

Viola Caretti M.D. Ph.D.

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HIGHLIGHTS OF QUALIFICATIONS

- **Assistant Professor, Pediatrics, Division of Child Neurology and Principal Investigator:**
UTHealth Houston
- **Residency:** Baylor Texas Children's Hospital
Pediatric Neurology - Neuroscience Track
- **Texas Medical License**
- **California Medical License**
- **Residency:** Stanford Medicine
Pediatric Neurology
- **Former Postdoctoral Fellow** at Stanford
Postnatal Neurodevelopment
- **PhD** Cancer Center Amsterdam
Pediatric Neuro-Oncology
- Licensed **Doctor of Medicine** in the EU
- **First authorship** on 10 published manuscripts, and 16 total
- Began a **novel line of research** on DIPG
- **Setup *in vivo* work** in the NRG
- Numerous **grants, awards** and **scholarships**
- Extensive **mentoring**, international, and **volunteer** experience

WORK AUTHORIZATION

- Permanent Resident (Green Card Holder)

EDUCATION

- **UT Health Houston, The BRAINS Research Laboratory** (July 2022 – 2023)
 - Houston, TX, USA
 - McCullough Lab
 - Postdoctoral Fellow: “*The Role of Gut Dysbiosis in Sexually Dimorphic Outcomes after Neonatal Hypoxic Ischemic Encephalopathy*”
- **Baylor / Texas Children's Hospital** (August 2019 – August 2023)
 - Houston, TX, USA
 - Pediatric Neurology Resident
- **Stanford University School of Medicine** (June 2017 – June 2019)
 - Stanford, CA, USA
 - Pediatric Neurology Resident
- **Stanford University** (October 2012 – May 2017)
 - Stanford, CA, USA
 - Monje Lab
 - Postdoctoral Fellow: “*Neuro-glial Interactions in the Glioma Microenvironment*”
 - Stanford Optogenetics Innovation Laboratory Course (January 2013)
- **Cancer Center Amsterdam, VUmc** (May 2008 – July 2012)
 - Amsterdam, The Netherlands
 - Neuro-Oncology Research Group (NRG), VU University Medical Center (VUmc)
 - Ph.D. Project: “*Diffuse intrinsic pontine gliomas: towards new treatment strategies*”
- **Bicocca University of Medicine** (October 2000 – March 2007)
 - Milan, Italy
 - Degree: Doctor of Medicine
 - Thesis: “Non-dopaminergic systems in Parkinson's Disease: an [¹²³I]β-CIT SPECT Study”
 - Student Council Representative to the Medicine Faculty (2003 – 2004)

- **Erasmus Project** (March – December 2006)
· Amsterdam, The Netherlands
Experimental medical thesis internship at the VUmc (Neurology Department)
- **Impington Village College** (September 1998 – May 2000)
· Cambridge, United Kingdom
International Baccalaureate
Ranked 1st among all foreign students and 2nd in the graduating class.
- **Tito Livio Liceum** (1994 – 1998)
· Milan, Italy
Classical Studies including Greek and Latin

GRANTS & FELLOWSHIPS

- **PERF®-CNS Elterman & Shields Grant** (2024)
- **DoP Pilot Grant Award** UTHealth Houston (2023)
- **Lyla Nsouli foundation** Brain Cancer Research Grant (2015)
- **Bear Necessities** Pediatric Cancer Foundation fellowship (2014)
- **Child Health Research Institute (CHRI)** Grant Support Award (2013)
- **Deans Postdoctoral Fellowship** (Stanford University) (2013)
- **American Italian Cancer Foundation (AICF)** fellowship (not accepted) (2013)

PUBLICATIONS

1. Korf JM, McCullough LD, **Caretti V**. A narrative review on treatment strategies for neonatal hypoxic ischemic encephalopathy. *Transl Pediatr*. 2023 Aug 30;12(8):1552-1571. doi: 10.21037/tp-23-253. Epub 2023 Aug 22. PMID: 37692539; PMCID: PMC10485647.
2. Perla M, **Caretti V**, Moro MA, McCullough LD. Role of the Meningeal Lymphatics in Stroke. *Stroke*. 2023 Jun;54(6):1670-1673. doi: 10.1161/STROKEAHA.123.043424. Epub 2023 May 22. PMID: 37216448; PMCID: PMC10204316.
3. C. Wang, S. Sinha, X. Jiang, S. Fitch, C. Wilson, **V. Caretti**, A. Ponnuswami, M. Monje, G. Grant, F. Yang. A comparative study of brain tumor cells from different age and anatomical locations using 3D biomimetic hydrogels. *Acta Biomaterialia* (Sept 2020). 2020.09.007.
4. M.H.A. Jansen*, T. Lagerweij*, A.C.P. Sewing*, D.J. Vugts, D.G. van Vuurden, C.F.M. Molthoff, **V. Caretti**, S.J.E. Veringa, N. Petersen, A.M. Carcaboso, D.P. Noske, W.P. Vandertop, P. Wesseling, G.A.M.S. van Dongen, G.J.L. Kaspers, E. Hulleman. Bevacizumab targeting diffuse intrinsic pontine glioma: results of 89Zr-bevacizumab PET imaging in brain tumor models. *Mol Cancer Ther* (Sept 2016). 15(9):2166-74.
5. **V. Caretti***, H.S. Venkatesh*, T.B. Johung*, A. Noll, Y. Tang, S. Nagaraja, E.M. Gibson, C.W. Mount, J. Polepalli, S.S. Mitra, P.J. Woo, R.C. Malenka, H. Vogel, M. Bredel, P. Mallick, M. Monje. Neuronal Activity Promotes Glioma Growth through Neuroligin-3 Secretion. *Cell* (May 2015). 161(4): 803–816.
6. **V. Caretti***, A.C.P. Sewing*, T. Lagerweij*, P. Schellen, M.H.A. Jansen, D.G. van Vuurden, S. Idema, C.F. Molthoff, W.P. Vandertop, G.J.L. Kaspers, D.P. Noske, E. Hulleman. Convection enhanced delivery of carmustine to the murine brainstem: A feasibility study. *J Neurosci Methods* (Dec 2014). 238:88-94.
7. **V. Caretti***, M. Bugiani*, M. Freret, P. Schellen, M.H.A. Jansen, D.G. van Vuurden, G.J.L. Kaspers, PG Fisher, E. Hulleman, P. Wesseling, H. Vogel, M. Monje. Subventricular spread of diffuse intrinsic pontine glioma. *Acta Neuropathol* (Oct 2014). 128(4):605-7.
8. **V. Caretti**, C. Sewing, T. Lagerweij, P. Schellen, M. Bugiani, M.H.A. Jansen, D.G. van Vuurden, A.C. Navis, I. Horsman, P. Wesseling, W.P. Vandertop, D.P. Noske, G.J.L. Kaspers, E. Hulleman, H. Vogel, M. Monje*, T. Wurdinger*. Human pontine glioma cells can induce murine tumors. *Acta Neuropathol* (Apr 2014). 127(6):897-909.
9. E. Giovannetti, Q. Wang, A. Avan, N. Funel, E. Galvani, T. Lagerweij, D. Chiasserini, J.H. Lee, **V. Caretti**, A. van der Velde, U. Boggi, Y. Wang, E. Vasile, G.J. Peters, T. Wurdinger, G. Giaccone. Role of CYB5A in pancreatic cancer prognosis and autophagy modulation. *JNCI* (Jan 2014). 106(1):djt346.
10. **V. Caretti***, A. Avan*, N. Funel*, E. Galvani, M. Maftouh, R.J. Honeywell, T. Lagerweij, O.V. Telling, D. Campani, D. Fuchs, H.M. Verheul, G.J. Schuurhuis, U. Boggi, G.J. Peters, T. Wrdinger, E. Giovannetti. Crizotinib inhibits metabolic inactivation of gemcitabine in c-Met-driven pancreatic carcinoma. *Cancer Res* (Nov 2015). 73(22):6745-56.
11. **V. Caretti***, L. Hiddingh*, T. Lagerweij, P. Schellen, P.W. Koken, E. Hulleman, D. van Vuurden, W.P. Vandertop, G. Kaspers, D.P. Noske, T. Wurdinger. WEE1 Kinase Inhibition Enhances the Radiation Response of Diffuse Intrinsic Pontine Gliomas. *Mol Cancer Ther* (Feb 2013). 12(2):141-50.
12. **V. Caretti***, M.H.A. Jansen*, D.G. van Vuurden, T. Lagerweij, M. Bugiani, I. Horsman, H. Wessels, P. van der Valk, J. Cloos, D.P. Noske, W.P. Vandertop, P. Wesseling, T. Wurdinger, E. Hulleman, G. Kaspers. Implementation of a Multi-Institutional Diffuse Intrinsic Pontine Glioma Autopsy Protocol and Characterization of a Primary Cell Culture. *Neuropathol Appl Neurobiol* (Jun 2013). 39(4):426-36.
13. **V. Caretti**, D.P. Noske, W.P. Vandertop, G. Kaspers, T. Wurdinger. Pioneering Preclinical Research in Diffuse Intrinsic Pontine Glioma: Towards New Treatment Strategies. *PhD Thesis* (July 2012).
14. S. Idema, **V. Caretti**, M. Lamfers, V. van Beusechem, D. Noske, W.P. Vandertop, C. Dirven. Anatomical differences determine distribution of adenovirus after convection-enhanced delivery to the rat brain. *PLoS One* (October 2011). 6(10) e24396.
15. **V. Caretti**, I. Zondervan, D. Meijer, S. Idema, W. Vos, B. Hamans, M. Bugiani, E. Hulleman, P. Wesseling, W. Vandertop, D. Noske, P. David G. Kaspers, C. Molthoff, T. Wurdinger. Monitoring of tumor growth and post-irradiation recurrence in a diffuse intrinsic pontine glioma mouse model. *Brain Pathology* (July, 2011). 21(4) 441-51.

16. **V. Caretti**, D. Stoffers, A. Winogrodzka, I-U. Isaías, G. Costantino, G. Pezzoli, C. Ferrarese, A. Antonini, E-Ch. Wolters, J. Booij. Loss of thalamic serotonin transporters in early drug-naïve Parkinson's disease patients is associated with tremor: an [(123)I]beta-CIT SPECT study. *J Neural Transm* (May 2008). 115(5) 721-9.
* Equal Contribution

MEDICAL BOARDS

- **American Board of Psychiatry and Neurology (ABPN), Child Neurology Certification** (September 2023)
- **USMLE Step 1, 2 CS, 2 CK, 3** (October 2015 - August 2019)
- **Medical Licensing Exam** (July 2007)
 - *Milan, Italy*

ACADEMIC COMMITTEE & COMMUNITY SERVICE

- **Baylor Texas Children's Hospital** (2021 – present)
 - *Houston, TX*
 - Child Neurology DEI (Diversity, Equity, and Inclusion) Committee*
- **MIMS PTO Board Member** (2021 – 2022)
 - *Houston, TX*
 - Corporate Fundraising Chair* Mandarin Immersion Magnet School Parent Teacher Organization
- **MIMS Art Club** (2021 – 2022)
 - *Houston, TX*
 - Founder and Instructor* Mandarin Immersion Magnet School

AWARDS FOR INTERNATIONAL CLERKSHIPS, ELECTIVES & HONORS

- **PERF-CNS Elterman & Shields Research Grant**, Child Neurology Society (August 2024)
 - *Houston, TX*
 - From: *Pediatric Epilepsy Research Foundation*
- **Hospital Infantil Dr. Robert Reid Cabral**, Child Neurology Department (March 2022)
 - *Santo Domingo, Dominican Republic*
 - From: *Baylor / Texas Children's Hospital*
- **Hospital das Clinicas**, Neurology Department (August – September 2007)
 - *Belo Horizonte, Brazil*
 - From: *International Federation of Medical Students Associations*
- **Hospital Universitario Central de Asturias**, Pneumology Department (August 2004)
 - *Oviedo, Spain*
 - From: *International Federation of Medical Students Associations*
- **SLIC Facilitator** Stanford Leaders in Communication (June 2014)
 - *Stanford, CA*
- **Best Presentation Award** (November 2010)
 - OOA (Annual Oncology Graduate School) Retreat
 - *Texel, The Netherlands*
- **Travel Award** (December 2007)
 - WFN World Congress on Parkinson's Disease and Related Disorders
 - *Amsterdam, The Netherlands*

MEDIA

- **Brains & Bourbon** Ep18 Rethinking Brain Tumors (Sept 2014)
 - <http://goo.gl/qbEQNU>
- **Outside the tower. A night at the museum.** Mention in Letter in Science (July 2014)
 - <http://goo.gl/3oHs1X>
- **NDRI Research Nexus: Brain Donations Empower Researchers at Stanford University** (Dec 2013)
 - <http://goo.gl/PuhDzv>
- **Penguins & Pajamas** Neurotalk at the Academy of Arts and Sciences (Sept 2013)
 - <http://goo.gl/7TZ78Y>

MENTORSHIP & TEACHING

- **Students Mentored**
 - 2 research assistant, and 1 PhD candidate (UT Health) (2023 – present)
 - Houston, TX
 - 2 Undergraduate, 1 Medical, and 2 PhD Students (Stanford University) (2013 – 2016)
 - Stanford, CA
 - 1 Undergraduate awarded the Stanford Firestone Medal (2016)
 - 3 Masters Students (Master Oncology, VUmc) (2009 – 2011)
 - Amsterdam
- **Courses Taught**
 - Neurology (Osteopath School of Milan) (2005-2006)
 - Milan

PROFESSIONAL THEATER TRAINING & PERFORMANCE

- **Being Scene**, director A. Hayes (November 2013)
 - Stanford, CA
- **The Symphonic Body: Stanford**, director A. Carlson (May 2013)
 - Stanford, CA
- **Advanced Theatre Laboratory**, director G. Bagnoli (October 2004 — February 2006)
 - Milan, Italy
- **Advanced Stage for Actors**, director G. Bagnoli (August 2005)
 - Florence, Italy
- **'Quelli di Grock' Theater School**, 1st and 2nd year (October 2002 — July 2004)
 - Milan, Italy

ADDITIONAL INTERNATIONAL EXPERIENCES & VISUAL ARTWORK

- **Editorial International Meeting** (1993 – 1999)
 - Buntingford, United Kingdom
 The White House International Centre (Peace Child International)
 Financed by the United Nations.
 Artist-Editor and *painter* for the books:
 - 'Pachamama' (1999)
 - 'Global Environment Outlook' (1998)
 - 'a World in our Hands' (1995)
 - 'Rescue Mission Planet Earth' (1993)
- **International Children's Peace Council** (1993 – 1998)
 - Various educational projects on sustainable development and human rights in elementary and secondary schools.
 - Milan, Italy (1996 – 2007)
 - Delegate in the *Children's Food Summit*
 - Rome, Italy (November 1996)
 - Delegate in the *World Summit Children Project*
 - San Jose, Costa Rica (August 1996)