



CURRICULUM VITAE

**Priv.-Doz. Dr. med. univ. et scient.
Katharina GOERAL**

Curriculum Vitae (1/4)

Priv.-Doz. DDr. Katharina GOERAL

EDUCATION

- 11/2013 – 03/2022 **PhD – Medical University of Vienna**
Graduation: March 2022
Thematic Program: Clinical Neurosciences (CLINS)
- 10/2006 – 10/2013 **Human Medicine – Medical University of Vienna (GPA: 1.41)**
Graduation: October 2013
Optional subjects – Completed with GPA: 1.0:
neonatal intensive care with bedside teaching, neonatal
neurology, pathomechanism in perinatal asphyxia, pre- and
perinatal cardiology, extremely low birth weight infant, case
rounds on the NICU, intensive medicine
- 09/1998 – 06/2006 **Comprehensive Secondary School**
Hollabrunn, Austria
(school leaving exam: 06/2006; A-levels with distinction)

SCIENTIFIC EMPLOYMENT

- 06/2011 – 07/2012 **Pediatric Neuroscience and Stem Cell Research Trainee**
Kennedy Krieger Institute, Johns Hopkins Medical Institutions
Baltimore, MD (USA)
- 05/2010 – 05/2011 **Scientific Employment**
Department of Pediatrics and Adolescence Medicine
Division of Neonatology, Intensive Care and Pediatric Neurology
University Hospital Vienna (Austria)

CLINICAL APPOINTMENT

- 03/2023 **Habilitation (Priv. Doz.)**
- Since 11/2022 **Internal career agreement** (“Interne Karrierevereinbarung”) for
the scientific university staff
- Since 12/2019 **Attending Physician**
Department of Pediatrics and Adolescent Medicine
Division of Neonatology, Intensive Care and Pediatric Neurology
- 12/2019 – 11/2021 **Special Interest Training** (“Zusatzfach Neonatologie und
Pädiatrische Intensivmedizin”)
Department of Pediatrics and Adolescent Medicine
Division of Neonatology, Intensive Care and Pediatric Neurology
- 10/2013 – 11/2019 **Residency** (“Facharzt für Kinder- und Jugendheilkunde”)
Department of Pediatrics and Adolescent Medicine
Division of Neonatology, Intensive Care and Pediatric Neurology



Contact

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Address

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Personal Information

Born on December 27, 1987
Nationality: AUSTRIA

ORCID ID

[0000-0002-5209-6169](https://orcid.org/0000-0002-5209-6169)

ORAL PRESENTATIONS 1

48. Jahrestagung der Gesellschaft für Neonatologie und Pädiatrische Intensivmedizin; Mai 18-21, 2022; Aachen (Germany)

- A novel MRI-based scoring system to predict outcome in neonates born preterm with intraventricular haemorrhage
- MRI Marker

47. Jahrestagung der Gesellschaft für Neonatologie und Pädiatrische Intensivmedizin; June 16-19, 2021; Vienna (Austria)

- aEEG and NIRS in preterms with intraventricular hemorrhage and posthemorrhagic hydrocephalus

Das amplituden-integrierte EEG in der Neonatologie – Update 2019; December 14, 2019; Vienna (Austria)

- Neuromonitoring in preterms with intraventricular hemorrhage and posthemorrhagic hydrocephalus

4th Austrian Brain Club; September 15-20, 2018; Innsbruck (Austria)

- research presentation

44. Jahrestagung der Gesellschaft für Neonatologie und Pädiatrische Intensivmedizin; June 7-9, 2018; Rostock (Germany)

- Superb microvascular imaging of the neonatal brain: feasibility, reproducibility, and normal imaging features

3rd Austrian Brain Club; September 15-20, 2017; Graz (Austria)

- research presentation

Euro-Asian Neonatology Conference; April 20-22, 2017; Yekaterinburg (Russia)

- LISA – Viennese experience and the effect on neurodevelopmental outcome and IVH (invited Keynote lecture)
- Workshop: Neuromonitoring in the neonatal ICU

6th international congress of union of european neonatal and perinatal societies UENPS; November 23-25th, 2016; Valencia (Spain)

- Brain metrics and impaired brain growth after intraventricular hemorrhage

2nd Austrian Brain Club; July 28, 2016; Vienna (Austria)

- research presentation

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ORAL PRESENTATIONS 2

42. Jahrestagung der Gesellschaft für Neonatologie und Pädiatrische Intensivmedizin; June 2-4, 2016; Frankfurt (Germany)

- Correlation between NIRS and aEEG in hypothermia treated newborns with hypoxic-ischemic encephalopathy

1st Congress of joint European Neonatal Societies (jENS) – 56th ESPR/ESN Annual Meeting and 5th International Congress of UENPNS; September 15-20, 2015; Budapest (Hungary)

- Prediction of neurodevelopmental outcome in infants with intraventricular hemorrhage using a functional MRI score (Session: Young Investigator Prize session)

11th European Paediatric Neurology Society Congress; May 27-30, 2015; Vienna (Austria)

- NIRS, aEEG and outcome in hypothermia treated newborns with hypoxic-ischemic encephalopathy (Session: Fetal Neurology)

41. Jahrestagung der Gesellschaft für Neonatologie und Pädiatrische Intensivmedizin; May 21-23, 2015; Stuttgart (Germany)

- Correlation between NIRS and aEEG in hypothermia treated newborns with hypoxic-ischemic encephalopathy

1st Austrian Brain Club; September 15-20, 2015; Innsbruck (Austria)

- research presentation

40. Jahrestagung der Gesellschaft für Neonatologie und Pädiatrische Intensivmedizin; June 26-28, 2014; Bonn (Germany)

- The influence of therapeutic hypothermia on aEEG and outcome in neonates with HIE

VII international perinatal diaglog; September 11-13, 2014; Vienna (Austria)

- Neuroapoptosis following anesthesia

Monitoring day; February 24, 2014; Vienna (Austria)

- The use of aEEG and NIRS in perinatal asphyxia

Pediatric Academic Societies' Annual Meeting 2013 (PAS); May 4 – 7, 2013; Washington, D.C. (USA)

- Arrested differentiation in a neonatal mouse model of posthemorrhagic hydrocephalus

Hydrocephalus 2012 – The 4th Meeting of the International Society for Hydrocephalus and Cerebrospinal Fluid Disorders; October 19 – 22, 2012; Kyoto (Japan)

- Differentiation arrest and pronounced inflammatory response in a neonatal mouse model of posthemorrhagic hydrocephalus

Hershey Conference of Developmental Brain Injury; June 5 – 8, 2012; London (UK)

- Study of neuroinflammation, glial progenitor cells, and growth factors in an ischemic mouse model of periventricular white matter injury

Pediatric Academic Societies' Annual Meeting 2012 (PAS); April 28 – May 1, 2012; Boston, MA (USA)

- Evaluation of the subventricular zone and the oligodendrocytic lineage in a neonatal mouse model of posthemorrhagic hydrocephalus

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SCHOLARSHIPS AND PRICES

05/2022	Science award at the 48. Jahrestagung der Gesellschaft für Neonatologie und Pädiatrische Intensivmedizin 2022
03/2019	Austrian Society of Pre- and Perinatal Medicine – Otto Thalhammer award 2019
05/2018	Medical University Vienna – Researcher of the Month May 2018
05/2017	Medical University Vienna – research scholarship
09/2015	ESPR scholarship for one of the best 10 abstracts at the 1 st Congress of joint European Neonatal Societies (jENS)
10/2012	Medical University Vienna – merit based scholarship
06/2011	Medical University Vienna – research scholarship
05/2011	Students4excellence Scholarship
10/2010 (2 weeks)	„From Sound to Ultrasound: Multimedia based Pediatric Cardiology Intensive Program“ in Crete (Greece)

FUNDING ACQUISITION

02/2023	GNPI Projektförderung Project: <u>Precision Medicine in IntravENTricular hemorrhage</u> Award: 10.000€
09/2021	WWTF Life-Sciences Call (LS20-030) Project: <u>PIMIENTo Precision Medicine in IntravENTricular hemorrhage for Outcome prediction</u> Award: 865.350€ (total), 247.760€ (our unit) Role: Co-Principal investigator
01/2017	Jubiläumsfond der Österreichischen Nationalbank (OENB) Project: <u>When to intervene in preterm infants with posthemorrhagic hydrocephalus</u> Award: 52.000€ Role: Co-Investigator/Supervisor

EMPLOYMENT HISTORY

07/2010 – 08/2010	Medical assistance (internal medicine, surgery, ER) Vaduz (Liechtenstein)
09/2008 – 03/2010	Part-time employment (practice for primary care) Vienna (Austria)
07/2010 – 08/2010	Part-time employment (practice for gynecology) Hollabrunn (Austria)

LANGUAGE SKILLS

German ★ ★ ★ ★
As a first language

English ★ ★ ★ ★
Fluent in spoken and written E.
Further education:
- „medical English
- „Principles of scientific writing“

Polish ★ ★ ★ ★
As a first language

French ★ ★ ★ ★
Basic knowledge
School leaving examination –
grade: A

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PEER-REVIEWED PUBLICATIONS

First-author publications

1. Vaginal delivery is associated with neurochemical evidence of increased neuroaxonal remodelling in infants from the KUNO-Kids health study: cross-sectional analysis. Neonatology. 2022;119(6):769-776. doi: 10.1159/000526472. Kürner K*, **Goeral K***, Atkinson A, Brandstetter S, Toncheva AA, Kabesch M, Apfelbacher C, Melter M, Seelbach-Göbel B, Berger A, Kuhle J, Wellmann S, KUNO-Kids study group.
(* shared first-authorship)
2. A novel magnetic resonance imaging-based scoring system to predict outcome in neonates born preterm with intraventricular haemorrhage. Dev Med Child Neurol. 2021;00:1-11. doi: 10.1111/dmcn.15116.
Goeral K, Kasprian G, Hüning BM, Waldhoer T, Fuiko R, Schmidbauer V, Prayer D, Felderhoff-Müser U, Berger A, Olischar M, Klebermass-Schrehof K.
3. Longitudinal Reference Values for Cerebral Ventricular Size in Preterm Infants Born at 23-27 Weeks of Gestation. J Pediatr. 2021 Jun 29:S0022-3476(21)00647-8. doi: 10.1016/j.jpeds.2021.06.065.
Goeral K, Schwarz H, Hammerl M, Brugger J, Wagner M, Klebermass-Schrehof K, Kasprian G, Kiechl-Kohlendorfer U, Berger A, Olischar M.
4. Considerable mortality and morbidity in neonates born below 500 gram. Acta Paediatr. 2021 Aug;110(8):2359-2365. doi: 10.1111/apa.15885.
Goeral K, Fuiko R, Binder J, Lindtner C, Jernej R, Rittenschober-Boehm J, Klebermass-Schrehof K, Berger A, Grill A.
5. Early life serum neurofilament dynamics predict neurodevelopmental outcome of preterm infants. J Neurol. 2021 Jul;268(7):2570-2577. doi: 10.1007/s00415-021-10429-5.
Goeral K*, Hauck A*, Atkinson A, Wagner MB, Pimpel B, Fuiko R, Klebermass-Schrehof K, Leppert D, Kuhle J, Berger A, Olischar M, Wellmann S.
(* shared first-authorship)
6. Microvessel ultrasound of neonatal brain parenchyma: feasibility, reproducibility, and normal imaging features by superb microvascular imaging (SMI). Eur Radiol. 2019 Apr;29(4):2127-2136. doi: 10.1007/s00330-018-5743-1.
Goeral K, Hojreh A, Kasprian G, Klebermass-Schrehof K, Weber M, Mitter C,

Berger A, Prayer D, Brugger PC, Vergesslich-Rothschild K, Patsch JM.

7. Prediction of Outcome in Neonates with Hypoxic-Ischemic Encephalopathy II: Role of Amplitude-Integrated Electroencephalography and Cerebral Oxygen Saturation Measured by Near-Infrared Spectroscopy. Neonatology. 2017;112(3):193-202. doi: 10.1159/000468976.

Goeral K, Urlesberger B, Giordano V, Kasprian G, Wagner M, Schmidt L, Berger A, Klebermass-Schrehof K, Olischar M.

Last-author publications

Under Review

Impact of being small for gestational age in neonates born below 600g birth weight. *Pediatric Research under review.*

Jernej R, Fuiko R, Binder J, Kiss H, Klebermass-Schrehof K, Grill A, Berger A, **Goeral K.**

Impact of Posthemorrhagic Ventricular Dilatation on Cerebral Oxygenation in Preterm Infants With Intraventricular Hemorrhage. *Journal of Pediatrics under review.*

Elis J, Klein L, Steiner M, Moser K, Giordano V, Vignolle G, Ciglar L, Kasprian G, Langs G, Olischar M, Berger A, **Goeral K.**

Published

1. Predicting Outcomes of Preterm Neonates Post Intraventricular Hemorrhage. *Int J Mol Sci.* 2024 Sep 25;25(19):10304. doi: 10.3390/ijms251910304. PMID: 39408633; PMCID: PMC11477204.
[Special Issue: Molecular Advances in Pediatric Diseases]
Vignolle GA, Bauerstätter P, Schönthaler S, Nöhammer C, Olischar M, Berger A, Kasprian G, Langs G, Vierlinger K, **Goeral K.**
2. Cerebellar haemorrhage and atrophy in infants born extremely preterm with intraventricular haemorrhage. *Dev Med Child Neurol.* 2024;00:1–9. doi: 10.1111/dmcn.16123.
Buchmayer J, Fuiko R, Kienast P, Stummer S, Kasprian G, Berger A, **Goeral K.**
3. Acute Impact of Posthemorrhagic Ventricular Dilatation on Cerebral Oxygenation in Preterm Infants with Intraventricular Hemorrhage. *Acta Paediatrica.* doi: 10.1111/apa.17375
Steiner M, Elis J, Giordano V, Kienast P, Ciglar L, Langs G, Vignolle GA, Olischar M, Berger A, **Goeral K.**
4. Neurodevelopmental Outcome in Preterm Infants with Intraventricular Hemorrhages: The Potential of Quantitative Brainstem MRI. *Cereb Cortex.* 2024 May 2;34(5):bhae189. doi: 10.1093/cercor/bhae189.
Kienast P, Schmidbauer V, Yildirim MS, Seeliger S, Stuempflen M, Elis J, Giordano

Vito, Fuiko R, Olischar M, Vierlinger K, Noehammer C, Berger A, Prayer D, Kasprian G, **Goeral K.**

5. MRI based Reference Values for 2D Quantitative Brain Metrics in a Cohort of Extremely Preterm Infants. Neonatology. 2024;121(1):97-105. doi: 10.1159/000534009.
Buchmayer J, Kasprian G, Jernej R, Stummer S, Schmidbauer V, Giordano V, Klebermass-Schrehof K, Berger A, **Goeral K.**
6. Intrauterine detection of Ureaplasma species after vaginal colonization in pregnancy and neonatal outcome. Neonatology. 2023 Dec 5:1-8. doi: 10.1159/000534779.
Rittenschober-Boehm J, Fuiko R, Farr A, Willinger B, Berger A, **Goeral K.**
7. Brain biometry reveals impaired brain growth in preterm neonates with intraventricular hemorrhage. Neonatology. 2023;120(2):225-234. doi: 10.1159/000528981.
Steiner M, Schwarz H, Kasprian G, Rittenschober-Boehm J, Schmidbauer V, Fuiko R, Olischar M, Klebermass-Schrehof K, Berger A, **Goeral K.**
8. Routine use of cerebral magnetic resonance imaging in preterm infants born <28 weeks. J Pediatr. 2022 Jun 20;S0022-3476(22)00485-1. doi: 10.1016/j.jpeds.2022.05.033.
Buchmayer J, Kasprian G, Giordano V, Schmidbauer V, Steinbauer P, Klebermass-Schrehof K, Berger A, **Goeral K.**
9. Outcome prediction in neonatal hypoxic-ischemic encephalopathy using neurophysiology and neuroimaging. Neonatology. 2022. doi: 10.1159/000524751.
Steiner M, Urlesberger B, Giordano V, Kasprian G, Glatter S, Oberleitner-Leeb C, Rittenschober-Boehm J, Werther T, Berger A, Olischar M, **Goeral K.**
10. Association between fat-free mass and brain size in extremely preterm infants. Nutrients 2021, 13, 4205. doi: 10.3390/nu13124205.
Binder C, Buchmayer J, Thajer A, Giordano V, Schmidbauer V, Harreiter K, Klebermass-Schrehof K, Berger A, **Goeral K.**

Co-author publications

Under Review

Impact of cerebral oxygenation-guided resuscitation during immediate postnatal transition on brain injury and brain growth detected by MRI in very preterm neonates: a secondary outcome analysis of the multicenter randomized phase 3 clinical COSGOD III trial. *The Journal of Pediatrics under review.*

Hammerl M, Schreiner C, Griesmaier E, Kiechl-Kohlendorfer U, Pfurtscheller D, Avian A, Tschauner S, **Goeral K**, Buchmayer J, Lista G, Prof.; Ilaria Stucchi, MD; Jenny Bua, MD, PhD; Gerhard Pichler, Prof.

2-Year Neurodevelopmental Outcome in Preterm Neonates with Cerebral Oxygenation Monitoring After Birth: A multi-national, multi-center retrospective follow-up study of the COSGOD III trial. *The Journal of Pediatrics under review.*

Pichler G, Wolfsberger C, **Goeral K**, Hammerl M, Perme T, Dempsey E, Springer L, Lista G, Szczapa T, Fuchs H, Bua J, Avian A, Fuiko R, Kiechl-Kohlendorfer U, Kornhauser Cerar L, Stapelton I, Molnar K, Stucchi I, Malak R, Schwabberger B, Klebermass-Schrehof K, Baik-Schneditz N.

Machine learning-based tool to assess risk of hemodynamically significant PDA in extremely premature infants. *Pediatric Research under review.* Küng E, **Goeral K**, Unterasinger L, Schilhart-Wallisch C, Berger A, Wisgrill L, Dorffner G.

Cerebral oxygenation during transition and amplitude-integrated electroencephalography signals: an ancillary study to the COSGOD-III trial. *Acta Paediatrica under review.* Schreiner C, **Goeral K**, Hammerl M, Klebermass-Schrehof K, Avian A, Neubauer V, Kiechl-Kohlendorfer U, Pfurtscheller D, Griesmaier E, Pichler G.

1. Effect of timing of umbilical cord clamping on cerebral regional tissue oxygenation: a secondary analysis of the COSGOD III trial. Arch Dis Child Fetal Neonatal Ed. 2025 Apr 29:fetalneonatal-2024-327946. doi: 10.1136/archdischild-2024-327946. Epub ahead of print. PMID: 40306760.
Perme T, Kornhauser Cerar L, Schwabegger B, Urlesberger B, Wolfsberger CH, Baik N, **Goeral K**, Hammerl M, Dempsey EM, Springer L, Lista G, Szczapa T, Fuchs H, Karpinski L, Bua J, Avian A, Law BHY, Buchmayer J, Kiechl-Kohlendorfer U, Schwarz CE, Gruendler K, Stucchi I, Klebermass-Schrehof K, Schmölzer GM, Pichler G; COSGOD III study group.
2. Brain oxygenation monitoring during neonatal stabilization and resuscitation and its potential for improving preterm infant outcomes: a systematic review and meta-analysis with Bayesian analysis. Eur J Pediatr. 2025 Apr 21;184(5):305. doi: 10.1007/s00431-025-06138-0. PMID: 40259049; PMCID: PMC12011959.
Bruckner M, Suppan T, Suppan E, Schwabegger B, Urlesberger B, **Goeral K**, Hammerl M, Perme T, Dempsey EM, Springer L, Lista G, Szczapa T, Fuchs H, Karpinski L, Bua J, Law B, Buchmayer J, Kiechl-Kohlendorfer U, Cerar LK, Schwarz CE, Gründler K, Stucchi I, Klebermass-Schrehof K, Schmölzer GM, Pichler G.
3. Reference ranges for arterial oxygen saturation, heart rate and cerebral oxygen saturation during immediate postnatal transition in extremely and very preterm neonates. Pediatr. 2024 May 30:114132. doi: 10.1016/j.jpeds.2024.114132.
Wolfsberger CH, Schwabegger B, Urlesberger B, Avian A, **Goeral K**, Hammerl M, Perme T, Dempsey EM, Springer L, Lista G, Szczapa T, Fuchs H, Karpinski L, Bua J, Law B, Buchmayer J, Kiechl-Kohlendorfer U, Kornhauser-Cerar L, Schwarz CE, Gründler K, Stucchi I, Klebermass-Schrehof K, Schmölzer GM, Pichler G; COSGOD III study group.
4. Maternal biomarkers in predicting neonatal sepsis after preterm premature rupture of membranes in preterm infants. Acta Paediatr. 2024 Jan 24. doi: 10.1111/apa.17114.
Grill A, **Goeral K**, Leitich H, Farr A, Berger A, Rittenschober-Boehm J.
5. Quantitative Magnetic Resonance Imaging for Neurodevelopmental Outcome Prediction in Neonates Born Extremely Premature – An Exploratory Study. Clin Neuroradiol. 2024 Jan 30. doi: 10.1007/s00062-023-01378-9.

Schmidbauer V, Yildirim M, Dovjak G, **Goeral K**, Buchmayer J, Weber M, Kienast P, Diogo M, Prayer F, Stuempflen M, Kittinger J, Malik J, Nowak N, Klebermass-Schrehof K, Fuiko R, Berger A, Prayer D, Kasprian G, Giordano V.

6. Cerebral regional tissue Oxygen Saturation to Guide Oxygen Delivery in preterm neonates during immediate transition after birth (COSGOD III) – An investigator-initiated randomized, multi-center, multi-national, phase III clinical trial. *BMJ*. 2023 Jan 24;380:e072313. doi: 10.1136/bmj-2022-072313.
Pichler G, **Goeral K**, Hammerl M, Perme T, Dempsey EM, Springer L, Lista G, Szczapa T, Fuchs H, Karpinski L, Bua J, Avian A, Law B, Urlesberger B, Buchmayer J, Kiechl-Kohlendorfer U, Kornhauser Cerar L, Schwarz CE, Gründler K, Stucchi I, Schwabegger B, Klebermass-Schrehof K, Schmölzer GM.
7. Marhofer P, **Goeral K**, Klebermass-Schrehof K (2023) Ultrasound Guided Brachial Plexus Anaesthesia for Neonatal Ischaemia of the Upper Limb: A Case Report. *Ann Case Report*. 8: 1219. doi: <https://doi.org/10.29011/2574-7754.101219>
8. Regular lung recruitment maneuvers during high-frequency oscillatory ventilation in extremely preterm infants: a randomized controlled trial. *BMC Pediatr*. 2022 Dec 12;22(1):710. doi: 10.1186/s12887-022-03780-7.
Werther T, Kueng E, Aichhorn L, Pummer L, **Goeral K**, Berger A, Hermon M, Klebermass-Schrehof K.
9. Synthetic MR Imaging-Based WM Signal Suppression Identifies Neonatal Brainstem Pathways in Vivo. *AJNR Am J Neuroradiol*. 2022 Nov. doi: 10.3174/ajnr.A7710.
Schmidbauer VU, Yildirim MS, Dovjak GO, Weber M, Diogo MC, Milos RI, Giordano V, Prayer F, Stuempflen M, **Goeral K**, Buchmayer J, Klebermass-Schrehof K, Berger A, Prayer D, Kasprian G.
10. Cardiopulmonary resuscitation of a very preterm infant using high-frequency oscillation ventilation. *Resusc Plus*. 2022 Jun 28;11:100265. doi: 10.1016/j.resplu.2022.100265.
Buchmayer J, Wisgrill L, Schneider M, Werther T, **Goeral K**, Berger A, Schmölzer GM, Wagner M.
11. Different from the Beginning: WM Maturity of Female and Male Extremely Preterm Neonates-A Quantitative MRI Study. *AJNR Am J Neuroradiol*. 2022 Apr;43(4):611-619. doi: 10.3174/ajnr.A7472.
Schmidbauer VU, Yildirim MS, Dovjak GO, **Goeral K**, Buchmayer J, Weber J,

Diego MC, Giordano V, Mayr-Geisl G, Prayer F, Stuempfen M, Lindenlaub F, List V, Glatter S, Rauscher A, Stuhr F, Lindner C, Klebermass-Schrehof K, Berger A, Prayer D, Kasprian G.

12. A Mixed-Lipid Emulsion Containing Fish Oil for the Parenteral Nutrition of Preterm Infants: No Impact on Visual Neuronal Conduction. *Nutrients* 2021, 13, 4241. doi: 10.3390/nu13124241.

Binder C, Schned H, Longford N, Schwindt E, Thanhhaeuser M, Thajer A, **Goeral K**, Tardelli M, Berry D, Wisgrill L, Seki D, Berger A, Klebermass-Schrehof K, Repa A, Giordano V.

13. Aberrant gut-microbiota-immune-brain axis development in premature neonates with brain damage. *Cell Host Microbe*. 2021 Sep 1:S1931-3128(21)00380-2. doi: 10.1016/j.chom.2021.08.004.

Seki D, Mayer M, Hausmann B, Pjevac P, Giordano V, **Goeral K**, Unterasinger L, Klebermass-Schrehof K, De Paepe K, Van de Wiele T, Spittler A, Kasprian G, Warth B, Berger A, Berry D, Wisgrill L.

14. Maternal Vaginal Ureaplasma spp. Colonization in Early Pregnancy Is Associated with Adverse Short- and Long-Term Outcome of Very Preterm Infants. *Children (Basel)*. 2021 Apr 3;8(4):276. doi: 10.3390/children8040276.

Rittenschöber-Böhm J, Habermüller T, Waldhoer T, Fuiko R, Schulz SM, Pimpel B, **Goeral K**, Witt A, Berger A, Pichler K.

15. The Effect of Music on aEEG Cyclicity in Preterm Neonates. *Children (Basel)*. 2021 Mar 9;8(3):208. doi: 10.3390/children8030208.

Giordano V, **Goeral K**, Schrage-Leitner L, Berger A, Olischar M.

16. Development of a 3D printed patient-specific neonatal brain simulation model using multimodality imaging for perioperative management. *Pediatr Res*. 2021 Mar 2. doi: 10.1038/s41390-021-01421-w.

Wagner M, Werther T, Unger E, Kasprian G, Dovjak G, Dorfer C, Schned H, Steinbauer P, **Goeral K**, Olischar M, Roessler K, Berger A, Oberoi G.

17. Impact of Prematurity on the Tissue Properties of the Neonatal Brain Stem: A Quantitative MR Approach. *AJNR Am J Neuroradiol*. 2021 Mar;42(3):581-589. doi: 10.3174/ajnr.A6945.

Schmidbauer V, Dovjak G, Geisl G, Weber M, Diogo MC, Yildirim MS, **Goeral K**, Klebermass-Schrehof K, Berger A, Prayer D, Kasprian G.

18. Validity of SyMRI for Assessment of the Neonatal Brain. *Clin Neuroradiol*. 2021

- Jun;31(2):315-323. doi: 10.1007/s00062-020-00894-2.
Schmidbauer V, Geisl G, Cardoso Diogo M, Jengojan S, Perepelov V, Weber M, **Goeral K**, Lindenlaub F, Klebermass-Schrehof K, Berger A, Prayer D, Kasprian G.
19. SyMRI detects delayed myelination in preterm neonates. *Eur Radiol.* 2019 Dec;29(12):7063-7072. doi: 10.1007/s00330-019-06325-2.
Schmidbauer V, Geisl G, Diogo M, Weber M, **Goeral K**, Klebermass-Schrehof K, Berger A, Prayer D, Kasprian G.
20. Vaginal Ureaplasma parvum serovars and spontaneous preterm birth. *Am J Obstet Gynecol.* 2019 Jun;220(6):594.e1-594.e9. doi: 10.1016/j.ajog.2019.01.237.
Rittenschober-Böhm J, Waldhoer T, Schulz SM, Pimpel B, **Goeral K**, Kasper DC, Witt A, Berger A.
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