin gradient is present despite liver cirrhosis and is attenuated after transjugular portosystemic shunt (TIPS). **BMC Gastroenterol**. 2011 ;11:107.

* shared authorship

5. **Schulze zur Wiesch J***, Thomssen A*, Hartjen P, Tóth I, Lehmann C, Meyer-Olson D, Colberg K, Frerk S, Babikir D, Schmiedel S, Degen O, Mauss S, Rockstroh J, Staszewski S, Khaykin P, Strasak A, Lohse AW, Fätkenheuer G, Hauber J, van Lunzen J. Comprehensive Analysis of Frequency and Phenotype of T Regulatory Cells in HIV Infection: CD39 Expression of FoxP3+ T Regulatory Cells Correlates with Progressive Disease. **J Virol**. 2011 ;85(3):1287-97.

* shared authorship

6. **Schulze zur Wiesch J**, Pieper D, Stahmer I, Eiermann T, Buggisch P, Lohse A, Hauber J, van Lunzen J. Sustained virological response after early antiviral treatment of concomitant acute HCV/HIV co-infection. **Clinical Infectious Diseases** 2009 ;49(3):466-72.

7. **Schulze zur Wiesch J**, Lauer G, Timm J, Kuntzen T, Neukamm M, Berical A, Jones A, Nolan B, Longworth S, Kasprovicz V, McMahon C, Wurcel A, Lohse A, Lewis L, Chung R, Kim A, Allen T and Walker B. Immunologic evidence for lack of heterologous protection following resolution of HCV infection. **Blood** 2007 ;110(5):1559-69.

8. Kim AY*, **Schulze zur Wiesch J***, Kuntzen T, Timm J, Kaufmann D, Duncan J, Jones A, Wurcel A, Davis, Gandhi R, Robbins G, Allen T, Chung R, Lauer G, Walker B. Impaired HCV-specific T cell responses and recurrent HCV in HIV coinfection. **PLOS Medicine** 2006 ;3(12):e492.

* shared authorship

9. **Schulze zur Wiesch J**, Lauer GM, Day CL, Kim AY, Ouchi K, Duncan JE, Wurcel AG, Timm J, Jones AM, Mothe B, Allen TM, McGovern B, Lewis-Ximenez L, Sidney J, Sette A, Chung RT, Walker BD. Broad repertoire of the CD4+ Th cell response in spontaneously controlled hepatitis C virus infection includes dominant and highly promiscuous epitopes. **J Immunol.** 2005 ;175(6):3603-13.
10. Hartjen P, Frerk S, Hauber I, Matzat V, Thomssen A, Holstermann B, Hohenberg H, Schulze W, **Schulze zur Wiesch J***, van Lunzen J*. Assessment of the range of the HIV-1 infectivity enhancing effect of individual human semen specimen and the range of inhibition by EGCG. *AIDS Res Ther.* 2012 ;9(1):2.
* shared authorship

CO-AUTHOR

1. Dammermann W, Schipper P, Ullrich S, Fraedrich K, Schulze zur Wiesch J, Fründt T, Tiegs G, Lohse A, Lüth S. Increased Expression of Complement Regulators CD55 and CD59 on Peripheral Blood Cells in Patients with EAHEC O104:H4 Infection. *PLoS ONE* 2013 ,8(9): e74880.
2. Li C, Toth I, **Schulze zur Wiesch J**, Pereyra F, Rychert J, Rosenberg ES, van Lunzen J, Lichterfeld M, Yu XG. Functional Characterization of HLA-G(+) Regulatory T Cells in HIV-1 Infection. **PLoS Pathog.** 2013 ;9(1):e1003140.
3. Lindqvist M, van Lunzen J, Soghoian DZ, Kuhl BD, Ranasinghe S, Kranias G, Flanders MD, Cutler S, Yudanin N, Muller MI, Davis I, Farber D, Hartjen P, Haag F, Alter G, **Schulze zur Wiesch J**, Streeck H. Expansion of HIV-specific T follicular helper cells in chronic HIV infection. **J Clin Invest.** 2012 ;122(9):3271-80.
4. Kim AY, Kuntzen T, Timm J, Nolan BE, Baca MA, Reyor LL, Berical AC, Feller AJ, Johnson KL, **Schulze zur Wiesch J**, Robbins GK, Chung RT, Walker BD, Carrington M, Allen TM, Lauer GM. Spontaneous Control of HCV Is Associated With Expression of HLA-B*57 and Preservation of Targeted Epitopes. **Gastroenterology.** 2011 ;140(2):686-696.e1.
5. Strasak AM, Kim AY, Lauer GM, de Sousa PS, Ginuino CF, Fernandes CA, Velloso CE, de Almeida AJ, de Oliveira JM, Yoshida CF, **Schulze zur Wiesch J**, Paranhos-Baccala G, Lang S, Brant LJ, Ulmer H, Strohmaier S, Kaltenbach L, Lampe E, Lewis-Ximenez LL. Antibody Dynamics and Spontaneous Viral Clearance in Patients with Acute Hepatitis C Infection in Rio de Janeiro, Brazil. **BMC Infect Dis.** 2011 ;11(1):15.
6. Lewis-Ximenez LL, Lauer GM, **Schulze zur Wiesch J**, de Sousa PS, Ginuino CF, Paranhos-Baccalá G, Ulmer H, Pfeiffer KP, Goebel G, Pereira JL, Mendes de Oliveira J, Yoshida CF, Lampe E, Velloso CE, Alves Pinto M, Coelho HS, Almeida AJ, Fernandes CA, Kim AY, Strasak AM. Prospective follow-up of patients with acute hepatitis C virus infection in Brazil. **Clin Infect Dis.** 2010 ;50(9):1222-30.
7. Kasprowicz V, Kang YH, Lucas M, **Schulze zur Wiesch J**, Kuntzen T, Fleming V, Nolan BE, Longworth S, Berical A, Bengsch B, Thimme R, Lewis-Ximenez L, Allen TM, Kim AY, Klenerman P, Lauer GM. Hepatitis C virus (HCV) sequence variation induces an HCV-specific T-cell phenotype analogous to spontaneous resolution. **J Virol.** 2010 ;84(3):1656-63.
8. Kuntzen T, Timm J, Berical A, Lennon N, Berlin AM, Young SK, Lee B, Heckerman D, Carlson J, Reyor LL, Kleyman M, McMahon CM, Birch C, **Schulze zur Wiesch J**, Ledlie T, Koehrsen M, Kodira C, Roberts AD, Lauer GM, Rosen HR, Bihl F, Cerny A, Spengler U, Liu Z, Kim AY, Xing Y, Schneidewind A, Madey MA, Fleckenstein JF, Park VM, Galagan JE, Nusbaum C, Walker BD, Lake-Bakaar GV, Daar ES, Jacobson IM, Gomperts ED, Edlin BR, Donfield SM, Chung RT, Talal AH, Marion T, Birren BW, Henn MR, Allen TM. Naturally occurring dominant resistance mutations to

hepatitis C virus protease and polymerase inhibitors in treatment-naïve patients. **Hepatology**. 2008 ;48(6):1769-78.

9. Kasprowicz V., **Schulze zur Wiesch J**, Kuntzen T., Nolan B., Longworth S., Berical A., McMahon C., Reyor L., Elias N., Kwok W., McGovern B., Freeman G., Chung R. Klenerman P., Lewis-Ximenez L., Walker B., Allen T., Kim A., Lauer G. PD-1 expression levels on CD8+ and CD4+ T cells are associated with viral load during acute Hepatitis C but do not predict infection outcome. **J. Virol**. 2008, 82(6) 3154-60.

10. Kuntzen T, Timm J, Berical A, Lewis-Ximenez LL, Jones A, Nolan B, **Schulze zur Wiesch J**, Li B, Schneidewind A, Kim A, Chung RT, Lauer GM, Allen TM. Viral Sequence Evolution in Acute HCV Infection. **J Virol**. 2007 ;81(21):11658-68.

11. Timm J, Li B, Daniels M, Bhattacharya T, Reyor L, Allgaier R, Kuntzen T, Fischer W, Duncan J, **Schulze zur Wiesch J**, Kim J, Frahm N, Brander C, Chung RT., Lauer GM, Korber B, Walker BW, Allen T. HLA-Associated Sequence Polymorphisms in HCV: Reproducible Immune Responses and Constraints on Viral Evolution. **Hepatology**. 2007 ; 46(2):339-49.

12. Corey KE, Ross AS, Wurcel A, **Schulze zur Wiesch J**, Kim AY, Lauer GM, Chung RT. Outcomes and Treatment of Acute Hepatitis C Virus Infection in a United States Population. **Clin Gastroenterol Hepatol**. 2006 ;4(10):1278-82.

13. McGovern BH, Wurcel A, Kim AY, **Schulze zur Wiesch J**, Bica I, Zaman MT, Timm J, Walker BD, Lauer GM. Acute hepatitis C virus infection in incarcerated injection drug users. **Clin Infect Dis**. 2006 ;42(12):1663-70.

14. Lauer GM, Lucas M, Timm J, Ouchi K, Kim AY, Day CL, **Schulze zur Wiesch J**, Paranhos-Baccala G, Sheridan I, Casson DR, Reiser M, Gandhi RT, Li B, Allen TM, Chung RT, Klenerman P, Walker BD. Full-breadth analysis of CD8+ T-cell responses in acute hepatitis C virus infection and early therapy. **J Virol**. ;79(20):12979-88.

15. Timm J, Lauer GM, Kavanagh DG, Sheridan I, Kim AY, Lucas M, Pillay T, Ouchi K, Reyor LL, **Schulze zur Wiesch J**, Gandhi RT, Chung RT, Bhardwaj N, Klenerman P, Walker BD, Allen TM. CD8 epitope escape and reversion in acute HCV infection. **J Exp Med**. 2004 ;200(12):1593-604.

16. Kim AY, Lauer GM, Ouchi K, Addo MM, Lucas M, **Schulze zur Wiesch J**, Timm J, Boczanowski M, Duncan JE, Wurcel AG, Casson D, Chung RT, Draenert R, Klenerman P, Walker BD. The magnitude and breadth of hepatitis C virus-specific CD8+ T cells depend on absolute CD4+ T-cell count in individuals coinfecting with HIV-1. **Blood**. 2005 ;105(3):1170-8.

17. Borowski P, Lang M, Niebuhr A, Haag A, Schmitz H, **Schulze zur Wiesch J**, Choe J, Siwecka MA, Kulikowski T. Inhibition of the helicase activity of HCV NTPase/helicase by 1-beta-D-ribofuranosyl-1,2,4-triazole-3-carboxamide-5'-triphosphate (ribavirin-TP). **Acta Biochim Pol**. 2001 ;48(3):739-44.

18. Borowski P, Kuehl R, Mueller O, Hwang LH, **Schulze zur Wiesch J**, Schmitz H. Biochemical properties of a minimal functional domain with ATP-binding activity of the NTPase/helicase of hepatitis C virus. **Eur J Biochem**. 1999 ;266(3):715-23.

19. Borowski P, **Schulze zur Wiesch J**, Resch K, Feucht H, Laufs R, Schmitz H. Protein kinase C recognizes the protein kinase A-binding motif of nonstructural protein 3 of hepatitis C virus. **J Biol Chem**. 1999 ;274(43):30722-8.

20. Borowski P, Kuhl R, Laufs R, **Schulze zur Wiesch J**, Heiland M. Identification and characterization of a histone binding site of the non-structural protein 3 of hepatitis C virus. **J Clin Virol**. 1999 ;13(1-2):61-9.

REVIEWS

1. **Schulze zur Wiesch J**, Schmitz H, Borowski E, Borowski P. The proteins of the Hepatitis C virus: their features and interactions with intracellular protein phosphorylation. **Arch Virol**. 2003 Jul;148(7):1247-67. Review.
2. van Lunzen J, **Schulze zur Wiesch J**, Stellbrink H-J. Immunological benefit of CCR5 antagonists in HIV infection. **Hot Topics HIV Other Retrov** 2012;2(3):15-22.
3. Borowski P, Max Heiland, **Schulze zur Wiesch J**. Nonstructural protein 3 of hepatitis C virus disrupts intracellular signal transduction pathways by distinct mechanisms. **Current Topics in Virology** 1999,1 (1), Pages: 26-32.

Editorials /letters to the Editor

1. **Schulze zur Wiesch J** and van Lunzen J. Hide and Seek. Can We Eradicate HIV by Treatment Intensification? **The Journal of Infectious Diseases** 2011 ;0:1-4.
2. **Schulze zur Wiesch J**, Ansgar Lohse. Results of the IDEAL trial: "Mirror, mirror on the wall...which's the fairest peg-interferon of them all?" **Hepatology** 2009 ;50(6):2034-7.
3. **Schulze zur Wiesch J**, van Lunzen J. Improved treatment for primary HIV infection by Interferon-alpha therapy? Does HCV treatment in HIV/HCV Co-infected patients help us to test this hypothesis? **Journal of Infectious Diseases** 2013 ;Jul 15;208(2):362-3.
4. Hartjen P, Meyer-Olson D, Lehmann L, Stellbrink H., van Lunzen J, **Schulze zur Wiesch J**. Vgamma2Vdelta2 T cells are skewed towards a terminal differentiation phenotype in untreated HIV infection. Letter, **The Journal of Infectious Diseases** . 2013 ;Jul;208(1):180-2.
5. **Schulze zur Wiesch J**, Pudelski N, Hoepner L, Supplith M, Buggisch P, Lohse AW, Lüth S. "Real-Life" Comparison of Pegylated-Interferon 2a Versus 2b Combination Therapy of Chronic Hepatitis C Virus. **Hepatology** 2011. 2011 ;(4):1405-6. (letter)

CASE REPORTS

1. **Schulze zur Wiesch J**, Wichmann D, Hofer A, van Lunzen J, Burchard G, Schmiedel S. Primary HIV infection presenting as haemolytic crisis in a patient with previously undiagnosed G6PDdeficiency. **AIDS** 2008 ;22(14):1886-8.
2. **Schulze zur Wiesch J**, Wichmann D, Melzer F, Schmoock G, Sobottka I, Rohde H, Wernery R, Schmiedel S, Burchard G. Genomic tandem repeat analysis proves laboratory-acquired brucellosis in veterinary camel laboratory in the United Arab Emirates. **Zoonoses Public Health** 2010;57(5):315-7.

Julian Schulze zur Wiesch

Julian Schulze zur Wiesch, MD

Hamburg, 09/30/2013