TYLER C. CHEUNG, MD

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Licensure:
California #A117880, 2011, 2013
New York State #254024-2, 2009, 2012
NPI: 1790993590
Certification:
American Board of Psychiatry and Neurology, 2009

POSITIONS

Neurology and Movement Disorders, *Southern California Neurology Consultants, Inc*. Staff privileges at Huntington Memorial Hospital (Pasadena, CA). Feb. 2014-current.

Neurohospitalist, *SAGE Neurohospitalist Group*. Staff privileges at Riverside Community Hospital (Riverside, CA), Glendale Memorial Hospital (Glendale, CA), Glendale Aventist Medical Center (Glendale, CA). Feb. 2014-current.

EDUCATION

Residency in Neurology, *Tufts University School of Medicine*, Boston, Massachusetts, 2006-2009

Residency in Internal Medicine (Preliminary Year)**,** *Albany Medical Center*, Albany, New York, 2005-2006.

M.D. *Tufts University School of Medicine*, Boston, Massachusetts, 2001-2005.

B.S. *Yale University*, New Haven, Connecticut. Major: Molecular Biochemistry and Biophysics, 1997-2001.

FELLOWSHIPS

Fellowship in Movement Disorders and Deep Brain Stimulation, *Cedars Sinai Medical Center*, Los Angeles, California. 2011-2013. *Mentors: Michele Tagliati, Cameron McIntyre (Case Western Reserve University), Adam N. Mamelak, Ueli Rutishauser, Nancy Sicotte. Collaborators: Allan Wu, Marco Iacoboni (University of California, Los Angeles)*

Movement Disorders Clinical Fellowship*, Mount Sinai School of Medicine***,** New York, New York, 2009-2011. *Mentors: Michele Tagliati, Ron L. Alterman, C. Warren Olanow.*

Harold R. Williams Summer Research Fellowship, 2002: "Data Analysis and Automation of Multiplex Functional Proteome Screens of HT-1080 Fibrosarcoma Cells." Primary investigator: Dr. Daniel Jay, *Sackler School of Biomedical Sciences, Tufts University*.

Summer Undergraduate Research Fellowship, 2000: "Interaction between the Martian Atmosphere and a Hypothetical Subterranean Biosphere." Primary Investigator: Dr. Yuk L. Yung, *California Institute of Technology/Jet Propulsion Laboratory*.

Summer Undergraduate Research Fellowship, 1999: "Gaseous Metabolism of Prokaryotic Algal Mats." Primary Investigator: Dr. Yuk L. Yung, *California Institute of Technology/Jet Propulsion Laboratory*.

GRANTS AND AWARDS

Completed

CTSI Core Facility Voucher Award, April, 2013
Structural and Functional Connectivity of Movement Disorder Patients Undergoing DBS
Role: Co-investigator
Sponsor: UCLA/Cedars Sinai Clinical and Translational Science Institute (CTSI)

CSMC CTSI Eigler-Whiting-Mann Grant, Oct. 2012 – Oct. 2013
Building Probabilistic Atlases of Brain Activation to Investigate Deep Brain Stimulation for Dystonia
Role: Principle Investigator
Sponsor: Eigler-Whiting-Mann Fund, Cedars Sinai Medical Center.

Sports Spectacular Endowed Fellow, Dec. 2, 2011-Dec. 1, 2012
Deep Brain Stimulation in Parkinson's Disease and Dystonia
Sponsor: Sports Spectacular Foundation.

Submitted

K23 Mentored Patient-Oriented Research Career Development Award (1K23NS085051-01)
Studying Deep Brain Stimulation in Dystonia via Volumes of Tissue Activation
Sponsor: National Institute of Neurologic Disorders and Stroke/National Institutes of Health
Reviewed 6/2013, Status: not funded.

PUBLICATIONS

Peer-Reviewed Publications

Cheung T, Noecker AM, McIntyre CC, Alterman RL, Tagliati M. "Defining a Therapeutic Target for Pallidal Deep Brain Stimulation for Dystonia." *Ann Neurol,* 2014; 76:22-30.

Bronstein JM, Tagliati M, McIntyre CC, Chen R, Cheung T, Hargraves EL, Israel Z, Moffitt M, Montgomery EB, Stypulkowski P, Shils J, Denison T, Vitek J, Volkman J, Wertheimer K, Okun MS. "The Rational Driving the Evolution of Deep Brain Stimulation to Constant-Current Devices." *Neuromodulation*, 2014 (early view).

Cheung T, Nuño M, Hoffman M, Katz M, Kilbane C, Alterman RL, Tagliati M. "Longitudinal Impedance Variability in Patients with Chronically Implanted DBS Devices." *Brain Stimul,* 2013; 6(5): 746-751.

Cheung T, Alterman RL, Tagliati M. "Reply: Neural reorganization through deep brain stimulation: Anything new on the horizon?" *Mov Disord,* 2013; 28(10):1467.

Cheung T, Zhang C, Rudolph J, Alterman RL, Tagliati M. "Sustained Relief of Generalized Dystonia Despite Prolonged Interruption of Deep Brain Stimulation." *Mov Disord*, 2013: 28(10): 1431-1434.

Panov F, Tagliati M, Ozelius L, Fuchs T, Gologorsky Y, Cheung T, Avshalumov, M, Bressman S, Saunders-Pullman R, Alterman Ron, Weisz, D. "Pallidal Deep Brain Stimulation for DYT6 Dystonia" *JNNP*, 83 (2): 182-7, 2012.

Cheung T, Tagliati M. "Deep Brain Stimulation: Can We Do It Better?" *Clin Neurophysiol.* 121(12): 1979-80. 2010.

Posters and Abstracts, International Conferences

Cheung T, Mamelak AN, Tagliati M. "Bipolar Configuration Improves Thalamic DBS Outcome for Essential Tremor: Clinical Observations and Correlation with Volume of Tissue Activation." *Mov Disord,* 2013:28(S1), S346.

Cheung T, Mamelak AN, Tagliati M. "Visualizing Pallidal DBS for Dystonia and Parkinson's Disease." *Mov Disord,* 2013:28(S1), S437.

Cheung T, Mamelak AN, Tagliati M. "Bipolar Versus Monopolar Electrode Configuration in Thalamic DBS for Essential Tremor." *Neurology,* 2013; 80(Meeting Abstracts): 2958.

Cheung T, Nuno M, Hoffman M, Katz M, Killbane M, Alterman RL, Tagliati M. "DBS Electrode Impedance Varies Over Time in Humans." *Mov Disord*. 27(S1), S154, June 2012.

Wertheimer JC, Sherman D, Cheung T, Tagliati M. "Quality of Life and Attitude in Parkinson's disease: A Comparison Between Individuals With and Without Deep Brain Stimulation." *Mov Disord* 27(S1), S179, June 2012.

Changizi BK, Alterman RL, Cheung T, Ngy D, Cho C. "Deep Brain Stimulation of the Globus Pallidus Internus Improves Parkinsonian Features of Multiple System Atrophy." *Mov Disord* 27(S1), S316, June 2012.

Cheung T, Flatow V, Ben-Haim S, Osborn I, Cho C, Tagliati M, and Alterman R. "Status Dystonicus Following Deep Brain Stimulation Surgery in DYT1 Dystonia Patients." *Neurology* 78:P01.227, 2012.

Cheung T, Zhang C, Rudolph J, Alterman RL, Tagliati M. "Continued Relief of Symptoms in Generalized DYT-1 Dystonia after Cessation of Chronic Pallidal Deep Brain Stimulation." *Neurology*. 76(Suppl 4): A329. 2011.

Gan JJ, Gupta F, Cheung T, Alterman RL, Tagliati M. "Long-Term Benefit of Pallidal Deep Brain Stimulation in a Case of Chorea-Acanthocytosis," *Neurology*. 76(Suppl 4): A590, 2011

Knight-Greenfield A, Cheung T, NY, Raciti L, Alterman RL, Tagliati . "Long-Term Analysis of Deep Brain Stimulation in Parkinson's Disease: Beyond 5 Years" *Neurology*. 76(Suppl 4): A277. 2011.

Raciti L, Rudolph JC, Cheung T, Tagliati M, Alterman R. "Successful pallidal DBS therapy in an elderly patient with DYT-1 dystonia." *Movement Disorders*. 25(S2), S465. 2010

Yung YL, Cheung T, Richardson MI, Weiss BP, Webster CR, Delin KA. "Interaction between the Martian Atmosphere and a Hypothetical Subterranean Biosphere." Eos Trans. AGU, 81 (48), Fall Meet. Suppl., 2000.

LECTURES AND PRESENTATIONS

"Deep Brain Stimulation for Parkinson's Disease." *(Lecture Series)*
Dept. of Anatomy, Li Ka Shing Faculty of Medicine, Hong Kong University. Dec. 4, 2013.
Dept. of Neurology, Taipei Veterans General Hospital, Taiwan. Dec. 10, 2013.
Dept. of Neurosurgery, Tainan Municipal An-Nan Hospital, Taiwan. Dec. 11, 2013.
Dept. of Neurosurgery, Jinan University, Guangzhou, China. Dec. 18, 2013.

"Deep Brain Stimulation for Dystonia." *(Lecture Series)*
Dept. of Neurosurgery, Queen Mary Hospital, Hong Kong. Dec. 9, 2013.
Dept. of Neurology, Taipei Veterans General Hospital, Taiwan. Dec. 10, 2013.
Dept. of Neurosurgery, Jinan University, Guangzhou, China. Dec. 18, 2013.

"Which Dystonias are suitable for pallidal DBS?" Dept. of Neurosurgery, Prince of Wales Hospital. Dec. 6, 2013.

"Overview of Current Clinical Practices Regarding DBS In PD And Dystonia." *71st Mid-Taiwan Movement Disorders Symposium*, Taichung, Taiwan. Dec. 13, 2013.

"Current State of the Mechanisms in Deep Brain Stimulation for PD And Dystonia." *2013 Taiwan Movement Disorders Society*, Dept. of Neurology, Kaohsiung Medical University, Taiwan. Dec 14, 2013.

"Modeling the Regions of Influence of Pallidal DBS for Dystonia." *27th Annual PSG Symposium on the Etiology, Pathogenesis, and Treatment of Parkinson Disease and Other Movement Disorders*. Montreal, Canada, October 1, 2013.

Winner, Best Abstract for Other/Non-Parkinson's Disease Movement Disorders.

"Computational Data Analysis in the Python and R Languages." *Motor Control Laboratory (PI: Iacoboni), Ahmanson-Lovelace Brain Mapping Center,* Los Angeles, California, July 11, 2013.

"Visualizing the Volume of Neural Tissue Activation in Deep Brain Stimulation for Parkinson's Disease and Dystonia." *Cedars Sinai Research Day,* Los Angeles, California, January 11, 2013.

"Longitudinal Impedance Variability in Patients with Chronically Implanted DBS Devices." *Cedars Sinai Research Day*, Los Angeles, California, January 11, 2013.

"**Impedance Variation in DBS Patients with Movement Disorders,"** *The Role of Constant Current Stimulation in DBS,* Parkinson Alliance, Princeton, NJ, March 20, 2012.

"**Deep Brain Stimulation**" Grand Rounds, Cedars Sinai Medical Center, Los Angeles, California. April 1, 2011.

INVITED PEER REVIEWER

J. Neurol Neurosurg Psychiat, Oct. 2012.

ADDITIONAL COURSEWORK

"3rd Annual Clinical and Translational Research Workshop." *Clinical and Translational Sciences Institute, Cedars Sinai Medical Center.* Faculty Director: Steven Piantadosi. Los Angeles, California. July 22-26, 2013.

"THE NEURON SIMULATION ENVIRONMENT: 2013 Summer Course." *University of California, San Diego*. Faculty Directors: N. T. Carnevale, Michael Hines. La Jolla, California, June 22-25, 2013.

CLINICAL RESEARCH EXPERIENCE

Impedance Variability in Patients with Implanted DBS Devices
Role: Co-investigator
Principal Investigator: M. Tagliati*, Cedars Sinai Medical Center*
Sponsor: Parkinson Alliance. 2012-present

INTREPID Study: Implantable Neurostimulator for the Treatment of Parkinson's disease.
Role: Co-Investigator

PI: M. Tagliati, *Cedars Sinai Medical Center*
Sponsor Boston Scientific, 2012-present

PD0004: A Multicenter, Multinational, Double-Blind, Placebo-Controlled*, Two-Arm Study to Evaluate the Efficacy of Rotigotine on Parkinson's Disease Associated Pain.
Role: Co-Investigator
PI: M. Tagliati, *Cedars Sinai Medical Center*
Sponsor UCB, 2012-present

A Phase II, Multi-Center, Randomised, Double-Blind, Placebo-Controlled, Parallel Group Study to Investigate the Efficacy, Safety, and Tolerability of Cogane (PYM50028), a Novel, Orally Active Neurotrophic Factor Inducer, in Male and Female Subjects with Early-Stage Parkinson's Disease When Administered Once Daily for 28 Weeks
Role: Co-Investigator
Principal Investigator: M Tagliati, *Cedars Sinai Medical Center*
Sponsor: Phytopharm, Plc. 2012-2013

A Double-Blind, Randomized, Placebo-Controlled Study Of The Safety And Efficacy Of Syn115 As Adjunctive Therapy In Levodopa-Treated Parkinson's Subjects With End Of Dose Wearing Off
Role: Co-Investigator
Principal Investigator: M. Tagliati, *Cedars Sinai Medical Center*
Sponsor: Biotie Therapies, 2012-2013.

CD PROBE - Cervical Dystonia - Patient Registry For Observation Of Botox Efficacy.
Role: Sub Investigator
Principal Investigator: M.Tagliati. *Mount Sinai School of Medicine*
Sponsor: Allergan, Inc. 2009-2010

Open-Label, 12 Months Safety And Efficacy Study Of Levodopa-Carbidopa Intestinal Gel In Levodopa-Responsive Subjects With Advanced Parkinson's Disease And Severe Motor-Fluctuations.
Role: Sub Investigator
Principal Investigator: M.Tagliati. *Mount Sinai School of Medicine*
Sponsor: Solvay. 2009-2010

A Phase 1/2 Trial Assessing The Safety And Efficacy Of Bilateral Intraputaminal And Intranigral Administration Of Cere-120 (Adeno-Associated Virus Serotype 2 [Aav2]-Neurturin [Ntn]) In Subjects With Idiopathic Parkinson's Disease.
Role: Sub Investigator
Principal Investigator: M.Tagliati. C. Cho. *Mount Sinai School of Medicine*
Sponsor: Ceregene. 2009-2010

Medtronic Implantable Systems Performance Registry for Deep Brain Stimulation
Role: Sub Investigator
Principal Investigator: W. Tse. *Mount Sinai School of Medicine*
Sponsor: Medtronic 2010

TEACHING

Movement Disorders didactic series, Aug. 2011-present, neurology clerkship, *Cedars Sinai Medical Center.*

Neurology Casebook didactic series, Aug. 2011-present, neurology clerkship, *Cedars Sinai Medical Center.*

Deep Brain Stimulation, Jan. 2011: Neurology residency neuroscience lecture series, *Mount Sinai School of Medicine.*

Movement Disorders, 2010-11: 3rd year neurology clerkship lecture series, *Mount Sinai School of Medicine.*

Problem Based Learning Instructor, Spring 2005: teaching of introductory clinical case vignettes to first year medical students. *Tufts University School of Medicine.*

SOCIETIES

- Movement Disorders Society
- American Academy of Neurology
- American Medical Association/Massachusetts Medical Society.

OTHER EXPERIENCE

2001-2010: *470 Team USA Olympic Campaign* (volunteer): Multimedia redesign and software development for website to support athletic campaign for the 2004 and 2008 Summer Olympics.

Summer, 1998: *Lucent Technologies, Communications Software Division*: Development of web-based enterprise applications and solutions.

1990-present: experience in operation and programming of multiple computational languages and platforms, including C, IDL, Java, Javascript, FORTRAN, perl, python (including the *pandas, numpy,* and *matplotlib* data analysis libraries) and the R statistical language. Operating systems experience include Ubuntu Linux (cloud and physical instances), RHEL/fedora Linux, DEC VMS, BSD and Solaris UNIX, Mac OS X, and Windows.