

## 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 [<sup>123</sup>I]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 1<sup>st</sup> among all foreign students and 2<sup>nd</sup> 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. \*Thao L. Nguyen, DO, \*Varun Kannan, MD, **Viola Caretti, MD, PhD**, Jon Cokley, PharmD, Omar Tanweer, MD, Daniel Davila-Williams, MD. *Successful use of intra-arterial verapamil in an infant with vasospasm secondary to aneurysmal subarachnoid hemorrhage. Pediatr Stroke.* 2023;6: 43-50.
2. 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.
3. 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.
4. 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.
5. 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.
6. **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 Neuroigin-3 Secretion. *Cell* (May 2015). 161(4): 803–816.
7. **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.
8. **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.
9. **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.
10. 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.
11. **V. Caretti\***, A. Avan\*, N. Funel\*, E. Galvani, M. Maftouh, R.J. Honeywell, T. Lagerweij, O.V. Tellingena, 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.
12. **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.
13. **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.
14. **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).
15. 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.

16. **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.
17. **V. Caretti**, D. Stoffers, A. Winogrodzka, I-U. Isaias, 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**, 1<sup>st</sup> and 2<sup>nd</sup> 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)