

Eduard Hendrik Joannes Voormolen

MD, MSc
21-02-1983



Nationality: Dutch/Czech

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| Clinical Experience | <ul style="list-style-type: none"> Resident in Neurosurgery, in clinical training and PhD candidate (AGIKO) 2011 - present <i>University Medical Center Utrecht, Utrecht, NL & St. Elisabeth Hospital, Tilburg, NL</i> Ongoing training in clinical neurosurgery, gamma knife radiosurgery, and research |
| | <ul style="list-style-type: none"> Resident in Neurosurgery not-in-training (ANIOS) and Researcher 2009-2011 <i>University Medical Center Utrecht, Utrecht, NL</i> 6 months of neurosurgical clinical work combined with 18 months of research |
| International Experience | <ul style="list-style-type: none"> Stereotactic Radiosurgery Fellowship 2015 <i>Werner Medical James Cancer Center, Columbus, OH, United States of America</i> Clinical fellowship: learned Gamma Knife and Linac radiosurgery indications, planning and radiophysics/radiobiology of radiosurgery |
| | <ul style="list-style-type: none"> Research Internship 2006 and 2008 <i>Toronto Western Hospital, Toronto ON, Canada</i> Performed research during two summers at MRI physics laboratory on the subject of voxel-based morphometry which resulted in 2 journal articles |
| | <ul style="list-style-type: none"> UC Berkeley Exchange Semester 2003 <i>University of California, Berkeley, CA, United States of America</i> Completed courses in anatomy, endocrinology, evolution theory, and astronomy GPA: 3.5 out of 4.0 |
| Education | <ul style="list-style-type: none"> Degree in Medicine: Selective Utrecht Medical Masters (SUMMA) 2004-2009 <i>University of Utrecht, Utrecht, Netherlands</i> An accelerated 4-year course in medicine for 40 selected students per year GPA: 3.3 out of 4.0 |
| | <ul style="list-style-type: none"> Masters Degree: Biomedical Image Sciences (BIS) 2005-2010 <i>University of Utrecht, Utrecht, Netherlands</i> Research master program resulting MSc in medical image processing GPA: 3.7 out of 4.0 |
| | <ul style="list-style-type: none"> Bachelor Degree: University College Utrecht 2001-2004 <i>University of Utrecht, Utrecht, Netherlands</i> Majored in physics, chemistry, cell biology, German, pharmacology, and immunology. GPA: 3.4 (with Honors) out of 4.0 |
| | <ul style="list-style-type: none"> High School: International Gymnasium Rijnlands Lyceum Oegstgeest, Netherlands 1995-2001 Enrolled in a bilingual English-Dutch educational program |
| Grants | <ul style="list-style-type: none"> Kansen voor West European Union Grant (KvW-00128) 2017 Grant (€ 223.000) received for collaboration between business and University on co-developing a haptic feedback shirt for cranial neurosurgery |
| | <ul style="list-style-type: none"> Medtronic Navigation Research Stimulation Grant 2012 A research materials support grant (approx. € 100.000) issued by Medtronic |
| | <ul style="list-style-type: none"> ZonMW AGIKO Grant 2011 Personal Grant of € 66.000 from Dutch government fund to combine research with clinical training |
| | <ul style="list-style-type: none"> Alexandre Suerman MD/PhD Grant 2009 Personal grant of € 100.000 for 2 years of PhD research for talented medical students from the University of Utrecht |

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| Teaching | <ul style="list-style-type: none"> ▪ Lecturer in Neurosurgery Educating intensive care nurses about acute neurosurgery and neurology at the <i>St. Antonius Hospital Academy</i> and third year medical students about basic neurosurgery at the <i>University of Utrecht Medical School</i>. ▪ Research Supervisor Master Students Day-to-day supervision of students performing 6-9-month research projects ▪ Cadaver Lab Manager In charge of arranging anatomic teaching activities in the neurosurgical cranial anatomy cadaver laboratory for neurosurgical residents, staff and visitors. | <p style="text-align: right;"><i>2010-present</i></p> <p style="text-align: right;"><i>2011 - present</i></p> <p style="text-align: right;"><i>2011 - 2015</i></p> |
| Extra-Curricular Activities | <ul style="list-style-type: none"> ▪ President of Dutch Neurosurgical Residents Association (NVNA) As president of the NVNA (http://nvna.info) I supervise the treasurer and secretary and are the spokesperson of the association. I co-organize the educational meetings that are held each six months. ▪ Member of Fidelio Committee for Young Opera Friends Fidelio is the organization of young friends of the Dutch opera (DNO) based in Amsterdam. I was in charge of acquisition of funds/sponsors and helped organizing meet-and-greets with opera singers and lecturers. ▪ Chair of University College Science Career Committee Organized lectures by scientists, workshops led by technical companies to introduce students from University College to career opportunities. | |
| Social | <p>Onafhankelijk Heeren Genootschap Equites Fraternity Utrecht's Studenten Corps Fraternity</p> | |
| Hobbies | <p>Tennis: played regional level; chair of club youth committee Golf : handicap 15.6 Field hockey: play interregional level (1st class); trained/coached youth teams Alpine skiing, clarinet, opera, astronomy</p> | |
| Languages | <p>Dutch (<i>native</i>), English (<i>fluent</i>), Czech (<i>proficient</i>), German (<i>conversant</i>), French (<i>basic knowledge</i>)</p> | |

Scientific Publications

PhD Thesis (to be published in June 2018):

Computer Assisted Surgery of the Skull Base: Contributions to Guidance and Imaging

Voormolen, Eduard H, Marijn van Stralen, Peter A Woerdeman, Josien P W Pluim, Herke Jan Noordmans, Max A Viergever, Luca Regli, en Jan Willem Berkelbach van der Sprenkel. “Determination of a Facial Nerve Safety Zone for Navigated Temporal Bone Surgery”. *Neurosurgery* 70, nr. 1 Suppl Operative (maart 2012): 50–60; discussion 60.

Voormolen, Eduard H, Peter A Woerdeman, Marijn van Stralen, Herke Jan Noordmans, Max A Viergever, Luca Regli, en Jan Willem Berkelbach van der Sprenkel. “Validation of Exposure Visualization and Audible Distance Emission for Navigated Temporal Bone Drilling in Phantoms”. *PLoS One* 7, nr. 7 (2012): e41262.

Voormolen, Eduard H, Sander Diederer, Marijn van Stralen, Peter A Woerdeman, Herke Jan Noordmans, Max A Viergever, Luca Regli, Pierre A Robe, en Jan Willem Berkelbach van der Sprenkel. “Benchmarking Distance Control and Virtual Drilling for Lateral Skull Base Surgery”. *World Neurosurgery* 109 (januari 2018): e217–28.

Voormolen, Eduard H, Sander Diederer, Helene Cebula, Peter A Woerdeman, Herke Jan Noordmans, Max A Viergever, Pierre A Robe, Sebastien Froelich, Luca Regli en Jan Willem Berkelbach van der Sprenkel. “Distance Control and Virtual Drilling Improves Anatomical Orientation during Anterior Petrosectomy” *Submitted*

Voormolen, Eduard H, Sander Diederer, Peter A Woerdeman, Jan Willem Berkelbach van der Sprenkel, Herke Jan Noordmans, Max A Viergever, Peter Luijten, Hans Hoogduin, en Pierre A Robe “Implications of Extracranial Distortion in Ultra-High Field MRI for Image-Guided Cranial Neurosurgery” *Submitted*

Other publications:

Voormolen, Eduard H, Abdelkarime Khodadade Jahrome, Lambertus W Bartels, Frans L Moll, Willem P Mali, en Peter J Blankestijn. “Nonmaturation of Arm Arteriovenous Fistulas for Hemodialysis Access: A Systematic Review of Risk Factors and Results of Early Treatment”. *Journal of Vascular Surgery* 49, nr. 5 (mei 2009): 1325–36.

Gragnaniello, Cristian, Remi Nader, Tristan van Doormaal, Mahmoud Kamel, **Eduard H Voormolen**, Giovanni Lasio, Emad Aboud, Luca Regli, Cornelius A F Tulleken, en Ossama Al-Mefty. “Skull Base Tumor Model”. *Journal of Neurosurgery* 113, nr. 5 (november 2010): 1106–11.

Voormolen, Eduard H, Corie Wei, Eva W C Chow, Anne S Bassett, David J Mikulis, en Adrian P Crawley. “Voxel-Based Morphometry and Automated Lobar Volumetry: The Trade-off between Spatial Scale and Statistical Correction”. *NeuroImage* 49, nr. 1 (1 januari 2010): 587–96.

Chow, Eva W C, Andrew Ho, Corie Wei, **Eduard H Voormolen**, Adrian P Crawley, en Anne S Bassett. “Association of Schizophrenia in 22q11.2 Deletion Syndrome and Gray Matter Volumetric Deficits in the Superior Temporal Gyrus”. *The American Journal of Psychiatry* 168, nr. 5 (mei 2011): 522–29.

Voormolen, Eduard H, Sebastien Froelich, Peter A Woerdeman, Jan Willem Berkelbach van der Sprenkel, Weibel Braunius, en Luca Regli. “Surgical Instrument Tracking Optimizes Trans-Sphenoidal Endoscopic Treatment of Petrous Apex Cholesterol Granuloma”. *Journal of Neurological Surgery. Part A, Central European Neurosurgery* 74, nr. 2 (maart 2013): 109–12.

Khlebnikov, Vitaliy, Daniel Polders, Jeroen Hendrikse, Pierre A Robe, **Eduard H Voormolen**, Peter R Luijten, Dennis W J Klomp, en Hans Hoogduin. “Amide Proton Transfer (APT) Imaging of Brain Tumors at 7 T: The Role of Tissue Water T1-Relaxation Properties”. *Magnetic Resonance in Medicine* 77, nr. 4 (april 2017): 1525–32.

Sadik, Zjiwar H A, **Eduard H Voormolen**, Paul R A M Depauw, Bachtar Burhani, Willy-Anne Nieuwlaat, Jeroen Verheul, Sieger Leenstra, Ruth E M Fleischeuer, en Patrick E. J. Hanssens. “Treatment of Nonfunctional Pituitary Adenoma Postoperative Remnants: Adjuvant or Delayed Gamma Knife Radiosurgery?” *World Neurosurgery* 100 (april 2017): 361–68.