

CV - Michael Frühwald

Personal data

Name and academic title: Professor Dr. Dr. Michael C. Frühwald
Date of birth: February 24th, 1966
Institution: Paediatric and Adolescent Medicine
University Medical Center Augsburg, University of Augsburg
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Current position: Full Professor

Academic Education and Degrees

2004 Habilitation (Pediatrics), Westfalian-Wilhelms-University Münster
Thesis: "Epigenetische und genetische Charakterisierungsmerkmale von Medulloblastomen und sPNET des ZNS im Kindesalter"
1999 PhD (Neurosciences), The Ohio State University, Columbus Ohio, USA
Thesis: "Medulloblastoma: A developmental abnormality of the cerebellum"
1995 Dr. med. (Medicine): "Surfactanttherapie bei Frühgeborenen: Vergleich von zwei Präparationen aus Rinderlungen", Julius-Maximilians-University Würzburg

Professional Experience

Since 2020 Full Professor of Paediatrics and Adolescent Medicine, University of Augsburg
2008–2020 Associate Professor, Westfalian-Wilhelms-University Münster
Since 2010 Director Paediatric and Adolescent Medicine, University Medical Center Augsburg
Since 2013 Spokesman of the Clinical Ethics Committee, University Medical Center Augsburg
2006–2010 Chief Attending, Department of Pediatric Haematology and Oncology, Westfalian-Wilhelms-University Münster
2004–2006 Resident, Pediatrics, University Hospital Münster
1996–1999/ Resident in Pediatrics, University Medical Center, Würzburg and
2000–2004 University Hospital, Münster
1996–1999 Postdoc and Graduate Student (Dr. Mildred Scheel Foundation for Cancer Research/Deutsche Krebshilfe), The Ohio State University (Columbus/Ohio, USA), (Division of Human Cancer Genetics, Department of Neuroscience) and Children's Hospital (Columbus/Ohio, USA)

Publications (208 articles published in peer-reviewed journals, 28 book chapters, H-Index=35)

- (1) Infants and Newborns with Atypical Teratoid Rhabdoid Tumors (ATRT) and Extracranial Malignant Rhabdoid Tumors (eMRT) in the EU-RHAB Registry: A Unique and Challenging Population. Nemes K, Johann PD, Steinbügl M, Gruhle M, Bens S, Kachanov D, Teleshova M, Hauser P, Simon T, Tippelt S, Eberl W, Chada M, Lopez VS, Grigull L, Hernáiz-Driever P, Eyrich M, Pears J, Milde T, Reinhard H, Leipold A, van de Wetering M, Gil-da-Costa MJ, Ebetsberger-Dachs G, Kerl K, Lemmer A, Boztug H, Furtwängler R, Kordes U, Vokuhl C, Hasselblatt M, Bison B, Kröncke T, Melchior P, Timmermann B, Gerss J, Siebert R, **Frühwald MC**. *Cancers* (Basel). 2022 Apr 27;14(9):21
- (2) ATRT-SHH comprises three molecular subgroups with characteristic clinical and histopathological features and prognostic significance. Federico A, Thomas C, Miskiewicz K, Woltering N, Zin F, Nemes K, Bison B, Johann PD, Hawes D, Bens S, Kordes U, Albrecht S, Dohmen H, Hauser P, Keyvani K, van Landeghem FKH, Lund EL, Scheie D, Mawrin C, Monoranu CM, Parm Ulhøi B, Pietsch T, Reinhard H, Riemenschneider MJ, Sehested A, Sumerauer D, Siebert R, Paulus W, **Frühwald MC**, Kool M, Hasselblatt M. *Acta Neuropathol*. 2022 Jun;143(6):697-711. doi: 10.1007/s00401-022-02424-5 (shared senior authors)
- (3) SMARCB1-deficient and SMARCA4-deficient Malignant Brain Tumors With Complex Copy Number Alterations and TP53 Mutations May Represent the First Clinical Manifestation of Li-Fraumeni Syndrome. Hasselblatt M, Thomas C, Federico A, Nemes K, Johann PD, Bison B, Bens S, Dahlum S, Kordes U, Redlich A, Lessel L, Pajtlér KW, Mawrin C, Schüller U, Nolte K, Kramm CM, Hinz F, Sahm F, Giannini C, Penkert J, Kratz CP, Pfister SM, Siebert R, Paulus W, Kool M, **Frühwald MC**. *Am J Surg Pathol*. 2022 Sep 1;46(9):1277-1283. doi: 10.1097/PAS.0000000000001905

- (4) Clinical evidence for a biological effect of epigenetically active decitabine in relapsed or progressive rhabdoid tumors. Steinbügl M, Nemes K, Johann P, Kröncke T, Tüchert S, da Costa MJG, Ebinger M, Schüller U, Sehested A, Hauser P, Reinhard H, Sumerauer D, Hettmer S, Jakob M, Hasselblatt M, Siebert R, Witt O, Gerss J, Kerl K, **Frühwald MC**. *Pediatr Blood Cancer*. 2021 Dec;68(12):e29267. doi: 10.1002/pbc.29267
- (5) Current recommendations for clinical surveillance and genetic testing in rhabdoid tumor predisposition: a report from the SIOPE Host Genome Working Group. **Frühwald MC**, Nemes K, Boztug H, Cornips MCA, Evans DG, Farah R, Glentis S, Jorgensen M, Katsibardi K, Hirsch S, Jahnukainen K, Kventzel I, Kerl K, Kratz CP, Pajtler KW, Kordes U, Ridola V, Stutz E, Bourdeaut F. *Fam Cancer*. 2021 Feb 3. doi: 10.1007/s10689-021-00229-1
- (6) Clinical and genetic risk factors define two risk groups of extracranial malignant rhabdoid tumours (eMRT/RTK). Nemes K, Bens S, Kachanov D, Teleshova M, Hauser P, Simon T, Tippelt S, Woessmann W, Beck O, Flotho C, Grigull L, Driever PH, Schlegel PG, Khurana C, Hering K, Kolb R, Leipold A, Abbink F, Gil-Da-Costa MJ, Benesch M, Kerl K, Lowis S, Marques CH, Graf N, Nysom K, Vokuhl C, Melchior P, Kröncke T, Schneppenheim R, Kordes U, Gerss J, Siebert R, Furtwängler R, **Frühwald MC**. *Eur J Cancer*. 2021 Jan;142:112-122
- (7) Locoregionally administered B7-H3-targeted CAR T cells for treatment of atypical teratoid/rhabdoid tumors. Theruvath J, Sotillo E, Mount CW, Graef CM, Delaidelli A, Heitzeneder S, Labanieh L, Dhingra S, Leruste A, Majzner RG, Xu P, Mueller S, Yecies DW, Finetti MA, Williamson D, Johann PD, Kool M, Pfister S, Hasselblatt M, **Frühwald MC**, Delattre O, Surdez D, Bourdeaut F, Puget S, Zaidi S, Mitra SS, Cheshier S, Sorensen PH, Monje M, Mackall CL. *Nat Med*. 2020 May;26(5):712-719.
- (8) **Frühwald, M.C.**, Hasselblatt, M., Nemes, K., Bens, S., Steinbügl, M., Johann, P.D., Kerl, K., Hauser, P., Quiroga, E., Solano-Paez, P., Biassoni, V., Gil-da-Costa, M.J., Perek-Polnik, M., van de Wetering, M., Sumerauer, D., Pears, J., Stabell, N., Holm, S., Hengartner, H., Gerber, N.U., Grotzer, M., Boos, J., Ebinger, M., Tippelt, S., Paulus, W., Furtwängler, R., Hernáiz-Driever, P., Reinhard, H., Rutkowski, S., Schlegel, P.G., Schmid, I., Kortmann, R.D., Timmermann, B., Warmuth-Metz, M., Kordes, U., Gerss, J., Nysom, K., Schneppenheim, R., Siebert, R., Kool, M., Graf, N. (2020). Age and DNA methylation subgroup as potential independent risk factors for treatment stratification in children with atypical teratoid/rhabdoid tumors. *Neuro Oncology*, 22(7), 1006-1017.

Grants / Awards / Skills

M.C. Frühwald, has received several grants from the German Research Foundation (e.g. DFG FR1516/4-1), the DKH (Deutsche Krebshilfe, 70113981) and other German funding agencies (e.g. DKS 2020.10). Altogether awarded grants sum up to approx. 3.3 Mill. €

MCF received the 20th Annual Research Forum Award of the Children's Research Institute, Columbus, Ohio, USA (1999). Furthermore, he received fellowships from the DKH (1996-1999), the Kind-Philipp-Stiftung (1999-2001) and the Neuroscience program of The Ohio State University (1998-1999).

His methodological skills encompass genetic and epigenetic analyses of tumors, clinical trial design and performance and the ethical counselling of medical teams and patients as well as their advocates.