### Curriculum Vitae

# Akira Midorikawa, Ph.D.

Office Address: Department of Psychology, Faculty of Letters, Chuo University

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Phone: +81(0) 42-674-3742

Qualification: Certified clinical psychologist

Area of Study: Clinical neuropsychology

Interests: Neuropsychology of dementia and developmental disorders, Residual abilities in

brain damaged patients

## **Academic Training**

Ph.D., 2002 Department of Education (Division of Psychology), Graduate School of Letters, Chuo University, Tokyo, Japan

M.A., 1997 Department of Education (Division of Psychology), Graduate School of Letters, Chuo University, Tokyo, Japan

B.A., 1995 Department of Education (Psychology Course), Faculty of Letters, Chuo University, Tokyo, Japan

#### **Clinical and Research Practice**

2008-present Clinical Neuropsychologist at Department of neurosurgery, Tokyo

Metropolitan Komagome Hospital, Tokyo, Japan

• Neuropsychology and awake brain surgery

2007-present Clinical Neuropsychologist at Yokohama Rehabilitation Center,

Yokohama, Japan

• Psychosocial rehabilitation

2000-2014 Researcher (Clinical Neuropsychologist), Department of Neurology,

Showa University School of Medicine, Tokyo, Japan

Neuropsychology of dementia and other disorders
 (e.g. Memory consolidation and epilepsy/ Cognitive functions of patient with agenesis of the corpus callosum (ACC)/ Visual

functions of patient with posterior cortical atrophy/ Residual functions of frontotemporal dementia/ Relationships between dementia and developmental disorders/ Neuropsychological mechanism of musical reading and writing)

### **Posts**

2013-present	Professor, Chuo University, Tokyo, Japan
2008-2013	Associate Professor, Chuo University, Tokyo, Japan
2006-2008	Lecturer, Chuo University, Tokyo, Japan
2003-2006	Postdoctoral Fellow (Japan Science and Technology Agency),
	National Institute of Neurology and Psychiatry, Tokyo, Japan
2002-2003	Postdoctoral Fellow (Japan Science and Technology Corporation),
	Fukushima University, Fukushima, Japan

## **Professional Membership of Societies**

American Psychological Association (Division 40) (from 2017)

International Neuropsychological Society (from 2004)

The Japanese Psychological Association (from 1997)

Neuropsychological Association of Japan (from 1996)

Japan Society for Higher Brain Dysfunction (from 1996)

#### Grants

- April 1, 2016~March 31, 2018. Midorikawa, A. *Neuropsychological Study of Time Cognition*:

  Grant-in-Aid for Scientific Research on Innovative Areas (Research in a proposed research area) (¥12,740,000)
- April 1, 2015~March 31, 2018. Midorikawa, A. *Grasping residual function in severely demented patients*: Grant-in-Aid for Scientific Research (¥4,810,000)
- April 1, 2014~March 31, 2016. Midorikawa, A. *Neuropsychological approach to the study of synchronization phenomenon*: Grant-in-Aid for Scientific Research on Innovative Areas (Research in a proposed research area) (¥3,510,000)
- October 20, 2010~March 31, 2013. Midorikawa, A. The development of supporting tools for

elderly persons with dementia based on residual function: Grants-in-Aid for Scientific Research (¥3,770,000)

April 1, 2007~March 31, 2009. Midorikawa, A. *The development of a new evaluation systems* for motor function of patients with Parkinson's disease: Grants-in-Aid for Scientific Research (¥2,800,000)

April 1, 2006~March 31, 2008. Kanbayashi, Y. Studies on behavior assessment and intervention for preschoolers with developmental disorders:

Grants-in-Aid for Scientific Research (¥4,150,000)

April 1, 2006~March 31, 2008. Yamaguchi, M. Cortical developmental model during infancy: Grants-in-Aid for Scientific Research (¥15,310,000)

#### **Editorial Board**

The Japanese Journal of Neuropsychology Higher Brain Function Research (Japanese) Journal of Alzheimer's Disease (Associate Editor)

#### Referees

American Journal of Alzheimer's Disease & Other Dementias/ ANNALS (Singapore)/ Behavioural Neurology/ Brain and Nerve (Japanese)/ Higher Brain Function Research (Japanese)/ Japanese Journal of Neuropsychology/ Journal of Neurological Science/ Journal of Neurology, Neurosurgery, and Psychiatry/ Neuroscience Research/ Perceptual and Motor Skills

#### **Publications**

- 1. Shinoura, N., <u>Midorikawa, A.</u>, Yamada, R., Hiromitsu, K., Itoi, C., Saito, S. & Yagi, K. Operative Strategies during Awake Surgery Affect Deterioration of Paresis a Month after Surgery for Brain Lesions in the Primary Motor Area. *Journal of Neurological Surgery Part A: Central European Neurosurgery.* (2016).
- 2. Midorikawa, A., Suzuki, H., Hiromitsu, K. & Kawamura, M. Wandering behavior of a

- severely demented patient with frontotemporal dementia. *Neurocase*, **22**, 220–224 (2016).
- 3. Saito, S. & <u>Midorikawa, A.</u> Development of the Japanese Indecisiveness (Yujufudan) Scale. *The Japanese Journal of Psychology* **87**, 535–545 (2016).
- 4. Hiromitsu, K. & <u>Midorikawa, A.</u> Downward and Parallel Perspectives in an Experimental Study of Out-of-Body Experiences. *Multisensory Research* **29**, 439–451 (2016).
- 5. <u>Midorikawa, A.</u>, Leyton, C. E., Foxe, D., Landin-Romero, R., Hodges, J. R. & Piguet, O. All Is Not Lost: Positive Behaviors in Alzheimer's Disease and Behavioral-Variant Frontotemporal Dementia with Disease Severity. *Journal of Alzheimer's Disease*, **54**, 549–558 (2016).
- 6. Sugimoto-Shiromaru, A., Mori, Y., Futamura, A., <u>Midorikawa, A.</u>, Koyama, S. & Kawamura, M. What you see is not necessarily what you perceive: Picture agnosia and Alzheimer's disease. *Neurology and Clinical Neuroscience*, **4**, 16–18 (2016).
- 7. <u>Midorikawa, A.</u> Developmental Disorders and Dementia. *BRAIN and NERVE*, **67**, 1125–1132 (2015).
- 8. Itoi, C., Hiromitsu, K., Saito, S., Yamada, R., Shinoura, N. & <u>Midorikawa, A.</u> Predicting sleepiness during an awake craniotomy. *Clinical Neurology and Neurosurgery*, **139**, 307–310 (2015).
- 9. Kuroda, T., Futamura, A., Sugimoto, A., <u>Midorikawa, A.</u>, Honma, M. & Kawamura, M. Autobiographical age awareness disturbance syndrome in autoimmune limbic encephalitis: two case reports. *BMC Neurology*, **15**, 238 (2015).
- Murakami, H., Owan, Y., Oguchi, T., Nomoto, S., Shozawa, H., Kubota, S., Mori, Y., Mizuma, K., Futamura, A., Kobayakawa, M., Kezuka, M., Midorikawa, A., Miller, M.W. & Kawamura, M. Modified Six Elements Test: Earlier diagnosis of the correlation between motor and executive dysfunction in Parkinson's disease without dementia. Neurology and Clinical Neuroscience, 3, 209–214 (2015).
- 11. <u>Midorikawa, A.</u> & Kawamura, M. The emergence of artistic ability following traumatic brain injury. *Neurocase* **21**, 90–94 (2015).
- 12. <u>Midorikawa, A.</u>, Itoi, C. & Kawamura, M. Detection of residual cognitive function through non-spontaneous eye movement in a patient with advanced frontotemporal dementia. *Frontiers in Neuroscience* **8**, (2014).

- 13. Hanazuka, Y., Shimahara, N., Tokuda, Y. & <u>Midorikawa, A.</u> Orangutans (*Pongo pygmaeus*) remember old acquaintances. *PLoS ONE* **8**, (2013).
- 14. Shinoura, N., Yamada, R., Tabei, Y., Shiode, T., Itoi, C., Saito, S. & <u>Midorikawa, A.</u> The right dorsal anterior cingulate cortex may play a role in anxiety disorder and visual function. *Neurological Research*, **35** 65–70. (2013).
- 15. Sugimoto, A., <u>Midorikawa, A.</u>, Koyama, S., Futamura, A., Hieda, S. & Kawamura, M. Picture agnosia as a characteristic of posterior cortical atrophy. *European Neurology*, **68**, 34-41 (2012).
- Hanazuka, Y., Kurotori, H., Shimizu, M. & <u>Midorikawa, A.</u> Visual discrimination in an orangutan (*Pongo pygmaeus*): measuring visual preference. *Perceptual and Motor Skills* 114, 429–432 (2012).
- 17. <u>Midorikawa, A.</u> & Kawamura, M. The relationship between subclinical Asperger's syndrome and frontotemporal lobar degeneration. *Dementia and Geriatric Cognitive Disorders Extra* **2**, 180–186 (2012).
- **18.** Shinoura, N., Yamada, R., Tabei, Y., Otani, R., Itoi, C., Saito, S. & <u>Midorikawa, A.</u> Damage to the right dorsal anterior cingulate cortex induces panic disorder. *Journal of affective disorders*, **133**, 569–572 (2011).
- 19. <u>Midorikawa, A.</u> & Kawamura, M. Does the brain prefer geometrical homogeneity? *Behavioural Neurology.* **23**, 101–5 (2010).
- 20. <u>Midorikawa, A.</u> Clinical characteristics of posterior cortical atrophy. *BRAIN and NERVE* **62**, 727–35 (2010).
- 21. <u>Midorikawa, A.</u>, Kawamura, M. & Nakamura, K. Discrepancy between imitating finger configuration and finger action: a single case report. *European Neurology* **64**, 80–82 (2010).
- 22. Wada, Y., Shirai, N., Otsuka, Y., <u>Midorikawa, A.</u>, Kanazawa, S., Dan, I. & Yamaguchi, M. K. (2009). Sound enhances detection of visual target during infancy: A study using illusory contours. *Journal of Experimental Child Psychology*, **102**, 315–322 (2009).
- 23. <u>Midorikawa, A.</u>, Nakamura, K., Nagao, T. & Kawamura, M. Residual perception of moving objects: dissociation of moving and static objects in a case of posterior cortical atrophy. *European Neurology* **59**, 152–158 (2008).

- 24. <u>Midorikawa, A.</u>, Fukutake, T. & Kawamura, M. Dementia and painting in patients from different cultural backgrounds. *European Neurology* **60**, 224–229 (2008).
- 25. <u>Midorikawa, A.</u> et al. Impairment of motor dexterity in schizophrenia assessed by a novel finger movement test. *Psychiatry Research* **159**, 281–289 (2008).
- 26. <u>Midorikawa, A.</u> & Kawamura, M. Different stages of human memory consolidation system deficits revealed by patients with epileptic amnesia. *BRAIN and NERVE* **60**, 855–860 (2008).
- 27. <u>Midorikawa, A.</u> & Kawamura, M. Recovery of long-term anterograde amnesia, but not retrograde amnesia, after initiation of an anti-epileptic drug in a case of transient epileptic amnesia. *Neurocase* **13**, 385–9 (2007).
- 28. <u>Midorikawa, A.</u> & Kawamura, M. Parallel processing of motion vision. *BRAIN and NERVE* **59**, 37–44 (2007).
- 29. Mochizuki-Kawai, H., Mochizuki, S., <u>Midorikawa, A.</u>, Yamanaka, K., Tagaya, H. & Kawamura M. Disappearance of memory fragments in patients with Alzheimer's disease: evidence from a longitudinal study of visual priming. *Neuropsychologia* **44**, 1114–9 (2006).
- 30. <u>Midorikawa, A.</u>, Kawamura, M. & Takaya, R. A disconnection syndrome due to agenesis of the corpus callosum: disturbance of unilateral synchronization. *Cortex* **42**, 356–365 (2006).
- 31. <u>Midorikawa, A.</u>, Kawamura, M. & Kezuka, M. Musical alexia for rhythm notation: a discrepancy between pitch and rhythm. *Neurocase* **9**, 232–238 (2003).
- 32. Kawamura, M., <u>Midorikawa, A.</u> & Kezuka, M. Cerebral localization of the center for reading and writing music. *Neuroreport* **11**, 3299–3303 (2000).
- 33. Midorikawa, A. & Kawamura, M. A case of musical agraphia. *Neuroreport* 11, 3053–3057 (2000).

#### **Abstracts and Conference Presentations**

1. <u>Midorikawa, A.</u>, Leyton, C.E., Foxe, D., Landin-Romero, R., Hodges J.R. & Piguet, O. All is not lost – positive behaviors in Alzheimer's disease and behavioral-variant

- frontotemporal dementia with disease severity. 10th International Conference on Frontotemporal Dementias, August 31-September 2, 2016 (Munich, Germany)
- Kawamura, M., Kuroda, T., Futamura, A., Sugimoto, A., <u>Midorikawa, A.</u> & Honma, M. Autobiographical age awareness disturbance (AAAD) syndrome in autoimmune limbic encephalitis (Thematic Session: Axes in our mental time: is there any unique time axis for mankind?). 31st International Congress of Psychology (ICP2016) July 24 -29, 2016 Pacifico Yokohama (Yokohama, Japan)
- 3. <u>Midorikawa, A.</u> The current state of neuropsychology in Japan (Thematic Session: Do neuropsychological case studies belong to the past? Why are case studies majorities in Japan?) 31st International Congress of Psychology (ICP2016) July 24 -29, 2016 Pacifico Yokohama (Yokohama, Japan)
- 4. Saito, S. & <u>Midorikawa, A.</u> Indecisiveness Person Avoid the Situation Confronted to Decision-making. 31st International Congress of Psychology (ICP2016) July 24 -29, 2016 Pacifico Yokohama (Yokohama, Japan)
- 5. Hanazuka, Y. & Midorikawa, A. Bornean orangutans (Pongo pygmaeus) can distinguish delayed self-images from recorded self-images. 31st International Congress of Psychology (ICP2016) July 24 -29, 2016 Pacifico Yokohama (Yokohama, Japan)
- 6. Hiromitsu, K. & <u>Midorikawa, A.</u> Self-location during out of body illusion. International Multisensory Research Forum 17th Annual Meeting, June 15-18, 2016 (Suzhou, China)
- 7. Shoko, S., Itoi, C., Hiromitsu, K., Yamada, R., Shinoura, N. & <u>Midorikawa, A.</u> The case of category specific anomia during awake surgery in the right frontal lobe. The 5th INS/ASSBI Pacific Rim Conference, July 1-4, 2015 (Sydney, Australia)
- 8. Itoi, C., Hiromitsu, K., Saito, S., Yamada, R., Shinoura, N. & <u>Midorikawa, A.</u> The personality changes by removal of the acoustic nerve tumour. The 5th INS/ASSBI Pacific Rim Conference, July 1-4, 2015 (Sydney, Australia)
- 9. Hiromitsu, K., Itoi, C., Shoko, S., Yamada, R., Shinoura, N. & <u>Midorikawa, A.</u> A case of touch-color synesthesia elicited by deficit in the left medial parietal lobe. The 5th INS/ASSBI Pacific Rim Conference, July 1-4, 2015 (Sydney, Australia)
- 10. Hanazuka, Y., Tanaka, M & <u>Midorikawa, A.</u> The Effect of Animal Keepers on The Drawing Behavior of a Bornean Orangutan (Pongo pygmaeus), International

- Primatological Society Congresses, August 11-16, 2014 (Hanoi, Vietnam)
- 11. Itoi, C., Hiromitsu, K., Saito, S., Yamada, R., Shinoura, N. & <u>Midorikawa, A.</u> Cognitive traits predict sleepiness during awake surgery. International Neuropsychological Society 2014 Mid-Year Meeting, July 9-11, 2014 (Jerusalem, Israel)
- 12. Hiromitsu, K., Itoi, C., Saito, S., Yamada, R., Shinoura, N. & <u>Midorikawa, A.</u> Tactile extinction depends on the attention to somatosensory input. International Neuropsychological Society 2014 Mid-Year Meeting, July 9-11, 2014 (Jerusalem, Israel)
- 13. <u>Midorikawa, A.</u> & Kawamura, M. Hyperesthesia and dementia. International Neuropsychological Society 2013 Mid-Year Meeting, July 10-13, 2013 (Amsterdam, The Netherlands)
- 14. Hiromitsu, K., Itoi, C. Saito, S. Yamada, R. Shinoura, N. & <u>Midorikawa, A</u>. Religious experiences and out-of-body experiences during awake surgery. International Neuropsychological Society 2013 Mid-Year Meeting, July 10-13, 2013 (Amsterdam, The Netherlands)
- 15. <u>Midorikawa, A.</u> & Kawamura, M. Maladaptive social behaviors in older people: frontotemporal dementia or autistic spectrum disorders? The 8th International Conference on Frontotemporal Dementias, September 5-7, 2012 (Manchester, UK)
- 16. Saito, S., Itoi, C., Hiromitsu, K., Shiode, T., Tabei, Y., Yamada, R., Shinoura, N. & Midorikawa, A. Sentence comprehension and short-term memory: consideration from patients with prefrontal lobe lesion. The 2012 International Neuropsychological Society Mid-Year Meeting/11th Nordic Meeting in Neuropsychology June 27-30, 2012 (Oslo, Norway)
- 17. Hiromitsu, K., Saito, S., Itoi, C., Shiode, T., Tabei, Y., Yamada, R., Shinoura, N. & Midorikawa, A. Error patterns of the picture naming predict the brain lesion and unilateral neglect. The 2012 International Neuropsychological Society Mid-Year Meeting/11th Nordic Meeting in Neuropsychology June 27-30, 2012 (Oslo, Norway)
- 18. Itoi, C. & <u>Midorikawa, A.</u> Emotional perceptions and Personality traits. The 2012 International Neuropsychological Society Mid-Year Meeting/11th Nordic Meeting in Neuropsychology June 27-30, 2012 (Oslo, Norway)
- 19. Midorikawa, A., Itoi, C. & Kawamura, M. Getting a residual function through

- eye-movement in a patient with severe frontotemporal lobar degeneration (FTLD). The 2012 International Neuropsychological Society Mid-Year Meeting/11th Nordic Meeting in Neuropsychology June 27-30, 2012 (Oslo, Norway)
- 20. <u>Midorikawa, A.</u> & Kawamura, M. Emergence of artistic ability after traumatic brain injury. INS/ASSBI Meeting. July 6-9, 2011 Sky City (Auckland, New Zealand)
- 21. Izuta I., Sunami Y. & <u>Midorikawa, A.</u> A case of musical alexia: rhythm reading interferes with pitch. The Neuroscience and music IV. June 2011, 9-12 (Edinburgh, Scotland, UK)
- 22. Uchida, S., Nakahara, K., <u>Midorikawa, A.</u>, Kuraoka, K., Saito, A., Takemoto, A., Kawamura, M. & Nakamura, K. Interhemispheric functional connectivity in a subject with complete agenesis of the corpus callosum. 16th Annual Meeting of the Organization for Human Brain Mapping. 1387 MT-AM ,6.7,2010.
- 23. <u>Midorikawa, A.</u> & Kawamura, M. The diagnosis of frontotemporal lobar degeneration (FTLD) may include patients with autism spectrum disorders (ASD). The International Neuropsychological Society, The Polish Neuropsychological Society and The Polish Neuroscience Society Joint Mid-Year Meeting, 2010 (Krakow. Poland)
- 24. <u>Midorikawa, A.</u> & Kawamura, M.: Cognitive functions of a patient with fronto-temporal dementia (FTD) showing superior painting skills is similar to that of autistic savant syndrome. International Neuropsychological Society, Finnish Neuropsychological Society, Joint Mid-Year Meeting, 2009 (Helsinki, Finland & Tallinn, Estonia)
- 25. <u>Midorikawa, A.</u> & Kawamura, M. Emergence of geometrical ability in a case of frontotemporal lobar degeneration (FTLD), XXX International Neuropsychological Society Mid-year Meeting, 2008 (Buenos Aires, Argentina)
- 26. <u>Midorikawa, A.</u> & Kawamura, M. A novel disconnection syndrome: Unilateral motor dyssynchronization to periodical visual stimuli, 36th Annual INS Meeting, 2008 (Waikoloa, HI, USA)
- 27. <u>Midorikawa, A.</u> Case report of a patient with posterior cortical atrophy who relatively preserved perception of moving objects. Neuroscience 2006 The 29th Annual Meeting of the Japan Neuroscience Society, 2006 (Kyoto, Japan)
- 28. <u>Midorikawa, A.</u> & Amano, K. An examination of the effect of early intervention on the improvement of voluntary attention of preschool children at high risk of learning

- disabilities using a continuous performance test (CPT). First ISCAR Congress International Society for Cultural and Activity Research September, 2005 (Sevilla, Spain)
- 29. <u>Midorikawa, A.</u>, Kawamura, M., Nagao, T. & Nakamura, K.: Preserved ability to detect moving objects but not still objects in patients with posterior cortical atrophy. Society for Neuroscience 34th Annual meeting. October, 2004 (San Diego, USA)
- 30. Takaya, R., <u>Midorikawa, A.</u> & Saito, M. Whole body movements converged on upper limb movement in 1-to 6-month-old. 14th Biennial International Conference on Infant Studies. May, 2004 (Chicago, USA)
- 31. Mochizuki-Kawai, H., Mochizuki, S., <u>Midorikawa, A.</u>, Yamanaka, K. & Mitsuru Kawamura: Disappearing of memory fragments in patients with Alzheimer's disease: Evidence from longitudinal study of visual priming. Tsukuba International Conference on Memory, Dynamic Cognitive Processes, March 2004 (Tsukuba, Japan)
- 32. <u>Midorikawa, A.</u> & Kawamura, M. Rhythm disturbances in Parkinson's disease 7th International Conference on Music Perception & Cognition. July, 2002 (Sydney, Australia)
- 33. <u>Midorikawa, A.</u> & Amano, K. The continuous performance test (CPT) as an assessment of voluntary attention in preschool children at high risk for learning disabilities. The International Society for Cultural Research and Activity Theory, Fifth Congress, June, 2002 (Amsterdam, Netherland)
- 34. Kawamura, M. & <u>Midorikawa, A.</u> A case study of autobiographical amnesia. Frontier of Human Memory, October, 2001 (Sendai, Japan)
- 35. <u>Midorikawa, A.</u> The role of short-term memory in musical writing. Society for Music Perception & Cognition 2001, August, 2001 (Kingston, Canada)
- 36. <u>Midorikawa, A.</u>, Nagao, T. & Kawamura, M. A case of picture agnosia XXVII International Congress of Psychology, July, 2000 (Stockholm, Sweden)
- 37. <u>Midorikawa, A.</u> & Kawamura, M. Pure musical agraphia. International Symposium on Neuroscience of Music '99, October, 1999 (Niigata, Japan)