

Bibliography

- Adams M, Reginato MJ, Shao D, Lazar MA & Chatterjee VK. (1997).
Transcriptional activation by peroxisome proliferator-activated receptor
gamma is inhibited by phosphorylation at a consensus mitogen-activated
protein kinase site. *The Journal of biological chemistry* **272**, 5128-5132.
- al Yacoub N, Romanowska M, Kraus S, Schweiger S & Foerster J. (2007).
PPAR delta is a type 1 interferon target gene and inhibits apoptosis in T
cells.
- Bairoch A, Boeckmann B, Ferro S & Gasteiger E. (2004). Swiss-Prot: juggling
between evolution and stability. *Briefings in bioinformatics* **5**, 39-55.
- Berman HM, Westbrook J, Feng Z, Gilliland G, Bhat TN, Weissig H, Shindyalov
IN & Bourne PE. (2000). The Protein Data Bank. *Nucl Acids Res* **28**,
235-242.
- Bhushan M, McLaughlin B, Weiss JB & Griffiths CE. (1999). Levels of
endothelial cell stimulating angiogenesis factor and vascular endothelial
growth factor are elevated in psoriasis. *The British journal of dermatology*
141, 1054-1060.
- Blessing M, Schirmacher P & Kaiser S. (1996). Overexpression of bone
morphogenetic protein-6 (BMP-6) in the epidermis of transgenic mice:
inhibition or stimulation of proliferation depending on the pattern of
transgene expression and formation of psoriatic lesions. *The Journal of
cell biology* **135**, 227-239.
- Bockamp E, Christel C, Hameyer D, Khobta A, Maringer M, Reis M, Heck R,
Cabezas-Wallscheid N, Epe B, Oesch-Bartlomowicz B, Kaina B, Schmitt
S & Eshkind L. (2007). Generation and characterization of tTS-H4: a
novel transcriptional repressor that is compatible with the reverse

Bibliography

tetracycline-controlled TET-ON system. *The journal of gene medicine* **9**, 308-318.

Bowcock AM & Krueger JG. (2005). Getting under the skin: the immunogenetics of psoriasis. *Nat Rev Immunol* **5**, 699-711.

Boyman O, Hefti HP, Conrad C, Nickoloff BJ, Suter M & Nestle FO. (2004). Spontaneous development of psoriasis in a new animal model shows an essential role for resident T cells and tumor necrosis factor-alpha. *The Journal of experimental medicine* **199**, 731-736.

Burdick AD, Bility MT, Girroir EE, Billin AN, Willson TM, Gonzalez FJ & Peters JM. (2007). Ligand activation of peroxisome proliferator-activated receptor-beta/delta(PPARbeta/delta) inhibits cell growth of human N/TERT-1 keratinocytes. *Cellular signalling* **19**, 1163-1171.

Burns KA & Vanden Heuvel JP. (2007). Modulation of PPAR activity via phosphorylation. *Biochimica et biophysica acta*.

Buske-Kirschbaum A, Kern S, Ebrecht M & Hellhammer DH. (2007). Altered distribution of leukocyte subsets and cytokine production in response to acute psychosocial stress in patients with psoriasis vulgaris. *Brain, behavior, and immunity* **21**, 92-99.

Chelsky D, Ralph R & Jonak G. (1989). Sequence requirements for synthetic peptide-mediated translocation to the nucleus. *Molecular and cellular biology* **9**, 2487-2492.

Chen CL, Yull FE, Cardwell N, Singh N, Strayhorn WD, Nanney LB & Kerr LD. (2000). RAG2^{-/-}, I kappa B-alpha^{-/-} chimeras display a psoriasiform skin disease. *The Journal of investigative dermatology* **115**, 1124-1133.

Chenna R, Sugawara H, Koike T, Lopez R, Gibson TJ, Higgins DG & Thompson JD. (2003). Multiple sequence alignment with the Clustal series of programs. *Nucleic acids research* **31**, 3497-3500.

Bibliography

- Chiba H, Clifford J, Metzger D & Chambon P. (1997). Distinct retinoid X receptor-retinoic acid receptor heterodimers are differentially involved in the control of expression of retinoid target genes in F9 embryonal carcinoma cells. *Mol Cell Biol* **17**, 3013-3020.
- Debets R, Hegmans JP, Deleuran M, Hooft S, Benner R & Prens EP. (1996). Expression of cytokines and their receptors by psoriatic fibroblast. I. Altered IL-6 synthesis. *Cytokine* **8**, 70-79.
- Di-Poi N, Desvergne B, Michalik L & Wahli W. (2005). Transcriptional repression of peroxisome proliferator-activated receptor beta/delta in murine keratinocytes by CCAAT/enhancer-binding proteins. *The Journal of biological chemistry* **280**, 38700-38710.
- Enlund F, Samuelsson L, Enerback C, Inerot A, Wahlstrom J, Yhr M, Torinsson A, Riley J, Swanbeck G & Martinsson T. (1999). Psoriasis susceptibility locus in chromosome region 3q21 identified in patients from southwest Sweden. *Eur J Hum Genet* **7**, 783-790.
- Friedmann PS, Cooper HL & Healy E. (2005). Peroxisome proliferator-activated receptors and their relevance to dermatology. *Acta dermatovenereologica* **85**, 194-202.
- Gisondi P, Adami F, Di Francesco V, Zamboni M & Girolomoni G. (2007). Efficacy of low-calorie diet associated to suboptimal cyclosporine in the treatment of severe chronic plaque psoriasis of obese patients: open, controlled, randomized clinical trial. *Journal of Investigative Dermatology* **127**, S15.
- Gudjonsson JE, Johnston A, Dyson M, Valdimarsson H & Elder JT. (2007). Mouse Models of Psoriasis. *The Journal of investigative dermatology* **127**, 1292-1308.

Bibliography

- Haack K, Cockrell AS, Ma H, Israeli D, Ho SN, McCown TJ & Kafri T. (2004). Transactivator and structurally optimized inducible lentiviral vectors. *Mol Ther* **10**, 585-596.
- Hamminga EA, van der Lely AJ, Neumann HA & Thio HB. (2006). Chronic inflammation in psoriasis and obesity: implications for therapy. *Med Hypotheses* **67**, 768-773.
- Harris SG & Phipps RP. (2001). The nuclear receptor PPAR gamma is expressed by mouse T lymphocytes and PPAR gamma agonists induce apoptosis. *European journal of immunology* **31**, 1098-1105.
- Harris SG & Phipps RP. (2002). Induction of apoptosis in mouse T cells upon peroxisome proliferator-activated receptor gamma (PPAR-gamma) binding. *Advances in experimental medicine and biology* **507**, 421-425.
- He TC, Chan TA, Vogelstein B & Kinzler KW. (1999). PPARdelta is an APC-regulated target of nonsteroidal anti-inflammatory drugs. *Cell* **99**, 335-345.
- Hobbs RM, Silva-Vargas V, Groves R & Watt FM. (2004). Expression of activated MEK1 in differentiating epidermal cells is sufficient to generate hyperproliferative and inflammatory skin lesions. *The Journal of investigative dermatology* **123**, 503-515.
- Icre G, Wahli W & Michalik L. (2006). Functions of the Peroxisome Proliferator-Activated Receptor (PPAR) alpha and beta in Skin Homeostasis, Epithelial Repair, and Morphogenesis. *The Journal of investigative dermatology* **126 Suppl**, 30-35.
- Jakobsen MA, Petersen RK, Kristiansen K, Lange M & Lillevang ST. (2006). Peroxisome proliferator-activated receptor alpha, delta, gamma1 and gamma2 expressions are present in human monocyte-derived dendritic cells and modulate dendritic cell maturation by addition of subtype-specific ligands. *Scand J Immunol* **63**, 330-337.

Bibliography

- Jang S-I & Steinert PM. (2002). Loricrin Expression in Cultured Human Keratinocytes Is Controlled by a Complex Interplay between Transcription Factors of the Sp1, CREB, AP1, and AP2 Families. *J Biol Chem* **277**, 42268-42279.
- Kanda N & Watanabe S. (2005). 17beta-estradiol enhances heparin-binding epidermal growth factor-like growth factor production in human keratinocytes. *American journal of physiology* **288**, C813-823.
- Kimura R, Iwamoto R & Mekada E. (2005). Soluble form of heparin-binding EGF-like growth factor contributes to retinoic acid-induced epidermal hyperplasia. *Cell Struct Funct* **30**, 35-42.
- Kohlmann WM, Urban W, Sterry W & Foerster J. (2004). Correlation of psoriasis activity with abundance of CD25+CD8+ T cells: conditions for cloning T cells from psoriatic plaques. *Experimental dermatology* **13**, 607-612.
- Koponen JK, Kankkonen H, Kannasto J, Wirth T, Hillen W, Bujard H & Yla-Herttuala S. (2003). Doxycycline-regulated lentiviral vector system with a novel reverse transactivator rtTA2S-M2 shows a tight control of gene expression in vitro and in vivo. *Gene therapy* **10**, 459-466.
- Kota BP, Huang TH & Roufogalis BD. (2005). An overview on biological mechanisms of PPARs. *Pharmacol Res* **51**, 85-94.
- Kuenzli S & Saurat JH. (2003). Effect of topical PPARbeta/delta and PPARgamma agonists on plaque psoriasis. A pilot study. *Dermatology (Basel, Switzerland)* **206**, 252-256.
- Kunsthfeld R, Hirakawa S, Hong YK, Schacht V, Lange-Asschenfeldt B, Velasco P, Lin C, Fiebigler E, Wei X, Wu Y, Hicklin D, Bohlen P & Detmar M. (2004). Induction of cutaneous delayed-type hypersensitivity reactions in

Bibliography

VEGF-A transgenic mice results in chronic skin inflammation associated with persistent lymphatic hyperplasia. *Blood* **104**, 1048-1057.

Lazennec G, Canaple L, Saugy D & Wahli W. (2000). Activation of Peroxisome Proliferator-Activated Receptors (PPARs) by Their Ligands and Protein Kinase A Activators. *Molecular endocrinology (Baltimore, Md)* **14**, 1962-1975.

Lim H, Gupta RA, Ma WG, Paria BC, Moller DE, Morrow JD, DuBois RN, Trzaskos JM & Dey SK. (1999). Cyclo-oxygenase-2-derived prostacyclin mediates embryo implantation in the mouse via PPARdelta. *Genes & development* **13**, 1561-1574.

Lowes MA, Bowcock AM & Krueger JG. (2007). Pathogenesis and therapy of psoriasis. *Nature* **445**, 866-873.

Lowes MA, Chamian F, Abello MV, Fuentes-Duculan J, Lin SL, Nussbaum R, Novitskaya I, Carbonaro H, Cardinale I, Kikuchi T, Gilleaudeau P, Sullivan-Whalen M, Wittkowski KM, Papp K, Garovoy M, Dummer W, Steinman RM & Krueger JG. (2005). Increase in TNF-alpha and inducible nitric oxide synthase-expressing dendritic cells in psoriasis and reduction with efalizumab (anti-CD11a). *Proceedings of the National Academy of Sciences of the United States of America* **102**, 19057-19062.

Luquet S, Lopez-Soriano J, Holst D, Fredenrich A, Melki J, Rassoulzadegan M & Grimaldi PA. (2003). Peroxisome proliferator-activated receptor delta controls muscle development and oxidative capability. *Faseb J* **17**, 2299-2301.

Madsen P, Rasmussen HH, Leffers H, Honore B & Celis JE. (1992). Molecular cloning and expression of a novel keratinocyte protein (psoriasis-associated fatty acid-binding protein [PA-FABP]) that is highly up-regulated in psoriatic skin and that shares similarity to fatty acid-binding proteins. *The Journal of investigative dermatology* **99**, 299-305.

Bibliography

- Malhotra S, Bansal D, Shafiq N, Pandhi P & Kumar B. (2005). Potential therapeutic role of peroxisome proliferator activated receptor-gamma agonists in psoriasis. *Expert opinion on pharmacotherapy* **6**, 1455-1461.
- Marino MG, Carboni I, De Felice C, Maurici M, Maccari F & Franco E. (2004). Risk factors for psoriasis: a retrospective study on 501 outpatients clinical records. *Ann Ig* **16**, 753-758.
- Masternak MM, Al-Regaiey KA, Del Rosario Lim MM, Bonkowski MS, Panici JA, Przybylski GK & Bartke A. (2005). Caloric restriction results in decreased expression of peroxisome proliferator-activated receptor superfamily in muscle of normal and long-lived growth hormone receptor/binding protein knockout mice. *J Gerontol A Biol Sci Med Sci* **60**, 1238-1245.
- Michalik L, Auwerx J, Berger JP, Chatterjee VK, Glass CK, Gonzalez FJ, Grimaldi PA, Kadowaki T, Lazar MA, O'Rahilly S, Palmer CN, Plutzky J, Reddy JK, Spiegelman BM, Staels B & Wahli W. (2006). International Union of Pharmacology. LXI. Peroxisome proliferator-activated receptors. *Pharmacological reviews* **58**, 726-741.
- Monczak Y, Trudel M, Lamph WW & Miller WH, Jr. (1997). Induction of apoptosis without differentiation by retinoic acid in PLB-985 cells requires the activation of both RAR and RXR. *Blood* **90**, 3345-3355.
- Moreland JL, Gramada A, Buzko OV, Zhang Q & Bourne PE. (2005). The Molecular Biology Toolkit (MBT): a modular platform for developing molecular visualization applications. *BMC bioinformatics* **6**, 21.
- Nair RP, Henseler T, Jenisch S, Stuart P, Bichakjian CK, Lenk W, Westphal E, Guo SW, Christophers E, Voorhees JJ & Elder JT. (1997). Evidence for two psoriasis susceptibility loci (HLA and 17q) and two novel candidate regions (16q and 20p) by genome-wide scan. *Hum Mol Genet* **6**, 1349-1356.

Bibliography

- Naldi L, Chatenoud L, Linder D, Belloni Fortina A, Peserico A, Virgili AR, Bruni PL, Ingordo V, Lo Scocco G, Solaroli C, Schena D, Barba A, Di Landro A, Pezzarossa E, Arcangeli F, Gianni C, Betti R, Carli P, Farris A, Barabino GF & La Vecchia C. (2005). Cigarette smoking, body mass index, and stressful life events as risk factors for psoriasis: results from an Italian case-control study. *J Invest Dermatol* **125**, 61-67.
- Nolan TM, Di Girolamo N, Coroneo MT & Wakefield D. (2004). Proliferative effects of heparin-binding epidermal growth factor-like growth factor on pterygium epithelial cells and fibroblasts. *Investigative ophthalmology & visual science* **45**, 110-113.
- NuclearReceptorsNomenclatureCommitte. (1999). A unified nomenclature system for the nuclear receptor superfamily. *Cell* **97**, 161-163.
- Park F. (2007). Lentiviral vectors: Are they the future of animal transgenesis? *Physiological genomics*.
- Piqueras L, Reynolds AR, Hodiola-Dilke KM, Alfranca A, Redondo JM, Hatae T, Tanabe T, Warner TD & Bishop-Bailey D. (2007). Activation of PPARbeta/delta induces endothelial cell proliferation and angiogenesis. *Arteriosclerosis, thrombosis, and vascular biology* **27**, 63-69.
- Platt DH, Bartoli M, El-Remessy AB, Al-Shabrawey M, Lemtalsi T, Fulton D & Caldwell RB. (2005). Peroxynitrite increases VEGF expression in vascular endothelial cells via STAT3. *Free radical biology & medicine* **39**, 1353-1361.
- Pleguezuelos O & Kapas S. (2006). Differentiation of the HaCaT keratinocyte cell line: modulation by adrenomedullin. *The British journal of dermatology* **154**, 602-608.
- Rahman P & Elder JT. (2005). Genetic epidemiology of psoriasis and psoriatic arthritis. *Annals of the rheumatic diseases* **64 Suppl 2**, ii37-39; discussion ii40-31.

Bibliography

- Romanowska M, al Yacoub N, Seidel H, Donandt S, Gerken H, Phillip S, Haritonova N, Artuc M, Schweiger S, Sterry W & Foerster J. (2007). PPAR[delta] Enhances Keratinocyte Proliferation in Psoriasis and Induces Heparin-Binding EGF-Like Growth Factor. *The Journal of investigative dermatology*.
- Sano S, Chan KS, Carbajal S, Clifford J, Peavey M, Kiguchi K, Itami S, Nickoloff BJ & DiGiovanni J. (2005). Stat3 links activated keratinocytes and immunocytes required for development of psoriasis in a novel transgenic mouse model. *Nature medicine* **11**, 43-49.
- Schon MP & Boehncke WH. (2005). Psoriasis. *The New England journal of medicine* **352**, 1899-1912.
- Shirakata Y, Kimura R, Nanba D, Iwamoto R, Tokumaru S, Morimoto C, Yokota K, Nakamura M, Sayama K, Mekada E, Higashiyama S & Hashimoto K. (2005). Heparin-binding EGF-like growth factor accelerates keratinocyte migration and skin wound healing. *Journal of cell science* **118**, 2363-2370.
- Sommer DM, Jenisch S, Suchan M, Christophers E & Weichenthal M. (2006). Increased prevalence of the metabolic syndrome in patients with moderate to severe psoriasis. *Arch Dermatol Res* **298**, 321-328.
- Sterry WF, John (2003). What must a model display to proof as a model for psoriasis? In *Ernst Schering Research Foundation Workshop*.
- Szulc J, Wiznerowicz M, Sauvain MO, Trono D & Aebischer P. (2006). A versatile tool for conditional gene expression and knockdown. *Nature methods* **3**, 109-116.
- Tachibana K, Kobayashi Y, Tanaka T, Tagami M, Sugiyama A, Katayama T, Ueda C, Yamasaki D, Ishimoto K, Sumitomo M, Uchiyama Y, Kohro T, Sakai J, Hamakubo T, Kodama T & Doi T. (2005). Gene expression

Bibliography

profiling of potential peroxisome proliferator-activated receptor (PPAR) target genes in human hepatoblastoma cell lines inducibly expressing different PPAR isoforms. *Nuclear receptor* **3**, 3.

- Tan NS, Michalik L, Desvergne B & Wahli W. (2005). Multiple expression control mechanisms of peroxisome proliferator-activated receptors and their target genes. *The Journal of steroid biochemistry and molecular biology* **93**, 99-105.
- Tan NS, Michalik L, Di-Poi N, Desvergne B & Wahli W. (2004a). Critical roles of the nuclear receptor PPARbeta (peroxisome-proliferator-activated receptor beta) in skin wound healing. *Biochemical Society transactions* **32**, 97-102.
- Tan NS, Michalik L, Di-Poi N, Ng CY, Mermoud N, Roberts AB, Desvergne B & Wahli W. (2004b). Essential role of Smad3 in the inhibition of inflammation-induced PPARbeta/delta expression. *The EMBO journal* **23**, 4211-4221.
- Tan NS, Michalik L, Noy N, Yasmin R, Pacot C, Heim M, Fluhmann B, Desvergne B & Wahli W. (2001). Critical roles of PPAR beta/delta in keratinocyte response to inflammation. *Genes Dev* **15**, 3263-3277.
- Tan NS, Shaw NS, Vinckenbosch N, Liu P, Yasmin R, Desvergne B, Wahli W & Noy N. (2002). Selective cooperation between fatty acid binding proteins and peroxisome proliferator-activated receptors in regulating transcription. *Molecular and cellular biology* **22**, 5114-5127.
- Tanaka T, Yamamoto J, Iwasaki S, Asaba H, Hamura H, Ikeda Y, Watanabe M, Magoori K, Ioka RX, Tachibana K, Watanabe Y, Uchiyama Y, Sumi K, Iguchi H, Ito S, Doi T, Hamakubo T, Naito M, Auwerx J, Yanagisawa M, Kodama T & Sakai J. (2003). Activation of peroxisome proliferator-activated receptor delta induces fatty acid beta-oxidation in skeletal muscle and attenuates metabolic syndrome. *Proceedings of the National Academy of Sciences of the United States of America* **100**, 15924-15929.

Bibliography

- The MGCPT. (2004). The Status, Quality, and Expansion of the NIH Full-Length cDNA Project: The Mammalian Gene Collection (MGC). *Genome Res* **14**, 2121-2127.
- Trembath RC, Clough RL, Rosbotham JL, Jones AB, Camp RD, Frodsham A, Browne J, Barber R, Terwilliger J, Lathrop GM & Barker JN. (1997). Identification of a major susceptibility locus on chromosome 6p and evidence for further disease loci revealed by a two stage genome-wide search in psoriasis. *Human molecular genetics* **6**, 813-820.
- Tudor C, Feige JN, Pingali H, Lohray VB, Wahli W, Desvergne B, Engelborghs Y & Gelman L. (2007). Association with coregulators is the major determinant governing peroxisome proliferator-activated receptor mobility in living cells. *The Journal of biological chemistry* **282**, 4417-4426.
- Wang LH, Yang XY, Zhang X, Huang J, Hou J, Li J, Xiong H, Mihalic K, Zhu H, Xiao W & Farrar WL. (2004). Transcriptional inactivation of STAT3 by PPARgamma suppresses IL-6-responsive multiple myeloma cells. *Immunity* **20**, 205-218.
- Westergaard M, Henningsen J, Johansen C, Rasmussen S, Svendsen ML, Jensen UB, Schroder HD, Staels B, Iversen L, Bolund L, Kragballe K & Kristiansen K. (2003). Expression and localization of peroxisome proliferator-activated receptors and nuclear factor kappaB in normal and lesional psoriatic skin. *J Invest Dermatol* **121**, 1104-1117.
- Wrone-Smith T & Nickoloff BJ. (1996). Dermal injection of immunocytes induces psoriasis. *The Journal of clinical investigation* **98**, 1878-1887.
- Xia YP, Li B, Hylton D, Detmar M, Yancopoulos GD & Rudge JS. (2003). Transgenic delivery of VEGF to mouse skin leads to an inflammatory condition resembling human psoriasis. *Blood* **102**, 161-168.

Bibliography

- Xu HE, Lambert MH, Montana VG, Parks DJ, Blanchard SG, Brown PJ, Sternbach DD, Lehmann JM, Wisely GB, Willson TM, Kliewer SA & Milburn MV. (1999). Molecular recognition of fatty acids by peroxisome proliferator-activated receptors. *Molecular cell* **3**, 397-403.
- Zhao Q, Khorasanizadeh S, Miyoshi Y, Lazar MA & Rastinejad F. (1998). Structural elements of an orphan nuclear receptor-DNA complex. *Molecular cell* **1**, 849-861.
- Zheng Y, Peng Z, Wang Y, Tan S, Xi Y & Wang G. (2003). Alteration and significance of heparin-binding epidermal-growth-factor-like growth factor in psoriatic epidermis. *Dermatology* **207**, 22-27.
- Zoete V, Grosdidier A & Michielin O. (2007). Peroxisome proliferator-activated receptor structures: Ligand specificity, molecular switch and interactions with regulators. *Biochimica et biophysica acta*.
- Zuo X, Wu Y, Morris JS, Stimmel JB, Leesnitzer LM, Fischer SM, Lippman SM & Shureiqi I. (2006). Oxidative metabolism of linoleic acid modulates PPAR-beta/delta suppression of PPAR-gamma activity. *Oncogene* **25**, 1225-1241.