

CURRICULUM VITAE

Name: Hirofumi Nakatomi M.D. , Ph.D
Date of Birth: November 15, 1967
Current Post: Team Leader, Biomedical Neural Dynamics Collaboration Laboratory,
RIKEN Center for Brain Science and
Professor, Department of Neurosurgery, Kyorin university

Education and Degrees:

1993 May Resident of Department of Neurosurgery (The University of Tokyo)
1993 Dec Resident of Department of Neurosurgery (Showa General hospital, Japan)
2003 Mar Doctor of Medicine (PhD equivalent) (the University of Tokyo)
2002 June Clinical Neurosurgery Fellow, Mayo Clinic Rochester (Rochester, MN, USA)
2004 June Skull Base Surgery Fellow, University Cincinnati (Cincinnati, OH, USA)
2005 August House Ear Clinic, visiting fellow (Los Angeles, LA, USA)
2005 Oct Associate, The University of Tokyo, Department of Neurosurgery (Japan)
2006 April Chief, Toranomon hospital, Department of Neurosurgery (Japan)
2010 March Assistant professor, The University of Tokyo, Department of Neurosurgery (Japan)
2014 Jun Associate professor, The University of Tokyo, Department of Neurosurgery (Japan)
2018 Oct Team Leader, Biomedical Neural Dynamics Collaboration Laboratory, RIKEN Center for Brain Science (Wako, Saitama, Japan)
2021 Jan Professor, Kyorin University (Japan), Department of Neurosurgery

Appointments

AANS (American Association of Neurological Surgeons) international fellow, 2015-
CNS (Congress of Neurological Surgeons) international fellow, 2015-
The Japan Geriatric Neurosurgery, Executive Committee Member and chairman, 2023/4-
The Japan Neurosurgical Society, Councilor, 2012-
The Japan Neurosurgical Society, Financial Committee Member, 2013-2020
The Japan Neurosurgical Society, General Affairs Committee Member, 2013-2020, 2023-
The Japan Neurosurgical Society, Constitution Committee Member, 2013-2020, 2023-
The Japan Neurosurgical Society, Committee on Canonical History Member, 2013-2019
The Japanese Society on Surgery for Cerebral Stroke, Councilor, 2022-
The Japanese Society for Skull Base Surgery, Executive Committee Member, 2023-

Specialty

Complex cerebrovascular lesions (Complex aneurysms, AVMs, bypass surgery)
Skull base tumors (schwannomas, meningiomas, craniopharyngiomas)

Honors and Awards

1997 The Domonkai Award (Non-Specialist Division), Department of Neurosurgery, The University of Tokyo
1998 Young Investigator Award (Vascular Disorders Division), Japanese Neurosurgical Society

- 2000 The Domonkai Award (Non-Specialist Division), Department of Neurosurgery, The University of Tokyo
- 2003 Kusano Award for Excellence, Japanese Stroke Society, Japanese Heart Association
- 2003 Best Resident Award (Summer Quarter), Department of Neurosurgery, Mayo Clinic, USA
- 2003 Domonkai Award (Specialist Division), Department of Neurosurgery, The University of Tokyo
- 2017 ROBOMECH Award, Robotics and Mechatronics Division, The Japan Society of Mechanical Engineers
- 2023 RIKEN Eiho Award, from RIKEN

Publications (Selected)

1. Shima Y*, Sasagawa S*, Ohta N*(equal contribution), Oyama R, Sogawa C, Kim Y, Sakashita-Kubota M, Kawakami H, Naemura K, Takubo N, Kobayashi M, Ozeki A, Nakaki R, Tanaka M, Kamatani Y, Matsuda K, Kurihara H, Furihata T, Takahashi S, Rikitake Y, Kozaki K, Nakafuku M, Mataga N, Ohtsuka N, Akimitsu N, Wada Y, Kamiguchi H, Okabe S, Kato T, Nakagawa H, Saito N, and **Nakatomi H**. Increased PDGFRB and NF- κ B signaling caused by highly prevalent somatic mutations in intracranial aneurysms. *Sci Transl Med*. 2023 Jun 14;15(700):eabq7721. doi: 10.1126/scitranslmed.abq7721. Epub 2023 Jun 14. PMID: 37315111.
2. Hongo H, Miyawaki S, Teranishi Y, Mitsui J, Katoh H, Komura D, Tsubota K, Matsukawa T, Watanabe M, Kurita M, Yoshimura J, Dofuku S, Ohara K, Ishigami D, Okano A, Kato M, Hakuno F, Takahashi A, Kunita A, Ishiura H, Shin M, **Nakatomi H**, Nagao T, Goto H, Takahashi SI, Ushiku T, Ishikawa S, Okazaki M, Morishita S, Tsuji S, Saito N. Somatic GJA4 gain-of-function mutation in orbital cavernous venous malformations. *Angiogenesis*. 2022 Jul 29. doi: 10.1007/s10456-022-09846-5. Online ahead of print. PMID: 35902510
3. **Nakatomi H**, Kiyofuji S, Ono H, Tanaka M, Takizawa K, Shiokawa Y, Morita A, Saito N, Kamiyama H, Flemming K, Link M. Giant Fusiform and Dolichoectatic Aneurysms of the Basilar Trunk and Vertebrobasilar Junction - Clinicopathological and Surgical Outcome. *Neurosurgery*. 2020 Dec 15;88(1):82-95. doi: 10.1093/neuros/nyaa317.PMID: 32745190
4. **Nakatomi H**, Jacob JT, Carlson ML, Tanaka S, Tanaka M, Saito N, Lohse CM, Driscoll CLW, Link MJ. Long-term risk of recurrence and regrowth after gross-total and subtotal resection of sporadic vestibular schwannoma. *J Neurosurg*. 2017 May 19:1-7. doi: 10.3171/2016.11.JNS16498.
5. Ochi T, **Nakatomi H**, Ito A, Imai H, Okabe S, Saito N. Temporal changes in the response of SVZ neural stem cells to intraventricular administration of growth factors. *Brain Res*. 2016;1636 :118-129.
6. Yoshino M, Kin T, Ito A, Saito T, Nakagawa D, Ino K, Kamada K, Mori H, Kunimatsu A, **Nakatomi H**, Oyama H, Saito N. Combined use of diffusion tensor tractography and multifused contrast-enhanced FIESTA for predicting facial and cochlear nerve positions in relation to vestibular schwannoma. *J Neurosurg*. 2015;123(6) :1480-1488.
7. **Nakatomi H**, Miyazaki H, Tanaka M, Kin T, Yoshino M, Oyama H, Usui M, Moriyama H, Kojima H, Kaga K, Saito N. Improved preservation of function during acoustic neuroma surgery. *J Neurosurg*. 2015;122(1) :24-33.
8. Ono H, **Nakatomi H**, Tsutsumi K, Inoue T, Teraoka A, Yoshimoto Y, Ide T, Kitanaka C, Ueki K, Imai H, Saito N. Symptomatic recurrence of intracranial arterial dissections: follow-up study of 143 consecutive cases and pathological investigation. *Stroke*. 2013;44(1) :126-131.
9. Flemming KD, Wiebers DO, Brown RD Jr, Link MJ, **Nakatomi H**, Huston J 3rd, McClelland R, Christianson TJ. Prospective risk of hemorrhage in patients with vertebrobasilar nonsaccular intracranial aneurysm. *J Neurosurg*. 2004;101(1) :82-87.
10. **Nakatomi H**, Kuriu T, Okabe S, Yamamoto S, Hatano O, Kawahara N, Tamura A, Kirino T, Nakafuku M. Regeneration of hippocampal pyramidal neurons after ischemic brain injury by recruitment of endogenous neural progenitors. *Cell*. 2002;110(4) :429-441.
11. Yamamoto S, Nagao M, Sugimori M, Kosako H, **Nakatomi H**, Yamamoto N, Takebayashi H, Nabeshima Y, Kitamura T, Weinmaster G, Nakamura K, Nakafuku M. Transcription factor

expression and Notch-dependent regulation of neural progenitors in the adult rat spinal cord. *J Neurosci.* 2001;21(24) :9814-9823.

12. **Nakatomi H**, Segawa H, Kurata A, Shiokawa Y, Nagata K, Kamiyama H, Ueki K, Kirino T. Clinicopathological study of intracranial fusiform and dolichoectatic aneurysms : insight on the mechanism of growth. *Stroke.* 2000;31(4) :896-900.
13. **Nakatomi H**, Nagata K, Kawamoto S, Shiokawa Y. Ruptured dissecting aneurysm as a cause of subarachnoid hemorrhage of unverified etiology. *Stroke.* 1997;28(6) :1278-1282.