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Staatsangehörigkeit: deutsch
Familienstand: verheiratet, 1 Kind

BERUFLICHER UND WISSENSCHAFTLICHER WERDEGANG

- 1966** Hochschulreife (Abitur), Eichendorff-Gymnasium Koblenz
1967-1968 Wehrdienst (Fernmelder), Koblenz
1969-1975 Studiengang Diplom-Biologie: Johannes-Gutenberg-Universität Mainz: sehr gut
1969-1976 Studiengang Gymnasiallehrer (Chemie und Biologie): Universität Mainz: sehr gut
1976-1978 Promotion in Biochemie, Universität Mainz (Dr. rer. nat., magna cum laude)
1978-1981 Wissenschaftlicher Assistent, Institut für Med. Mikrobiologie, Universität Mainz
1981-1983 Visiting Investigator, Scripps Research Institute, La Jolla, USA
1983-1987 Oberassistent, Pathologisches Institut, Inselspital der Universität Bern, Schweiz
1987-1993 Wissenschaftlicher Angestellter, Frauenklinik, Technische Universität München
1989 Habilitation, Dr. med. habil. (Experimentelle Gynäkologie) TU München
1990 Privatdozent, Erteilung der Lehrbefugnis
seit 1993 Universitätsprofessor (C3) auf Lebenszeit (Experimentelle Gynäkologie)
Frauenklinik, Klinikum rechts der Isar der Technischen Universität München

FORSCHUNGSFELDER

- 1974-1977** Institut für Biochemie der Universität Mainz: Membran-assoziierte Me^{2+} -ATPasen.
1978-1980 Institut für Medizinische Mikrobiologie der Universität Mainz: Komplement-abhängige Rezeptor-Systeme lymphoider und phagozytischer Zellen.
1981-1983 Department of Immunopathology, Scripps Research Institute, La Jolla, CA, USA: Rezeptor-Systeme von Entzündungszellen (Chemotaxis).
1983-1987 Pathologisches Institut der Universität Bern, Schweiz: Rezeptor-Systeme, Chemotaxis, Tumorbologie.
1987-heute Frauenklinik, TU München, Klinikum rechts der Isar, TU München: Tumorinvasion/ Metastasierung in der gynäkologischen Onkologie, Krebsbiomarker, Therapie-Ansprechmarker, Gensignaturen, Proteomics, Genomics, Epigenetik, Gestationspathologie, personalisierte Krebsmedizin, Biobanking.

WISSENSCHAFTLICHE AKTIVITÄTEN

- 411 Publikationen in wissenschaftlichen Zeitschriften und Büchern. Editor von 5 Büchern, 5 Sonderausgaben von wissenschaftlichen Zeitschriften.
- Betreuung von ca. 190 Dissertationen und 17 Habilitationen, (Co)-Organisation von 34 internationalen / nationalen Konferenzen.
- Mitgründer der Firma Wilex AG München (1997).
- 72 Patente bzw. Patentanmeldungen.
- Co-Editor der Zeitschriften European Journal of Cancer, Thrombosis & Haemostasis, International Journal of Oncology, Cancer Therapy, Critical Reviews in Clinical Laboratory Science, The Open Clinical Chemistry Journal, Thrombosis Research (beendet).
- Gutachter für eine Vielzahl von wissenschaftlichen Zeitschriften und Forschungsfördernde Institutionen (Europäische Kommission, DFG, Krebshilfe, Alexander von Humboldt-Stiftung, Wilhelm Sander-Stiftung, weitere inländische und ausländische Förderinstitutionen).
- Chairman der EORTC PathoBiology Group (2003-2009), Translational Research Chairman of the EORTC PathoBiology Group und Member of EORTC Translational Research Advisory Committee (TRAC). Board Member der EORTC PathoBiology Group und Mitglied des EORTC

Translational Research Advisory Committee (TRAC). Repräsentant des Network of Core Institutions (NOCI) der EORTC für das Klinikum rechts der Isar, Techn. Universität München.

MITGLIED BEI

- Beiratsmitglied von Brustkrebs Deutschland e.V.
- Stiftungsratsmitglied der Henner Graeff Stiftung (Vorstandsmitglied), München
- Stiftungsratsmitglied der Frey-Werle-Stiftung, München (ab 2014)
- Vorstandsmitglied im AlumniClub (Medizin) der Technischen Universität München
- Scientific Advisory Board der Association for Worldwide Innovative Networking (WIN) in Personalized Cancer Medicine, Paris, Frankreich
- Board der International Society for Fibrinolysis and Proteolysis, Brüssel (2002-2008)
- Stiftungsrat (Board of directors) Tumor Bank Foundation Basel, Schweiz (2001-2006)
- Scientific Advisory Board der Wilex AG, München (2001-2005)
- American Association for Cancer Research, Philadelphia, USA
- International Society on Thrombosis and Haemostasis, Carrboro, USA
- International Society of Fibrinolysis and Proteolysis, Leuven, Belgien
- European Organization for Research and Treatment of Cancer (EORTC), Brüssel, Belgien
- PathoBiology Group (EORTC), Brüssel, Belgien
- Translational Advisory Committee (EORTC), Belgien
- Network of Core Institutions (EORTC), Brüssel, Belgien
- Gesellschaft für Biochemie und Molekularbiologie, Frankfurt
- Deutsche Gesellschaft für Zellbiologie, Heidelberg
- Tumorzentrum München
- Deutsche Krebsgesellschaft, Berlin
- Brustkrebs Deutschland, München
- Habilitationskommission, Fakultät für Medizin, TU München
- Ständige apl.-Professur-Kommission, Fakultät für Medizin, TU München

GEFÖRDERT DURCH

Schweizer Nationalfonds, Rolex-Fond, DFG (Ausbildungsstipendium und Forschungsstipendium USA, Klinische Forschergruppe GR280, Graduierten-Kolleg 333, mehrere Einzelförderungen), Schwerpunktprogramm 1100, SFB 207, SFB 456, SFB 469, BMBF NFG3, BMBF Innovative Medizin, BMWi (ZIM), BIOREGIO-M, Wilhelm-Sander-Stiftung, Krebshilfe (Dr. Mildred Scheel-Stiftung), Hochschulsonderprogramm HSP Bayern, Kommission für Klinische Forschung der Med. Fakultät der TU München, EU-Förderung (BIOMED-1, BIOMED-2, 4th Medical and Health Program, PECO, Esprit-3, TMR, Marie-Curie-Programm, 6th Framework Program, 7th Framework Program), IUCC, DAAD, Bayerische Forschungsförderung (FORTEPRO), BfArM Bonn, BayChina. EORTC Translational Research Fund. Verschiedene Forschungsnetzwerke mit der pharmazeutischen Industrie.

Ausgewählte Publikationen (von 411)

- 1) Dorn J, Beaufort N, **Schmitt M**, Diamandis EP, Goettig P, Magdolen V. (2014). Function and clinical relevance of kallikrein-related peptidases and other serine proteases in gynecological cancers. *Critical Reviews in Clinical Laboratory Sciences*, Epub ahead.
- 2) Dorn J, Gkazepis A, Kotsch M, Kremer M, Propping C, Mayer K, Mengele K, Diamandis EP, Kiechle M, Magdolen V, **Schmitt M**. (2014). Clinical value of protein expression of kallikrein-related peptidase 7 (KLK7) in ovarian cancer. *Biological Chemistry* 395:95-107.
- 3) Aichler M, Elsner M, Ludyga N, Feuchtinger A, Zangen V, Maier SK, Balluff B, Schöne C, Hierber L, Braselmann H, Meding S, Rauser S, Zischka H, Aubele M, **Schmitt M**, Feith M, Hauck SM, Ueffing M, Langer R, Kuester B, Zitzelsberger H, Höfler H, Walch AK. (2013). Clinical response to chemotherapy in oesophageal adenocarcinoma patients is linked to defects in mitochondria. *Journal of Pathology* 230:410-419.
- 4) Dorn J, Bayani J, Yousef GM, Yang F, Magdolen V, Kiechle M, Diamandis EP, **Schmitt M**. (2013). Clinical utility of kallikrein-related peptidases (KLK) in urogenital malignancies. *Thrombosis and Haemostasis* 110:408-422.
- 5) Falkenberg N, Anastasov N, Rappl K, Braselmann H, Auer G, Walch A, Huber M, Höfig I, **Schmitt M**, Höfler H, Atkinson MJ, Aubele M. (2013). miR-221/-222 differentiate prognostic groups in advanced breast cancers and influence cell invasion through uPAR. *British Journal of Cancer* 109:2714-2723.

- 6) Gross E, Meul C, Raab S, Propping C, Avril S, Aubele M, Gkazepis A, Schuster T, Grebenchtchikov N, **Schmitt M**, Kiechle M, Meijer J, Vijzelaar R, Meindl A, van Kuilenburg, A. (2013). Somatic copy number changes in DPYD reflect chemosensitivity in triple-negative breast cancers. *British Journal of Cancer* 109:2347-2355.
- 7) Harbeck N, **Schmitt M**, Meisner C, Friedel C, Untch M, Schmid M, Sweep CGJ, Lisboa BW, Lux MP, Beck T, Hasmüller S, Kiechle M, Jänicke F, Thomssen C, for the Chemo-N0 Study Group. (2013). Ten-year analysis of the prospective multicenter Chemo-N0 trial validates ASCO-recommended biomarkers uPA and PAI-1 for therapy decision making in node-negative breast cancer patients. *European Journal of Cancer* 49:1825-1835.
- 8) Ludyga N, Anastasov N, Rosemann M, Seiler J, Lohmann N, Braselmann H, Mengele K, **Schmitt M**, Höfler H, Aubele M. (2013). Effects of simultaneous knockdown of HER2 and PTK6 on malignancy and tumor progression in human breast cancer cells. *Molecular Cancer Research* 11:381-392.
- 9) Bronger H, Kraeft S, Schwarz-Boeger U, Cerny C, Stöckel A, Avril S, Kiechle M, **Schmitt M**. (2012). Modulation of CXCR3 ligand secretion by prostaglandin E2 and cyclooxygenase inhibitors in human breast cancer. *Breast Cancer Research* 14:R30.
- 10) Daidone MG, Foekens JA, Harbeck N, Martens J, Brünner N, Thomssen C, Hall JA, Salgado R, Dittmer J, Geurts-Moespot A, Duffy MJ, Sweep FCGJ, **Schmitt M**. (2012). Identification, validation and clinical implementation of tumor-associated biomarkers: translational strategies of the EORTC-PathoBiology Group. *Eur J Cancer Supplements* 10:120-127.
- 11) Grismayer B, Soelch S, Seubert B, Kirchner T, Schäfer S, Baretton G, **Schmitt M**, Luther T, Krüger A, Kotsch M, Magdolen V. (2012). Rab31 expression levels modulate tumor-relevant characteristics of breast cancer cells. *Molecular Cancer* 11:62.
- 12) Hofer S, Mengele K, Stemmler HJ, **Schmitt M**, Pestalozzi B. (2012). Intrathecal trastuzumab: dose matters. *Acta Oncologica* 51:955-956.
- 13) Seiz L, Dorn J, Kotsch M, Walch A, Grebenchtchikov NI, Gkazepis A, Schmalfeldt B, Kiechle M, Bayani J, Diamandis EP, Langer R, Sweep FCGJ, **Schmitt M**, Magdolen V. (2012). Stromal cell-associated expression of kallikrein-related peptidase 6 (KLK6) indicates poor prognosis of ovarian cancer patients. *Biological Chemistry* 393:391-401.
- 14) Dorn J, Harbeck N, Kates R, Gkazepis A, Scorilas A, Soosaipillai A, Diamandis E, Kiechle M, Schmalfeldt B, **Schmitt M**. (2011). Impact of expression differences of kallikrein-related peptidases and of uPA and PAI-1 between primary tumor and omentum metastasis in advanced ovarian cancer. *Annals in Oncology* 22:877-883.
- 15) Dorn J, Magdolen V, Gkazepis A, Gerte T, Harlozinska A, Sedlaczek P, Diamandis E, P, Schuster T, Harbeck N, Kiechle M, **Schmitt M**. (2011). Circulating biomarker tissue kallikrein-related peptidase KLK5 impacts ovarian cancer patients' survival. *Annals in Oncology* 22:1783-1790.
- 16) Hauser S, Bickel L, Weinspach D, Gerg M, Schäfer M, K, Pfeifer M, Hazin J, Schelter F, Weidle U, H, Ramser J, Volkmann J, Meindl A, **Schmitt M**, Schrözlmaier F, Altevoigt P, Krüger A. (2011). Full-length L1CAM and not its $\Delta 2\Delta 27$ splice variant promotes metastasis through induction of gelatinase expression. *PLoS One*. 6:e18989.
- 17) Kotsch M, Dorn J, Doetzer K, Schmalfeldt B, Krol J, Baretton G, Kiechle M, **Schmitt M**, Magdolen V. (2011). mRNA expression levels of the biological factors uPAR uPAR-del4/5 and rab31 displaying prognostic value in breast cancer are not clinically relevant in advanced ovarian cancer. *Biol Chem*. 392:1047-1051.
- 18) **Schmitt M**, Harbeck N, Brünner N, Jänicke F, Meisner C, Mühlenweg B, Jansen H, Dorn J, Nitz U, Kantelhardt E, J, Thomssen C. (2011). Review of clinical studies employing Level-of-Evidence-1 disease forecast cancer biomarkers urokinase-type plasminogen activator (uPA) and its inhibitor PAI-1. *Expert Rev Mol Diagn*. 11:617-634.
- 19) Rauser S, Marquardt C, Balluff B, Deininger SO, Albers C, Belau E, Hartmer R, Suckau D, Specht K, Ebert MP, **Schmitt M**, Aubele M, Höfler H, Walch A. (2010). Classification of HER2 receptor status in breast cancer tissues by MALDI Imaging Mass Spectrometry. *J Proteome Res*. 9:1854-1863.
- 20) Seiz L, Kotsch M, Grebenchtchikov N, Geurts-Moespot A, Fuessel S, Goettig P, Gkazepis A, Wirth MP, **Schmitt M**, Loßnitzer A, Sweep FC, Magdolen V. (2010). Polyclonal antibodies against kallikrein-related peptidase 4 (KLK4): immunohistochemical assessment of KLK4 expression in healthy tissues and prostate cancer. *Biological Chemistry* 391:391-340.
- 21) Lössner D, Abou-Ajram C, Bengel A, Aumercie, M, **Schmitt M**, Reuning U. (2009). Integrin $\alpha v \beta 3$ upregulates integrin-linked kinase expression in human ovarian cancer cells via enhancement of ILK gene transcription. *Journal of Cellular Physiology* 220:367-375.
- 22) Thomssen C, Harbeck N, Dittmer J, Abraha-Spaeth S, Papendick N, Paradiso A, Lisboa B, Jänicke F, **Schmitt M**, Vetter M. (2009). Feasibility of measuring the prognostic factors uPA and PAI-1 in core needle biopsy breast cancer specimens. *Journal of the National Cancer Institute* 101:1028-1029.
- 23) Gluz O, Mengele K, **Schmitt M**, Kates R, Diallo-Danebrock R, Neff F, Royer HD, Eckstein N, Mohrmann S, Ting E, Kiechle M, Poremba C, Nitz U, Harbeck N. (2009). Y-Box binding protein YB-1 identifies high-risk primary breast cancer patients benefiting from rapidly cycled tandem high-dose adjuvant chemotherapy. *Journal of Clinical Oncology* 27:6144-6151.
- 24) Duffy, MJ, Napieralski R, Martens JW, Span PN, Spyrtatos F, Sweep FC, Brunner N, Foekens JA, **Schmitt M**. EORTC PathoBiology Group. (2009). Methylated genes as new cancer biomarkers. *European Journal of Cancer* 45:335-346.
- 25) Hartmann O, Spyrtatos F, Harbeck N, Dietrich D, Fassbender A, **Schmitt M**, Eppenberger-Castori S,

- Vuaroqueaux V, Lerebours F, Welzel K, Maier S, Plum A, Niemann S, Foekens JA, Lesche R, Martens JWM. (2009). DNA methylation markers predict outcome in node-positive, estrogen receptor-positive breast cancer with adjuvant anthracycline-based chemotherapy. *Clinical Cancer Research* 15:315-328.
- 26) Specht K, Harbeck N, Smida J, Annecke K, Reich U, Naehrig J, Langer R, Mages J, Busch R, Kruse E, Klein-Hitpass L, **Schmitt M**, Kiechle M, Hoefler H. (2009). Expression profiling identifies genes that predict recurrence of breast cancer after adjuvant CMF-based chemotherapy. *Breast Cancer Research and Treatment* 118:45-56.
 - 27) Zhang Y, Sieuwerts AM, McGreevy M, Casey G, Cufer T, Paradiso A, Harbeck N, Span PN, Hicks DG, Crowe J, Tubbs RR, Budd GT, Lyons J, Sweep FC, **Schmitt M**, Schittulli F, Golouh R, Talantov D, Wang Y, Foekens JA. (2009). The 76-gene signature defines high-risk patients that benefit from adjuvant tamoxifen therapy. *Breast Cancer Research and Treatment* 116:303-309.
 - 28) Debela M, Beaufort N, Magdolen V, Schechter NM, Craik CS, **Schmitt M**, Bode W, Goettig P. (2008). Structures and specificity of the human kallikrein-related peptidases KLK 4, 5, 6, and 7. *Biological Chemistry* 389:623-632.
 - 29) Sturgeon CM, Hoffman BR, Chan DW, Ch'ng SL, Hammond E, Hayes DF, Liotta LA, Petricoin EF, **Schmitt M**, Semmes OJ, Söletormos G, van der Merwe E, Diamandis EP; National Academy of Clinical Biochemistry. (2008). National Academy of Clinical Biochemistry Laboratory Medicine Practice Guidelines for use of tumor markers in clinical practice: quality requirements. *Clinical Chemistry* 54:e1-e10.
 - 30) Harbeck N, Nimmrich I, Hartmann A, Ross JS, Cufer T, Grützmann R, Kristiansen G, Paradiso A, Hartmann O, Margossian A, Martens J, Schwobe I, Kluth A, Müller V, Milde-Langosch K, Nährig J, Foekens J, Maier S, **Schmitt M**, Lesche R; on behalf of the EpiBreast Group. (2008). Multicenter study using paraffin-embedded tumor tissue confirms PITX2 DNA methylation as a marker for outcome prediction in tamoxifen-treated, node-negative breast cancer patients. *Journal of Clinical Oncology* 26:5036-5042.
 - 31) Dorn J, **Schmitt M**, Kates R, Schmalfeldt B, Kiechle M, Scorilas A, Diamandis EP, Harbeck N. (2007). Primary tumor levels of human tissue kallikreins affect surgical success and survival in ovarian cancer patients. *Clinical Cancer Research* 13:1742-1748.
 - 32) Maier S, Nimmrich I, Koenig T, Eppenberger-Castori S, Bohlmann I, Paradiso A, Spyrtatos F, Thomssen C, Mueller V, Nährig J, Schittulli F, Kates R, Lesche R, Schwobe I, Kluth A, Marx A, Martens JW, Foekens JA, **Schmitt M**, Harbeck N; European Organisation for Research and Treatment of Cancer (EORTC) PathoBiology group. (2007). DNA-methylation of the homeodomain transcription factor PITX2 reliably predicts risk of distant disease recurrence in tamoxifen-treated, node-negative breast cancer patients--Technical and clinical validation in a multi-centre setting in collaboration with the European Organisation for Research and Treatment of Cancer (EORTC) PathoBiology group. *European Journal of Cancer* 43:1679-1686.
 - 33) Foekens JA, Atkins D, Zhang Y, Sweep FC, Harbeck N, Paradiso A, Cufer T, Sieuwerts AM, Talantov D, Span PN, Tjan-Heijnen VC, Zito AF, Specht K, Hoefler H, Golouh R, Schittulli F, **Schmitt M**, Beex LV, Klijn JG, Wang Y. (2006). Multicenter validation of a gene expression-based prognostic signature in lymph node-negative primary breast cancer. *Journal of Clinical Oncology* 24:1665-1671.
 - 34) Borgono CA, Kishi T, Scorilas A, Harbeck N, Dorn J, Schmalfeldt B, **Schmitt M**, Diamandis EP. (2006). Human kallikrein 8 protein is a favorable prognostic marker in ovarian cancer. *Clinical Cancer Research*. 12:1487-1493.
 - 35) Martens JW, Nimmrich I, Koenig T, Look MP, Harbeck N, Model F, Kluth A, Bolt-de Vries J, Sieuwerts AM, Portengen H, Meijer-Van Gelder ME, Piepenbrock C, Olek A, Hofler H, Kiechle M, Klijn JG, **Schmitt M**, Maier S, Foekens JA. (2005). Association of DNA methylation of phosphoserine aminotransferase with response to endocrine therapy in patients with recurrent breast cancer. *Cancer Research* 65:4101-4117.
 - 36) Meijer-van Gelder ME, Look MP, Peters HA, **Schmitt M**, Brunner N, Harbeck N, Klijn JG, Foekens JA. (2004). Urokinase-type plasminogen activator system in breast cancer: association with tamoxifen therapy in recurrent disease. *Cancer Research* 64:4563-4568.
 - 37) Scorilas A, Borgono CA, Harbeck N, Dorn J, Schmalfeldt B, **Schmitt M**, Diamandis EP. Human kallikrein 13 protein in ovarian cancer cytosols: a new favorable prognostic marker. *Journal of Clinical Oncology* (2004); 22:678-685.
 - 38) Look M, van Putten W, Duffy M, **Schmitt M**, Foekens J. (2003). Pooled analysis of prognostic impact of uPA and PAI-1 in breast cancer patients. *Thrombosis and Haemostasis* 90:538-548.
 - 39) Yousef GM, Polymeris ME, Grass L, Soosaipillai A, Chan PC, Scorilas A, Borgono C, Harbeck N, Schmalfeldt B, Dorn J, **Schmitt M**, Diamandis EP. (2003). Human kallikrein 5: a potential novel serum biomarker for breast and ovarian cancer. *Cancer Research* 63:3958-3965.
 - 40) Kishi T, Grass L, Soosaipillai A, Scorilas A, Harbeck N, Schmalfeldt B, Dorn J, Mysliwiec M, **Schmitt M**, Diamandis EP. (2003). Human kallikrein 8, a novel biomarker for ovarian carcinoma. *Cancer Research* 63:2771-2774.
 - 41) Harbeck N, Kates RE, Look MP, Meijer-Van Gelder ME, Klijn JG, Kruger A, Kiechle M, Janicke F, **Schmitt M**, Foekens JA. (2002). Enhanced benefit from adjuvant chemotherapy in breast cancer patients classified high-risk according to urokinase-type plasminogen activator (uPA) and plasminogen activator inhibitor type 1 (n = 3424). *Cancer Research* 62:4617-4622.
 - 42) Look MP, van Putten WL, Duffy MJ, **Schmitt M**, Foekens JA. (2002). Pooled analysis of prognostic impact of urokinase-type plasminogen activator and its inhibitor PAI-1 in 8377 breast cancer patients. *Journal of the National Cancer Institute* 94:116-128.

- 43) Jänicke F, Prechtl A, Thomssen C, Harbeck N, Meisner C, Untch M, Sweep CG, Selbmann HK, Graeff H, **Schmitt M**; German N0 Study Group. (2001). Randomized adjuvant chemotherapy trial in high-risk, lymph node-negative breast cancer patients identified by urokinase-type plasminogen activator and plasminogen activator inhibitor type 1. *Journal of the National Cancer Institute* 93:913-920.