

# MEDICAL FACULTY UNIVERSITY HOSPITAL MAGDEBURG

## EXPERIMENTAL OBSTETRICS AND GYNAECOLOGY

### Publications

#### Selected publications of the Department of Experimental Gynecology and Obstetrics

#### 2020

**Santamaria CG, Meyer N, Schumacher A, Zenclussen ML, Teglia CM, Culzoni MJ, Zenclussen AC, Rodriguez HA.** (2020) Dermal exposure to the UV filter benzophenone-3 during early pregnancy affects fetal growth and sex ratio of the progeny in mice. Arch Toxicol. 2020 May 19. doi: 10.1007/s00204-020-02776-5. Online ahead of print. PMID: 32430675

**Meyer M, Langwisch S, Scharm M, Zenclussen AC.**(2020) Using ultrasound to define the time point of intrauterine growth retardation in a mouse model of heme oxygenase-1 deficiency. Biol Reprod. 2020 Apr 28;ioaa057. doi: 10.1093/biolre/ioaa057. Online ahead of print. PMID: 32342097

**Michael L. Dustin and Ana Claudia Zenclussen.** (2020) A checkpoint cliffhanger at the dawn of placental mammals. J Biol Chem

**Violeta Stojanovska and Ana Claudia Zenclussen.** (2020) Innate and adaptive immune responses in HELLP syndrome. Front Immunol

**Mandy Busse, Kim-Norina Jutta Campe, Anke Redlich, Anika Oettel, Roland Hartig, Serban-Dan Costa and Ana Claudia Zenclussen.** (2020) Regulatory B Cells Are Decreased and Impaired in Their Function in Peripheral Maternal Blood in Pre-term Birth. Front Immunol 20 March 2020, doi: 10.3389/fimmu.2020.00386

**Nicole Meyer, Ana Claudia Zenclussen.** (2020) Immune Cells in the Uterine Remodeling: Are They the Target of Endocrine Disrupting Chemicals? Front Immunol, 11, 246 2020 Feb 19 eCollection 2020, DOI: 10.3389/fimmu.2020.00246

**Ute Bank, Katrin Deiser, Carlos Plaza-Sirvent, Lisa Osbelt, Amelie Witte, Laura Knop, Rebecca Labrenz, Robert Jänsch, Felix Richter, Aindrila Biswas, Ana C Zenclussen, Eric Vivier, Chiara Romagnani, Anja A Kühn, Ildiko R Dunay, Till Strowig, Ingo Schmitz, Thomas Schüler.** (2020) c-FLIP Is Crucial for IL-7/IL-15-dependent NKp46 + ILC Development and Protection From Intestinal Inflammation in Mice. Nat Commun , 11 (1), 1056 2020 Feb 26, DOI: 10.1038/s41467-020-14782-3

**Nicolás Anselmino, Michael Starbuck, Estefania Labanca, Javier Cotignola, Nora Navone, Geraldine Gueron, Ana C Zenclussen, Elba Vazquez** (2020). Heme Oxygenase-1 Is a Pivotal Modulator of Bone Turnover and Remodeling: Molecular Implications for Prostate Cancer Bone Metastasis. Antioxid Redox Signal, 2020 Jan 20 [Online ahead of print]; DOI: 10.1089/ars.2019.7879

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**Anne Schumacher, Ana C Zenclussen.** (2019) Human Chorionic Gonadotropin-Mediated Immune Responses That Facilitate Embryo Implantation and Placentation. Front Immunol, 10, 2896 2019 Dec 10 eCollection, DOI: 10.3389/fimmu.2019.02896

**Ehrentraut S, Sauss K, Neumeister R, Luley L, Oettel A, Fettke F, Costa S-D, Langwisch S, Zenclussen AC, Schumacher A.** (2019) Human Miscarriage Is Associated With Dysregulations in Peripheral Blood-Derived Myeloid Dendritic Cell Subsets. *Frontiers in Immunol* 2019 Oct 15; Volume 10 | Article 2440. doi: 10.3389/fimmu.2019.02440

**Luo Y, Meyer N, Jiao Q, Scheffel J, Zimmermann C, Metz M, Zenclussen AC, Mauerer M, Siebenhaar F.** (2019) Chymase-Cre; Mcl- 1fl/fl Mice Exhibit Reduced Numbers of Mucosal Mast Cells. *Frontiers in Immunol* 2019 Oct 15, Volume 10 | Article 2399. doi: 10.3389/fimmu.2019.02399

**Busse M, Campe KJ, Nowak D, Schumacher A, Plenagl S, Langwisch S, Tiegs G, Reinhold A, Zenclussen AC.** (2019) IL-10 producing B cells rescue mouse fetuses from inflammation-driven fetal death and are able to modulate T cell immune responses. *Sci Rep.* 2019 Jun 27; 9(1): 9335. doi: 10.1038/s41598-019-45860-2.

**Meyer N, Santamaria C, Müller JE, Schumacher A, Rodriguez HA and Zenclussen AC.** (2019) Exposure to 17 $\beta$ -ethinyl estradiol during early pregnancy affects fetal growth and survival in mice. *Environ Pollut.* 2019 May 9;251:493-501. doi: 10.1016/j.envpol.2019.04.144. [Epub ahead of print]

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**Santamaría CG, Abud JE, Porporato MM, Meyer N, Zenclussen AC, Kass L, Rodríguez HA.** (2018) The UV filter benzophenone 3, alters early follicular assembly in rat whole ovary cultures. *Toxicol Lett.* 2018 Dec 30;303:48-54. doi: 10.1016/j.toxlet.2018.12.016. [Epub ahead of print]

**Meyer N, Schüler T, Zenclussen AC,** High Frequency Ultrasound for the Analysis of Fetal and Placental Development *In Vivo*. *JOVE* in press.

**Ewert L, Fischer A, Brandt S, Scurt FG, Philipson L, Müller AJ, Girndt M, Zenclussen AC, Lindquist JA, Gorny X, Mertens PR** (2018) Cold shock Y-box binding protein-1 acetylation status in monocytes is associated with systemic inflammation and vascular damage. Available online 22 September 2018. <https://doi.org/10.1016/j.atherosclerosis.2018.09.020> "provisional"

**Consentius C, Mirenska A, Jurisch A, Reinke S, Scharm M, Zenclussen AC, Hennig C, Volk HD.** (2018) In situ detection of CD73+ CD90+ CD105+ lineage: Mesenchymal stromal cells in human placenta and bone marrow specimens by chipcytometry. *Cytometry A*, 2018 Sep 13. doi: 10.1002/cyto.a.23509

**Schumacher A, Sharkey DJ, Robertson SA, Zenclussen AC.** (2018) Immune Cells at the Fetomaternal Interface: How the Microenvironment Modulates Immune Cells To Foster Fetal Development. *J Immunol.* 2018 Jul 15;201(2):325-334. doi: 10.4049/jimmunol.1800058.

**Meyer N, Zenclussen AC.** (2018) Mast cells-Good guys with a bad image? *Am J Reprod Immunol.* 2018 Jun 19:e13002. doi: 10.1111/aji.13002. [Epub ahead of print]

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**Anne Schumacher, Stefanie Ehrentraut, Markus Scharm, Hongsheng Wang, Roland Hartig, Herbert C. Morse III and Ana Claudia Zenclussen** (2018) Plasma Cell Alloantigen 1 and IL-10 Secretion Define Two Distinct Peritoneal B1a B Cell Subsets With Opposite Functions, PC1<sup>high</sup> Cells Being Protective and PC1<sup>low</sup> Cells Harmful for the Growing Fetus. *Front. Immunol.*, 15 May 2018 | <https://doi.org/10.3389/fimmu.2018.01045>

**Sauss K, Ehrentraut S, Zenclussen AC, Schumacher A.** (2018) The pregnancy hormone human

chorionic gonadotropin differentially regulates plasmacytoid and myeloid blood dendritic cell subsets. *Am J Reprod Immunol.* 2018 Feb 28. doi: 10.1111/aji.12837

**Meyer N, Schüler T, Zenclussen AC.** (2018) Simultaneous ablation of uterine natural killer cells and uterine mast cells in mice leads to poor vascularization and abnormal Doppler measurements that compromise fetal well-being. *Frontiers Immunol* (in press). DOI: 10.3389/fimmu.2017.01913

## 2017

**Ranjan S, Goihl A, Kohli S, Gadi I, Pierau M, Shahzad K, Gupta D, Bock F, Wang H, Shaikh H, Kähne T, Reinhold D, Bank U, Zenclussen AC, Niemz J, Schnöder TM, Brunner-Weinzierl M, Fischer T, Kalinski T, Schraven B, Luft T, Huehn J, Naumann M, Heidel FH, Isermann B.** (2017) Activated protein C protects from GvHD via PAR2/PAR3 signalling in regulatory T-cells. *Nature Communications* 8, Article number: 311 (2017) doi:10.1038/s41467-017-00169-4

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**Meyer N, Woidacki K, Knöfler M, Meinhardt G, Nowak D, Velicky P, Pollheimer J, Zenclussen AC.** (2017) Chymase-producing cells of the innate immune system are required for decidual vascular remodeling and fetal growth. *Sci Rep.* 2017 Mar 22;7:45106. doi: 10.1038/srep45106.

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**Weissenborn C, Ignatov T, Nass N, Kalinski T, Costa SD, Zenclussen AC, Ignatov A.** (2017) GPER Promoter Methylation Controls GPER Expression in Breast Cancer Patients. *Cancer Investigation*, 2017, S. 1-8, doi: 10.1080/07357907.2016.1271886.

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**Kohli S, Ranjan S, Hoffmann J, Kashif M, Daniel EA, Al-Dabet MM, Bock F, Nazir S, Huebner H, Mertens PR, Fischer KD, Zenclussen AC, Offermanns S, Aharon A, Brenner B, Shahzad K, Ruebner M, Isermann B.** (2016) Maternal extracellular vesicles and platelets promote preeclampsia through inflammasome activation in embryonic trophoblast. *Blood.* 2016 Sep 2. pii: blood-2016-03-705434. [Epub ahead of print]

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