

Curriculum Vitae

ANDREAS SCHERER PH.D.

Finland

E-mail : Andreas.Scherer@Helsinki.fi

Phone : +358 (0)50 448 7257

EMPLOYMENT

- **National Coordinator Finland EATRIS**
EATRIS European Research Infrastructure for Translational Medicine
09/2014- present
Co-Chair EATRIS Biomarker Platform
Chair, EATRIS Quality Initiative
- **Project Director – Biomarkers and Molecular Diagnostics**
Institute for Molecular Medicine Finland
09/2014-present
- **Manager, Bioinformatics**
Australian Genome Research Facility (AGRF); Melbourne, Australia
05/2011 until 01/2013
- **BM Expert-Computational biologist**, Novartis AG, Basel, Switzerland,
Immunology/Transplantation/Autoimmune Diseases; International Project Team Manager
Biomarker Development/Integrative Expression Profiling;
09/2004 until 07/2007
- **Computational biologist**, Novartis Research Foundation, Switzerland, Biomarker
Development/Integrative Expression Profiling, Group of S.D. Chibout MD, PhD,
06/2003 to 08/2004
- **Postdoctoral Associate**, Novartis Pharma AG, Switzerland, Transplantation & Immunology
BU Molecular Biology Group, Laboratory of F. Raulf, Ph.D.,
03/2000 to 05/2003

COMPANY

- Founder/CEO of « **Spheromics** », a service provider for
 - scientific writing,
 - biomarker development consultancy
 - –omics data analysis training;09/2007 until present

EDUCATION

- **Postdoctoral Associate**, University of Texas, Dallas, TX, USA, Southwestern Medical Center (UTSW), Center for Developmental Biology and the Center for Oncology, Laboratory of J. M. Graff, Assistant Professor, 07/1997 to 08/1999
- **Ph.D.**, Molecular Biology, Max-Planck-Institute for Immunobiology, Germany, Department for Developmental Biology, Laboratory of R. Kemler, Professor, 1997
PhD thesis: Cadherins and Catenins in the early development of the zebrafish *Danio rerio*
- **Master of Science**, Genetics, University of Cologne, Germany, and Max-Planck-Institute for Immunobiology, Germany Department for Immunology, Laboratory of M. Reth, Professor, 1992
Diploma thesis: Analysis of the genomic murine Igk-RS region by cloning and exon trapping.

EDITOR/REVIEWER

- Advisory Board Member of Open Access Bioinformatics, since 2012
- Editorial Board Member of World Journal of Transplantation, since 2012
- Cancer letters, 2012-present
- Nephrology, Dialysis, Transplantation, 2009-present
- Biotechniques, 2003 to 2004
- Occasional reviewer for other journals

PROFESSIONAL AFFILIATIONS

Scholarly Societies

- International Society for Computational Biology (ISCB)
- The Transplantation Society (TTS)
- European Renal Association (ERA)
- American Society for Cell Biology (ASCB)
- Society for Developmental Biology (SDB)
- Australasian Microarray and Related Technologies Association (AMATA)
 - Executive committee member 2011 -2013
- European Medical Writer Association (EMWA)

Refereed Publications

(a) Journals

- 1) Aittokallio T, **Scherer A**, Poutanen M, and Freedman L. “Matched preclinical designs for improved translatability“. *Science Transl Med.*, 2017
- 2) Marti H-P, Jeffs A, **Scherer A**, Leader J, Leader C, Bedford J, Walker R. “Renal Fibrosis mRNA Classifier: Validation in Experimental Lithium-induced Interstitial Fibrosis in the Rat Kidney”. *PLoS ONE*, 2016, 11(12):e0168240. doi: 10.1371/journal.pone.0168240. eCollection 2016.
- 3) Eikrem OS, Strauss P, Beisland C, **Scherer A**, Landolt L, Flatberg A, Leh S, Beisvag V, Skogstrand T, Hjelle K, Shresta A, Marti HP. Development and confirmation of potential gene classifiers of human clear cell renal cell carcinoma using next-generation RNA sequencing. *Scand J Urol.* 2016 Dec;50(6):452-462.
- 4) Ø. Eikrem, C. Beisland, K. Hjelle, A. Flatberg, **A. Scherer**, L. Landolt, T. Skogstrand, S. Leh, V. Beisvag, and H.P. Marti. “Transcriptome Sequencing (RNAseq) enables utilization of Formalin-Fixed, Paraffin-Embedded biopsies with Clear Cell Renal Cell Carcinoma for Exploration of Disease Biology and Biomarker Development”, *PLOS ONE*, 2016 Feb 22;11(2):e0149743. doi: 10.1371/journal.pone.0149743. PMID: 26901863
- 5) Kenneth Finne, Hans-Peter Marti, Sabine Leh, Trude Skogstrand, Heidrun Vethe, Olav Tenstad, Frode S. Berven, **Andreas Scherer**, Bjørn Egil Vikse. “Proteomic analysis of normal or minimally damaged renal tubular tissue demonstrates extensive changes in two-kidney-one-clip hypertensive rats”, *Nephron* 2016; 132(1):70-80. doi: 10.1159/000442825; PMID: 26745798
- 6) Heidrun Vethe, Kenneth Finne, Trude Skogstrand, Marc Vaudel, Bjørn E. Vikse, Michael Hultström, Sandrine Placier, **Andreas Scherer**, Olav Tenstad, Hans-Peter Marti. “Distinct protein signature of hypertension-induced damage in the renal proteome of the two-kidney, one-clip (2K1C) rat model.” *J Hypertens.*, 2015 Jan;33(1):126-35. doi: 10.1097/HJH.0000000000000370. PMID: 25304470
- 7) Nicole Hartmann, Evert Luesink, Edward Khokhlovich, Joseph D. Szustakowski, Lukas Baeriswyl, Joshua Peterson, **Andreas Scherer**, Nirmala R. Nanguneri, Frank Staedtler. “The use of haplotype-specific transcripts improves sample annotation consistency.” *Biomarker Research* 2014;2:17. PMID:25285214.
- 8) Martin Letzkus, Evert Luesink, Sandrine Starck-Schwartz, Marc Bigaud, Fareed Mirza, Nicole Hartmann, Bernhard Gerstmayer, Uwe Janssen, **Andreas Scherer**, Martin Schumacher, Aurelie Verles, Alessandra Vitaliti, Nanguneri Nirmala, Keith J Johnson, Frank Staedtler. “Gene expression profiling of immunomagnetically separated cells directly from stabilized whole blood for multicenter clinical trials.” *Clinical and Translational Medicine* 2014; 3:36.
- 9) Marti H-P, Fuscoe JC, Kwekel JC, Anagnostopoulou A, and **Scherer A**. Metzincins and related genes (MARGS) in experimental renal aging: towards a unifying fibrosis classifier across species. *Nephrology Dialysis Transplantation (NDT)*, 2014, Feb 24, PMID: 24569495
- 10) Su Z.Q., Labaj P., Li S.,...**Scherer, A.**,...Shi L. “Power and Limitations of RNA-Seq”, *The SEQC Consortium, Nature Biotechnology*, 2014;32(9):903-914.
- 11) Wang C., Gong B.,...,**Scherer A.**,...,Tong W. “A comprehensive study design reveals treatment- and abundance-dependent concordance between RNA-Seq and microarrays”, *The SEQC consortium, Nature Biotechnology*, 2014;32(9):926-932.

- 12) Borchers C, Kast J, Foster L, Siu M, Overall CM, Binkowski A, Hildebrand W, **Scherer A**, Mansoor M, Keown P for the Human Proteome Organization Chromosome 6 Consortium. "The human proteome organization chromosome 6 consortium: integrating chromosome-centric and biology/disease driven strategies", *J Proteomics*. 2014; 100: 60-67.
- 13) **Andreas Scherer** (editorial). "Clinical and Ethical Considerations of Massively Parallel Sequencing Applications in Transplantation Science". *World Journal of Transplantation* 2013, Dec 24;3(4):62-7. doi: 10.5500/wjt.v3.i4.62.
- 14) Frank Staedtler, Nicole Hartmann, Martin Letzkus, Sandrine Bongiovanni, **Andreas Scherer**, Philippe Marc, Keith J Johnson, and Martin M Schumacher. "Robust and tissue independent gender-specific transcript biomarkers", *Biomarkers*. 2013 Aug;18(5):436-45.
- 15) **Andreas Scherer**, Oliver P. Günther, Robert F. Balshaw, Zsuzsanna Hollander, Janet Wilson McManus, Raymond Ng, W. Robert McMaster, Bruce M. McManus, Paul A. Keown, for the Biomarkers in Transplantation Group. "Alteration of Human Blood Cell Transcriptome in Uremia", *BMC Med Genomics*. 2013 Jun 28; 6(1):23.
- 16) Jensen JM, **Scherer A**, Wanke C, Braeutigam M, Bongiovanni S, Letzkus M, Staedtler F, Kehren J, Zuehlsdorf M, Schwarz T, Weichenthal M, Foelster-Holst R, Proksch E. "Gene expression is differently affected by pimecrolimus and betamethasone in lesional skin of atopic dermatitis." *Allergy* 2012; 67(3):413-23.
- 17) Jensen JM, Ahrens, K, Meingassner J, **Scherer A**, Braeutigam M, Stuetz A, Schwarz T, Foelster-Holst R, Harder J, Glaeser R, Proksch E. "Differential suppression of epidermal antimicrobial protein expression in atopic dermatitis and in EFAD mice by pimecrolimus compared to corticosteroids." *Exp Dermatol*. 2011; 20(10): 783-8.
- 18) S Roedder, **A Scherer**, M Koerner, H-P Marti "A Subset of Metzincins and Related Genes Constitutes a Marker of Human Solid Organ Fibrosis". *Virchows Archives, European Journal of Pathology*, 2011, 458(4): 487-496.
- 19) L Shi, G Campbell, WD Jones,..., **A Scherer**,..., R Wolfinger "The MAQC-II study of common practices for the development and validation of microarray-based predictive models". *Nature Biotechnology*, 2010; 28: 827-838.
- 20) J. Luo, M. Schumacher, **A. Scherer**, D. Sanoudou, D. Megherbi, T. Davison, T. Shi, W. Tong, L. Shi, H. Hong, C. Zhao, F. Elloumi, W. Shi, R. Thomas, S. Lin, G. Tillinghast, G. Liu, Y. Zhou, D. Herman, Y. Li, Y. Deng, H. Fang, P. Bushel, M. Woods, J. Zhang "A Comparison of Batch Effect Removal Methods for Enhancement of Cross-Batch Prediction Performance Using MAQC-II Microarray Gene Expression Data". *The Pharmacogenomics Journal*, 2010; 10: 247-257.
- 21) S. Rödder, **A. Scherer**, M. Körner, U. Eisenberger, A. Hertig, F. Raulf, E. Rondeau, H.-P. Marti "Meta-Analyses Qualify Metzincins and Related Genes as Acute Rejection Markers in Renal Transplant Patients". *American Journal of Transplantation*. 2009; 10: 286-297.
- 22) Guenther O.P., Balshaw R.F., **Scherer A.**, Hollander Z., Mui A., Triche T., Cohen-Freue G., Li G., Ng R., Wilson-McManus J., McMaster W.R., McManus B.M., Keown P.A. "Functional Genomic Analysis of Peripheral Blood During Early Acute Renal Allograft Rejection." *Transplantation*, 2009; 88: 942-51.
- 23) **Scherer A.**, Gwinner W., Mengel M., Kirsch T., Raulf F., Szustakowski JD., Hartmann N., Staedtler F., Engel G., Klupp J., Korn A., Kehren J., Haller H. "Transcriptome Changes in Renal Allograft Protocol Biopsies at Three Months Precede the Onset of Interstitial Fibrosis/Tubular Atrophy (IF/TA) at Six Months" *Nephrology Dialysis Transplantation*, 2009;24(8):2567-75

- 24) S. Rödder, **A. Scherer**, F. Raulf, C.C. Berthier, A. Hertig, L. Couzi, E. Rondeau, H.-P. Marti
 - a. “Renal Allografts with Interstitial Fibrosis/Tubular Atrophy (IF/TA) display Distinctive Expression Profiles of Metzincins and Related Genes”. *American Journal of Transplantation*. 2009; 9: 517-26.
- 25) Cohen Freue GV, Hollander Z, Shen E, Zamar RH, Balshaw R, **Scherer A**, McManus B, Keown P, McMaster WR, Ng RT “MDQC: a new quality assessment method for microarrays based on quality control reports.” *Bioinformatics*. 2007 Dec 1;23(23):3162-9. Epub 2007 Oct 12
- 26) Papoian R, **Scherer A**, Saulnier M, Staedtler F, Cordier A, Legay F, Maurer G, Staeheli J, Vonderscher J, and Chibout SD: Velocegenomics: “An Accelerated In-vivo Drug Discovery Approach to Rapidly Predict the Biologic, Druglike Activity of Compounds, Proteins or Genes”. *Pharm Res*. 2005 Oct; 22(10):1597-613
- 27) **Scherer A.**, Krause A., Walker J.R, Sutton S.E., Seron D., Raulf F., Cooke M.P: “Optimized Protocol for Linear RNA Amplification and Application to Expression Profiling of Human Renal Biopsies”, *BioTechniques* 34:546-556, 2003
- 28) **Scherer A.**, Krause A., Walker J., Korn A., Niese D., Raulf F. “Early Prognosis of the Development of Renal Chronic Allograft Rejection by Gene Expression Profiling of Human Protocol Biopsies”, *Transplantation*, 75:1323-1330,2003
- 29) **Scherer A.**, and Graff, J. M. “Calmodulin Differentially Modulates Smad1 and Smad2 Signaling”, *Journal of Biological Chemistry*, 275, (2000), pp. 41430-41438.
- 30) Apel T. W., **Scherer A.**, Adachi T., Auch D., Ayane M. and Reth M. “The ribose 5-phosphate isomerase-encoding gene is located immediately downstream from that encoding murine immunoglobulin k”. *Gene*, 156 (1995), pp 191-197.

(b) Conference Proceedings

- Scherer A**, Gwinner W, Kirsch T, Mengel M, Szustakowski JD, Engel G, Klupp J, Kehren J, Haller H. “Early Signs of Immune Response and Pro-Fibrotic Events in Renal Allograft Protocol Biopsies Three Months before Chronic Allograft Damage”. *American Journal of Transplantation*, Supplement 2, 7 (2007), p.181
- Bergling S, Gwinner W, Schuierer S, Engel G, Klupp J, Kehren J, Mengel M, Haller H, **Scherer A.** “Gene Signature of Early Micro-Calcification in Serial Allograft Biopsies by Network Analysis“. *American Journal of Transplantation*, Supplement 2, 7, (2007), p. 274
- Scherer A.**, and Graff J. M. “Calmodulin Differentially Modulates Smad1 and Smad2 Signaling”, *Molecular Biology of the Cell*, 11:s, (2000), p. 59a

(c) Abstracts/Posters

- O.S. Eikrem, C., Beisland, K., Hjelle, A. Flatberg, **A. Scherer**, T. Skogstrand, S. Leh, V. Beisvag, H.-P. Marti. Next-generation sequencing of clear cell renal carcinoma: A pairwise comparison of RNAseq data from FFPE vs RNAlater® stored kidney biopsies. 30th Annual Congress European Association of Urology 2015
- Hans-Peter Marti, James C. Fuscoe, Joshua C Kwekel, Aikaterini Anagnostopoulou and **Andreas Scherer**. “Fibrosis of Kidneys and of Other Solid Organs: Towards a Unifying Classifier Across Species”. ASN Kidney Week 2013 Annual Meeting, November 7-10 in Atlanta, GA, USA.

- A. Anagnostopoulou, **A. Scherer**, A. Jeffs, J. Bedford, J. Leader, R. Walker, H.-P. Marti. "Solid Organ Fibrosis: Evidence for a Common Pathway Across Species. Swiss Society of Nephrology, Zuerich, CH, December 5-7, 2012.
- Marti HP, Jeffs A, **Scherer A**, Leader J, Bedford J, Davis G, Anagnostopoulou A, Walker R. "Solid Organ Fibrosis: Evidence for a Common Pathway Across Species." Translational Nephrology, Queensland Molecular Biology Conference, Auckland, NZ, August 24-25, 2012.
- V. Whitehall, T. Dumenil, **A. Scherer**, M. Ruvolo, S. Greco, A. Mould, G. Boyle, B. Leggett. "DNA methylation signatures in colorectal cancer". Epigenetics, Adelaide, May 7-9, 2012.
- Anagnostopoulou A, Walker R, Jeffs A, **Scherer A**, Leader J, Bedford J, Davis G, and Marti HP. "A subset of metzincins and related genes constitutes a marker of solid organ fibrosis across species." Society of General Internal Medicine, SGIM, Basel, CH, May 9-12, 2012
- Andreas Scherer**, Jens-Michael Jensen, Matthias Braeutigam, Thomas Schwarz, Regina Foelster-Holst, Ehrhardt Proksch "Gene expression profiles are differently affected by pimecrolimus and betamethasone in lesional skin in atopic dermatitis". European Society of Dermatological Research (ESRD), September 8-11, 2010, Helsinki, Finland
- S Roedder, **A Scherer**, M Koerner, H-P Marti "Successful Cross-Organ Classification of Fibrosis based on Microarray Metaanalysis applying a Classifier Model of Renal Transplant IF/TA". XXIII International congress of The Transplantation Society, Vancouver, BC, Canada, August 15-19, 2010
- S Roedder, **A Scherer**, F Raulf, C Berthier, A Hertig, E Rondeau, H-P Marti "Extracellular Matrix related Transcript-Sets for the Identification and Classification of Acute Rejection in Human Renal Allografts. Kongress fuer Nephrologie, 26-29.9.2009, 1. Jahrestagung der Deutschen Gesellschaft fuer Nephrologie
- Paul Keown, **Andreas Scherer**, Oliver Günther, Robert Balshaw, Raymond Ng, Zsuzsanna Hollander, Robert McMaster and Bruce McManus "The Longitudinal Pattern of Differential Gene Expression Within the First 3 months Following Renal Transplantation" American Transplant Congress, May 30-June 3 2009, Boston, MA, USA
- S Roedder, **A Scherer**, F Raulf, C Berthier, A Hertig, E Rondeau, H-P Marti "Renal Allografts with Unspecific Chronic Dysfunction are Characterized by Distinct Expression Profiles of Metzincins and Related Genes" International Society of Nephrology Nexus Symposium on Transplantation and the Kidney, Rome, Italy from September 25 - 28, 2008
- Silke Roedder, **A Scherer**, F Raulf, C Berthier, A Hertig, E Rondeau, H-P Marti "Differential Expression of Metzincins and Related Genes, including MMP7, MMP9 and THBS2, discriminates Acute Renal Allograft Rejection from Chronic Allograft Dysfunction" American Society of Nephrology, Renal Week Nov 4-9, 2008, Philadelphia, PA
- Scherer A**, Wanke C, Jensen JM, Braeutigam M,..., Proksch E "Differential impact of pimecrolimus and betamethasone treatment on gene expression profile on atopic dermatitis". Society for Investigative Dermatology, 2007, Los Angeles, CA
- Scherer A**, Gwinner W, Kirsch T, Mengel M, Szustakowski JD, Engel G, Klupp J, Kehren J, Haller H. "Early Signs of Immune Response and Pro-Fibrotic Events in Renal Allograft Protocol Biopsies Three Months before Chronic Allograft Damage". American Society for Transplantation, 2007
- Bergling S, Gwinner W, Schuierer S, Engel G, Klupp J, Kehren J, Mengel M, Haller H, **Scherer A**. "Gene Signature of Early Micro-Calcification in Serial Allograft Biopsies by Network Analysis". American Society for Transplantation, 2007

- Scherer A**, Grass P, Hartmann N, Kirsch T, Gwinner W, Mengel M, Marti HP, Kehren J “Biomarker in Transplantation: from genomics to Systems Biology”; Keystone Symposia 2006
- Scherer A**, Grass P, Kirsch T, Gwinner W, Mengel M, Haller H, and Kehren J: “Predictive Biomarkers of Chronic Renal Allograft Nephropathy”. Keystone 2006, Victoria, BC, “Emerging Genomic Biomarkers: Impact on Drug Discovery and Clinical Practice”
- Garami A, Firat H, **Scherer A**, Cordier A. and Chibout SD. “Gene expression profiling of in vivo responses to IL-6 type cytokines”, Intl. Conf. on Basic and Clinical Immunogenomics Budapest, Hungary, 3–7 October, 2004
- Scherer A**, Grass P, Kirsch T, Gwinner W, Mengel M, Haller H, and Kehren J “Early Prediction of the Development of Renal Chronic Allograft Rejection by Gene Expression Profiling of Protocol Biopsies”. Keystone Symposium. Functional Genomics: Global Analysis of Complex Biological Systems; Santa Fe, NM, February 2004
- “Early Prediction of the Development of Renal Chronic Allograft Rejection by Gene Expression Profiling of Protocol Biopsies”, Abstract, 4th Congress of the International Transplant Coordinators Society, in conjunction with the Canadian Association of Transplantation (CAT) and CST, Lake Louise, Alberta, Canada, March 19-22, 2003.
- Scherer A**, Krause A, Walker JR, Korn A, Raulf F “Transcriptomic Approaches for Prognosis and Diagnosis of Renal Chronic Allograft Rejection”. Abstract, Seventh Banff Conference of Allograft Pathology, Aberdeen, Scotland, 14th-18th, June 2003
- Scherer A.**, and Graff J. M. “Calmodulin Differentially Modulates Smad1 and Smad2 Signaling”, 40th Annual Meeting of the American Society for Cell Biology, San Francisco, CA, Dec. 2000

(d) Presentations

- Scherer A.** Irreproducibility in biomarker research and clinical development: A global challenge. 7th Conference and Expo Molecular & Cancer Biomarkers, Berlin, Germany; Sept 2016
- Scherer A.** Biomarkers- Discovery, Validation, and Commercialization. International Workshop, Palermo, Italy, 26-27. Nov. 2015. Fondazione Ri.med
- Scherer A.** Introduction to Gene Expression Profiling for Biomarker Discovery. Renal Research Workshop, Dunedin, Otago, 11/2012.
- Anagnostopoulou A, Walker R, Jeffs A, **Scherer A**, Leader J, Bedford J, Davis G, and Marti HP. “A subset of metzincins and related genes constitutes a marker of solid organ fibrosis across species.” ERA-EDTA Congress, Paris, France, May 24-27, 2012
- Oliver P. Günther, **Andreas Scherer**, David Lin, Raymond T. Ng, Robert F. Balshaw, Gabriela Cohen-Freue, Virginia Chen, Mandeep Takhar, Zsuzsanna Hollander, W. Robert McMaster, Bruce M. McManus and Paul A. Keown for the Biomarkers in Transplantation (BiT) Team, University of British Columbia, Vancouver, BC, Canada “Classification of acute renal rejection with proteogenomic ensemble classifiers.”, The Transplantation Society, XXIII World Congress, August 15-19, 2010
- S. Roedder, **A. Scherer**, H.-P. Marti, ”Expression Signatures of Extracellular Matrix Related Transcript Sets Linked Renal Allograft Interstitial Fibrosis/Tubular Atrophy with Acute T-cell

mediated Rejection”, Oral Presentation, 1st International Conference on Transplantomics and Biomarkers in Organ Transplantation, San Francisco, 24.-26.Feb 2010

Scherer A, Gwinner W, Kirsch T, Mengel M, Szustakowski JD, Engel G, Klupp J, Kehren J, Haller H. “Early signs of immune response and pro-fibrotic events in renal allograft protocol biopsies three months before chronic allograft damage”. American Transplant Congress 2007

Bergling S, Gwinner W, Schuierer S, Kirsch T, Mengel M, Haller H, **Scherer A**. „Detection of early onset of micro-calcification after renal transplantation by Relevance Network analysis”. American Transplant Congress 2007

Scherer A, Grass P, Kehren J, Chibout SD, Beauregard L, Engel G, Korn A, Hartmann N, Staedtler F, Kirsch T, Gwinner W, Mengel M, Schwarz A, Haller H. “Leveraging Molecular Tools And Novel Analysis Strategies for the Differential Analysis of Allograft Rejection.” Eighth Banff Meeting on Allograft Pathology, Edmonton, Alberta, July 2005.

“Early Prediction of the Development of Renal Chronic Allograft Rejection by Gene Expression Profiling of Protocol Biopsies. XIX International Congress of the Transplantation Society, Miami, USA, August 25-30, 2002

Books

“Batch effects and Noise in Microarray Experiments: Sources and Solutions”, **Andreas Scherer** (Editor), John Wiley and Sons, 2009, ISBN: 978-0-470-74138-2

Book Chapters

“Impact of Experimental Noise and Annotation Imprecision on Data Quality in Microarray Experiments”, authors: **Andreas Scherer**, Fan Meng, Manhong Dai, in “Statistical Methods for Microarray Experiments”, 2013, pp. 155-176, Springer Protocols, Methods in Molecular Biology, Humana Press, editor: A. Yakovlev, L. Klebanov., D. Gaile, ISBN 978 1 60327 336 7

“Variation, Variability, Batches and Bias in Microarray Experiments: An Introduction”, **Andreas Scherer**, in “Batch effects and Noise in Microarray Experiments: Sources and Solutions”, **Andreas Scherer** (Editor), John Wiley and Sons, 2009, ISBN: 978-0-470-74138-2, p. 1-4.

“Aspects of Technical Bias”, Martin Schumacher, Frank Staedtler, Wendell Jones, and **Andreas Scherer**, in “Batch effects and Noise in Microarray Experiments: Sources and Solutions”, **Andreas Scherer** (Editor), John Wiley and Sons, 2009, ISBN: 978-0-470-74138-2, p. 51-60.

“Toward Integration of Biological Noise: Aggregation Effect in Microarray Data Analysis”, Lev Klebanov and **Andreas Scherer**, in “Batch effects and Noise in Microarray Experiments: Sources and Solutions”, **Andreas Scherer** (Editor), John Wiley and Sons, 2009, ISBN: 978-0-470-74138-2, p. 183-190

“Data, Analysis, and Standardization”, Gabriella Rustici, **Andreas Scherer**, and John Quackenbush, in “Batch effects and Noise in Microarray Experiments: Sources and Solutions”, **Andreas Scherer** (Editor), John Wiley and Sons, 2009, ISBN: 978-0-470-74138-2, p. 215-230.

“Clinical Validation and Biomarkers Translation”, David Lin, **Andreas Scherer**, Raymond Ng, Robert Balshaw, Shawna Flynn, Paul Keown, Rob McMaster, and Bruce McManus, in: “Biomarkers in Drug Development: A Handbook of Practice, Application, and Strategy”; editor Bleavins Michael R., Carini Claudio, Jurima-Romet Mallé, and Rahbari Ramin (eds.) Wiley and Sons Inc. 2010; ISBN 978-0-470-16927-8

PATENTS

- “Methods of Diagnosing Rejection of a Kidney Allograft Using Genomic or Proteomic Expression Profiling”,
Paul Keown, **Andreas Scherer**, Oliver Gunther, Robert Balshaw, Raymond Ng, Alice Mui, Robert McMaster, Bruce Mcmanus, Freue Gabriela Cohen, Anna Meredith with Biomarkers in Transplantation Group, UBC, Vancouver, CA;
WO 2009143624 A1; published 2010;
US/30.05.08/USO 129022; Application No/Patent No. 09753385.5 – 1222 PCT/CA2009000744
- “Predictive Biomarkers of Chronic Allograft Nephropathy”
Andreas Scherer
WO 2007112999 A2; US 20100022627 A1; published 2007;
DV-50143P1
- “Identification of Phospholipase A2 as a Target in Cancer Treatment, with Special Emphasis on Colorectal Cancer and Its Mechanism of Action”
Andreas Scherer, Ruben Papoian,
WO 2006076414 A3; published 2007;
International Patent Application DV/4-34117A/USN
- “Use of organic compounds for the manufacture of a medicament for use in the treatment of a disease or condition associated with iron imbalance or iron transport”,
Ruben Papoian, **Andreas Scherer**
WO2006062973 A2; published 2006
- “Secreted polypeptide species associated with cardiovascular disorders”
Argoud Guilaine-Puy, Bederr Nassima, Bougueleret Lydie, Isabelle Cusin, Organic Eva, Anne Niknejad, Papoian Ruben, Reffas Samia, Keith Rose, Saudrais Cedric, **Andreas Scherer**
WO2005015206 A3; published 2005;
Global Patent Application DV/4-33643A/GEP-PCT
- “Secreted Polypeptides and The Use Thereof”
Guilaine Argoud-Puy, Nassima Bederr, Lydie Bougueleret, Isabelle Cusin, Eve Mahe, Anne Niknejad, Samia Reffas, Keith Rose, Cedric Saudrais, **Andreas Scherer**, Ruben Papoian, Uwe Dengler, Lawrence Croft
WO/2005/019825; published 2005;
Global Patent Application DV/4-33622A/GEP-PCT
- “Diagnosis of Chronic Rejection”
Andreas Krause, Detlef Niese, Friedrich Raulf, **Andreas Scherer**
WO 2004/018710; published 2004
- “Use of Fibroblast Growth Factor Fragments”
Jacques Bollekens, Salah-Dine Chibout, Jacky Vonderscher, Francois Legay, Andre Cordier, Ruben Papoian, **Andreas Scherer**
WO 2005045044 A2; published 2005;
International Patent Application DV/4-33263A