



# MEDICAL FACULTY UNIVERSITY HOSPITAL MAGDEBURG

## EXPERIMENTAL OBSTETRICS AND GYNAECOLOGY

### Publications

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

#### 2026

Hoymann, N.; Scholz, L.; Alboradi, S.; Grabar, V.; Uehre, G.M.; Khuankhunsathid, J.T.; Taube, E.T.; Toth, G.; Mészáros, J.; Gennari, P.; Tchaikovsky S, Ignatov A and Busse M. **Alterations in the Placenta Following Vaccination and Infection with SARS-CoV-2 During Pregnancy.** *Int. J. Mol. Sci.* 2026 [Link to Paper](#)

Scholz L, Hoymann N, Alboradi S, Grabar V, Uehre GM, Toth G, Mészáros J, Gennari P, Tchaikovsky S, Ignatov A and Busse M. **Detailed investigation of specific B cell populations in response to vaccination and infection with Severe Acute Respiratory Syndrome Coronavirus-2 (SARS-CoV-2) during pregnancy.** *Frontiers.* 2026 [Link to Paper](#)

#### 2025

Uehre GM, Grabar V, Grage-Griebenow E, Klemens O, Scholz L, Hoymann N, Alboradi S, Ignatov A, Tchaikovsky S, Busse M.

**Impact of SARS-CoV-2 Infection and Vaccination on Pregnancy Outcome and Passive Neonatal Immunity.** *Cells.* 2025  
[Link to Paper](#)

#### 2023

Uehre GM, Tchaikovsky S, Ignatov A, Zenclussen AC, Busse M. **B Cells Induce Early-Onset Maternal Inflammation to Protect against LPS-Induced Fetal Rejection.** *Int J Mol Sci.* 2023 [Link to Paper](#)

#### 2022

Campe KJ, Redlich A, Zenclussen AC, Busse M. **An increased proportion of progesterone receptor A in peripheral B cells from women who ultimately underwent spontaneous preterm birth.** *J Reprod Immunol.* 2022 [Link to Paper](#)

Busse M, Zenclussen AC. **IL-10 Producing B Cells Protect against LPS-Induced Murine Preterm Birth by Promoting PD1- and ICOS-Expressing T Cells.** *Cells.* 2022 [Link to Paper](#)

Busse M, Langwisch S, Tedford K, Fischer KD, Zenclussen AC. **Maternal B cell signaling orchestrates fetal development in mice.** *Development.* 2022 [Link to Paper](#)

## 2021

Busse M, Scharm M, Oettel A, Redlich A, Costa SD, Zenclussen AC. **Enhanced S100B expression in T and B lymphocytes in spontaneous preterm birth and preeclampsia.** J Perinat Med. 2021 [Link to Paper](#)

Busse M, Plenagl S, Campe NKJ, Müller AJ, Tedford K, Schumacher A, Zenclussen AC. **Maternal B Cell-Intrinsic MyD88 Signaling Mediates LPS-Driven Intrauterine Fetal Death.** Cells. 2021 [Link to Paper](#)

Busse M, Redlich A, Hartig R, Costa SD, Rathert H, Fest S, Zenclussen AC. **Imbalance between inflammatory and regulatory cord blood B cells following pre-term birth.** J Reprod Immunol. 2021 [Link to Paper](#)

## 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 Köhl, Ildiko R Dunay, Till Strowig, Ingo Schmitz, Thomas Schöler.** (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.

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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>

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**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, Heidele 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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