

1. Personal details

Surname, given name(s): GADOLA, Stephan (Donat)
Date and place of birth: 30th March 1967, Basel, Switzerland
Nationality: Swiss

2. Current Positions:

- Chief physician, Clinic of Rheumatology & Pain Medicine, Bethesda Hospital, Basel, Switzerland
- Visiting Professor of Immunology, University of Southampton, UK

3. Qualifications

- Physician, University of Basel, Switzerland, Staatsexamen 11/1992 (highest score of class)
- Doctor of Medicine, University of Basel, Switzerland, Faculty of Medicine, 6/1993
- PhD in Immunology, Weatherall Institute of Molecular Medicine, Oxford/United Kingdom
- Venia docendi (Habilitation; Privatdozent) in Rheumatology/Clinical immunology, Bern 1/2007
- Specialist in Internal Medicine (Swiss Federal Medical Association, FMH; GMC 6161724)
- Specialist in Rheumatology (Swiss Federal Medical Association, FMH; GMC 6161724)
- Fellow of the Royal Society of Physicians (FRCP), 2011
- Board certified in Musculoskeletal Ultrasound (Swiss Association of Ultrasound Medicine)

4. Additional current positions/activities

- Fiduciary consultant (since 2006) for the Swiss Sjögren group (<http://www.sjogren-forum.ch/viewforum.php?f=10&sid=0c9f635c57a5f5c03e97d8a48ef74653>)
- Peer reviewer for different funding bodies (e.g. MRC, Wellcome Trust)

5. Previous positions

- Therapeutic area head Rheumatology at Roche Pharma Research & early Development (pRED), Basel (1.9.2016 – 30.06.2019)
- Director, senior translational medicine expert at Novartis Institutes of Biomedical Research (NIBR), Novartis Basel (13.5.2013 - 31.7.2016)
- University of Southampton and Southampton NHS Foundation Trust (1.8.2007 – 10.5.2013)
 - Full professor of Immunology, Academic Unit of Clinical & Experimental Sciences (CES), Faculty of Medicine, University of Southampton (UoS), UK
 - Director of the Southampton Musculoskeletal Biomedical Research Unit (MSK BRU)
 - Consultant Rheumatologist for the Southampton NHS Foundation Trust
 - Hampshire & Isle of Wight (HIOW) NIHR Comprehensive Local Research Network (CLRN) Immunology & Inflammation speciality group lead (from 1/2012-5/2013)
- University Hospital of Bern, Inselspital, Clinic of Rheumatology, Immunology & Allergology Consultant Rheumatologist (Oberarzt) and Max Cloëtta Assistant Professor (1.1.2002 – 30.07.2006)

6. Medical education and practice

6.1. Rheumatology & Immunology

- 1/96 - 12/97 **University of Lübeck, Department of Rheumatology, Vasculitis Center UKSH & Rheumaklinik Bad Bramstedt, Lübeck, Germany** (Professor W.L. Gross) as Specialist Registrar (Stationsarzt) in Rheumatology & Clinical Immunology
- 12/98-12/01 **Institute of Molecular Medicine in Oxford, UK** (with Prof Vincenzo Cerunolo and Prof Sir Andrew J. McMichael)
- 01/02 – 6/07 **Max Cloëtta Assistant Professorship at the Clinic for Rheumatology and Clinical Immunology/Allergology of the University Hospital of Bern, Inselspital**

6.2. General and Internal Medicine

- 1986 - 1992 Study of Medicine at University of Basel (Exam 11/92; score 5.94; possibl.max. 6.0)
- 1/93 - 9/95 Locums, including 6 months at the Heilbad Clinic St. Moritz
- 11/93 - 12/95 Specialist Registrar (Assistenzarzt) in Internal Medicine (Univ. Hospital Baselland, Prof. Hans Kummer), including 8 months in the intensive care unit
- 1/98 - 11/98 Specialist Registrar (Assistenzarzt) in Internal Medicine (Univ. Hospital Baselland, Proff. Hans Kummer and Reto Krapf), including 4 months in the intensive care unit
- 7-9/98 Final exams in Internal Medicine („FMH Prüfung“; score 6.0)

7. Society Memberships

- Association of Physicians of GB and Ireland
- Royal College of Physicians
- British Society of Immunology
- British Society of Rheumatology
- Federal Medical Association of Switzerland (FMH)
- Swiss Society of Rheumatology (SGR); Member of the scientific committee for the annual SGR congress
- Southampton Musculoskeletal shadow BRU (Director from 2010-2013)
- Southampton/Wessex Initiative for Synovitis Scoring (SWISS; Chair, 2010-2013)

8. Publications

8.1. Original Articles (Total Impact Factor >420)

Nr.	Publication	IF
1	Teisserenc H, Schmitt W, Blake N, Dunbar R, Gadola S , Gross WL, Exley A, Cerundolo V (1997). A case of primary immunodeficiency due to a defect of the major histocompatibility gene complex class I processing and presentation pathway FEBS Lett , 57:183-7.	3.60
2	Lamprecht P, Gadola S , Schnabel A, Gross WL (1998) ANCA, infectious endocarditis, glomerulonephritis and cryoglobulinemic vasculitis. Clin Nephrol , 49:389-90.	4.76
3	Moins-Teisserenc HT, Gadola SD (<i>joint 1st author</i>), Cella M, Dunbar PR, Exley A, Blake N, Baykal C, Lambert J, Bigliardi P, Willemsen M, Jones M, Buechner S, Colonna M, Gross WL, Cerundolo V (1999) Association of a syndrome resembling Wegener's granulomatosis with low	33.63

	surface expression of HLA class-I molecules. Lancet , 354:1598-603.	
4	Tomasec P, Braud VM, Rickards C, Powell MB, McSharry BP, Gadola S , Cerundolo V, Borysiewicz LK, McMichael AJ, Wilkinson GW (2000) Surface expression of HLA-E, an inhibitor of natural killer cells, enhanced by human cytomegalovirus gpUL40. Science , 287:1031.	31.36
4	Karadimitris A, Gadola S (<i>joint 1st author</i>), Altamirano M, Brown D, Woolfson A, Klenerman P, Chen JL, Koezuka Y, Roberts IA, Price DA, Dusheiko G, Milstein C, Fersht A, Luzzatto L, Cerundolo V (2001) Human CD1d-glycolipid tetramers generated by in vitro oxidative refolding chromatography. Proc Natl Acad Sci U S A , 98:3294-8	9.77
5	Gadola SD , Dulphy N, Salio M, Cerundolo V (2002) Valpha24-JalphaQ-independent, CD1d-restricted recognition of alpha-galactosylceramide by human CD4(+) and CD8alphabeta(+) T lymphocytes. J Immunol , 168:5514-20.	5.75
6	Gadola SD (<i>corresponding</i>), Zaccai NR, Harlos K, Shepherd D, Castro-Palomino JC, Ritter G, Schmidt RR, Jones EY, Cerundolo V (2002) Structure of human CD1b with bound ligands at 2.3 Å, a maze for alkyl chains. Nat Immunol , 3:721-6.	25.67
7	Yang JQ, Singh AK, Wilson MT, Satoh M, Stanic AK, Park JJ, Hong S, Gadola SD , Mizutani A, Kakumanu SR, Reeves WH, Cerundolo V, Joyce S, Van Kaer L, Singh RR (2003) Immunoregulatory role of CD1d in the hydrocarbon oil-induced model of lupus nephritis. J Immunol , 171:2142-53.	5.75
8	Schultz H, Schinke S, Weiss J, Cerundolo V, Gross WL, Gadola S (2003) BPI-ANCA in transporter associated with antigen presentation (TAP) deficiency: possible role in susceptibility to Gram-negative bacterial infections. Clin Exp Immunol , 133:252-9.	3.13
9	Lautscham G, Haigh T, Mayrhofer S, Taylor G, Croom-Carter D, Leese A, Gadola S , Cerundolo V, Rickinson A, Blake N (2003) Identification of a TAP-independent, immunoproteasome-dependent CD8+ T-cell epitope in Epstein-Barr virus latent membrane protein 2. J Virol , 77:2757-61.	5.19
10	Lucas M, Gadola S , Meier U, Young NT, Harcourt G, Karadimitris A, Coumi N, Brown D, Dusheiko G, Cerundolo V, Klenerman P (2003) Frequency and phenotype of circulating Valpha24/Vbeta11 double-positive natural killer T cells during hepatitis C virus infection. J Virol , 77:2251-7.	5.19
11	Markel G, Mussaffi H, Ling KL, Salio M, Gadola S , Steuer G, Blau H, Achdout H, de Miguel M, Gonen-Gross T, Hanna J, Arnon TI, Qimron U, Volovitz I, Eisenbach L, Blumberg RS, Porgador A, Cerundolo V, Mandelboim O (2004) The mechanisms controlling NK cell autoreactivity in TAP2-deficient patients. Blood , 103:1770-8.	10.56
12	Batuwangala T, Shepherd D, Gadola SD , Gibson KJ, Zaccai NR, Fersht AR, Besra GS, Cerundolo V, Jones EY (2004) The crystal structure of human CD1b with a bound bacterial glycolipid. J Immunol , 172:2382-8.	5.75

13	Korten S, Anderson RJ, Hannan CM, Sheu EG, Sinden R, Gadola S , Taniguchi M, Hill AV (2005) Invariant Valpha14 chain NKT cells promote Plasmodium berghei circumsporozoite protein-specific gamma interferon- and tumor necrosis factor alpha-producing CD8+ T cells in the liver after poxvirus vaccination of mice. Infect Immun , 73:849-58.	4.10
14	Koch M, Stronge VS, Shepherd D, Gadola SD , Mathew B, Ritter G, Fersht AR, Besra GS, Schmidt RR, Jones EY, Cerundolo V (2005) The crystal structure of human CD1d with and without alpha-galactosylceramide. Nat Immunol , 6:819-26.	25.67
15	Gadola SD , Silk JD, Jeans A, Illarionov PA, Salio M, Besra GS, Dwek R, Butters TD, Platt FM, Cerundolo V (2006) Impaired selection of invariant natural killer T cells in diverse mouse models of glycosphingolipid lysosomal storage diseases. J Exp Med , 203:2293-303.	14.78
16	Gadola SD (corresp.) , M, Stuart DI, Jakobsen BK, Cerundolo V, Jones EY (2006) Structure and binding kinetics of three different human CD1d-alpha-galactosylceramide-specific T cell receptors. J Exp Med , 203:699-710.	14.78
17	Vijayanand P, Seumois G, Pickard C, Powell RM, Angco G, Sammut D, Gadola SD , Friedmann PS, Djukanovic R (2007) Invariant natural killer T cells in asthma and chronic obstructive pulmonary disease. N Engl J Med , 356:1410-22.	53.48
18	Caversaccio M, Bonél HM, Carter R, Williams AP, Gadola SD (2008) TAP deficiency syndrome: chronic rhinosinusitis and conductive hearing loss. Eur Arch Otorhinolaryngol , 265:1289-92.	1.21
19	Schegg V, Vogel M, Didichenko S, Stadler MB, Belezny Z, Gadola S , Sengupta C, Stadler BM, Miescher SM (2008). Evidence that anti-muscarinic antibodies in Sjögren's syndrome recognise both M3R and M1R. Biologicals , 36:213-22.	1.77
20	Förger F, Marcoli N, Gadola S , Möller B, Villiger PM, Østensen M (2008) Pregnancy induces numerical and functional changes of CD4+CD25 high regulatory T cells in patients with rheumatoid arthritis. Ann Rheum Dis , 7:984-90	9.08
21	Matulis G, Jüni P, Villiger PM, Gadola SD (corresp.) (2008) Detection of latent tuberculosis in immunosuppressed patients with autoimmune diseases: performance of a Mycobacterium tuberculosis antigen-specific interferon gamma assay. Ann Rheum Dis , 67:84-90.	9.08
22	Laudien M, Gadola SD (joint 1st author) , Podschun R, Hedderich J, Paulsen J, Reinhold-Keller E, Csernok E, Ambrosch P, Hellmich B, Moosig F, Gross WL, Sahly H, Lamprecht P (2010) Nasal carriage of Staphylococcus aureus and endonasal activity in Wegener's granulomatosis as compared to rheumatoid arthritis and chronic Rhinosinusitis with nasal polyps. Clin Exp Rheumatol , 28:51-5.	2.4
23	Xu C, de Vries R, Visser L, Diepstra A, Gadola SD , Poppema S, van den Berg A (2010) Expression of CD1d and presence of invariant NKT cells in classical Hodgkin lymphoma.	3.58

	Am J Hematol , 85:539-41.	
24	Matulis G, Sanderson JP, Lissin NM, Asparuhova MB, Bommineni GR, Schümperli D, Schmidt RR, Villiger PM, Jakobsen BK, Gadola SD (<i>corresp.</i>) (2010) Innate-like control of human iNKT cell autoreactivity via the hypervariable CDR3beta loop. PLoS Biol ; 8:e1000402.	12.47
25	Sanderson JP, Waldburger-Hauri K, Garzón D, Matulis G, Mansour S, Pumphrey NJ, Lissin N, Villiger PM, Jakobsen B, Faraldo-Gómez JD, Gadola SD (<i>corresp.</i>) (2011) Natural variations at position 93 of the invariant V α 24-J α 18 α chain of human iNKT-cell TCRs strongly impact on CD1d binding. Eur J Immunol . 42:248-55.	4.94
26	Brennan PJ, Tatituri RV, Brigl M, Kim EY, Tuli A, Sanderson JP, Gadola SD , Hsu FF, Besra GS, Brenner MB (2011) Invariant natural killer T cells recognize lipid self antigen induced by microbial danger signals. Nat Immunol , 12:1202-11.	25.67
27	Worsley P, Warner M, Mottram S, Gadola S , Veeger HE, Hermens H, Morrissey D, Little P, Cooper C, Carr A, Stokes M. (2013) Motor control retraining exercises for shoulder impingement: effects on function, muscle activation, and biomechanics in young adults. J Shoulder Elbow Surg , 22:e11-9.	2.37
28	Darshan J, Shaw E, Green B, Gallagher PJ, Gadola SD (<i>corresp.</i>) (2013) Intestinal ischaemia and mesenteric necrosis in a heavy smoker. QJM-Int J Med , 106:183-6.	2.46
29	Sanderson JP, Brennan PJ, Mansour S, Matulis G, Patel O, Lissin N, Godfrey DI, Kawahara K, Zähringer U, Rossjohn J, Brenner MB, Gadola SD (<i>corresp.</i>) (2013) CD1d protein structure determines species-selective antigenicity of isoglobotrihexosylceramide (iGb3) to invariant NKT cells. Eur J Immunol , 43:815-25.	4.52
30	Warwick DJ, Shaikh A, Gadola S, Stokes M, Worsley P, Bain D, Tucker AT, Gadola SD . (2013) Neuromuscular electrostimulation via the common peroneal nerve promotes lower limb blood flow in a below-kneecast: A potential for thromboprophylaxis. Bone Joint Res , 2:179-85.	NA
31	Sleiman M, Brons NH, Kaoma T, Dogu F, Villa-Forte A, Lenoble P, Hentges F, Kotsch K, Gadola SD , Vilches C, Zimmer J. (2014). NK cell killer Ig-like receptor repertoire acquisition and maturation are strongly modulated by HLA class I molecules. J Immunol , 192:2602-10.	5.36
32	Gao Y, Workman S, Gadola S , Elliott T, Grimbacher B, Williams AP. (2014) Invariant natural killer T cells recognize lipid self antigen induced by microbial danger signals. J Allergy Clin Immunol , 133:1420-8.	11.25
33	Hinks TSC, Zhou X, Staples KJ, Dimitrov BD, Manta A, Petrossian T, Lum PY, Smith CG, Ward JA, Howarth PH, Walls AF, Gadola SD & Djukanović R. (2015) Innate and adaptive T cells in asthma: relationship to severity and disease mechanisms J Allergy Clin Immunol , 136:323-33.	11.25

34	Warwick D, Shaikh A, Worsley P, Gadola S, Bain D, Tucker A, Gadola SD , Stokes M. (2015) Microcirculation in the foot is augmented by neuromuscular stimulation via the common peroneal nerve in different lower limb postures: a potential treatment for leg ulcers. Int Angiol , 34:158-65.	0.83
35	Jupp J, Mansour S, Johnson CD, Sanderson J, Fine D, Gadola S (corr.) (2015) T-cell populations in chronic pancreatitis. Pancreatology ,15:311-2.	2.84
36	Hinks T, Zhou X, Staples K, Dimitrov B, Manta A, Petrossian T, Lum P, Smith C, Ward J, Howarth P, Walls A, Gadola SD , Djukanović R. (2015). Innate and adaptive T cells in asthma: relationship to severity and disease mechanisms Lancet , 385 Suppl 1:S42.	NA
37	Mansour S, Tocheva AS, Sanderson JP, Goulston LM, Platten H, Serhal L, Parsons C, Edwards MH, Woelk CH, Elkington PT, Elliott T, Cooper C, Edwards CJ, Gadola SD (corresp.) (2015) Structural and Functional Changes of the Invariant NKT Clonal Repertoire in Early Rheumatoid Arthritis. J Immunol , 195:5582-91.	4.92
38	Mansour S, Tocheva AS, Cave-Ayland C, Machelett MM, Sander B, Lissin NM, Molloy PE, Baird MS, Stübs G, Schröder NWJ, Schumann RR, Rademann J, Postle AD, Jakobsen BK, Marshall BG, Gosain R, Elkington P, Elliott T, Skylaris CK, Essex JW, Tews I, Gadola SD (corresp.) (2016) Cholesteryl esters stabilise human CD1c conformations for recognition by self-reactive T cells Proc Natl Acad Sci U S A ;113(9):E1266-75.	10.6
39	Gao Y, Arkwright PD, Carter R, Cazaly A, Harrison RJ, Mant A, Cant AJ, Gadola S , Elliott TJ, Khakoo SI, Williams AP (2016). Bone marrow transplantation for MHC class I deficiency corrects T-cell immunity but dissociates natural killer cell repertoire formation from function. J Allergy Clin Immunol ; 138:1733-36	11.25
40	Anna S. Tocheva, Salah Mansour, Tristan G.H. Holt, Samuel Jones, Andrew Chancellor, Joseph P. Sanderson, Efrem Eren, Tim J. Elliott, Richard I. G. Holt, and Stephan D. Gadola (corresp.) (2017). The clonal iNKT cell repertoire in people with type 1 diabetes is characterized by a loss of clones expressing high-affinity TCRs. J Immunol ; 198:1452-1459.	4.92
41	Chancellor A, White A, Tocheva AS, Fenn JR, Dennis M, Tezera L, Singhania A, Elliott T, Tebruegge M, Elkington P, Gadola S , Sharpe S, Mansour S (2017) Quantitative and qualitative iNKT repertoire associations with disease susceptibility and outcome in macaque tuberculosis infection. Tuberculosis (Edinb) ; 105:86-95	2.62
42	Singhania A, Wallington JC, Smith CG, Horowitz D, Staples KJ, Howarth PH, Gadola SD , Djukanović R, Woelk CH, Hinks TS (2017). Multi-tissue Transcriptomics Delineates the Diversity of Airway T Cell Functions in Asthma. Am J Respir Cell Mol Biol . 2017 Sep 21. doi: 10.1165/rcmb.2017-0162OC. [Epub ahead of print]	4.10
43	Kelly S, Davidson B, Keidel S, Gadola S , Gorman C, Meenagh G, Reynolds P (2017) The impact of rheumatologist-performed ultrasound on diagnosis and management of inflammatory arthritis in routine clinical practice.	1.74

	BMC Musculoskelet Disord ; 18:487-495	
44	Chancellor A, Tocheva AS, Cave-Ayland C, Tezera L, White A, Al Dulayymi JR, Bridgeman JS, Tews I, Wilson S, Lissin NM, Tebruegge M, Marshall B, Sharpe S, Elliott T, Skylaris C, Essex JW, Baird MS, Gadola S , Elkington P, Mansour S (2017). CD1b-restricted GEM T cell responses are modulated by Mycobacterium tuberculosis mycolic acid meromycolate chains. Proc Natl Acad Sci U S A ; 114:E10956-E10964.	9.66
45	Singhania A, Wallington JC, Smith CG, Horowitz D, Staples KJ, Howarth PH, Gadola SD , Djukanović R, Woelk CH, Hinks TSC (2018). Multitissue Transcriptomics Delineates the Diversity of Airway T Cell Functions in Asthma. Am J Respir Cell Mol Biol . 2018; 58:261-270.	4.10

Cumulative IF 427.47

8.2. Review articles (peer reviewed)

1	Gadola SD , Moins-Teisserenc HT, Trowsdale J, Gross WL, Cerundolo V (2000). TAP deficiency syndrome. Clin Exp Immunol , 121:173-8.	3.13
2	Gadola SD , Karadimitris A, Zaccai NR, Salio M, Dulphy N, Shepherd D, Jones EY, Cerundolo V (2003). Generation of CD1 tetramers as a tool to monitor glycolipid-specific T cells. Philos Trans R Soc Lond B Biol Sci , 358:875-7	6.05
3	Gadola S , Salzer U, Schultz H, Grimbacher B (2004) Adult-onset primary immunodeficiencies. Internist (Berl) , 45:912-22.	0.35
4	Williams EL, Gadola S , Edwards CJ (2009) Anti-TNF-induced lupus. Rheumatology (Oxford) , 48:716-20.	4.17
5	Gadola SD (2009) Interleukin-1 cytokines, inflammasomes, NOD-signalosomes and autoinflammation. Z Rheumatol , 68:712-9.	0.4
6	Gadola S & Gross WL (2012) . Vasculitis in 2011 – The renaissance of granulomatous inflammation in AAV. Nat Rev Rheum , 8:74-6.	6.45
7	Chancellor AS, Gadola SD , Mansour S (2018). The versatility of the CD1 lipid antigen presentation pathway. Immunology , 154:196-203.	3.70

8.3. Editorials, Comments, letters, non-peer reviewed reviews

1	Noukakis D, Gadola S , Stöcklin R (2005). Report of the roundtable discussion organised by the Swiss Proteomics Society (SPS), Bern, 8th December 2004. Proteomics , 5:3017-8.
2	Wienert S, Gadola S , Hunziker T (2008). Facets of lupus erythematosus: panniculitis responding to thalidomide J Dtsch Dermatol Ges , 6:214-6.

3	Djukanovic R & Gadola SD (2008) . Virus infection, asthma, and chronic obstructive pulmonary disease. N Engl J Med , 359:2062-4.
4	Gadola S & Gross WL (2011) . ANCA –associated vasculitides. Rheuma Schweiz ; Fachzeitschrift Nr. 5/2011 (Schwerpunkt Vaskulitis).
5	Gadola SD (2012) Perspectives: modelling the vasculitis and granulomatous tissue destruction of granulomatosis with polyangiitis (GPA). Clin Exp Rheumatol , 30:S1-2.
6	Zimmer J, Sleiman M, Hentges F, Gadola SD (2012) Clinical and Immunological Remarks about TAP Deficiency. J Biol Chem . 2012, 287:27047.
7	Gao Y, Gadola S , Grimbacher B, Williams AP. (2014) Reply: To PMID 24582167. J Allergy Clin Immunol , 134:990
8	Gadola S. (2015) Das primäre Sjögren Syndrom (Article for the Swiss Rheumatology Patient Review) ForumR , April 2015:10-13

8.4. Book chapters

1	Gadola S, Villiger P.M (2006) Konnektivitiden und Vaskulitiden („Connective tissue diseases and Vasculitides“) (p.74 - 115). In „Rheumatologie in Kürze -Klinisches Basiswissen für die Praxis“ Thieme Verlag , Stuttgart.
2	Gadola SD (2012) Einführung in das Immunsystem („Introduction to the immune system“) (p.3 – p.76). In text book „Klinische Immunologie“ (Editors: Peter, Pichler, Ladner) Elsevier Urban & Fischer Verlag 2012 . ISBN 978-3-437-23256-5.
3	Mansour S, Gadola SD (2015) Cluster of differentiation 1 (CD1): A family of lipid antigen presenting molecules In text book „Encyclopedia of Immunobiology“ Elsevier (Publication planned for 5/2016)

9. Prizes & Awards

- 2012 Clinical Excellence Award, University Hospital of Southampton NHS Foundation Trust
- 2007 Pfizer Prize in Rheumatology/Immunology, basic science (Zürich)
- 2003 Max Cloëtta 5-year fellowship (Max Cloëtta assistant professorship)
- 2003 SCORE fellowship (Swiss National Science Foundation)
- 2002 1st Prize for the best free oral communication or poster, Swiss Rheumatology Congress Montreux (12-13 September) 2002
- 2000 3rd Prize, Young Master's Tournament of the DGIM ("Novel Immunodeficiency Syndrome with Resemblance to Wegener's Granulomatosis"; Wiesbaden, Germany)

10. Research grants (as Principal Investigator)

10.1 Grants in Switzerland (1998; 1/2002 – 6/2007): Total (in CHF) = 1'582'680

Funding Body	Year	Title of study	Amount (CHF)
Swiss National Science Foundation	1998	Research fellowship in Oxford ("halbes SNF Nachwuchsstipendium"), funding 6 months of the fellowship	21'500
Janggen Poehn; Roche; Novartis; Holderbank; FAG	1998	Research fellowship in Oxford/UK (complementary to SNF; 12/98 – 12/01)	100'000
Swiss National Science Foundation (SNF)	2002	Studies on CD1 and lipid specific T lymphocytes in human autoimmune disease (Project 3200-068070 and SCORE 3200-069338)	300'000
Max Cloëtta Foundation	2002	Clinician scientist Fellowship (5 y. from '03)	650'180
BAG,EKRK	2003	Quantitative assessment of ESAT-6 and CFP-10 specific T-lymphocyte responses for diagnosis of latent infection with <i>Mycobacterium tuberculosis</i> before and during TNF α -inhibitor treatment	65'000
Herrmann Foundation	2003	CD1-specific T cells in Tuberculosis	100'000
Novartis Foundation	2003	CD1 and lipid antigen presentation	40'000
WFR/Abbott AG	2003	Diagnosis of latent Tuberculosis	60'000
SMSG Foundation	2003	Immunoregulation and Myelin-Destruction by Lipid Specific T-Lymphocytes in Multiple Sclerosis	20'000
Hans-Sigrist Stiftung	2004	Unterstützung für Doktorand (G.Matulis) aus Litauen	6'000
AHP (Switzerland)	2004	Lipid- and Peptide responses in TB	25'000
Essex	2004	Diagnostik latente Tuberkulose	10'000
Abbott	2004	Diagnostik latente Tuberkulose	60'000
AVIDEX Ltd	2005	Effect of CD80 inhibition on peptide and lipid specific T-cell responses	50'000
AVIDEX Ltd	2006	Effect of CD80 inhibition on peptide and lipid specific T-cell responses (Follow-up)	25'000
Pfizer	2007	Pfizer Research Price for basic research in Rheumatology, Immunology & Clinical Immunology	50'000

Total: CHF 1'582'680

10.2 In the UK (8/2007 – 5/2013): Total (in GBP) = 1'309'587

Funding Body	Year	Title of study	Amount (£)
Arthritis Research Campaign	2009	CD1d & Immunoregulatory iNKT Cells in	£ 175'701

		early Rheumatoid Arthritis	
SUHT & UoS	2010	SUHT/UoS Musculoskeletal Biomedical Research Unit competition	£ 129'720
CRLN	2010 - 2012	Research Nurse support (iNKT cells in human autoimmune diseases)	£ 25'522
Abbott (INDUSTRY)	2009	Ultrasound machine (MyLab70xvg, <i>ex demo</i>) & 20% salary ultrasound technician (Band 6)	£ 50'000
Abbott (INDUSTRY)	2010 - 2012	Southampton Wessex Initiative for Synovitis Scoring (SWISS) by ultrasound (unrestricted grant for the building of a (supra-)regional network to teach and standardise the use of ultrasound for assessment of arthritis)	£ 24,800
RMC	2010 - 2011	A humanised CD1d mouse model for the study of invariant Natural Killer T Lymphocytes	£ 10'000
Wessex	2010 - 2011	Group 1 CD1 Molecules	£ 20'000
Parnell Fund	2011 - 2012	CD1D & Immunoregulatory iNKT Cells in Type 1 Diabetes	£ 52,840
Parnell Fund	2012 - 2012	CD1D & Immunoregulatory iNKT Cells in Type 1 Diabetes (extension funding)	£ 17,114
BBSRC	2012 - 2015	Elucidating structure-activity relationships for protein-hydrocarbon inter-actions: Using human CD1d protein as a model system (BB/J017302/1)	£ 669,549
IFLS "Bridging the Gap" (via EPSRC)	2012 - 2013	Structure-activity relationships of mycolic acids (MAs), a class of human CD1b-binding T cell activating cell wall lipids from <i>M.tuberculosis</i> (<i>Mtb</i>)	£ 13,874
Diabetes UK	2014 - 2016	Repertoire and Function of invariant natural killer T cells in human Type 1 diabetes	£ 120,467

Total: £ 1,309,587

11. Charing boards and conference meetings (selection)

- 06 – 11/2011: Chair of Global Advisory Board, IGRA in Rheumatology (face-to-face meetings in London and Chicago, plus 3 Webex meetings)
- 7.12.2011: British Society of Immunology (BSI) annual meeting, Liverpool, chair of the parallel session "Molecular and Clinical Interfaces of iNKT cells"
- 11/10/2011: Chair of Abbott symposium "MRI to support the diagnosis of Spondyloarthritis", DeVere Grand Harbour Hotel, Southampton
- 08/09/2011: Swiss Rheumatology Congress (SGR), Bern/Switzerland, Chair of plenary Session
- 03/09/2011: DGRh Kongress, Muenchen, Chair of session "Vaskulitiden"
- 15-16/11/2012: 2012: Organizer and chair of conference "Antigen Processing and Presentation in Health and Disease", Luxembourg

- 4/12/2013: British Society of Immunology, BSI annual meeting, Liverpool. Chair of parallel session: Antigen presentation of MHC class I and MHC class I-like molecules

12. Organisation of Congresses & Symposia (until 2013)

- 2002 – 2007: Concept, design and organisation of the Swiss National Patient Day for patients suffering from connective tissue diseases and vasculitides (“Nationaler Patiententag” Bern, Switzerland)
- 2006 – 2011, and 2020/2021: Annual Congress of the SGR/SGPMR (member of the scientific committee of the SGR/SGPMR congress)
- 2006: Minisymposiums “Lipids and the Immune System“ (Bern, Inselspital, 2.2.06)
- 2005: Minisymposium “Proteomics meets immunology” (Thun, 18.08.2005)
- 2005: Annual Meeting of the SSAI/SSPT (Hotel Allegro, Bern, 4.-5.3.05)
- 2004: Meeting of the Swiss Proteomics Society (Bern, Inselspital, 8.-9.12.2004)
- 2011 – 2012: Annual Meeting of the Southampton/Wessex Ultraound Initiative
- 2011: British Society of Immunology (BSI) annual meeting, Liverpool; Organisation of the parallel session “Molecular and Clinical Interfaces of iNKT cells”
- 2012: Antigen Processing and Presentation in Health and Disease, 15.-16.11.2012, Luxembourg

13. Teaching and seminar activities

Teaching Medicine and Biology students

- **Curriculum lectures for Medical and Biology students (in German and English)**
 - Basic Immunology (University of Bern, 3rd year Biology students; University of Southampton, PhD students)
 - Basic immunology (Southampton, BIOL3037 course, since 2008: Autoimmunity; Autoinflammation; NK cells; CD1 & iNKT cells; Mucosal Immunology)
 - Rheumatology & Clinical immunology (Southampton, 3rd year Medical students: Immunology of Pregnancy; 5th year Medical students: Vasculitis)
 - Rheumatology (Southampton, 5th year students: Rheumatological emergencies)
 - Protein biochemistry (University of Oxford, PhD students, 2001)
 - Molecular Immunology (Southampton, PhD students)
- **Problem based learning tutorials (PBL) and Clinical Skills (Bern, Southampton)**

Teaching health professionals

- **Meet the expert workshops** at Swiss Rheumatology Congress (e.g. on “Immundiagnostik”)
- **Key note teaching lectures** in clinical immunology at educational days
- **Book chapters in textbooks** of both Clinical Immunology and Rheumatology
- **invited lectures and seminars** on immunological and rheumatological topics (including inflammatory rheumatic diseases, immune regulation, immune deficiencies, antigen presentation, and others) for Rheumatologists, Immunologists, Biologists and Structural Biologists, General Practicioners, Chemists, Public Health doctors, and allied health professionals
- **Supervision of PhD students, MD students, and Postdoctoral Research Fellows**

Teaching Patients

- **Numerous lectures for patients** with vasculitides, connective tissue diseases and arthritis syndromes, e.g. for SLE regional patient group (Bern) and during the annual national patient day (“Nationaler Patiententag Konnektivitis & Vaskulitis”) which I initiated and organised during 5 years (2002-2007).

Lectures and seminars

- 4/11/2017: Napa, USA. CD1-MR1 conference. Invited plenary talk: "The hidden virtues of CD1b"
- 5/11/2016: Davos, Switzerland. MPA annual congress. Plenary talk. "Mucosal Rheumatology"
- 26/09/2016: Kuming, China. RICS Annual Meeting. "Concepts In Immunology"
- 17/05/2016: Zürich, Switzerland. Immunotolerance: Moving towards Clinical Application (invited talk): "Quantitative & qualitative changes of the iNKT repertoire in autoimmunity"
- 21/4/2016: Liestal, Switzerland. Plenary talk to Basel-County Rheumatologists. "History of Immunology"
- 01/4/2016: Berlin, Charité. Paradigm shift in early clinical development (View from Pharma R&D)
- 8/09/2015: Allschwil, Switzerland. Inflammatory Rheumatology – Learnings from real cases.
- 8/04/2015: University of Zürich, Switzerland. Invited talk. Immune communication via CD1 – from bench to bedside.
- 4/04/2014: Ancona, Italy. International Meeting "Systemic vasculitides: Biologic and therapeutic advances. Plenary talk: "GPA: An overview on key pathways targeted in current clinical trials"
- 25/06/2014: RehaClinic Bad Zurzach, invited seminar: "Einführung in das Immunsystem für Rheumatologen"
- 21/03/2014: Rheumazentrum Ruhrgebiet (Herne, Deutschland), invited teaching seminar for the "Deutsche Rheuma-Akademie; Kurs „Klinische Immunologie“: „Einführung in Struktur und Funktionsweise des Immunsystems"
- 14/06/2013: EULAR, Madrid, oral presentation: "Early Rheumatoid Arthritis (RA) is characterised by qualitative changes of the iNKT regulatory cell repertoire"
- 4/12/2013: British Society of Immunology, annual meeting, Liverpool. Plenary session: "Molecular basis of lipid antigen recognition by T-cells"
- 22/02/2013: 4th Cluster Symposium "Inflammation at Interfaces", Hamburg, invited lecture "New approaches to delete autoimmunity".
- 19/04/2013: Annual Meeting of the SSAI in Bern, Switzerland, "Immunity to infection" Symposium: Plenary lecture "Practical approach in a patient with cellular immunodeficiency"
- 14/01/2012: UC San Diego, 3rd global IGRA symposium. Invited keynote lecture "IGRA in the face of Immune Modifiers". The big island of Hawaii, Hilton Waikoloa.
- 06/02/2012: University of Würzburg/Germany, Institute for Virology and Immunobiology. Host: Professor Thomas Herrmann. Title: "lipid presenting CD1 proteins and the immune system: Jacks of all trades!"
- 06/03/2012: Speaking at the Institute of Infection and Global Health, Liverpool on "CD1 and CD1 specific T-cell responses".
- 09/03/2012: British Peripheral Nerve Society, Chilworth Manor, Southampton. Keynote lecture on "Small vessel vasculitis".
- 22/02/2012: 106th Annual Meeting of Association of Physicians (St Barts Hospital, London). Oral presentation on "Structural Elucidation of Lipid Antigen Presentation via CD1 Proteins".
- 15/04/2012: DGIM (Annual Meeting of the German Society of Internal Medicine), Wiesbaden, launch symposium for the new textbook "Klinische Immunologie". Title of the talk "Immunsystem im Wandel der Zeit".
- 02/05/2012: British Society of Rheumatology Congress, Glasgow; Industry Symposium (Qiagen/Cellestis). "Latent tuberculosis infection (LTBI) screening in autoimmune, immune-suppressed patients"
- 30/06/2012: Tokyo, Japan, Japanese IGRA Symposium
- 02/07/2012: Seoul, South Korea, Korean IGRA Symposium
- 20/09/2012: Bochum, Germany, Jahreskongress, Deutsche Gesellschaft für Rheumatologie (DGRh); invited lecture "Sekundäre Vaskulitiden bei Immundefekten".
- 21/09/2012: Annual Congress of the Swiss Rheumatology Society (SGR): Plenary lecture "Highlights in basic science"
- 24/09/2012: Zuerich Immunology Symposium: Antigen Presentation via CD1 proteins: From bedside to bench – and back!
- 26/09/2012: Novartis Seminar: Lipid antigen presenting CD1 proteins & their interaction with human T cells
- 15/11/2012: Antigen Processing and Presentation in Health and Disease, Luxembourg: Plenary lecture "The Story of TAP Deficiency Syndrome"

- 27/11/2012: Copenhagen, Rikshospital, Dept. of Pulmonary and Infectious disease: Screening of TB in the context of arthritis and new biologics drugs (Sponsor: Qiagen)
- 06/12/2012: Stadtsptal Triemli, Zurich/Switzerland: Symposium on Biologics and autoantibodies. Talk 1) „Antibodies: Structure, function and mechanisms of induction; Talk 2) Biological induced autoimmune disease”.
- 24/01/2011: University College London, Division of Infection and Immunity, Windeyer Institute UCL, invited seminar: "The innate hierarchy of human iNKT cells".
- 28/01/2011: Royal Society of Medicine, London TB Day. Plenary lecture (Host:, Cellestis)
- 04/03/2011: Oxford, Unipart Conference Centre. Supra-regional meeting in Rheumatology. Invited lecture: "ANCA vasculitis".
- 08/03/2011: AstraZeneca UK headquarters, Alderley Park, Manchester. Invited seminar "iNKT cells in cancer - lost in translation ?"
- 05/04/2011: Southampton, Faculty of Medicine, Division of Developmental Origins of Health and Disease (Host: Prof Chris Burns); invited seminar: "Potential role for iNKT cell-mediated tolerance as a cure for type 1 diabetes".
- 06/04/2011: Abbott Arena Nurse meeting_Antibodies in disease, "Antibodies – friend or foe ?"; Southampton University Hospital.
- 09/04/2011: Deutscher Pneumologen Kongress, Dresden/Germany, "IGRA Symposium". Invited lecture „IGRA in immunosuppressed patients“ (Cellestis).
- 10/05/2011: Chilworth Manor, Southampton, Masterclass Rheumatology. Invited lectures: "Spotting inflammatory arthritis" and "A Question of Joints".
- 01/06/2011: University of Cardiff, Dept of Medical Biochemistry and Immunology, BSI Seminar (Host: David Cole). Invited seminar "CD1d and its interaction with invariant NTK receptors - Facts and Fallacies"
- 17/06/2011: Wessex Neurology Meeting, Wessex Heartbeat Suite, SGH. Invited seminar "Small vessel vasculitides - Diseases requiring interdisciplinary management"
- 21/06/2011: Norton Park, UK. Protocols in Practice Meeting. Invited lecture "Investigations & the role of ultrasound" (UCB Pharma)
- 09/09/2011: Swiss Rheumatology Congress. Invited plenary lecture "Highlights in Basic Rheumatology" (congress: "Meet the expert workshop: Immundiagnostik" (on 8.9. and 9.9.2011), as well as an "Interactive session on Rheumatoid Arthritis" on 9.9.2011).
- 12/09/2011: Cellestis global Meeting, Berlin, Hotel Adlon. Invited plenary lecture. Title: "Detection of antigen specific Interferon- γ secretion in immunosuppressed patients – A Rheumatologist's view".
- 16/09/2011: Institute for Life Sciences, Southampton. Invited lecture for the launch meeting of the crystallography unit: "Protein structures – the crystal balls of medicine".
- 21/10/2011: Forschungszentrum Borstel (Leibnitz Institut), Germany. Invited seminar „Lipid Antigen Presentation via CD1 Proteins“.
- 10/11/2011: TB Day (IGRA ECHO meeting), Utrecht/NL. Invited plenary lecture: „TB testing before TNF α blocker therapy”.
- 25/11/2011: Imperial College London, Hammersmith Campus (Host: Prof Danny Altman). Invited seminar: "CD1 antigen presentation of lipid antigens".
- 07/12/2011: Annual Congress of the British Society of Immunology (BSI), Liverpool/UK, parallel session "Molecular & Clinical Interfaces of iNKT cells", keynote lecture: "Molecular basis of CD1d-iNKT receptor interaction".
- 09/12/2010: Annual Congress of the British Society of Immunology (BSI), Liverpool/UK. Oral presentation "Natural Variations in the "invariant" CDR3a loop modulate the binding of human iNKT receptors to CD1d"
- 12/10/2010: Birmingham RCUK Cancer Centre, University of Birmingham, Edgbaston. Invited seminar "Human iNKT cells: Adaptive or Innate - or both?"
- 29/09/2010: University Hospital Southampton: National Paediatric&Adult Specialist Training Day, "CD1 molecules in Immune tolerance and host defence"
- 28/09/2010: University Hospital of Dublin/Ireland. Invited seminar "IGRA testing for latent tuberculosis in immunosuppressed autoimmune patients"

- 21/09/2010: Weatherall Institute of Molecular Medicine, John Radcliffe Hospital Campus, University of Oxford; Immunology Seminar series (plus student session afterwards). Invited seminar "Human iNKT cell receptors – some are more equal than others".
- 10/09/2010: Annual Congress of the Swiss Rheumatology Society (SGR), Fribourg/Switzerland. Invited lecture "Meet the expert: Immundiagnostik in der Praxis" (2 sessions).
- 29/01/2010: Dept. of Experimental Rheumatology, Addenbrookes Hospital Campus, University of Cambridge (Host: Professor Hill Gaston), invited seminar "Invariant NKT cell receptors : innate-type recognition with an adaptive gear".
- 20/01/2010: University Hospital Southampton, RCPATH_Clin Immunol Training Day_CD1 antigen presentation
- 14/01/2010: Annual educational meeting of the Swiss Rheumatology Society (SGR), Bern. keynote lecture "Immundiagnostics"
- 18/06/2009: Imperial College, Dept. of Immunology, John Humphrey Seminars, Royal Free Hospital London/UK (Host: Prof. H. Stauss). Invited seminar "The HIGHS & LOWs of iNKT cells"
- 03/06/2009: University Medical Center Groningen/NL. Invited seminar "CD1 antigen presentation".
- 07/05/2009: Clinical Immunology Day, Bern/Switzerland. Keynote lecture "Immunology 2007-2009"
- 04/03/2009: Miltenyi Biotech, Bergisch-Gladbach/Germany. Invited seminar „ CD1 antigen presenting molecules: New opportunities for diagnosis & treatment “
- 20/02/2009: UCB Pharma, Headquarter Slough/London/UK. Invited seminar "Targets for Immunotherapy: A Rheumatologist's view"
- 18/10/2008: European Society of Immunodeficiency (ESID) bi-annual congress, Den Bosch/NL. Oral presentation "Insights into the Peptide-loading Complex"
- 07/10/2008, University of Groningen/NL, plenary session, Top Master PhD programm. Invited keynote lecture „CD1d-restricted NKT cells in Autoimmunity & Tolerance – the missing link?"
- 16/09/2008, University Hospital of Basel/Switzerland, Dept. of Internal Medicine. Invited seminar "Wegener's Granulomatosis: Essentials and recent developments"
- 11/01/2008, Annual Meeting of the Swiss Society of Allergology and Immunology, Grindelwald/CH. Invited plenary lecture "The pathogenesis of Wegener's Granulomatosis"
- 12/09/2007: Annual Congress of the Swiss Society of Rheumatology (SGR), Interlaken. Key note lecture "Highlights in Immunology 2007"
- 04/07/2007: University Hospital Aarau, Switzerland. Invited seminar „Adult Immunodeficiency syndromes"
- 15/03/2007: CCR congress, Mannheim/Germany. plenary lecture „QuantiFERON TB-Gold als diagnostisches Tool in immunsupprimierten Patienten"
- 23/02/2007: Annual Congress of the British Society of Immunology (BSI), Glasgow/Scotland. Oral presentation "CD1d Recognition by iNKT cells"
- 10/01/2007: University of Cardiff, Immunology Dept, Cardiff/UK. Invited seminar "Invariant NK T cell Receptors – Between Innate and Adaptive"
- 31/10/2006: Klinik Obach/Switzerland. Invited seminar "Adult Immunodeficiency Syndromes"
- 09/05/2006: Institute for Microbiology, ETH Hönggerberg/Zürich (Host: Prof A. Oxenius). Invited seminar "Anatomy of Lipid Antigen Recognition by T-Lymphocytes"
- 27/04/2006: Berner Fortbildungskurs für Rheumatologen. Plenary lecture „ANCA"
- 15/02/2006 : Institute de Pharmacologie et de Biologie Structurale, Toulouse/France. Invited seminar "Recognition of glycolipid antigens by CD1-restricted T-cell receptors"
- 19/01/2006: SGR-Fortbildungstagung, Bern/Switzerland. Plenary lecture „Diagnostik der latenten Tuberkulose bei immunsupprimierten Patienten"

- 17/11/2005: Fortbildung für die Berner Rheumatologen, Muensingen/Switzerland „Adulte Immundefekte – Einführung anhand von klinischen Fällen“
- 30/10/2005: Bern Immunology Club, Switzerland. Invited seminar „interaction of T-cell receptors with human CD1d“
- 07/10/2005: Leipzig Institut, Forschungszentrum Borstel, Schleswig-Holstein/Germany (Host: Prof. U. Zähringer), invited seminar „CD1, Lipids, and T-lymphocytes“
- 28/04/2005: 1. Berner Fortbildungskurs Klinische Immunologie & Rheumatologie, Bern. Keynote lecture „Was der Rheumatologe über Autoimmunität wissen muss“
- 04/03/2005: Annual Meeting of the Swiss Society of Allergy and Immunology (SSAI/SSPT), Bern/Switzerland. Plenary lecture “CD1 restricted T cells and immune regulation”
- 27/01/2005: Berner Diabetes Symposium, Bern/Switzerland. Plenarvortrag „Diabetes assoziierte Probleme des Bewegungsapparates“
- 17/09/2004: Annual Congress of the SGR/SGM, Locarno/Switzerland, oral presentation “T cell Receptors of human lipid specific T lymphocytes bind with different affinities to CD1d-complexes loaded with glycosylceramides of identical hydrophilic headgroup but different sphingosine chain length”
- 16/09/2004: Annual Congress of the SGR/SGM, Locarno/Switzerland. Oral presentation “QuantiFeron TB-Gold ELISA – A new diagnostic test to distinguish memory immune responses against M.tuberculosis or M.bovis Bacille Calmette-Guerin (BCG) can be used in immunosuppressed autoimmune patients”
- 3/2002: Institute of Molecular Medicine (IMM), John Radcliffe Hospital, Oxford/UK, oral presentation to the IMM’s external advisory board of the Institute of Molecular Medicine, representing the Tumour Immunology Division “Antigen presentation by CD1 molecules”
- 09/2001: Weatherall Institute of Molecular Medicine, University of Oxford/UK, Friday seminar series (Host: Prof. A. McMichael), invited seminar “New views on CD1”
- 02/2001: Human Immunology Unit annual meeting, Trinity College, University of Oxford/UK, oral presentation “CD1-tetramers for analysis of glycolipid specific T lymphocytes”
- 10/2000: Dept. of Biochemistry, University of Dundee/Scotland (Host: Prof M. Ferguson). Invited seminar “CD1 Molecules and lipid antigen presentation to T cells”