Curriculum Vitae

Date Prepared:	February 2023
Name:	**David J. Lin, MD**
Office Address:	Center for Neurotechnology and Neurorecovery, Massachusetts General Hospital, 175 Cambridge Street, Suite 300, Boston, MA 02114
Work Phone:	626-375-4171
Work Email:	dlin7@mgh.harvard.edu
Place of Birth:	Montreal, Canada

Education:

06/2006	BS	Mathematical and Computational Science *with Honors*	Stanford University
06/2013	MD	Doctor of Medicine, *Magna Cum Laude*	Harvard Medical School

Postdoctoral Training:

07/13-06/14	Intern	Internal Medicine	Massachusetts General Hospital/Harvard Medical School
07/14-06/17	Resident	Neurology	Massachusetts General Hospital/Brigham & Women's Hospital/Harvard Medical School
07/17-06/18	Fellow	Neurorecovery	Massachusetts General Hospital/Spaulding Rehabilitation Hospital/Harvard Medical School
07/18-06/20	Fellow	Neurocritical Care	Massachusetts General Hospital/Brigham & Women's Hospital/Harvard Medical School

Faculty Academic Appointments:

09/19-	Assistant Professor (Adjunct Faculty)	Rehabilitation Sciences	MGH Institute of Health Professions
07/20-01/22	Instructor	Neurology	Harvard Medical School
01/22-	Assistant Professor	Neurology	Harvard Medical School

Appointments at Hospitals/Affiliated Institutions:

11/14-	Visiting Scientist	Engineering	Brown University
07/20-	Assistant in Neurology	Neurology	Massachusetts General Hospital
10/20-	Staff Neurologist, Core Investigator	Neurology, Research, Center for Neurorestoration and Neurotechnology (C*f*NN)	Providence VA Medical Center

Other Professional Positions:

2017-2019	Consultant	Boehringer Ingelheim Int.	
2020-	Consultant	MGH Translational Research Center	5 days per year
2022-	Consultant	Neurotrauma Sciences	1 day per year

Major Administrative Leadership Positions:

Local

2020-	Director, MGH Neurorecovery Clinic	Department of Neurology, Massachusetts General Hospital
2020-	Director, MGH Neurorecovery Fellowship	Department of Neurology, Massachusetts General Hospital

Committee Service:

Local

2015-2016	Residency Selection Committee	Partners Neurology Residency, Massachusetts General Hospital, Brigham and Women's Hospital Trainee Member
2016-2018	Educational Leadership Committee	Brigham and Women's Hospital Trainee Member
2017-2019	Graduate Medical Education Committee	Massachusetts General Hospital Trainee Member

Professional Societies:

2015-	American Academy of Neurology	Member
2016-	Society for Neuroscience	Member

2017-2018	American Congress of Rehabilitation Medicine	Member
2018-	American Heart Association	Member
2019-	American Society of Neurorehabilitation	Member

Grant Review Activities:

2022	CHHD-K Function, Integration, and Rehabilitation Sciences Study Section 2022	NIH Ad hoc Member

Editorial Activities:

- **Ad hoc Reviewer**

Annals of Medicine, Annals of Clinical and Translational Neurology, BMJ Open, Brain, IEEE Transactions on Neural Systems and Rehabilitation Engineering, Journal of Neuroengineering, Journal of Neuroengineering and Neurorehabilitation, Journal of Stroke and Cerebrovascular Disease, Lancet Neurology, Nature Neuroscience, Nature Scientific Reports, Neurology, Neurorehabilitation and Neural Repair, Neural Regeneration Research, Stroke

- **Other Editorial Roles**

2018-2019	Invited Guest Editor	*Frontiers in Neurology*, Performance and Participation Outcomes for Individuals with Neurological Conditions, Special Issue

Honors and Prizes:

2006	Mathematical and Computational Science Departmental Honors	Stanford University	Undergraduate scholastic achievement
2010	Elizabeth D. Hay Prize for Basic Science	Harvard Medical School	Research
2010	Nancy Lurie Marks Scholar in Medicine	Harvard Medical School	Research
2010	Howard Hughes Medical Institute Fellowship	Howard Hughes Medical Institute	Research
2011	Martha Gray Prize in Physiology and Systems Biology	Harvard-MIT	Research
2012	Medical Student Travel Award	American Academy of Neurology	Research
2013	Medical Student Prize for Excellence	American Academy of Neurology	Clinical
2013	Magna Cum Laude	Harvard Medical School	Research

2014	Travel Award	American Neurological Association	Research
2016	Medical Education Champion	Partners Neurology Residency	Clinical teaching
2016	NIH R25 Research Education Program for Residents and Fellows Awardee	National Institutes of Health, National Institute of Neurological Disorders and Stroke	Research
2017	Travel Award	American Neurological Association	Research
2017	Clinical Research Award	Massachusetts General Hospital, Department of Neurology	Research
2017	Resident Teaching Award	Massachusetts General Hospital, Department of Neurology	Clinical teaching
2018	Travel Award	American Neurological Association	Research
2018	Clinical Research Award	Massachusetts General Hospital, Department of Neurology	Research
2018	Poster Award	American Congress of Rehabilitation Medicine	Research
2018	Stroke Tank "Pitch it to the Judges" Winner	American Heart Association/American Stroke Association, Northeast Cerebrovascular Consortium	Research
2020	NIH Loan Repayment Program Awardee	National Institutes of Health, National Institute of Neurological Disorders and Stroke	Research
2020	K12 Scholar	Neurorehabilitation and Restorative Neuroscience Training Network (NRNTN)	Research
2021	Leadership Development Program for Researchers	Massachusetts General Hospital Center for Faculty Development	Research
2021	Training in Grantsmanship for Rehabilitation Research Awardee	Medical University of South Carolina	Research
2021	Ally for Women Award Nominee	Massachusetts General Hospital Center for Faculty Development	Clinical
2022	Neurocritical Fellowship Class Faculty Appreciation Award	Massachusetts General Hospital, Brigham and Women's Hospital, Neurocritical Care Divisions	Clinical

Report of Funded and Unfunded Projects

Past

2018-2021 Defining Stroke Recovery Across the Post-Acute Care Continuum

American Heart Association/American Stroke Association/Northeast Cerebrovascular Consortium
PI
The goals of this project are to develop a model to predict recovery of upper extremity impairment after stroke using clinically available data and to define relationships between upper extremity impairment/activity measures and stroke outcome/quality metrics.

2020-2021 Scalable Prediction of Arm Motor Recovery after Stroke and Comprehensive Assessments of its Impact on Disability
American Society of Neurorehabilitation, Seed Funding for Collaboration
PI ($5000 – total direct costs)
The goals of this project are to (1) develop analytic models to predict arm motor recovery with our data and (2) refine optimal measures of stroke recovery across ICF domains. This is a collaborative ASNR seed project.

2020-2021 Defining the Neuroanatomy and Neurophysiology of Recovery after Brain Hemorrhage
Heitman Foundation, Young Investigator Award
PI ($86,957 – total direct costs)
The goals of this project are to (1) define how structural topography of primary ICH influences trajectory of arm recovery and (2) determine how EEG spectral slowing correlates cross-sectionally and longitudinally with arm motor recovery scores.

2020-2022 Integrating Measures of Neuroanatomy and Neurophysiology to Decipher Motor Recovery after Stroke
American Academy of Neurology, Clinical Research Training Scholarship
PI ($150,000 – total direct costs)
The goals of this project are to (1) determine which neurophysiologic measures of motor cortical function and functional connectivity best explain arm motor recovery after stroke and (2) define how neuroanatomic measures of CST injury and neurophysiologic measures of motor cortical circuits together explain arm motor recovery.

2020-2022 Targeting Neuroplasticity with Brain Computer Interfaces to Maximize Motor Recovery for Veterans with Stroke
Department of Veterans Affairs Career Development Award 1, IK1 RX003563
PI ($400,419 – total direct costs)
The goals of this project are to (1) identify longitudinal changes in cortical functional connectivity induced by EEG-BCI arm orthosis training and (2) evaluate how baseline motor severity and neuroanatomy of stroke injury modulates the effects of EEG-BCI arm orthosis training on cortical functional connectivity.

Current

2022-2025 Determining the Implicit and Rule-Based Learning Ability of Individuals with Aphasia to Better Align Learning Ability and Intervention
NIH R21, DC020546
Consultant (PI Erin Meier) ($354,468 – total direct costs)
The aims of this study are to determine the subacute rs-fNIRS functional connectivity patterns that are (1) are associated with subacute language deficits, (2) change over time and are related to longitudinal language changes, and (3) predict language gains by the early chronic stroke stage.

2021-2023 Determining the Implicit and Rule-Based Learning Ability of Individuals with Aphasia to Better Align Learning Ability and Intervention
NIH R21, DC019203
Consultant (PI Sofia Vallila Rohter) ($480,000 – total direct costs)
The objectives of the proposed study are to (1) determine the learning phenotype of individuals with aphasia, and (2) examine how lesion characteristics (size and location of damage to the brain), language ability, and cognitive ability relate to learning ability.

2021-2023 A Portable fNIRS-based Brain-Computer Interface to Augment Post-Stroke Motor Rehabilitation
Axem Neurotechnology Inc
PI ($141,573 – total direct costs)
The present study will help determine how a novel, portable fNIRS-based BCI system may be utilized clinically to promote upper-extremity recovery in chronic stroke survivors.

2022-2026 Predictability in Complex Object Control
NIH R37, HD087089
Co-I (PI Dagmar Sternad) ($2,011,011 – total direct costs)
The goals of this project are to objectively quantify upper extremity coordination challenges in stroke patients and phenotype profiles of recovery.

2022-2027 Deconstructing Post-Stroke Hemiparesis for Precision Neurorehabilitation
Department of Veterans Affairs Career Development Award 2, IK2 RX004237
PI ($1,388,948 – total direct costs)
The goals of this project are to (1) Deconstruct post-stroke hemiparesis into its individual components (2) Map descending motor tract anatomy onto distinct components of post-stroke hemiparesis and (3) Map descending motor tract physiology onto distinct components of post-stroke hemiparesis.

Projects Submitted for Funding

Pending: A comparison of telerehabilitation adherence-enhancing interventions amongst people with disabilities
Submitted 05/2021 PCORI
Co-I (PI Lynne Gauthier)
The goal of this project is to identify the most effective approaches to promoting adherence to physical exercise/rehabilitation amongst people with disabilities.

Training Grants and Mentored Trainee Grants

2020-2021 Advancing Stroke Research through Remote Assessment of Upper Extremity Impairment
MGH Institute of Health Professions Faculty Research Fellowship Grant
Mentor of Kimberly Erler
The major goal of this project is to develop a telehealth assessment package of motor outcomes after stroke to facilitate the remote delivery of rehabilitation and to inform novel personalized intervention strategies.

2022-2023 Adequacy of Nutritional Intake During Intensive Care Hospitalization in Patients with Brain Injury and its Association with Acute and Post-Discharge Clinical Outcomes
Department of Nutrition Services Member Research Grant
Mentor of Kaman Lo
The major goals of this project are to (1) characterize changes in nutritional status and clinical outcomes of patients with brain injury between baseline and ninety day follow-up and (2) assess for associations between nutritional intake adequacy during NSICU hospitalization in patients after acute brain injury and clinical outcomes.

Unfunded Current Projects

2017- Stroke Motor Rehabilitation and Recovery Study (SMaHRT)
Massachusetts General Hospital
PI
The goal of this IRB-approved study (MGH IRB 2017P000868) is to understand the neuroanatomic and neurophysiologic correlates of the natural history of upper extremity motor recovery after stroke.

Report of Local Teaching and Training

Teaching of Students in Courses:

2015	Neuroanatomy	Harvard Medical School
	2nd year medical students	3-hr session / week for 4 weeks
2016	Neuroanatomy (HST 130)	Harvard-MIT
	2nd year medical students	2 x 3-hr sessions / week for 6 weeks
2020	Neurobiology of Disease (NBD 209), Stroke Session	Harvard University
	Graduate students	3-hr session
2020-	Neuroanatomy (HST 130)	Harvard-MIT
	2nd year medical students	2 x 3-hr sessions / week for 6 weeks

Formal Teaching of Residents, Clinical Fellows and Research Fellows (post-docs):

2017-	Neurorehabilitation and Stroke Recovery	Partners (Massachuestts General Hospital / Brigham and Women's Hospital) Core Resident Education Conference
	Neurology Residents and Fellows	1 hour lecture / year
2019-	Stroke Recovery	Spaulding Rehabilitation Hospital Core Resident Education Conference
	Spaulding PM&R Residents	1 hour lecture / year

2020-	Neurorecovery after the NeuroICU	MGH Neurocritical Care Didactice & Case Review Conference
	Neurology fellows and residents	1 hour lecture / year
2022-	Upper Extremity Motor Recovery after Stroke: Clinical Trial Update and Novel Approaches	MGH Stroke Service Conference
	Neurology fellows and residents	1 hour lecture / year

Clinical Supervisory and Training Responsibilities:

2020-	Attending Physician, MGH Neurocritical Care Unit	Massachusetts General Hospital
	Mass General Brigham Neurology Residents and Fellows	40 hours / month
2020-	Attending Physician, Acute Stroke Service	Massachusetts General Hospital
	Mass General Brigham Neurology Residents and Fellows	10 hours / month
2020-	Attending Physician, Neurotrauma Consultation Service	Massachusetts General Hospital
	Mass General Brigham Neurology Residents and Fellows	1 hour / month
2020-	Neurology Residency Clinic Clinic Preceptor	Massachusetts General Hospital
	Mass General Brigham Neurology Residents	10 hours / month
2020-	Neurorecovery Clinic Clinic Preceptor	Massachusetts General Hospital
	Mass General / Spaulding Neurorecovery Fellows	10 hours / month

Research Supervisory and Training Responsibilities:

2019-	Supervision of graduate student trainees	Massachusetts General Hospital
	1-2 trainees per year	1.5 hour lab meeting per week, 1:1 supervision one hour per week per trainee

Formally Mentored Harvard Medical, Dental and Graduate Students:

2018-2019 Galina Gheihman, HMS Class of 2019

Conducted research with me during her final year of medical school. Hosted a national workshop and published a paper with me in Archives of Physical Medicine and Rehabilitation entitled, "Reimagining Stroke Rehabilitation and Recovery Across the Care Continuum"

2022-pres Sarah Cavanagh, Harvard Bioengineering PhD Student

Currently conducting thesis research in my laboratory. Co-advised with Dr. Conor Walsh (Harvard John A. Paulson School of Engineering and Applied Sciences)

Other Mentored Trainees and Faculty:

2017-2018 Shirin Toolee, BS, MS / Industry

Career Stage: Masters student. Mentoring role: Brown University thesis co-advisor. Thesis title "Understanding how cognitive deficits influence motor recovery in patients with acute ischemic stroke"

2017-2020 Lauren Ostrowski, BS / MD PhD Student

Career Stage: post-undergraduate research. Mentoring role: Research co-mentor. Accomplishments: multiple first-author presentations at national conferences based on mentored research- American Society of Neurorehabilitation 2019, Society for Neuroscience 2019

2020-2021 Sarah Cavanagh, BS / Health Science Specialist, Providence VA Medical Center

Career Stage: Masters student. Mentoring role: Brown University thesis co-advisor

2019-pres Nicole Dusang, BS

Career Stage: PhD student. Mentoring role: Brown University thesis co-advisor

2020-pres Rashida Nayeem, BS

Career Stage: PhD student. Mentoring role: Northeastern University thesis co-advisor. Member of dissertation committee.

2020-2022 Julia Carlson, MD

Career Stage: MGH Neurology Fellow. Mentoring role: Fellowship mentor. Accomplishments: submission of poster to Neurocritical Care Annual Conference

2022- Isha Vora, MS, SLP

Career Stage: MGH Institute of Health Professions Rehabilitation Sciences PhD student. Mentoring role: PhD Co-Advisor, Member of thesis committee. Accomplishments:

Winner of Fletcher H. McDowell Award for Best Clinical Science at American Soceity of Neurorehabilitation

Formal Teaching of Peers (e.g., CME and other continuing education courses):

No presentations below were sponsored by 3rd parties/outside entities

2019	Models for Monitoring Stroke Recovery Neurorehabilitation, Harvard CME Course	Lecture Waltham, MA
2019	Proportional Recovery of the Arm after Stroke Neurorehabilitation, Harvard CME Course	Lecture Waltham, MA
2021	Models for Monitoring Stroke Recovery, Part 1 Neurorehabilitation, Harvard CME Course	Lecture Waltham, MA
2021	Models for Monitoring Stroke Recovery, Part 2 Neurorehabilitation, Harvard CME Course	Lecture Waltham, MA
2022	Stroke Recovery, The Cutting Edge Neurorehabilitation, Harvard CME Course	Lecture Waltham, MA

Local Invited Presentations:

No presentations below were sponsored by 3rd parties/outside entities

2017	A Proposal to Define the Trajectory of Motor Recovery after Ischemic Stroke / Weekly Conference Stroke Service, Massachusetts General Hospital
2017	Stroke Motor Rehabilitation and Recovery Study / In-Service Lecture Physical and Occupational Therapy Departments, Massachusetts General Hospital
2017	Towards Brain-Computer Interfaces for Stroke Rehabilitation / Lecture Series Spaulding Stroke Research and Recovery Institute, Spaulding Rehabilitation Hospital
2018	Stroke Recovery: A Comprehensive View Across the Post-Acute Care Continuum / Speaker Series Center of Neurotechnology and Neurorecovery, Massachusetts General Hospital
2018	Stroke Recovery: A Comprehensive Perspective / Speaker Series

White Matter Hyperintensity-Imaging Ischemic Stroke Research Group, Massachusetts General Hospital

2018 Stroke Recovery / Seminar

Seminar in Recovery and Restoration of CNS Health and Function, Massachusetts General Hospital & Brown University

2018 Stroke Recovery, Clinical Translation / Speaker Series

Technology for Equitable and Accessible Medicine (TEAM), Harvard School of Engineering and Applied Sciences

2018 SMaHRT, Preliminary Results and Insights / Speaker Series

Neurostatistics Working Group, Harvard T.H. Chan School of Public Health

2018 Stroke Motor Rehabilitation and Recovery Study, An Update / In-Service Lecture

Occupational and Physical Therapy Departments, Massachusetts General Hospital

2018 Stroke Recovery: A Patient Centered Approach / Grand Rounds

Department of Neurology, Massachusetts General Hospital

2018 Stroke Recovery: A Quantitative Approach / Grand Rounds

MGH Behavioral Neurology and Neuropsychiatry Division

2018 The SMaHRT Study (Perspectives on Year One) / Speaker Series

Spaulding Stroke Institute, Spaulding Rehabilitation Hospital

2019 Deciphering Spontaneous Recovery After Stroke / Research Seminar

MGH Institute of Health Professions

2019 Stroke Recovery: A Quantitative Clinical-Scientific Model / Grand Rounds

Brigham and Women's Hospital Rehabilitation Services & Therapy

2019 Corticospinal Tract Injury Estimated from Acute Stroke Imaging Predicts Upper Extremity Motor Recovery After Stroke
Spaulding-Labuschagne Neuromodulation Center

2020 Tracking Development in Spasticity Following a New Stroke

MGH-Spaulding-Harvard Paralysis Center

2020 Stroke Recovery: From Health Systems to Meaningful Outcomes and Biomarkers for Neurotechnological Treatments
Center *for* Neurorestoration and Neurotechnology Virtual Seminar

Providence Veterans Affairs Medical Center
Providence, RI

2021 Stroke Neurorehabilitation: The Cutting Edge

Updates in Internal Medicine
Providence Veterans Affairs Medical Center Accreditation Outreach Network
Providence, RI

2021 Stroke Recovery: Cutting Edge Treatments

MGH Interprofessional Educational Series

2021 Neurorecovery and COVID-19

CHANT Summer Series, MGH Division of Infectious Disease

2022 Arm and Hand Motor Recovery after Stroke

Summer Learning Series, MGH Summer Learning Series

2022 Nutrition Support from Neurosciences ICU to Neurorecovery – Establishing a Framework

Longwood Nutrition Conference, Harvard Medical School

Report of Regional, National and International Invited Teaching and Presentations

Those presentations below sponsored by outside entities are so noted and the sponsor(s) is (are) identified.

Regional

2017 Understanding Stroke Motor Recovery / Invited Presentation

Opening Ceremony of the Center for Neurotechnology, University of Albany

Albany, NY

2018 Stroke Recovery: Towards Stratified Neurorehabilitation / Grand Rounds

Braintree Rehabilitation Hospital

Braintree, MA

2018 Recovery after Stroke: Bridging the Clincial-Translational Gap / Invited Presentation

ACTION Lab, Northeastern University

Boston, MA

2018 Stroke Motor Recovery: Insights from Neural Structure and Function to Inform Health Systems / Invited Speaker
Boston ACTION Club, Northeastern University

Boston, MA

2018 A Solution for Stroke Recovery / Podium Presentation
Northeast Cerebrovascular Consortium 13th Annual Summit
Newport, RI

2019 Stroke Recovery Design Innovation Workshop
Northeast Cerebrovascular Consortium 14th Annual Summit
Boston, MA (NECC, American Stroke Association)

2019 Defining Stroke Recovery Across the Care Continuum
Northeast Cerebrovascular Consortium 14th Annual Summit, Stroke Tank Presentation
Boston, MA

2020 Stroke Recovery Biomarkers and Cutting Edge Treatments
Encompass Health, 41st Annual Neurorehabilitation Conference
Braintree, MA

2021 Stroke Neurorecovery: How Natural History Can Inform Novel Treatments
University of Massachusetts Neurology Grand Rounds
Worcester, MA

2021 A Neurological Approach to Stroke Recovery
Brown University Neurology Grand Rounds
Providence, RI

2022 Stroke Neurology: From Mechanisms of Prevention to Models of Recovery
Brown Neuroscience Bench-Bedside Seminar Series
Providence, RI

2022 Stroke Outcomes and Predictors: where acute stroke meets stroke rehabilitation
Paul Coverdell National Acute Stroke Program Learning Session Series
Boston, MA

2022 The Clinical Neuroscience of Neurotechnology for Neurorehabilitation
Tufts University NeuroNetwork Keynote Presentation
Medford, MA

2022 Predictors of Recovery after Stroke
Encompass Health, 43rd Annual Neurorehabilitation Conference
Braintree, MA

2022 Rationale and Design of an Interdisciplinary Neurorecovery Clinic
Encompass Health, 43rd Annual Neurorehabilitation Conference
Braintree, MA

2022 Systems Neuroscience for Stroke Recovery: New Outcomes and Novel Treatments
ACTION Lab, Northeastern University
Boston, MA

National

2017 Leveraging Apple Technology to Define and Improve Recovery for Stroke Patients / Invited Presentation
Apple Inc.
Cupertino, CA (Apple)

2018 Clinical Perspectives on Neurotechnology for Stroke Rehabilitation / Invited Presentation
International Brain-Computer Interface Meeting
Monterey, CA

2019 Stroke Recovery: Development of a Learning Healthcare System / Invited Presentation
University of Southern California Neurorehabilitation Seminar
Los Angeles, CA

2020 Corticospinal Tract Injury Estimated From Acute Stroke Imaging Predicts Upper Extremity Motor Recovery After Stroke (Oral Abstract)
International Stroke Conference
Los Angeles, CA

2020 Stroke Recovery: Biomarkers and Outcomes of Motor Recovery after Stroke / Invited Presentation
H. Ben Taub Department of Physical Medicine & Rehabilitation Grand Rounds
Baylor College of Medicine
Houston, TX

2020 Clinically Relevant Biomarkers and Outcomes for Motor Recovery after Stroke
The Department of Physical Medicine and Rehabilitation Grand Rounds
Johns Hopkins University

Baltimore, MD

2021 From Neurocritical Illness to Neurorecovery
Columbia University Neurocritical Care Teaching Conference
New York, New York

2022 A Neurologist's Perspectives on Stroke Recovery and Rehabilitation
Center for Biomedical Research Excellence (COBRE) in Stroke Recovery, Medical University South Carolina
Charleston, South Carolina

2022 Stroke Recovery and Rehabilitation: Let's Get Really Specific
Neurology Grand Rounds, University of Michigan
Ann Arbor, MI

International

2021 BCI-Neurotechnology for Stroke Recovery: Clinical Relevance
International BCI & Neurotechnology Spring School (BCIs for Stroke Rehabilitation)
Schiedlberg, Austria

2022 Clinical Relevance of BCI for Stroke
International BCI & Neurotechnology Spring School (BCIs for Stroke Rehabilitation)
Schiedlberg, Austria

Report of Clinical Activities and Innovations

Current Licensure and Certification:

2016	Massachusetts Medical License
2017	Board Certification, Neurology, American Board of Psychiatry and Neurology
2018	Subspecialty Certification, Brain Injury Medicine, American Board of Psychiatry and Neurology
2022	Subspecialty Certification, Neurocritical Care, American Board of Psychiatry and Neurology

Practice Activities:

2020-	Neurocritical Care	MGH Neurosciences Intensive Care Unit	10 weeks / year

2020-	Neurorecovery Clinic	Neurorecovery Clinic, MGH	Two half day sessions / month
2020-	Acute Stroke Service	Stroke Service, MGH	10 hours / month
2020-	Neurology Clinic	Providence VA Medical Center	4 hours / month

Clinical Innovations:

Stroke Motor Recovery Outpatient Program at Massachusetts General Hospital (2019-pres)	I developed an outpatient program for stroke survivors within the Neurorecovery Clinic at Massachusetts General Hospital, in which clinical visits are focused on neurorehabilitation and integrated with outcomes data collection.
Covid-19 Neurorecovery Follow-up Program (2020 – pres)	During the first wave of the Covid-19 pandemic, I developed a follow-up program for patients with COVID with critical illness and neurologic complications. This outpatient program now receives wide ranging referrals from across the hospital and region.
Neurorecovery Interdisciplinary Outpatient Program (2020 – pres)	I developed an interdisciplinary outpatient program for survivors of acute neurologic illness to be seen simultaneously and via telehealth by providers from neurology, physical, occupational, speech therapy, pharmacy, physiatry, and clinical psychology. This interdisciplinary clinic now occurs once per month and receives wide ranging local and regional referrals.

Educational Material for Patients and the Lay Community:

Patient educational material

2019	Understanding Stroke: A Guide to Your Care in the Hospital and Beyond	Co-Author	Patient Education Material, Massachusetts General Hospital

<u>Report of Scholarship</u>

ORCID ID: 0000-0002-6575-9849

Peer-Reviewed Scholarship in print or other media:

Research Investigations

1. **Lin D**, Stahl DC, Ikle D, Grannis FW, Jr. Employee attitudes and smoking behavior at the City of Hope National Medical Center smoke-free campus. J Natl Compr Canc Netw. 2006;4(6):535-42. Epub 2006/07/04. PubMed PMID: 16813723.
2. **Lin D**, Najbauer J, Salvaterra PM, Mamelak AN, Barish ME, Garcia E, Metz MZ, Kendall SE, Bowers M, Kateb B, Kim SU, Johnson M, Aboody KS. Novel method for visualizing and modeling

the spatial distribution of neural stem cells within intracranial glioma. Neuroimage. 2007;37 Suppl 1:S18-26. Epub 2007/06/15. doi: 10.1016/j.neuroimage.2007.03.076. PubMed PMID: 17560798.
3. Klin A, **Lin DJ**, Gorrindo P, Ramsay G, Jones W. Two-year-olds with autism orient to non-social contingencies rather than biological motion. Nature. 2009;459(7244):257-61. Epub 2009/03/31. doi: 10.1038/nature07868. PubMed PMID: 19329996; PMCID: PMC2758571.
4. Vander Wyk BC, Ramsay GJ, Hudac CM, Jones W, **Lin D**, Klin A, Lee SM, Pelphrey KA. Cortical integration of audio-visual speech and non-speech stimuli. Brain Cogn. 2010;74(2):97-106. Epub 2010/08/17. doi: 10.1016/j.bandc.2010.07.002. PubMed PMID: 20709442; PMCID: PMC3869029.
5. **Lin DJ**, Kang E, Chen C. Changes in input strength and number are driven by distinct mechanisms at the retinogeniculate synapse. J Neurophysiol. 2014;112(4):942-50. Epub 2014/05/23. doi: 10.1152/jn.00175.2014. PubMed PMID: 24848465; PMCID: PMC4122736.
6. **Lin DJ**, Hermann KL, Schmahmann JD. The Diagnosis and Natural History of Multiple System Atrophy, Cerebellar Type. Cerebellum. 2016;15(6):663-79. Epub 2015/10/16. doi: 10.1007/s12311-015-0728-y. PubMed PMID: 26467153; PMCID: PMC4833693.
7. Bonin Pinto C, Morales-Quezada L, de Toledo Piza PV, Zeng D, Saleh Velez FG, Ferreira IS, Lucena PH, Duarte D, Lopes F, El-Hagrassy MM, Rizzo LV, Camargo EC, **Lin DJ**, Mazwi N, Wang QM, Black-Schaffer R, Fregni F. Combining Fluoxetine and rTMS in Poststroke Motor Recovery: A Placebo-Controlled Double-Blind Randomized Phase 2 Clinical Trial. Neurorehabil Neural Repair. 2019;33(8):643-55. Epub 2019/07/10. doi: 10.1177/1545968319860483. PubMed PMID: 31286828; PMCID: PMC6688938.
8. **Lin DJ**, Cloutier AM, Erler KS, Cassidy JM, Snider SB, Ranford J, Parlman K, Giatsidis F, Burke JF, Schwamm LH, Finklestein SP, Hochberg LR, Cramer SC. Corticospinal Tract Injury Estimated From Acute Stroke Imaging Predicts Upper Extremity Motor Recovery After Stroke. Stroke. 2019:STROKEAHA119025898. Epub 2019/10/28. doi: 10.1161/STROKEAHA.119.025898. PubMed PMID: 31648631.
9. Ciarán O'Neill, Tommaso Proietti, Kristin Nuckols, Megan E. Clarke, Cameron J. Hohimer, Alison Cloutier, **David J. Lin**, Conor J. Walsh. Inflatable Soft Wearable Robot for Reducing Therapist Fatigue During Upper Extremity Rehabilitation in Severe Stroke. IEEE Robotics and Automation Letters. 2020; 5(3):3899 - 3906.
10. Nuckols K, Hohimer CJ, Glover C, Lucena DSd, Moyo W, Wagner D, Cloutier A, **Lin DJ**, Walsh CJ, editors. Effects of a Soft Robotic Glove using a High Repetition Protocol in Chronic Stroke: A Pilot Study. 2020 8th IEEE RAS/EMBS International Conference for Biomedical Robotics and Biomechatronics (BioRob); 2020 29 Nov.-1 Dec. 2020.
11. Tomasso Proietti, Ciarán O'Neill, Cameron Hohlmer, Kristin Nuckols, Megan Clarke, Yu Meng Zhou, **David Lin**, Conor James Walsh. Sensing and Control of a Multi-Joint Soft Wearable Robot for Upper-Limb Assistance and Rehabilitation. IEEE Robotics and Automation Letters. 2021; 6(2): 2381-2388.
12. Kline DK, **Lin DJ**, Cloutier A, Sloane K, Parlman K, Ranford J, Picard-Fraser M, Fox AB, Hochberg LR, Kimberley TJ. Arm Motor Recovery After Ischemic Stroke: A Focus on Clinically Distinct Trajectory Groups. J Neurol Phys Ther. 2021;45(2):70-8. Epub 2021/03/13. doi: 10.1097/NPT.0000000000000350. PubMed PMID: 33707402.
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