

## Curriculum Vitae (Jan 2018)

### Takako FUJIOKA

Assistant Professor, CCRMA (Center for Computer Research in Music and Acoustics),

Department of Music, Stanford University

Stanford, California 94305-8180, USA

Phone: (650) 723-4971 ex. 308

Fax: (650) 723-8468

Other Stanford Affiliation:

Stanford Neurosciences Institute

Stanford Center for Mind, Brain and Computation

Stanford Bio-X

### RESEARCH INTERESTS

Music perception and cognition, music education, cultural aspects of music, memory for music, relation between musical structure and lyrics, magnetoencephalography (MEG), electroencephalography (EEG), magnetic resonance imaging (MRI), transcranial magnetic stimulation (TMS), neural oscillation, neural connectivity, auditory-motor interaction, timing processing, hearing and language disorders, cochlear implant, movement disorders, stroke, Parkinson's disease, development, aging, brain plasticity, learning, rehabilitation.

### TEACHING INTERESTS

Music Perception and Cognition, Auditory Cognitive Neuroscience, Social and cognitive neuroscience, Learning and Plasticity, Developmental Neuropsychology, Human Neurophysiology, Music and Health.

### PROFESSIONAL APPOINTMENTS

2017 March – May (during the sabbatical)

Visiting Scholar, Sunnybrook Research Institute, Toronto, Ontario, Canada. Engaged in brain imaging research related to stroke rehabilitation, hosted by Drs. Sandra E. Black, and Joyce L. Chen.

2012 - present

Assistant Professor, Center for Computer Research in Music and Acoustics, Department of Music, Stanford University, California.

2010-2012

Scientific associate, Rotman Research Institute, Baycrest, Toronto, Ontario. The primary research involves developing pedagogical methods for music-supported rehabilitation for sensori-motor recovery in stroke patients, and establishing biomarkers of recovery using MEG data with neural evoked response and oscillatory activities.

1993-2000

Research associate, Communication & Information Laboratory, Dai Nippon Printing Company, Tokyo, Japan, engaged in research for computational linguistics and knowledge database.

### EDUCATION

2008-2009 Research Fellow supported by Centre for Stroke Recovery, Rotman Research Institute at Baycrest. Supervisor: Drs. Donald Stuss & Bernhard Ross.

2007-2009 Research Fellow at McMaster University. Supervisor: Dr. Laurel Trainor

- 2004-2007 Research Fellow supported by Canadian Institute of Health Research (CIHR) at Rotman Research Institute, Baycrest, Canada. Supervisors: Drs. Terence W. Picton, Laurel Trainor, and Bernhard Ross
- 2003-2004 Post-doctoral Research Fellow, Supervisor: Dr. Christo Pantev
- 2000-3 Ph.D. in Physiology, Department of Physiological Science, School of Life Science, Graduate University for Advanced Studies, Department of Integrative Physiology, National Institute for Physiological Sciences, Okazaki, Japan. Supervisor: Dr. Ryusuke Kakigi
- 1993 M.Sc. in Information System Engineering, Department of Electrical Engineering, Graduate School of Science and Engineering, Waseda University, Tokyo, Japan. Involved with Speech Dialogue Modeling and Natural Language Processing. Supervisor: Dr. Katsuhiko Shirai.
- 1990 B.Eng in System Engineering, Department of Electrical Engineering, School of Science and Engineering, Waseda University, Tokyo, Japan. Supervisor: Dr. Katsuhiko Shirai.

### INTERNSHIPS

- 2001-2003 Visiting Academic Fellow, Rotman Research Institute, Supervisor: Dr. Christo Pantev
- 1992 Visiting Student, Department of Natural Language Processing, Spoken Language Communication Research Laboratories, Advanced Telecommunications Research Institute International (ATR), Kyoto, Japan. Supervisor: Dr. Iida Hitoshi.

### FUNDINGS

- 2016-8 Principal proposer Takako Fujioka, Co-PI: Auriel Washburn, "Neural oscillatory and social personality correlates for perception and performance of musical joint-action" NSF 14-595 SBE Postdoctoral Research Fellowships (SPRF), \$238,264 USD.
- 2013-4 Principal proposer Takako Fujioka, Co-proposer: Chris Chafe, "Course curriculum development for NeuroMusic laboratory", for 2013 Autumn and 2014 Winter terms in total \$20,000 for TA support, funded by Course Development Funds by Vice Provost for Graduate Education, Stanford University
- 2012 - 4 Principal Investigator, Heart and Stroke Foundation of Ontario (HSFO) "Examination of the intensity of music-supported stroke rehabilitation" Co-PI: Deirdre Dawson (Rotman Research Institute, Co-investigators: Bernhard Ross, Donald T. Stuss (Rotman Research Institute) Sandra Black (Sunnybrook Hospital, Neurology), for 2 year for the total of \$139,998 CAD. Approved, commencing July 1, 2012.
- 2012 -6 Principal Investigator, Canadian Institutes of Health Research (CIHR) Operating Grant "Impact of music-supported rehabilitation on behavioural and cortical functions in stroke recovery" Co-PI: Deirdre Dawson (Rotman Research Institute, Co-investigators: Bernhard Ross, Donald T. Stuss (Rotman Research Institute) Sandra Black (Sunnybrook Hospital, Neurology), for 3 year for the total of \$461,247 CAD, commencing April 1, 2012.
- 2011-5 Co-Principal Investigator, CIHR Operating Grant "Oscillatory networks for rhythmic timing in auditory and motor regions: Interaction, development and plasticity" PI: Laurel Trainor (McMaster U), Co-investigators: Geoff Hall & Larry Roberts (McMaster U). for 5 years for the total of \$789,839 CAD, commencing Oct 1, 2011.
- 2011- 3 Co-investigator, Med-El Hearing Solutions (MHS) Research Grants. "Age-related Changes in the Effects of Stimulation Rates on Cortical Processing and Speech Recognition in Cochlear Implant (CI) Listeners". PI: Lendra Friesen (Sunnybrook Health Science Centre) Co-investigators: Vincent Lin & David Shipp (Sunnybrook Hospital, Otolaryngology) \$135,000 CAD in total for 2 years.
- 2010-2 Co-investigator, The Ontario Trillium Foundation, "Baycrest Living Through Arts for the seniors"

partnership with Royal Conservatory of Music. \$216,250 CAD.

- 2008-10 Co-investigator, Centre for Stroke Recovery at Baycrest, “Neuromagnetic studies of musical training effects on auditory-motor functions” in collaboration with Drs. Don Stuss and Bernhard Ross. \$50,000 CAD.
- 2004-7 Principal Investigator, Post-doctoral fellowship from Canadian Institutes of Health Research, “Musical memory and temporal processing: effects of musical training and aging” \$135,000 CAD
- 2004-5 Co-Principal Investigator, with Dr. Ryusuke Kakigi, Operation research grant, the sound Technology Promotion Foundation (Tokyo, Japan) “Development of auditory cortex and musical training effect” \$8,400 CAD.

## **AWARDS**

2007 Fujioka, et al. (2006): chosen by the Centre of Excellence for Early Childhood Development (CEEDC) as one of the top 10 articles on early childhood development 2007.

2006 Fujioka, Ross, Kakigi, Pantev & Trainor (2006): one of NSERC's top 50 discoveries of 2006.

2004-7 CIHR Post-doctoral Fellowship Award “Musical memory and temporal processing: effects of musical training and aging” from Canadian Institutes of Health Research, CAD \$135,000

2000-3 PhD-scholarship award by The Japan Scholarship Foundation, Tokyo, Japan, CAD \$52,650

1980 Finalist at The PTNA Piano Competition, the National Piano Teachers' Association of Japan.

## **ACADEMIC ACTIVITIES**

### **Academic Service (internal)**

#### **- Departmental Service**

Music Graduate Curriculum committee (2016 Fall)

Music Library committee (2013-6)

#### **- Exam/Thesis Committee**

- PhD Special Area Exam – Iran Roman (Ph.D., CBMTA) Nov 7, 2017

- PhD Special Area Exam – Tysen Dauer (Ph.D., Musicology) Oct 30, 2017

- PhD Dissertation Oral Defense – Keith Cross (Ph.D., Graduate School of Education), Sep 28, 2017

- PhD Dissertation Reading Exam – John Granzow (Ph.D., CBMTA), June 5, 2016

- PhD Special Area Exam – Madeline Huberth (Ph.D., CBMTA) Dec 3, 2016

- PhD Special Area Exam – Emily Graber (Ph.D., CBMTA) March 10, 2016

- PhD Dissertation Proposal – Keith Cross (Ph.D., Graduate School of Education), March 10, 2015

- PhD Dissertation Proposal, Benjamin Strauber (Ph.D., Neuroscience and Graduate School of Education), March 10, 2015

- PhD Dissertation Oral Defense – Luke Dahl (Ph.D., CBMTA) Nov 18, 2014

- PhD Qualifying Proposal – Keith Cross (Ph.D., Graduate School of Education), Oct 29, 2014

- PhD Qualifying Exam – Madeline Huberth (Ph.D., CBMTA PhD) October 13, 2014

- PhD Qualifying Exam – Alex Chechile (Ph.D., CBMTA PhD) October 15, 2014

- PhD Thesis Reading – Bjorn Erlach (Ph.D., CBMTA PhD) December 13, 2013

- PhD Special Area Exam – John Granzow (Ph.D., CBMTA PhD) December 11, 2013

- PhD Dissertation Oral Defense – Jieun Oh (Ph.D., CBMTA) Dec, 6, 2013

- PhD Dissertation Oral Defense – Juan-Pablo Caceres (Ph.D., CBMTA) Nov 29, 2012

- PhD Qualifying exam – Megha Makam (PhD Biology) October 8, 2012

**- Advisees**

Current:

Auriel Washburn (NSF-funded Post-doctoral Fellow, CCRMA, 2016-present), Emily Graber (6th year Ph.D., CBMTA), Madeline Huberth (5th year Ph.D., CBMTA), Iran Roman (4<sup>th</sup> year Ph.D., CBMTA), Elliot Kermit-Canfield (4<sup>th</sup> year Ph.D.), Benjamin Strauber (5<sup>th</sup> year Ph.D., Neuroscience), Keith Cross (6<sup>th</sup> year Ph.D., Education), Tysen Dauer (4<sup>th</sup> year Ph.D., Musicology), Wisam Reid (3<sup>rd</sup> year MAMST, Primary advisee), Mu-Heng (Eric) Yang (2nd year MAMST, Primary advisee), Barbara Nerness (1<sup>st</sup> year MAMST, Primary advisee), Elena Georgieva (1<sup>st</sup> year MAMST, Primary advisee), Cara Turnbull (1<sup>st</sup> year MAMST, Primary advisee)

Past:

Claudia Freigang (CIHR-funded Post-doctoral Fellow, Rotman, 2015-2017), Doron Roberts-Kedes (MAMST, Primary advisee) Shina Lin (MAMST, Primary advisee), Nick Gang (MAMST, Primary advisee), Graham Davis (MAMST, Primary advisee), Walker Davis (MAMST, Primary advisee), Hana Shin (MAMST, Primary advisee), Luke Dahl (6<sup>th</sup> year Ph.D., CBMTA, SCORE Teaching Assistantship), Aya Yagi (4th year, BA, Music), Alex Chechile (Ph.D., CBMTA), Juan Pablo Caceres (Post-doctoral fellow at CCRMA), Megha Makam (during 3rd year, Ph.D. Biology)

**Academic Service (external)**

- Research advisory council, the Academy of Neurologic Music Therapy (2017-)
- Grant reviewer, Netherlands Organisation for Scientific Research (2017).
- External thesis examiner, University of Helsinki, Cognitive Brain Research Unit, Marina Kliuchko (supervisor: Profs. Mari Tervaniemi, Elvira Brattico, Peter Vuust) 2017 May.
- External grant reviewer, Canadian Institutes of Health Research (CIHR) (2016 March).
- External grant reviewer, The Natural Sciences and Engineering Research Council of Canada (NSERC), Discovery grant competition (2015 January)
- External grant reviewer, The Social Sciences and Humanities Research Council (SSHRC) Canada (2015 January)
- External grant reviewer, National Science Foundation (NSF), US, doctoral fellowship competition (2014 December)
- Scientific advisory board, International Conference for Music Perception and Cognition (ICMPC) 2014 (2013 Dec – 2014 Aug)
- External grant reviewer, The Natural Sciences and Engineering Research Council of Canada (NSERC), Discovery grant competition (2013 Dec)
- External thesis examiner, University of Helsinki, Cognitive Brain Research Unit, Vesa Putkin (supervisor: Prof. Mari Tervaniemi) (2012 August – 2013 October)
- CIHR Canada-China research collaboration grant competition, external reviewer (2012 July)

**Reviewership for peer-review journals**

Journal of Neuroscience, Proceedings of the National Academy of Sciences (Highwire), Scientific Report (Nature communications), Cerebral Cortex, Journal of Gerontology: Psychological Sciences (Oxford Journals), Frontiers in Human Neuroscience, Frontiers in Systems Neuroscience, Frontiers in Psychology, PLoSOne (The Public Library of Science), Journal of Cognitive Neuroscience (MIT press), European Journal of Neuroscience (Wiley), Neuropsychological Review (Springer), The Journal of the Acoustical Society of America (the Acoustical Society of America), Neuroscience & Biobehavioral Reviews, Developmental Cognitive Neuroscience, Neuroimage, Progress in Neurobiology, Neuroscience, Neuroscience Letters, Brain Research, Clinical Neurophysiology, Neuroscience Research, Brain and Cognition, Neuropsychologia, Cortex,

Neurobiology of Aging (Elsevier), Ear and Hearing (Lippincott Williams & Wilkins), Music Perception (University of California Press), Psychology of Music, Mind and Brain, Journal of Experimental Psychology: Human Perception and Performance (American Psychological Association), Review of Educational Research (Sage), BMC Neuroscience (Biomed Central), Psychophysiology (Wiley Online Library)

### **Academic membership**

Society for Music Perception and Cognition, The Society of Neuroscience, Cognitive Neuroscience Society

### **TEACHING**

#### **Lecture/Seminar courses** (at Stanford University)

- 2017 Fall, a new course “Music 351A: Seminar in Music Perception and Cognition – special topic in healthy and impaired hearing” offered with a co-instructor Dr. Matthew Fitzgerald (Stanford Ear Institute, Faculty of Medicine)
- 2015 Winter, a new course “Music 451C: EEG III, Hyper scanning and joint action” is offered
- 2014 Winter, a new course ‘Music 451B: Advanced Research in Auditory and Music Neuroscience’ is offered.
- 2013 Winter, a new course Music 451A ‘Research seminar in Neuroscience of Auditory perception and Music cognition’ is offered, including EEG recording and analysis laboratory exercises and scientific reading and writing assignments
- 2013 Autumn, a new course Music 39A ‘Research seminar in Music, Health, and Medicine’ included scientific reading, presentation and writing assignments and guest lectures by health care professionals (music therapists, clinical psychologist, and medical doctors)
- 2014 Spring, a revised course Music 251, Psychophysics and Music cognition by adding a series of laboratory exercises and associated different presentation and writing assignments to the existing format of lectures, individual consultation on each student’s experiment design, data analysis , writing, presentation).
- 2013 Autumn, Winter, Spring Music 351 Seminar in Music Perception and Cognition (journal article discussion and project/data analysis design discussions)
- 2013 Spring Music 251, Psychophysics and Music cognition (lectures, discussion and individual consultation on each student’s experiment design, data analysis and writing, 5 assignments and project presentation).
- 2012 Autumn, Winter, Spring Music 351 Seminar in Music Perception and Cognition (journal article discussion and project/data analysis design discussions)
- 2012 Winter Music 220B Compositional Algorithms, Psychoacoustics, and Computational Music (lectures, 4 assignments and final project on compositional exercises)

#### Courses taught before Stanford

2008 Spring Instructor, Developmental Neurophysiology (Undergraduate course - PSY318) Dpt.

Psychology, University of Toronto Mississauga (Toronto, Canada)

2001 August Instructor, Neurophysiology using MEG, Summer training school for physiology National Institute for Physiological Sciences (Okazaki, Japan)

1992-3 Teaching assistant, Electronic Circuit Seminar (Undergraduate course), Dpt. Elec. Engineering, Waseda University (Tokyo, Japan)

### **PUBLICATIONS** (underscore indicates student contribution)

#### **Under review**

Huberth M., Dauer T, Nanou C, Román I, Gang N, Reid W, Wright M, **Fujioka, T.** “Performance monitoring of self and other in a turn-taking piano duet: A dual-EEG study”

Graber EM, **Fujioka, T.** “Induced Beta Power Modulations during Isochronous Beats Distinguish Anticipation for Accelerations and Decelerations”

Lam, T., Dawson, D., Honjo, K., Ross, B., Binns, M., Stuss, D. T., Black, S. E., Chen, J. J., Levin, B., **Fujioka, T.**, Chen, J. L., “Neuroimaging Measures of Structural and Functional Integrity of the Motor System Predicts Motor Ability in Chronic Stroke Individuals”

#### **Under revision**

Cross, K., **Fujioka, T.** “Auditory Rhyme Processing in Expert Freestyle Rap Lyricists and Novices: An ERP Study”

Freigang, C., Honjo, K., **Fujioka, T.**, Chen, J. L., Black, S. E., Stuss, D. T., Dawson D. R., Ross, B. “The effects of stroke on central auditory processing abilities in chronic stroke patients”

#### **Peer-reviewed journal articles**

1. **Fujioka T.**, Dawson D.R., Wright R., Honjo, K., Chen, J. L., Chen, J., Black, S. E., Stuss, D. T., Dawson D. R., Ross, B. (in press) “The effects of music-supported therapy on motor, cognitive, and psychosocial functions in chronic stroke” *Annals of the New York Academy of Sciences*.
2. Huberth, M., **Fujioka, T.** (in press) “Performers’ motions reflect their intention to express short or long melodic groupings” *Music Perception*.
3. Lam, T., Dawson, D., Honjo, K., Ross, B., Binns, M., Stuss, D. T., Black, S. E., Chen, J., Levin, B., **Fujioka, T.**, Chen, J. L. (2018) “Neural coupling between contralesional motor and frontoparietal networks correlates with motor ability in individuals with chronic stroke” *Journal of the Neurological Sciences*, 384, 21–29.
4. **Fujioka T.**, Ross, B. (2017) “Beta-band oscillations during passive listening to metronome sounds reflect improved timing representation after short-term musical training in healthy older adults.” *European Journal of Neuroscience*, Vol. 46, pp. 2339–2354.
5. Ross B, Barat M, **Fujioka, T.** (2017) “Sound-making actions lead to immediate plastic changes of neuromagnetic evoked responses and induced beta-band oscillations during perception”. *Journal of Neuroscience*, 24, 3613-16.
6. Huberth, M., **Fujioka, T.** (2017) Neural representation of a melodic motif: Effects of polyphonic contexts. *Brain and Cognition*, 111, 144–155.
7. Ross, B. and **Fujioka, T.** (2016), 40-Hz oscillations underlying perceptual binding in young and older adults. *Psychophysiology*, 53: 974–990.
8. Ross, B. and **Fujioka, T.**, Trainor L. J. (2015) Beta-Band Oscillations Represent Auditory Beat and Its Metrical Hierarchy in Perception and Imagery. *Journal of Neuroscience*, 35 (45), 15187-15198.
9. Riggs, L., **Fujioka, T.**, Chan, J., McQuiggan, D. A., Anderson, A.K., & Ryan, J. D. (2014) “Association with Emotional Information Alters Subsequent Processing of Neutral Faces”, *Frontiers in Human Neuroscience*.
10. **Fujioka T.**, Fidali B. & Ross B. (2014) Neural correlates of intentional switching from ternary to binary meter in a musical hemiola pattern. *Frontiers in Psychology - Auditory Cognitive Neuroscience*.
11. Cirelli, L. K., Bosnyak, D., Manning, F. C., Spinelli, C., Marie, C., **Fujioka, T.**, Ghahremani, A & Trainor, L. J. (2014). Beat-induced fluctuations in auditory cortical beta-band activity: using EEG to measure age-related changes. *Frontiers in Psychology*, 5, 1-9.
12. Ross B., Miyazaki T., Thompson J., Jamali S. & **Fujioka T.** (2014). Human cortical responses to slow and fast binaural beats reveal multiple mechanisms of binaural hearing. *Journal of Neurophysiology*, 112, 1871-84.

13. Jamali, S., **Fujioka, T.**, Ross, B. (2014) Neuromagnetic beta and gamma oscillations in the somatosensory cortex after music training in healthy older adults and a chronic stroke patient. *Clinical Neurophysiology*, 125, 1213–1222.
14. Ross, B., Jamali, S., Miyazaki, T., **Fujioka, T.** (2013) Synchronization of beta and gamma oscillations in the somatosensory evoked neuromagnetic steady-state response. *Experimental Neurology*, 245, 0-51.
15. Miyazaki, T., Thompson, J., **Fujioka, T.**, Ross, B. (2013) Sound envelope encoding in the auditory cortex revealed by neuromagnetic responses in the theta to gamma frequency bands. *Brain Research*, 1506, 64-75.
16. Marie C., **Fujioka T.**, Herrington, L, and Trainor LJ. (2013) The High-Voice Superiority Effect in Polyphonic Music Is Influenced by Musical Experience. *Psychomusicology: Music, Mind & Brain*, 22(2), 97-104
17. Altenmüller, E, Demorest, S.M, **Fujioka, T.**, Halpern, A.R., Hannon, E.E., Loui, P., Majno, M., Oechslin, M.S., Osborne, N., Overy, K. , Palmer, C., Peretz, I., Pfordresher, P.Q., Särkämö, T., Wan, C.Y., & Zatorre, R.J. (2012) Introduction to The Neurosciences and Music IV: Learning and Memory. *Annals of the New York Academy of Sciences*, 1252 (1) , 1-16
18. **Fujioka T.**, Ween JE, Jamali S., Stuss DT, & Ross B. (2012) Changes in neuromagnetic beta-band oscillation after music-supported stroke rehabilitation. *Annals of the New York Academy of Sciences*, 1252 (1) , 294-304
19. **Fujioka T.**, Trainor LJ, Large EW, Ross B. (2012) “Internalized Timing of Isochronous Sounds Is Represented in Neuromagnetic Beta Oscillations” *Journal of Neuroscience*. 2012;32 1791-1802
20. Ross B, Miyazaki T, **Fujioka T.** (2012) “Interference in dichotic listening: the effect of contralateral noise on oscillatory brain networks”, *European Journal of Neuroscience*. 35 (1) , pp. 106-118
21. Zendel BR., Ross B, **Fujioka T.** (2011) “The effect of stimulus rate and tapping rate on tapping performance”. *Music Perception*, 29(1):63-76.
22. **Fujioka T.**, Mourad N., He C, Trainor LJ. (2011) “Development of auditory-specific brain rhythm in infants”. *European Journal of Neuroscience*, Feb;33(3):521-9.
23. **Fujioka T.**, Mourad N., He C, Trainor, L. (2010) “Comparison of artifact correction methods for infant EEG applied to extraction of event-related potential signals”. *Clinical Neurophysiology*. 2011 Jan;122(1):43-51. Epub 2010 Jun 30.
24. **Fujioka T.**, Zendel BR., Ross, B. (2010) “Endogenous neuromagnetic activity for mental hierarchy of timing”. *Journal of Neuroscience*. March, 30(9):3458 –3466.
25. **Fujioka T.**, Trainor LJ, Large EW, Ross B. (2009) “Beta and gamma rhythms in human auditory cortex during musical beat processing”. *Annals of New York Academy of Sciences*. 1169:89-92.
26. Tew S., **Fujioka T.**, He C, Trainor LJ. (2009) “Neural representation of transposed melody at 6 months of age”. *Annals of New York Academy of Sciences*. 1169: 287-290.
27. **Fujioka T.**, Trainor LJ, Ross B. (2008) “Simultaneous pitches are encoded separately in auditory cortex:an MMNm study”. *Neuroreport*. Feb 12;19(3):361-6.
28. **Fujioka T.**, Ross B. (2008) “Auditory processing indexed by stimulus induced alpha desynchronization in children”. *International Journal of Psychophysiology*. 68(2):130-40.
29. Ross B, **Fujioka T.**, Tremblay KL, Picton TW. (2007) “Aging in binaural hearing begins in mid-life: Evidence from cortical auditory evoked responses to changes in interaural phase”. *The Journal of Neuroscience*. 27(42):11172-8.
30. **Fujioka T.**, Ross B, Kakigi R, Pantev C, Trainor LJ. (2006) “One year of musical training affects development of auditory cortical-evoked fields in young children”. *Brain*; Oct;129 (Pt 10):2593-608.
31. Herdman AT, **Fujioka T.**, Chau W, Ross B, Pantev C, Picton TW. (2006) “Cortical oscillations related to processing congruent and incongruent grapheme-phoneme pairs”. *Neuroscience Letters*. 2006 May 15;399(1-2):61-6.
32. **Fujioka T.**, Trainor LJ, Ross B, Kakigi R, Pantev C. (2005) “Automatic encoding of polyphonic melodies in musicians and nonmusicians”. *Journal of Cognitive Neuroscience*. Oct;17(10):1578-92.

33. Herdman AT, **Fujioka T**, Chau W, Ross B, Pantev C, Picton TW. (2004) "Cortical oscillations modulated by congruent and incongruent audiovisual stimuli". *Neurol Clin Neurophysiol*. 2004 Nov 30;2004:15.
34. **Fujioka T**, Trainor LJ, Ross B, Kakigi R, Pantev C. (2004) "Musical training enhances automatic encoding of melodic contour and interval structure". *Journal of Cognitive Neuroscience*. 2004 Jul-Aug;16(6):1010-21.
35. Pantev C, Ross B, **Fujioka T**, Trainor LJ, Schulte M, & Schulz M. (2003), "Music and learning-induced cortical plasticity". *Annals of New York Academy of Sciences*. Nov.;999: 438-450
36. **Fujioka T**, Ross B, Okamoto H, Takeshima Y, Kakigi R, Pantev C (2003) "Tonotopic representation of missing fundamental complex sounds in the human auditory cortex". *European Journal of Neuroscience* 18(2):432-440.
37. **Fujioka T**, Kakigi R, Gunji A, Takeshima Y (2002) "The auditory evoked magnetic fields to very high frequency tones". *Neuroscience* 112:367-381.

### **INVITED PRESENTATIONS**

1. July 12, 2017, Telluride Neuromorphic Cognition Engineering Workshop, Telluride, Colorado (USA) " Investigation of brain functions related to music: Design in human MEG/EEG research".
2. June 17, 2017. THE NEUROSCIENCES AND MUSIC – VI Music, Sound and Health, Boston (USA), Martin Conference Center. "Characterizing neural plasticity in sensorimotor functions after music-making for upper-extremity rehabilitation in chronic stroke".
3. May 24, 2017. University of Toronto, Music and Health Sciences Showcase. "How Does the Brain Make Music? The Link between Audition, Action, and Intention behind Music-Supported Rehabilitation"
4. January 29, 2016. Stanford Phonetics and Phonology Workshop. "Musical structure processing and expertise-related plasticity in brain".
5. December 10, 2015. SCAN (Stroke Collaborative Action Network) Meeting, Stanford University, Medical School. "Music-supported rehabilitation for hemiparetic arm and hand: Design and preliminary data for functional integrity of sensorimotor and auditory processing"
6. October 29, 2015. Mind, Brain, Computation training seminar at Stanford University, Department of Psychology. "Neural correlates for prediction of musical structures and learning-related functional plasticity in expert, development, and stroke recovery."
7. September 23rd, 2013. a colloquium lecture at the Ear club at UC Berkeley Department of Psychology, entitled "Neuromagnetic signatures of music perception: functional significance and plasticity"

### **PATENTS AND COPYRIGHTS**

- 2000-259671 Information formation system, Information retrieval system and record medium, Fujioka, T. Dai Nippon Printing Company
- 2000-259670 Document analysis systems, Fujioka, T. Dai Nippon Printing Company
- 2000-003362 Document analysis systems, Fujioka, T. Dai Nippon Printing Company
- 2000-003361 Document analysis systems, Fujioka, T. Dai Nippon Printing Company
- 2000-003360 Document analysis systems, Fujioka, T. Dai Nippon Printing Company

- END of CV -