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PUBLICATION LIST

> Cathrin Brisken

Published papers with peer reviews

Duss, S., André, S., Nicoulaz, A.L., Fiche, M., Bonnefoi, H., Brisken, C., Iggo, R.D. An oestrogen-dependent model of breast cancer created by transformation of normal human mammary epithelial cells. *Breast Cancer Res.* 9(3):R38 (2007)

Ciarloni, L., Mallepell, S., Brisken, C. Amphiregulin is an essential mediator of estrogen receptor alpha function in mammary gland development. *Proc. Natl. Acad. Sci. U S A.* 104(13):5455-60 (2007)

Ayyanan, A., Civenni, G., Morel, C., Ciarloni, L., Lefort, K., Mandinova, A., Raffoul, W., Fiche, M., Dotto, G.P., Brisken, C. Increased Wnt signaling triggers oncogenic conversion of human mammary cells by a Notch-dependent mechanism, *Proc. Natl. Acad. Sci. USA*, 103(10):3799-804 (2006)

Mallepell, S., Krust, A., Chambon, P., Brisken, C. Paracrine signaling through the epithelial Estrogen Receptor α is required for proliferation and morphogenesis in the mammary gland, *Proc. Natl. Acad. Sci. USA*, 103(7):2196-201 (2006)

Devgan, V., Mammucari, C., Millar, SE, Brisken, C, and Dotto, G. P. 21^{WAF1/Cip1} is a negative transcriptional regulator of *Wnt4* expression downstream of Notch1 activation. *Genes and Development*, 19:1485-95 (2005)

Farmer, P., Bonnefoi, H., Becette, V., Tubiana-Hulin, M., Fumoleau, P., Larsimont, D., MacGrogan, G., Bergh, J., Cameron, D., Goldstein, D., Duss, S., Nicoulaz, A-L., Fiche, M., Brisken, C, Delorenzi, M., and Iggo, R. Identification of molecular apocrine breast tumors by microarray analysis. *Oncogene*, 24, 4660-4671 (2005)

Pierre F, Bonnefoi H, Becette V, Tubiana-Hulin M, Fumoleau P, Larsimont D, Macgrogan G, Bergh J, Cameron D, Goldstein D, Duss S, Nicoulaz AL, Brisken C, Fiche M, Delorenzi M, Iggo R. Identification of molecular apocrine breast tumours by microarray analysis *Oncogene* 24, 4660-71(2005)

Chu, E.Y., Hens, J., Andl, T., Kairo, A., Yamaguchi, T.P., Brisken, C., Glick, A., Wysolmerski, J.J., Millar, S.E. Canonical WNT signaling promotes mammary placode development and is essential for initiation of mammary gland morphogenesis. *Development* 131, 4819-29 (2004)

Brisken, C., Socolovsky, M., Lodish, H. F., Weinberg, R.A. The Signaling Domain of the Erythropoietin Receptor Rescues Prolactin Receptor-Mutant Mammary Epithelium. *Proc. Natl. Acad. Sci. USA* 99, 14241-5 (2002)

Brisken, C., Ayyanan, A., Nguyen, C., Heineman, A., Reinhardt, F., Tan, J., Dey, S.K., Dotto, G. P., Weinberg, R.A. IGF-2 is a mediator of prolactin-induced proliferation/morphogenesis in the breast. *Developmental Cell* 3, 877-887 (2002)

Reviews

Brisken, C. and Rajaram, R.D. Alveolar and Lactogenic Differentiation. *J Mammary Gland Biol.* 11(3-4):239-48 (2006)

PUBLICATION LIST

Gass, S., Harris, J., Ormandy, C., Brisken, C. Using expression arrays to elucidate the gene expression programs driving prolactin function. *Journal of Mammary Gland Biology and Neoplasia* 8, 269-286 (2003)

Brisken, C. Breast Cancer, Learning from the mouse mammary gland. *Bull Suisse Cancer* 1, 28-31 (2003)

Brisken, C., Ayyannan, A., Doppler, W. Prolactin signaling and Stat5, going their own separate ways? *Breast Cancer Research* 4, 209-212 (2002)

Brisken, C. Hormonal control of alveolar development and its implications for breast carcinogenesis. *Journal of Mammary Gland Biology and Neoplasia* 7, 39-48 (2002)

> Jörg Hülsken

Published papers with peer reviews

Scheller, M., Huelsken, J., Rosenbauer, F., Taketo, M.M., Birchmeier, W., Tenen, D.G. and Leutz, A. Hematopoietic stem cell and multi lineage defects by beta-catenin activation. *Nat. Immunol.* 7, 1037-47 (2006)

Dessimoz, J., Bonnard, C., Huelsken, J. & Grapin-Botton, A. Pancreas-specific deletion of β -catenin reveals Wnt-dependent and Wnt-independent functions during development., *Curr.Biol.* 15, 1677-83 (2005)

Goux, D., Coudert, J.D., Maurice, D., Scarpellino, L., Jeannet, G., Piccolo, S., Weston, K., Huelsken, J., Held, W. Cooperating pre-T-cell receptor and TCF-1-dependent signals ensure thymocyte survival. *Blood* 106, 1726-33 (2005)

Naef, F. & Huelsken, J. Cell type specific transcriptomics in chimeric models using transcriptome-based masks. *Nucleic Acids Res.* 33, e111 (2005)

Teuliere J., Faraldo MM., Shtutman M., Birchmeier W., Huelsken J., Thiery JP., Glukhova MA. β -Catenin-Dependent and -Independent Effects of Δ N-Plakoglobin on Epidermal Growth and Differentiation. *Molecular and Cellular Biology*, 24, 8649-8661 (2004)

> Ivan Stamenkovic

Published papers with peer reviews

Bai, Y., Liu, Y.J., Wang, H., Xu, Y., Stamenkovic, I., Yu, Q. Inhibition of the hyaluronan-CD44 interaction by merlin contributes to the tumor-suppressor activity of merlin. *Oncogene.* 26(6):836-50 (2007)

Bacac, M., Provero, P., Mayran, N., Stehle, J.C., Fusco, C., Stamenkovic, I. A mouse stromal response to tumor invasion predicts prostate and breast cancer patient survival. *PLoS ONE.* 1:e32 (2006)

PUBLICATION LIST

Riggi, N., Cironi, L., Provero, P., Suva, M.L., Stehle, J.C., Baumer, K., Guillou, L., Stamenkovic, I. Expression of the FUS-CHOP fusion protein in primary mesenchymal progenitor cells gives rise to a model of myxoid liposarcoma, *Cancer Res.*, 66(14):7016-23 (2006)

Bacac, M., Migliavacca, E., Mckee, T., Delorenzi, M., Coindre, J.-M., Guillou, L. and Stamenkovic, I. A gene expression signature that distinguishes desmoid tumours from nodular fasciitis, *J. Pathol.* 208(4):543-53 (2006)

Riggi, N., Cironi, L., Provero P., Suvà, M.L., Kaloulis, K., Garcia-Echeverria, C., Hoffmann, F., Trumpp, A. and Stamenkovic, I. Development of Ewing's sarcoma from bone-marrow-derived mesenchymal progenitor cells. *Cancer Res.*, 65(24):11459-68 (2005)

Meyer, E., Vollmer, J.Y., Bovey, R., Stamenkovic, I. Matrix metalloproteinases 9 and 10 inhibit protein kinase C-potentiated, p53-mediated apoptosis. *Cancer Research*, 65(10), 4261-72 (2005)

Lahav, R., Suva, M.L., Rimoldi, D., Patterson, P.H., Stamenkovic I. Endothelin receptor B inhibition triggers apoptosis and enhances angiogenesis in melanomas. *Cancer Research* 15, 64, 8945-53 (2004)

Yu, Q., Stamenkovic, I. Transforming Growth Factor-beta facilitates breast carcinoma metastasis by promoting tumor cell survival. *Clinical & Experimental Metastasis* 21, 235-42 (2004)

Fiore, E., Fusco, C., Romero, P., Stamenkovic, I. Matrix metalloproteinase 9 (MMP-9/gelatinase B) proteolytically cleaves ICAM-1 and participates in tumor cell resistance to natural killer cell-mediated cytotoxicity. *Oncogene* 21, 5213-5223 (2002)

Yu, W.H., Woessner, F. Jr., McNeish, J.D., Stamenkovic, I. CD44 regulates female reproductive organ remodelling and anchors the assembly of matrilysin/MMP-7 with heparin-binding epidermal growth factor precursor and ErbB4. *Genes and Development* 16, 307-323 (2002)

Reviews

Riggi, N., Cironi, L., Suvà, M.L., Stamenkovic, I. Sarcomas: genetics, signalling, and cellular origins. Part 1: The fellowship of TET. *J Pathol.* 213(1):4-20 (2007)

Riggi, N. and Stamenkovic I. The biology of Ewing's sarcoma. *Cancer Lett.* 254(1):1-10 (2007)

Riggi, N., Suvà, M.L., Stamenkovic, I. Ewing's Sarcoma-Like Tumors Originate from EWS-FLI-1-Expressing Mesenchymal Progenitor Cells. *Cancer Res.* 66(19):9786 (2006)

Stamenkovic, I. Extracellular matrix remodelling, the role of matrix metalloproteinases. *Journal of Pathology* 200, 448-64 (2003)

> Jürg Tschopp

Published papers with peer reviews

Didierlaurent, A., Brissoni, B., Velin, D., Aebi, N., Tardivel, A., Kaslin, E., Sirard, J. C., Angelov, G., Tschopp, J., and Burns, K. Tollip regulates proinflammatory responses to interleukin-1 and lipopolysaccharide. *Mol Cell Biol* 26, 735-742 (2006)

Grutter, C., Briand, C., Capitani, G., Mittl, P. R., Papin, S., Tschopp, J., and Grutter, M. G. Structure of the PRYSPRY-domain: implications for autoinflammatory diseases. *FEBS Lett* 580, 99-106 (2006)

Gurcel, L., Abrami, L., Girardin, S., Tschopp, J., and van der Goot, F. G. Caspase-1 activation of lipid metabolic pathways in response to bacterial pore-forming toxins promotes cell survival. *Cell* 126, 1135-1145 (2006)

Munding, C., Keller, M., Niklaus, G., Papin, S., Tschopp, J., Werner, S., and Beer, H. D. (2006). The estrogen-responsive B box protein: a novel enhancer of interleukin-1 β secretion. *Cell Death Differ* 13, 1938-1949 (2006)

Thureau, M., Everett, H., Tapernoux, M., Tschopp, J., and Thome, M. The TRAF3-binding site of human molluscipox virus FLIP molecule MC159 is critical for its capacity to inhibit Fas-induced apoptosis. *Cell Death Differ* 13, 1577-1585 (2006)

Bossen, C., Ingold, K., Tardivel, A., Bodmer, J.L., Gaide, O., Hertig, S., Ambrose, C., Tschopp, J., Schneider, P. Interactions of tumor necrosis factor (TNF) and TNF receptor family members in the mouse and human, *J Biol Chem.*, 281(20):13964-71 (2006)

Martinon, F., Petrilli, V., Mayor, A., Tardivel, A., Tschopp, J. Gout-associated uric acid crystals activate the NALP3 inflammasome, *Nature*, 440(7081):237-41 (2006)

Published reviews

Martinon, F., and Tschopp, J. Inflammatory caspases and inflammasomes: master switches of inflammation. *Cell Death Differ.* 14(1):10-22 (2007)

Budd, R. C., Yeh, W. C., and Tschopp, J. cFLIP regulation of lymphocyte activation and development. *Nat Rev Immunol* 6, 196-204 (2006)

Meylan, E., Tschopp, J., and Karin, M. Intracellular pattern recognition receptors in the host response. *Nature* 442, 39-44 (2006)

Janssens, S., and Tschopp, J. Signals from within: the DNA-damage-induced NF- κ B response. *Cell Death Differ* 13, 773-784 (2006)

Meylan, E., and Tschopp, J. Toll-like receptors and RNA helicases: two parallel ways to trigger antiviral responses. *Mol Cell* 22, 561-569 (2006)

Meylan, E., Tschopp, J. The RIP kinases: crucial integrators of cellular stress, *TIBS* 30, 151-159 (2005)

Martinon, F., Tschopp, J., NLRs join TLRs as innate sensors of pathogens. *Trends Immunol.* 26, 447-454 (2005)

PUBLICATION LIST

Petrilli, V., Papin, S., Tschopp, J. The inflammasome. *Curr. Biol.* 15, R581 (2005)

Dohrman, A., Kataoka, T., Cuenin, S., Russell, J. Q., Tschopp, J., Budd, R. C. Cellular FLIP (long form) regulates CD8+ T cell activation through caspase-8-dependent NF-kappa B activation. *J. Immunol.* 174, 5270-5278 (2005)

Ingold, K., Zumsteg, A., Tardivel, A., Huard, B., Steiner, Q. G., Cachero, T. G., Qiang, F., Gorelik, L., Kalled, S. L., Acha-Orbea, H., Rennert, P. D., Tschopp, J., Schneider, P. Identification of proteoglycans as the APRIL-specific binding partners. *J. Exp. Med.* 201, 1375-1383 (2005)

Dohrman, A., Russell, J. Q., Cuenin, S., Fortner, K., Tschopp, J., Budd, R. C. Cellular FLIP long form augments caspase activity and death of T cells through heterodimerization with and activation of caspase-8. *J. Immunol.* 175, 311-318, (2005)

Meylan, E., Curran, J., Hofmann, K., Moradpour, D., Binder, M., Bartenschlager, R., Tschopp, J. Cardif is an adaptor protein in the RIG-I antiviral pathway and is targeted by hepatitis C virus. *Nature* 437, 1167-1172 (2005)

Janssens, S., Tinel, A., Lippens, S., and Tschopp, J. PIDD mediates NF-κB activation in response to DNA damage. *Cell* 123(6):1079-92 (2005)

> Félix Naef

Published papers with peer reviews

Stoll, G., Rougemont, J., Naef, F. Representing perturbed dynamics in biological network models. *Phys Rev E Stat Nonlin Soft Matter Phys.* 76(1 Pt 1):011917. (2007)

Rougemont, J., Naef, F. Dynamical signatures of cellular fluctuations and oscillator stability in peripheral circadian clocks. *Mol Syst Biol.* 3:93. (2007)

Parisi, F., Wirapati, P. and Naef, F. Identifying synergistic regulation involving c-Myc and sp1 in human tissues, *Nucleic Acids Res.* 35(4):1098-107 (2007)

Ben-Haim, N., Lu, C., Guzman-Ayala, M., Pescatore, L., Mesnard, D., Bischofberger, M., Naef, F., Robertson, E. J., and Constam, D.B. The nodal precursor acting via activin receptors induces mesoderm by maintaining a source of its convertases and BMP4. *Dev Cell* 11, 313-323 (2006)

Retelska, D., Iseli, C., Bucher, P., Jongeneel, C.V., Naef, F. Similarities and differences of polyadenylation signals in human and fly. *BMC Genomics.* 12;7:176 (2006)

Stoll, G., Rougemont, J., Naef, F. Few crucial links assure checkpoint efficiency in the yeast cell-cycle network, *Bioinformatics* 22, 2539-2546 (2006)

Naef, F., Huelsken, J. Cell-type-specific transcriptomics in chimeric models using transcriptome-based masks *Nucleic Acids Research*, 33:e111 (2005)

Schibler, U., Naef, F. Cellular oscillators: rhythmic gene expression and metabolism. *Current Opinion in Cell Biology* 17, 223-9 (2005)

Nagoshi, E., Saini, C., Bauer, C., Laroche, T., Naef, F., Schibler, U. Circadian gene expression in individual fibroblasts: cell-autonomous and self-sustained oscillators pass time to daughter cells. *Cell*, 119, 693-705 (2004)

Gene Expression Signatures in Tumors

> **Monika Hegi**

Published papers with peer reviews

Lange, K., Kammerer, M., Hegi, M.E., Grotegut, S., Dittmann, A., Huang, W., Fluri, E., Yip, G.W., Götte, M., Ruiz, C., Orend, G. Endothelin receptor type B counteracts tenascin-C-induced endothelin receptor type A-dependent focal adhesion and actin stress fiber disorganization. *Cancer Res.* 67(13):6163-73 (2007)

Preusser, M., Heinzl, H., Gelpi, E., Schonegger, K., Haberler, C., Birner, P., Marosi, C., Hegi, M., Gorlia, T., and Hainfellner, J.A. Histopathologic assessment of hot-spot microvessel density and vascular patterns in glioblastoma: Poor observer agreement limits clinical utility as prognostic factors: a translational research project of the European Organization for Research and Treatment of Cancer Brain Tumor Group. *Cancer.* 107(1):162-70 (2006)

Stupp, R., van den Bent, M.J., and Hegi, M.E. Optimal role of temozolomide in the treatment of malignant gliomas. *Curr Neurol Neurosci Rep* 5, 198-206 (2005)

Hegi, M.E., Diserens, A.C., Gorlia, T., Hamou, M.F., de Tribolet, N., Weller, M., Kros, J.M., Hainfellner, J.A., Mason, W., Mariani, L., Bromberg, J.E., Hau, P., Mirimanoff, R.O., Cairncross, J.G., Janzer, R.C., Stupp, R. MGMT gene silencing and benefit from temozolomide in glioblastoma. *New England Journal of Medicine* 352, 997-1003 (2005)

Ruiz, C., Huang, W., Hegi, M.E., Lange, K., Hamou, M.F., Fluri, E., Oakeley, E.J., Chiquet-Ehrismann, R., Orend, G. Differential Gene Expression Analysis Reveals Activation of Growth Promoting Signaling Pathways by Tenascin-C. *Cancer Research* 64, 7377-7385 (2004)

Hegi, M.E., Diserens, A.C., Godard, S., Dietrich, P.Y., Regli, L., Ostermann, S., Otten, P., Van Melle, G., de Tribolet, N., Stupp, R. Clinical Trial Substantiates the Predictive Value of O-6-Methylguanine-DNA Methyltransferase Promoter Methylation in Glioblastoma Patients Treated with Temozolomide. *Clinical Cancer Research* 10, 1871-1874 (2004)

Lachat, Y., Diserens, A.C., Nozaki, M., Kobayashi, H., Hamou, M.F., Godard, S., De Tribolet, N., Hegi, M.E. INK4a/Arf is required for suppression of EGFR/DeltaEGFR(2-7).-dependent ERK activation in mouse astrocytes and glioma. *Oncogene* 23, 6854-63 (2004)

Godard, S., Getz, G., Delorenzi, M., Farmer, P., Kobayashi, H., Desbaillets, I., Nozaki, M., Diserens, A.-C., Hamou, M.-F., Dietrich, P. Y., Regli, L., Janzer, R.C., Stupp, R., Bucher, P., de Tribolet, N., Domany, E., Hegi, M. E. Classification of human astrocytic gliomas on the basis of gene expression, A correlated group of genes with angiogenic activity emerges as a strong predictor of subtypes. *Cancer Research* 63, 6613-6625 (2003)

PUBLICATION LIST

Reviews

Stupp, R., Hegi, M.E. Methylguanine methyltransferase testing in glioblastoma: when and how? *J Clin Oncol.* 25(12):1459-60 (2007)

Hau, P., Stupp, R., and Hegi, M.E. MGMT methylation status: The advent of stratified therapy in glioblastoma? *Disease Markers* 22, 1-8 (2007)

Stupp, R., Hegi, M.E. Targeting brain-tumor stem cells. *Nat Biotechnol.* 25(2):193-4 (2007)

Stupp, R., and Hegi, M.E. Neuro-oncology: oligodendroglioma and molecular markers. *Lancet Neurol* 6, 10-12 (2007)

Hegi, M.E. and Stupp, R. Correlative Studies in Neuro-Oncology Trials: Should they influence treatment. *Curr Oncol Rep*, 8(1):54-7 (2006)

Hegi, M.E., Murat, A., Lambiv, W.L., and Stupp, R. Brain tumors: molecular biology and targeted therapies. *Ann Oncol* 17 Suppl 10, x191-x197 (2006)

Stupp, R., Hegi, M.E., van den Bent, M.J., Mason, W.P., Weller, M., Mirimanoff, R.O., and Cairncross, J.G. Changing paradigms - an update on the multidisciplinary management of malignant glioma. *Oncologist* 11, 165-180 (2006)

van den Bent, M.J., Hegi, M.E., and Stupp, R. Recent developments in the use of chemotherapy in brain tumours. *Eur J Cancer* 42(5):582-8 (2006)

Dehdashti, A.R., Hegi, M.E., Regli, L., Pica, A., and Stupp, R. New trends in the medical management of glioblastoma multiforme: the role of temozolomide chemotherapy. *Neurosurg Focus* 20(4):E6 (2006)

Stupp, R., van den Bent, M.J., Hegi, M.E. Optimal role of temozolomide in the treatment of malignant gliomas. *Current Neurology and Neuroscience Reports*, 5,198-206 (2005)

Scientific articles in anthologies

Stupp, R., Hegi, M. E. Recent developments in the management of malignant glioma. In, *ASCO 2003 Educational Book*. Perry, M. C. (Ed). 779-788, American Society of Clinical Oncology. Alexandria, VA, (2003)



Vincent Piguet

PUBLICATION LIST

> Richard Iggo

Published papers with peer reviews

Duss, S., André, S., Nicoulaz, A.L., Fiche, M., Bonnefoi, H., Brisken, C., Iggo, R.D. An oestrogen-dependent model of breast cancer created by transformation of normal human mammary epithelial cells. *Breast Cancer Res.* 9(3):R38 (2007)

Lukashev, A.N., Fuerer, C., Chen, M.J., Searle, P., Iggo, R. Late expression of nitroreductase in an oncolytic adenovirus sensitizes colon cancer cells to the prodrug CB1954, *Hum Gene Ther.* 16(12):1473-83 (2005)

Pierre, F., Bonnefoi, H., Becette, V., Tubiana-Hulin, M., Fumoleau, P., Larsimont, D., Macgrogan, G., Bergh, J., Cameron, D., Goldstein, D., Duss, S., Nicoulaz, A.L., Brisken, C., Fiche, M., Delorenzi, M., Iggo, R. Identification of molecular apocrine breast tumours by microarray analysis *Oncogene* 24, 4660-71 (2005)

Bridge, A.J., Pebernard, S., Ducraux, A., Nicoulaz, A. L., and Iggo, R. Induction of an interferon response by RNAi vectors in mammalian cells. *Nature Genetics* 34, 263-264 (2003)

Bonnefoi, H., Ducraux, A., Movarekhi, S., Pelte, M.F., Bongard, S., Lurati, E., Iggo, R. p53 as a potential predictive factor of response to chemotherapy, feasibility of p53 assessment using a functional test in yeast from trucut biopsies in breast cancer patients. *British Journal of Cancer* 86, 750-755 (2002)

Tumor Angiogenesis

> Curzio Rüegg

Published papers with peer reviews

Bieler, G., Hasmim, M., Monnier, Y., Imaizumi, N., Ameyar, M., Bamat, J., Ponsonnet, L., Chouaib, S., Grell, M., Goodman, S.L., Lejeune, F., Ruegg, C. Distinctive role of integrin-mediated adhesion in TNF-induced PKB/Akt and NF-kappaB activation and endothelial cell survival. *Oncogene.* Mar 19; [Epub ahead of print] (2007)

Hasmim, M., Bieler G., and Rüegg, C. Zoledronate inhibits endothelial cell adhesion, migration and survival through the suppression of multiple, prenylation-dependent signaling pathways. *J. Thromb. Hemost.* 5(1):166-73 (2007)

Lejeune, F.J., Monnier, Y., Ruegg, C. Complete and long-lasting regression of disseminated multiple skin melanoma metastases under treatment with cyclooxygenase-2 inhibitor, *Melanoma Res.*, 16(3):263-5 (2006)

Zaman, K., Driscoll, R., Hahn, D., Werffeli, P., Goodman, S.L., Bauer, J., Leyvraz, S., Lejeune, F., Stupp, R., Ruegg, C. Monitoring multiple angiogenesis-related molecules in the blood of cancer patients shows a correlation between VEGF-A and MMP-9 levels before treatment and divergent changes after surgical vs. conservative therapy. *International Journal of Cancer*, 118(3):755-64 (2006)

PUBLICATION LIST

Hasmim, M., Vassalli, G., Ponsonnet, I., Vassalli, G., Bamat, J., Bieler, C., Paroz, J., Oguey, D., and Rüegg, C. Endothelial cell death induced by expression of isolated integrin β 1 subunit cytoplasmic domain in vitro and in vivo is secondary to cell detachment *Thromb. Haemost.*, 94: 1060-1070 (2005)

Foletti, A., Alghisi, G.C., Ponsonnet L., Ruegg C. Isolated integrin beta3 subunit cytoplasmic domains require membrane anchorage and the NPXY motif to recruit to adhesion complexes but do not discriminate between beta1- and beta3-positive complexes. *Thrombosis and Haemostasis*, 94,155-66 (2005)

Broillet A., Hantson, J., Ruegg, C., Messenger, T., Schneider, M. Assessment of microvascular perfusion changes in a rat breast tumor model using SonoVue to monitor the effects of different anti-angiogenic therapies. *Academic Radiology*, 12, S28-33 (2005)

Monnier, Y., Zaric, J., Ruegg, C. Inhibition of Angiogenesis by Non-Steroidal Anti-Inflammatory Drugs: From the Bench to the Bedside and Back. *Curr Drug Targets Inflamm Allergy*. 4, 31-38 (2005)

Zaric, J., Ruegg, C. Integrin-mediated adhesion and soluble ligand binding stabilize COX-2 protein levels in endothelial cells by inducing expression and preventing degradation. *Journal of Biological Chemistry* 280, 1077-1085 (2005)

Bezzi, M., Hasmim, M., Bieler, G., Dormond, O., Rüegg, C. Zoledronate sensitizes endothelial cells to tumor necrosis factor-induced programmed cell death, evidence for the suppression of sustained activation of focal adhesion kinase and protein kinase B/Akt. *Journal of Biological Chemistry* 278, 43603-14 (2003)

Dormond, O., Rüegg, C. Regulation of endothelial cell integrin function and angiogenesis by COX-2, cAMP and Protein Kinase A. *Thrombosis and Haemostasis* 90, 577-855 (2003)

Rüegg, C., Zaric, J., Stupp, R. Non steroidal anti-inflammatory drugs and COX-2 inhibitors as anti-cancer therapeutics, hypes, hopes and reality. *Annals of Medicine* 35, 476-87 (2003)

Stupp, R., Rüegg, C. New drugs and combinations for malignant glioma. *FORUM Trends Clinical and Experimental Medicine* 13, 61-75 (2003)

Reviews

Stupp, R. and Rüegg, C. Integrin inhibitors reach the clinic (editorial). *J. Clin Oncol.* 25(13):1637-8 (2007)

Mariotti, A., Perotti, A., Sessa, C., and Rüegg, C. N-cadherin as a therapeutic target in cancer. *Expert Opinion on Investigational Drugs* 16(4):451-65 (2007)

Lejeune, F.J., and Rüegg, C. Recombinant human tumor necrosis factor: an efficient agent for cancer treatment. *Bull Cancer* 93, E90-100. (2006)

Alghisi, G.C. and Ruegg, C. Vascular integrins in tumor angiogenesis: mediators and therapeutic targets, *Endothelium*, 13(2):113-35 (2006)

Ruegg, C. Leukocytes, inflammation, and angiogenesis in cancer: fatal attractions, *J Leukoc Biol.* 80(4):682-4 (2006)

PUBLICATION LIST

Lejeune, F.J., Lienard, D., Matter, M., Ruegg, C. Efficiency of recombinant human TNF in human cancer therapy, *Cancer Immun.*, 6:6 (2006)

Monnier, Y., Zaric, J. and R egg, C. Inhibition of Angiogenesis by Non-Steroidal Anti-Inflammatory Drugs: From the bench to the bedside and back. *Curr Drug Targets*, 4, 33-40 (2005)

R egg, C., Hasmim, M., Lejeune, F. and Alghisi G.C., Anti-angiogenic peptides and proteins: from experimental tools to clinical drugs, *Biochim Biophys Acta.*, 1765(2):155-77 (2005)

R egg, C., Dormond, O., Mariotti, A. Endothelial cell integrins and COX-2, Mediators and therapeutic targets of tumor angiogenesis. *Biochimica et Biophysica Acta (BBA). - Reviews on Cancer* 1654, 51-67 (2004)

R egg, C., Driscoll, R., Werffely-George, P., Meuwly, J., Khalil, Z., Stupp, R. The quest for surrogate markers of angiogenesis, a paradigm for translational research in tumor angiogenesis and anti-angiogenesis trials. *Current Molecular Medicine* 3, 673-691 (2003)

R egg, C., Driscoll R., Werffely-George P., Stupp R. Translational research in tumor angiogenesis, from bench to bedside and back to the bench. *Bulletin Suisse du Cancer* 23, 3 (2003)

R egg, C. Targeting the tumor vasculature as an anti-cancer therapy, emerging paradigms and open questions. *Swiss Medical Forum* 14, 317-323 (2002)

Book Chapter

Lejeune, F.J., Li nard, D., and R egg, C. Recombinant human TNF in human cancer therapy (book chapter), 1906-2006 - Cent ans d'innovations diagnostiques et th rapeutiques en cancérologie (Ed Jacques Robert et al.) John Libbey (2006)



Gerhard Christofori

Published papers with peer reviews

Kren, A., Baeriswyl, V., Lehembre, F., Wunderlin, C., Strittmatter, K., Antoniadis, H., F ssler, R., Cavallaro, U., Christofori, G. Increased tumor cell dissemination and cellular senescence in the absence of beta1-integrin function. *EMBO J.* 26(12):2832-42 (2007)

Kopfstein, L., Veikkola, T., Djonov, V.G., Baeriswyl, V., Schomber, T., Strittmatter, K., Stacker, S.A., Achen, M., Alitalo, K. and Christofori, G. Distinct roles of vascular endothelial growth factor-D in lymphangiogenesis and metastasis. *Am. J. Pathol.* 170(4):1348-61 (2007)

Wild, D., B h e, M., Wicki, A., Storch, D., Waser, B., Gotthard, M., Christofori, G., Reubi, J.C., and M cke, H.R. [Lys40(Ahx-DTPA-111In)NH₂]-Exendin-4 is a highly efficient radiotherapeutic for glucagon-like peptide-1 receptor-targeted therapy for insulinoma. *J. Nuclear Med.* 47(12):2025-33 (2006)

PUBLICATION LIST

Herzig, M., Novatchkova, M., Savarese, F., Perl, A.-K., Wilgenbus, P., and Christofori, G. Tumor progression induced by the loss of E-cadherin independent of beta-catenin/Tcf-mediated Wnt-signaling. *Oncogene*. 26(16):2290-8 (2006)

Fiedler, U., Christian, S., Koidl, S., Kerjaschki, D., Emmett, M.S., Bates, D.O., Christofori, G., and Augustin, H.G. The sialomucin CD34 is a marker of tumor-associated lymphatic endothelial cells in tumors. *Am. J. Pathol.* 168, 1045-1053. (2006)

Eldor, R., Yeffet, A., Baum, K., Doviner, V., Amar, D., Ben-Neriah, Y., Christofori, G., Peled, A., Carel, J.C., Boitard, C., Klein, T., Serup, P., Eizirik, D.L., Melloul, D. Conditional and specific NF- κ B blockade protects pancreatic beta cells from diabetogenic agents. *Proc Natl Acad Sci USA* 103,5072-5077 (2006)

Wicki, A., Lehembre, F., Wick N., Hantusch B., Kerjaschki D., and Christofori, G. Tumor invasion in the absence of epithelial-mesenchymal transition: podoplanin-mediated remodeling of the cytoskeleton. *Cancer Cell* 9, 261-272 (2006)

Schaffhauser, B., Strittmatter, K., Antoniadis, H., Veikkola, T., Alitalo, K., and Christofori, G. Moderate anti-angiogenic activity by local transgenic expression of endostatin in Rip1Tag2 transgenic mice. *J. Leuk. Biol.* 80, 669-676 (2006)

Grotegut, S., von Schweinitz, D., Christofori, G., and Lehembre, F. Hepatocyte growth factor/scatter factor (HGF/SF) induces cell scattering through MAPK/Egr-1-mediated upregulation of Snail. *EMBO J* 25, 3534–3545 (2006)

Cabrita, M., Jäggi, F., Widjaja, S., and Christofori, G. A functional interaction between Sprouty proteins and caveolin-1. *J. Biol. Chem.* 281, 29201-2912 (2006)

Reviews

Wicki, A. and Christofori, G. The potential role of podoplanin in tumour invasion. *Br. J. Cancer.* 96(1):1-5 (2007)

Fantozzi, A., Christofori, G., Mouse models of breast cancer metastasis, *Breast Cancer Res.*, 8(4):212 (2006)

Christofori, G., New signals from the invasive front, *Nature*, 441(7092):444-50 (2006)

Kopfstein, L. and Christofori, G., Metastasis: Cell autonomous versus stroma-contributed mechanisms, *Cell. Mol. Life Sci.*, 63(4):449-68 (2006)

Book Chapter

Wicki, A. and Christofori, G. The molecular basis of the angiogenic switch In: *Tumor Angiogenesis: Mechanisms and Cancer Therapy* (eds. N. Fusenig and D. Marme) Springer Verlag, Heidelberg (2006)

Tumor Immunity and Cancer Immunotherapy

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Published papers with peer reviews

Alves, P.M., Viatte, S., Fagerberg, T., Michielin, O., Bricard, G., Bouzourene, H., Vuilleumier, H., Kruger, T., Givel, J.C., Levy, F., Speiser, D.E., Cerottini, J.C., Romero, P. Immunogenicity of the carcinoembryonic antigen derived peptide 694 in HLA-A2 healthy donors and colorectal carcinoma patients. *Cancer Immunol Immunother.* Apr 20; [Epub ahead of print] (2007)

Romero, P., Zippelius, A., Kurth, I., Pittet, M.J., Touvrey, C., Iancu, E.M., Corthesy, P., Devere, E., Speiser, D.E., Rufer, N. Four functionally distinct populations of human effector-memory CD8⁺ T lymphocytes. *J Immunol.* 178(7):4112-9 (2007)

Le Gal, F.A., Widmer, V.M., Dutoit, V., Rubio-Godoy, V., Schrenzel, J., Walker, P.R., Romero, P.J., Valmori, D., Speiser, D.E., Dietrich, P.Y. Tissue homing and persistence of defined antigen-specific CD8⁺ tumor-reactive T-cell clones in long-term melanoma survivors. *J Invest Dermatol.* 127(3):622-9 (2007)

Derré, L., Bruyninx, M., Baumgaertner, P., Devere, E., Corthesy, P., Touvrey, C., Mahnke, Y.D., Pircher, H., Voelter, V., Romero, P., Speiser, D.E., Rufer, N. J. In Vivo Persistence of Codominant Human CD8⁺ T Cell Clonotypes Is Not Limited by Replicative Senescence or Functional Alteration. *Immunol.* 179(4):2368-79 (2007)

Appay, V., Voelter, V., Rufer, N., Reynard, S., Gasparini, D., Liénard, D., Speiser, D.E., Schneider, P., Cerottini, J.C., Romero, P., and Leyvraz, S. Combination of transient lymphodepletion with Busulfan and Fludarabine and peptide vaccination in a phase I clinical trial for patients with advanced melanoma. *J Immunother.* 30(2):240-50 (2007)

Barbey, C., Baumgaertner, P., Devere, E., Rubio-Godoy, V., Derré, L., Bricard, G., Guillaume, P., Luescher, I.F., Liénard, D., Cerottini, J.-C., Romero, P., Rufer, N., and Speiser, D.E. IL-12 controls cytotoxicity of a novel subset of self antigen-specific human CD28⁺ cytolytic T cells. *J Immunol.* 178(6):3566-74 (2007)

Alves, P., Lévy, N., Bouzourene, H., Viatte, S., Bricard, G., Ayyoub, M., Vuilleumier, H., Givel, J.-C., Halkic, N., Speiser, D., Romero, P., Lévy, F. Molecular and immunological evaluation of the expression of cancer/testis gene products in human colorectal cancer. *Cancer Immunol Immunother.* 56(6):839-47 (2007)

Tabiasco, J., Devere, E., Rufer, N., Salaun, B., Cerottini, J.-C., Speiser, D.E., and Romero, P. Human effector CD8⁺ T lymphocytes express toll like receptor-3 as a functional coreceptor. *J Immunol.* 177(12):8708-13 (2006)

Appay, V., Jandus, C., Voelter, V., Reynard, S., Coupland, S.E., Rimoldi, D., Liénard, D., Guillaume, P., Krieg, A.M., Cerottini, J.-C., Romero, P., Leyvraz, S., Rufer, N., Speiser, D.E. New generation vaccine induces effective melanoma-specific CD8⁺ T cells in the circulation but not in the tumor site, *J Immunol.* 177(3):1670-8 (2006)

PUBLICATION LIST

Bioley, G., Jandus, C., Tuyaerts, S., Rimoldi, D., Kwok, W.W., Speiser, D.E., Tiercy, J.M., Thielemans, K., Cerottini, J.C., Romero, P. Melan-A/MART-1-specific CD4 T cells in melanoma patients: identification of new epitopes and ex vivo visualization of specific T cells by MHC class II tetramers. *J Immunol.* 177(10):6769-79

Appay, V., Speiser, D.E., Rufer, N., Reynard, S., Barbey, C., Cerottini, J.-C., Leyvraz, S., Pinilla, C., Romero, P. Decreased specific CD8(+) T cell cross-reactivity of antigen recognition following vaccination with Melan-A peptide, *Eur J Immunol.*, 36(7):1805-14 (2006)

Speiser, D.E., Baumgaertner, P., Barbey, C., Rubio-Godoy, V., Moulin, A., Corthesy, P., Devevre, E., Dietrich, P.Y., Rimoldi, D., Lienard, D., Cerottini, J.-C., Romero, P., Rufer, N. A novel approach to characterize clonality and differentiation of human melanoma-specific T cell responses: spontaneous priming and efficient boosting by vaccination, *J Immunol*, 177(2):1338-48 (2006)

Viatte, S., Alves, P.M., Romero, P. Reverse immunology approach for the identification of CD8 T-cell-defined antigens: advantages and hurdles, *Immunol Cell Biol*, 84(3):318-30 (2006)

Appay, V., Reynard, S., Voelter, V., Romero, P., Speiser, D.E., Leyvraz, S. Immuno-monitoring of CD8+ T cells in whole blood versus PBMC samples. *J Immunol Methods*, 309(1-2):192-9 (2006)

Baumgaertner, P., Rufer, N., Devevre, E., Derré, L., Rimoldi, D., Geldhof, C., Voelter, V., Lienard, D., Romero, P., Speiser, D.E. Ex vivo detectable human CD8 T-cell responses to cancer-testis antigens, *Cancer Res.*, 66(4):1912-6 (2006)

Pittet, M.J., Gati, A., Le Gal, F.A., Bioley, G., Guillaume, P., de Smedt, M., Plum, J., Speiser, D.E., Cerottini, J.-C., Dietrich, P.Y., Romero, P., Zippelius, A. Ex vivo characterization of allo-MHC-restricted T cells specific for a single MHC-peptide complex, *J Immunol.*, 176(4):2330-6 (2006)

Migliaccio, M., Alves, P.M., Romero, P., and Rufer, N. Distinct mechanisms control human naive and antigen-experienced CD8+ T lymphocyte proliferation. *J Immunol.* 176(4):2173-82 (2006)

Mahnke, Y., Speiser, D., Luescher, I.F., Cerottini, J.C., Romero, P., Recent advances in tumour antigen-specific therapy: in vivo veritas. *International Journal of Cancer*, 113: 173-178 (2005)

Michielin, O., Blanchet, J.S., Fagerberg, T., Valmori, D., Rubio-Godoy, V., Speiser, D., Ayyoub, M., Alves, P., Luescher, I., Gairin, J.E., Cerottini, J.C., Romero, P. Tinkering with nature: The tale of optimizing peptide based cancer vaccines. Review Article. *Cancer Treat Res.* 123:267-291 (2005)

Bricard, G., Bouzourene, H., Martinet, O., Rimoldi, D., Halkic, N., Gillet, M., Chaubert, P., Macdonald, H.R., Romero, P., Cerottini, J.C., Speiser, D.E., Naturally acquired MAGE-A10 and SSX-2 specific CD8⁺ T cell responses in patients with hepatocellular carcinoma. *Journal of Immunology.* 174:1709-1716 (2005)

Speiser, D.E., Cerottini, J.C., Romero, P., Tumor cell recognition efficiency by T cells. *PLoS Medicine* 29:2 (3) e77 (2005)

PUBLICATION LIST

Speiser, D.E., Lienard, D., Rufer, N., Rubio-Godoy, V., Rimoldi, D., Lejeune, F., Krieg, A.M., Cerottini, J.C., Romero, P. Rapid and strong human CD8(+) T cell responses to vaccination with peptide, IFA, and CpG oligodeoxynucleotide 7909. *Journal of Clinical Investigation*, 115, 739-46 (2005)

Chapatte, L., Servis, C., Valmori, D., Burlet-Schiltz, O., Dayer, J., Monsarrat, B., Romero, P., Levy, F. Final antigenic Melan-A peptides produced directly by the proteasomes are preferentially selected for presentation by HLA-A*0201 in melanoma cells. *Journal of Immunology* 173, 6033-40 (2004)

Speiser, D.E., Pittet, M.J., Guillaume, P., Lubenow, N., Hoffman, E., Cerottini, J.-C., Romero, P. Ex vivo analysis of human antigen-specific CD8+ T-cell responses, quality assessment of fluorescent HLA-A2 multimer and interferon-gamma ELISPOT assays for patient immune monitoring. *Journal of Immunotherapy* 27, 298-308 (2004)

Lienard, D., Rimoldi, D., Marchand, M., Dietrich, P.Y., van Baren, N., Geldhof, C., Batard, P., Guillaume, P., Ayyoub, M., Pittet, M.J., Zippelius, A., Fleischhauer, K., Lejeune, F., Cerottini, J.C., Romero, P., Speiser, D.E. Ex vivo detectable activation of Melan-A-specific T cells correlating with inflammatory skin reactions in melanoma patients vaccinated with peptides in IFA. *Cancer Immunity* 4, 4 (2004)

Zippelius, A., Bioley, G., Le Gal, F.A., Rufer, N., Brandes, M., Batard, P., De Smedt, M., Plum, J., Speiser, D.E., Cerottini, J.C., Dietrich, P.Y., Romero, P., Pittet, M.J. Targeting of secretory IgA to Peyer's patch dendritic and T cells after transport by intestinal M cells. *Journal of Immunology* 172, 2773-7 (2004)

Zippelius, A., Batard, P., Rubio-Godoy, V., Bioley, G., Lienard, D., Lejeune, F., Rimoldi, D., Guillaume, P., Meidenbauer, N., Mackensen, A., Rufer, N., Lubenow, N., Speiser, D., Cerottini, J.C., Romero, P., Pittet, M.J. Effector function of human tumor-specific CD8 T cells in melanoma lesions, a state of local functional tolerance. *Cancer Research* 64, 2865-73 (2004)

Valmori, D., Dutoit, V., Ayyoub, M., Rimoldi, D., Guillaume, P., Liénard, D., Lejeune, F., Cerottini, J.C., Romero, P., Speiser, D.E. Simultaneous CD8+ T cell responses to multiple tumor antigen epitopes in a multipeptide melanoma vaccine. *Cancer Immunity* 3, 15 (2003)

Ayyoub, M., Rimoldi, D., Guillaume, P., Romero, P., Cerottini, J.C., Valmori, D., Speiser, D.E. Tumor reactive SSX-2 specific CTL are selectively expanded during spontaneous responses to antigen expressing tumors in melanoma patients. *Cancer Research* 63, 5601-6 (2003)

Pittet, M.J., Rubio-Godoy, V., Bioley, G., Guillaume, P., Batard, P., Speiser, D.E., Luescher, I., Cerottini, J.C., Romero, P., Zippelius, A. α -3 domain mutants of peptide/MHC multimers allow the selective isolation of high avidity tumor-reactive CD8 T cells for adoptive T cell therapy. *Journal Immunology* 171, 1844-1849 (2003)

Rufer, N., Zippelius, A., Batard, P., Pittet, M.J., Kurth, I., Corthesy, P., Cerottini, J.-C., Leyvraz, S., Roosnek, E., Nabholz, M., Romero, P. Identification of human pre-effector CD8+ T lymphocytes with distinct replicative history and partial effector functions. *Blood* 102, 1779-1787 (2003)

PUBLICATION LIST

Ayyoub, M., Stevanovic, S., Sahin, U., Guillaume, P., Servis, C., Rimoldi, D., Valmori, D., Romero, P., Cerottini, J.C., Rammensee, H.G., Pfreundschuh, M., Speiser, D.E., Lévy, F. Proteasome-assisted identification of a SSX-2-derived epitope recognized by tumor-reactive CTL infiltrating metastatic melanoma. *Journal of Immunology* 168, 1717-1722 (2002)

Reviews

Speiser, D.E., Cerottini, J.-C. and Romero, P. The human T cell response to melanoma antigens. *Adv Immunol.* 92:187-224 (2006)

Viatte, S., Alves, P., Romero, P. Reverse immunology approach for the identification of CD8 T cell defined antigens: Advantages and hurdles. *Immunol Cell Biol.* 84:318-30 (2006)

Mahnke, Y.D, Speiser, D.E., Luescher, I.F., Cerottini, J.C., Romero, P. Recent advances in tumour antigen-specific therapy: in vivo veritas. *International Journal of Cancer* 113, 173-178 (2004)

Romero, P., Cerottini, J.C., Speiser, D.E., Monitoring tumor antigen specific T-cell responses in cancer patients and phase I clinical trials of peptide-based vaccination. *Cancer Immunol Immunother.* 53, 249-55 (2004)

Romero, P., Valmori, D., Pittet, M.J., Zippelius, A., Rimoldi, D., Lévy, F., Dutoit, V., Rubio-Godoy, V., Michielin, O., Guillaume, P., Batard, P., Luescher, I.F., Lejeune, F., Liénard, D., Rufer, N., Dietrich, P.-Y., Speiser, D.E., Cerottini, J.-C. Antigenicity and immunogenicity of Melan-A/MART-1 derived peptides as targets for tumor reactive CTL, *Immunol Rev.*;188:81-96 (2002)

> Frédéric Lévy

Published papers with peer reviews

Alves, P.M., Viatte, S., Fagerberg, T., Michielin, O., Bricard, G., Bouzourene, H., Vuilleumier, H., Kruger, T., Givel, J.C., Levy, F., Speiser, D.E., Cerottini, J.C., Romero, P. Immunogenicity of the carcinoembryonic antigen derived peptide 694 in HLA-A2 healthy donors and colorectal carcinoma patients. *Cancer Immunol Immunother.* Apr 20; [Epub ahead of print] (2007)

Alves, P., Lévy, N., Bouzourene, H., Viatte, S., Bricard, G., Ayyoub, M., Vuilleumier, H., Givel, J.-C., Halkic, N., Speiser, D., Romero, P., Lévy, F. Molecular and immunological evaluation of the expression of cancer/testis gene products in human colorectal cancer. *Cancer Immunol Immunother*, 56(6):839-47 (2007)

Colombetti, S., Fagerberg, T., Baumgartner, P., Chapatte, L., Speiser, D.E., Rufer, N., Michielin, O., Lévy, F., Impact of orthologous melan-A peptide immunizations on the anti-self melan-A/HLA-A2 T cell cross-reactivity, *J Immunol.*, 176(11):6560-7 (2006)

Chapatte, L., Ayyoub, M., Morel, S., Peitrequin, A.L., Lévy, N., Servis, C., Van den Eynde, B.J., Valmori, D., Lévy, F. Processing of tumor-associated antigen by the proteasomes of dendritic cells controls in vivo T-cell responses, *Cancer Res.*, 66(10):5461-8 (2006)

PUBLICATION LIST

Chapatte, L., Servis, C., Valmori, D., Burlet-Schiltz, O., Dayer, J., Monsarrat, B., Romero, P., Levy, F. Final antigenic Melan-A peptides produced directly by the proteasomes are preferentially selected for presentation by HLA-A*0201 in melanoma cells. *Journal of Immunology* 173, 6033-40 (2004)

Nagorsen, D., Servis, C., Lévy, N., Provenzano, M., Dudley, M.E., Marincola, F.M., Lévy, F. Proteasomal cleavage does not determine immunogenicity of gp100-derived peptides gp100 209-217 and gp100 209-217T210M. *Cancer Immunology, Immunotherapy* 53, 817-24 (2004)

Reviews

Viatte, S., Alves, P., Romero, P. Reverse immunology approach for the identification of CD8 T cell defined antigens: Advantages and hurdles. *Immunol Cell Biol.* 84:318-30 (2006)

> Daniel Speiser

Published papers with peer reviews

Alves, P.M., Viatte, S., Fagerberg, T., Michielin, O., Bricard, G., Bouzourene, H., Vuilleumier, H., Kruger, T., Givel, J.C., Levy, F., Speiser, D.E., Cerottini, J.C., Romero, P. Immunogenicity of the carcinoembryonic antigen derived peptide 694 in HLA-A2 healthy donors and colorectal carcinoma patients. *Cancer Immunol Immunother.* Apr 20; [Epub ahead of print] (2007)

Romero, P., Zippelius, A., Kurth, I., Pittet, M.J., Touvrey, C., Iancu, E.M., Corthesy, P., Devere, E., Speiser, D.E., Rufer, N. Four functionally distinct populations of human effector-memory CD8+ T lymphocytes. *J Immunol.* 178(7):4112-9 (2007)

Derré, L., Bruyninx, M., Baumgaertner, P., Devere, E., Corthesy, P., Touvrey, C., Mahnke, Y.D., Pircher, H., Voelter, V., Romero, P., Speiser, D.E., Rufer, N. J. In Vivo Persistence of Codominant Human CD8+ T Cell Clonotypes Is Not Limited by Replicative Senescence or Functional Alteration. *Immunol.* 179(4):2368-79 (2007)

Barbey, C., Baumgaertner, P., Devere, E., Rubio-Godoy, V., Derré, L., Bricard, G., Guillaume, P., Luescher, I.F., Liénard, D., Cerottini, J-C., Romero, P., Rufer, N., and Speiser, D.E. IL-12 controls cytotoxicity of a novel subset of self antigen-specific human CD28+ cytolytic T cells. *J Immunol.* 178(6):3566-74 (2007)

Le Gal, F.A., Widmer, V.M., Dutoit, V., Rubio-Godoy, V., Schrenzel, J., Walker, P.R., Romero, P.J., Valmori, D., Speiser, D.E., Dietrich, P.Y. Tissue homing and persistence of defined antigen-specific CD8+ tumor-reactive T-cell clones in long-term melanoma survivors. *J Invest Dermatol.* 127(3):622-9 (2007)

Appay, V., Voelter, V., Rufer, N., Reynard, S., Gasparini, D., Liénard, D., Speiser, D.E., Schneider, P., Cerottini, J.C., Romero, P., and Leyvraz, S. Combination of transient lymphodepletion with Busulfan and Fludarabine and peptide vaccination in a phase I clinical trial for patients with advanced melanoma. *J Immunother.* 30(2):240-50 (2007)

PUBLICATION LIST

Alves, P., Lévy, N., Bouzourene, H., Viatte, S., Bricard, G., Ayyoub, M., Vuilleumier, H., Givel, J.-C., Halkic, N., Speiser, D., Romero, P., Lévy, F. Molecular and immunological evaluation of the expression of cancer/testis gene products in human colorectal cancer. *Cancer Immunol Immunother*, 56(6):839-47 (2007)

Tabiasco, J., Devere, E., Rufer, N., Salaun, B., Cerottini, J.C., Speiser, D., Romero, P. Human effector CD8+ T lymphocytes express TLR3 as a functional coreceptor. *J Immunol*. 177(12):8708-13 (2006)

Batard, P., Peterson, D.A., Devere, E., Guillaume, P., Cerottini, J.-C., Rimoldi, D., Speiser, D.E., Winther, L. and Romero, P. Dextramers: new generation of fluorescent MHC class I / peptide multimers for visualization of antigen-specific CD8 T cells. *J Immunol Methods* 310: 136-48 (2006)

Guillaume, P., Baumgaertner, P., Angelov, G.S., Speiser, D., and Luescher, I.F. Fluorescence-activated cell sorting and cloning of bona fide CD8+ CTL with reversible MHC-peptide and antibody Fab' conjugates. *J Immunol*. 177:3903-3912 (2006)

Bioley G., Jandus, C., Tuybaerts, S., Rimoldi, D., Kwok, W.W., Speiser, D.E., Tiercy, J.-M., Thielemans, K., Cerottini, J.-C. and Romero, P. Melan-A / MART-1 specific CD4 T cells in melanoma patients: identification of new epitopes and ex vivo visualization of specific T cells by MHC class II tetramers. *J Immunol*. 177: 6769-6779 (2006)

Appay, V., Jandus, C., Voelter, V., Reynard, S., Coupland, S.E., Rimoldi, D., Lienard, D., Guillaume, P., Krieg, A.M., Cerottini, J.-C., Romero, P., Leyvraz, S., Rufer, N., Speiser, D.E. New generation vaccine induces effective melanoma-specific CD8+ T cells in the circulation but not in the tumor site, *J Immunol.*, 177(3):1670-8 (2006)

Speiser, D.E., Baumgaertner, P., Barbey, C., Rubio-Godoy, V., Moulin, A., Cortesy, P., Devere, E., Dietrich, P.Y., Rimoldi, D., Lienard, D., Cerottini, J.-C., Romero, P., Rufer, N. A novel approach to characterize clonality and differentiation of human melanoma-specific T cell responses: spontaneous priming and efficient boosting by vaccination, *J Immunol*, 177(2):1338-48 (2006)

Appay, V., Speiser, D.E., Rufer, N., Reynard, S., Barbey, C., Cerottini, J.-C., Leyvraz, S., Pinilla, C., Romero, P. Decreased specific CD8(+) T cell cross-reactivity of antigen recognition following vaccination with Melan-A peptide, *Eur J Immunol.*, 36(7):1805-14 (2006)

Baumgaertner, P., Rufer, N., Devere, E., Derré, L., Rimoldi, D., Geldhof, C., Voelter, V., Lienard, D., Romero, P., Speiser, D.E. Ex vivo detectable human CD8 T-cell responses to cancer-testis antigens, *Cancer Res.*, 66(4):1912-6 (2006)

Colombetti, S., Fagerberg, T., Baumgaertner, P., Chapatte, L., Speiser, D.E., Rufer, N., Michielin, O., Lévy, F. Impact of orthologous melan-A peptide immunizations on the anti-self melan-A/HLA-A2 T cell cross-reactivity, *J Immunol.*, 176(11):6560-7 (2006)

Pittet, M.J., Gati, A., Le Gal, F.A., Bioley, G., Guillaume, P., de Smedt, M., Plum, J., Speiser, D.E., Cerottini, J.-C., Dietrich, P.Y., Romero, P., Zippelius, A. Ex vivo characterization of allo-MHC-restricted T cells specific for a single MHC-peptide complex, *J Immunol.*, 176(4):2330-6 (2006)

PUBLICATION LIST

- Appay, V., Reynard, S., Voelter, V., Romero, P., Speiser, D.E., Leyvraz, S. Immuno-monitoring of CD8+ T cells in whole blood versus PBMC samples. *J Immunol Methods*, 309(1-2):192-9 (2006)
- Michielin, O., Blanchet, J.S., Fagerberg, T., Valmori, D., Rubio-Godoy, V., Speiser, D., Ayyoub, M., Alves, P., Luescher, I., Gairin, J.E., Cerottini, J.C., Romero, P. Tinkering with nature: The tale of optimizing peptide based cancer vaccines. Review Article. *Cancer Treat Res.* 123:267-291 (2005)
- Speiser, D.E. Tumor specific T cells induced in melanoma patients either naturally or by vaccination with peptides, IFA ± CpG oligodeoxynucleotides. *Cancer Immunity*; 5 Suppl 1:23 (2005)
http://www.cancerimmunity.org/v5suppl1p23/041244_abs.htm
- Ayyoub, M., Merlo, A., Hesdorffer, C.S., Speiser, D., Rimoldi, D., Cerottini, J.C., Ritter, G., Chen, Y.T., Old, L.J., Stevanovic, S., Valmori, D., Distinct but overlapping T helper epitopes in the 37-58 region of SSX-2. *Clinical Immunology.* 114:70-78 (2005)
- Bricard, G., Bouzourene, H., Martinet, O., Rimoldi, D., Halkic, N., Gillet, M., Chaubert, P., Macdonald, H.R., Romero, P., Cerottini, J.C., Speiser, D.E., Naturally acquired MAGE-A10 and SSX-2 specific CD8⁺ T cell responses in patients with hepatocellular carcinoma. *Journal of Immunology.* 174:1709-1716 (2005)
- Speiser, D.E., Cerottini, J.C., Romero, P., Tumor cell recognition efficiency by T cells. *PLoS Medicine* 29:2 (3) e77 (2005)
- Speiser D.E. and Romero, P., Toward improved immunocompetence of adoptively transferred CD8+ T cells. *Journal of Clinical Investigation*, 115:1467-1469 (2005)
Speiser, D.E., Immunological Techniques: Ex vivo characterization of T cell mediated immune responses in cancer. Editorial Overview. *Current Opinion in Immunology.* 17:419-422 (2005)
- Montes, M., Rufer N., Appay V., Reynard S., Pittet M.J., Speiser D.E., Guillaume P., Cerottini J.C., Romero P., Leyvraz S. Optimal in vitro expansion of human antigen specific CD8+ T cells for adoptive transfer therapy. *Clinical and Experimental Immunology*, 142:292-302 (2005)
- Speiser, D.E., Lienard, D., Rufer, N., Rubio-Godoy, V., Rimoldi, D., Lejeune, F., Krieg, A.M., Cerottini, J.C., Romero, P. Rapid and strong human CD8(+) T cell responses to vaccination with peptide, IFA, and CpG oligodeoxynucleotide 7909. *Journal of Clinical Investigation*, 115, 739-46 (2005)
- Ayyoub, M., Hesdorffer, C.S., Metthez, G., Stevanovic, S., Ritter, G., Chen, Y.T., Old, L.J., Speiser, D., Cerottini, J.C., Valmori, D., Identification of an SSX-2 epitope presented by dendritic cells to circulating autologous CD4+ T cells. *Journal of Immunology*, 172 7206-7211 (2004)
- Ayyoub, M., Hesdorffer, C.S., Montes, M., Merlo, A., Speiser, D., Rimoldi, D., Cerottini, J.C., Ritter, G., Scanlan, M., Old, L.J., Valmori, D. An immunodominant SSX-2-derived epitope recognized by CD4+ T cells in association with HLA-DR. *Journal of Clinical Investigation* 113: 1225-33 (2004)

PUBLICATION LIST

Rothenfusser, S., Hornung, V., Ayyoub, M., Britsch, S., Towarowski, A., Krug, A., Sarris, A., Lubenow, N., Speiser, D., Endres, S., Hartmann, G. CpG-A and CpG-B oligonucleotides differentially enhance human peptide-specific primary and memory CD8+ T-cell responses in vitro. *Blood* 15, 2162-9 (2004)

Speiser, D.E., Pittet, M.J., Guillaume, P., Lubenow, N., Hoffman, E., Cerottini, J.C., Romero, P. Ex vivo analysis of human antigen-specific CD8+ T-cell responses, quality assessment of fluorescent HLA-A2 multimer and interferon-gamma ELISPOT assays for patient immune monitoring. *Journal of Immunotherapy* 27, 298-308 (2004)

Lienard, D., Rimoldi, D., Marchand, M., Dietrich, P.Y., van Baren, N., Geldhof, C., Batard, P., Guillaume, P., Ayyoub, M., Pittet, M.J., Zippelius, A., Fleischhauer, K., Lejeune, F., Cerottini, J.C., Romero, P., Speiser, D.E. Ex vivo detectable activation of Melan-A-specific T cells correlating with inflammatory skin reactions in melanoma patients vaccinated with peptides in IFA. *Cancer Immunity* 4, 4 (2004)

Zippelius A., Bioley G., Le Gal F-A., Rufer N., Brandes M., Batard P., De Smedt M., Plum J., Speiser D.E., Cerottini J-C., Dietrich P-Y., Romero P., Pittet M.J. Targeting of secretory IgA to Peyer's patch dendritic and T cells after transport by intestinal M cells. *Journal of Immunology* 172, 2773-7 (2004)

Zippelius, A., Batard, P., Rubio-Godoy, V., Bioley, G., Lienard, D., Lejeune, F., Rimoldi, D., Guillaume, P., Meidenbauer, N., Mackensen, A., Rufer, N., Lubenow, N., Speiser, D., Cerottini, J.C., Romero, P., Pittet, M.J. Effector function of human tumor-specific CD8 T cells in melanoma lesions, a state of local functional tolerance. *Cancer Research* 64, 2865-73 (2004)

Valmori, D., Dutoit, V., Ayyoub, M., Rimoldi, D., Guillaume, P., Liénard, D., Lejeune, F., Cerottini, J.C., Romero, P., Speiser, D.E. Simultaneous CD8+ T cell responses to multiple tumor antigen epitopes in a multipeptide melanoma vaccine. *Cancer Immunity* 3, 15 (2003)

Ayyoub, M., Rimoldi, D., Guillaume, P., Romero, P., Cerottini, J.-C., Valmori, D., Speiser, D. E. Tumor reactive SSX-2 specific CTL are selectively expanded during spontaneous responses to antigen expressing tumors in melanoma patients. *Cancer Research* 63, 5601-6 (2003)

Pittet, M.J., Rubio-Godoy, V., Bioley, G., Guillaume, P., Batard, P., Speiser, D.E., Luescher, I., Cerottini, J.C., Romero, P., Zippelius, A. α -3 domain mutants of peptide/MHC multimers allow the selective isolation of high avidity tumor-reactive CD8 T cells for adoptive T cell therapy. *Journal Immunology* 171, 1844-1849 (2003)

Reviews

Speiser, D.E., Cerottini, J.-C. and Romero, P. The human T cell response to melanoma antigens. *Adv Immunol. In Press.* (2006)

Mahnke, Y., Speiser, D., Luescher, I.F., Cerottini, J.C., Romero, P., Recent advances in tumour antigen-specific therapy: in vivo veritas. *International Journal of Cancer*, 113: 173-178 (2005)

Speiser, D.E., Immunological techniques: ex vivo characterization of T cell-mediated immune responses in cancer. *Current Opinion in Immunology*; 17:419-22 (2005)

PUBLICATION LIST

Slingluff, C.L. Jr., Speiser, D.E., Progress and controversies in developing cancer vaccines. *Journal of Translational Research*. 3:18 (2005)

Romero, P., Cerottini, J.C., Speiser, D.E., Monitoring tumor antigen specific T-cell responses in cancer patients and phase I clinical trials of peptide-based vaccination. *Cancer Immunol Immunother*. 53, 249-55 (2004)

Romero, P., Valmori, D., Pittet, M.J., Zippelius, A., Rimoldi, D., Lévy, F., Dutoit, V., Rubio-Godoy, V., Michielin, O., Guillaume, P., Batard, P., Luescher, I.F., Lejeune, F., Liénard, D., Rufer, N., Dietrich, P.Y., Speiser, D.E., Cerottini, J.C. Antigenicity and immunogenicity of Melan-A/MART-1 derived peptides as targets for tumor reactive CTL in human melanoma. *Immunological Reviews* 188, 81-96 (2002)

> Serge Leyvraz

Published papers with peer reviews

Appay, V., Voelter, V., Rufer, N., Reynard, S., Jandus, C., Gasparini, D., Lienard, D., Speiser, D.E., Schneider, P., Cerottini, J.C., Romero, P., Leyvraz, S. Combination of transient lymphodepletion with busulfan and fludarabine and peptide vaccination in a phase I clinical trial for patients with advanced melanoma. *J Immunother*. 30(2):240-50 (2007)

Appay, V., Jandus, C., Voelter, V., Reynard, S., Coupland, S.E., Rimoldi, D., Lienard, D., Guillaume, P., Krieg, A.M., Cerottini, J.-C., Romero, P., Leyvraz, S., Rufer, N., Speiser, D.E. New generation vaccine induces effective melanoma-specific CD8+ T cells in the circulation but not in the tumor site, *J Immunol.*, 177(3):1670-8 (2006)

Appay, V., Speiser, D.E., Rufer, N., Reynard, S., Barbey, C., Cerottini, J.-C., Leyvraz, S., Pinilla, C., Romero, P. Decreased specific CD8(+) T cell cross-reactivity of antigen recognition following vaccination with Melan-A peptide, *Eur J Immunol.*, 36(7):1805-14 (2006)

Appay, V., Reynard, S., Voelter, V., Romero, P., Speiser, D.E., Leyvraz, S. Immuno-monitoring of CD8+ T cells in whole blood versus PBMC samples. *J Immunol Methods*, 309(1-2):192-9 (2006)

Zaman, K., Driscoll, R., Hahn, D., Werffeli, P., Goodman, S.L., Bauer, J., Leyvraz, S., Lejeune, F., Stupp, R., Rugg, C. Monitoring multiple angiogenesis-related molecules in the blood of cancer patients shows a correlation between VEGF-A and MMP-9 levels before treatment and divergent changes after surgical vs. conservative therapy, *Int J Cancer*, 118(3):755-64 (2006)

Montes, M., Rufer, N., Appay, V., Reynard, S., Pittet, M.J., Speiser, D.E., Guillaume, P., Cerottini, J.C., Romero, P., Leyvraz, S. Optimum in vitro expansion of human antigen-specific CD8+ T cells for adoptive transfer therapy. *Clin Exp Immunol*. 142: 292-302 (2005)

> Nathalie Rufer

Published papers with peer reviews

Thadikkaran, L., Menzel, O., Tissot, J-D., Rufer, N. Proteomic and transcriptomic analysis of human CD8+ T lymphocytes over-expressing telomerase. *Proteomics*. In press. (2007)

Romero, P., Zippelius, A., Kurth, I., Pittet, M.J., Touvrey, C., Iancu, E.M., Corthesy, P., Devevre, E., Speiser, D.E., Rufer, N. Four functionally distinct populations of human effector-memory CD8+ T lymphocytes. *J Immunol*. 178(7):4112-9 (2007)

Appay, V., Voelter, V., Rufer, N., Reynard, S., Jandus, C., Gasparini, D., Lienard, D., Speiser, D.E., Schneider, P., Cerottini, J.C., Romero, P., Leyvraz, S. Combination of transient lymphodepletion with busulfan and fludarabine and peptide vaccination in a phase I clinical trial for patients with advanced melanoma. *J Immunother*. 30(2):240-50 (2007)

Derré, L., Bruyninx, M., Baumgaertner, P., Devevre, E., Corthesy, P., Touvrey, C., Mahnke, Y.D., Pircher, H., Voelter, V., Romero, P., Speiser, D.E., Rufer, N. J. In Vivo Persistence of Codominant Human CD8+ T Cell Clonotypes Is Not Limited by Replicative Senescence or Functional Alteration. *Immunol*. 179(4):2368-79 (2007)

Barbey, C., Baumgaertner, P., Devevre, E., Rubio-Godoy, V., Derré, L., Bricard, G., Guillaume, P., Luescher, I.F., Liénard, D., Cerottini, J-C., Romero, P., Rufer, N., and Speiser, D.E. IL-12 controls cytotoxicity of a novel subset of self antigen-specific human CD28+ cytolytic T cells. *J Immunol*. 178(6):3566-74 (2007)

Tabiasco, J., Devevre, E., Rufer, N., Salaun, B., Cerottini, J-C., Speiser, D.E., and Romero, P. Human effector CD8+ T lymphocytes express toll like receptor-3 as a functional coreceptor. *J Immunol*. 177(12):8708-13 (2006)

Appay, V., Voelter, V., Rufer, N., Reynard, S., Gasparini, D., Liénard, D., Speiser, D.E., Schneider, P., Cerottini, J.C., Romero, P., and Leyvraz, S. Combination of transient lymphodepletion with Busulfan and Fludarabine and peptide vaccination in a phase I clinical trial for patients with advanced melanoma. *J Immunother*. 30(2):240-50 (2007)

Bianchi, T., Rufer, N., MacDonald, HR., and Migliaccio, M. The tumor suppressor p16(Ink4a) regulates T lymphocyte survival. *Oncogene*. 25(29):4110-5 (2006)

Colombetti, S., Fagerberg, T., Baumgaertner, P., Chapatte, L., Speiser, D.E., Rufer, N., Michielin, O., and Lévy, F. Impact of orthologous Melan-A peptide vaccination on the anti-self Melan-A/HLA-A2 T cell cross-reactivity. *J Immunol*. 176(11):6560-7 (2006)

Menzel, O., Migliaccio, M., Goldstein, D.R., Dahoun, S., Delorenzi, M., and Rufer, N. Mechanisms regulating the proliferative potential of human CD8+ T lymphocytes over-expressing telomerase. *J Immunol*. 177(6):3657-68 (2006)

Appay, V., Jandus, C., Voelter, V., Reynard, S., Coupland, S.E., Rimoldi, D., Lienard, D., Guillaume, P., Krieg, A.M., Cerottini, J.-C., Romero, P., Leyvraz, S., Rufer, N., Speiser, D.E. New generation vaccine induces effective melanoma-specific CD8+ T cells in the circulation but not in the tumor site, *J Immunol*., 177(3):1670-8 (2006)

PUBLICATION LIST

Speiser, D.E., Baumgaertner, P., Barbey, C., Rubio-Godoy, V., Moulin, A., Cortesy, P., Devevre, E., Dietrich, P.Y., Rimoldi, D., Lienard, D., Cerottini, J.-C., Romero, P., Rufer, N. A novel approach to characterize clonality and differentiation of human melanoma-specific T cell responses: spontaneous priming and efficient boosting by vaccination, *J Immunol*, 177(2):1338-48 (2006)

Baumgaertner, P., Rufer, N., Devevre, E., Derré, L., Rimoldi, D., Geldhof, C., Voelter, V., Lienard, D., Romero, P., Speiser, D.E. Ex vivo detectable human CD8 T-cell responses to cancer-testis antigens, *Cancer Res.*, 66(4):1912-6 (2006)

Appay, V., Speiser, D.E., Rufer, N., Reynard, S., Barbey, C., Cerottini, J.-C., Leyvraz, S., Pinilla, C., Romero, P. Decreased specific CD8(+) T cell cross-reactivity of antigen recognition following vaccination with Melan-A peptide, *Eur J Immunol.*, 36(7):1805-14 (2006)

Bianchi, T., Rufer, N., MacDonald, H.R., Migliaccio, M. The tumor suppressor p16Ink4a regulates T lymphocyte survival, *Oncogene*, 25(29):4110-5 (2006)
Colombetti, S., Fagerberg, T., Baumgartner, P., Chapatte, L., Speiser, D.E., Rufer, N., Michielin, O., Lévy, F. Impact of orthologous melan-A peptide immunizations on the anti-self melan-A/HLA-A2 T cell cross-reactivity, *J Immunol.*, 176(11):6560-7 (2006)

Migliaccio, M., Alves, PM., Romero, P., and Rufer, N. Distinct mechanisms control human naive and antigen-experienced CD8+ T lymphocyte proliferation. *J Immunol.* 176(4):2173-82 (2006)

Montes, M., Rufer, N., Appay, V., Reynard, S., Pittet, MJ., Speiser, DE., Guillaume, P., Cerottini, J.C., Romero, P., and Leyvraz, S. Optimum in vitro expansion of human antigen-specific CD8 T cells for adoptive transfer therapy. *Clin Exp Immunol.* 142, 292-302 (2005)

Le Gal, F.A., Ayyoub, M., Dutoit, V., Widmer, V., Jager, E., Cerottini, J.C., Dietrich, P.Y., Valmori, D. Distinct structural TCR repertoires in naturally occurring versus vaccine-induced CD8+ T-cell responses to the tumor-specific antigen NY-ESO-1. *Journal of Immunotherapy*, 28, 252-7 (2005)

Speiser, D.E., Lienard, D., Rufer, N., Rubio-Godoy, V., Rimoldi, D., Lejeune, F., Krieg, A.M., Cerottini, J.C., Romero, P. Rapid and strong human CD8(+) T cell responses to vaccination with peptide, IFA, and CpG oligodeoxynucleotide 7909. *Journal of Clinical Investigation*, 115, 739-46 (2005)

Migliaccio, M., Raj, K., Menzel, O., Rufer, N. Mechanisms That Limit the In Vitro Proliferative Potential of Human CD8+ T Lymphocytes. *The Journal of Immunology*, 174, 3335-3343 (2005)

Rufer, N., Reichenbach, P., Romero, P. Methods for the ex vivo characterization of human CD8+ T subsets based on gene expression and replicative history analysis. *Methods in Molecular Medicine* 109, 265-84 (2005)

Zippelius, A., Bioley, G., Le Gal, F.A., Rufer, N., Brandes, M., Batard, P., De Smedt, M., Plum, J., Speiser, D.E., Cerottini, J.C., Dietrich, P.Y., Romero, P., Pittet, M.J. Human thymus exports naive CD8 T cells that can home to nonlymphoid tissues. *The Journal of Immunology* 172: 2773-2777 (2004)

PUBLICATION LIST

Zippelius, A., Batard, P., Rubio-Godoy, V., Bioley, G., Lienard, D., Lejeune, F., Rimoldi, D., Guillaume, P., Meidenbauer, N., Mackensen, A., Rufer, N., Lubenow, N., Speiser, D., Cerottini, J.C., Romero, P., Pittet, M.J. Effector function of human tumor-specific CD8 T cells in melanoma lesions: a state of local functional tolerance. *Cancer Research* 64, 2865-2873 (2004)

Papagno, L., Spina, C.A., Marchant, A., Salio, M., Rufer, N., Little, S., Dong, T., Chesney, G., Waters, A., Easterbrook, P., Dunbar, P.R., Sheperd, D., et al. CD8+ differentiation towards senescence following elevated activation in HIV-1 infection. *Public Library of Science Biology* 2, E20 (2003)

Dietrich, P-Y., Le Gal, F-A., Dutoit, V., Pittet, M.J., Trautman, L., Zippelius, A., Cognet, I., Widmer, V., Walker, P., Michielin, O., Guillaume, P., Connerotte, T., et al. Prevalent role of TCR alpha-chain in the selection of the preimmune repertoire specific for a human tumor-associated self-antigen. *Journal of Immunology* 170, 5103-5109 (2003)

Rufer N., Zippelius A., Batard P., Pittet M.J., Kurth I., Corthesy P., Cerottini J-C., Leyvraz S., Roosnek E., Nabholz M., Romero P. Identification of human pre-effector CD8+ T lymphocytes with distinct replicative history and partial effector functions. *Blood* 102, 1779-1787 (2003)

Sauce, D., Rufer, N., Mercier, P., Bodinier, M., Rémy-Martin, J-P., Duperrier, A., Ferrand, C., Hervé, P., Romero, P., Lang, F., Tiberghien, P. and Robinet, E. Retrovirus-mediated gene transfer in polyclonal T cells results in lower apoptosis and enhanced ex vivo expansion of CMV-reactive CD8 T cells as compared to EBV-reactive CD8 T cells. *Blood* 102, 1241-1248 (2003)

Reviews

Rufer, N. Molecular tracking of antigen-specific T-cell clones during immune responses. *Curr Opin Immunol.* 17, 441-447 (2005)

Rufer, N., Nabholz, M. Télomérase, élixir de jeunesse des cellules humaines ? *Médecine / Science* 19, 345-350 (2003)

Romero, P., Valmori, D., Pittet, M.J., Zippelius, A., Rimoldi, D., Lévy, F., Dutoit, V., Rubio-Godoy, V., Michielin, O., Guillaume, P., Batard, P., Luescher, I.F., et al., Antigenicity and immunogenicity of Melan-A/Mart-1 derived peptides as targets for tumor reactive CTL in human melanoma. *Immunology Reviews* 188, 81-96 (2002)

Book chapter

Rufer, N., Reichenbach, P., and Romero, P. book chapter: Methods for the ex-vivo characterization of human CD8+ T subsets based on gene expression and replicative history analysis. *Methods Mol Med.* 109, 265-284. *Adoptive Immunotherapy: Methods and Protocols.* Edited by Ludewig B, and Hoffman, MW. Humana Press Inc.

> Olivier Michielin

Published papers with peer reviews

Feige, J.N., Gelman, L., Rossi, D., Zoete, V., Metivier, R., Tudor, C., Anghel, S.I., Grosdidier, A., Lathion, C., Engelborghs, Y., Michielin, O., Wahli, W., Desvergne, B. The endocrine disruptor mono-ethyl-hexyl-phthalate is a selective PPARgamma modulator which promotes adipogenesis. *J Biol Chem.* Apr 27; [Epub ahead of print] (2007)

Alves, P.M., Viatte, S., Fagerberg, T., Michielin, O., Bricard, G., Bouzourene, H., Vuilleumier, H., Kruger, T., Givel, J.C., Levy, F., Speiser, D.E., Cerottini, J.C., Romero, P. Immunogenicity of the carcinoembryonic antigen derived peptide 694 in HLA-A2 healthy donors and colorectal carcinoma patients. *Cancer Immunol Immunother.* Apr 20; [Epub ahead of print] (2007)

Aublin, A., Ciofani, M., Willkomm, N., Hamrouni, A., Szymczak-Workman, A., Takahashi, T., Sandjeu, Y., Guillaume, P., Vignali, D., Michielin, O., Zúñiga-Pflücker, J.C. and Maryanski, J. A natural structural variant of the mouse TCR b-chain displays intrinsic receptor function and antigen specificity, *J Immunol.* 177(12):8587-94 (2006)

Zoete, V. and Michielin, O. Comparison between computational alanine scanning and per-residue binding free energy decomposition for protein-protein association using MM-GBSA. Application to the TCR-p-MHC complex. *Proteins.* 67(4):1026-47 (2007)

Grosdidier, A., Zoete, V., Michielin, O. EADock: docking of small molecules into protein active sites with a multiobjective evolutionary optimization. *Proteins.* 67(4):1010-25 (2007)

Zoete, V., Grosdidier, A., Michielin, O. Peroxisome proliferator-activated receptor structures: Ligand specificity, molecular switch and interactions with regulators. *Biochim Biophys Acta.* 1771(8):915-25 (2007)

Michalik, L., Zoete, V., Krey, G., Grosdidier, A., Gelman, L., Chodanowski, P., Feige, J.N., Desvergne, B., Wahli, W., Michielin, O. Combined simulation and mutagenesis analyses reveal the involvement of key residues for peroxisome proliferator-activated receptor alpha helix 12 dynamic behavior. *J Biol Chem.* 282(13):9666-77 (2007)

Yip, L., Zoete, V., Scheib, H. and Michielin, O. Structural assessment of single amino acid mutations: application to TP53 function, *Hum Mutat.* 27(9):926-37 (2006)

Colombetti, S., Fagerberg, T., Baumgartner, P., Chapatte, L., Speiser, D.E., Rufer, N., Michielin, O., Lévy, F., Impact of orthologous melan-A peptide immunizations on the anti-self melan-A/HLA-A2 T cell cross-reactivity, *J Immunol.*, 176(11):6560-7 (2006)

Fagerberg, T., Cerottini, J.C., Michielin, O., Structural Prediction of Peptides Bound to MHC Class I, *Journal of Molecular Biology*, 356(2):521-46 (2006)

PUBLICATION LIST

Suarez, M., Haenni, M., Canarelli, S., Fisch, F., Chodanowski, P., Servis, C., Michielin, O., Freitag, R., Moreillon, P., Mermod, N., Structure-function characterization and optimization of a plant-derived antibacterial peptide, *Antimicrob Agents Chemother*, 49(9):3847-57 (2005)

De Los Rios, P., Cecconi, F., Pretre, A., Dietler, G., Michielin, O., Piazza, F., Juanico, B., Functional dynamics of PDZ binding domains: a normal-mode analysis, *Biophys J*, 89(1):14-21. Epub (2005)

Cebecauer, M., Guillaume, P., Mark, S., Michielin, O., Boucheron, N., Bezard, M., Meyer, B.H., Segura, J.M., Vogel, H., Luescher, I.F., CD8+ cytotoxic T lymphocyte activation by soluble major histocompatibility complex-peptide dimers. *J Biol Chem*;280(25):23820-8 (2005)

Reviews

Michielin, O., Blanchet, J.S., Fagerberg, T., Valmori, D., Rubio-Godoy, V., Speiser, D.E., Ayyoub, M., Alves, P., Luescher, I., Gairin, J.E., Cerottini, J.C., Romero, P., Tinkering with nature: the tale of optimizing peptide based cancer vaccines. *Cancer Treat Res*. 2005;123:267-91 (2005)

Filges, I., Zaman, K., Michielin, O., Vulliemoz, D., Perey, L., Stupp, R., Present chemoprevention and future vision, *Rev Med Suisse*;1(20):1343-6, 1349. French, (2005)

> Pascal Schneider

Published papers with peer reviews

Appay, V., Voelter, V., Rufer, N., Reynard, S., Gasparini, D., Liénard, D., Speiser, D.E., Schneider, P., Cerottini, J.C., Romero, P., and Leyvraz, S. Combination of transient lymphodepletion with Busulfan and Fludarabine and peptide vaccination in a phase I clinical trial for patients with advanced melanoma. *J Immunother*. 30(2):240-50 (2007)

Cachero, T.G., Schwartz, I.M., Qian, F., Day, E.S., Bossen, C., Ingold, K., Tardivel, A., Krushinskie, D., Eldredge, J., Silvian, L., Lugovskoy, A., Farrington, G.K., Strauch, K., Schneider, P., Whitty, A. Formation of virus-like clusters is an intrinsic property of the tumor necrosis factor family member BAFF (B cell activating factor), *Biochemistry*, 21;45(7):2006-13 (2006)

Bossen, C., Ingold, K., Tardivel, A., Bodmer, J.L., Gaide, O., Hertig, S., Ambrose, C., Tschopp, J., Schneider, P. Interactions of tumor necrosis factor (TNF) and TNF receptor family members in the mouse and human, *J Biol Chem*., 281(20):13964-71 (2006)

Ingold, K., Zumsteg, A., Tardivel, A., Huard, B., Steiner, Q.G., Cachero, T.G., Qiang, F., Gorelik, L., Kalled, S.L., Acha-Orbea, H., Rennert, P.D., Tschopp, J., Schneider, P. Identification of proteoglycans as the APRIL-specific binding partners. *J Exp Med*. 2;201(9):1375-83 (2005)

> Jean-Pierre Kraehenbuhl

Published papers with peer reviews

Revaz, V., Zurbriggen, R., Moser, C., Schiller, J.T., Ponci, F., Bobst, M., Nardelli-Haefliger, D. Humoral and cellular immune responses to airway immunization of mice with human papillomavirus type 16 virus-like particles and mucosal adjuvants. *Antiviral Res.* 76(1):75-85 (2007)

Revaz, V. and Nardelli-Haefliger, D. Importance of mucosal immunity in defense against epithelial cancers. *Current Opinion in Immunology*, 2, 174-179 (2005)

Nardelli-Haefliger, D., Lurati, F., Wirthner, D., Ponci, F., Spertini, F., Schiller, J., Lowy, D. and De Grandi, P. Immune responses induced by lower airway mucosal immunization with a human papillomavirus type 16 virus-like-particle vaccine. *Vaccine* 23, 3634-3641 (2005)

Anderle, P., Rumbo, M., Sierro, F., Mansourian, R., Michetti, P., Roberts, M. A. and Kraehenbuhl, J. P. Novel markers of the human follicle-associated epithelium identified by gene expression profiling and laser dissection microscopy, *Gastroenterology* 129, 321-327 (2005)

Didierlaurent A, Ferrero I, Otten LA, Dubois B, Reinhardt M, Carlsen H, Blomhoff R, Akira S, Kraehenbuhl JP, Sirard JC. Flagellin Promotes Myeloid Differentiation Factor 88-Dependent Development of Th2-Type Response. *Journal of Immunology*, 172, 6922-6930 (2004)

Didierlaurent A, Ramirez JC, Gherardi M, Zimmerli SC, Graf M, Orbea HA, Pantaleo G, Wagner R, Esteban M, Kraehenbuhl JP, Sirard JC. Attenuated poxviruses expressing a synthetic HIV protein stimulate HLA-A2-restricted cytotoxic T-cell responses. *Vaccine* 22, 3395-3403 (2004)

Rumbo M, Sierro F, Debard N, Kraehenbuhl JP, Finke D. Lymphotoxin beta receptor signaling induces the chemokine CCL20 in intestinal epithelium. *Gastroenterology*. 127, 213-23 (2004)

Baud, D., Benyacoub, J., Kok, M., Curtiss III, R., De Grandi, P., Nardelli-Haefliger, D., Immunogenicity against human papillomavirus type 16 virus like particles is strongly enhanced by the PhoPc phenotype in *Salmonella typhimurium*, *Infection and Immunity*. 72, 750-6 (2004).

Nardelli-Haefliger, D., Wirthner, D., Schiller, J. T., Lowy, D. R., Hildesheim, A., Ponci, F., De Grandi, P., Specific antibody levels at the cervix are menstrual-cycle dependent in women vaccinated with Human Papillomavirus type 16 Virus like particles. *Journal of the National Cancer Institute* 95, 1128-1137 (2003).

Ramirez, J. C., Finke, D., Esteban, M., Kraehenbuhl, J. P., Acha-Orbea, H. Nasal inoculation of Modified Vaccinia Virus Ankara (MVA). is safe in mice. *Archives of Virology* 148, 827-839 (2003).

Balmelli, C., Demotz, S., Acha-Orbea, H., De Grandi, P., Nardelli-Haefliger, D. Trachea, lung and tracheo-bronchial lymph nodes are the major inductive sites after nasal vaccination of mice with human papillomavirus type 16 virus-like particles. *Journal of Virology* 76, 12596-12602 (2002).

PUBLICATION LIST

Revaz, V., Benyacoub, J., Kast, W. M., Schiller, J. T., De Grandi, P., Nardelli-Haefliger, D. Mucosal vaccination with a recombinant Salmonella typhimurium expressing human papillomavirus type 16 (HPV16). L1 virus-like particles (VLPs) or HPV16VLPs purified from insect cells inhibits the growth of HPV16-expressing tumor cells in mice. *Virology* 279, 354-360 (2001)

Sierro, F., Dubois, B., Coste, A., Kaiserlian, D., Kraehenbuhl, J. P., Sirard, J. C. Flagellin stimulation of intestinal epithelial cells triggers CCL20-mediated migration of dendritic cells. *Proceedings of the National Academy of Science USA* 98, 13722-13727 (2001).

Published papers without peer reviews

Nardelli-Haefliger, D. and Revaz, V., Mucosal Vaccines for HPV. *Papillomavirus Report* 16

Reviews

Revaz V, Nardelli-Haefliger D. The importance of mucosal immunity in defense against epithelial cancers. *Current Opinion in Immunology*,17, 175-9 (2005)

Corbett M, Kraehenbuhl JP. Lung immunity: necessity is the mother of induction. *Nature Medecine* 10, 904-5 (2004)

Kraehenbuhl JP, Corbett M. Immunology. Keeping the gut microflora at bay. *Science*, 303, 1624-1625 (2004)

Niedergang F, Didierlaurent A, Kraehenbuhl JP, Sirard JC. Dendritic cells: the host Achille's heel for mucosal pathogens? *Trends in Microbiology* 12, 2, 79-88 (2004)

Revaz,V., Wirth, S., Nardelli-Haefliger, D., Vaccination in Papillomavirus humains , *Biologie et pathologie tumorale*. ed. Aubin.F., Prétet, J.-L., Mouglin, C. Editions Médicales Internationales 687-711 (2003)

Technology Development and Support

> **Mauro Delorenzi - Bioinformatics Core Facility**

Published papers with peer reviews

Desmedt, C., Piette, F., Loi, S., Wang, Y., Lallemand, F., Haibe-Kains, B., Viale, G., Delorenzi, M., Zhang, Y., d'Assignies, M.S., Bergh, J., Lidereau, R., Ellis, P., Harris, A.L., Klijn, J.G., Foekens, J.A., Cardoso, F., Piccart, M.J., Buyse, M., Sotiriou, C.; TRANSBIG Consortium. Strong time dependence of the 76-gene prognostic signature for node-negative breast cancer patients in the TRANSBIG multicenter independent validation series. *Clin Cancer Res.* 13(11):3207-14 (2007)

Vuaroqueaux, V., Urban, P., Labuhn, M., Delorenzi, M., Wirapati, P., Benz, C.C., Flury, R., Dieterich, H., Spyrtatos, F., Eppenberger, U., Eppenberger-Castori, S. Low E2F1 transcript levels are a strong determinant of favorable breast cancer outcome. *Breast Cancer Res.* 9(3):R33 (2007)

Schmid, C.D., Sengstag, T., Bucher, P., Delorenzi, M. MADAP, a flexible clustering tool for the interpretation of one-dimensional genome annotation data. *Nucleic Acids Res.* 35(Web Server issue):W201-5 (2007)

Kuhn, A., Goldstein, D.R., Hodges, A., Strand, A.D., Sengstag, T., Kooperberg, C., Becanovic, K., Pouladi, M.A., Sathasivam, K., Cha, J.H., Hannan, A.J., Hayden, M.R., Leavitt, B.R., Dunnett, S.B., Ferrante, R.J., Albin, R., Shelbourne, P., Delorenzi, M., Augood, S.J., Faull, R.L., Olson, J.M., Bates, G.P., Jones, L., Luthi-Carter, R. Mutant huntingtin's effects on striatal gene expression in mice recapitulate changes observed in human Huntington's disease brain and do not differ with mutant huntingtin length or wild-type huntingtin dosage. *Hum Mol Genet.* 16(15):1845-61 (2007)

Loi, S., Haibe-Kains, B., Desmedt, C., Lallemand, F., Tutt, A.M., Gillet, C., Ellis, P., Harris, A., Bergh, J., Foekens, J.A., Klijn, J.G.M., Larsimont, D., Buyse, M., Bontempi, G., Delorenzi, M., Piccart, M.J., and Sotiriou, C. Definition of clinically distinct molecular subtypes in estrogen receptor positive breast carcinomas through use of genomic grade. *J. Clin. Oncol.* 25(10):1239-46 (2007)

Buyse, M., Loi, S., van't Veer, L., Viale, G., Delorenzi, M., Glas, A. M., d'Assignies, M. S., Bergh, J., Lidereau, R., Ellis, P., Harris, A., Bogaerts, J., Therasse, P., Floore, A., Amakrane, M., Piette, F., Rutgers, E., Sotiriou, C., Cardoso, F., and Piccart, M. J. Validation and clinical utility of a 70-gene prognostic signature for women with node-negative breast cancer. *J Natl Cancer Inst* 98, 1183-1192 (2006)

Gotthardt, D., Blancheteau, V., Bosserhoff, A., Ruppert, T., Delorenzi, M., and Soldati, T. Proteomic fingerprinting of phagosome maturation and evidence for the role of a Galpha during uptake. *Mol Cell Proteomics*, 5(12):2228-43 (2006)

Hodges, A., Strand, A. D., Aragaki, A. K., Kuhn, A., Sengstag, T., Hughes, G., Elliston, L. A., Hartog, C., Goldstein, D. R., Thu, D., Hollingsworth, Z. R., Collin, F., Synek, B., Holmans, P. A., Young, A. B., Wexler, N. S., Delorenzi, M., Kooperberg, C., Augood, S. J., Faull, R. L., Olson, J. M., Jones, L. , and Luthi-Carter, R. Regional and cellular gene expression changes in human Huntington's disease brain. *Hum Mol Genet* 15, 965-977 (2006)

PUBLICATION LIST

Leupin, N., Kuhn, A., Hügli, B., Grob, T.J., Jaggi, R., Tobler, A., Delorenzi, M., and Fey, M.F. Gene expression profiling reveals consistent differences between clinical samples of human leukaemias and their model cell lines. *Br. J. Haematol.* 135(4), 520-3 (2006)

Menzel, O., Migliaccio, M., Goldstein, D.R., Dahoun, S., Delorenzi, M., and Rufer, N. Mechanisms regulating the proliferative potential of human CD8+ T lymphocytes over-expressing telomerase. *J Immunol.* 177(6):3657-68 (2006)

Urban, P., Vuaroqueaux, V., Labuhn, M., Delorenzi, M., Wirapati, P., Wight, E., Senn, H. J., Benz, C., Eppenberger, U., and Eppenberger-Castori, S. Increased expression of urokinase-type plasminogen activator mRNA determines adverse prognosis in ErbB2-positive primary breast cancer. *J Clin Oncol* 24, 4245-4253 (2006)

Sotiriou, C., Wirapati, P., Loi, S., Harris, A., Fox, S., Smeds, J., Nordgren, H., Farmer, P., Praz, V., Haibe-Kains, B., Desmedt, C., Larsimont, D., Cardoso, F., Peterse, H., Nuyten, D., Buyse, M., Van de Vijver, M.J., Bergh, J., Piccart, M., Delorenzi, M. Gene expression profiling in breast cancer: understanding the molecular basis of histologic grade to improve prognosis, *J Natl Cancer Inst.* 98(4):262-72 (2006)

Bacac, M., Migliavacca, E., Stehle, J.C., Mckee, T., Delorenzi, M., Coindre, J.M., Guillou, L. and Stamenkovic, I., A gene expression signature that distinguishes desmoid tumors from nodular fasciitis, *J Pathol.*, 208(4):543-53 (2006)

Jagannathan, V., Roulet, E., Delorenzi, M., Bucher, P., HTPSELEX - a database of high-throughput SELEX libraries for transcription factor binding sites. *Nucleic Acids Research*, 34(Database issue):D90-4 (2006)

Farmer, P., Bonnefoi, H., Becette, V., Tubiana-Hulin, M., Fumoleau, P., Larsimont, D., MacGrogan, G., Bergh, J., Cameron, D., Goldstsein, D., Duss, S., Nicoulaz, A.L., Fiche, M., Brisken, C., Delorenzi, M., Iggo, R., Identification of molecular apocrine breast tumours by microarray analysis. *Oncogene*, 24:4660-71 (2005)

Jongeneel, C.V., Delorenzi, M., Iseli, C., Zhou, D., Haudenschild, C., Brian, J., Stevenson, B.J., Strausberg, R.L., Simpson, A.J.G., Vasicek, T.J., An atlas of human gene expression from massively parallel signature sequencing (MPSS), *Genome Res.* 15:1007-14 (2005)

Anderle, P., Sengstag, T., David, M., Mutch, D.M., Rumbo, M., Praz, V., Mansourian, R., Delorenzi, M., Williamson, G., Roberts, M.A., Changes in the transcriptional profile of transporters in the intestine along the anterior-posterior and crypt-villus axes, *BMC Genomics*, 6:69 (2005)

Beckmann, J.S., Maurer, F., Delorenzi, M. and Falquet, L., Ubiquitin ligases as cancer genes, *Human Mutation* 25: 507-12 (2005)

Anderle P, Sengstag T, Mutch DM, Rumbo M, Praz V, Mansourian R, Delorenzi M, Williamson G, Roberts MA. Changes in the transcriptional profile of transporters in the intestine along the anterior-posterior and crypt-villus axes. *BMC Genomics* 6, 69 (2005)

PUBLICATION LIST

de Fourmestraux V., Neubauer H., Poussin C., Farmer P., Falquet L., Burcelin R., Delorenzi M., Thorens B., Transcript profiling suggests that differential metabolic adaptation of mice to a high fat diet is associated with changes in liver to muscle lipid fluxes. *Journal of Biological Chemistry*, 279, 50743-50753 (2004)

Godard, S., Getz, G., Delorenzi, M., Farmer, P., Kobayashi, H., Desbaillets, I., Nozaki, M., Diserens, A.C., Hamou, M.F., Dietrich, P.Y., Regli, L., Janzer, R.C., Bucher, P., Stupp, R., de Tribolet, N., Domany, E., Hegi, M.E. Classification of human astrocytic gliomas on the basis of gene expression, A correlated group of genes with angiogenic activity emerges as a strong predictor of subtypes. *Cancer Research* 63, 6613-6625 (2003)

Reviews

Migliavacca, E., Applied Introduction to Multivariate Methods Used in Drug Discovery, Mini Review in *Medicinal Chemistry* 3, 831-843 (2003)

Scientifics articles in anthologies

Goldstein, D.R., Delorenzi, M. Statistical Design and Data Analysis for Microarray Experiments. A. Berger and M.A. Roberts (eds)., *Unraveling Lipid Metabolism with Microarrays*. Dekker, New York, USA (2003)

Anderle, P., Berger, A., Farmer, P.J., Roberts, M.A. Dietary long chain fatty acid induction of gene signals involved in carcinogenesis. A. Berger and M.A. Roberts (eds)., *Unraveling Lipid Metabolism with Microarrays*. Dekker, New York, USA (2003)

Anderle, P., Farmer, P.J., Berger, A., Roberts, M.A. A Nutrigenomic Approach to Understanding the Mechanisms by which Dietary Long Chain Fatty Acids Induce Gene Signals and Control Mechanisms involved in Carcinogenesis. A. Berger and M.A. Roberts (eds)., *Unraveling Lipid Metabolism with Microarrays*. Dekker, New York, (2003)

Book Chapters

Goldstein, D.R., Delorenzi, M., Luthy-Carter, R. and Sengstag, T. book chapter: Meta-Analysis of Microarray Studies. In in Rudy Guerra and David Allison (eds) *Meta-Analysis and Combining Information in Genetics*, Chapman-Hall (2006)



Friedrich Beermann - Animal Core Facility

Published papers with peer reviews

Murisier, F., Guichard, S., Beermann, F. The tyrosinase enhancer is activated by Sox10 and Mitf in mouse melanocytes. *Pigment Cell Res.* 20(3):173-84 (2007)

Murisier, F., Guichard, S., Beermann, F. Distinct distal regulatory elements control tyrosinase expression in melanocytes and the retinal pigment epithelium. *Dev Biol.* 303(2):838-47 (2007)

Schouwey, K., Delmas, V., Larue, L., Zimmer-Strobl, U., Strobl, L., Radtke, F. and Beermann, F. Notch1 and Notch2 receptors influence progressive hair graying in a dose-dependent manner. *Dev Dynam*, 236(1):282-9 (2007)

PUBLICATION LIST

Membrez, M., Hummler, E., Beermann, F., Haefliger, J.A., Savioz, R., Pedrazzini, T. and Thorens, B. Glut8 is dispensable for embryonic development but influences hippocampal neurogenesis and heart function. *Mol. Cell. Biol.* 26, 4268-4276 (2006)

Moriyama, M., Osawa, M., Mak, S.S., Ohtsuka, T., Yamamoto, N., Han, H., Delmas, V., Kageyama, R., Beermann, F., Larue, L. and Nishikawa, S.I. Notch signaling via Hes1 transcription factor maintains survival of melanoblasts and melanocyte stem cells. *J. Cell. Biol.* 173, 333-339 (2006)

Murisier, F., Guichard, S. and Beermann, F. A conserved transcriptional enhancer that specifies *Tyrp1* expression to melanocytes. *Dev. Biol.* 298, 644-655 (2006)

Zou, J., Beermann, F., Wang, J., Kawakami, K., Wei, X. The Fugu *tyrp1* promoter directs specific GFP expression in zebrafish: tools to study the RPE and the neural crest-derived melanophores. *Pigm Cell Res.* 19, 615-627 (2006)

Beermann, F., Kaloulis, K., Hofmann, D., Murisier, F., Bucher, P., Trumpp, A. Identification of evolutionarily conserved regulatory elements in the mouse *Fgf8* locus. *Genesis* 44: 1-6 (2006)

Preynat-Seauve, O., Schuler, P., Contassot, E., Beermann, F., Huard, B., French, L.E. Tumor-infiltrating dendritic cells are potent antigen-presenting cells able to activate T cells and mediate tumor rejection. *Journal of Immunology* 176: 61-67 (2006)

Rosenblatt-Velin, N., Lepore, M., Cartoni, C., Beermann, F. and Pedrazzini, T., FGF-2 controls the differentiation of resident cardiac precursors into functional cardiomyocytes. *J. Clin. Invest.* 115, pp. 1724-1733 (2005)

Ackermann, J., Fruttschi, M., Kaloulis, K., McKee, T., Trumpp, A. and Beermann, F., Metastasizing melanoma formation caused by expression of activated N-ras^{Q61K} on an INK4a-deficient background. *Cancer Res.* 65, pp. 4005-4011 (2005)

Ackermann, J. and Beermann, F., The fibroblast growth factor-2 is not essential for melanoma formation in a transgenic mouse model. *Pigment Cell Res.* 18, pp. 315-319 (2005)

Osawa, M., Egawa, G., Mak, S.S., Moriyama, M., Freter, R., Yonetani, S., Beermann, F. and Nishikawa, S., Molecular characterization of melanocyte stem cells in their niche. *Development* 132, pp. 5589-5599 (2005)

Marty, N., Dallaporta, M., Foretz, M., Emery, M., Tarussio, D., Bady, I., Binnert, C., Beermann, F., Thorens, B. Regulation of glucagon secretion by glucose transporter type 2 (*Glut2*) and astrocyte-dependent glucose sensors. *J. Clin. Invest.* 115, pp. 3545-3553 (2005)

Reviews

Beermann, F. Modeling melanoma. *Drug Disc Today: Disease Mod.* 3, 129-135 (2006)

Porret, A., Mérillat, A.M., Guichard, S., Beermann, F. and Hummler, E., Tissue-specific transgenic and knockout mice, *Methods Mol. Biol.* 337:185-205 (2006)

PUBLICATION LIST

Murisier, F., Beermann, F. Genetics of pigmentation: lessons from the tyrosinase gene family. *Histology and Histopathology* 21: 567-578 (2006)

Ackermann J., Beermann F. The fibroblast growth factor-2 is not essential for melanoma formation in a transgenic mouse model. *Pigment Cell Research* 18, 315-319 (2005)

Ackermann J, Fruttschi M, Kaloulis K, McKee T, Trumpp A, Beermann F. Metastasizing melanoma formation caused by expression of activated N-RasQ61K on an INK4a-deficient background. *Cancer Research* 65, 4005-11 (2005)

Guyonneau. L., Murisier, F., Rossier, A., Moulin, A., Beermann, F. Melanocytes and pigmentation are affected in dopachrome tautomerase knockout mice. *Molecular and Cellular Biology* 24, 3396-403 (2004)

Rousseau, B., Larrieu-Lahargue, F., Guilhem-Ducléon, F., Beermann, F., Javerzat, S., Bikfalvi, A. The tyrp1-Tag/tyrp1-FGFR1-DN bigenic mouse, A model for selective inhibition of tumor development, angiogenesis and invasion into the neural tissue by blockade of fibroblast growth factor (FGF) receptor activity. *Cancer Research* 64, 2490-5 (2004)

Tardivel. A., Tinel, A., Lens, S., Steiner, Q.G., Säuberli, E., Wilson, A., Mackay, F., Rolink, A.G., Beermann, F., Tschopp, J., Schneider, P. The anti-apoptotic factor Bcl-2 can functionally substitute for the B cell survival but not for the marginal zone B cell differentiation activity of BAFF. *European Journal of Immunology* 34, 509-18 (2004)

Beermann, F., Orlow, S.J., Lamoreux, M.L. The Tyr (albino) locus of the laboratory mouse. *Mammalian Genome* 15, 749-58 (2004)

Montoliu, L., Larue, L., Beermann, F. On the use of regulatory regions from pigmentary genes to drive the expression of transgenes in mice. *Pigment Cell Research* 17, 2, 188 (2004)

Foletti, A., Vuadens, F., Beermann, F. Nuclear localization of mouse fibroblast growth factor 2 requires N-terminal and C-terminal sequences. *Cellular and Molecular Life Science* 10, 2254-2265 (2003)

> **Nathalie Garin - Microscopy, Imaging and Morphology Facility**

Published papers with peer reviews

Rey, J., Garin, N., Spertini, F., Cortes, B. Targeting of secretory IgA to Peyer's patch dendritic and T cells after transport by intestinal M cells. *Journal of Immunology* 172, 3026-33 (2004)

Finke, D., Acha-Orbea, H., Mattis, A., Lipp, M., Kraehenbuhl, J-P. CD4+CD3- cells induce Peyer's patch development, role of alpha4beta1 integrin activation by CXCR5. *Immunity* 17, 363-373 (2002)

Zilian, O., Saner, C., Hagedorn, L., Lee, H. Y., Sauberli, E., Suter, U., Sommer, L., Aguet, M. Multiple roles of mouse Numb in tuning developmental cell fates. *Current Biology* 11, 494-501 (2001)

PUBLICATION LIST

> **Catherine Servis - Clinical Tumor Proteome Analysis
Facility**

Published papers with peer reviews

Chapatte, L., Ayyoub, M., Morel, S., Peitrequin, A.L., Lévy, N., Servis, C., Van den Eynde, B.J., Valmori, D., Lévy, F. Processing of tumor-associated antigen by the proteasomes of dendritic cells controls in vivo T-cell responses, *Cancer Res.*, 66(10):5461-8 (2006)

NCCR 1st Phase Projects

> Mauro Delorenzi

Published papers with peer reviews

Jongeneel C.V., Delorenzi M., Iseli C., Zhou D., Haudenschild CD., Khrebtukova I., Kuznetsov D., Stevenson BJ., Strausberg RL., Simpson AJ., Vasicek TJ. An atlas of human gene expression from massively parallel signature sequencing (MPSS) *Genome Research* 15:1007-1014 (2005)

Schmid, C-S., Praz, V., Delorenzi. M., Périer. R., Bucher. P. The Eukaryotic Promoter Database EPD, the impact of in silico primer extension. *Nucleic Acids Research* 32, D82-85 (2004)

Pierre F, Bonnefoi H, Becette V, Tubiana-Hulin M, Fumoleau P, Larsimont D, Macgrogan G, Bergh J, Cameron D, Goldstein D, Duss S, Nicoulaz AL, Brisken C, Fiche M, Delorenzi M, Iggo R. Identification of molecular apocrine breast tumours by microarray analysis *Oncogene* 24, 4660-71(2005)

Beckmann JS., Maurer F., Delorenzi M., Falquet L. On ubiquitin ligases and cancer. *Human Mutation*, 25:507-12 (2005)

> Lars French

Published papers with peer reviews

Ingold K, Zumsteg A, Tardivel A, Huard B, Steiner QG, Cachero TG, Qiang F, Gorelik L, Kalled SL, Acha-Orbea H, Rennert PD, Tschopp J, Schneider P. Identification of proteoglycans as the APRIL-specific binding partners. *Journal of Experimental Medicine* 201:1375-83 (2005)

Schneider P, Tschopp J BAFF and the regulation of B cell survival. *Immunology Letters* 88, 57-62 (2003)

Huard B, Arlettaz L, Ambrose C, Kindler V, Mauri D, Roosnek E, Tschopp J, Schneider P, French LE. BAFF production by antigen presenting cells provides T cell costimulation. *International Immunology* 16, 467-75 (2004)

Tardivel A., Tinel A., Lens S., Steiner Q-G., Sauberli E., Wilson A., Mackay F., Rolink A.G., Beermann F., Tschopp J., Schneider P. The antiapoptotic factor Bcl-2 can functionally substitute for the B cell survival but not the marginal zone B cell differentiation activity of BAFF. *European Journal of Immunology* 34, 509-18 (2004)

Gaide O., Schneider P. Permanent correction of an inherited ectodermal dysplasia with recombinant EDA. *Nature Medicine* 9, 614-618 (2003)

PUBLICATION LIST

> Richard Iggo

Published papers with peer reviews

Fuerer, C., Homicsko, K., Lukashev, A.N., Pittet, A.L. and Iggo RD. Fusion of the BCL9 HD2 domain to E1A increases the cytopathic effect of an oncolytic adenovirus that targets colon cancer cells. *BMC Cancer*. 6:236 (2006)

Malerba M., Nikolova D., Cornelis J., Iggo R. Targeting of autonomous parvoviruses to colon cancer by insertion of Tcf sites in the P4 promoter. *Cancer Gene Therapy* 13, 273-80 (2006)

Homicsko K., Lukashev A., Iggo RD. RAD001 (everolimus) improves the efficacy of replicating adenoviruses that target colon cancer. *Cancer Research* 65, 6882-6890 (2005)

Fuerer C., Iggo R. 5-fluorocytosine increases the toxicity of Wnt-targeting replicating adenoviruses that express cytosine deaminase as a late gene. *Gene Therapy* 11, 142-51 (2004)

Malerba M., Daeffler L., Rommelaere J., Iggo R. D. Replicating parvoviruses that target colon cancer cells. *Journal of Virology* 77, 6683-6691 (2003)

Fuerer C., Iggo R. Adenovirus with Tcf binding sites in multiple early promoters show enhanced selectivity for tumour cells with constitutive activation. *Gene Therapy* 9, 270-281 (2002)

> Peter Beard

Published papers with peer reviews

Jurvansuu J, Raj K, Stasiak A, Beard P. Viral Transport of DNA Damage That Mimics a Stalled Replication Fork. *Journal of Virology*, 79, 569-580 (2005)

Raj K., Berguerand S., Southern S., Doorbar J., Beard P. E1 empty set E4 protein of human papillomavirus type 16 associates with mitochondria. *Journal of Virology* 78, 7199-207 (2004)

Lathion S., Schaper J., Beard P., Raj, K. Notch1 can contribute to viral-induced transformation of primary human keratinocytes. *Cancer Research* 63, 8687-94 (2003)

Nicolas M., Wolfer A., Raj K., Kummer J., Mill P., van Noort M., Hui C., Clevers H., Dotto G.P., Radtke F. Notch1 functions as a tumor suppressor in mouse skin. *Nature Genetics* 33, 416-421 (2003)

Radtke F., Raj K. The role of Notch in tumorigenesis, oncogene or tumour suppressor ? *Nature Review Cancer* 3, 756-767 (2003)

Bechtold V., Beard P., Raj K. Human papillomavirus type 16 E2 protein has no effect on transcription from episomal viral DNA. *Journal of Virology* 77, 2021-2028 (2003)

PUBLICATION LIST

Raj K., Ogston P., Beard P. Virus-mediated killing of cells that lack p53 activity. *Nature* 416, 202 (2002)

> Christos Sotiriou

Published papers with peer reviews

Jazaeri AA, Chandramouli GV, Aprelikova O, Nuber UA, Sotiriou C, Liu ET, Ropers HH, Yee CJ, Boyd J, Barrett JC. BRCA1-mediated repression of select X chromosome genes. *Journal of Translational Medicine* 21, 32. (2004)

Durbecq V, Paesmans M, Cardoso F, Desmedt C, Di Leo A, Chan S, Friedrichs K, Pinter T, Van Belle S, Murray E, Bodrogi I, Walpole E, Lesperance B, Korec S, Crown J, Simmonds P, Perren TJ, Leroy JY, Rouas G, Sotiriou C, Piccart M, Larsimont D. Topoisomerase-II alpha expression as a predictive marker in a population of advanced breast cancer patients randomly treated either with single-agent doxorubicin or single-agent docetaxel. *Molecular Cancer Therapeutics* 3, 1207-1214 (2004)

Durbecq V, Desmed C, Paesmans M, Cardoso F, Di Leo A, Mano M, Rouas G, Leroy JY, Sotiriou C, Piccart M, Larsimont D. Correlation between topoisomerase-IIalpha gene amplification and protein expression in HER-2 amplified breast cancer. *International Journal of Oncology* 25, 1473-9 (2004)

Cardoso F, Paesmans M, Larsimont D, Durbecq V, Bernard-Marty C, Rouas G, Dolci S, Sotiriou C, Piccart MJ, Di Leo A. Potential predictive value of Bcl-2 for response to tamoxifen in the adjuvant setting of node-positive breast cancer. *Clinical Breast Cancer* 5(5):364-9 (2004)

Lacroix M, Haibe-Kains B, Hennuy B, Laes JF, Lallemand F, Gonze I, Cardoso F, Piccart M, Leclercq G, Sotiriou C. Gene regulation by phorbol 12-myristate 13-acetate in MCF-7 and MDA-MB-231, two breast cancer cell lines exhibiting highly different phenotypes. *Oncol Rep.* 12, 701-7 (2004)

Sotiriou C, Lothaire P, Dequanter D, Cardoso F, Awada A. Molecular profiling of head and neck tumors. *Curr Opin Oncol.*16, 211-4 (2004)

Cardoso, F., Durbecq, V., Larsimont, D., Paesmans, M., Leroy, J.Y., Rouas, G., Sotiriou, C., Renard, N., Richard, V., Piccart, M.J., Di Leo, A. Correlation between complete response to anthracycline-based chemotherapy and topoisomerase II-alpha gene amplification and protein overexpression in locally advanced/metastatic breast cancer. *International Journal of Oncology* 24, 201-9 (2004)

Piccart, M.J., Sotiriou, C., Cardoso, F. New data on chemotherapy in the adjuvant setting. *Breast* 12, 373-8 (2003)

Pusztai, L., Sotiriou, C., Buchholz, T.A., Meric, F., Symmans, W.F., Esteva, F.J., Sahin, A, Liu, E.T., Hortobagi, G.N. Molecular profiles of invasive mucinous and ductal carcinomas of the breast, a molecular case study. *Cancer Genetics and Cytogenetics* 141, 148-53 (2003)

Jazaeri, A.A., Lu, K., Schmandt, R., Harris, C.P., Rao, P.H., Sotiriou, C., Chandramouli, G.V., Gershenson, D.M., Liu, E.T. Molecular determinants of tumor differentiation in papillary serous ovarian carcinoma. *Molecular Carcinogenesis* 36, 53-59 (2003)

PUBLICATION LIST

Sotiriou, C., Neo, S.Y., McShane, L.M., Korn, E.L., Long, P.M., Jazaeri, A., Martiat, P., Fox, S.B., Harris, A.L., Liu, E.T. Breast cancer classification and prognosis based on gene expression profiles from a population-based study. *Proceedings of the National Academy of Science USA* 100, 10393-8 (2003).

Sotiriou, C., Khanna, C., Petersen, D., Jazaeri, A., Liu, E.T. Core Biopsies can be used to distinguish differences in expression profiling by cDNA microarrays. *Journal of Molecular Diagnostics* 4, 30-36 (2002).

Sotiriou, C., Powles, T.J., Dowsett, M., Jazaeri, A., Feldman, A., Assersohn, L., Chandramouli, G., Libutti, S., Liu, E. FNA-derived gene expression profiles correlate with response to systemic chemotherapy in breast cancer. *Breast Cancer Research* 4, R4 (2002).

Jazaeri, A.A., Yee, C.J., Sotiriou, C., Brantley, K.R., Boyd, J., Liu, E.T. Gene expression profiles of BRCA1-linked, BRCA2-linked, and sporadic ovarian cancers. *Journal of the National Cancer Institute* 94, 990-1000 (2002).

Reviews

Loi S, Desmedt C, Cardoso F, Piccart M, Sotiriou C. Breast cancer gene expression profiling: clinical trial and practice implications *Pharmacogenomics*. 6, 49-58 (2005)

Loi S, Buyse M, Sotiriou C, Cardoso F. Challenges in breast cancer clinical trial design in the postgenomic era. *Curr Opin Oncol*. 16, 536-41. (2004)

Cardoso F, Ross JS, Piccart MJ, Sotiriou C, Durbecq V. Targeting the ubiquitin-proteasome pathway in breast cancer. *Clin Breast Cancer*. 5, 148-57 (2004)

Liu. E., Sotiriou. C. Defining the galaxy of gene expression in breast cancer. *Breast Cancer Research* 4, 141-4 (2002).

> Urs Eppenberger

Published papers with peer reviews

Urban, P., Vuaroqueaux, V., Labuhn, M., Delorenzi, M., Wirapati, P., Wight, E., Senn, H. J., Benz, C., Eppenberger, U., and Eppenberger-Castori, S. Increased expression of urokinase-type plasminogen activator mRNA determines adverse prognosis in ErbB2-positive primary breast cancer. *J Clin Oncol* 24, 4245-4253 (2006)