#### **CURRICULUM VITAE**

Steven C. Cramer, MD, MMSc, FAAN, FAHA, FASNR

Professor, Department of Neurology Susan and David Wilstein Endowed Chair in Rehabilitation Medicine Director, Neurorehabilitation Program David Geffen School of Medicine at UCLA 710 Westwood Plaza, Reed C239 Los Angeles, CA 90095-1769

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## **Education and Training**

1980-83	B.A., Neurobiology, with Highest Honors, Univ. of Calif., Berkeley; Berkeley, CA
1984-88	M.D.; University of Southern California, School of Medicine; L.A., CA
1988-91	Residency, Internal Medicine; UCLA Center for Health Sciences; L.A., CA
1992-95	Residency, Neurology; Massachusetts General Hospital; Boston, MA
1995-97	Fellowship, Cerebrovascular Disease; Massachusetts General Hospital; Boston, MA
1995-97	M.M.Sc. (Master of Medical Sciences): Harvard Medical School: Boston, MA

### **Awards and Honors**

1981-83	Member U.C. Berkeley Honors Society
1982	American Heart Association Undergraduate Research Fellowship
1985-88	Joseph Collins Foundation Scholarship
	USC Merit Scholarship
1986	Neuroscience Award, Western Medical Student Research Forum
	USC Student Research Fellowship
	Dean's Scholar
1991	UCLA Solomon Scholar
1997	Robert G. Siekert New Investigator Award in Stroke, Honorable Mention,
	American Heart Association
2003	van den Noort Award for junior faculty research, UC Irvine Dept. Neurology
2004	Specialist of the Month Award, UC Irvine Primary Care Medical Group
2004	UCI Medical Center Exemplary Performance Award
2005	Nicholas Foundation Prize
2009	"Vision in Emergency Medical Services" Award, from Orange County, CA
	Emergency Medical Services, for work setting up Stroke Receiving Centers
	Elected to membership, American Neurological Association

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2010	N 1 (D) 11 AT 11 N1 1 O O O N 11 1 A 1 1
2010	Named a "Physician of Excellence" by the Orange County Medical Association
2011	"Highly Commended" by the British Medical Association Medical Book Awards,
	for "Brain Repair after Stroke"
	Member, "Blue Ribbon Panel on Rehabilitation Research at the National Institutes
	of Health", Bethesda, MD
	Chair, Rehabilitation and Recovery Committee, American Heart Association
2012	Outstanding Mentor Award, University of California, Irvine/ICTS
	2 <sup>nd</sup> place prize winner, Plexus Journal Creative Writing Contest
	Eric Corey Raps Memorial Lecturer, Univ. of Pennsylvania, Philadelphia, PA
2013	Peter Jay Sharp Visiting Professor in Neurological Rehabilitation,
	Weill Cornell Medical Center, New York, NY.
2014	Dr. Lui Che Woo Distinguished Professorship, Chinese University of Hong
	Kong, China
	Chair, Stroke Task Force of the American Heart Association, Western States Affiliate
	Chair, Stroke Recovery & Rehabilitation Working Group, NIH StrokeNet
2015	Stoppelmoor Lecturer, University of Iowa, Dept. Neurology, Iowa City, IA
2017	Stroke Rehabilitation Award, given by the American Heart Association
	Honorary Membership granted, Korean Stroke Society
	2017 Robert Newcomb Interdisciplinary Team Science Award, UC Irvine/ICTS
	Elected a Fellow of the American Academy of Neurology
	Elected a Fellow of the American Heart Association
	Holan Lecturer, Cleveland Clinic, Cleveland, OH
2018	Barbro B. Johansson Award in Stroke Recovery, given by the World Stroke
	Organization, Montreal, Canada
2019	Presidential Lecturer, American Academy for Cerebral Palsy and Developmental
	Medicine
	American Congress of Rehabilitation Medicine Award for Excellence in Post-
	Acute Stroke Rehabilitation
2020	Co-Chair, NINDS/NICHD Neurorehab Assessments and Examinations Working
	Group, Common Data Elements Rehabilitation Project
	Susan and David Wilstein Endowed Chair in Rehabilitation Medicine, UCLA
2023	Outstanding Neurorehabilitation Clinician Scientist Award (inaugural awardee),
	American Society of Neurorehabilitation
	Member, Executive Committee, VA Spinal Cord Injury Consortium
	Appointed to National Advisory Board on Medical Rehabilitation Research, NIH
2024	Elected a Fellow of the American Society of Neurorehabilitation
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Grants	
7/95-6/97	Fellowship, Clinical Investigator Training Program, Harvard-MIT Division of
1/93-0/91	Health Sciences and Technology and Pfizer Inc.
7/05 6/07	<b>5.</b>
7/95-6/97	Principal Investigator, Career Development Fellowship Award, National
	Stroke Association, "Clinical and functional MRI study of recovery of motor
4/00 10/02	function after stroke."  Principal Investigator, Montared Clinical Scientist Development Award
4/98-10/02	Principal Investigator, Mentored Clinical Scientist Development Award,
	NICHD, K08-HD1219, "Recovery from stroke: a clinical and functional MRI
	study."

11/98-12/02	Co-Principal Investigator, Overlake Hospital Auxiliaries and Foundation
1/99-12/02	Grant, "Recovery from Stroke."  Co-Principal Investigator, Grant-in-Aid, American Heart Association, "Pelvic
7/99-6/00	vein thrombosis as a source of paradoxical emboli in cryptogenic stroke."  Principal Investigator, Pilot Research Grant, Howard Hughes Medical Institute: "Behavioral, molecular, and functional imaging assessment of stroke recovery in the rat"
7/99-6/01	Principal Investigator, Beginning Grant-in-Aid, American Heart Association, Northwest Affiliate, "The role of cortical plasticity in recovery from stroke."
9/00-8/02	Principal Investigator, Pilot Project, University of Washington Rehabilitation Network (R24-HD39629, Marjorie Anderson Principal Investigator), "Brain plasticity and disability in multiple sclerosis."
2/01-10/02	Principal Investigator, Pilot Research Project, National Multiple Sclerosis Society, "Changes in cortical organization following an acute demyelinating event."
1/02-10/02	Principal Investigator, Seattle Foundation, "A longitudinal study of
3/02-9/02	compensatory changes in brain function in multiple sclerosis."  Principal Investigator, Vertis Neuroscience, Inc. (now Northstar Neuroscience),
3102 3102	advisor on study "Safety of a novel method to promote recovery in patients with hemiparetic stroke."
4/03-6/04	Principal Investigator, College of Medicine Committee on Research and
	Graduate Academic Programs, UC Irvine, "Does motor cortex continue to
7/03-12/07	function in patients with paraplegia?"  Principal Investigator, NINDS, R01 NS43310, "Safety of Autologous Marroy,"
7/03-12/07	Principal Investigator, NINDS, R01 NS43310, "Safety of Autologous Marrow Stromal Cells After Stroke"
8/03-4/07	Principal Investigator, GlaxoSmithKline, "Randomized, Placebo-controlled, Double-blind Pilot Trial to Evaluate the Safety and Efficacy of Ropinirole in Motor Recovery after Stroke"
11/03-10/08	Collaborator, NICHD, N01 HD33352, "Robotics for Rehabilitation Therapy" (David Reinkensmeyer, PI)
1/04-12/04	Principal Investigator, Roman Reed Spinal Cord Injury Research Fund of California, "Does mental practice of foot movement improve corticospinal conduction and motor status after spinal cord injury?"
7/04-6/05	Co-Principal Investigator, UC Irvine Academic Senate Council on Research, Computing, and Library Resources, Multi-Investigator Faculty Research Grant MS-2004-2005-18, "Role of mitochondrial genetic variations in
7/04-6/05	recovery from stroke" (Vincent Procaccio, co-PI) Co-Principal Investigator, UC Irvine Academic Senate Council on Research,
	Computing, and Library Resources, Multi-Investigator Faculty Research Grant MS-2004-2005-10, "Mechanisms of motor rehabilitation using robot- like training and brain imaging" (David Reinkensmeyer, co-PI)
9/05-8/07	Principal Investigator, NIBIB, R01 EB005047, "Safety of repetitive TMS in chronic subcortical stroke"
6/05-5/06	Principal Investigator, Nicholas Foundation Prize, "Effect of Internet-Enabled Intense Exercise Therapy on Motor Status after Spinal Cord Injury"
6/05-5/06	Principal Investigator, GlaxoSmithKline, "Effect of stroke on serum levels of cytokines and endogenous anti-(anti-MAG Antibody)"
2/06-7/07	Principal Investigator, Stem Cell Therapeutics, as lead PI for the international multicenter trial "Safety Of Beta-hCG + Erythropoietin In Acute Stroke"

1/07-12/08	Principal Investigator, NIH, "Robot-Assisted Therapy For The Arm Severely Weakened After Stroke", pilot grant within R24 HD050821 "Engineering for Neurological Rehabilitation"
4/07-3/08	Principal Investigator, NIH, "Genetic influences on experience-dependent cortical plasticity in the elderly", pilot grant within P50 AG16573 "Alzheimer's Disease Research Center"
4/08-3/13	co-Principal Investigator, NIH R01 NS058755, "BDNF Genotype, Cortical Plasticity and Recovery From Stroke" (Jeffrey Kleim, overall grant PI; Steve Cramer, UCI subcontract PI)
10/08-9/10	co-Principal Investigator, NIH R21AT003842, "Mental Practice Impact on Gait and Cortical Organization in SCI" (Stephen Page, overall grant PI; Steve Cramer, UCI subcontract PI)
1/09-6/10	Principal Investigator (at UC Irvine; co-PI overall trial), Stem Cell Therapeutics, for the international multicenter trial "A Phase IIb prospective, randomized, double-blind, placebo controlled study of NTx®-265: human chorionic gonadotropin (hCG) and epoetin alfa (EPO) in acute ischemic stroke patients"
12/08-11/13	Principal Investigator, NIH R01 NS059909, "Motor Function after Stroke" Note: 2-year ARRA supplement (9/09 - 8/11) also awarded in relation to this Grant, as well as an NINDS Administrative Supplements for Collaborative Activities to Promote Translational Research (CAPTR, 12-1/09 - 11/30/11) and NIH Administrative Supplement (5/12-11/13)
1/09-10/10	Principal Investigator (overall and at UC Irvine), GlaxoSmithKline, for the international multicenter trial "A Single-Blind Study of the Safety, Pharmacokinetics and Pharmacodynamics of Escalating Repeat Doses of GSK249320 in Patients With Ischemic Stroke"
6/09-12/09	co-Principal Investigator, Panasonic Electronics, "Evaluation of an arm robotic device"
1/11-12/11	Principal Investigator, CTSA Team Building Award "Applications of Stem Cell Therapies in Clinical Neuroscience"
1/11-12/11	Principal Investigator, UC Irvine Conference Support Program
2/11-1/12	Principal Investigator, University of California Office of Research and Graduate Studies Research Opportunity Grant, "University of California Stroke Stem Cell Consortium"
3/12-2/13	co-Principal Investigator, CTSA Translational Collaborative Discovery Grant, "Visual rehabilitation after stroke: harnessing cortical plasticity for therapeutic interventions" (Alyssa Brewer, co-Principal Investigator)
5/12-6/12	Faculty Desktop Computing Initiative Award, UC Irvine
10/12-9/13	Principal Investigator, Dean's Triumvirate Grant "Telerehabilitation To Reduce Disability After Stroke," UC Irvine
8/12 - 12/15	sub-investigator, NIH R44 HD074331, "A Music-Based Rehabilitation Device For Training And Assessing Hand Function" (Nizan Friedman, overall PI)
9/13-8/18	Principal Investigator, NIH K24 HD074722, "Brain plasticity and rehabilitation after stroke"
10/13-9/18	Co-Investigator, NIH U01 NS086872, "National Stroke Trial Network National Clinical Coordinating Center" (Joe Broderick overall PI)
3/14-6/14	Faculty Desktop Computing Initiative Award, UC Irvine

9/14-7/18	Principal Investigator, NIH U01 NS091951, "Telerehabilitation for Patients with Stroke"
4/15-3/20	Co- Principal Investigator, Calif. Inst. for Regenerative Medicine AC1-07675, "UCLA – UC Irvine Alpha Stem Cell Consortium" (John Adams, UCLA, PI)
9/15-8/20	Principal Investigator (with E. Alison Holman, multiple PI), NIH R01 NR015591, "Genetic variation, stress, and functional outcomes after stroke rehabilitation"
10/15 - 9/20	Sub-investigator, Leducq Foundation, 15CVD02, "Evoked Neuronal Activity: A New Therapy for Acute Ischemic Stroke?" (Ron Frostig PI)
8/15 - 3/19	Sub-investigator, NIH UL1 TR001414, "Institute for Clinical And Translational Science" (Dan Cooper overall PI)
9/15-8/16	Site Principal Investigator, NIH R44 HD082882, "Lever actuated rehabilitation of the arm using wheelchair propulsion and computer gaming" (Danny Zondervan, overall PI)
7/15-12/18	Principal Investigator, SanBio, "Traumatic Brain Injury Trial Training"
8/15-3/19	Principal Investigator, SanBio, "Stroke Trial Training"
1/17-12/18	Principal Investigator, American Heart Association/American Stroke Association Innovative Research Grant 17IRG33460393, "The home is the stroke clinic of the future"
9/17-12/17	Principal Investigator, Medtronic, "EEG Studies of patients with suspected stroke in the Emergency Department"
10/18-9/23	Co-Investigator, NIH U01 NS086872, "National Stroke Trial Network National Clinical Coordinating Center" (Joe Broderick overall PI); competitive renewal
4/19-3/24	Principal Investigator (with An Do, Zoran Nenadic, and David Reinkensmeyer, multiple PI), NIH R01 HD095457, "Brain-Computer Interface-Functional Electrical Stimulation For Stroke Recovery"
7/19-6/24	Sub-investigator, R01 HD062744, "Effectiveness of Robot-Assisted Hand Movement Training After Stroke" (D. Reinkensmeyer, PI)
4/20-3/25	Sub-investigator, R01 NS115845, "Effects of Global Brain Health on Sensorimotor Recovery After Stroke" (S-L. Liew, PI)
9/21-8/22	Sub-investigator, VA 36C24E21P0147, "A Biomarker to Personalized Care in Post-Stroke Spatial Neglect" (AM Barrett, PI)
8/21-7/26	Principal Investigator (with Pooja Khatri, Achala Vagal, and Cathy Stinear, multiple PI), NIH U01 NS120910, "Validation of Early Prognostic Data for Recovery Outcomes after Stroke for Future, Higher Yield Trials (VERIFY)"
12/21-11/26	Principal Investigator (with Jeff Ojemann, multiple PI), NIH UH3 NS121565, "Motor Recovery through Plasticity-Inducing Cortical Stimulation"
3/23-5/28	Sub-investigator (Eva Mistry and J Mocco, PIs), Patient-Centered Outcomes Research Institute AD-2022C1-25624 "Treatment with Endovascular Intervention for Stroke Patients with Existing Disability (TESTED) Study"
11/23-11/24	Co-Investigator (Michael Su, PI), TRCare, "Bedside telerehabilitation early after CNS injury"
10/23-9/28	Co-Investigator, NIH U01 NS086872, "National Stroke Trial Network National Clinical Coordinating Center" (Joe Broderick overall PI); competitive renewal
9/24-8/29	Principal Investigator (with Dylan Edwards, multiple PI), NIH UG 3NS133283, "Telerehabilitation In The Home After Stroke: A Randomized, Controlled, Assessor-Blind Clinical Trial (The TR-2 Trial)"

## **Licensure and Certification**

1988-92	California medical license registration
1991	Diplomate, American Board of Internal Medicine
	re-certified 2002; re-re-certified 2017-2027
1993-98	Massachusetts medical license registration
1996	Diplomate, American Board of Psychiatry and Neurology (Neurology)
	re-certified 2006, re-re-certified 2016-2026
1997-2002	Washington medical license registration
2002	California medical license registration
2005	Diplomate, Vascular Neurology, subspecialty of Amer Board Psych & Neurology
	Certified 2006, re-certified 2016-2026

# **Appointments**

1991-1992	Internist in private practice, Huntington Medical Group, Pasadena, CA
1993-1995	Graduate Assistant in Medicine, Massachusetts General Hospital, Boston, MA
1993-1997	Assistant in Medicine, McLean Hospital, Belmont, MA
1995-1997	Instructor in Neurology, Harvard University, Boston, MA
	Postdoctoral Fellow, Massachusetts Institute of Technology, Cambridge, MA
1995-1996	Clinical & Research Fellow, Massachusetts General Hospital
1996-1997	Graduate Assistant in Neurology, Massachusetts General Hospital
1997-1998	Staff Neurologist, Seattle VA, Seattle, WA
1997-2002	Assistant Professor in Neurology, University of Washington, Seattle, WA
2002-2017	Affiliate Asst. Professor in Neurology, University of Washington
2002-2005	Assistant Professor in Neurology, University of California, Irvine, Irvine, CA
2003	Director, Neuroimaging Core, UCI General Clinical Research Center
	Assistant Professor in Anatomy and Neurobiology, Univ. of California, Irvine
	Co-director, Clinical Stroke Service, UC Irvine
2004-2019	Associate, Reeve-Irvine Research Center, UC Irvine
2005-2019	Member, Institute for Brain Aging and Dementia, UC Irvine
2005-2010	Associate Professor in Neurology, UC Irvine
	Associate Professor in Anatomy and Neurobiology, UC Irvine
2006	Executive Committee, UC Irvine Alzheimer's Disease Research Center
2006-2009	Director, Stroke Center, UC Irvine
	Associate Clinical Director, U.C. Irvine Stem Cell Research Center
2010-2018	Clinical Director, Sue & Bill Gross Stem Cell Research Center, UC Irvine
2010-2019	Professor in Neurology and Anatomy & Neurobiology, UC Irvine
2011-2013	Member, Stroke Leadership Committee, American Heart Association
2011-2015	Vice-Chair of Research, Dept. Neurology, UC Irvine
2014	Interim Director, UC Irvine Comprehensive Stroke & Cerebrovascular Center
2014-2019	Associate Director, Institute for Clinical & Translational Science, UC Irvine
2018-	Adjunct Professor of Neurology, University of Rochester
2019	Professor, Department of Neurology, University of California, Los Angeles
	Medical Director of Research, California Rehabilitation Institute
	Stroke Task Force, California Rehabilitation Institute

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Medical Executive Committee, California Rehabilitation Institute
Stroke Steering Committee, Select Medical national organization
Program Committee, California Rehabilitation Institute
Quality and Patient Safety Committee, California Rehabilitation Institute
Research Committee, California Rehabilitation Institute
Science of Achievement in Rehabilitation Council, Calif. Rehab. Institute
Member, UCLA Neuroscience Interdepartmental Program
Member, Grand Rounds Committee, Dept. Neurology
Program Director in Neurorehabilitation; Dept. Neurology, UCLA

Member, Graduate Education Committee; Dept. Neurology, UCLA

**Research Training** 

2021-

2023-

Brain uptake of leucine in the rat Dept. Internal Medicine	
Supervisor: William Pardridge, MD UCLA; Westwood, CA	
1983-84 Developed a model for study of rat brain Donner Laboratory	
protein synthesis rates Lawrence Berkeley Lab	
Supervisor: Tom Budinger, MD, PhD Berkeley, CA	
1986 Comparison of toxicities between Cancer Research Labs	
Adriamycin and its cyanomorpholinyl USC; L.A., CA	
analogue in mice	
Supervisor: Zoltan Tokes, PhD	
1990-91 Analysis of glucose transport proteins Dept. Internal Medicine	
in proximal nephron UCLA; Westwood, CA	
Supervisor: William Pardridge, MD	
1994 Clinicopathological study of the central Dept. Neuropathology	
nervous system and chronic Mass. Gen. Hospital	
lymphocytic leukemia Boston, MA	
Supervisor: David Louis, MD	
1995-97 Clinical and functional MRI study of Depts. Neurology/Radiol	logy
motor recovery after stroke Mass. Gen. Hospital	0.
Supervisors: Seth Finklestein, MD Boston, MA	
Bruce Rosen, MD, PhD Charlestown, MA	

## **Professional Organization Memberships**

1992-	American Academy of Neurology
1995-	Stroke Council, American Heart Association
1999-2005	Organization for Human Brain Mapping
2005-2019	Founder and Director, Orange County Stroke Society
2006-	American Society of Neurorehabilitation
2009-	American Neurological Association
2010-2019	Co-Founder and Co-Director, Orange County Stroke Rehab Network
2023-	Founder and Director, Los Angeles Stroke Rehabilitation Network (LASER-Net)

## Consultant, Board, and Advisory Positions

1999-2001 Stroke Advisory Board, AstraZeneca

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2001-2006	Consultant, and member Advisory Board, Northstar Neuroscience, Inc. (formerly Vertis Neuroscience, Inc.)
2002-2003	Consultant, AGA Medical Corporation
2002-	Consultant, and member of Recovery from Brain Injury Advisory Board, GlaxoSmithKline
2003	Consultant, Merck & Co., Inc.
2004-2005	Consultant, AGY Therapeutics
2004-2006	Consultant and member Advisory Board, EBEWE Pharma
2004-2005	Consultant, Target Therapeutics, Inc., subsidiary of Boston Scientific Corp.
2004-2013	Member, External Scientific Review Committee, Centre for Stroke Recovery Of the Heart and Stroke Foundation of Ontario
2004-2006	appointed to Stroke Task Force, American Heart Assoc, Western States Affiliate
2005	Consultant, W.L. Gore & Associates
	Consultant, Biotrofix
2005-2010	Member, Board of Directors, American Heart Assoc., Orange County Division Consultant, Stem Cell Therapeutics
2006	Member, M's Science Research Expert Panel
2006-2008	Member, Advisory Board, Project Walk, Carlsbad, CA
	Member, Advisory Board, "Cortical Stimulation to Enhance Recovery after Stroke" (RJ Nudo, PI), U54 NS048126
2007	Consultant, Sygnis Pharma AG
	Consultant, CytRx Corporation
	Member, California Department of Public Health Stroke Work Group Master Plan Stroke Working Group
	Member, Advisory Board, Allergan Inc.
	Consultant, Pfizer Inc.
2008	Grupo Ferrer S.A., Expert Panel
	Consultant, Johnson & Johnson
	Consultant, Photothera
2009	Member, Medical Advisory Board, Goddess Fund
2010	Consultant, Cogstate Ltd.
	Lecturer, Genentech
2012-	Consultant, MicroTransponder
2012-2014	Chair, Rehabilitation and Recovery Committee of the American Heart Association's Stroke Council
2014	Consultant, Dart Neuroscience
	Member, American Heart Association Western States Affiliate Quality & Systems Improvement Task Force
2014-	External Advisory Board, South Carolina Research Center for Recovery from Stroke, COBRE/NIH Center at Medical University of South Carolina
	Member, Executive Committee, NIH StrokeNet
2015	Consultant, RAND Corporation Consultant, Roche
2016	Consultant, Toyama Chemical Co., Ltd.
2017-2022	Consultant, R56NS100528, "Optimizing sensori-motor training post-stroke" (Schweighofer, Nicolas, PI)
2018	Consultant, Abbvie
	Consultant, Neurolutions
	Consultant, Regenera

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Consultant, SanBio

Consultant, Constant Therapeutics

Consultant, Stemedica Consultant, TRCare

Writing Group, Clinical Performance Measures for Stroke Rehabilitation Performance Measures for Healthcare Professionals from the American

Heart Association/American Stroke Association

2019 Consultant, Fujifilm Toyama Chemical Co., Ltd.

Consultant, Biogen

Member, Editor Search Committee, for the journal Stroke

2020 Consultant, Medtronic

Consultant, NeuExcell

2021 Consultant, Elevian

Consultant, Panaxium Consultant, Myomo

2022 Consultant, Omniscient Neurotechnology

Consultant, Helius Medical Technologies

Advisory Panel, Brooks Clinical Research Center

Consultant, BrainQ

Co-Chair, Neurorecovery and Neuroplasticity Special Interest Group,

American Neurological Association

Consultant, Battelle Consultant, Nervgen Consultant, Brainsgate

Advisory Board, "Facilitating Rehabilitation Clinician Uptake of PCOR/CER Results via Improved Research Reporting" (PCORI Award #: EASCS-24311)

2023 Member, Program Committee, American Society of Neurorehabilitation

Consultant, NeuroTrauma Sciences

Consultant, MedRhythms

Consultant, R01NS133094, "Sensorimotor control of common-goal bimanual

coordination" (Qiushi Fu, PI)

2024 Consultant, Beren Therapeutics

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Member, NIH Research Plan for Rehabilitation 2026 Working Group

### Other University Appointments, Committees, and Activities

1982-83	Created and performed with Cal Students/Community Music Program
1984-88	Student Research Committee, University of Southern California
	Medical Education & Curriculum, University of Southern California
	Committee
	Grading & Evaluation Committee, University of Southern California
1987-88	Founder and Founding Editor, The USC Journal of Medicine
2001	Associate Member of Medical Staff, Seattle Cancer Care Alliance
2000-2002	Research Affiliate, Center on Human Development and Disability, University of Washington, Seattle, WA
	Member, Graduate Program in Neurobiology and Behavior, U of W, Seattle, WA
2002-2003	UC Irvine General Clinical Research Center, Advisory Committee member

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Page 10 2003-Member, UC Irvine Medical Center Stroke Work Group 2004 Member, UC Irvine Imaging Steering Committee (Research Imaging Center) Member, UC Irvine Imaging Task Force Member Dissertation Committee, Jiavin Liu, PhD student, Dept. Biomedical Engineering, at UC Irvine Neurology Rehabilitation Task Force, at UC Irvine Member, UC Irvine College of Medicine "Vision 2010" Committee Member Dissertation & Thesis Committees, Elizabeth Orr, M.S. student, Kinesiology, CSULBLong Beach, CA 2005 Member Dissertation Committee, Robert Sanchez, PhD student, Dept. Mechanical/Aerospace Engin, at UC Irvine Co-mentor, K01, Stephen Page, OTR/L, PhD, University of Cincinnati, Cincinnati, OH Member, Dissertation Committee, Judy Pa, PhD student, Dept. Cognitive Sciences, at UC Irvine Member Dissertation Committee, Jeremy Emken, PhD student, Dept. Biomedical Engineering, at UC Irvine Mentor, Erlina Hassen, UC Irvine GCRC Clinical Trials Certification **Program Intern** Chair, Clinical Enterprise Subcommittee of the UC Irvine College of Medicine "Vision 2010" Committee Member, Communications Subcommittee of the UC Irvine College of Medicine "Vision 2010" Committee Member, Dissertation Committee, Ali Winkler, PhD student, Dept. Cognitive Sciences, at UC Irvine Member, Dissertation Committee, Eric Wolbrecht, PhD student, Dept. Mechan/Aerospace Engin, at UC Irvine Member, Advisement Committee, Brian David, PhD student, Dept. Anatomy 2006 & Neurobiology, at UC Irvine Member, Advisement Committee, Monica Siegenthaler, PhD student, Dept. Anatomy & Neurobiology, at UC Irvine Member, Advancement and Thesis Committees, Mitra J. Hooshmand, PhD student, Dept. Anatomy & Neurobiology, at UC Irvine Member Advancement and Thesis Committees, Desirée L. Salazar, PhD student, Dept. Anatomy & Neurobiology, at UC Irvine 2007 Member, Advisement Committee, Darius Gleason, PhD student, Calif Inst Regen Med Research Fellow, at UC Irvine Member, Advisement and Thesis Committees, Sharyn Rossi, PhD student, Calif Inst Regen Med Research Fellow, at UC Irvine Member, Advancement and Thesis Committees, Kevin Beck, PhD student, Dept. Anatomy & Neurobiology, at UC Irvine 2008 External Thesis Committee member, Cinzia Callautti, PhD Student, Dept.

Neurology, Cambridge University, Cambridge, England Member, Advancement Committee, Javier Garcia, PhD student, Dept. Cog

Sci, at UC Irvine

Member, Advancement Committee, Chris Lay, PhD student, Dept. Neurobiology& Behavior, at UC Irvine

Member, Advancement Committee, Maya Koike, PhD student, Dept. Neurobiology& Behavior, at UC Irvine

Member, Advancement Committee, Jessica Kneubuhl, PhD student, Dept. Anatomy & Neurobiology, at UC Irvine Member, Advancement Committee, Julius Klein, PhD student, Dept. Mechanical/Aerospace Engineering, at UC Irvine External Thesis Committee member, Ettie Ben-Shabat, PhD Student, Dept. Occupational Therapy, La Trobe University, Victoria, Australia Institute for Clinical Translational Science Scientific Review Committee, UC Irvine Neurology Dept. Chair Search Committee, UC Irvine 2009 Co-mentor, K23, Jack Lin, MD, UC Irvine Co-mentor, K01, Dr. Jean Gehricke, UC Irvine Member, Advisement Committee, Rafer Willenberg, PhD student, Dept. Anatomy & Neurobiology, at UC Irvine Member, Advisement Committee, Jason Sharp, PhD student, Dept. Anatomy & Neurobiology, at UC Irvine 2010 Member, Advancement Committee, Steve Spencer, PhD student, Dept. Mechanical/Aerospace Engineering, at UC Irvine Member, Advancement Committee, Celina Mojica, PhD student, Dept. 2011 Anatomy& Neurobiology, UC Irvine Co-mentor, K12, Eric Chang, MD, UC Irvine Member, Advancement and Thesis Committees, James Allington, PhD student, Dept. Mechanical/Aerospace Engineering, UC Irvine Graduate Advisor, Stephanie McHughen, UC Irvine 2012 Advisory Committee for the UC Irvine Center for Statistical Consulting Member, Thesis Committee, Nizan Friedman, PhD student, Dept. Biomedical Engineering, at UC Irvine Member, Thesis Committee, William Winter, PhD student, Dept. Cognitive Sciences, at UC Irvine Member, Thesis Committee, Justin Rowe, PhD student, Dept. Biomedical Engineering, at UC Irvine Member, Thesis Committee, Bo Zhou, PhD student, Dept. Statistics at UC Irvine Graduate Advisor, Kristin Pearson-Fuhrhop, UC Irvine Member, Drug and Device Discovery and Development ("D4") Committee of 2013 University of California Biomedical Research Acceleration, Integration & Development (UC BRAID) Member, Advancement Committee, Zhe Yu, PhD student, Dept. Statistics, at UC Irvine 2014 Member, Thesis Committee, Maryam Khademi, Dept. Informatics, UC Irvine Site Leader, University of California Center for Accelerated Innovation Member, Space Committee, UC Irvine Stem Cell Research Center Member, Advancement Committee, Eric Gold, PhD student, Dept. Anatomy & Neurobiology, at UC Irvine Graduate Advisor, Erin Burke, UC Irvine 2015 Member, Thesis Committee, Ellen G. Wann, PhD student, Dept. Neurobiology & Behavior, at UC Irvine Member, Clinical/Translational Advisory Committee, UC Irvine Stem Cell Research Center Graduate Advisor, Jennifer Wu, UC Irvine

Cramer, Steven C. C.V. Page 12 2016 External Thesis Examiner, Christine Shiner, Faculty of Medicine, The University of New South Wales, Australia Member, Advancement Committee, Irina Nesterenko, MS student, Dept. Molecular Biology & Biochemistry, at UC Irvine 2017 Member, Thesis Committee, Anirudh Wodeyar, Dept. Cognitive Sciences, UC Irvine Mentor, K99, Jessica Cassidy, DPT, PhD, UC Irvine Co-mentor, K01, Sook-Lei Liew, PhD, OTR/L, University of Southern California 2018 Graduate Advisor, Morgan Ingemanson, UC Irvine 2019-Co-mentor, K01, Joanne Smith, PT, PhD, Chapman University 2021 Member, Thesis Committee, Seungmin Jung, Dept. Mechanical Engineering, at UCLA UCLA representative to the University of California Stroke Consortium Recovery & Rehabilitation Subgroup Mentor, K23, Kathryn Cross, MD, PhD, UCLA Co-mentor, AHA Career Development Award, Tanui Gulati, PhD, Cedars Sinai Consultant, K01, Kristan Leech, DPT, PhD, University of Southern California Co-mentor, American Academy of Neurology Clinical Research Scholarship, David Lin, MD, Massachusetts General Hospital 2022 Co-mentor, K23, Ania Busza, MD, PhD, University of Rochester Member, Thesis Committee, Dylan Reinsdorf, PhD student, Dept. Mechanical and Aerospace Engineering, at UC Irvine Member, Thesis Committee, Yongwon Cho, MA student, Dept. Social Ecology, at UC Irvine

Consultant, K23, Abhishek Jaywant, PhD, New York-Presbyterian Hospital/Weill Cornell Medical Center

2023 Member, Thesis Committee, Mianzhi Zhou, PhD student, Dept. Bioengineering, at UCLA

> Member, Thesis Committee, Megan McCune, PhD student, Dept. Physical Therapy and Rehabilitation Science, at UCSF

Member, Thesis Committee, Zhibin Zhou, PhD student, Dept. Cognitive Sciences, at UC Irvine

#### **Conference Duties**

1999	Co-organized "Stroke Drug Development: Behavior Assessment of Research
	Animals to Determine Drug Effect" meeting, Boston, MA
2000	Co-organized "Neuronal Plasticity: The Key to Stroke Recovery" meeting,
	Kananaskis, Alberta, Canada
	Moderator, "fMRI: Clinical Disorders" session of the 8th annual meeting of
	ISMRM, Denver, CO
	Abstract reviewer, American Heart Association Scientific Sessions 2001
2001	Abstract reviewer, American Heart Association Asia-Pacific Scientific Forum and
	42nd Annual Conf. on Cardiovascular Disease Epidemiology and Prevention
	NINDS Stroke Progress Review Group Roundtable meeting
2002	Chair, "Neural Recovery and Reorganization in Humans" session of the
	International Stroke Symposium: Translating Principles of Brain Plasticity

into Clinical Interventions

Abstract reviewer, American Heart Association Scientific Sessions 2002 Abstract reviewer, American Academy of Neurology, 55<sup>th</sup> annual meeting Moderator, "Cerebrovascular Disease: Clinical Aspects" session of 2003 meeting of American Academy of Neurology

Abstract reviewer, American Heart Association Scientific Sessions 2003 Steering Committee, First International Workshop on Neuroimaging and Stroke Recovery

Abstract reviewer, American Academy of Neurology, 56<sup>th</sup> annual meeting Abstract reviewer, American Academy of Neurology, 57<sup>th</sup> annual meeting Abstract reviewer, Organization for Human Brain Mapping, 11<sup>th</sup> annual meeting Co-organizer, UCI Comprehensive Stroke Care Symposium

Abstract reviewer, American Heart Association Scientific Sessions 2005 Abstract reviewer, American Academy of Neurology, 58<sup>th</sup> annual meeting

Abstract reviewer, Organization for Human Brain Mapping, 12<sup>th</sup> annual meeting Moderator, International Stroke Conference 2006, "Brain Stimulation to Improve Stroke Outcome"

Abstract reviewer, American Heart Association Scientific Sessions 2006
Member, Imaging Subcommittee, NINDS Stroke Progress Review Group
Member, Biology of Repair Subcomm. NINDS Stroke Progress Review Group
Member, Recovery & Rehab Subcomm. NINDS Stroke Progress Review Group
Abstract reviewer, Organization for Human Brain Mapping, 13th annual meeting
Co-organizer, Symposium, "UCI Stroke Care 2007: A Nursing Perspective"
Ran "Workshop on Magnetic Resonance Imaging, Transcranial Magnetic
Stimulation, and Functional Electrical Stimulation" at Sunnybrook Health
Sciences Centre, Toronto, part of Centre for Stroke Recovery of Heart &
Stroke Foundation of Ontario meeting

Moderator, International Stroke Conference 2008, "Clinical Approaches to Brain Repair after Stroke"

Moderator, 26th Princeton Conference on Cerebrovascular Disease, "Rehabilitation"

Co-organizer, "Stroke Symposium 2008", UCI Stroke & Cerebrovascular Ctr Abstract reviewer, American Heart Association Scientific Sessions 2008 Abstract reviewer, American Academy of Neurology, 61<sup>st</sup> annual meeting Abstract reviewer, Organization for Human Brain Mapping, 15<sup>th</sup> annual meeting co-Chair, NIH Blueprint meeting: "Harnessing Neuroplasticity for Human Applications"

Moderator, 15<sup>th</sup> annual meeting of the Organization for Human Brain Mapping, "Utility of Brain Mapping for Improving Human Brain Repair" Abstract reviewer, International Stroke Conference 2010

Abstract reviewer, American Academy of Neurology, 62<sup>nd</sup> annual meeting Moderator, "Rehab & Repair" section of Stroke Synergium 2010

Moderator, International Stroke Conference 2010, "Brain Repair after Stroke" Abstract reviewer, American Neurological Association, 135<sup>th</sup> annual meeting Member, Scientific Committee, and abstract reviewer, 2011 International

Conference on Rehabilitation Robotics (ICORR) meeting Abstract reviewer, International Stroke Conference 2011 Abstract reviewer, American Academy of Neurology, 63<sup>rd</sup> annual meeting

Moderator, 1st annual Orange County Stroke Rehab Network "Continuing

2003

2004 2005

2006

2007

2008

2009

2010

	Education Workshop"
2011	Poster Tour Moderator, Multidisciplinary Clinical Rehabilitation,
	International Stroke Conference 2011
	Moderator, 2 <sup>nd</sup> annual Orange County Stroke Rehab Network "Continuing
	Education Workshop"
	Abstract reviewer, American Academy of Neurology, 64 <sup>th</sup> annual meeting
2012	Abstract reviewer, Organization for Human Brain Mapping, 18 <sup>th</sup> annual meeting
	Discussant, Junior Investigator Session; and Leader, Stroke Leader Roundtable
	Luncheon for Early Career/Fellows; International Stroke Conference 2012
	Abstract reviewer, International Stroke Conference 2013
	Moderator, 3 <sup>rd</sup> annual Orange County Stroke Rehab Network "Continuing
	Education Workshop"
2013	Abstract reviewer, Organization for Human Brain Mapping, 19th annual meeting
	Moderator, International Stroke Conference 2013, "Enhancing Stroke
	Rehabilitation: Engaging the Brain Reward System"
	Moderator, European Stroke Conference, "Rehabilitation And Reorganisation
	After Stroke"
2014	Moderator, International Stroke Conference 2014, "Exercise after Stroke:
	Evidence and Application"
	Abstract reviewer, International Stroke Conference 2015
	Course Co-Director, "A Comprehensive Approach to Stroke Care" of the
	UC Irvine Health Stroke & Cerebrovascular Disease Center
2015	Abstract reviewer, Organization for Human Brain Mapping, 21st annual meeting
	Moderator, International Stroke Conference 2015, "Junior Investigator Session II"
2016	Moderator, World Congress of Neurorehabilitation, Philadelphia, PA
	Abstract reviewer, International Stroke Conference 2017
	Abstract reviewer, American Academy of Neurology, 2017 Annual Meeting
2017	Moderator, 2016 Annual Meeting, American Society of Neurorehabilitation
2017	Abstract reviewer, International Stroke Conference 2018
2010	Abstract reviewer, American Academy of Neurology, 2018 Annual Meeting
2018	Abstract reviewer, International Stroke Conference 2019  Abstract reviewer, American Academy of Nourclean 2010 Appual Meeting
	Abstract reviewer, American Academy of Neurology, 2019 Annual Meeting Workshop co-Chair, "Stroke Recovery Workshop: Bridging the Translational
	Gap in Stroke Recovery & Rehabilitation Research," NIH, Bethesda, MD
2019	Abstract reviewer, 5 <sup>th</sup> European Stroke Organization Conference
2019	Moderator, International Stroke Conference 2019
	Moderator, American Academy of Neurology 71 <sup>st</sup> annual meeting
	Abstract reviewer, International Stroke Conference 2020
	Abstract reviewer, American Academy of Neurology, 2020 Annual Meeting
2020	Abstract reviewer, 145th Annual Meeting, American Neurological Association
2020	Abstract reviewer, International Stroke Conference 2021
2021	Abstract reviewer, American Neurological Association, 146 <sup>th</sup> annual meeting
	Abstract reviewer, International Stroke Conference 2022
2022	Abstract reviewer, 147 <sup>th</sup> Annual Meeting, American Neurological Association
	Abstract reviewer, International Stroke Conference 2023
	Abstract reviewer, American Academy of Neurology 75 <sup>th</sup> annual meeting
	Moderator, American Neurological Association, 147 <sup>th</sup> annual meeting
2023	Moderator, International Stroke Conference 2023
	Moderator, Orange County Stroke Rehab Network "Continuing Education

Workshop"

Abstract reviewer, American Neurological Association, 148th annual meeting

Abstract reviewer, International Stroke Conference 2024

Moderator, American Neurological Association, 148<sup>th</sup> annual meeting

Abstract reviewer, 2024 Annual Meeting of the Am Soc Neurorehabilitation

2024 Moderator, International Stroke Conference 2024

Abstract reviewer, 2024 Spring meeting, Int'l Stroke Genetics Consortium Abstract reviewer, American Neurological Association, 149<sup>th</sup> annual meeting

Abstract reviewer, International Stroke Conference 2025

Topic Chair (Neurorehabilitation), Scientific Program of the 2025 Annual

Meeting of the American Academy of Neurology

Abstract reviewer, 2025 Annual Meeting of the American Academy of Neurology

Program Director, Neuroscience in the Clinic (2025 Annual Meeting of the

American Academy of Neurology

Moderator, American Neurological Association, 149th annual meeting

Host and moderator, 31st annual International Stroke Genomics Consortium (UCLA)

#### **Editorial Board member**

Guest Editor, Archives of Physical Medicine & Rehabilitation, Vol 87, No., 12, Suppl 2

2006- Editorial board member, Neurorehabilitation and Neural Repair

2013 Guest Editor, International Journal of Stroke, Vol 8, No 1

2010-2015 Assistant Editor, Stroke

2019- Associate Editor, Neurorehabilitation and Neural Repair

2020- Section Editor, *Stroke* 

#### Ad hoc reviewer

#### Journals

Acta Physiologica Scandinavica

Annals of Neurology

Archives of General Psychiatry

Archives of Physical Medicine and Rehabilitation

Artificial Intelligence in Medicine

Behavioural Brain Research

Brain

Brain and Cognition

**Brain Research** 

Brain Research Bulletin

Cerebral Cortex

Cerebrovascular Diseases

Cleveland Clinic Journal of Medicine

Clinical Neurology and Neurosurgery

Clinical Neurophysiology

**Current Biology** 

Disability and Rehabilitation

European Journal of Neurology

European Journal of Neuroscience

Experimental Brain Research

**Experimental Neurology** 

**Expert Review of Neurotherapeutics** 

Games for Health Journal

Heart

Hippocampus

**Human Brain Mapping** 

IEEE Transactions on Neural Systems and Rehabilitation Engineering

JAMA Neurology

JAMA Psychiatry

Journal of the American Medical Association

Journal of Biomedical Optics

Journal of Cerebral Blood Flow and Metabolism

Journal of Clinical Investigation

Journal of NeuroEngineering and Rehabilitation

Journal of Neuroimaging

Journal of Neurology

Journal of Neurology, Neurosurgery & Psychiatry

Journal of Neurophysiology

Journal of Neuroscience

Journal of Neuroscience Methods

Journal of Nuclear Medicine

Journal of Physiology

Journal of Stroke and Cerebrovascular Diseases

The Lancet

The Lancet Neurology

Neurocase

Neuroimage

Neuroimage: Clinical

Neurology

Neuropharmacology

Neuropsychologia

NeuroRehabilitation

Neurorehabilitation and Neural Repair

Neuroreport

Neuroscience

Neuroscience Letters

New England Journal of Medicine

Physical Therapy

PLOS ONE

PM&R: The journal of injury, function and rehabilitation

Progress in Brain Research

Progress in Neurobiology

Proceedings of the National Academy of Sciences

Quarterly Journal of Experimental Psychology

Regenerative Medicine

Restorative Neurology and Neuroscience

Science

Science Translational Medicine.

Stroke

Topics in Stroke Rehabilitation

#### **Granting Agencies**

Action Medical Research (Great Britain)

Alberta Heritage Foundation for Medical Research

Alzheimer's Disease Research Center, University of Washington

American Heart Association-Bugher Foundation Study Section

Austrian Science Fund (FWF)

Biotechnology and Biological Sciences Research Council

California Institute for Regenerative Medicine Training Program (U.C. Irvine)

Canadian Institutes of Health Research

Clinical Translational Science Award (CTSA) External Reviewers Exchange Consortium

Florida Department of Health Biomedical Research Program

Hakim Innovative Stroke Research Award Evaluation Committee

Health Research Board (Ireland)

Kansas University Medical Center Internal Grants Program

The Langeloth Foundation

Medical Research Council (Great Britain)

Medical Research Council of Canada

National Institutes of Health: NINDS Board of Scientific Counselors (ad hoc; twice)

National Institutes of Health: Clinical Neurosciences and Disease study section

(formerly BDCN-1), standing member, 2002-2007

National Institutes of Health: CHHD-K ("Function, Integration and Rehabilitation Sciences") study section, *standing member*, 2012-2020; **Chair**, 2018-2020

National Institutes of Health: NSD-A Study Section, ad hoc

National Institutes of Health: IRG ZNS1 SRB-K Study Section, ad hoc

National Institutes of Health: ZRG1 BDCN-C (02)M Study Section, ad hoc

National Institutes of Health: ZRG1 BDCN-N Study Section, ad hoc

National Institutes of Health: ZRG1 BDCN-T(03) Study Section, ad hoc

National Institutes of Health: ZRG1 BDCN-M (07) M Study Section, ad hoc

National Institutes of Health: ZRG1 BDCN-W (03) M Study Section, ad hoc

National Institutes of Health: ZRG1 MOSS-L (50) Special Emphasis Panel, ad hoc

National Institutes of Health: ZRG1-BDCN T58, ad hoc

National Institutes of Health: 2015/08 ZHD1 DSR-T (40), 1 of 3 appointed *Chair* 

National Institutes of Health: ZHD1 DSR-K (52), Chair

National Institutes of Health: Acute Neural Injury and Epilepsy, ad hoc

National Institutes of Health: ZHD1 DSR-T (50), Chair

National Institutes of Health: ZHD1 DSR-T (02), Chair

National Institutes of Health: 2020/01 ZHD1 DSR-T (50), 1 of 2 appointed Chair

National Institutes of Health: ZRG1 HDM Z 52

Neurological Foundation of New Zealand

Nova Scotia Health Research Foundation

Ontario Centre for Stroke Recovery

Research into Ageing

Royalty Research Fund, University of Washington

Rutherford Discovery Fellowships, New Zealand

Spinal Cord Research Foundation

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University of California Center for Accelerated Innovation

University of Kansas, COBRE grant reviews

University of Maryland Claude D. Pepper Center Pilot Grant Program

University of Wisconsin, Research Growth Initiative Program

V.A. Medical Research Service Merit Review

Volkswagen Foundation

The Wellcome Trust

Western Medical Rehabilitation Research Network Pilot Grant Program

### **U.S. Patents**

Patent No. 5,885,231 "Digital Motor Event Recording System", 3/23/1999

Patent No. 10,475,352 "Systems And Methods For Facilitating Rehabilitation Therapy", 11/12/19

### U.S. FDA Investigational New Drug Applications

IND 67,354; "Randomized, Placebo-controlled, Double-blind Pilot Trial to Evaluate the Safety and Efficacy of Ropinirole in Motor Recovery after Stroke"; exemption request granted

IND 73,981; "Safety of Beta-hCG + Erythropoietin in Acute Stroke"; approved

IND 14,054; "Safety of IV Autologous Mononuclear Cells and Marrow Stromal Cells After Stroke"; approved

### **U.S. FDA Investigational Device Exemption**

G050214 "Studies on the safety of repetitive transcranial magnetic stimulation (rTMS) in chronic subcortical stroke"; exemption granted (co-author)

Q140628 Premarket risk determination review (non-significant risk device study)

### **Data Safety Monitoring Board and Steering Committee**

DSMB member for the study "MK-0724 on the Amelioration of Neurological Damage and Recovery from Middle Cerebral Artery Ischemic Stroke" (Merck)

DSMB member for the study "Escitalopram & Language Intervention for Subacute Aphasia (ELISA)" (NIDCD P50 DC011739)

Steering Committee member, "The Efficacy of a Frequency-tuned Electromagnetic Field Treatment in Facilitating the Recovery of Subacute Ischemic Stroke Patients - a Pivotal Study" (eMagine Study) (BrainQ)

## **Presentations Delivered Within the University**

1996	Lecturer, HST 130, Harvard Medical School
1997	Grand Rounds, Dept. Neurology, Massachusetts General Hospital
1998	Grand Rounds, Dept. Neurosurgery, University of Washington
1999	Lecturer, NEUBEH 503, Department of Neurobiology and Behavior
	Grand Rounds, Dept. Rehabilitation Medicine, University of Washington
2001	Lecturer, University of Washington Mini-Medical School
	Cardiovascular Care Update, CME course, Univ. of Washington

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Lecturer, Review Course, Dept. of Physical Medicine and Rehab., U. of Wash.

Grand Rounds, Dept. Rehabilitation Medicine, University of Washington

Lecturer, Psychology 460, University of Washington

Grand Rounds, Dept. Speech Pathology, U. of Wash.

Grand Rounds, Dept. Neurosurgery, U. of Wash.

Research Conference, Dept. Nuclear Medicine, U. of Wash.

Grand Rounds, Dept. Neurology, U. of Wash.

Grand Rounds, Dept. Emergency Medicine, U. of Wash.

2002 Lecturer, University of Washington Mini-Medical School

Grand Rounds, Dept. Internal Medicine, U. of Wash. Grand Rounds, Dept. Rehabilitation Medicine, University of Washington

Co-speaker, Grand Rounds, University of Washington Regional Heart Center

Grand Rounds, Dept. Neurology, U. of Wash.

2003 Lecturer, Alzheimer's Center Seminar Series, U.C. Irvine

Lecturer, University of California, Irvine Mini-Medical School

Lecturer, Clinical Lecture Series, Dept. Physical Medicine & Rehabilitation

Lecturer, UCI Stroke Seminar

Grand Rounds, Dept. Neurology, UC Irvine

Lecturer, Department of Anatomy & Neurobiology Seminar

2004 Lecturer, Neuroscience clinical correlates, 1st year medical school class

Lecturer, Topics in Medicine, 2<sup>nd</sup> year medical school class

Lecturer, UCI Human Brain Map Seminar series

Lecturer, Institute for Brain Aging and Dementia

Grand Rounds, Dept. Emergency Medicine, UC Irvine

Speaker, UCI Primary Care Physicians

Guest Lecturer, Biology 2B course

Speaker, UCI Medical School Student Interest Group in Neurology

Lecturer, Trauma-Critical Care Noon Conference

Lecturer, UCI Medical Center Nursing Education Series

2005 Speaker, College of Medicine "Careers in Medicine" Group

Speaker, UCI Comprehensive Stroke Care Symposium

Guest teacher, NB251

Lecturer, Neuroscience clinical correlates, 1st year medical school class

Lecturer, Topics in Medicine, 2<sup>nd</sup> year medical school class

Speaker, Department Physical Medicine & Rehabilitation lecture series

Speaker, 18th UCI Chief Executive Roundtable Retreat

Guest Lecturer, Biology 2B course

UCI Dept. Neurosurgery Cerebrovascular Symposium: Contemporary

Comprehensive Approach to the Management of Cerebrovascular Disease

Speaker, "Breakfast with the Dean" UCI lecture series

UCI Nursing Neuro-update lecturer

Grand Rounds, Dept. Neurology, UC Irvine

UCI Medical Center, Dept. Internal Medicine, Resident Education Series lecture

Lecturer, "Foundations of Neuroscience," Neurobiology 202A

VA Long Beach, Dept. Internal Medicine, Resident Education Series lecture

Grand Rounds, Dept. Anesthesiology, UC Irvine

UCI Clinical Neuroscience Advisory Board

2006 Grand Rounds, Dept. Internal Medicine

Speaker, Department Physical Medicine & Rehabilitation lecture series

C.V.

Speaker, UCI Clinical Neurosciences Update 2006

Lecturer, Neuroscience clinical correlates, 1st year medical school class

Lecturer, Topics in Medicine, 2<sup>nd</sup> year medical school class

Speaker, UC Irvine/Samueli School of Engineering 5th Annual Industry

Research Symposium, California: Prosperity through Technology

Grand Rounds, Dept. Neurosurgery, UC Irvine

Rehab Therapy In-service Rounds, UC Irvine

Grand Rounds, Dept. Neurology, UC Irvine

Speaker, Department Physical Medicine & Rehabilitation lecture series

Lecturer, weekly resident seminar, Dept. Internal Medicine

2007 Speaker, Institute for Brain Aging and Dementia Seminar Series

Lecturer, "Foundations of Neuroscience," Neurobiology 202A

Lecturer, "Clinical Application of Stem Cell" course 09270 EE

Grand Rounds, Dept. Neurosurgery, UC Irvine

Lecturer, Topics in Medicine, 2<sup>nd</sup> year medical school class

Speaker, Department Physical Medicine & Rehabilitation lecture series

UCI Multidisciplinary Exercise Sciences Training Program lecture series

UCI Stroke Care 2007: A Nursing Perspective

Lecturer, Neuroscience clinical correlates, 1st year medical school class

UCI Family Medicine Update Course, 2007, Garden Grove, CA

Grand Rounds, Dept. Neurology, UC Irvine

Lecturer, "Foundations of Neuroscience," Neurobiology 202A

Speaker, Progress In Neurobiology Series, Dept. Anat & Neurobio, UC Irvine

Speaker, College Student Interest Group in Neurology, branch of AAN

Speaker, UCI Exercise Science Group

2008

Lecturer, Neuroscience clinical correlates, 1st year medical school class

Speaker, Dept. Physical Medicine & Rehabilitation lecture series (twice)

Speaker, Dept. Neurosurgery Neurotrauma and Critical Care symposium

Speaker, UCI Stroke & Cerebrovascular Center "Stroke Symposium 2008"

UCI Family Medicine Update Course, 2008, Garden Grove, CA

Grand Rounds, Dept. Neurology, UC Irvine

Speaker, UC Irvine Medical School Student Interest Group in Neurology

Lecturer, "Foundations of Neuroscience," Neurobiology 202A

Lecturer, weekly resident seminar, Dept. Internal Medicine

Keynote speaker, UCI Medical Scientist Training Program, annual retreat

Lecturer, 4 motor system talks, Neurobiology 208A (Anatomy 210A)

2009 Grand Rounds, Dept. Neurology, UC Irvine

Calif Inst Regenerative Medicine Fellows Stem Cell Seminar, UC Irvine

Speaker, Reeve-Irvine Medal Symposium: "Stepping Toward a New

Restorative Neuroscience," Irvine, CA

Speaker, resident seminar series, Dept. Neurosurgery, UC Irvine

Lecturer, Neuroscience clinical correlates, 1st year medical school class

Guest Lecturer, Biology 2B course

UCI Family Medicine Update Course, 2009, Garden Grove, CA

Lecturer, UCI Stem Cell Symposium, Irvine, CA

Lecturer, "Foundations of Neuroscience," Neurobiology 202A

Grand Rounds, Dept. Neurology, UC Irvine

2010 Speaker, UC Irvine Medical School Academic Medicine Interest Group

Speaker, College Student Interest Group in Neurology, branch of AAN

Lecturer, 16<sup>th</sup> UCI Distinguished Lecture Series on Brain, Learning, and Memory

Lecturer, Neuroscience clinical correlates, 1st year medical school class

Guest Lecturer, Biology 2B course

UCI Family Medicine Update Course, 2010, Garden Grove, CA

Grand Rounds, Dept. Neurology, UC Irvine

Lecturer, UC Irvine COSMOS (California State Summer School for

Mathematics & Science) program

UCI Neurology & Neurosurgery Update for Primary Care, Huntington Beach, CA

UCI 2010 Stroke & Cerebrovascular Disease Management And Emerging Therapies

2011 Guest Lecturer, Neurobiology 112B

Lecturer, "Foundations of Neuroscience," Neurobiology 202A

Lecturer, "Epilepsy as a window to mechanisms of neuronal plasticity" (Course code 08330)

Lecturer, "Stem Cell Topics", MMG230

Invited speaker, 1st UC Irvine School of Medicine Clinical Basic &

Translational Science Festival

Lecturer, UC Irvine COSMOS (California State Summer School for

Mathematics & Science) program

Speaker, "Unmet Clinical Needs", UCI Workshop

Speaker, 2011 UCI Stroke Symposium 2011 Neuroendovascular Management

and Neurocritical Care of the Stroke Patient

2012 Lecturer, Clinical Foundations, 2<sup>nd</sup> year medical students

Lecturer, MMG 230 course "Topics in Stem Cells"

Lecturer, UC Irvine COSMOS (California State Summer School for

Mathematics & Science) program

Grand Rounds, Dept. Neurology, UC Irvine

Irvine Global Innovations Summit, CalITT

Lecturer, Venture Science--Crossing Disciplines, Creating Innovation, CalITT

Lecture to residents, Physical Medicine & Rehabilitation

2013 Lecturer, Clinical Foundations, 2<sup>nd</sup> year medical students

Lecturer, MMG230/ANAT230 "Topics in Stem Cells"

Lecturer, Bio 44 "Stem Cells and Brain Repair"

Speaker, Dept. Neurology, Neurology Research Social

Guest Lecturer, Neurobiology 112B

Grand Rounds, Dept. Neurology, UC Irvine

Lecturer, 5 motor system talks, Neurobiology 208A (Anatomy 210A)

2014 Guest Lecturer, Neurobiology 112B

Lecturer, "Foundations of Neuroscience," Neurobiology 202A

Lecturer, Clinical Foundations, 2<sup>nd</sup> year medical students

Neuro Nuggets Nursing Conference, UC Irvine Medical Center

Department of Rehabilitation Services "Current Trends" Lecture Series

Speaker, Stem Cell Awareness Day Symposium "Stem Cells: Translational

Opportunities and Challenges"

Lecturer (twice), resident educational series, Dept. Physical Medicine & Rehabilitation

Speaker, "A Comprehensive Approach to Stroke Care" of the UC Irvine

Health Stroke & Cerebrovascular Disease Center

2015 Invited Reader, Art of Medicine Symposium, UC Irvine

Lecturer, Clinical Foundations, 2<sup>nd</sup> year medical students

Grand Rounds, Dept. Neurology, UC Irvine

	Grand Rounds, Dept. Neurological Surgery, UC Irvine
	Speaker, 2015 UC Irvine Health Neurosciences Updates for Primary Care
	Speaker, UC Irvine Health Comprehensive Stroke Center Symposium: 2015
	Moving Stroke Care to the Next Level
2016	Lecturer, Clinical Foundations, 2 <sup>nd</sup> year medical students (2 lectures)
	Lecturer, UC Irvine Brain Mapping Colloquium
	Grand Rounds, Dept. Neurology, UC Irvine
	Research Associates lecture, UC Irvine
	UC Irvine Health Comprehensive Stroke & Cerebrovascular Center Symposium
2017	Lecturer, Clinical Foundations, 2 <sup>nd</sup> year medical students
	Guest Lecturer, Advanced Neurobiology II - N115B
	Speaker, UC Irvine Mini-Med School
2018	Guest Lecturer, Advanced Neurobiology II - N115B
2010	Speaker, Poetry of Healing and Hope: An Evening of Poets
	Speaker, Department Physical Medicine & Rehabilitation lecture series
	Guest Lecturer, Biological Sciences N120C
	Speaker, "An Evening To Remember", UCI Center for the Neurobiology of
	Learning and Memory
	Speaker, Biological Sciences N117: Introduction to Neuroscience Clinical Trials
	Speaker, UC Irvine Stroke Symposium 2018
	Speaker, College Student Interest Group in Neurology (CoSIGN)
2019	Speaker, Poetry of Healing and Hope: An Evening of Poets
	Grand Rounds, Dept. Neurology, UCLA
2020	Lecturer, VA Greater Los Angeles Physical Medicine and Rehabilitation residency
	lunchtime lecture series (monthly lectures)
	Panelist, UCLA Neurotech Event, The Future of Prosthetics: Restoring Limbs and
	Movement
	Speaker, UCLA Neuroimaging Affinity Group
	Lecturer, UCLA Neurology Resident Lecture Series
2021	Lecturer, VA Greater Los Angeles Physical Medicine and Rehabilitation residency
	lunchtime lecture series (monthly lectures)
	Speaker, UCLA Neuromodulation Seminar Series
	Speaker, UCLA Brain Attack! '21
2022	Lecturer, VA Greater Los Angeles Physical Medicine and Rehabilitation residency
	lunchtime lecture series (monthly lectures)
	Neuro Rehab Quarterly Meeting, UCLA Neurorehabilitation Therapists
	UCLA Dept. Neurosurgery and Casa Colina Lecture Series
	Speaker, UCLA Brain Attack! '22
2023	Lecturer, UCLA-VA Greater Los Angeles Physical Medicine and Rehabilitation
	residency lunchtime lecture series (monthly lectures)
	Invited speaker, Stroke Prevention and Acute Treatment, Friends of Semel Institute
	Los Angeles, CA
2024	Lecturer, UCLA-VA Greater Los Angeles Physical Medicine and Rehabilitation
	residency lunchtime lecture series (monthly lectures)
	Lecturer, UCLA Neurology Residency Lecture Series
	Guest lecturer, UCLA NS191A course "Cognitive Horizons: Unveiling the
	Neuroscience of Normal Aging and Neurodegenerative Trajectories"
	Grand Rounds, Dept. Neurosurgery, UCLA

## **Invited External Presentations**

1997	Special Presentation, Dept. Neurology, V.A. Medical Center, U. of Minnesota
	Grand Rounds, Dept. Neurology, Medical College of Wisconsin
	Grand Rounds, Dept. Neurology, University of Washington
	IBC Ischemic Stroke Conference
1998	Plenary Session, 23 <sup>rd</sup> International Joint Conference on Stroke
1,,,0	and Cerebral Circulation of the American Heart Association
	IBC Ischemic Stroke Conference
	University of Washington Neuroscience Nursing Symposium
	60 <sup>th</sup> Annual Assembly of the American Academy of Physical Medicine and Rehabilitation
	Clinical Functional MRI, Harvard Medical School CME course
	Radiological Society of North America, annual meeting
	Grand Rounds, Oregon Health Sciences University, Dept. Neurology
1999	24 <sup>th</sup> International Joint Conference on Stroke
1777	and Cerebral Circulation of the American Heart Association
	2 <sup>nd</sup> World Congress in Neurological Rehabilitation
	UCLA Program in Neural Repair
2000	Visiting Professor, University of Kansas Center on Aging
2000	"Neuronal Plasticity: The Key to Stroke Recovery" meeting
	Lecturer, International Society for Magnetic Resonance in Medicine, 8 <sup>th</sup> annual meeting
	Lecturer, Annual Multidisciplinary Stroke Course, Rehab. Institute of Chicago
	Organization for Human Brain Mapping, 6 <sup>th</sup> annual meeting
	Grand Rounds, Walla Walla General Hospital, Walla Walla, Washington
	American Association of Neuroscience Nurses, Puget Sound Chapter
	American Clinical Neurophysiology Society, annual meeting
	Grand Rounds, Magic Valley Regional Medical Center, Twin Falls, Idaho
	Washington Chapter of American College of Physicians-American Society of
2001	Internal Medicine, annual meeting Diagnosis & Treatment of Acute Stroke, CME course, American Heart Association
2001	Primary Care Rounds, Providence-St. Peter Hospital, Olympia, WA
	Grand Rounds, St. Joseph Hospital, Bellingham, WA
	Annual Conference in Movement Sciences, Columbia University
	·
	Keynote speaker, Women's Health Research Symposium, University of Kentucky Organization for Human Brain Mapping, 7 <sup>th</sup> annual meeting
	Current Topics in fMRI Research: An International fMRI Symposium, Ulm, Germany
	Puget Sound Stroke Interest Group
2002	Guest Faculty, "Motor Recovery After Stroke," Rehab. Institute of Chicago
2002	Invited speaker, Cerebrovascular Center, LDS Hospital, Salt Lake City, Utah
	University of Washington Annual Neuroscience Nursing Symposium  Speaker "Provention & Treatment of Agute Strake" a Professional Education
	Speaker, "Prevention & Treatment of Acute Stroke," a Professional Education
	Symposium of the American Stroke Association
	Grand Rounds, U.C. Irvine Medical Center, Dept. Neurology
	Invited speaker, 23rd Princeton Conference on Cerebrovascular Disease
	Lecturer, "Neurorehabilitation: Brain Recovery and Reorganization Through
	Therapy" course, 54 <sup>th</sup> annual meeting American Academy of Neurology

Lecturer, Stroke Conference, Northwest Hospital, Seattle, WA

Invited speaker, "Living Well with Stroke," Harborview Hospital, Seattle, WA

Grand Rounds, Madigan Army Medical Center Dept. Neurology, Tacoma, WA

Grand Rounds, University of Utah Dept. Internal Medicine, Salt Lake City, UT

Lecturer, annual meeting Society for Cardiac Angiography and Interventions, satellite symposium, Seattle, WA

Lecturer, Region 3 meeting of Washington Academy of Physician Assistants Lecturer, annual meeting Transcatheter Cardiovascular Therapeutics, satellite Symposium, Washington, DC

Invited speaker, 17<sup>th</sup> annual meeting, Northwest Vascular Technologist Assoc'n Lecturer, Stem Cell Biology Basic Science Seminar, City of Hope National Medical Center

2003 Invited speaker, Leisure World, Laguna Hills, CA

Speaker, Orange County Neurological Society, Costa Mesa, CA

Invited speaker, American Stroke Association "2003 Emerging Science in the Diagnosis and Treatment of Stroke" satellite broadcast

Invited speaker, Orange Senior Center, Orange, CA

Lecturer, Western Medical Rehab. Research Network-UCLA fMRI Course

Invited speaker, Center for Functional and Molecular Imaging, Georgetown Univ.

Invited speaker, 2003 joint conference of the American Congress of Rehabilitation Medicine and the American Society of Neurorehabilitation

2004 Lecturer, Long Beach Memorial Hospital, Dept. Family Medicine

Speaker, First International Workshop on Neuroimaging and Stroke Recovery

Speaker, UC Irvine Medical Center Stroke Prevention Seminar

Invited speaker, plenary session, 29th International Stroke Conference

Lecturer, Huntington Beach Hospital

Speaker, California Spinal Cord Injury/Neural Regeneration Consortium Roman Reed Research Meeting

Invited lecturer, UCLA Neural Repair Seminar

Invited speaker, 24th Princeton Conference on Cerebrovascular Disease

Invited speaker, Martinos Center for Biomedical Imaging, Massachusetts General Hospital

Keynote Speaker, Centre for Stroke Recovery, Heart and Stroke Foundation of Ontario, annual meeting

Lecturer, International Society for Magnetic Resonance in Medicine, 12th annual meeting

Neurorehabilitation Research Institute, Bobath Memorial Hospital, Osaka, Japan

Eisenhower Medical Center, Rancho Mirage, CA

Oasis Senior Center, Corona Del Mar, CA

Invited speaker, American Society of Neuroradiology, 42<sup>nd</sup> annual meeting, Seattle, WA

Monterey Park Hospital, Monterey Park, CA

Garfield Medical Center, Alhambra, CA

Irvine Regional Medical Center, Irvine, CA

Bowers Museum, UCI Senior Health Series, Santa Ana, CA

Encino-Tarzana Regional Medical Center, Tarzana, CA

Western States Stroke Consortium, 6th annual meeting

Invited lecturer, Dept. Neurology, University of Cambridge, England

Grand Rounds, Dept. Neurology, UCSD, La Jolla, CA

The Richard Nixon Library, Yorba Linda, CA

Lecturer, Western Medical Rehab. Research Network-UCLA fMRI Course

Grand Rounds, Dept. Neurology, University of Southern California, LA, CA

2005 Speaker, Orange County Regional Paramedic Advisory Committee (four times)

Lakeview Senior Center, Irvine, CA

Lecturer, Huntington Beach Hospital

Orange County Neurological Society

Rancho Los Amigos Rehabilitation Hospital Stroke Support Group, Downey, CA

Lewis Lake Senior Center/AARP, Garden Grove, CA

Project Walk, Carlsbad, CA

Newport Beach Country Club, Newport Beach, CA

5<sup>th</sup> annual Orange County Emergency Care meeting, Santa Ana, CA

Second International Workshop on Imaging Recovery from Stroke, Hamburg, Germany

Grand Rounds, Saddleback Memorial Hospital, Laguna Hills, CA

Grand Rounds, Mission Hospital, Mission Viejo, CA

Grand Rounds, Western Medical Center, Anaheim, CA

Grand Rounds, Dept. Neurology, University of Texas, San Antonio

Grand Rounds, Garden Grove Hospital, Garden Grove, CA

Orange Senior Center, Orange, CA

Invited speaker, 6th Annual University of California Neurotrauma Meeting

Lecturer, Dept. Biokinesiology & Physical Therapy BKN 623, USC, LA, CA

Merage JCC of Orange County, Irvine, CA

Board of American Heart Association, Orange County Division

Lecturer, Cal State Univ, Fullerton Dept Nursing/UCI Family Nurse Practitioner Program, Nursing 560 course

2006 Grand Rounds, Saddleback Memorial Hospital, Laguna Hills, CA

Speaker, UCI Stroke Center Community Lecture Dinner (twice)

Speaker, Florence Sylvester Senior Center, Laguna Hills, CA

Invited speaker, International Stroke Conference 2006, "Poststroke

Neuroplasticity: Factors Important to Motor Recovery Trial Design"

Speaker, "Functional Restoration for the Stroke Survivor: Informing the

Efforts of Engineers," State of the Science Workshop, La Jolla, CA

Pacific Hospital of Long Beach, Long Beach, CA

Instituto Neurociencias Buenos Aires, Buenos Aires, Argentina

Hotchkiss Brain Institute, University of Calgary, Alberta

Annual meeting, Neural Control of Movement, "Abnormal Movement" satellite

Speaker, American Stroke Association, Orange County Division, "Stroke Awareness Month"

Speaker, Anaheim Chapter of Mended Hearts

Speaker, Edwards Lifesciences Scientific Advisory Board Meeting

Grand Rounds, Placentia Linda Hospital, Placentia, CA

Grand Rounds, Orange Coast Memorial Medical Center, Fountain Valley, CA

Grand Rounds, Dept. Physical Medicine Rehabilitation, Univ. Cincinnati, OH

Invited lecturer, 2006 Barrow Neurological Institute Stroke Update, Phoenix, AZ

Mission Stroke Support Group, Mission Viejo, CA

Orange Coast Chapter of Emergency Nurses Association, Newport Beach, CA

University of Florida, Neural Plasticity Symposium, Gainesville, FL

Neuroscience Stroke Symposium, on the 25th year of the Department of Neurology at Henry Ford Hospital, Detroit, MI

American Heart Association, Emergency Cardiovascular Care Forum, Azusa, CA

Neural Prosthesis Seminar, Case Western Reserve, Cleveland, OH

Invited lecturer, University of Oregon, Eugene, OR

Board of Directors, American Heart Association, Orange County Division

Speaker, Regents Point Senior Center, Irvine, CA

Speaker, Advances in Neurorehabilitation, at the Festival of International

Conferences on Caregiving, Disability, Aging, and Technology, Toronto, CA

Speaker, 3rd Annual Adv in Neurology, Methodist Neurologic Inst, Houston, TX

Speaker, 2007 Regional Alzheimer's Disease Research Conference, Irvine, CA

Invited speaker, 8th Annual University of California Neurotrauma Meeting

Healthsouth Tustin Rehabilitation Hospital Stroke Support Group, Tustin, CA

Speaker, Timely Topics in Emergency Care, Irvine, CA

Grand Rounds, Dept. Neurology, Harbor-UCLA Medical Center, Torrance, CA

Invited speaker, Orange Senior Center, Orange, CA

Speaker, "World President Organization", Orange County Chapter.

Speaker, University High School Medical Club

Speaker, Osher Lifelong Learning Institute, UCI

Oasis Senior Center, Corona Del Mar, CA

Featured Speaker, 12th Intl. Symposium on Neural Regeneration, Asilomar, CA

Speaker, Neurosciences Postgraduate Teaching Meeting, Dept. Neurology,

University of Cambridge, UK

2008

Speaker, Faculty of Health, University of East Anglia, UK

American Soc Exper Neurotherapeutics, 10<sup>th</sup> annual meeting, Arlington, VA

Stroke Treatment Academic Industry Roundtable, VIth meeting, Arlington, VA

Grand Rounds, San Joaquin Community Hospital, Bakersfield, CA

Invited speaker, 26th Princeton Conference on Cerebrovascular Disease

Speaker, 60th annual meeting, American Academy of Neurology, Future of

Neuroscience Conference: Neural Repair

Keynote speaker, "Brain Plasticity Symposium", Univ. Florida, Gainesville, FL

Grand Rounds, Orange Coast Memorial Medical Center, Fountain Valley, CA

Speaker, Certified Neuroscience Registered Nurse Review Course, Irvine, CA

Speaker, National Stroke Association "Stroke: The Full Continuum of Care,"

Long Beach, CA

Grand Rounds, UCLA, Los Angeles, CA

Grand Rounds, Anaheim Memorial Medical Center, Anaheim, CA

12<sup>th</sup> annual St. Francis Medical Center Critical Care Symposium, Long Beach, CA

Lecturer, Human Cortical Physiology Lab, NINDS, Bethesda, MD

2009 Capitol Hill Symposium "The X Factor: Women and Stroke", Washington, DC

Transient Ischemic Attack Educational Program Dinner (twice), Brea, and Irvine, CA

Grand Rounds, Grossmont Hospital, La Mesa, CA

University of Southern California Neurorehabilitation Retreat, San Marino, CA

UCLA Ahmanson-Lovelace Brain Mapping Center Seminar, Westwood, CA

9<sup>th</sup> annual Orange County Emergency Care meeting, Santa Ana, CA

Speaker, Whittier Chapter of Mended Hearts

Grand Rounds, Dept. Neurology, Harbor-UCLA Medical Center, Torrance, CA

American Physical Therapy Assoc., annual research meeting, Asilomar, CA

Stroke & Neurocritical Care Conf, Western Medical Center, Santa Ana, CA

Grand Rounds, St. Jude Medical Center, Fullerton, CA

2009 Barrow Neurological Institute Stroke Update, Phoenix, AZ

UC San Diego, Dept. Psychology Seminar Series, La Jolla, CA

3rd Int'l Symposium of Competence Network Stroke, Berlin, Germany

2010 Healthsouth Tustin Rehabilitation Hospital Stroke Support Group, Tustin, CA

Grand Rounds, Long Beach Memorial Hospital, Long Beach, CA

Speaker, "Stem Cell Therapies as an Emerging Paradigm for Stroke" (STEPS-2) meeting, Houston, TX

Invited speaker, 27th Princeton Conference on Cerebrovascular Disease

Coastline Community College, Brain Injury Class/Group

Lecturer, PT523, "Functional Human Neuroanatomy" course, Chapman Univ., Orange, CA University, Doctor of Physical Therapy Program, Orange, CA

Speaker, 11th Annual UC San Diego Stroke Conference, La Jolla, CA

Speaker, Integrative Neural Systems Underlying Vital Aerodigestive Tract Functions, Madison, WI

9<sup>th</sup> Welsh Stroke Conference, Newport, Wales

University of Glasglow, SINAPSE lecture, Glasgow, Scotland

Asan Medical Center, Dept. Rehabilitation Medicine, Seoul, Korea

World Stroke Congress, Presidential Symposium, Seoul, Korea

Grand Rounds, Dept. Neurology, Harbor-UCLA Medical Center, Torrance, CA

2011 Grand Rounds, University of California San Diego, Dept. Neurology

Invited Plenary Session Speaker, National Institute of Child Health & Human Development, Scientific Vision Plasticity Workshop

Speaker, Ezra Center, Anaheim, CA

Invited speaker, International Stroke Conference 2011, Los Angeles, CA

Invited speaker, Spring Brain 2011, Tucson, AZ

Association of Rehabilitation Nurses, LA/Orange County Chapter, Downey, CA

Invited speaker, "Entrenchment and Plasticity" conference, UC Santa Barbara

Grand Rounds, Harvard Longwood Neurology Program, Boston, MA

Grand Rounds, Massachusetts General Hospital, Boston, MA

Grand Rounds, New York-Presbyterian Hospital- Weill-Cornell, New York, NY

Speaker, 12th Annual UC San Diego Stroke Conference, La Jolla, CA

Lecturer, PT523, "Functional Human Neuroanatomy" course, Chapman Univ., Orange, CA Walnut Village Senior Center, Anaheim, CA

Invited speaker, 5th Neurodegenerative Conditions Research & Development, San Francisco, CA

Invited speaker, 136<sup>th</sup> annual meeting of the American Neurological Association, San Diego, CA

Neurosciences Critical Care Rounds, Johns Hopkins University, Baltimore, MD

Neurosciences Plenary Grand Rounds, Medical University of South Carolina, Charleston, SC

Silverado Senior Living Center, Costa Mesa, CA

Panelist, Caltech/MIT Enterprise Forum, Pasadena, CA

Festschrift for Jean-Claude Baron, Cambridge University, Cambridge, UK

Speaker, "Stem Cell Therapies as an Emerging Paradigm for Stroke" (STEPS-3) meeting, Arlington, VA

Invited lecturer, national webinar, sponsored by the American Heart

Association/American Stroke Association

Sharp Memorial Hospital, San Diego

Bridges to Stem Cell Scholars Program, California State University, Fullerton

Lakeview Senior Center, Irvine, CA

Lecturer, PT523, "Functional Human Neuroanatomy" course, Chapman Univ., Orange, CA

Lecturer, Orange County Emergency Medical Services Prehospital Providers

**Awards Ceremony** 

Eric Corey Raps Memorial Lecture, Univ. of Pennsylvania, Philadelphia, PA

Oregon Stroke Network annual meeting, Portland, OR

Western States Stroke Consortium, Scottsdale, AZ

3<sup>rd</sup> Canadian Stroke Congress, Calgary, AB, Canada

2013 Grand Rounds, Dept. Neurology, Harbor-UCLA Medical Center, Torrance, CA

Invited speaker, American Physical Therapy Association, Combined Sections Meeting, San Diego, CA

Invited speaker, International Stroke Conference 2013, Honolulu, HI

Speaker, American Academy of Neurology, 64<sup>th</sup> annual meeting

"Neurorehabilitation Enhancement Techniques" session, San Diego, CA

Speaker, 14th Annual UC San Diego Stroke Conference, La Jolla, CA

Invited speaker, 22<sup>nd</sup> European Stroke Conference, London, UK

Lecturer, PT523, "Functional Human Neuroanatomy" course, Chapman Univ., Orange, CA

Orange Coast Memorial Medical Center, Fountain Valley, CA

Invited speaker, 13th International Stroke Genetics Meeting, Charlottesville, VA

Grand Rounds, Dept. Physical Medicine & Rehabilitation, Weill Cornell Medical Center, New York, NY.

The XXI World Congress of Neurology, Vienna, Austria

Tsukuba Global Science Week 2013, University of Tsukuba, Japan

2014 Grand Rounds, Dept. Neurology, Emory University

Grand Rounds, Neurorehabilitation, Washington University, St Louis

Keynote Address, Annual Interdisciplinary Stroke Course,

Rehabilitation Institute of Chicago, Chicago, IL

Grand Rounds, Providence Saint Joseph Medical Center, Burbank, CA

Lecturer, PT523, "Functional Human Neuroanatomy" course, Chapman Univ., Orange, CA

Lecturer, Scientific Workshop on Brain Plasticity, Hemispheric

Specialization, and Neuro-Rehabilitation After Cerebral Hemispherectomy

Lecturer, Orange County Emergency Medical Services Base Hospital Coordinators "No Fear: Stroke"

Invited speaker (2 lectures), 139<sup>th</sup> annual meeting of the American Neurological Association, Baltimore, MD

Speaker, Gerontological Society of America 2014 Annual Scientific Meeting

Workshop "Aging, the Central Nervous System, and Mobility in Older Adults

Invited speaker, International Stroke Conference 2015, Nashville, TN (2 talks)

Invited Symposium, Experimental Biology 2015 Annual Meeting, Boston, MA

Distinguished Speaker Conference, Spaulding Rehabilitation Hospital, Boston, MA

Special Lecture, Dept. Neurology, UC San Francisco

Invited speaker, 24th European Stroke Conference, Vienna, Austria

Grand Rounds, Anaheim Regional Medical Center, Anaheim, CA

Lecturer, PT523, "Functional Human Neuroanatomy" course, Chapman Univ., Orange, CA

Invited speaker, 8th annual Yatsu Day Symposium, Univ Texas, Houston (x2)

Grand Rounds, Dept. Neurology, University of Iowa, Iowa City, IA

16<sup>th</sup> University of California Neurotrauma Symposium, Santa Barbara, CA

Grand Rounds, University of Washington, Seattle, WA

American Society of Neurorehabilitation 2015 Annual Meeting, Chicago, IL

Newport Beach Public Library "Medicine In Our Backyard" Lectures

Invited speaker, Burke Centennial Neurorehab. Symposium, White Plains, NY

Speaker, Schallert Fest, a research symposium for Dr. Timothy Schallert

2015

University of Texas, Austin

Invited Seminar, Clinically Applied Rehabilitation Engineering Initiative at University of Texas, Austin

Invited speaker, International Stroke Conference 2016, L.A., CA (2 talks)

Invited speaker, American Physical Therapy Association, Combined Sections Meeting, Anaheim, CA (2 talks)

Mission Hospital, Rehabilitation Medicine

Los Alamitos Medical Center Rehabilitation Medicine

9<sup>th</sup> World Congress for Neurorehabilitation, Philadelphia, PA

University of Utah Elaine J. Skalabrin Stroke Symposium, Salt Lake City, UT

Rehabilitation Research At NIH: Moving The Field Forward, Bethesda, MD

Dept. Neurology, University of Washington, Seattle, WA

Lecturer, PT523, "Functional Human Neuroanatomy" course, Chapman Univ., Orange, CA

Center for Brain Plasticity and Recovery, Georgetown University, Washington, D.C.

IV STEP Conference, American Physical Therapy Association, Columbus, OH

National Space Biomedical Research Institute, Annual Sensorimotor Adaptation

Team Symposium "Brain Plasticity and Space Flight", Houston, TX

International Conference Stroke Update 2016, Jeju Island, Korea

Seoul National University Boramae Medical Center, Seoul, Korea

International Symposium on rTMS Treatments, Tokyo, Japan

Dept. Molecular Neuroscience, Osaka University, Osaka, Japan

Grand Rounds, Dept. Neurology, Harbor-UCLA Medical Center, Torrance, CA

Translational Stroke Research: Vision and Opportunities Workshop, Panel Member, NIH, Bethesda, MD

5<sup>th</sup> Annual Symposium on Regenerative Rehabilitation, Emory Univ., Atlanta, GA

2016 American Society of Neurorehabilitation annual meeting, San Diego, CA

Brain Injury Association of California: TBI Med-Legal Conference, Napa, CA

Casa Colina, Rehabilitation Hospital, Pomona, CA

Speaker, 7th Annual Orange County Stroke Rehab Network's Cont. Education Workshop

Grand Rounds, Dept. Neurology, UCLA, Westwood, CA

2017 Grand Rounds, St. Mary's Medical Center, Long Beach, CA

Grand Rounds, Dept. Neurology, Cedars-Sinai Medical Center, Los Angeles, CA

NeuroRehabilitation Seminar Series, University of Southern California, Los Angeles, CA

Invited speaker, International Stroke Conference 2017, Houston, TX

Grand Rounds, Valley Presbyterian Hospital, Van Nuys, CA

Lecturer, PT523, "Functional Human Neuroanatomy" course, Chapman Univ., Orange, CA

Future of Healthcare Symposium, Chapman University, Orange, CA

Grand Rounds, Citrus Valley Medical Center, Covina, CA

Keynote speaker, Louisiana State University Health Science Campus School of Allied

Health Professions Research Symposium, New Orleans, LA

Grand Rounds, Orange Coast Memorial Medical Center, Fountain Valley, CA

Plenary speaker, 2017 Annual Spring Meeting of the Korean Stroke Society, Seoul, Korea

Lecturer, Dept. Neurology, Charles University in Prague, Hradec Kralove, Czech Republic

Grand Rounds, Anaheim Regional Medical Center, Anaheim, CA

Grand Rounds, Lakewood Regional Medical Center, Lakewood, CA

Grand Rounds, Huntington Beach Hospital, Huntington Beach, CA

Grand Rounds, Fountain Valley Regional Medical Center, Fountain Valley, CA

Grand Rounds, Pomona Valley Hospital Medical Center, Pomona, CA

Florey Institute of Neuroscience and Mental Health, Melbourne, Australia

Hunter Medical Research Institute, New Lambton Heights, Australia

Plenary Speaker, Rehabilitation Medicine Society of Australia and New Zealand 2017

Integrated Biomedical Sciences Seminar Series, Loma Linda University, Loma Linda, CA

Keynote speaker, Chinese Association of Rehabilitation Medicine, Xi'an, China

Keynote speaker, 9<sup>th</sup> Annual Practical Management of Acute Stroke, Cleveland Clinic, Cleveland OH

Invited speaker, 142<sup>nd</sup> annual meeting of the American Neurological Association, San Diego, CA

2018 Plenary Speaker, 2018 Brain Injury Summit, Vail, CO

Invited speaker, International Stroke Conference 2018, Los Angeles, CA

Invited speaker, Meitra Hospital, Calicut, India

Invited speaker, 10th World Congress for Neurorehabilitation, Mumbai, India

Grand Rounds, St. David's Medical Center, Austin, TX

Lecturer, PT523, "Functional Human Neuroanatomy" course, Chapman Univ., Orange, CA

Speaker, American Academy of Neurology, 70th annual meeting

"Rehabilitation in Neurology" session, Los Angeles, CA

Speaker, 4th European Stroke Organization Conference, Gothenburg, Sweden

Plenary speaker, Harvard Medical School Neurorehabilitation 2018 course, Boston, MA

Lecturer, Center for Neurotechnology and Neurorecovery, Massachusetts General Hospital, Boston, MA

Grand Rounds, Garden Grove Hospital, Garden Grove, CA

Lecturer, NIH StrokeNet Grand Rounds, national lecture via the web

Keynote speaker, Chinese Association of Rehabilitation Medicine, Yinchuan, China

Keynote speaker, Oregon Stroke Network 11th Annual Oregon Stroke Conference, Portland, OR

Invited speaker, Telehealth Secrets 2018, Newark, CA

Grand Rounds, Dept. Neurology, University of Rochester, Rochester, NY

Barbro B Johansson Award in Stroke Recovery Lecture, 11th World Stroke Congress, Montreal, Canada

Grand Rounds, Good Samaritan Hospital, Los Angeles, CA

Lecturer, Pomona Valley Hospital Medical Center, 3<sup>rd</sup> Annual Neuro Symposium, Ontario, CA

Invited speaker, American Association for the Advancement of Science Judicial Seminar "Emerging Issues in Neuroscience", La Jolla, CA

Invited speaker, American Society for Neurorehabilitation, San Diego, CA

Invited speaker, 24th Workshop of the International Stroke Genetics Consortium, Washington, DC

Invited speaker, State of the Science in Post-Stroke Motor Recovery, Perth, Australia (tele-lecture)

Speaker, 9<sup>th</sup> Annual Orange County Stroke Rehab Network's Cont. Education Workshop Lecturer, New York University, New York, NY

Speaker, American Stroke Association Advisory Committee Meeting

Invited speaker, International Stroke Conference, 2019, Honolulu, HI

Grand Rounds, Citrus Valley Medical Center, Covina, CA

2019

Lecturer, PT523, "Functional Human Neuroanatomy" course, Chapman Univ., Orange, CA

Grand Rounds, Anaheim Regional Medical Center, Anaheim, CA

Invited lecture, Texas Biomedical Device Center, University of Texas, Dallas, TX

Speaker, American Academy of Neurology, 71<sup>st</sup> annual meeting, Philadelphia, PA

Invited Speaker, Stroke & Rehabilitation Conference, Univ. of Missouri, Columbia, MO

Invited Speaker, Chinese University of Hong Kong

Keynote speaker, Chinese Association of Rehabilitation Medicine, Hefei, China

Speaker, Enhancing Outcomes in Stroke Rehabilitation and Recovery, Cedars-Sinai Conference, LA, CA

Presidential Lecture, 73rd annual meeting of the American Academy for Cerebral Palsy and Developmental Medicine and International Alliance of Academies of Childhood Disability 2nd Tri-Annual Meeting, Anaheim, CA

Invited Speaker, NorthEast Cerebrovascular Consortium, Boston, MA

Lecturer, UC Irvine Comprehensive Stroke and Neurocritical Care Symposium, Orange, CA Invited speaker, American Congress of Rehab. Medicine 96<sup>th</sup> annual meeting, Chicago, IL

Grand Rounds, Dept. Neurology, Cedars-Sinai Medical Center, Los Angeles, CA Invited speaker, Center for Neurotechnology and Neurorecovery, Massachusetts

General Hospital, Boston, MA

Invited speaker, International Stroke Conference, 2020, Los Angeles, CA

Lecturer, PT523, "Functional Human Neuroanatomy" course, Chapman Univ., Orange, CA Invited speaker, Academy of Brazilian Neurology Live Special

Lecturer, Sunrise Health Physical Medicine and Rehabilitation residency program, Las Vegas, NV

Lecturer, Neuropsychology Didactics lecture series, Neuropsychology Program, Cedars-Sinai Medical Center

Lecturer and Panelist, Brain Health, Innovation & Technologies (Brain-HIT2020), Israel, via the web

Lecturer, Pacific Stroke Association, Annual Stroke Conference 2020

Lecturer, California Rehabilitation Institute community lecture series

Invited speaker, American Congress of Rehab. Medicine 97<sup>th</sup> annual meeting, Atlanta, GA Keynote speaker, 41st Annual Braintree Neurorehabilitation Conference, Boston, MA Lecturer, Society of Vascular and Interventional Neurology 13th Annual Meeting

Grand Rounds, St. Louis University, St. Louis, MO

Lecturer, PT523, "Functional Human Neuroanatomy" course, Chapman Univ., Orange, CA (multiple lectures)

Lecturer, Virginia Polytechnic Institute and State University Synapse Seminar Series Invited speaker, International Stroke Conference, 2021

Speaker, NIH StrokeNet Network Webinar

Invited speaker, Distinguished Lectures In Neuroprosthetics, Swiss Federal Institute of Technology (EPFL)

Invited speaker, "Shaping the Future of TeleRehabilitation Through Research", Brown University, the Learning Health Systems Rehabilitation Research Network, and The Center on Health Services Training and Research Virtual Institute

Panelist, Johnson & Johnson and Healthcare Businesswomen's Association Virtual Stroke Event

Lecturer, Anaheim Regional Medical Center

Lecturer, Pacific Stroke Association, 21st Annual Stroke Conference

Panelist, Telemedicine and Teleteaching in the Age of COVID. Webinar (McMaster University and Eyestart)

Stroke Grand Rounds, University of Texas, Houston

Invited speaker, 7th IEEE World Forum on the Internet of Things

Lecturer, Sunrise Health Physical Medicine and Rehabilitation residency program, Las Vegas, NV

2020

Lecturer, XXIX Brazilian Congress of Neurology

Speaker, Workshop Hospital Albert Einstein, Sao Paolo, Brazil

Invited speaker, American Congress of Rehab. Medicine 98<sup>th</sup> annual meeting, Chicago, IL Speaker, Cedars-Sinai 2021 Physical Medicine and Rehabilitation Conference: Creativity and Collaboration in Changing Times

Speaker, Eisenhower Medical Center, Rancho Mirage, CA

Invited speaker, Washington University, St. Louis, Hope Center Neurovascular Injury & Repair Research Group lecture series

Keynote speaker, 5<sup>th</sup> Annual Neural Engineering Research Symposium, University of Miami Grand Rounds, Longwood Neurology Program (Beth Israel Deaconess Medical Center, Boston Children's Hospital, and Brigham and Women's Hospital), Boston, MA

Grand Rounds, Dept. Neurology, Emory University, Atlanta, GA

48<sup>th</sup> Annual Meeting of the Clinical Neurological Society of America, Clearwater Beach, FL Invited speaker, International Stroke Conference, 2022, New Orleans, LA

Grand Rounds, Sharp Healthcare, San Diego, CA

2022

2023

Moderator, 2022 Cedars-Sinai Physical Medicine & Rehabilitation Grand Rounds Educational Series, Los Angeles, CA

NIH StrokeNet Clinical Trials Network Learning Community Monthly Lecture Series Lecturer, PT523, "Functional Human Neuroanatomy" course, Chapman Univ., Orange, CA International Stroke Genetics Consortium Global Alliance for Acute and Long-Term Outcome Studies Teleconference

Grand Rounds, PIH Health Good Samaritan Hospital, Los Angeles, CA

Invited speaker, AHA Bugher Hemorrhagic Stroke Scholar Seminar

Invited speaker, Integrated Brain Imaging Center, University of Washington, Seattle, WA Invited speaker, American Academy of Neurology 2022 annual meeting, Seattle, WA Speaker, Orange County Stroke Rehab Network's Cont. Education Workshop 2022, Orange, CA

Invited speaker, Robotics and Technology in Rehabilitation Symposium, MossRehab, Philadelphia, PA

Keynote Speaker, International Symposium on Patient Rehabilitation, Innovation And NeuroTechnologies (SPRINT); Institution de Lavigny and World Federation for Neurorehabilitation; Lausanne, Switzerland

Lecturer, Humboldt-Del Norte Consortium, Eureka, CA

Invited speaker, University College, Dublin, Ireland

Speaker, "Utilizing Technology to Improve Outcomes in Rehabilitation," Cedars-Sinai PM&R Conference, Los Angeles, CA

Lecturer, Neurobiology 208A, University of California, Irvine

Invited Speaker, 50<sup>th</sup> Anniversary Annual Meeting and International Conference of the Korean Academy of Rehabilitation Medicine

147<sup>th</sup> annual meeting of the American Neurological Association, Chicago, IL

International Neurological Disorders and Neurophysiology Conference Shijiazhuang, China

Invited speaker, American Congress of Rehab. Medicine 99<sup>th</sup> annual meeting, Chicago, IL Lecturer, California Rehabilitation Institute Lunch-&-Learn series

Lecturer, Advances in Stroke Recovery 2023 Scientific Conference, Canadian Partnership for Stroke Recovery

Lecturer, International Stroke Conference, 2023, Dallas, TX

Grand Rounds, Dept. Neurology, University of Utah, Salt Lake City, UT

Invited speaker, 28th International Stroke Genetics Consortium, Melbourne, Australia

Keynote Speaker, Utah Stroke & Neuro-Rehabilitation Conference, Park City, UT Speaker, 2023 meeting of the American Society of Neurorehabilitation, Charleston, SC Invited speaker, STROKE 2023 (48th meeting, Japan Stroke Society; 52nd meeting, Japanese Society on Surgery for Cerebral Stroke; 39th SAH/Spasm Symposium) Invited speaker, Hackensack Meridian Health 11<sup>th</sup> Annual National Stroke Symposium, Eatontown, NJ

Invited speaker, American Academy of Neurology 2023 annual meeting, Boston, MA Grand Rounds, Dept. Neurology, University of Massachusetts, Worcester, MA Grand Rounds, Dept. Neurology, UC Irvine

Grand Rounds, Dept. Neurology, University of Southern California, LA, CA Lecturer, Providence Little Company of Mary of San Pedro and the Providence Health Ministries

Invited speaker, European Congress of NeuroRehabilitation 2023, Lyon, France Invited lecturer, 148<sup>th</sup> annual meeting of the American Neurological Association, Philadelphia, PA

Keynote speaker, Upper Limb Stroke Rehabilitation Summer School 2023, KU Leuven-University of Leuven, Leuven, Belgium

Invited speaker and panelist, NIH Workshop: Advancing Digital Endpoints & Digital Health Technologies for Neurological and Neuromuscular Disorders Invited speaker, Long Beach Medical Center 8<sup>th</sup> Annual Code Stroke Symposium, Long Beach, CA

Invited speaker, 15th World Stroke Congress, Toronto, ON Invited lecturer, 29th International Stroke Genetics Workshop, Boston, MA Lecturer, Neurobiology 208A, University of California, Irvine Invited speaker, Pomona Valley Hospital Medical Center 8<sup>th</sup> Annual Neuro Symposium, Pomona, CA

Invited speaker, 4th International Neurorehabilitation and Neuroscience Conference, Tokyo, Japan

Invited speaker, 2nd International Symposium on Hyper-Adaptability (HypAd2023), Kyoto, Japan

Speaker, American Congress of Rehab. Medicine 100<sup>th</sup> annual meeting, Atlanta, GA Lecturer, Grand Rounds, Fountain Valley Regional Hospital, Fountain Valley, CA Speaker, Stroke Rehabilitation Symposium, Los Angeles Stroke Rehab. Network Invited lecturer, Grand Rounds, Department of Neurology, University of Maryland Keynote speaker, International Stroke Rehabilitation and Recovery Conference, Houston, TX

Lecturer, Monthly meeting of the StrokeNet Recovery Fellows
Speaker, UC Riverside Medical School Student Interest Group in Neurology
Invited speaker, International Stroke Conference 2024, Phoenix, AZ
Invited speaker, American Academy of Neurology 2024 annual meeting, Denver, CO
Invited speaker, American Heart Association Executive Board (Los Angeles Chapter)
Steven L. Wolf Research Symposium, Emory University, Atlanta, GA
Lecturer, 31<sup>st</sup> annual International Stroke Genomics Consortium, Los Angeles, CA
Invited speaker, "Targeted Neuroplasticity to Enhance Rehabilitation" Symposium,
Shirley Ryan Ability Lab, Chicago, IL

Lecturer, Neurobiology 208A (graduate course) University of California, Irvine Invited speaker, Society of Vascular and Interventional Neurology 2024 Annual Meeting

2024

### **Bibliography**

#### Book

"Brain Repair after Stroke," SC Cramer & RJ Nudo, eds, Cambridge Univ Press, Cambridge, UK. 2010.

#### Peer-Reviewed articles

- 1. **Cramer SC**, Rhodes RH, Acton EA, Tokes ZA. Neurotoxicity and dermatotoxicity of cyanomorpholinyl Adriamycin. Cancer Chemotherapy and Pharmacology 1989; 23:71-75.
- 2. Kurtz I, Dass PD, **Cramer SC**. The importance of renal ammonia metabolism to whole body acid-base balance: A reanalysis of the pathophysiology of renal tubular acidosis. Mineral and Electrolyte Metabolism 1990; 16:331-340.
- 3. **Cramer SC**, Pardridge WM, Hirayama BA, Wright EM. Colocalization of GLUT-2 glucose transporter, sodium/glucose transporter, and  $\gamma$ -glutamyl transpeptidase in rat kidney using double peroxidase immunocytochemistry. Diabetes 1992; 41:766-770.
- 4. **Cramer SC**, Glaspy JA, Efird JT, Louis DN. Chronic lymphocytic leukemia and the central nervous system: a clinical and pathological study. Neurology 1996; 46:19-25.
- 5. **Cramer SC**, Segal A, Hamilton R, Schmahmann J, Ma MJ. Leukoencephalitis Due to Varicella Zoster Virus: report of a case and review of clinical features. Neurology and Clinical Neurophysiology 1996; 1:2-8 (http://mitpress.mit.edu/NCN).
- 6. **Cramer SC**, Robertson RL, Dooling EC, Scott RM. Moyamoya and Down syndrome. Clinical and radiological features. Stroke 1996; 27:2131-2135.
- 7. **Cramer SC**, Schaefer PW, Krishnamoorthy KS. Microgyria in the distribution of the middle cerebral artery in a patient with DiGeorge syndrome. Journal of Child Neurology 1996; 11:494-497.
- 8. Rordorf G, **Cramer SC**, Efird JT, Schwamm L, Buonanno F, Koroshetz WJ. Pharmacological elevation of blood pressure in acute stroke. Clinical effects and safety. Stroke 1997; 28:2133-2138.
- 9. **Cramer SC**, Nelles G, Schaechter JD, Kaplan JD, Finklestein SP. Computerized measurement of motor performance. Stroke 1997; 28:2162-2168.
- 10. **Cramer SC**, Nelles G, Benson R, Kaplan JD, Kwong KK, Parker R, Kennedy DN, Finklestein SP, Rosen BR. A functional MRI study of subjects with motor recovery after stroke. Stroke 1997; 28:2518-2527.

- 11. Rordorf G, Koroshetz WJ, Copen WA, **Cramer SC**, Schaefer PW, Budzik RW, Schwamm LH, Buonanno F, Sorensen AG, Gonzalez G. Regional ischemia and ischemic injury in patients with acute MCA stroke as defined by early diffusion weighted and perfusion weighted MRI. Stroke 1998; 29:939-944.
- 12. Nelles G, **Cramer SC**, Schaechter JD, Kaplan JD, Finklestein SP. Quantitative assessment of mirror movements after stroke using a computerized dynamometer. Stroke 1998; 29:1182-1187.
- 13. **Cramer SC**, Rordorf G, Kaufman JA, Ferdinando Buonanno F, KoroshetzWJ, Schwamm L. Clinically occult pelvic-vein thrombosis in cryptogenic stroke. Lancet 1998; 351:1927-1928.
- 14. **Cramer SC**, Finklestein SP, Schaechter JD, Bush G, Rosen BR. Activation of distinct motor cortex regions during ipsilateral and contralateral finger movements. J Neurophysiology 1999; 81:383-387.
- 15. Stroke Therapy Academic Industry Roundtable. Recommendations for standards regarding preclinical neuroprotective and restorative drug development. Stroke 1999; 30:2752-2758.
- 16. **Cramer SC**, Bastings, EP. Mapping clinically relevant plasticity after stroke. Neuropharmacology 2000; 39:842-851.
- 17. **Cramer SC**, Moore CI, Finklestein SP, Rosen BR. A pilot study of somatotopic mapping after cortical infarct. Stroke 2000; 31:668-671.
- 18. **Cramer SC**, Chopp M. Recovery recapitulates ontogeny. Trends in Neurosciences 2000; 23: 265-271.
- 19. Rordorf G, Koroshetz W, Efird JT, **Cramer SC**. Predictors of mortality in stroke patients admitted to an intensive care unit. Critical Care Medicine 2000; 28:1301-1305.
- 20. Uchino K, Billhemier D, Cramer SC. Entry criteria and baseline characteristics predict outcome in acute stroke trials. Stroke 2001; 32:909-916.
- 21. Stroke Therapy Academic Industry Roundtable. II. Recommendations for clinical trial evaluation of acute stroke therapies. Stroke 2001; 32:1598-1606.
- 22. Reed SD, **Cramer SC**, Blough DK, Meyer K, Jarvik JG. Treatment with tissue plasminogen activator and inpatient mortality in ischemic stroke patients treated in community hospitals. Stroke 2001; 32: 1832-40.
- 23. **Cramer SC**, Fray E, Tievsky A, Parker RA, Riskind PN, Stein MC, Wedeen V, Rosen BR. Changes in motor cortex activation after recovery from spinal cord inflammation. Multiple Sclerosis, 2001; 7:364-370.
- 24. **Cramer SC**, Stegbauer KC, Schneider A, Mukai J, Maravilla KR. Decreased diffusion in central pontine myelinolysis. Am J Neuroradiol, 2001; 22: 1476-1479.
- 25. Cramer SC, Nelles G, Schaechter JD, Kaplan JD, Finklestein SP, Rosen BR. A functional

- MRI study of three motor tasks in the evaluation of stroke recovery. Neurorehabil Neural Repair 2001; 15:1-8.
- 26. **Cramer SC**, Weisskoff RM, Schaechter JD, Nelles G, Foley M, Finklestein SP, Rosen BR. Motor cortex activation is related to force of squeezing. Human Brain Mapping, 2002; 16:197-205.
- 27. Doherty MJ, Watson NF, Uchino K, Hallam DK, Cramer SC. Diffusion Abnormalities in Patients with Wernicke Encephalopathy. Neurology, 2002; 58: 655-657.
- 28. **Cramer SC**, Mark A, Barquist K, Nhan H, Stegbauer KC, Price R, Bell K, Odderson I, Esselman P, Maravilla KR. Motor cortex activation is preserved in patients with chronic hemiplegic stroke. Annals of Neurology 2002; 52:607-616.
- 29. Schaechter JD, Kraft, E, Hilliard TS, Dijkhuizen RM, Benner T, Finklestein SP, Rosen BR, Cramer SC. Motor recovery and cortical reorganization after constraint-induced movement therapy in stroke patients: a preliminary study. Neurorehabil Neural Repair 2002; 16:326-338.
- 30. Zemke AC, Heagerty PJ, Lee C, **Cramer SC**. Motor cortex organization after stroke is related to side of stroke and level of recovery. Stroke 2003; 34:e23-28.
- 31. **Cramer SC**, Maki JH, Waitches GM, D'Souza N, Grotta JC, Burgin WS, Kramer LA. Paradoxical emboli from calf and pelvic veins in cryptogenic stroke. Journal of Neuroimaging 2003; 13:218-223.
- 32. Crafton KR, Mark AN, Cramer SC. Improved understanding of motor cortex injury by incorporating measures of functional anatomy. Brain 2003; 126:1650-1659.
- 33. Aylward EH, Richards TL, Berninger VW, Nagy WE, Field KM, Grimme AC, Richards AL, Thomson JB, **Cramer SC**. Effects of instructional treatment on brain activation for specific language processes in children with dyslexia. Neurology 2003; 61:212-219.
- 34. Bodwell JA, Mahurin RK, Waddle S, Price R, Cramer SC. Age and features of movement influence motor overflow. Journal of the American Geriatrics Society 2003; 51:1735-1739.
- 35. Morrison SJ, Demorest SM, Aylward EH, Cramer SC, Maravilla KR. An fMRI investigation of cross-cultural music comprehension. Neuroimage 2003; 20:378-384.
- 36. **Cramer SC**, Benson RR, Burra VC, Himes D, Crafton KR, Janowsky JS, Brown JA, Lutsep HL. Mapping individual brains to guide restorative therapy after stroke: Rationale and pilot studies. Neurological Research 2003; 25:811-814.
- 37. Brown JA, Lutsep H, **Cramer SC**, Weinand M. Motor cortex stimulation for enhancement of recovery after stroke: Case report. Neurological Research 2003; 25:815-818.
- 38. **Cramer SC**, Rordorf G, Maki JH, Kramer LA, Grotta JC; Burgin WS, Hinchey JA, Benesch C, Furie KL, Lutsep HL, Kelly E, Longstreth WT, Jr. Increased pelvic vein thrombi in cryptogenic stroke: results of the Paradoxical Emboli from Large Veins in Ischemic Stroke (PELVIS) study. Stroke 2004; 35:46-50.

- 39. Atri A, Sherman S, Norman KA, Kirchhoff BA, Nicolas MM, Greicius MD, **Cramer SC**, Breiter HC, Hasselmo ME, Stern CE. Blockade of central cholinergic receptors impairs new learning and increases proactive interference in a word paired-associate memory task. Behavioral Neuroscience 2004;118:223-36.
- 40. Parisi MA, Pinter JD, Glass IA, Field K, Maria BL, Chance PF, Mahurin, RK, **Cramer SC**. Cerebral and cerebellar motor activation abnormalities in a subject with Joubert syndrome: functional magnetic resonance imaging (MRI) study. Journal of Child Neurology 2004; 19:214-218.
- 41. Nhan H, Barquist K, Bell K, Esselman P, Odderson IR, Cramer SC. Brain function early after stroke in relation to subsequent recovery. Journal of Cerebral Blood Flow and Metabolism 2004; 24:756-763.
- 42. Aylward EH, Park J, Field KM, Grimme AC, Richards TL, **Cramer SC**, Meltzoff AN. Brain activation during face perception: evidence of a developmental change. Journal of Cognitive Neuroscience 2005; 17:308-319.
- 43. **Cramer SC**, Benson RR, Himes DM, Burra VC, Janowsky JS, Weinand ME, Brown JA, Lutsep HL. Use of functional MRI to guide decisions in a clinical stroke trial. Stroke 2005; 36:e50-52.
- 44. Lacourse MG, Orr ELR, Cramer SC, Cohen MJ. Brain activation during execution and motor imagery of novel and skilled sequential hand movements. Neuroimage 2005; 27:505-519.
- 45. **Cramer SC**, Lastra L, Michael G. Lacourse MG, Cohen MJ. Brain motor system function after complete spinal cord injury. Brain 2005; 128:2941-2950.
- 46. **Cramer SC**, Crafton KR. Somatotopy and movement representation sites following stroke. Exp Brain Res 2006; 168:25-32.
- 47. **Cramer SC**, Shah R, Juranek J, Crafton KR, Le V. Activity in the peri-infarct rim in relation to recovery from stroke. Stroke 2006; 37:111-115.
- 48. Takaya N, Yuan C, Chu B, Saam T, Underhill H, Cai J, Tran N, Polissar NL, Isaac C, Ferguson MS, Garden GA, **Cramer SC**, Maravilla KR, Hashimoto B, Hatsukami TS. Association between carotid plaque characteristics and subsequent ischemic cerebrovascular events: a prospective assessment with magnetic resonance imaging. Stroke 2006; 37:818-823.
- 49. Brown JA, Lutsep HL, Weinand M, **Cramer SC**. Motor cortex stimulation for the enhancement of recovery from stroke: a prospective multicenter safety study. Neurosurgery 2006; 58:464-473.
- 50. Sanchez RJ, Shah P, Liu J, Rao S, Smith R, Rahman T, **Cramer SC**, Bobrow JE, Reinkensmeyer DJ. Automating arm movement training following severe stroke: functional exercises with quantitative feedback in a gravity-reduced environment. IEEE Trans Neural Syst Rehabil Eng 2006; 14:378-389.

- 51. Kleim JA, Chan S, Pringle E, Schallert K, Procaccio V, Jimenez R, **Cramer SC**. BDNFval<sup>66</sup>met polymorphism is associated with impaired experience-dependent plasticity in human motor cortex. Nature Neuroscience 2006; 9:735-737.
- 52. Liu J, **Cramer SC**, Reinkensmeyer DJ. Learning to perform a new movement with robotic assistance: Comparison of visual demonstration with haptic guidance. Journal of NeuroEngineering and Rehabilitation 2006; 3:20-29.
- 53. **Cramer SC**, Orr ELR, Cohen MJ, Lacourse MG. Effects of motor imagery training after chronic, complete spinal cord injury. Exp Brain Res 2007; 177:233-42.
- 54. Kostanian V, Cramer SC. Artery of Percheron Thrombolysis: A case report. AJNR Am J Neuroradiol. 2007; 28:870-1.
- 55. Stradling D, Yu W, Langdorf ML, Tsai F, Kostanian V, Hasso AN, Welbourne SJ, Schooley Y, Fisher MJ, Cramer SC. Stroke care delivery before vs. after JCAHO stroke center certification. Neurology 2007; 68:469-470.
- 56. **Cramer SC**, Parris TB, Levy RM, Stebbins GT, Ruland SD, Lowry DW, Trouard TP, Squire SW, Weinand ME, Savage CR, Wilkinson SB, Juranek J, Leu S-Y, Himes DM. Predicting functional gains in a stroke trial. Stroke 2007; 38:2108-14.
- 57. Kleim JA, Kleim ED, **Cramer SC**. Systematic assessment of training-induced changes in corticospinal output to hand using frameless stereotaxic transcranial magnetic stimulation. Nature Protocols 2007; 2:1675-84.
- 58. Yozbatiran N, Der-Yeghiaian L, **Cramer SC**. A standardized approach to performing the Action Research Arm Test. Neurorehabil Neural Repair 2008; 22:78-90.
- 59. Westhout F, Pare L, Delfino R, **Cramer SC**. Slope of the intracranial pressure waveform following traumatic brain injury. Surgical Neurology 2008; 70:70-74.
- 60. Orr ELR, Lacourse MG, Cohen MJ, Cramer SC. Cortical activation during executed, imagined, and observed foot movements. Neuroreport 2008; 19:625-630.
- 61. Lin JJ, Riley JD, Juranek J, **Cramer SC**. Vulnerability of the frontal-temporal connections in temporal lobe epilepsy. Epilepsy Research 2008; 82: 162-170.
- 62. Takahashi CD, Der-Yeghiaian L, Le V, Motiwala RR, **Cramer SC**. Robot-based hand motor therapy after stroke. Brain 2008; 131:425-437.
- 63. Harness ET, Yozbatiran N, Cramer SC. Effects of intense exercise in chronic spinal cord injury. Spinal Cord 2008; 46:733-737.
- 64. Yozbatiran N, Alonso-Alonso M, See J, Demirtas-Tatlidede A, Luu D, Motiwala RR, Pascual-Leone A, **Cramer SC**. Safety and behavioral effects of high-frequency repetitive transcranial magnetic stimulation in stroke. Stroke 2009; 40:309-312.

- 65. Huda S, Rodriguez R, Lastra L, Warren M, Lacourse MG, Cohen MJ, **Cramer SC**. Cortical activation during foot movements. II. Effect of movement rate and side. Neuroreport 2008; 19:1573-1577.
- 66. Davidoff AW, Hill MD, Cramer SC, Yang Y, Moore A. Open labeled, uncontrolled pharmacokinetic study of a single intramuscular HCG dose in healthy male volunteers. Int J Clin Pharmacol Ther 2009; 47:516-524.
- 67. McHughen SA, Rodriguez PF, Kleim JA, Kleim EP, Crespo LM, Procaccio V, Cramer SC. BDNF val<sup>66</sup>met polymorphism influences short-term experience-dependent plasticity in the human brain. Cerebral Cortex. 2010; 20:1254-1262.
- 68. Page SJ, Szaflarski JP, Eliassen JC, Pan H, **Cramer SC**. Cortical plasticity following motor skill learning during mental practice in stroke. Neurorehabil Neural Repair. 2009; 23:382-388.
- 69. **Cramer SC**, Dobkin BH, Noser EA, Rodriguez RW, Enney LA. A randomized, placebocontrolled, double-blind study of ropinirole in chronic stroke. Stroke 2009; 40:3034-3038.
- 70. Lane TA, Garls D, Mackintosh E, Kohli S, **Cramer SC**. Liquid storage of marrow stromal cells. Transfusion 2009; 49:1471-1481.
- 71. Jack CR et al, **on behalf of the Alzheimer's Disease Neuroimaging Initiative Investigators**. Serial PIB and MRI in normal, mild cognitive impairment and Alzheimer's disease: implications for sequence of pathological events in Alzheimer's disease. Brain 2009 May;132:1355-65
- 72. Mormino EC et al, **on behalf of the Alzheimer's Disease Neuroimaging Initiative Investigators**. Episodic memory loss is related to hippocampal-mediated beta-amyloid deposition in elderly subjects. Brain. 2009; 132:1310-1323.
- 73. **Cramer SC**, Sampat A, Haske-Palomino M, Nguyen S, Procaccio V, Hermanowicz N. Increased prevalence of val66met BDNF genotype among subjects with cervical dystonia. Neurosci Ltrs 2010; 468:42-45.
- 74. Belayev L, Khoutorova L, Zhao KL, Davidoff AW, Moore AF, Cramer SC. A novel neurotrophic therapeutic strategy for experimental stroke. Brain Research 2009; 1280:117-123.
- 75. Milot MH, Marchal-Crespo L, Green CS, **Cramer SC**, Reinkensmeyer DJ. Comparison of error amplification and haptic guidance training techniques for learning of a timing-based motor task by healthy individuals. Experimental Brain Research. 2010; 201:119-131.
- 76. Marchal-Crespo, L McHughen S, **Cramer SC**, Reinkensmeyer DJ. The effect of haptic guidance, aging, and initial skill level on motor learning of a steering task. Experimental Brain Research. 2010; 201:209-220.
- 77. Underhill HR, Yuan C, Yarnykh VL, Chu B, Oikawa M, Dong L, Polissar NL, Garden G, **Cramer SC**, Hatsukami TS. Prevalence, incidence, and predictors of surface disruption in the carotid artery. Am J Neuroradiol. 2010; 31:487-493.

- 78. Saver JL, Albers GW, Dunn B, Johnston KC, Fisher M; **STAIR VI Consortium**. Stroke Therapy Academic Industry Roundtable (STAIR) recommendations for extended window acute stroke therapy trials. Stroke. 2009; 40:2594-2600.
- 79. Yozbatiran N, Harness ET, Le V, Luu D, Lopes CV, **Cramer SC**. A tele-assessment system for monitoring treatment effects in subjects with spinal cord injury. Journal of Telemedicine and Telecare. 2010; 16:152-157.
- 80. Riley JD, Franklin DL, Choi V, Kim RC, Binder DK, **Cramer SC**, Lin JJ. Altered white matter integrity in temporal lobe epilepsy: association with cognitive and clinical profiles. Epilepsia. 2010; 51:536-545.
- 81. Holland D et al, **on behalf of the Alzheimer's Disease Neuroimaging Initiative Investigators**. Subregional neuroanatomical change as a biomarker for Alzheimer's disease. Proc Natl Acad Sci U S A. 2009; 106:20954-20959.
- 82. **Cramer SC**, Fitzpatrick C, Warren M, Hill MD, Brown D, Whitaker L, Ryckborst KJ, Plon L. The Beta-hCG + Erythropoietin in Acute Stroke (BETAS) study. A three center, single dose, open label, non-controlled, Phase IIa safety trial. Stroke. 2010; 41:927-931.
- 83. Wolk DA, Dickerson BC, **on behalf of the Alzheimer's Disease Neuroimaging Initiative Investigators**. Apolipoprotein E (APOE) genotype has dissociable effects on memory and attentional-executive network function in Alzheimer's disease. Proc Natl Acad Sci. 2010; 107:10256-61.
- 84. Ho AJ, Stein JL, Hua X, Lee S, Hibar DP, Leow AD, Dinov ID, Toga AW, Saykin AJ, Shen L, Foroud T, Pankratz N, Huentelman MJ, Craig DW, Gerber JD, Allen AN, Corneveaux JJ, Stephan DA, DeCarli CS, DeChairo BM, Potkin SG, Jack CR Jr, Weiner MW, Raji CA, Lopez OL, Becker JT, Carmichael OT, Thompson PM, on behalf of the Alzheimer's Disease Neuroimaging Initiative Investigators. A commonly carried allele of the obesity-related FTO gene is associated with reduced brain volume in the healthy elderly. Proc Natl Acad Sci. 2010; 107:8404-9.
- 85. Rimol LM, Agartz I, Djurovic S, Brown AA, Roddey JC, Kähler AK, Mattingsdal M, Athanasiu L, Joyner AH, Schork NJ, Halgren E, Sundet K, Melle I, Dale AM, Andreassen OA, on behalf of the Alzheimer's Disease Neuroimaging Initiative Investigators. Sex-dependent association of common variants of microcephaly genes with brain structure. Proc Natl Acad Sci 2010; 107:384-8.
- 86. Riley JD, Le V, Der-Yeghiaian L, See J, Newton JM, Ward NS, **Cramer SC**. Anatomy of stroke injury predicts gains from therapy. Stroke. 2011; 42:421-426.
- 87. **Cramer SC**, Wu J, Hanson JA, Nouri S, Karnani D, Chuang T, Le V. A system for addressing incidental findings in neuroimaging research. Neuroimage. 2011; 55:1020-1023.
- 88. **Cramer SC**, Procaccio V. Correlation between genetic polymorphisms and stroke recovery. Analysis of the GAIN Americas and GAIN International Studies. Eur J Neurology. 2012; 19:718-724.

- 89. McHughen SA, Pearson-Fuhrhop K, Ngo VK, **Cramer SC**. Intense training overcomes effects of the val<sup>66</sup>met BDNF polymorphism on short-term plasticity. Experimental Brain Research 2011; 213:415-422.
- 90. Riley JD, Moore S, **Cramer SC**, Lin JJ. Caudate atrophy and impaired frontostriatal connections are linked to executive dysfunction in temporal lobe epilepsy. Epilepsy & Behavior. 2011; 21:80-87.
- 91. Nouri S, **Cramer SC**. Anatomy and physiology predict response to motor cortex stimulation post-stroke. Neurology 2011; 77:1076-1083.
- 92. McHughen SA, **Cramer SC**. The BDNF val<sup>66</sup>met polymorphism is not related to motor function or short-term cortical plasticity in elderly subjects. Brain Research. 2013; 1495:1-10.
- 93. Pearson-Fuhrhop KM, Minton B, Acevedo D, Shahbaba B, **Cramer SC**. Genetic variation in the human brain dopamine system influences motor learning and its modulation by L-Dopa. PLoS ONE. 2013; 8(4):e61197 (12 pages).
- 94. **Cramer SC**, Stradling D, Brown DM, Carrillo-Nunez IM, Ciabarra A, Cummings M, Dauben R, Lombardi DL, Patel N, Traynor EN, Waldman S, Miller K, Stratton SJ. Organization of a U.S. county system for comprehensive acute stroke care. Stroke 2012; 43:1089-1093.
- 95. Reinkensmeyer DJ, Wolbrecht ET, Chan V, Chou C, Cramer SC, Bobrow JE. Comparison of three-dimensional, assist-as-needed robotic arm/hand movement training provided with Pneu-WREX to conventional tabletop therapy after chronic stroke. Am J Phys Med & Rehab. 2012; 91(11 Suppl 3):S232-41.
- 96. Lee J-Y, King C, Stradling D, Warren M, Nguyen D, Lee J, Riola MA, Montoya M, Patel D, Le VH, Welbourne SJ, **Cramer, SC**. Influence of hematoma location on acute mortality after intracerebral hemorrhage. Journal of Neuroimaging. 2014. 2014; 24:131-136.
- 97. See J, Der-Yeghiaian L, Chou C, Chan V, McKenzie A, Reinkensmeyer DJ, **Cramer SC**. A standardized approach to the Fugl-Meyer assessment and its implications for clinical trials. Neurorehabil Neural Repair. 2013; 27:732-741.
- 98. Stewart JC, **Cramer SC**. Patient-reported measures provide unique insights into motor function after stroke. Stroke. 2013; 44:1111-1116.
- 99. Cramer SC, Abila B, Scott NE, Simeoni M, Enney LA, on behalf of the MAG111539 study investigators. Safety, pharmacokinetics, and pharmacodynamics of escalating repeat doses of GSK249320 in patients with stroke. Stroke. 2013; 44:1337-1342.
- 100. Mousavi Hondori H, Khademi M, Dodakian L, **Cramer SC**, Lopes CV. A spatial augmented reality rehab system for post-stroke hand rehabilitation. Stud Health Technol Inform. 2013; 184:279-85.
- 101. Hagerty MR, Isaacs I, Brasington L, Shupe L, Fetz EE, **Cramer SC**. Case study of ecstatic meditation: fMRI and EEG evidence of self-stimulating a reward system. Neural Plasticity. 2013: 653572 (12 pages).

- 102. Dodakian L, Sharp KG, See J, Abidi NS, Mai M, Fling BW, Le VH, **Cramer SC**. Targeted engagement of a dorsal premotor circuit in the treatment of post-stroke paresis. NeuroRehabilitation. 2013; 33:13-24.
- 103. Gorrostieta C, Fiecas M, Ombao H, Burke E, **Cramer S**. Hierarchical vector autoregressive models and their applications to multi-subject effective connectivity. Front Comput Neurosci. 2013; 7; article 159 (11 pages).
- 104. Stewart JC, Tran X, **Cramer SC**. Age-related variability in performance of a motor action selection task is related to differences in brain function and structure among older adults. Neuroimage. 2014; 86:326-334.
- 105. Pearson-Fuhrhop KM\*, Dunn EC\*, Mortero S, Devan WJ, Falcone GJ, Holmes AJ, Hollinshead MO, Roffman JL, Smoller JW, Rosand J, **Cramer SC**. Dopamine gene score predicts depressive symptoms in healthy adults and adults with depression. PLoS ONE. 2014; 9(5):e93772 (9 pages).
- 106. Fling BW, Riley JD, **Cramer SC**, Lin JJ. Altered organization of face processing networks in temporal lobe epilepsy. Epilepsia. 2015; 56:762-771.
- 107. Milot M-H, Spencer SJ, Chan J, Allington JP, Klein J, Chou C, Pearson-Fuhrhop K, Bobrow JE, Reinkensmeyer DJ, **Cramer SC**. Corticospinal excitability as a predictor of functional gains at the affected upper limb following robotic training in chronic stroke survivors. Neurorehabil Neural Repair. 2014; 28:819-827.
- 108. Wu J, Srinivasan R, Kaur A, **Cramer SC**. Resting-state cortical connectivity predicts motor skill acquisition. Neuroimage. 2014; 91:84-90.
- 109. Barton B, Treister A, Humphrey M, Abedi G, **Cramer SC**, Brewer AA. Paradoxical visuomotor adaptation predicted by BDNF Val66Met polymorphism affecting plasticity. Journal of Vision. 2014 Aug 7;14(9). (4 pages).
- 110. **Cramer SC**, Hill MD, for the REGENESIS-LED investigators. Human choriogonadotropin and Epoetin alfa in acute ischemic stroke patients (REGENESIS-LED Trial). Int J Stroke. 2014; 9:321-327.
- 111. Burke E, Dodakian L, See J, McKenzie A, Riley J, Le V, **Cramer SC**. A multimodal approach to understanding motor impairment and disability after stroke. Journal of Neurology. 2014; 261:1178-1186.
- 112. Dodakian L, Stewart JC, **Cramer SC**. Motor imagery during movement activates the brain more than movement alone after stroke: a pilot study. J Rehab Med. 2014;46:843-848.
- 113. Milot M-H, Spencer SJ, Chan V, Allington JP, Klein J, Chou C, Bobrow JE, Cramer SC, Reinkensmeyer DJ. A crossover pilot study evaluating the functional outcomes of two different types of robotic movement training in stroke survivors using the arm exoskeleton BONES. J NeuroEngin Rehab. 2013; 10:112 (12 pp).

- 114. Sharp K, Gramer R, Butler L, **Cramer SC**, Hade E, Page SJ. Effect of overground training augmented by mental practice on gait velocity in chronic, incomplete SCI. Arch Phys Med Rehabil. 2014; 95:615-621.
- 115. Burke Quinlan E, Dodakian L, See J, McKenzie A, Le V, Wojnowicz M, Shahbaba B, **Cramer SC**. Neural function, injury, and stroke subtype predict treatment gains after stroke. Ann Neurology. 2015; 77:132-145.
- 116. Zondervan DK, Augsburger R, Bodenhoefer B, Friedman N, Reinkensmeyer DJ, **Cramer SC**. Machine-based, self-guided home therapy for individuals with severe arm impairment after stroke: a randomized controlled trial. Neurorehabil Neural Repair. 2015; 29:395-406.
- 117. Burke E, Dobkin BH, Noser EA, Enney LA, Cramer SC. Predictors and biomarkers of treatment gains in a clinical stroke trial targeting the lower extremity. Stroke. 45:2379-2384.
- 118. Wu J, Burke E, Dodakian L, McKenzie A, Kathuria N, Zhou R, Ausberger R, See J, Le VH, Srinivasan R, **Cramer SC**. Connectivity measures are robust biomarkers of cortical function and plasticity after stroke. Brain. 2015; 138:2359-2369.
- 119. Mousavi Hondori HM, Khademi M, Dodakian L, McKenzie A, Lopes CV, **Cramer, SC**. Choice of human–computer interaction mode in stroke rehabilitation. Neurorehabil Neural Repair. 2016; 30:258-265.
- 120. Levy RM, Harvey RL, Kissela BM, Winstein CJ, Lutsep HL, Parrish TB, **Cramer SC**, Venkatesan L. Epidural cortical stimulation for stroke rehabilitation: results of the prospective, multicenter, randomized, single-blinded Everest trial. Neurorehabil Neural Repair. 2016; 30: 107-119.
- 121. Barbay S, Plautz EJ, Zoubina E, Frost SB, **Cramer SC**, Nudo, RJ. Effects of post-infarct MAG antibody treatment on motor recovery and motor map plasticity in squirrel monkeys. Stroke. 2015; 46:1620-1625.
- 122. Malcolm M, Enney L, **Cramer SC**. Methods for an international randomized clinical trial to investigate the effect of GSK249320 on motor cortex neurophysiology using transcranial magnetic stimulation in survivors of stroke. Journal of Clinical Trials. 2014; 4:1-9.
- 123. McCrimmon C, King C, Wang P, **Cramer SC**, Nenadic Z, Do A. Brain-controlled functional electrical stimulation therapy for gait rehabilitation after stroke: a safety study. The Journal of NeuroEngineering and Rehabilitation. 2015;12:57 (12 pages).
- 124. Kim DY, Quinlan EB, Gramer R, **Cramer SC**. BDNF val<sup>66</sup>met polymorphism is related to motor system function after stroke. Physical Therapy. 2016; 96:533-539.
- 125. Ingemanson ML, Rowe JB, Chan V, Wolbrecht ET, **Cramer SC**, Reinkensmeyer DJ. Use of a robotic device to measure age-related decline in finger proprioception. Exp Brain Res. 2016;234: 83-93.
- 126. Ngo D, Sun Y, Genton MG, Wu J, Srinivasan R, Cramer SC, Ombao, H. An exploratory

- data analysis of electroencephalograms using the functional boxplots approach. Frontiers in Neuroscience. 2015;9:282 (18 pages).
- 127. Zondervan DK, Friedman N, Chang E, Zhao X, Augsburger R, Reinkensmeyer DJ, **Cramer SC**. Home-based hand rehabilitation after chronic stroke: a randomized controlled single-blind trial comparing the MusicGlove with a conventional exercise program. Journal of Rehabilitation Research and Development. 2016; 53:457-472.
- 128. Dawson J, Pierce D, Dixit A, Kimberley TJ, Robertson M, Tarver B, Hilmi O, McLean J, Forbes K, Kilgard MP, Rennaker RL, **Cramer SC**, Walters M, Engineer N. Safety, Feasibility and efficacy of vagus nerve stimulation paired with upper limb rehabilitation following ischemic stroke. Stroke. 2016;47: 143-150.
- 129. Yu Z, Prado R, Quinlan E, **Cramer SC**, Ombao H. Understanding the Impact of Stroke on Brain Motor Function: A Hierarchical Bayesian Approach. Journal of the American Statistical Association. 2016; 111:549-563.
- 130. Norman SL, Dennison M, Wolbrecht E, **Cramer S**, Srinivasan R, and Reinkensmeyer DJ. Movement anticipation and EEG: implications for BCI-contingent robot therapy. IEEE Transactions on Neural Systems and Rehabilitation Engineering. 2016; 24:911-919.
- 131. Stewart JC, Dewanjee P, Shariff U, Cramer SC. Dorsal premotor activity and connectivity relate to action selection performance after stroke. Human Brain Mapping. 2016; 37:1816-1830.
- 132. MacDonald HJ, Stinear CM, Ren A, Coxon JP, Kao J, Macdonald L, Snow B, **Cramer SC**, Byblow WD. Dopamine gene profiling to predict impulse control and effects of dopamine agonist ropinirole: a proof of concept study. Journal of Cognitive Neuroscience. 2016; 28:909-919.
- 133. Wu J, Srinivasan R, Quinlan EB, Solodkin A, Small SL, **Cramer SC**. Utility of EEG measures of brain function in patients with acute stroke. J Neurophysiology. 2016; 115:2399-2405.
- 134. Onishi K, Karimi DP, Hata J, Newcomb R, Cramer S, Sharp K, Reinkensmeyer D, Adcock E. The Badges Program: a self-directed learning guide for residents for conducting research and a successful peer-reviewed publication. MedEdPORTAL Publications. 2016;12:10443.
- 135. McKenzie A, Dodakian L, See J, Le V, Quinlan EB, Bridgford C, Head D, Han VL, Cramer SC. Validity of Robot-based Assessments of Upper Extremity Function. Arch Phys Med Rehab. 2017; 98:1969-1976.
- 136. Sharp KG, Gramer R, Page SJ, Cramer SC. Increased Brain Sensorimotor Network Activation After Incomplete Spinal Cord Injury. Journal of Neurotrauma. 2017; 34:623-631.
- 137. Chiu NL, Kaiser B, Nguyen YV, Welbourne S, Lall C, **Cramer SC**. The Volume Of The Spleen And Its Correlates After Acute Stroke. Journal of Stroke and Cerebrovascular Diseases. J Stroke Cerebrovasc Dis. 2016;25:2958-2961.
- 138. Cramer SC, Enney LA, Russell CK, Simeoni M, Thompson TR. Proof-of-Concept

- Randomized Trial of the Monoclonal Antibody GSK249320 Versus Placebo in Stroke Patients. Stroke. 2017; 48:692-698.
- 139. Stewart JC, Dewanjee P, Tran G, Quinlan EB, Dodakian L, McKenzie A, See J, Cramer SC. Role of corpus callosum integrity in arm function differs based on motor severity after stroke. NeuroImage: Clinical. 2017; 14:641–647.
- 140. Cash D, Easton AC, Mesquita M, Beech J, Williams S, Lloyd A, Irving E, **Cramer SC**. GSK249320, a monoclonal antibody against the axon outgrowth inhibition molecule myelin-associated glycoprotein, improves outcome of rodents with experimental stroke. J Neurology Exp Neuroscience. 2016; 2:28-33.
- 141. Rowe JB, Chan V, Ingemanson ML, Cramer SC, Wolbrecht EG, Reinkensmeyer DJ. Robotic assistance for training finger movement using a Hebbian model: A randomized controlled trial. Neurorehabil Neural Repair. 2017; 31:769-780.
- 142. Dodakian L, McKenzie AL, Le V, See J, Pearson-Fuhrhop K, Quinlan EB, Zhou RJ, Augsberger R, Tran XA, **Cramer SC**. A home-based telerehabilitation program for patients with stroke. Neurorehabil Neural Repair. 2017; 31:923-933.
- 143. Juth V, Chan MK, Cramer SC, Holman AE. Assessing acute psychological distress in the immediate aftermath of stroke. European Journal of Cardiovascular Nursing. 2018; 17:186-189.
- 144. Wu J, Knapp F, **Cramer SC**, Ramesh Srinivasan R. Electroencephalographic connectivity measures predict learning of a motor sequencing task. J Neurophysiology. 2018; 119:490-498.
- 145. Cassidy JM, Tran G, Quinlan EB, **Cramer SC**. Neuroimaging identifies patients most likely to respond to a restorative stroke therapy. Stroke. 2018; 49:433-438.
- 146. Liew S-L, Anglin J, Bank N, Sondag M, Ito K, Kim H, Chan J, Ito J, Jung C, Khoshab N, Lefebvre S, Nakamura W, Saldana D, Schmiesing A, Tran C, Vo D, Ard T, Heydari P, Kim B, Aziz-Zadeh L, **Cramer SC**, Liu J, Soekadar S, Nordvik J, Westlye LT, Wang J, Winstein C, Yu C, Ai L, Koo B, Craddock C, Milham M, Lakich M, Pienta A, Stroud A. A large, open source dataset of stroke anatomical brain images and manual lesion segmentations. Scientific Data. 2018; 5:180011 (11 pages).
- 147. Raychev RI, Stradling D, Patel N, Gee JR, Lombardi DA, Moon JL, Brown DM, Pathak M, Yu W, Stratton SJ, **Cramer SC**. Evolution Of A U.S. County System for Acute Comprehensive Stroke Care. Stroke. 2018; 49:1217-1222.
- 148. Quinlan EB, Dodakian L, See J, McKenzie A, Stewart JC, **Cramer SC**. Biomarkers of rehabilitation therapy vary according to stroke severity. Neural Plasticity. 2018 Mar 12; 2018:9867196.
- 149. Wolbrecht ET, Rowe JB, Chan V, Ingemanson ML, **Cramer SC**, Reinkensmeyer DJ. Finger Strength, Individuation, and their Interaction: Relationship to Hand Function and Corticospinal Tract Injury after Stroke. Clinical Neurophysiology. 2018; 129:797-808.
- 150. Zhou RJ, Hondori HM, Khademi M, Cassidy JM, Wu KM, Yang DZ, Kathuria N, Erani F,

- Dodakian L, McKenzie A, Lopes CV, Scacchi W, Srinivasan R, **Cramer SC**. Predicting gains with visuospatial training after stroke using an EEG measure of frontoparietal circuit function. Frontiers in Neurology. 2018 Jul 24; 9:597.
- 151. Kimberley TJ, Pierce D, Prudente CN, Francisco GE, Yozbatiran N, Smith P, Wiggington J, Tarver B, Engineer N, Dickie D, Kline D, **Cramer SC**, Dawson J. Vagus nerve stimulation (VNS) paired with rehabilitation for improved upper limb motor function after stroke: a blinded randomized pilot study. Stroke. 2018; 49:2789-2792.
- 152. Norman SL, McFarland DJ, Miner A, Cramer SC, Wolbrecht, ET, Wolpaw, JR, Reinkensmeyer, DJ. Controlling Pre-Movement Sensorimotor Rhythm Can Improve Finger Extension after Stroke. Journal of Neural Engineering. 2018; 15(5):056026.
- 153. Milot MH, Marchal-Crespo L, Beaulieu L-D, Reinkensmeyer DJ, **Cramer SC**. Neural circuits activated by error amplification and haptic guidance training techniques during performance of a timing-based motor task by healthy individuals. Exp Brain Res. 2018; 236:3085-3099.
- 154. Ito KL, Kumar A, Zavnliangos-Petropulu A, **Cramer SC**, Liew S-L. Pipeline for Analyzing Lesions after Stroke (PALS). Frontiers in Neuroinformatics. 2018; 12:63.
- 155. Shreve L\*, Kaur A\*, Vo C, Wu JC, Cassidy JM, Nguyen A, Zhou RJ, Tran TB, Yang DZ, Medizade AI, Chakravarthy B, Hoonpongsimanont W, Barton E, Yu W, Srinivasan R, Cramer SC. Electroencephalography measures are useful for identifying large acute ischemic stroke in the Emergency Department. Journal of Stroke and Cerebrovascular Diseases. 2019; 28:2280-2286.
- 156. Ingemanson ML, Rowe JR, Chan V, Wolbrecht ET, Reinkensmeyer DJ, Cramer SC. Somatosensory system integrity explains differences in treatment response after stroke. Neurology. 2019; 92:e1098-e1108.
- 157. Ingemanson ML, Rowe JR, Chan V, Riley JD, Wolbrecht ET, Reinkensmeyer DJ, Cramer SC. Neural correlates of proprioception deficits after stroke. Neurorehabil Neural Repair. 2019; 33:740-750.
- 158. Levy ML, Crawford JR, Dib N, Verkh L, Tankovich N, **Cramer SC**. A Phase I/II study of safety and preliminary efficacy of intravenous allogeneic mesenchymal stem cells in chronic stroke. Stroke. 2019; 50:2835-2841.
- 159. 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; 50:3569-3577.
- 160. Kimberley TJ, Prudente CN, Engineer ND, Pierce D, Tarver B, **Cramer SC**, Dickie DA, Dawson J. Study protocol for a pivotal randomized study assessing vagus nerve stimulation (VNS) during rehabilitation for improved upper limb motor function after stroke (VNS-REHAB). European Stroke Journal. 2019; 4:363-377.

- 161. **Cramer SC**, Dodakian L, Le V, See J, Augsburger R, McKenzie A, Zhou RJ, Chiu NL, Heckhausen J, Cassidy JM, Scacchi W, Smith MT, Barrett AM, Knutson J, Edwards D, Putrino D, Agrawal K, Ngo K, Roth EJ, Tirschwell DL, Woodbury ML, Zafonte R, Zhao W, Spilker J, Wolf SL, Broderick JP, Janis S, PhD, for the NIH StrokeNet Telerehab Investigators. Telerehabilitation in the Home Versus Therapy In-Clinic After Stroke. JAMA Neurology. 2019; 76:1079-1087.
- 162. Chen Y, Chen Y, Zheng K, Dodakian L, See J, Zhou R, Chiu C, Augsburger R, McKenzie A, **Cramer SC**. A qualitative study on the user acceptance of a home-based stroke telerehabilitation system. Topics in Stroke Rehabilitation. 2020; 27:81-92.
- 163. Sanders Q, Chan V, Augsburger R, **Cramer SC**, Reinkensmeyer DM, Do AH. Feasibility of Wearable Sensing for In-Home Finger Rehabilitation Early After Stroke. IEEE Trans Neural Syst Rehabil Eng. 2020; 28:1363-1372.
- 164. Cassidy JM, Wodeyar A, Wu J, Kaur K, Masuda AK, Srinivasan R, Cramer SC. Low frequency oscillations are a biomarker of injury and recovery after stroke. Stroke. 2020; 51:1442-1450.
- 165. Dawson J, Engineer ND, Prudente CN, Pierce D, Francisco G, Yozbatiran N, Tarver WB, Casavant R, Kline D, **Cramer SC**, Van de Winckel A, Kimberley TJ. Vagus Nerve Stimulation Paired with Upper Limb Rehabilitation After Stroke: One-year Follow-up. Neurorehabil Neural Repair. 2020; 34:609-615.
- 166. Wodeyar A, Cassidy JM, Cramer SC, Srinivasan R. Damage to the structural connectome reflected in resting state fMRI functional connectivity. Network Neuroscience. 2020; 4:1197-1218.
- 167. Erani F, Zolotova N, Vanderschelden B, Khoshab N, Sarian H, Nazarzai L, Wu J, Chakravarthy B, Hoonpongsimanont W, Yu W, Shahbaba B, Srinivasan R, **Cramer SC**. EEG Might Improve Diagnosis of Acute Stroke and Large Vessel Occlusion. Stroke. 2020; 51:3361-3365.
- 168. Wu J, Dodakian L, See J, Burke Quinlan E, Meng L, Abraham J, Chang E, Le V, McKenzie A, **Cramer SC**. Gains across WHO dimensions of function after robot-based therapy in stroke subjects. Neurorehabil Neural Repair. 2020; 34:1150-1158.
- 169. Liew, S-L, Zavaliangos-Petropulu A, Jahanshad N, Lang CE, Hayward KS, Lohse K, Juliano JM, Assogna F, Baugh LA, Bhattacharya AK, Borich MR, Boyd LA, Brodtmann A, Buetefisch CM, Byblow WD, Cassidy JM, Conforto AB, Craddock RC, Dimyan MA, Dula AN, Ermer E, Etherton MR, Fercho KA, Gregory CM, Hadidchi S, Holguin JA, Hwang DH, Jung S, Kautz SA, Khlif MS, Khoshab N, Kim B, Kim H, Kuceyeski A, Lotze M, MacIntosh BJ, Margetis JL, Mohamed FB, Piras F, Ramos-Murguialday A, Richard G, Roberts P, Robertson AD, Rondina JM, Rost NS, Sanossian N, Schweighofer N, Shiroishi MS, Soekadar SR, Spalletta G, Stinear CM, Suri A, Tang WKW, Thielman GT, Vecchio D, Villringer A, Ward NS, Werden E, Westlye LT, Winstein C, Wittenberg GF, Wong KA, Yu C, Cramer SC, and Thompson PM. The ENIGMA Stroke Recovery Working Group: Big data neuroimaging to study brain-behavior relationships after stroke. Human Brain Mapping. 2022; 43:129-148.

- 170. de Havenon A, Tirschwell D, Heitsch L, **Cramer SC**, Braun R, Cole J, Reddy V, Majersik JJ, Lindgren A, Worrall BB. Variability of the Modified Rankin Scale Score Between Day 90 and 1 Year after Ischemic Stroke. Neurology: Clinical Practice. 2021; 11:e239-e244.
- 171. Smith B, Lobo-Prat J, Zondervan D, Lew C, Chan V, Chou C, Toledo S, Reinkensmeyer D, Shaw S, **Cramer SC**. Using a bimanual lever-driven wheelchair for arm movement practice early after stroke: a pilot randomized, controlled, single-blind trial. Clinical Rehabilitation. Clin Rehabil. 2021; 35:1577-1589.
- 172. Lui KK, Nunez MD, Cassidy JM, Vandekerckhove J, **Cramer SC**, Srinivasan R. Timing of readiness potentials reflect a decision-making process in the human brain. Computational Brain & Behavior. 2021; 4:264–283.
- 173. Kawabori M, Weintraub AH, Imai H, Zinkevych L, McAllister P, Steinberg GK, Frishberg BM, Yasuhara T, Chen JW, Cramer SC, Achrol AK, Schwartz NE, Suenaga J, Lu D, Semeniv I, Nakamura H, Kondziolka D, Chida D, Kaneko T, Karasawa Y, Paadre S, Nejadnik B, Bates D, Stonehouse AH, Richardson M, Okonkwo DO. Cell Therapy for Chronic Motor Deficits Secondary to TBI: Interim Analysis of the STEMTRA Trial. Neurology. 2021; 96:e1202-14.
- 174. Mattke S, Cramer SC, Wang M, Bettger FP, Cockroft KM, Feng W, Jaffee M, Oyesanya T, Puccio AM, Temkin N, Winstein C, Wolf SL, Yochelson MR. Estimating Minimal Clinically Important Differences for Two Scales in Patients with Chronic Traumatic Brain Injury. Curr Med Res Opin. 2020; 36:1999-2007.
- 175. **Cramer** SC, Le V, Saver JL, Dodakian L, See J, Augsburger R, McKenzie A, Zhou RJ, Chiu NL, Heckhausen J, Cassidy JM, Scacchi W, Smith MT, Barrett AM, Knutson J, Edwards E, Putrino D, Agrawal K, Ngo N, Roth EJ, Tirschwell DL, Woodbury ML, Zafonte R, Zhao W, Spilker J, Wolf SL, Broderick JP, Janis S. Intense Arm Rehabilitation Therapy Improves the Modified Rankin Scale Score: Association Between Gains in Impairment and Function. Neurology. 2021; 96:e1812-e1822.
- 176. Dawson J, Liu CY, Francisco GE, **Cramer SC**, Wolf SL, Dixit A, Alexander J, Ali R, Brown BL, Feng W, DeMark L, Hochberg L, Kautz SA, Majid A, O'Dell MW, Pierce D, Prudente CN, Redgrave J, Turner DL, Engineer ND, and Kimberley TJ. Vagus Nerve Stimulation Paired with Rehabilitation for Upper Limb Motor Function After Ischaemic Stroke (VNS-REHAB): A Randomised, Blinded, Pivotal, Device Trial. Lancet. 2021; 397:1545-1553.
- 177. Braun RG, Heitsch L, Cole JW, Lindgren AG, de Havenon A, Dude JA, Lohse KR, **Cramer SC**, Worrall BB. What The Modified Rankin Isn't Ranking: Domain-Specific Outcomes for Stroke Clinical Trials. Neurology. 2021; 97:367-377.
- 178. Cho Y, Heckhausen J, Hamm JM, **Cramer SC**. The role of goal adjustment during rehabilitation from stroke. Appl Psychol Health Well Being. 2022; 14:26-43.
- 179. Peterson C, Wong K-H, Stulberg E-L, Taylor K, **Cramer SC**, de Havenon AH. Effect of Pre-Morbid Anxiolytic Medications on Ischemic Stroke Functional Outcome. Stroke. 2021; 52:e51-e52.
- 180. Podury A, Raefsky SM, Dodakian L, McCafferty L, Le V, McKenzie A, See J, Zhou R,

- Nguyen T, Vanderschelden B, Wong G, Nazarzai L, Heckhausen J, **Cramer SC**, Dhand A. Social Network Structure is Related to Functional Improvement from Home-Based Telerehabilitation After Stroke. Frontiers in Neurology. 2021; 12:603767.
- 181. **Cramer SC**, Dodakian L, Le V, McKenzie A, See J, Augsburger R, Zhou RJ, Raefsky SM, Nguyen T, Vanderschelden B, Wong G, Bandak D, Nazarzai L, Dhand A, Scacchi W, Heckhausen J. A Feasibility Study Of Expanded Home-Based Telerehabilitation After Stroke. Frontiers in Neurology. 2021; 11:611453.
- 182. Paik SM, **Cramer SC**. Predicting Motor Gains with Home-based Telerehabilitation after Stroke. Journal of Telemedicine and Telecare. 2023; 29:799–807.
- 183. Cassidy JM, Wodeyar A, Srinivasan R, Cramer SC. Coherent Neural Oscillations Inform Early Stroke Motor Recovery. Human Brain Mapping. 2021; 42:5636-5647.
- 184. Lin DJ, Erler KS, Snider SB, Bonkhoff AK, DiCarlo J, Lam N, Ranford J, Parlman K, Cohen A, Freeburn J, Finklestein SP, Schwamm LG, Hochberg LR, **Cramer SC**. Cognitive Demands Influence Upper Extremity Motor Performance during Recovery from Acute Stroke. Neurology. 2021; 96:e2576-e2586.
- 185. McCrea M, Cramer SC, Okonkwo DO, Mattke S, Paadre S, Bates D, Nejadnik B, Giacino JT. Determining Minimally Clinically Important Differences for Outcome Measures in Patients with Chronic Motor Deficits Secondary to Traumatic Brain Injury. Expert Review of Neurotherapeutics. 2021; 21:1051-1058.
- 186. de Havenon A, Heitsch L, Sunmonu NA, Braun R, Lohse KR, Cole JW, Mistry E, Lindgren A, Worrall BB, and **Cramer SC**. Accurate Prediction of Persistent Upper Extremity Impairment in Patients with Ischemic Stroke. Arch Phys Med Rehabil. 2022; 103:964-969.
- 187. **Cramer SC**, See J, Liu B, Edwardson M, Wang X, Radom-Aizik S, Haddad F, Shahbaba B, Wolf SL, Dromerick AW, Winstein CJ. Genetic Factors, Brain Atrophy, and Response to Motor Rehabilitation after Stroke. Neurorehabil Neural Repair. 2022; 36:131-139.
- 188. Sanders Q, Chan V, Augsburger R, **Cramer SC**, Reinkensmeyer DJ, Sharp K. Feasibility of Home Hand Rehabilitation Using MusicGlove after Chronic Spinal Cord Injury. Spinal Cord Series and Cases. Spinal Cord Ser Cases. 2022; 8:86.
- 189. Ito KL, Kim B, Liu J, Soekadar SR, Winstein C, Yu C, Cramer SC, Schweighofer N, Liew S-L. Corticospinal tract lesion load originating from both ventral premotor and primary motor cortices predicts post-stroke motor severity. Neurorehabil Neural Repair. 2022; 36:179-182.
- 190. Erler KS, Wu R, DiCarlo JA, Petrilli MF, Gochyyev P, Hochberg LR, Kautz SA, Schwamm LH, **Cramer SC**, Finklestein SP, and Lin DJ. Association of Modified Rankin Scale with Recovery Phenotypes in Patients with Upper Extremity Weakness after Stroke. Neurology. 2022; 98:e1877-e1885.
- 191. Liew S-L, Lo B, Donnelly M, =Zavaliangos-Petropulu A, Jeong J, Barisano G, Hutton A, Simon J, Anglin J, Suri A, Ard T, Banaj N, Borich M, Boyd L, Brodtmann A, Buetefisch C, Cao L, Cassidy J, Ciullo V, Conforto A, **Cramer S**, Dacosta-Aguayo R, de la Rosa E, Domin M,

- Dula A, Feng W, Franco A, Geranmayeh F, Gramfort A, Gregory C, Hanlon C, Hordacre B, Kautz S, Khlif MS, Kim H, Kirschke J, Liu J, Lotze M, MacIntosh B, Mataró M, Mohamed F, Nordvik J, Park G, Pienta A, Piras F, Redman S, Revill K, Reyes M, Robertson A, Seo NJ, Soekadar S, Spalletta G, Stroud A, Telenczuk M, Thielman G, Westlye LT, Winstein C, Wittenberg G, Wong K, and Yu C. A large, curated, open-source stroke neuroimaging dataset to improve lesion segmentation algorithms. Scientific Data. 2022; 9:320.
- 192. Liew S-L, Zavaliangos-Petropulu A, Schweighofer N, Jahanshad N, Lang CE, Lohse KR, Banaj N, Barisano G, Baugh LA, Bhattacharya AK, Bigjahan B, Borich MR, Boyd LA, Brodtmann A, Buetefisch CM, Byblow WD, Cassidy JM, Ciullo V, Conforto AB, Craddock RC, Egorova N, Fercho KA, Gregory CM, Hanlon CA, Hayward KS, Holguin JA; Hordacre B, Hwang DH, Kautz SA, Khlif MS, Kim B, Kim H, Kuceyeski A, Lin D, Lotze M, MacIntosh BJ, Margetis JL; Mohamed FB, Nordvik JE, Petoe MA, Piras F, Raju S, Ramos-Murguialday A, Revill KP, Roberts P, Robertson AD, Schambra HM, Seo NJ, Shiroishi MS, Soekadar SR, Spalletta G, Stinear CS, Suri A, Tang WK, Thielman GT, Thijs VN, Vecchio D, Ward NS, Westlye LT, Winstein CJ, Wittenberg GF, Wong KA, Yu C, Wolf SL, Cramer SC, Thompson PM. Smaller spared subcortical nuclei are associated with worse post-stroke sensorimotor outcomes in 28 cohorts worldwide. Brain Communications. 2021; 3:fcab254.
- 193. Zavaliangos-Petropulu A, Lo B, Donnelly MR, Schweighofer N, Keith Lohse, Jahanshad N, Barisano G, Banaj N, Borich MR, Boyd LA, Buetefisch CM, Byblow WD, Cassidy JM, Charalambous CC, Conforto AB, DiCarlo JA, Dula AN, Egorova-Brumley N, Etherton MR, Feng W, Fercho KA, Geranmayeh F, Hanlon CA, Hayward KS, Hordacre B, Kautz SA, Khlif MS, Kim H, Kuceyeski A, Lin DJ, Lotze M, Liu J, MacIntosh BJ, Margetis JL, Piras F, Ramos-Murguialday A, Revill KP, Roberts PS, Robertson AD, Schambra HM, Seo NJ, Shiroishi MS, Soekadar SR, Spalletta G, Taga M, Tang WK, Thielman GT, Vecchio D, Ward NS, Westlye LT, Werden E, Winstein C, Wittenberg GF, Wolf SL, Wong KA, Yu C, Brodtmann A, Cramer SC, Thompson PM, Liew S-L Chronic stroke sensorimotor impairment is related to smaller hippocampal volumes: An ENIGMA analysis. Journal of the American Heart Association. 2022; 11:e025109.
- 194. Hayward K, Ferris JF, Lohse KR, Borich MR, Borstad A, Cassidy JM, **Cramer SC**, Dukelow SP, Findlater SE, Hawe RL, Liew S-L, Neva JL, Stewart JC, and Boyd LA. Observational Study of Neuroimaging Biomarkers of Severe Upper Limb Impairment After Stroke. Neurology. 2022; 99:e402-13.
- 195. Schuch CP, Lam TK, Baniña MC, Levin MF, Cramer SC, Swartz R, Thiel A, Chen JL. A comparison of lesion-overlap approaches to quantify corticospinal tract involvement in chronic stroke. Journal of Neuroscience Methods. 2022; 376:109612.
- 196. Chen Y, Park SY, Gui X, Cramer SC, Zheng K, Chen Y. Challenges and patient strategies in seeking health services for chronic stroke: A qualitative study. Int J Healthcare. 2022; 8:36-50.
- 197. Taleb S, Lee JJ, Duncan P, **Cramer SC**, Bahr-Hosseini M, Su M, Starkman S, Avila G, Hochberg A, Hamilton S, Conwit RA, Saver JL. Essential Information for Neurorecovery Clinical Trial Design: Trajectory of Global Disability in First 90 Days Poststroke in Patients Discharged to Acute Rehabilitation Facilities. BMC Neurology. 2023; 23:239.
- 198. Dawson J, Engineer ND, Cramer SC, Wolf SL, Ali R, O'Dell MW, Pierce D, Prudente

- CN, Redgrave J, Feng W, Liu CY, Francisco GE, Brown BL, Dixit A, Alexander J, DeMark L, Majid A, Tarver B, Turner DL, Kimberley TJ. Vagus Nerve Stimulation Paired with Rehabilitation for Upper Limb Motor Impairment Function After Ischemic Stroke: Sub-group Analysis of the VNS-REHAB Trial. Neurorehab Neural Repair. 2023; 37:367-373.
- 199. Schwerz de Lucena D, Rowe JB, Okita S, Chan V, **Cramer SC**, Reinkensmeyer DJ. Providing real-time wearable feedback to increase hand use after stroke: a randomized, controlled trial. Sensors. 2022; 22:6938.
- 200. Vanderschelden B, Erani F, Wu J, de Havenon A, Srinivasan R, Cramer SC. A measure of neural function provides unique insights into behavioral deficits in acute stroke. Stroke. 2023; 54:e25-e29.
- 201. Edwards D, Kumar S, Brinkman L, Cardoso Ferreira I, Esquenazi A, Nguyen T, Su M, Stein S, May J, Hendrix A, Finley C, Howard E, **Cramer SC**. Telerehabilitation initiated early in post-stroke recovery: A feasibility study. Neurorehab Neural Repair. 2023; 37:131-141.
- 202. Smith JA, Tain R, Sharp KG, Glynn LM, Van Dillen LR, Henslee K, Jacobs JV, Cramer SC. Identifying the neural correlates of anticipatory postural control: a novel fMRI paradigm. Human Brain Mapping. 2023; 44:4088-4100.
- 203. Young BM, Holman EA, **Cramer SC**, on behalf of the STRONG Study Investigators. Rehabilitation Therapy Doses Are Low After Stroke And Predicted By Clinical Factors. Stroke. 2023; 54831-839.
- 204. Young BM, Yadav R, Rana S, Kim W-S, Liu C, Batth R, Sakthi S, Farahmand E, Han S, Patel D, Luo J, Ramsey C, Feldman M, Cardoso-Ferreira I, Holl C, Nguyen T, Brinkman L, Su M, Chang, TY, **Cramer SC**. Wrist Proprioception in Adults With and Without Subacute Stroke. Brain Sciences. 2022; 13:31.
- 205. Liew S-L, Schweighofer N, Cole JH, Zavaliangos-Petropulu A, Lo BP, Han LKM, Hahn T, Schmaal L, Donnelly MR, Jeong JN, Wang Z, Abdullah A, Kim JH, Hutton A, Barisano G, Borich MR, Boyd LA, Brodtmann A, Buetefisch CM, Byblow WD, Cassidy JM, Charalambous CC, Ciullo V, Conforto AB, Dacosta-Aguayo R, DiCarlo JA, Domin M, Dula AN, Egorova-Brumley N, Feng W, Geranmayeh F, Gregory CM, Hanlon CA, Hayward KS, Holguin JA, Hordacre B, Jahanshad N, Kautz SA, Khlif MS, Kim H, Kuceyeski A, Lin DJ, Liu J, Lotze M, MacIntosh BJ, Margetis JL, Mataro M, Mohamed FB, Olafson ER, Park G, Piras F, Revill KP, Roberts P, Robertson AD, Sanossian N, Schambra HM, Seo NJ, Soekadar SR, Spalletta G, Stinear CM, Taga M, Tang WK, Thielman GT, Vecchio D, Ward NS, Westlye LT, Winstein CJ, Wittenberg GF, Wolf SL, Wong KA, Yu C, Cramer SC, and Thompson PM. Association of brain age, lesion volume, and functional outcome in patients with stroke. Neurology. 2023; 100:e2103-e2113.
- 206. Cho Y, Hamm JM, Heckhausen J, and **Cramer SC**. Downward Adjustment of Rehabilitation Goals May Facilitate Post-Stroke Arm Motor Recovery. Psychol Health. 2023; May 14:1-17.
- 207. de Havenon A, Bangad A, Skolarus LE, Aldridge CM, Braun RG, Cole JW, **Cramer SC**, Lindgren AG, Sunmonu NA, Worrall BB, and Lohse KR. Understanding Patterns of Missingness

- in Acute Ischemic Stroke trials: An Analysis of Pooled Participant Follow-up Data. Stroke. 2023; 54:e201-e202.
- 208. Francisco GE, Engineer N, Dawson J, Kimberley TJ, **Cramer SC**, Prudente CN, Pierce D, Tarver WB, Hinds RA, Van de Winckel A, and Yozbatiran N. Vagus Nerve Stimulation Paired with Upper-Limb Rehabilitation After Stroke: Two- and Three-Year Follow-up from the Pilot Study. Arch PMR. 2023; 104:1180-1187.
- 209. Lin DJ, Hardstone R, DiCarlo JA, McKiernan S, Snider SB, Jacobs H, Erler KS, Rishe K, Boyne P, Goldsmith J, Ranford J, Finklestein S, Schwamm LH, Hochberg LR, **Cramer SC**. Distinguishing Distinct Neural Systems for Proximal versus Distal Upper Extremity Motor Control after Acute Stroke. Neurology. 2023; 101:e347-e357.
- 210. Holman EA, **Cramer SC**, the STRONG Study team. Lifetime and acute stress predict functional outcomes following stroke: Findings from the longitudinal STRONG Study. Stroke. 2023; 54:2794-2803.
- 211. Aldridge CM, Braun R, Lohse K, de Havenon A, Cole JW, **Cramer SC**, Lindgren AG, Keene KL, Hsu F-C, Worrall BB. Genome-wide Association Studies of Three Distinct Recovery Phenotypes in Mild Ischemic Stroke. Neurology. 2024; 102:e208011.
- 212. Okonkwo DO, McAllister P, Achrol AS, Karasawa Y, Kawabori M, **Cramer SC**, Lai A, Kesari S, Frishberg BM, Groysman LI, Kim AS, Schwartz NE, Chen JW, Imai H, Yasuhara T, Chida D, Nejadnik B, Bates D, Stonehouse AH, Richardson RM, Steinberg GK, Poggio EC, Weintraub AH. Randomized Trial of Mesenchymal Stromal Cells for Chronic Brain Injury. Neurology. 2024; 103:e209797.
- 213. Olafson ER, Sperber C, Jamison KW, Bowren MD, Boes AD, Andrushko JW, Borich MR, Cassidy JM, Conforto AB, **Cramer SC**, Dula AN, Geranmayeh F, Hordacre B, Kautz SA, MacIntosh BJ, Piras F, Robinson AD, Seo NJ, Soekadar SR, Thomopoulos SI, Vecchio D, Weng TB, Westyle LT, Winstein CJ, Wittenberg GF, Wong KA, Thompson PM, Liew S-L, Kuceyeski A. Data-driven biomarkers outperform theory-based biomarkers in predicting stroke motor outcomes. Brain Commun. 2024; 6:fcae254.
- 214. **Cramer SC**, Parodi L, Moslemi Z, Braun R, Aldridge C, Shahbaba B, Rosand J, Holman EA, for the STRONG study investigators. Genetic Variation and Stroke Recovery: the STRONG Study. Stroke. 2024; 55:2094-2102.
- 215. de Havenon A, Viscoli C, Kleindorfer D, Sucharew H, Delic A, Becker C, Robinson D, Yaghi S, Li V, Lansberg MG, Cramer SC, Mistry EA, Sarpong DF, Kasner SE, Kernan W, Sheth KN. Underrepresentation of Disabled Subjects Reduces Power and Diversity in Stroke Prevention Trials. JAMA Netw Open. 2024; 7:e2423677.
- 216. Delcamp C, Chalard A, Srinivasan R, **Cramer SC**. Altered brain function during movement programming is linked with motor deficits after stroke: a high temporal resolution study. Front Neurosci. 2024; 18:1415134.
- 217. Biswas P, Dodakian L, Wang PT, Johnson CA, See J, Chan V, Chou C, Lazarous W, McKenzie AL, Reinkensmeyer DJ, Nguyen DV, Cramer SC, Do AH, Nenadic Z. A single-

- center, assessor-blinded, randomized controlled clinical trial to test the safety and efficacy of a novel Brain-Computer Interface Controlled Functional Electrical Stimulation (BCI-FES) intervention for gait rehabilitation in the chronic stroke population. BMC Neurology. 2024; 24:200.
- 218. Cho H, Benjaber M, Gkogkidis CA, Buchheit M, Ruiz-Rodríguez JF, Grannan BL, Weaver KE, Ko AL, **Cramer SC**, Ojemann JG, Denison T, Herron JA. Development and Evaluation of a Real-Time Phase-Triggered Stimulation Algorithm for the CorTec Brain Interchange. IEEE Transactions on Neural Systems and Rehabilitation Engineering (in press).
- 219. Wu M, Schwartz S, **Cramer SC**, Su M. Going down the rabbit hole: functional recovery from Alice in Wonderland Syndrome during rehabilitation therapy. A case report. SM J Case Rep. 2024; 10:3.
- 220. DiCarlo JA, Jaywant A, Gochyyev P, Bonkhoff, AK, Hardstone R, Erler KS, Ranford J, Cloutier A, Ward N, Sloane KL, Schwamm LH, **Cramer SC**, Lin DJ. Distinct Constructs Underlie Patient-Reported and Performance-Rated Outcomes after Stroke. Annals of Neurology. (in press).
- 221. Schwarz A, Feldman M, Le V, Dawson J, Liu CY, Francisco GE, Wolf SL, Dixit A, Alexander J, Ali R, Brown BL, Feng W, DeMark L, Hochberg LR, Kautz SA, Majid A, O'Dell MW, Redgrave J, Turner DL, Kimberley TJ, **Cramer SC**. Association between neuroimaging predictors and changes in arm impairment in a phase 3 stroke recovery trial. Annals of Neurology. (in press).

## Reviews and Invited Papers

- 1. **Cramer SC**. Stroke recovery: lessons from functional MRI and other methods of human brain mapping. Physical Medicine and Rehabilitation Clinics of North America 1999; 10:875-886.
- 2. **Cramer SC**. Effect of age on stroke recovery. "Ask the Experts" section, Stroke Connection Magazine, 2000 (Sept/Oct):19.
- 3. **Cramer SC**. Stroke recovery: how the computer reprograms itself (meeting report). Molecular Medicine Today 2000; 6:301-303.
- 4. **Cramer SC**. Does brain plasticity play a role in reducing disability related to demyelinating disease? International Journal of Multiple Sclerosis Care, 2000; 2:4-6.
- 5. **Cramer SC**. Functional magnetic resonance imaging in stroke recovery. Phys Med Rehabil Clin N Am 2003; 14:S47-55.
- 6. **Cramer SC**. Functional MRI after stroke: clinical issues and implications. Hospital Decisions International 2003 (Spring edition):155-158.

- 7. **Cramer SC**. Clinical issues in animal models of stroke and rehabilitation. ILAR Journal 2003; 44:83-84.
- 8. Schaechter JD, **Cramer SC**. Effects of experience after stroke on brain and behavior. Neurology Report 2003; 27(2):67-74.
- 9. **Cramer SC**. Implementing results of stroke recovery research into clinical practice. Stroke 2003; 34:1752-1753.
- 10. Cramer SC. Spasticity after stroke: what's the catch? Stroke 2004; 35:139-140.
- 11. Reinkensmeyer DJ, Emken JL, **Cramer SC**. Robotics, motor learning, and neurologic recovery. Annual Rev Biomed Eng 2004; 6:497-525.
- 12. **Cramer SC**. Changes in motor system function and recovery after stroke. Restorative Neurology and Neuroscience 2004; 22:231-238.
- 13. **Cramer SC**. PFO and its relationship to stroke. Cardiology Clinics of North America 2005; 23:7-11.
- 14. **Cramer SC**. Functional imaging in stroke recovery. Stroke. 2004;35[suppl I]:2695-2698.
- 15. Cavendish JJ, **Cramer SC**, Graham GD. Role of antiplatelet therapy in cardiovascular disease II: Ischemic stroke. Current Medical Research and Opinion 2004; 20 (11):1845–1849.
- 16. Members of Writing Committee (Baron JC, Cohen LG, **Cramer SC**, Dobkin BH, Johansen-Berg H, Loubinoux I, Marshall RS, Ward NS). Neuroimaging in stroke recovery: A position paper from the first international workshop on neuroimaging and stroke recovery. Cerebrovasc Dis 2004; 18:260-267.
- 17. **Cramer SC**. Patent foramen ovale and stroke: prognosis and treatment in young adults. J Thromb Thrombolysis 2005; 20:85-91.
- 18. Takahashi CD, Der Yeghiaian L, **Cramer SC**. Stroke recovery and its imaging. Clinics Neuroimaging N Am 2005; 15:681-95.
- 19. **Cramer SC.** Functional imaging and human brain neuroplasticity. Somatosensory Rehabilitation 2005; 4:50-51 (Guest Editor).
- 20. Hodics T, Cohen LG, **Cramer SC**. Functional imaging of intervention effects in stroke motor rehabilitation. Arch Phys Med Rehabil. 2006; 87 (12 Suppl):36-42.
- 21. Yozbatiran N, Cramer SC. Imaging motor recovery after stroke. NeuroRx 2006; 3:482-8.
- 22. **Cramer SC**, Koroshetz WJ, Finklestein SP. The case for modality-specific outcome measures in clinical trials in clinical trials of stroke recovery-promoting agents. Stroke 2007; 38:1393-1395.

- 23. **Cramer SC**. The EXCITE trial: a major step forward for restorative therapies in stroke. Stroke 2007; 38:2204-2205.
- 24. Tafti M, Cramer SC, Gupta, R. Orthopaedic management of the upper extremity of stroke patients. Journal of the American Academy of Orthopaedic Surgeons 2008; 16:462-470.
- 25. **Cramer SC**, Riley JD. Neuroplasticity and brain repair after stroke. Curr Opin Neurol. 2008; 21:76-82.
- 26. **Cramer SC**. Repairing the human brain after stroke. I. Mechanisms of spontaneous recovery. Ann Neurol 2008; 63:272-287.
- 27. **Cramer SC**. Repairing the human brain after stroke. II. Restorative therapies. Ann Neurol 2008; 63:549-560.
- 28. Cramer SC. Use of imaging in restorative stroke trials. Stroke 2009; 40 (3 Suppl):S28-9.
- 29. **Cramer SC**, Nudo RJ. Rehabilitation and Repair. Introduction, Princeton Conference Proceedings. Stroke 2009; 40 (3 Suppl):S27.
- 30. Milot M-H, **Cramer SC**. Biomarkers of recovery after stroke. Curr Opin Neurol 2008; 21:654-659.
- 31. **Cramer SC**. A window into the molecular basis of human brain plasticity. J Physiol 2008; 586:5601.
- 32. **Cramer SC**. The VECTORS study: when too much of a good thing is harmful. Neurology 2009; 73:170-171.
- 33. Pearson-Fuhrhop KM, Kleim JA, **Cramer SC**. Brain plasticity and genetic factors. Topics in Stroke Rehabilitation 2009; 6:282-299.
- 34. **Cramer SC**. Brain repair after stroke. New England Journal of Medicine 2010; 362:1827-1829.
- 35. **Cramer SC**. Stratifying patients with stroke in trials that target brain repair. Stroke 2010; 41 (10 Suppl):S114-6.
- 36. Pearson-Fuhrhop K, **Cramer SC**. Genetic influences on neural plasticity. PM&R 2010; 2 (12 Suppl 2):S227-40.
- 37. Hachinski V, Donnan GA, Gorelick PB, Hacke W, **Cramer SC**, Kaste M, Fisher M, Brainin M, Buchan AM, Lo EH, Skolnick BE, Furie KL, Hankey GJ, Kivipelto M, Morris J, Rothwell PM, Sacco RL, Smith SC Jr, Wang Y, Bryer A, Ford GA, Iadecola C, Martins SC, Saver J, Skvortsova V, Bayley M, Bednar MM, Duncan P, Enney L, Finklestein S, Jones TA, Kalra L, Kleim J, Nitkin R, Teasell R, Weiller C, Desai B, Goldberg MP, Heiss WD, Saarelma O, Schwamm LH, Shinohara Y, Trivedi B, Wahlgren N, Wong LK, Hakim A, Norrving B, Prudhomme S, Bornstein NM, Davis SM, Goldstein LB, Leys D, Tuomilehto J. Stroke: working toward a prioritized world agenda. Stroke 2010;41:1084-99.

- 38. Brainin M,Norrving B, Sunnerhagen KS, Goldstein LB, **Cramer SC**, Donnan GA, Duncan PW, Francisco G, Good D, Graham G, Kissela BM, Olver J, Ward A, Wissel J, Zorowitz R. Post Stroke Chronic Disease Management: Toward Improved Identification and Interventions for Post-stroke Spasticity—related Complications. Int J Stroke 2011; 6:42-46.
- 39. **Cramer SC**, Sur M, Dobkin BH, O'Brien C, Sanger TD, Trojanowski JQ, Rumsey JM, Hicks R, Cameron J, Chen D, Chen WG, Cohen LG, deCharms C, Duffy CJ, Eden GF, Fetz EE, Filart R, Freund M, Grant SJ, Haber S, Kalivas PW, Kolb B, Kramer AF, Lynch M, Mayberg HS, McQuillen PS, Nitkin R, Pascual-Leone A, Reuter-Lorenz P, Schiff N, Sharma A, Shekim L, Stryker M, Sullivan EV, and Vinogradov S. Harnessing Neuroplasticity for Clinical Applications. Brain 2011; 134:1591-1609.
- 40. **Cramer SC**. Listening to Fluoxetine: a hot message from the FLAME trial of post-stroke motor recovery. Int J Stroke 2011; 6:315-316.
- 41. Caplan LR, Arenillas J, Cramer SC, Joutel A, Lo EH, Meschia J, Savitz S, Tournier-Lasserve E. Stroke-related translational research. Arch Neurol 2011; 68:1110-1123.
- 42. **Cramer SC**. An overview of therapies to promote repair of the brain after stroke. Head Neck 2011; 33 Suppl 1:S5-7.
- 43. Albers GW, Goldstein LB, Hess DC, Wechsler LR, Furie KL, Gorelick PB, Hurn P, Liebeskind DS, Nogueira RG, Saver JL; **STAIR VII Consortium**. Stroke Treatment Academic Industry Roundtable (STAIR) recommendations for maximizing the use of intravenous thrombolytics and expanding treatment options with intra-arterial and neuroprotective therapies. Stroke. 2011; 42:2645-2650.
- 44. **Cramer SC**. Improving Outcomes After Stroke By LEAPS (Locomotor Experience Applied Post-Stroke) and Bounds. Stroke. 2011;42:3659-3660.
- 45. Pearson-Fuhrhop KM, Burke E, and **Cramer SC**. The influence of genetic factors on brain plasticity and recovery after neural injury. Curr Opin Neurol. 2012; 25:682-688.
- 46. Burke E, **Cramer SC**. Biomarkers and predictors of restorative therapy effects after stroke. Curr Neurol Neurosci Rep. 2013; 13:329-338.
- 47. Bernhardt J and **Cramer SC**. Giant steps for the science of stroke rehabilitation. Intl J Stroke. 2013; 8:1-2.
- 48. Chollet F, Cramer SC, Stinear C, Kappelle LJ, Baron JC, Weiller C, Azouvi P, Hommel M, Sabatini U, Moulin T, Tardy J, Valenti M, Montgomery S, Adams H. Pharmacological therapies in post stroke recovery: recommendations for future clinical trials. Journal of Neurology. 2014; 261:1461-1468.
- 49. Eckert M, Vu Q, Xie K, Yu J, Liao W, **Cramer SC\***, Zhao W\*. Evidence for High Translational Potential of Mesenchymal Stromal Cell Therapy To Improve Recovery From Ischemic Stroke. J Cerebral Blood Flow Metab. 2013;33:1322-1334.

- 50. Pearson-Fuhrhop KM, **Cramer SC**. Pharmacogenetics of neural injury recovery. Pharmacogenomics. 2013; 14:1635-1643.
- 51. Chang EY, Chang EH, Cragg S, Cramer S. Predictors of Gains During Inpatient Rehabilitation in Patients with Stroke: A Review. Critical Reviews in Physical and Rehabilitation Medicine. 2013; 25:55-73.
- 52. Savitz SI, **Cramer SC**, Wechsler L; STEPS 3 Consortium. Stem Cells as an Emerging Paradigm in Stroke (STEPS) 3: Enhancing the Development of Clinical Trials. Stroke. Stroke. 2014; 45:634-639.
- 53. Vu Q\*, Xie K\*, Eckert M, Zhao W, Cramer SC. Meta-analysis of preclinical studies of mesenchymal stromal cells for ischemic stroke. Neurology. 2014; 82:1277-1286.
- 54. Caiozzo C, Cooper DM, **Cramer S**, Galassetti P, Mulnard R, Nguyen D, Ogunseitan D, Olshansky E, Pontello A, Schneider M. The Institute for Clinical and Translational Science at UC Irvine: building an inquisitive environment where everything is questioned and there is no status quo. Clinical and Translational Science. 2014; 7:291-294.
- 55. Liebeskind D, Albers G, Crawford K, Derdeyn C, George M, Palesch Y, Toga A, Warach S, Zhao W, Brott T, Sacco R, Khatri P, Saver J, **Cramer SC**, Wolf S, Broderick J, Odenkirchen J, Koenig J, Janis S, Wintermark W. Imaging in StrokeNet: Realizing the Potential of Big Data. Stroke. 2015; 46:2000-2006.
- 56. Cramer SC. Drugs to Enhance Motor Recovery After Stroke. Stroke. 2015; 46:2998-3005.
- 57. Bushnell C, Bettger JP, Cockroft KM, **Cramer SC**, Edelen MO, Hanley D, Katzan I, Mattke S, Nilsen DM, Piquado T, Skidmore ER, Wing K, Yenokyan G. Chronic Stroke Outcome Measures for Motor Function Intervention Trials: Expert Panel Recommendations. Circulation: Cardiovascular Quality and Outcomes. 2015; 8 (6 Suppl 3):S163-169.
- 58. Winstein W, Stein J, Arena R, Bates B, Cherney LR, **Cramer SC**, Deruyter F, Eng JJ, Fisher B, Harvey RL, Lang CE, McKay-Lyons M, Ottenbacher KJ, Pugh S, Reeves MJ, Richards LG, Stiers W, Zorowitz RD. Guidelines for Adult Stroke Rehabilitation and Recovery: A Guideline for Healthcare Professionals from the American Heart Association/American Stroke Association. Stroke. 2016;47:e98-e169.
- 59. Treister AK, Hatch MN, **Cramer SC**, Chang EY. Demystifying post-stroke pain: from etiology to treatment. PM&R. 2017; 9:63-75.
- 60. Cassidy JM and **Cramer SC**. Spontaneous & Therapeutic-Induced Mechanisms of Functional Recovery After Stroke. Translational Stroke Research. 2017; 8:33-46.
- 61. Juth V, Holman EA, Chan MK, **Cramer SC**. Genetics as a Molecular Window into Recovery, its Treatment, and Stress Responses After Stroke. Journal of Investigative Medicine. 2016; 64:983-988.
- 62. Bernhardt J, Borschmann K, Boyd L, Carmichael ST, Corbett D, Cramer SC, Hoffmann T, Kwakkel G, Savitz S, Saposnik G, Walker M, and Ward N. Moving rehabilitation research

- forward: Developing consensus statements for rehabilitation and recovery research. Int J Stroke. 2016; 11:454-458.
- 63. Stewart JC, **Cramer SC**. Genetic Variation and Neuroplasticity: Role in Rehabilitation after Stroke. Journal of Neurologic Physical Therapy. 2017; 41 Suppl 3:S17-S23.
- 64. **Cramer SC**, Wolf SL, Adams HP Jr, Chen D, Dromerick AW, Dunning K, Ellerbe C, Grande A, Janis S, Lansberg MG, Lazar RM, Palesch YY, Richards L, Roth E, Savitz SI, Wechsler LR, Wintermark M, Broderick JP. Stroke Recovery and Rehabilitation Research: Issues, Opportunities, and the National Institutes of Health StrokeNet. Stroke. 2017; 48:813-819.
- 65. **Cramer SC**. Allogeneic stem cells to improve long-term outcomes after stroke. Lancet Neurology. 2017; 16:335-336.
- 66. Bernhardt J, Hayward KS, Kwakkel G, Ward NS, Wolf SL, Borschmann K, Krakauer JW, Boyd LA, Carmichael ST, Corbett D, **Cramer SC**. Agreed definitions and a shared vision for new standards in stroke recovery research: The Stroke Recovery and Rehabilitation Roundtable taskforce. Int J Stroke. 2016; 11:454-458.
- 67. Bosetti F, Koenig JI, Ayata C, Back SA, Becker K; Broderick JP, Carmichael ST, Cho S, Cipolla M, Corbett D, Corriveau R, **Cramer SC**, Ferguson AR, Finklestein S, Ford BD, Furie K, Hemmen TM, Iadecola C, Jakeman L, Janis S, Jauch, Johnston K, Kochanek PM, Kohn H, Lo EH, Lyden PD, Mallard C, McCullough LD, McGavern L, Meschia JF, Moy C, Perez-Pinzon M, Ramadan I, Savitz SI, Schwamm LH, Steinberg GK, Stenzel-Poore M, Tymianski M, Warach W, Wechsler LR, Zhang JH, Koroshetz W. Translational Stroke Research: Vision and Opportunities. Stroke. 2017; 48:2632-2637.
- 68. Boyd LA, Hayward KS, Ward NS, Stinear CM, Rosso C, Fisher RJ, Carter AR, Leff AP, Copland DA, Carey LM, Cohen LG, Basso DM, Maguire JM, **Cramer SC**. Biomarkers of stroke recovery: Consensus-based core recommendations from the Stroke Recovery and Rehabilitation Roundtable (SRRR). Int J Stroke. 2017; 12:480-493.
- 69. **Cramer SC**. On Brain Repair after Stroke. The Journal of Southern California Clinicians. 2017; 11: 27-32.
- 70. **Cramer SC**. Treatments to Promote Neural Repair after Stroke. Journal of Stroke. 2018; 20:57-70.
- 71. **Cramer SC**. Stimulating Dialogue Through Treatment Of Post-Stroke Aphasia With tDCS. JAMA Neurology. 2018; 75:1465-1467.
- 72. Chen Y; Abel KT; Janecek JT; Chen Y; Zheng K; **Cramer SC**. Home-based Technologies for Stroke Rehabilitation: A Systematic Review. International Journal of Medical Informatics. 2019; 123:11–22.
- 73. Lin DJ, Finklestein SP, **Cramer SC**. Contemporary treatment approaches to promote stroke recovery. Stroke. 2018; 49:3107-3114.
- 74. Bernhardt J, Borschmann KN, Kwakkel G, Burridge JH, Eng JJ, Walker MF, Bird M-L,

- **Cramer SC**, Hayward KS, O'Sullivan MJ, Clarkson AN, and Corbett D, for the SRRR2 Collaboration. Setting the scene for the second Stroke Recovery and Rehabilitation Roundtable. Int J Stroke. 2019; 14:450-456.
- 75. **Cramer SC**. Intense rehabilitation therapy produces very large gains in chronic stroke. A Call to Arm Rehabilitation to End Neuro-Nihilism. J Neurol Neurosurg Psychiatry 2019; 90:497.
- 76. Cramer SC. Recovery after Stroke. Continuum. 2020; 26:415-434.
- 77. Bernhardt J, Hayward KS, Dancause N, Lannin NA, Ward NS, Nudo R, Farrin A, Churilov L, Boyd LA, Jones TA, Carmichael ST, Corbett D, **Cramer SC**. A stroke recovery trial development framework: Consensus-based core recommendations from the second Stroke Recovery and Rehabilitation Roundtable. Int J Stroke. 2019;14:792-802 also appearing in Neurorehabil Neural Repair. 2019; 33:959-969.
- 78. Lin DJ. **Cramer SC**. Principles of neural repair and their application to stroke recovery trials. Seminars in Neurology. 2021; 41:157-166.
- 79. **Cramer SC**. Issues important to the design of stroke recovery trials. Lancet Neurology. 2020; 19:197-198.
- 80. Broderick JP, Elm JJ, Janis LS, Zhao W, Moy CS, Dillon CR, Chimowitz MI, Sacco RL, Cramer SC, Wolf SL, Johnston KC, Saver JL, Marshall RS, Brown D, Wintermark M, Elkind MSV, Kamel H, Tirschwell DL, Longstreth WT, Chervin RD, Adeoye OM, Barreto AD, Grotta JC, Ramey SL, Lo WD, Feng W, Schlaug G, Sheth KN, Selim M, Naidech AM, Lansberg MG, Lazar RM, Albers GW, Griffin JS, Sirline LP, Frasure J, Wright CB, and Khatri P. On behalf of the NIH StrokeNet Investigators. NIH StrokeNet During the Time of COVID-19 and Beyond. Stroke. 2020; 51:2580-2586.
- 81. Cramer SC, Wolf SL, Saver JL, Johnston KC, Mocco J, Lansberg MG, Savitz SI, Liebeskind DS, Smith W, Wintermark M, Elm JJ, Khatri P, Broderick JP, Janis S, on behalf of the NIH StrokeNet Recovery & Rehabilitation Group and the Acute Stroke Group. The utility of domain-specific endpoints in acute stroke trials. Stroke. 2021; 52:1154-1161.
- 82. Lindgren A, Braun RG, Majersik JJ, Clatworthy P, Mainali S, Derdeyn CP, Maguire J, Jern C, Rosand J, Cole J, Lee J-M, Khatri P, Nyquist P, Debette S, Wei LK, Rundek T, Leifer D, Thijs V, Lemmens R, Heitsch L, Prasad K, Jiménez-Conde JJ, Dichgans M, Rost NS, Cramer SC, Bernhardt J, Worrall BB, and Cadenas IF; for the International Stroke Genetics Consortium. International Stroke Genetics Consortium Recommendations for Studies of Genetics of Stroke Outcome and Recovery. International Journal of Stroke. 2022; 17:260-268.
- 83. Richards LG, **Cramer SC**. Advances in Stroke: Therapies Targeting Stroke Recovery. Stroke. 2021; 52:348-350.
- 84. **Cramer SC**. Intense Arm Rehabilitation Therapy Improves the Modified Rankin Scale Score. PracticeUpdate. https://www.practiceupdate.com/content/intense-arm-rehabilitation-therapy-improves-the-modified-rankin-scale-score/116374/65/7/1
- 85. Stein J, Katz DI, Black Schaffer RM, Cramer SC, Deutsch A, Harvey R, Lang C,

C.V.

- Ottenbacher K, Prvu-Bettger J, Roth E, Tirschwell D, Wittenberg GF, Wolf S, Nedungadi TP. Clinical Performance Measures for Stroke Rehabilitation Performance Measures for Healthcare Professionals from the American Heart Association/American Stroke Association. Stroke. 2021; 52:e675-e700.
- 86. Nami M, Thatcher R, Lobo M, Bolanos JF, Morris K, Sadri M, Bustos T, Sanchez Ge, Mohd-Yusof A, Borna A, Schwindt PD, Fiallos J, Dye J, Guo X, Peatfield N, Asiryan M, Mayuku-Dore A, Krakauskatite S, Soler P, **Cramer SC**, Besio WG, Berenyi A, Tripathi M, Hagedorn D, Ingemanson M, Gombosev M, LikerM, Salimpour Y, Mortazavi M, Braverman E, Prichep LS, Chopra D, Eliashiv DS, Hariri R, Tiwari A, Green K, Cormier J, Hussain N, Tarhan N, Sipple D, Roy M, Yu J, Filler A, Chen M, Wheeler C, Yamamoto V, Kateb B. A Proposed Brain-, Spine-, and Mental- Health Screening Methodology (NEUROSCREEN) for Healthcare Systems: Position of the Society for Brain Mapping and Therapeutics. Journal of Alzheimer's Disease. 2022; 86:21-42.
- 87. Cassidy JM, Mark JI, **Cramer SC**. Functional Connectivity Drives Stroke Recovery: Shifting the Paradigm from Correlation to Causation. Brain. 2022; 145:1211-1228.
- 88. Richards LG, **Cramer SC**. Advances in Stroke: Therapies Targeting Stroke Recovery 2022. Stroke. 2022; 53:260-263.
- 89. **Cramer SC**, Richards LG, Bernhardt J, Duncan P. Cognitive Deficits After Stroke. Stroke. 2023; 54:5-9.
- 90. Richards LG, Cramer SC. Advances in Stroke: Therapies Targeting Stroke Recovery. Stroke. 2023; 54:265-269.
- 91. **Cramer SC**, Lin DJ, Finklestein SP. Domain-Specific Outcome Measures in Clinical Trials of Therapies Promoting Stroke Recovery: A Suggested Blueprint. Stroke. 2023; 54:e86-e90.
- 92. Saver J, Duncan PW, Stein J, **Cramer SC**, Eng JJ, Lifshitz A, Hochberg A, and Bornstein NM, for the EMAGINE Investigators. EMAGINE Study protocol of a randomized controlled trial for determining the efficacy of a frequency tuned electromagnetic field treatment in facilitating recovery within the subacute phase following ischemic stroke. Front Neurol. 2023 May 5;14:1148074.
- 93. **Cramer SC**, Young BM, Schwarz A, Chang TY, Su M. Telerehabilitation following stroke. Phys Med Rehabil Clin N Am. 2024; 35:305-318.
- 95. Malakouti N, Serruya MD, **Cramer SC**, Kimberley TJ, Rosenwasser RH. Making Sense of Vagus Nerve Stimulation for Stroke. Stroke. 2024; 55:519-522.
- 96. Stulberg EL, Sachdev PS, Murray AM, Cramer SC, MD<sup>4</sup>, Sorond FA, Lakshminarayan K, Sabayan B. Post-stroke Brain Health Monitoring and Optimization: A Narrative Review. Journal of Clinical Medicine. 2023; 12:7413.
- 98. Delcamp C, Srinivasan R, Cramer SC. EEG provides insights into motor control and neuroplasticity during stroke recovery. Stroke. (in press)

99. van der Groen O, Ghosh M, Norman R, Kuceyeski A, Tozlu C, Kimberley T, Lin D, Buxbaum LJ, Kwakkel G, **Cramer SC**, Edwards D. A framework for refining outcome prediction models in post-stroke motor recovery. Neurorehab Neural Repair. (in press).

## **Meeting Proceedings**

- 1. Sanchez R, Reinkensmeyer D, Shah P, Liu J, Rao S, Smith, R, Cramer S, Rahman T, Bobrow J. Monitoring functional arm movement for home-based therapy after stroke. Proceedings of the 2004 IEEE Engineering in Medicine and Biology Society Meeting, San Francisco, California, September, 2004; 4787-4790.
- 2. Liu J, Emken J, Cramer S, Reinkensmeyer D. Learning to Perform a Novel Movement Pattern using Haptic Guidance: Slow Learning and Rapid Forgetting. Proceedings of IEEE 9th International Conference on Rehabilitation Robotics: Frontiers of the Human-Machine Interface, Chicago, Illinois, June, 2005; 37-40.
- 3. Sanchez RJ, Wolbrecht E, Smith R, Liu J, Rao S, Cramer S, Rahman T, Bobrow JE, Reinkensmeyer DJ. A Pneumatic Robot for Re-Training Arm Movement after Stroke: Rationale and Mechanical Design. Proceedings of IEEE 9th International Conference on Rehabilitation Robotics: Frontiers of the Human-Machine Interface, Chicago, Illinois, June, 2005; 500-504.
- 4. Takahashi C, Der-Yeghiaian L, Le V, **Cramer S**. A Robotic Device for Hand Motor Therapy after Stroke. Proceedings of IEEE 9th International Conference on Rehabilitation Robotics: Frontiers of the Human-Machine Interface, Chicago, Illinois, June, 2005; 17-20.
- 5. Wolbrecht ET, Chan V, Le V, **Cramer SC**, Reinkensmeyer DJ, and Bobrow JE. Real-time computer modeling of weakness following stroke optimizes robotic movement therapy. Proceedings of the 3rd International IEEE Engineering in Medicine and Biology Conference on Neural Engineering, Kohala Coast, Hawaii, May, 2007.
- 6. Reinkensmeyer D, Maier M, Guigon E, Chan V, Akoner M, Wolbrecht E, Cramer S, Bobrow M. Do robotic and non-robotic arm movement training drive motor recovery after stroke by a common neural mechanism? Experimental evidence and a computational model. Proceedings of the 31st Annual International IEEE EMBS Conference, Minneapolis, MN, September, 2009.
- 7. Reinkensmeyer DJ, Maier MA, Guigon E, Chan V, Akoner O, Wolbrecht ET, **Cramer SC**, Bobrow JE. Do robotic and non-robotic arm movement training drive motor recovery after stroke by a common neural mechanism? Experimental evidence and a computational model. Conf Proc IEEE Eng Med Biol Soc. 2009; 1:2439-2441.
- 8. Do AH, Wang PT, King CE, Schombs A, **Cramer SC**, Nenadic Z. Brain-computer interface controlled functional electrical stimulation device for foot drop due to stroke. Conf Proc IEEE Eng Med Biol Soc. 2012; 2012:6414-6417; San Diego, CA.
- 9. Khademi M, Hondori HM, Dodakian L, **Cramer SC**, and Lopes CV. Haptic Augmented Reality to Monitor Human Arm's Stiffness in Rehabilitation. Proceedings of the 2012 IEEE EMBS Conference on Biomedical Engineering and Sciences (IECBES), Dec 17-19, 2012.

- 10. Hondori HM, Khademi M, Dodakian L, **Cramer SC**, Lopes CV. A spatial augmented reality rehab system for post-stroke hand rehabilitation. NextMed / Medicine Meets Virtual Reality (MMVR20), San Diego, CA, Feb 2013.
- 11. Khademi M, Hondori HM, Lopes CV, Dodakian L, and **Cramer SC**. Comparing 'Pick and Place' Task in Spatial Augmented Reality versus Non-immersive Virtual Reality for Rehabilitation Setting. IEEE EMBC Conference, Osaka, Japan, 2013.
- 12. Khademi M, Hondori HM, Dodakian L, Lopes CV, **Cramer SC**. An assistive tabletop keyboard for stroke rehabilitation. Proceedings of the 2013 ACM International Conference on Interactive Tabletops and Surfaces, St. Andrews, United Kingdom, 2013.
- 13. Rowe J, Friedman N, Chan V, **Cramer SC**, Bachman M, Reinkensmeyer DJ. The Variable Relationship between Arm and Hand Use: A Rationale for Using Finger Magnetometry to Complement Wrist Accelerometry when Measuring Daily Use of the Upper Extremity. 36th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC14), Chicago, Illinois, 2014.
- 14. McCrimmon CM, King CE, Wang PT, Cramer SC, Nenadic Z, Do AH. Brain-Controlled Functional Electrical Stimulation for Lower-Limb Motor Recovery in Stroke Survivors. 36th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC'14), Chicago, Illinois, 2014.
- 15. Chen Y, Abel KT, **Cramer SC**, Zheng K, Chen Y. Recovery in My Lens: A Study on Stroke Vlogs. American Medical Informatics Association Annual Symposium. 2018; 5:1300-1309.
- 16. Gao X, Shen W, Ting C-M, **Cramer SC**, Srinivasan R, Ombao H. Modeling High-Dimensional Brain Connectivity using Copula Gaussian Graphical Models. IEEE International Symposium on Biomedical Imaging. Venice, Italy 2019.
- 16. Caldeira C, Figueiredo MC, Dodakian L, de Souza C, **Cramer SC**, Chen Y. Towards Supporting Data-Driven Practices in Stroke Telerehabilitation Technology. 23rd ACM Conference on Computer-Supported Cooperative Work and Social Computing. Proceedings of the Association for Computing Machinery (ACM) Human-Computer Interactions, Vol. 5, No. CSCW1, Article 25. 2021.
- 17. Jung S, Zhou M, Ma J, Yang R, **Cramer SC**, Dobkin BH, Yang LF, Rosen J. Wearable Body Sensors Integrated into a Virtual Reality Environment A Modality for Automating the Rehabilitation of the Motor Control System. 46<sup>th</sup> Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC) (Orlando, FL). 2024

## **Chapters and Letters**

1. **Cramer SC**. book review of <u>The Social Brain</u> by Michael S. Gazzaniga, in The USC Journal of Medicine 1988; 1:21-22.

- 2. **Cramer SC**, Schiller GJ. Acquired abnormalities of platelet function. The New England Journal of Medicine 1991; 324:1670.
- 3. Furie KL, Ogilvy CS, Smrcka M, Suwanwela Nij, Can U, Ay H, **Cramer SC**, Greenberg SM, Rordorf G, Finklestein SP, Foster GP, Koroshetz WJ, Suwanwela Nit, Kistler JP. Cerebrovascular disease. In: Roger N. Rosenberg, ed. Atlas of Clinical Neurology. Philadelphia, PA: Current Medicine; 1997; 5.1-5.82.
- 4. **Cramer SC**, Finklestein SP. Reparative Approaches: Growth Factors and other pharmacological treatments. In: Leonard P. Miller, ed. Stroke Therapy: basic, preclinical, and clinical directions. New York, NY: John Wiley & Sons, Inc.; 1999; 321-336.
- 5. **Cramer SC**. Functional MRI and recovery from stroke. In: Serge Rombouts, Frederik Barkhof, Philip Scheltens, eds. Clinical Functional MRI, Oxford University Press, Oxford, 2007; 265-283.
- 6. Orr ER, Rodriguez RW, **Cramer SC**. Recovery from stroke. In: Frank Hillary and John DeLuca, eds. Functional Neuroimaging of Neurologic Disorders, Guilford Press, New York, 2007; 361-388.
- 7. **Cramer SC**, Seitz RJ. Chapter 54: Imaging Functional Recovery from Stroke. In Marc Fisher, ed. Handbook of Clinical Neurology 2008; 94:1097-1117.
- 8. McHughen S, See J, **Cramer SC**. Functional Imaging and Stroke Recovery. In: Joel Stein, Richard Harvey, Richard Macko, Carolee Winstein, and Richard Zorowitz, eds. Stroke Recovery and Rehabilitation. Demos Medical, New York, 2009.
- 9. Dastur CK, **Cramer SC**. Paradoxical Embolism. In: Louis R. Caplan, ed. Uncommon Causes of Stroke, 2008; 483-489.
- 10. **Cramer SC**. Application of fMRI to monitor motor rehabilitation. In: Massimo Filippi, ed: Functional MRI Techniques and Protocols. Humana Press, New York, 2009; 769-784.
- 11. **Cramer SC**. Neural repair and plasticity. In: Walter R. Frontera, ed-in-chief: DeLisa's Physical Medicine and Rehabilitation: Principles and Practice. 5<sup>th</sup> ed. 2010; 2155-2172.
- 12. **Cramer SC**. Recovery. In: Runehov, A and Oviedo, L, eds: Encyclopaedia of Sciences and Religions. 2013.
- 13. **Cramer SC**. Issues in clinical trial methodology for brain repair after stroke. In: Steven C. Cramer and Randolph J. Nudo, ed; Brain Repair After Stroke. Cambridge University Press, Cambridge, 2010; 173-182.
- 14. Pearson-Fuhrhop KM, **Cramer SC**. Genetics in Neurorehabilitation. In: Selzer, Clarke, Cohen, Kwakkel, and Miller, eds; Textbook of Neural Repair & Rehabilitation 2nd Ed. 2014; 25-34.
- 15. **Cramer SC**. Repair-Based Therapies after Stroke. In: Paul A. Lapchak and John H. Zhang eds. Translational Stroke Research: From Target Selection to Clinical Trials (Springer Series in

Translational Stroke Research). 2012 817-831.

- 16. **Cramer SC**. Brain Repair After Stroke. In: Bo Norrving, ed. Oxford Textbook of Stroke and Cerebrovascular Disease. 2014; 225-233.
- 17. Pearson-Fuhrhop KM, Eshoiee M, and **Cramer SC**. Genetics of Stroke Recovery. In: Joel Stein, Richard I. Harvey, Richard F. Macko, Carolee J. Winstein, and D. Richard Zorowitz, eds. Stroke Recovery and Rehabilitation, 2nd edition. Demos Medical, New York. 2014.
- 18. Burke E, Cramer SC. Functional Imaging and Stroke Recovery. In: Joel Stein, Richard I. Harvey, Richard F. Macko, Carolee J. Winstein, and D. Richard Zorowitz, eds. Stroke Recovery and Rehabilitation, 2nd edition. Demos Medical, New York. 2014.
- 19. Stewart JC, **Cramer SC**. Response to Letter Regarding Article, "Patient-Reported Measures Provide Unique Insights Into Motor Function After Stroke". Stroke. 2013;44:e80.
- 20. **Cramer SC**. Issues in Clinical Trial Design in Stem Trials after Stroke. In: David Hess, Ed; Cell Therapy for Brain injury. 2014. Springer, New York.
- 21. **Cramer SC**. Interventions to Improve Recovery after Stroke. In: Sacco RL, Wong KS, MD FRCP, Lawrence KS, Grotta JC, Albers GW, Broderick JP, Kasner SE, editors. Stroke: Pathophysiology, Diagnosis, and Management (6th edition). Elsevier, Amsterdam.
- 22. **Cramer SC**, Cassidy JM. Application of fMRI to monitor motor rehabilitation. In: Massimo Filippi, ed: Functional MRI Techniques and Protocols Second Edition. 2016. Springer, New York.
- 23. Nguyen HX, **Cramer SC**. Cell-Based Therapies for the Treatment of Aphasia. In: G. Hickok and S. Small eds: Neurobiology of Language. Elsevier, Amsterdam 2016; 1085-1091.
- 24. **Cramer SC**. Marrow-derived Mesenchymal Stromal Cells in the Treatment of Stroke. In: M. Tuszynski ed: Translational Neuroscience. 2016. Springer, New York.
- 25. **Cramer SC** and Caplan LR. Recovery, Rehabilitation, and Repair. In: L. Caplan ed: Caplan's Stroke: A Clinical Approach 5th ed. Cambridge University Press, Cambridge; 2016; 608-626.
- 26. Thaler DE and **Cramer SC**. Paradoxical embolism and stroke. In: Louis R. Caplan, ed. Uncommon Causes of Stroke. 2018. (3<sup>rd</sup> edition).
- 27. Razmara A, **Cramer SC**. History of Neuroprotection: Trials and Tribulations. In: John Zhang and Paul A. Lapchak, eds. 2017. Neuroprotective Therapy for Stroke and Ischemic Disease.
- 28. **Cramer SC**. Neural Repair For Cerebrovascular Diseases. In: Michael Lawton ed. Molecular Genetic and Cellular Advances in Cerebrovascular Disease. 2018.
- 29. Yu Z, Prado R, Cramer SC, Quinlan EB, Ombao H. A Bayesian Model for Activation and Connectivity in Task-related fMRI Data. In: Thomas B. Fomby, R. Carter Hill, Ivan Jeliazkov,

Juan Carlos Escanciano, Eric Hillebrand, Daniel L, eds. 2019. Advances in Econometrics, Volume 40. Emerald Group Publishing, Bingley, UK.

- 30. Liew S-L, Lin DJ, **Cramer SC**. Interventions to Improve Recovery after Stroke. In: Sacco RL, Wong KS, MD FRCP, Lawrence KS, Grotta JC, Albers GW, Broderick JP, Kasner SE, editors. Stroke: Pathophysiology, Diagnosis, and Management (7th edition). 2021. Elsevier, Amsterdam.
- 31. **Cramer SC** and Bernhardt J. Recovery, Rehabilitation, and Repair. In L. Caplan ed: Caplan's Stroke: A Clinical Approach 6th ed. Cambridge University Press, Cambridge; 2022.
- 32. **Cramer SC**. Owed To The Fingers (poem). Journal of Humanities in Rehabilitation. <a href="https://www.jhrehab.org/2023/04/13/owed-to-the-fingers/">https://www.jhrehab.org/2023/04/13/owed-to-the-fingers/</a>
- 33. **Cramer SC**. Marrow-derived Mesenchymal Stromal Cells in the Treatment of Stroke. In: M. Tuszynski ed: Translational Neuroscience. 2<sup>nd</sup> edition. 2024. Springer, New York (in press).
- 34. **Cramer SC**. Sonnet of Hope (poem). Journal of Humanities in Rehabilitation. <a href="https://www.jhrehab.org/2024/04/22/sonnet-of-hope/">https://www.jhrehab.org/2024/04/22/sonnet-of-hope/</a>
- 35. **Cramer SC**. Chapter 4. The Neuroanatomical Bases by Which Neural Circuits Mediate Behavior. In: Principles of Neural Science, 7<sup>th</sup> edition. ER Kandel, JD Koester, SH Mack, and SA Siegelbaum, Eds. 2025, McGraw Hill, New York (in press).

## **Abstracts**

- 1. Jones RM, **Cramer SC**, Sargent TS, Budinger TF. Brain protein synthesis rates measured in vivo using methionine and leucine. Journal of Nuclear Medicine 1985; 26:P168.
- 2. **Cramer SC**, Jones RM, Sargent TS, Budinger TF. Evaluation of leucine as an in vivo tracer for measurement of brain protein synthesis. Clinical Research 1986; 34:69A.
- 3. **Cramer SC**, Pardridge WM, Hirayama BA, Wright EM. Colocalization of SGLT-1 and GLUT-2 in rat kidney cortex using double peroxidase immunocytochemistry. FASEB Journal 1992; 6:A1459.
- 4. **Cramer SC**, Glaspy JA, Efird JT, Louis DN. Chronic lymphocytic leukemia and the central nervous system: a clinical and pathological study. Ann Neurol 1995; 38:342.
- 5. **Cramer SC**, Kaplan J, Nelles G, Benson R, Finklestein, SP, Rosen BR. Patterns of brain activation using functional MRI in subjects recovered from stroke. NeuroImage 1996;3:S478.
- 6. Schwamm L, **Cramer SC**, Rordorf G, Kaufman J, Koroshetz WJ, Buonanno F. Magnetic resonance venography detection of pelvic thrombus in stroke patients with patent foramen ovale. Stroke 1997; 28:242.
- 7. Cramer SC, Benson RR, Kwong KK, Nelles G, Parker RA, Kennedy DN, Kaplan JD,

- Finklestein SP, Rosen BR. A functional MRI study of subjects recovered from hemiparetic stroke. Stroke 1997; 28:250.
- 8. Nelles G, Cramer SC, Schaechter JD, Kaplan JD, Finklestein SP. Computerized analysis of motor recovery after stroke. Stroke 1997; 28:268.
- 9. Rordorf G, **Cramer SC**, Buonanno F, Koroshetz WJ. Induced hypertension in stroke: safety and efficacy. Stroke 1997; 28:273.
- 10. **Cramer SC**, Nelles G, Benson RR, Kaplan JD, Parker RA, Kwong KK, Kennedy DN, Finklestein SP, Rosen BR. Simultaneous measurement of cerebral blood flow and functional MRI signal in the evaluation of stroke recovery mechanisms. Neurology 1997; 48: A415.
- 11. **Cramer SC**, Nelles G, Benson RR, Kaplan JD, Parker RA, Kwong KK, Finklestein SP, Rosen BR. A functional MRI study of three motor tasks in the evaluation of recovery from stroke. Proceedings of the fifth meeting of the International Society of Magnetic Resonance in Medicine (ISMRM); 1997 April 12-18; Vancouver: 512.
- 12. Nelles G, Cramer SC, Schaechter JD, Kaplan JD, Finklestein SP. Mirror movements in recovery after stroke. Stroke 1998; 29:274.
- 13. **Cramer SC**, Rordorf G, Kaufman JA, Buonanno F, Koroshetz WJ, Schwamm L. Pelvic vein thrombosis in cryptogenic stroke with patent foramen ovale/ASD. Neurology 1998; 50:A445.
- 14. **Cramer SC**, Fray L, Tievsky A, Parker RA, Riskind PN, Stein M, Wedeen V, Rosen BR. Patterns of cortical activation after recovery from myelitis. NeuroImage 1998; 7:S485.
- 15. Weisskoff RM, Cramer SC, Finklestein SP, Rosen BR. Increased volume or increased amplitude of activation in functional MRI? NeuroImage 1998; 7:S612.
- 16. **Cramer SC**, Weisskoff RM, Nelles G, Schaechter JD, Campbell T, Foley M, Finklestein SP, Rosen BR. Brain activation during squeezing at graded force levels. NeuroImage 1998; 7:S932.
- 17. **Cramer SC**, Finklestein SP, Schaechter JD, Bush G, Rosen BR. Distinct regions of motor cortex control ipsilateral and contralateral finger movements. J Neurol Rehab 1998; 12:42.
- 18. **Cramer SC**, Finklestein SP, Rosen BR. The effect of age on motor cortex organization: implications for stroke recovery. Neurorehabil Neural Repair 1999; 13:55.
- 19. Schaechter JD, Kraft E, Hilliard T, Rosen BR, Cramer SC. Motor recovery after stroke is associated with changes in brain activation patterns. Proc Soc Neurosci 1999; 153.13.
- 20. Uchino K, **Cramer SC**. Entry criteria and baseline characteristics predict outcome in acute stroke trials. Stroke 2000; 31:277
- 21. **Cramer SC**, Stegbauer KC, Price R, Maravilla KR. Active vs. passive finger movement: bilateral, overlapping activations. Neuroimage 2000; 11:S882.
- 22. Cramer SC, Stegbauer KC, Mark A, Price R, Barquist K, Bell KR, Esselman PC, Odderson

- IR, Maravilla KR. Motor cortex activation in hemiparetic stroke patients. Stroke 2001; 32:334.
- 23. **Cramer SC**, Bodwell JA, Billheimer D. Self-assessment of stroke recovery correlates with neurologic evaluation. Stroke 2001; 32:333.
- 24. **Cramer SC**, Maki JH, Waitches GM, Grotta JC, Burgin WS, Kramer LA. Paradoxical embolization in patients with cryptogenic stroke. Stroke 2001; 32:346.
- 25. Nhan H, Stegbauer KC, Price R, Cramer SC. Variations in motor performance during fMRI and their effects on brain activation. Neuroimage 2001; S882.
- 26. **Cramer SC**, Mark A, Maravilla KR. Preserved cortical function with reduced cerebral blood flow after stroke. Stroke 2002; 33:418.
- 27. Zemke A, **Cramer SC**. A functional MRI study of motor recovery patterns after stroke. . Stroke 2002; 33:351.
- 28. Crafton K, Mark A, Maravilla KR, **Cramer SC**. Improved understanding of stroke damage by considering normal function of the injured tissue. Stroke 2002; 33:358.
- 29. **Cramer SC**, Maki JH, Waitches GM, D'Souza N, Grotta JC, Burgin WS, Kramer LA. Paradoxical emboli in cryptogenic stroke. Neurology 2002; 58:A477-478.
- 30. Schaechter JD, Kraft, E, Hilliard TS, Dijkhuizen RM, Benner T, Finklestein SP, Rosen BR, Cramer SC. Motor recovery and cortical reorganization after Constraint-induced movement therapy in stroke patients. Proc Soc Neurosci 2002; 32: 662.3.
- 31. Morrison SJ, Demorest SM, Aylward EH, Cramer SC, Maravilla KR. An fMRI Investigation of Music and Speech Comprehension. Neuroimage 2002; 16: 2317-2318.
- 32. Nhan H, Barquist K, Bell K, Esselman P, Odderson IR, **Cramer SC**. A Serial Study of Brain Function after Stroke. Stroke 2003; 34:253.
- 33. Nhan H, Barquist K, Lee C, **Cramer SC**. Sensorimotor Cortex Function after Stroke. Stroke 2003; 34:313.
- 34. **Cramer SC**, Rordorf G, Maki JH, Kramer LA, Grotta JC, Burgin WS, Hinchey JA, Benesch C, Furie K, Lutsep HL, Kelly E, Longstreth WT. Paradoxical Embolism from Large Veins in Ischemic Stroke (PELVIS) Study. Stroke 2003; 34:262.
- 35. **Cramer SC**, Rordorf G, Maki JH, Kramer LA, Grotta JC, Burgin WS, Hinchey JA, Benesch C, Furie KL, Lutsep HL, Kelly E, WT Longstreth, Jr. Increased pelvic vein thrombi in cryptogenic stroke: results of the PELVIS study. Neurology 2003; 60 (Suppl 1):A326.
- 36. Mahurin RK, Burke MA, Lee RS, **Cramer SC**. Reorganization of motor and cognitive function in patients with multiple sclerosis. Neurology 2003; 60 (Suppl 1):A7.
- 37. Aylward E, Richards, T, Berninger V, Nagy W, Field K, Grimme A, Richards A, Thomson J, **Cramer S**. Instructional Treatment Associated with Changes in Brain Activation in Children

- with Dyslexia. Neuroimage 2003;19:S241.
- 38. Crafton KR, Cramer SC. Cortical stroke affects somatotopic organization and hemispheric asymmetry. Neuroimage 2003;19:S1147.
- 39. Brown JA, Cramer SC, Benson R, White H, Jacobs B, Gong J, Letsup H, Mada F, Coplin W. Improved hand function after intermittent targeted epidural motor cortex stimulation during rehabilitation therapy for spastic paresis caused by subcortical infarction. Presented at the 2003 Annual Meeting of the Neurosurgical Society of America, Sun River, Oregon, June 8, 2003.
- 40. **Cramer SC**, Crafton KR. Changes in lateralization and somatotopic organization after cortical stroke. Stroke 2004; 35:240.
- 41. **Cramer SC**, Lastra L, Lacourse MG, Cohen MJ. Brain motor system function after complete spinal cord injury. Neuroimage 2005; 26 (Suppl 1): 424.
- 42. **Cramer SC**, Le V, Shah R, Crafton KR. Motor recovery and activation in the rim surrounding a cortical stroke. Neuroimage 2005; 26 (Suppl 1): 427.
- 43. Stradling, D, Yu, W, Langdorf, M, Tsai F, Kostanian V, Hasso AN, Welbourne SJ, Schooley Y, Fisher MJ, Cramer SC. Stroke Care Delivery Before vs. After JCAHO Stroke Center Certification. Stroke 2006; 37:709.
- 44. Kleim JA, Chan S, Pringle E, Schallert K, Procaccio V, Jimenez R, Cramer SC. BDNFval<sup>66</sup>met polymorphism is associated with impaired experience-dependent plasticity in human motor cortex (Neuroimage, 2006).
- 45. **Cramer SC**, Orr ELR, Cohen MJ, Lacourse MG. Effects of motor imagery therapy after chronic, complete spinal cord injury (Neuroimage, 2006).
- 46. Westhout F, Pare L, Delfino R, **Cramer S**. Intracranial Pressure Waveform Analysis in Traumatic Brain Injury, 2006 Congress of Neurological Surgeons.
- 47. Beleyev L, Khoutorova L, Zhao KL,Salzman FM, Moore AF, Davidoff AW, Tucker JE, **Cramer SC**. A novel therapeutic strategy (hcg then epo) improves functional recovery after focal ischemia in rats. Cerebrovascular Diseases 2006; 21 (suppl 4): 81.
- 48. Glidden HK, Yozbatiran N, Rizzuto DS, Cramer SC, Andersen RA. fMRI during goal-directed movement planning in normal and spinal cord injured subjects. Atlanta, GA. Proc Soc Neurosci 2006.
- 49. Kostanian V, Cramer SC. Artery of Percheron thrombolysis: A case report. American Society of Interventional and Therapeutic Neuroradiology 2006.
- 50. **Cramer SC**, Der-Yeghiaian L, See J, Le V, Takahashi CD. Robot-based hand motor therapy after stroke. Stroke 2007 38:518.
- 51. **Cramer SC**, Parrish TB, Levy RM, Stebbins GT, Ruland SD, Lowry DW, Trouard TP, Squire SW, Weinand ME, Savage CR, Wilkinson SB, Juranek J, Leu S-Y, Himes DM. An

- assessment of brain function predicts functional gains in a clinical stroke trial. Stroke 2007 38:520.
- 52. Belayev L, Khoutorova L, Zhao KL, Zuo FM, Salzman A, Davidoff AW, Moore AF, **Cramer SC**. A novel therapeutic strategy improves functional recovery after MCAo stroke in rats. Stroke 2007 38:467.
- 53. Lin JJ, Juranek J, Franklin D, Drescher A, Maguire G, **Cramer SC**. Vulnerability of Frontal-Temporal Connections in Early Onset Focal Epilepsy, Epilepsia, 2006.
- 54. Riley JJ, Cramer SC, Lin JJ. Derangement of uncinate fasciculus myelin integrity as a function of age of seizure onset as revealed by DTI tractography. 13th Annual Meeting of the Organization for Human Brain Mapping, Chicago, IL, 2007.
- 55. Yozbatiran N, Javidan P, Le V, **Cramer SC**. Spinal Cord Atrophy after Chronic Injury Correlates with Clinical Deficits and Worsens over Time. 13th Annual Meeting of the Organization for Human Brain Mapping, Chicago, IL, 2007.
- 56. McHughen S, Kleim JA, Kleim ED, Procaccio V, **Cramer SC**. BDNF val66met polymorphism and short-term experience-dependent plasticity in the human brain. 13th Annual Meeting of the Organization for Human Brain Mapping, Chicago, IL, 2007.
- 57. **Cramer SC**, Der-Yeghiaian L; Le V; Motiwala RR; Takahashi CD. Robotic Therapy Induces Task-specific Changes in Brain Maps after Stroke. Neuroimage Organization for Human Brain Mapping annual meeting, Chicago, 2006.
- 58. Owen C, Pare L, **Cramer SC**. Respiratory Variation of Intracranial Pressure Waveform Slope in TBI. 2007 Congress of Neurological Surgeons.
- 59. Lane TA, Garls D, Mackintosh E, Kohli S, Digicaylioglu M, **Cramer S**. Liquid Storage Of Marrow Stromal Cells (MSC). Annual meeting American Association Blood Banks (AABB), 2007.
- 60. Lane TA, Garls D, Mackintosh E, Kohli S, **Cramer SC**. Feasibility of Rapidly Generating Sufficient Autologous Human Marrow Stromal Cells for Cellular Therapy. American Society of Hematology, 2007.
- 61. Riley JD, **Cramer SC**, Lin JJ. Voxelwise analysis of white matter integrity using tract-based spatial statistics in temporal lobe epilepsy. American Epilepsy Society, Philadelphia, PA, 2007.
- 62. Lane TA, Garls D, Mackintosh E, Kohli S, **Cramer SC**. Feasibility of Rapidly Generating Sufficient Autologous Human Marrow Stromal Cells for Cellular Therapy. 49th American Society of Hematology meeting, Atlanta, GA, 2007; Blood 2007;110(11):369a.
- 63. **Cramer SC**. Recovery from Stroke. 12th International Symposium on Neural Regeneration. Neurorehabil Neural Repair 2007 21:579.

- 64. **Cramer SC**, Dobkin BH, Noser EA, Rodriguez RW, Enney LA. Ropinirole in the treatment of motor deficits after stroke: a randomized, placebo-controlled, double-blind study. Stroke 2008; 39:542.
- 65. **Cramer SC**, Garls D, Kohli SS, Mackintosh E, Holcombe R, Digicaylioglu M, Lane TA. Feasibility of autologous marrow stromal cell therapy in human stroke. Stroke 2008; 39:616.
- 66. Yozbatiran N, Alonso-Alonso M, See J, Demirtas-Tatlidede A, Pascual-Leone A, **Cramer SC**. Safety and behavioral effects of a single session of high frequency repetitive transcranial magnetic stimulation in chronic stroke. Stroke 2008; 39:617.
- 67. Pare LS, Nenadic, Z, Zargarnian R, **Cramer SC**. Analysis of intracranial pressure waveform slope in traumatic brain injury, 2008 Congress of Neurological Surgeons.
- 68. McHughen S, Pearson Fuhrhop K, Kleim JA, Kleim EP, Procaccio V, **Cramer SC**. BDNF val66met polymorphism and short-term experience-dependent plasticity in motor cortex of elderly human subjects. 14th Annual Meeting of the Organization for Human Brain Mapping, Melbourne, Australia, 2008.
- 69. Lane T, Mackintosh E, Garls E, Kohli S, Digicaylioglu M, **Cramer S**. Effect of Temperature on Liquid Storage of Marrow Stromal Cells (MSC). Annual meeting American Association Blood Banks (AABB), 2008.
- 70. Riley J, Choi V, **Cramer SC**, Lin JJ. Microstructural abnormalities in the uncinate fasciculus as determined by TBSS and probabilistic tractography in temporal lobe epilepsy. American Epilepsy Society, Seattle, WA. 2008.
- 71. Rajneesh KF, Nenadic Z, Gajo EC, Chan JS, **Cramer SC**, Pare LS. Intracranial pressure waveform analysis in intracranial hemorrhage. Association of Neurological Surgeons Annual Meeting. San Diego, CA, 2009.
- 72. Javidan P, Yozbatiran Y, Le V, **Cramer SC**. Spinal cord atrophy after chronic injury correlates with clinical deficits and worsens over time. Journal of Investigative Medicine 57: #138, 2009.
- 73. Riley JD, Le VH, Der-Yeghiaian L, See J, Newton JM, Ward NS, **Cramer SC**. The Anatomy of Stroke Injury Predicts Extent of Gains from Therapy. International Stroke Conference, San Diego, CA. 2009.
- 74. **Cramer SC**, Warren M, Enney L, Sanaee N, Hancock S, Procaccio V. BDNF Polymorphism and Clinical Outcome in the GAIN Trials. International Stroke Conference, San Diego, CA. 2009.
- 75. Der-Yeghiaian L, Sharp KG, See J, Abidi NS, Mai K, Le VH, **Cramer SC**. Robotic Therapy after Stroke and the Influence of Baseline Motor Status. International Stroke Conference, San Diego, CA. 2009.

- 76. **Cramer SC**, Fitzpatrick C, Warren M, Plon L, Whitaker L, Ryckborst KJ, Brown D, Hill M. Safety of Beta-hCG + Erythropoietin in Acute Ischemic Stroke. International Stroke Conference, San Diego, CA. 2009.
- 77. **Cramer SC**, Warren M, Nguyen D, Lee J, Riola MA, Montoya R, Patel D, Le VH, Welbourne SJ, King C, Stradling D, Lee J-Y. Measurement of intracerebral hemorrhage volume. International Stroke Conference, San Diego, CA. 2009.
- 78. **Cramer SC**, Nouri S, on behalf of the EVEREST Study Investigators. The influence of non-motor regions on behavioral gains from motor cortex stimulation after stroke. 15<sup>th</sup> Annual Meeting of the Organization for Human Brain Mapping, San Francisco, CA, 2009.
- 79. **Cramer SC**, Nazaruk D, Le V, Chen PB, Wang GC, On behalf of the GAIN Americas and GAIN International MRI Substudy Investigators. The location of acute stroke predicts degree of chronic disability. 15<sup>th</sup> Annual Meeting of the Organization for Human Brain Mapping, San Francisco, CA, 2009.
- 80. Riley J, Choi V, Binder DK, **Cramer SC**, Lin JJ. Alterations in white matter integrity in temporal lobe epilepsy: association with cognitive functioning and histopathology. The location of acute stroke predicts degree of chronic disability. 15<sup>th</sup> Annual Meeting of the Organization for Human Brain Mapping, San Francisco, CA, 2009.
- 81. Milot M-H, Marchal-Crespo L, Green CS, Cramer SC, Reinkensmeyer DJ. The effectiveness of motor training using robotic guidance or error amplification is influenced by participant initial skill level for learning of a timing task. Society for Neuroscience, 2009.
- 82. **Cramer SC** and Nouri S, on behalf of the Everest Trial Group. Brain areas important to deriving behavioral gains from motor cortex stimulation after stroke. International Stroke Conference, San Antonio, 2010.
- 83. Riley J, **Cramer S**, Lin J. Caudate shape and volume abnormalities are linked to depression & executive functioning in epilepsy. Organization for Human Brain Mapping meeting, Barcelona, Spain, 2010.
- 84. **Cramer SC**, Procaccio V. Mitochondrial Genetics And Stroke Recovery. International Stroke Conference, Los Angeles, 2011.
- 85. McKenzie AL, Der Yeghiaian L, See J, Nguyen D, Le V, **Cramer SC**. Predicting and Detecting Arm Motor Gains in a Trial of Robotic Therapy. International Stroke Conference, Los Angeles, 2011.
- 86. **Cramer SC**, Hill MD, on behalf of the REGENESIS investigators. Study of NTx®-265: Human Chorionic Gonadotropin (hCG) and Epoetin Alfa (EPO) in Acute Ischemic Stroke Patients (REGENESIS Trial). International Stroke Conference, Los Angeles, 2011.
- 87. **Cramer SC**, Stradling D, Brown DM, Carrillo-Nunez IM, Ciabarra A, Cummings M, Dauben R, Lombardi DL, Patel N, Traynor EN, Waldman S, Miller K, Stratton SJ. Organization of a US County System for Acute Stroke Care. International Stroke Conference, Los Angeles, 2011.

- 88. **Cramer SC**, on behalf of the GSK249320 Study Investigators. A Single-Blind Study of the Safety, Pharmacokinetics and Pharmacodynamics of Escalating Repeat Doses of GSK249320 in Patients With Ischemic Stroke. International Stroke Conference, Los Angeles, 2011.
- 89. Bednar MM, **Cramer SC**, Finklestein SP, Park J, Ferreira L, McKernan R, Altstiel LD, Kupiec JW, Mount N, Maruff P. A Phase 2 Multicenter, Randomized, Double-blind, Placebo Controlled Study of the Safety and Efficacy of PF-03049423 in Subjects with Ischemic Stroke. International Stroke Conference, Los Angeles, 2011.
- 90. **Cramer SC**, Wu J, Hanson JA, Nouri S, Karnani D, Chuang TM, Le V. A System for Addressing Incidental Findings in Neuroimaging Research. 17<sup>th</sup> Annual meeting of the Organization for Human Brain Mapping, Quebec City, 2011.
- 91. Pearson-Fuhrhop KM, Minton B, Acevedo D, **Cramer SC**. Genetic Determinants of Dopamine Effects on Skill Learning and Cortical Plasticity. 17<sup>th</sup> Annual meeting of the Organization for Human Brain Mapping, Quebec City, 2011.
- 92. Milot M-H, Marchal-Crespo L, Reinkensmeyer D, **Cramer S**. Brain circuits underlying motor learning with haptic guidance and error amplification. 17<sup>th</sup> Annual meeting of the Organization for Human Brain Mapping, Quebec City, 2011.
- 93. Milot M-H, Chan V, Spencer S, Allington J, Klein J, Bobrow J, Reinkensmeyer D, **Cramer S**. Dynamic probe of brain plasticity helps best predict functional gain following robotic therapy. 17<sup>th</sup> Annual meeting of the Organization for Human Brain Mapping, Quebec City, 2011.
- 94. McKenzie A, Der-Yeghiaian L, See J, Le V, **Cramer SC**. Robot-based assessments of upper extremity function are valid and may be useful for tele-outcomes after stroke. International Stroke Conference, New Orleans, 2012.
- 95. Burke E, Der-Yeghiaian L, Riley J, See J, McKenzie A, Le V, **Cramer SC**. Neural Systems Injury Provides Insight Into Individual Behaviors While Global Injury Is Useful For Global Outcome In Chronic Stroke. International Stroke Conference, New Orleans, 2012.
- 96. Abedi A, Treister A, Riley J, Le V, **Cramer SC**. Acute Injury to Specific Neural Systems Predicts Outcome of Individual Behaviors. International Stroke Conference, New Orleans, 2012.
- 97. Liu VB, Winter WR, Wu JC, Srinivasan R, **Cramer SC**. Electrical Neuroimaging in Acute Stroke: A Pilot Study. 18<sup>th</sup> Annual meeting of the Organization for Human Brain Mapping, Beijing, China, 2012.
- 98. Pearson-Fuhrhop KM, Minton B, Acevedo D, Shahbaba B, Cramer SC. Genetic factors influence dopamine effects on learning and plasticity. Soc Neurosci, New Orleans, 2012.
- 99. Stewart JC, Tran X, **Cramer SC**. Neural correlates of motor action selection in older adults. Soc Neurosci, New Orleans, 2012.
- 100. Burke, EM, Der-Yeghiaian L, Riley J, See J, McKenzie A, Le V, Cramer SC. Motor system injury and function provide insight into pre-therapy motor behavior. Soc Neurosci, New

- 101. Sharp KG, Gramer R, Kim S, Page S, Cramer SC. Larger cortical activation after incomplete spinal cord injury. Soc Neurosci, New Orleans, 2012.
- 102. Barton B, Treister A, Abedi G, Humphrey M, Cramer SC, Brewer AA. BDNF polymorphism affecting neural plasticity predicts visuo-motor adaptation to left-right visual reversal. (2012) Vision Sciences Society Abstract, 63.416.
- 103. Shibuya K, Burke E, Der-Yeghiaiain L, See J, McKenzie A, **Cramer S**. Relationship between lesion location and motor performance in chronic stroke survivors using voxel-based lesion symptom mapping (VLSM). Annual meeting of the American Physical Therapy Association. San Diego, 2013.
- 104. Gehricke, J-G, Bowman, H, Doshi K., **Cramer S**, Muftuler, LT. Effects of tobacco use on math accuracy and brain activity in smokers with and without Attention-Deficit/Hyperactivity Disorder. National Institutes on Drug Abuse Frontiers in Drug Addiction Research Convention. New Orleans, Louisiana 2012.
- 105. **Cramer S**, Kim S, Gramer R, Page SJ, Sharp K. Age and time since injury are associated with larger cortical activation after incomplete spinal cord injury. Arch Phys Med Rehabil 2012; 93 (10); e18-19. Presented at the American Congress of Rehabilitation Medicine annual meeting.
- 106. Stewart JC, Tran X, **Cramer SC**. Two Distinct Patterns of Brain Activation during Motor Action Selection in Older Adults. Society for Neural Control of Movement. 23<sup>rd</sup> annual meeting, San Juan, Puerto Rico, 2013.
- 107. Xie K\*, Vu Q\*, Eckert M, Zhao W, **Cramer SC**. Methodological Quality and Meta-Analysis of Animal Studies of Mesenchymal Stromal Cells for Ischemic Stroke. International Stroke Conference, Honolulu, 2013.
- 108. Liu V, Winter W, Xie K, Kanjiya S, Tran G, Srinivasan R, **Cramer SC**. Cortical Network Dynamics in Acute Ischemic Stroke. International Stroke Conference, Honolulu, 2013.
- 109. Do AH, Wang PT, King CE, Schombs A, Nenadic Z, **Cramer SC**. Brain-computer Interface Controlled Functional Electrical Stimulation as a Novel Approach to Improving Footdrop After Stroke. International Stroke Conference, Honolulu, 2013.
- 110. Kim D-Y, Burke E, **Cramer S**. The BDNF Val<sup>66</sup>Met Polymorphism Influences Motor System Function and Plasticity after Stroke. 65<sup>th</sup> Annual meeting of the American Academy of Neurology, San Diego, CA, 2013.
- 111. **Cramer S**, Abila B, Scott N, Simeoni M, Enney L, on Behalf of the MAG111539 Study. Safety, Pharmacokinetics, and Pharmacodynamics of Escalating Repeat Doses of GSK249320 in Patients with Stroke Investigators. 65<sup>th</sup> Annual meeting of the American Academy of Neurology, San Diego, CA, 2013.
- 112. Burke E, Dodakian L, Le V, McKenzie A, See J, Riley J, Cramer SC. Predicting

- therapeutic gains in patients with stroke. 19<sup>th</sup> Annual meeting of the Organization for Human Brain Mapping, Seattle, WA, 2013.
- 113. Stewart JC, Shariff U, Dewanjee P, **Cramer SC**. Neural correlates of motor action selection after stroke. 19<sup>th</sup> Annual meeting of the Organization for Human Brain Mapping, Seattle, WA, 2013.
- 114. Wu J, Kaur A, Srinivasan R, **Cramer SC**. Cortical connectivity predicts short-term motor skill acquisition. 19th Annual meeting of the Organization for Human Brain Mapping, Seattle, WA, 2013.
- 115. Stewart, JC, Cramer SC. Increased activation in premotor and prefrontal cortices relates to poorer motor action selection performance after stroke (SFN 2013).
- 116. Burke E, Dodakian L, See J, McKenzie A, Le V, **Cramer SC**. Changes in motor system functional connectivity with robotic therapy in chronic stroke. (SFN 2013).
- 117. Wu J, Srinivasan R, Kathuria N, Dodakian L, See J, **Cramer SC**. Cortical connectivity predicts motor impairment and improvement with Telerehabilitation therapy in chronic stroke. (SFN 2013).
- 118. Sharp K, Gramer R, Kim S, Page S, and **Cramer SC**. Larger cortical activation after incomplete spinal cord injury (SFN 2013).
- 119. Stewart JC, Dewanjee P, Shariff U, **Cramer SC**. Action selection for paretic hand movements leads to increased activation in the contralesional hemisphere after stroke. Combined Sections Meeting of the American Physical Therapy Association, 2014.
- 120. Burke E, Dodakian L, See J, Riley JD, McKenzie A, Le V, **Cramer SC**. Different Predictors of Treatment Gains in Lacunar and Non-lacunar Stroke. International Stroke Conf 2014.
- 121. Shibuya K, Burke E, Dodakian L, See J, **Cramer SC**, McKenzie A. The Use of Voxel-Based Lesion Symptom Mapping to Relate Lesion Location to Motor Performance in Chronic Stroke Survivors. International Stroke Conf 2014.
- 122. Chiu NL, Kaiser B, Nguyen YV, Aubin K, Flores R, Welbourne S, Lall C, **Cramer SC**. Correlates Of Spleen Volume After Stroke. International Stroke Conf 2014.
- 123. Wu J, Kathuria N, Burke E, Dodakian L, See J, McKenzie A, Srinivasan R, **Cramer SC**. Cortical Connectivity Is A Powerful Predictor Of Motor Recovery In Chronic Stroke. International Stroke Conf 2014.
- 124. Dodakian L, Stewart JC, **Cramer SC**. Motor Imagery During Movement Activates The Brain More Than Movement Alone After Stroke. International Stroke Conf 2014.
- 125. Hondori HM, Khademi M, McKenzie A, Dodakian L, Lopes CV, Cramer SC. Utility of Augmented Reality in Relation to Virtual Reality in Stroke Rehabilitation. International Stroke Conf 2014.

- 126. Dodakian L, McKenzie A, Burke E, See J, Zhou R, Augsberger R, Cramer SC. A Home-Based Telerehabilitation System For Patients With Stroke. International Stroke Conf 2014.
- 127. Stewart JC, Burke E, Dodakian L, McKenzie A, See J, **Cramer SC**. Effective Connectivity during Paretic Hand Movements after Stroke: Effect of Side of Brain Damage. 20th Annual meeting of the Organization for Human Brain Mapping, Hamburg, Germany.
- 128. Wu J, Knapp F, Varzhapetyan N, Srinivasan R, **Cramer SC**. Cortical connectivity at rest predicts consolidation of a novel motor skill (SfN 2014).
- 129. Stewart JC, Dewanjee P, Quinlan EB, Dodakian L, McKenzie A, See J, Cramer SC. Relationship between M1-M1 coupling during paretic hand movement and corpus callosum integrity after stroke (SfN 2014).
- 130. Cramer, S. C., Kim, S., Gramer, R., Page, S. J., Sharp, K. (2012). Age and time since injury are associated with larger cortical activation after incomplete spinal cord injury. *Arch Phys Med Rehabil*, *93*, e18-e19. (Presented at the American Congress of Rehabilitation Medicine Annual Meeting).
- 131. **Cramer SC**, See J, Aizik S, Shahbaba B, Wolf SL, Dromerick AW, Winstein CJ, for the ICARE Investigators. Genetic Factors And Motor Status After Stroke. International Stroke Conf 2015, Nashville, TN.
- 132. Dewanjee P, Tran G, Stewart JC, Quinlan EB, Dodakian L, McKenzie A, See J, Cramer SC. Structural Integrity of the Corpus Callosum Correlates with Sensorimotor Impairment after Stroke. International Stroke Conf 2015, Nashville, TN.
- 133. Stewart JC, Quinlan EB, Dodakian L, McKenzie A, See J, **Cramer SC**. Role of Contralesional Hemisphere during Paretic Hand Movement Differs Based on Level of Motor Impairment. International Stroke Conf 2015, Nashville, TN.
- 134. Tran G, Quinlan EG, **Cramer SC**. Corticospinal Tract Injury And Motor Impairment After Stroke. International Stroke Conf 2015, Nashville, TN.
- 135. Wu J, Srinivasan R, Solodkin A, Small SL, **Cramer SC**. Neurological Correlates Of Brain Function After Acute Stroke--A Dense Array EEG Study. International Stroke Conf 2015, Nashville, TN.
- 136. Dawson JD, **Cramer S.** Vagus Nerve Stimulation Paired with Rehabilitation Improves Upper Limb Recovery after Chronic Ischemic Stroke. International Stroke Conf 2015, Nashville, TN.
- 137. Ingemanson M, Cramer S, Reinkensmeyer D, Rowe J, Chan V, Wolbrecht E. Brain Activity In Sensorimotor Areas Predicts Treatment Gains From Robotic Finger Rehabilitation. 21st Annual meeting of the Organization for Human Brain Mapping, Honolulu, HA, 2015.
- 138. Levy RM, Harvey RL, Kissela BM, Winstein CJ, Lutsep HL, Parrish TB, **Cramer SC**, Venkatesan L. Long-term safety and efficacy of Epidural Cortical Stimulation for Stroke

- Rehabilitation: Results of the Everest Trial. International Neuromodulation Society 11th World Congress, 2015, Montreal, Quebec.
- 139. Ingemanson ML, Rowe JB, Chan V, **Cramer SC**, Reinkensmeyer DJ. Robotic Retraining of Finger Movements after Stroke. International Stroke Conf 2016, LA, CA.
- 140. Liew S-L, Jahanshad N, Anglin J, Kim B, Nhoung H, Li J, Rondina J, Borich M, Boyd L, **Cramer S**, Lang C, Sanossian N, Soekadar S, Ward N, Winstein C, Thompson P. ENIGMA Stroke Recovery Working Group: Big Data Approaches to Predict Stroke Recovery from MRI Scans. 2016 Annual Meeting American Society of Neurorehabilitation, San Diego, CA.
- 141. Lu D, Steinberg GK, Kondziolka D, Gross RE, Rosenow JM Okonkwo DO, Chen PR, Chen JW, Savitz SI, **Cramer SC**, Schwartz NE, Liu WJ, Bates D. The STEMTRA trial: a Double-Blind, Controlled, Phase 2 Study to Investigate the Safety and Efficacy of Modified Bone Marrow-Derived Mesenchymal Stem Cells (SB623) in Patients with Chronic Motor Deficit from Traumatic Brain Injury. 6<sup>th</sup> Annual Traumatic Brain Injury Conference 2016, Washington DC.
- 142. McMahan B, Cassidy JM, O'Brien C, Brentlinger G, Srinivasan R, **Cramer SC**. Remote effects of stroke on brain function and motor cortex connectivity. Society for Neuroscience, San Diego, CA, 2016.
- 143. Kaur A, Shreve L, Vo C, Nguyen AP, Wu J, Cassidy J, Wu KM, Chiu N, Yu W, Velarde I, Gehan S, Chakravarthy B, Hoonpongsimanont W, Barton E, Srinivasan R, **Cramer SC**. Rapid EEG of Acute Ischemic Stroke in the Emergency Room. Society for Neuroscience, San Diego, CA, 2016.
- 144. Liew S-L, Jahanshad N, Anglin J, Khoshab N, Kim B, Nakamura W, Nhoung H, Rondina J, Tran C, Borich M, Boyd L, **Cramer S**, Dimyan MA, Ermer E, Lang CE, LI J, Nichols T, Roberts P, Sanossian N, Soekadar S, Ward N, Westlye LT, Winstein C, Wittenberg GF, Thompson PM. ENIGMA Stroke Recovery: Big Data Neuroimaging To Predict Stroke Recovery. Society for Neuroscience, San Diego, CA, 2016.
- 145. Ingemanson ML, Rowe JB, Chan V, Reinkensmeyer DJ, **Cramer SC**. Specificity of neural system injury in relation to motor and proprioceptive deficits poststroke. Society for Neuroscience, San Diego, CA, 2016.
- 146. Stewart JC, Baird J, Pathak G, **Cramer SC**. Distribution of interhemispheric structural connections between motor regions on the corpus callosum in older adults. Society for Neuroscience, San Diego, CA, 2016.
- 147. Ingemanson ML, Rowe JB, Chan V, Reinkensmeyer DJ, **Cramer SC**. Sensory and motor system predictors of treatment gains after robotic retraining of finger movements post-stroke 2016 Annual Meeting American Society of Neurorehabilitation, San Diego, CA.
- 148. Sharp KG, Gramer R, Kim S, Page S, and **Cramer SC**. Functional Magnetic Resonance Imaging as a Tool for Determining changes in Executive Functions with Exercise. International Society of Behavioral Nutrition and Physical Activity. Cape Town, Africa. 2016.
- 149. Wu J, Dodakian L, See J, Quinlan EB, Meng L, Abraham J, Le VH, McKenzie AL,

- **Cramer SC**. Recovery varies across ICF dimensions in robot-based therapy after stroke. Association of Academic Physiatrists Annual Meeting, Las Vegas, NV, 2017.
- 150. Raychev RI, Stradling D, Brown DM, Gee JR, Lombardi DL, Moon JL Patel N, Pathak M, Yu W, Stratton SJ, Cramer, SC. Evolution Of A U.S. County System for Acute Comprehensive Stroke Care. International Stroke Conference 2017, Houston, TX.
- 151. Liew S-L, Jahanshad N, Anglin J, Heydari P, Khoshab N, Kim B, Nakamura W, Nhoung H, Rondina J, Tran C, Aziz-Zadeh L, Borich M, Boyd L, Dimyan MA, Ermer E, Lang CE, Junning Li J, Liu J, Nichols T, Roberts P, Sanossian N, Soekadar S, Ward N, Wang J, Westlye LT, Winstein CJ, Wittenberg GF, Yu C, Cramer SC, Thompson PM. Effects of Lesioned Hemisphere on Post-Stroke Motor Impairment: ENIGMA Stroke Recovery (N=343). International Stroke Conference 2017, Houston, TX.
- 152. **Cramer, SC**, Enney LA, Russell CK, Simeoni M, Thompson TR. A Phase IIb Doubleblind, Randomized, Placebo Controlled Study of GSK249320 for Stroke Recovery. International Stroke Conference 2017, Houston, TX.
- 153. Kaur A, Wu J, Cassidy JM, Shreve L, Zhou RJ, Vo C, Medizade AI, Tran TB, Yang DZ, Yu W, Chakravarthy B, Hoonpongsimanont W, Barton E, Srinivasan R, **Cramer SC**. Feasibility And Utility Of EEG For Estimating Infarct Volume During ER Assessment Of Suspected Acute Stroke--A Pilot Study. International Stroke Conference 2017, Houston, TX.
- 154. Cassidy JM, Ingemanson M, Srinivasan R, Cramer SC. Effect of Corticospinal Tract Injury on Motor Cortex Function And Connectivity After Stroke. International Stroke Conference 2017, Houston, TX.
- 155. **Cramer SC**, Zhou R, Ingemanson M, Choi JJ, Wu KM, Kaur A, Erani F, Yang DZ, Khaturi N, Cassidy JM, Scacchi W, Dodakian L, McKenzie A, Lopes CV. Targeted Training Of A Motor-Parietal Circuit Improves Its Behavioral Output. International Stroke Conference 2017, Houston, TX.
- 156. Saposnik G, **Cramer S**, Cohen LG, Cohen A, Shing LK, laupacis A, Bayley M, on behalf of EVREST Multicenter Investigators & Stroke Outcomes Research Working Group (SORCan). Virtual Reality in Stroke Rehabilitation: Identifying Responders in Evrest Multicentre Trial. International Stroke Conference 2017, Houston, TX.
- 157. Dawson J, Kimberley TJ, Francisco GE, Smith P, **Cramer SC**, Wigginton J, Yozbatiran N, Wolf S, Tarver B, Pearce D, Engineer N. Vagus Nerve Stimulation Paired With Rehabilitation To Improve Upper Limb Function. International Stroke Conference 2017, Houston, TX.
- 158. Baird J, Pathak G, Cramer SC, Stewart JC. Segmentation of Interhemispheric Motor Regions on the Corpus Callosum in Stroke. OHBM 2017, Vancouver, BC, Canada.
- 159. Dawson J, Francisco G, Yozbatiran N, **Cramer S**, Wolf S, Engineer N, Pierce, D, Tarver WB, Smith P, Wigginton J, Kimberley TJ. A Randomized Blinded Study of Vagus Nerve Stimulation (VNS) During Rehabilitation for Improved Upper Limb Motor Function after Stroke (MT-St-02) Follow-up through 90-days. International Neuromodulation Society 13th World Congress. 2018. Edinburgh, Scotland.

- 160. Kimberley TJ, Francisco, G, Yozbatiran N, **Cramer S**, Wolf S, Engineer N, Pierce D, Tarver WB, Smith, P, Wigginton J, Dawson J. A Randomized Double-Blind Pilot Study Assessing Vagus Nerve Stimulation (VNS) During Rehabilitation for Improved Upper Limb Motor Function after Stroke (MT-St-02) Long-Term follow-up and exploration of other measures. International Neuromodulation Society 13th World Congress. 2018. Edinburgh, Scotland.
- 161. Anglin JM, Banks N, Sondag M, Ito K, Kim H, Chan J, Ito J, Yung C, Lefebvre S, Nakamura W, Saldana D, Schmiesing A, Tran C, Voi D, Heydari P, Kim B, Khoshab N, Aziz-Zadeh L, **Cramer SC**, Liu J, Soekadar S, Westlyes LT, Wang J, Winstein CJ, Yu C, Lakich M, Pienta A, Stroud A, Liew S-J. The ATLAS (Anatomical Tracings Of Lesions After Stroke) Dataset (SfN 2017).
- 162. Hayward KS, Borich MR, Cramer SC, Borstad A, Stewart JC, Neva JL, Ferris JK, Cassidy J, Boyd LA. Regional diffusion differences in people with severe upper limb impairment post-stroke: A multicentre study (SfN 2017).
- 163. Cassidy JM, **Cramer SC**. Application of neuroimaging in early stroke for motor recovery prediction (SfN 2017).
- 164. Francisco GE, Dawson J, Kimberly T, Yozbatiran N, **Cramer S**, Wolf W, Engineer N, Tarver B, Pierce D. A Randomized Double-Blind Study Assessing The Effect Of Vagus Nerve Stimulation (VNS) During Rehabilitation On Post-Stroke Upper Limb Recovery (World Federation for NeuroRehabilitation 2018).
- 165. Cassidy JM, Srinivasan R, **Cramer SC**. Baseline motor impairment impacts predictive performance of functional EEG measurements for early motor recovery after stroke (American Society of Neurorehabilitation 2017, Baltimore, MD).
- 166. Anglin JM, Banks NW, Sondag M, Ito KL, Kim H, Chan J, Ito J, Jung C, Lefebvre S, Nakamura W, Saldana D, Schmiesing A, Tran C, Vo D, Ard T, Heydari P, Kim B, Khoshab N, Aziz-Zadeh L, **Cramer SC**, Liu J, Soekadar S, Nordvik J-E, Westlye LT, Wang J, Winstein C, Yu C, Ai L, Craddock RC, Milham M, Lakich M, Pienta A, Stroud A, Liew, S-L. The Anatomical Tracings of Lesions After Stroke (ATLAS) Dataset Release 1.1. American Society of Neurorehabilitation 2017, Baltimore, MD.
- 167. Zavaliangos-Petropulu A, Jahanshad N, Ching CRK, Isaev D, Ragothaman A, Gutman B, Kim B, Robertson AD, Rondina JM, Aziz-Zadeh L, Byblow WD, Cramer SC, Domin M, Kautz SA, Kuceyeski A, Lang CE, Liu J, Lotze M, MacIntosh BJ, Ramos-Murguialday A, Roberts P, Stinear CM, Thielman C, Wang J, Winstein C, Wittenberg G, Yu C, Thompson PM, Liew S-L. Subcortical Brain Shape Differences Relate to Post-Stroke Motor Behavior. American Society of Neurorehabilitation 2017, Baltimore, MD.
- 168. Wodeyar A, Cassidy J, Wu J, **Cramer S**, Srinivasan, R. Graph theoretic measures of Fronto-Occipital EEG functional connectivity reflect MRI estimates of damage to the fronto-occipital fasciculus. Organization for Human Brain Mapping Annual Meeting. 2018. Singapore.

- 169. **Cramer SC**, Liu BJ, Edwardson MA, See J, Wang X, Radom-Aizik S, Shahbaba B, Wolf SL, Dromerick A, Winstein C; and the ICARE study investigators. BDNF val66met Genotype is Associated With Greater Brain Atrophy After Stroke. International Stroke Conference 2018, Los Angeles, CA.
- 170. Liew S-L, Jahanshad N, MacIntosh BJ, Robertson AD, Wang J, Soekadar S, Marguiles DS, Lotze M, Domin M, Byblow WD, Stinear CM, Westlye LT, Ramos A, Birbaumer N, Wiest R, Ward N, Anglin JM, Winstein CJ, Aziz-Zadeh L, Roberts P, Goud A, Borich MR, Wittenberg G, Lang CE, Kuceyeski A, Kautz S, Hanlon C, **Cramer SC**, Thompson PM; on behalf of the ENIGMA Stroke Recovery working group. Subcortical Volumes Associated With Post-Stroke Motor Performance Vary Across Impairment Severity, Time Since Stroke, and Lesion Laterality: an ENIGMA Stroke Recovery Analysis. International Stroke Conference 2018, Los Angeles, CA.
- 171. See J, Augsburger R, McKenzie A, Dodakian L, **Cramer SC**. Feasibility of Online Training and Certification for the Fugl-Meyer Motor Assessment in Stroke Recovery Trials. International Stroke Conference 2018, Los Angeles, CA.
- 172. Chen Y, Chen Y, Zheng K, Dodakian L, See J, Zhou R, Chiu N, Augsburger N, McKenzie A, **Cramer SC**. A Qualitative Study on a Telehealth System for Home-Based Stroke Rehabilitation. International Stroke Conference 2018, Los Angeles, CA.
- 173. Cassidy JM, Srinivasan R, Aziz Z, Yang DZ, O'Brien C, **Cramer SC**. Neural Function and Injury Combined Best Predict Behavioral Gains During Inpatient Stroke Rehabilitation. International Stroke Conference 2018, Los Angeles, CA.
- 174. McKenzie A, Razeghian J, Lopez J, See JD, Le V, **Cramer SC**, Beuttler R, Grant-Beuttler M. Kinematic Analysis of a Game-Based Telerehabilitation System for Post-Stroke Upper Extremity Recovery. APTA Combined Sections Meeting, New Orleans, LA 2018.
- 175. Suzuki S, Meng J, Patel R, Lin L-M, Golshani K, Abcede H, Shafie M, Yu W, **Cramer S**, Fisher M, Hsu F. Importance of Awareness in Wake-Up Stroke. 70<sup>th</sup> Annual meeting of the American Academy of Neurology, Los Angeles, CA, 2018.
- 176. Suzuki S, Meng J, Patel R, Lin L-M, Golshani K, Abcede H, Shafie M, Yu W, Cramer S, Fisher M, Hsu F. Get with The Guideline on Reducing Door-to-Reperfusion Time and Good Clinical Outcomes for Endovascular Reperfusion Therapy. 70<sup>th</sup> Annual meeting of the American Academy of Neurology, Los Angeles, CA, 2018.
- 177. Hayward KS, Ferris JK, Lohse KR, Borich MR, Cramer SC, Borstad A, Stewart JC, Cassidy J, Neva JL, Boyd LA. Biomarkers of upper limb outcome post-stroke: One-size-fits-all? Stroke 2018 (Stroke Society of Australia).
- 178. Norman SL, McFarland DJ, Miner A, **Cramer SC**, Wolbrecht EG, Wolpaw JR, Reinkensmeyer DJ. BCI-Based Control of Pre-Movement Sensorimotor Rhythm Amplitude May Improve Motor Performance after Stroke. BCI 2018. Asilomar Conference Center, Pacific Grove, CA, 2018.
- 179. Cramer SC, Dodakian L, Le V, See J, Augsburger R, McKenzie A, Zhou R, Chiu N,

- Scacchi W, Smith MT, Barrett AM, Chae J, Edwards D, Agrawal K, Ngo K, Roth EJ, Tirschwell D, Woodbury ML, Zafonte R, Wolf, SL, for the NIH StrokeNet Telerehab Investigators. Telerehabilitation In The Home Versus Therapy In-Clinic For Patients With Stroke. 4<sup>th</sup> European Stroke Organization Conference, Gothenburg, Sweden. 2018.
- 180. Reinkensmeyer DJ, Norman SL, McFarland DJ, Miner A, **Cramer SC**, Wolbrecht ET, Wolpaw JR. Sensorimotor rhythm control can improve finger movement after stroke. SfN 2018. San Diego, CA.
- 181. Hayward KS, Ferris JK, Lohse KR, Borich MR, **Cramer SC**, Dukelow S, Stewart JC, Borstad A, Cassidy J, Findlater S, Neva JL, Boyd LA. Biomarkers Of Upper Limb Outcome Post-Stroke: Moving Beyond One-Size-Fits-All. World Stroke Congress (World Stroke Organization). Montreal, Canada October 2018.
- 182. Lin DJ, Cloutier A, Snider S, Giatsidis F, Ranford J, Parlman K, Fasoli S, Kimberley TJ, Cramer SC, Finklestein SP, Hochberg LR. Clinical Translation of Early Clinical and Neuroimaging Biomarkers to Predict Upper Extremity Stroke Motor Recovery. American Society of Neurorehabilitation 2018. San Diego, CA.
- 183. Lobo Prat J, Zondervan DK, Lew C, Smith BW, Chan V, Chou C, Shaw S, Reinkensmeyer DJ, and **Cramer SC**. Using a novel lever-drive wheelchair to increase arm movement practice early after stroke: Preliminary results of a randomized controlled trial. American Society of Neurorehabilitation 2018. San Diego, CA.
- 184. Cassidy JM, Kaur K, Masuda AK, Srinivasan R, **Cramer SC**. Functional Neuroimaging Predicts Motor Recovery in Early Stroke Rehabilitation. American Society of Neurorehabilitation 2018. San Diego, CA.
- 185. de Lucena DS, Rowe JB, Chan V, **Cramer SC**, Reinkensmeyer DJ. Using the Manumeter for continuous feedback on hand activity after stroke: preliminary results. American Society of Neurorehabilitation 2018. San Diego, CA.
- 186. Chen Y, Abel KT, Cramer SC, Zheng K, Chen Y. Recovery in my lens: A study on stroke vlogs. American Medical Informatics Association Annual Symposium Proceedings. San Francisco, CA 2018.
- 187. **Cramer SC**, Dodakian L, Le V, See J, Augsburger R, McKenzie A, Zhou R, Chiu N, Scacchi W, Smith MT, Barrett AM, Knutson J, Edwards D, Putrino D, Agrawal K, Ngo K, Roth EJ, Tirschwell D, Woodbury ML, Zafonte R, Wolf SL, Zhao W, Broderick JP, and Janis S, for the NIH StrokeNet Telerehab Investigators. Telerehabilitation In The Home Versus Therapy In-Clinic For Patients With Stroke. International Stroke Conference 2019, Honolulu, HI
- 188. Byblow WD, Barber PA, Ackerley SJ, Smith M-C, **Cramer SC**, Stinear CM. Biomarkers for patient selection improve stroke rehabilitation trial efficiency. International Stroke Conference 2019, Honolulu, HI.
- 189. Erani F, Zolotova N, Vanderschelden B, Wu JC, Wodeyar A, Sarian H, Chakravarthy B, Hoonpongsimanont W, Yu W, Srinivasan R, Shahbaba B, **Cramer SC**. EEG Has High Precision for Diagnosing Stroke Hours After Onset. International Stroke Conference 2019, Honolulu, HI.

- 190. Cassidy JM, Kaur K, Masuda AK, Srinivasan R, **Cramer SC**. EEG is a Useful Biomarker of Motor Recovery in Early Stroke Rehabilitation. International Stroke Conference 2019, Honolulu, HI.
- 191. Cassidy JM, Wodeyar A, Wu J, Srinivasan R, **Cramer SC**. Linking Post-Stroke Injury, Neural Function, and Motor Behavior With EEG. International Stroke Conference 2019, Honolulu, HI.
- 192. Wodeyar A, Cassidy JM, Wu J, **Cramer SC**, Srinivasan R. Influence of Damage to the Structural Connectome on Functional Connectivity. 25<sup>th</sup> Annual meeting of the Organization for Human Brain Mapping, Rome, Italy, 2019.
- 193. Ito K, Zavaliangos-Petropulu A, **Cramer S**, Liew S-L. Lesion Load of Corticospinal Tracts from Higher-Level Motor Regions Predict Stroke Motor Outcomes. 25<sup>th</sup> Annual meeting of the Organization for Human Brain Mapping, Rome, Italy, 2019.
- 194. Lakes KD, Scerif G, Zhou R, **Cramer SC**, Radom-Aizik, S. How Does The Intensity Of Physical Activity Influence Executive Control In Children? An Electrophysiological Investigation. 15th European Congress of Sport & Exercise Psychology, Munster, Germany, 2019.
- 195. Bernhardt J, Borschmann K, Corbett D, **Cramer SC**, Kwakkel G, Eng JJ, Bird ML, Walker MF, Clarkson AN, O'Sullivan MJ, Burridge JH. Research And Clinical Practice: New Directions From The Stroke Recovery And Rehabilitation Roundtable II Montreal 2018. 5th European Stroke Organisation Conference. Milan, Italy. 2019.
- 196. Cho Y, Heckhausen J, **Cramer SC**. The Role of Goal Disengagement and Adjustment During Gamified Stroke Rehabilitation in Older Adults. Society for the Study of Human Development. Portland, OR. 2019.
- 197. Zavaliangos-Petropulu A, Bhattacharya AK, Bigjahan B, Borich MR, Brown TR, Buetefisch CM, Byblow WD, Conforto AB, Craddock RC, Cramer SC, Dula AN, Gill K, Goud A, Hadidchi S, Holguin JA, Hwang DH, Khoshab N, Kim H, Kuceyeski A, Lang CE, Lotze M, MacIntosh BJ, Manzano M, Margetis JL, Ramos-Murguialday A, Roberts P, Robertson AD, Rondina JM, See K-Y, Shiroishi MS, Stinear CM, Thielman G, Ward NS, Winstein C, Wittenberg GF, Wong KA, Jahanshad N, Thompson PM, Liew S-K. Ipsilesional Hippocampal Volume is Directly Associated with Motor Performance in Chronic Stroke Patients: An ENIGMA Stroke Recovery Analysis. Society for Neuroscience 2019.
- 198. Bernhardt J, Borschmann KN, Kwakkel G, Burridge JH, Eng JJ, Walker MF, Bird M-L, **Cramer SC**, Hayward KS, O'Sullivan MJ, Clarkson AN, Corbett D, for the SRRR II Collaboration. Consensus building at the Second Stroke Recovery and Rehabilitation Roundtable Canada. Stroke Society of Australasia Conference 2019. Canberra, Australia.
- 199. 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. American Society for Neurorehabilitation 2019. Chicago, IL.

- 200. Lin D, Erler K, Sloane K, Cloutier A, DiCarlo J, Lam N, Parlman K, Ranford J, Finklestein S, Kimberley T, Schwamm L, **Cramer S**, Hochberg L. Upper Extremity Motor Assessment and Neuroimaging Factors Important for Discharge Destination after Acute Stroke. American Society for Neurorehabilitation 2019. Chicago, IL.
- 201. Bernhardt J, Hayward K, Kwakkel G, Burridge J, Eng J, Walker M, Bird M-L, Borschmann K, **Cramer S**, O'Sullivan M, Clarkson A, McDonald M, Jeffers M, Corbett D, On behalf of the SRRR II Collaboration. Further Consensus building at the Second Stroke Recovery and Rehabilitation Roundtable (SRRR II). American Society for Neurorehabilitation 2019. Chicago, IL.
- 202. Hayward KS, Ferris JK, Lohse KR, Cramer SC, Borich MR, Stewart JC, Borstad A, Cassidy J, Dukelow S, Findlater S, Neva JL, Boyd LA. Severity of Impairment is Important when Exploring Biomarkers of Upper Limb Outcome Post-Stroke. American Society for Neurorehabilitation 2019. Chicago, IL.
- 203. Lin DJ, Erler KS, Sloane KL, Cloutier A, Snider SS, DiCarlo J, Lam N, Parlman K, Ranford J, Finklestein SP, Kimberley TJ, Schwamm L, **Cramer SC**, Hochberg LR. Clinical and Neuroimaging Factors Important for Discharge Destination after Acute Stroke. American Society for Neurorehabilitation 2019. Chicago, IL.
- 204. Levy ML, Crawford JR, Dib N, Verkh L, Tankovich N, **Cramer SC**. A Phase I/II, Prospective Multi-Center Study Of The Safety And Preliminary Efficacy Of Intravenous Allogeneic Mesenchymal Bone Marrow Cells In Chronic Ischemic Stroke. 2019 Congress of Neurological Surgeons Annual Meeting. San Francisco, CA
- 205. **Cramer SC**, Dodakian L, Le V, McKenzie A, See J, Augsburger R, Zhou R, Raefsky S, Nguyen T, Vanderschelden B, Wong G, Bandak D, Nazarzai L, Woytowicz E, Dhand A, Scacchi W, Heckhausen J. A Pilot Study Of Expanded Home-Based Telerehabilitation After Stroke. International Stroke Conference 2019, Los Angeles, CA.
- 206. Cassidy JM, Wodeyar A, Srinivasan R, Cramer SC. Coherent Neural Oscillations Inform Early Stroke Motor Recovery. International Stroke Conference 2020, Los Angeles, CA.
- 207. McAllister P, Semeniv I, Weintraub AH, Ikeda S, Frishberg BM, Lai A, Shinoda Y, **Cramer SC**, Munin MC, Schwartz NE, Nejadnik B, Bates D. Pre-Specified Interim Analysis of the STEMTRA Trial: Clinical Outcomes in Chronic Traumatic Brain Injury Patients. American Academy of Neurology Annual Meeting 2020, Toronto, ON.
- 208. Heitsch L, Braun R, DeHavenon A, Cole J, Lindgren A, Cramer S, Worrall B. Patterns of Domain-Specific Recovery Over 90 days from Acute Ischemic Stroke Onset. American Academy of Neurology Annual Meeting 2020, Toronto, ON.
- 209. Raefsky S, Dodakian L, Le V, McKenzie A, See J, Zhou R, Nguyen T, Vanderschelden B, Wong G, Nazarzai L, Heckhausen J, **Cramer SC**, and Dhand A. Social Factors Related to Home-Based Telerehabilitation After Stroke. American Academy of Neurology Annual Meeting 2020, Toronto, ON.

- 210. Welsh J, Holman A, **Cramer S**, McGee B, Coa M, Jubb A. Childhood Adversity and Cognitive Framing When Coping with Stroke. Association for Psychological Science 32<sup>nd</sup> Annual Convention. 2020.
- 211. Podury A, Raefsky S, Dodakian L, Le V, McKenzie A, See J, Zhou R, Nguyen T, Vanderschelden B, Wong G, Nazarzai L, Heckhausen J, **Cramer SC**, and Dhand A. Social Factors Related to Home-Based Telerehabilitation After Stroke. American Neurological Association 2020 meeting.
- 212. Braun R, Heitsch L, Cole J, Lindgren A, DeHavenon A, **Cramer S**, Worrall B. Use Of The NIHSS (National Institutes Of Health Stroke Scale) To Support Domain-Specific Measures In Clinical Stroke Recovery Trials. European Stroke Organisation Conference 2020.
- 213. Dawson J, Liu C, Francisco G, **Cramer S**, Wolf S, Dixit A, Ali R, Brown B, DeMark L, Majid A, Pierce D, Prudente C, Redgrave J, Turner D, Engineer N, Kimberley T Vagus Nerve Stimulation Paired With Rehabilitation For Upper Limb Motor Function After Ischaemic Stroke (VNS-Rehab): A Randomised, Blinded, Pivotal, Phase III Device Trial. European Stroke Organisation Conference 2020.
- 214. de Havenon A, Braun RG, Sunmonu NA, Heitsch L, Mistry EA, Cole J, Lindgren A, Worrall BB, Cramer SC. Predicting Persistent Upper Extremity Impairment in Ischemic Stroke Patients. International Stroke Conference 2021.
- 215. Paik SM, **Cramer SC**. Patients most likely to benefit from home-based telerehabilitation after stroke. International Stroke Conference 2021.
- 216. de Havenon AH, Braun R, Delic A, Wong K-H, **Cramer SC**, Worrall BB. Patient and Caregiver Agreement on Stroke Survivor Quality of Life in the Year After Stroke Onset. International Stroke Conference 2021.
- 217. Zavaliangos-Petropulu A, Banaj N, Barisano G, Borich MR, Brodtmann A, Buetefisch CM, Charalambous CC, Ciullo V, Conforto AB, Cramer SC, Dacosta- Aguayo R, Feng W, Hayward KS, Hordacre B, Kautz SA, Khlif MS, Kim H, Kuceyeski A, Lin JD, Lo B, Lohse KR, Lotze M, MacIntosh BJ, Mataro M, Mohamed FB, Ramos-Murguialday A, Piras F, Robertson AD, Schweighofer N, Seo NJ, Shiroishi MS, Spalletta G, Thielman GT, Ward NS, Winstein CJ, Wolf SL, Wong KA, Jahanshad N, Thompson PM, Liew S-L, ENIGMA Stroke Recovery Working Group (2021) Chronic stroke sensorimotor impairment correlates with spared hippocampal volume: An ENIGMA Analysis. Organization for Human Brain Mapping 2021.
- 218. Dawson J, Liu CY, Francisco GE, **Cramer SC**, Wolf SL, Dixit A, Alexander J, Ali R, Brown BL, Feng W, DeMark L, Hochberg L, Kautz SA, Majid A, O'Dell MW, Pierce D, Prudente CN, Redgrave J, Turner DL, Engineer ND, Kimberley TJ. Vagus Nerve Stimulation Paired with Upper Extremity Rehabilitation After Chronic Stroke: Cross-over results from the VNS-REHAB Pivotal Study. AAN 2021.
- 219. Erler KS, Wu R, DiCarlo JA, Hochberg LR, Kautz SA, Schwamm LH, Cramer SC, Finklestein SP, Lin DJ. Modified Rankin Scale Does Not Capture Precise Recovery Phenotypes after Acute Stroke. American Society of Neurorehabilitation. Virtual meeting. 2021.

- 220. Holman EA, Teixeira K, McGee B, Cao M, Jubb A, **Cramer SC**. On behalf of the STRONG Study Team. Lifetime Stress, Acute Stress, and Outcomes After Stroke: A Longitudinal Study of Stroke Survivors. International Stroke Conference. New Orleans, LA 2022.
- 221. **Cramer SC**, Saver JL, McGee B, Cao M, Jubb A, Holman EA, on behalf of the STRONG Study Team. A comparison of the modified Rankin Scale and Stroke Impact Scale-ADL for measuring function after stroke. International Stroke Conference. New Orleans, LA 2022.
- 222. Taleb S, Duncan P, **Cramer SC**, Bahr-Hosseini M, Starkman S, Avila G, Hamilton S, Conwit R, Saver JL. Trajectory of Global Disability During First 90 Days Poststroke: Foundational Data for Early Rehabilitation Intervention Trials. International Stroke Conference. New Orleans, LA 2022.
- 223. de Havenon A, Braun R, Worrall B, Sunmuno NA, Lindgren A, Cole JW, Lohse K, Broderick JP, **Cramer SC**. Quality of Life Trajectories in the Year after Large Vessel Occlusion Stroke and their Association with 90-Day Functional Outcome. International Stroke Conference. New Orleans, LA 2022.
- 224. Chalard A, Srinivasan R, **Cramer SC**. Premovement sensorimotor oscillations are associated with motor status in chronic stroke. International Stroke Conference. New Orleans, LA 2022.
- 225. Dawson J, Liu CY, Francisco GE, **Cramer SC**, Wolf SL, Dixit A, Alexander J, Ali R, Brown BL, Feng W, DeMark L, Hochberg L, Kautz SA, Majid A, O'Dell MW, Pierce D, Prudente CN, Redgrave J, Turner DL, Engineer ND, and Kimberley TJ. Vagus Nerve Stimulation Paired with Rehabilitation for Upper Limb Motor Function After Ischaemic Stroke: Sub-group Analysis of the Randomised, Blinded, Pivotal, VNS Rehab Device Trial. International Stroke Conference. New Orleans, LA 2022.
- 226. Braun RG, Heitsch L, Sunmonu NA, Cole JW, Lindgren AG, de Havenon A, Lohse KR, Cramer SC, Worrall BB. Enhancing Stroke Trial Efficiency Using NIHSS Scores To Predict Persistence Of Treatable Deficits. International Stroke Conference. New Orleans, LA 2022.
- 227. DiCarlo JA, Erler KS, Jaywant A, Ranford J, **Cramer SC**, MD, Lin DJ. Patient-reported and performance-based outcomes separate independently and are associated with distinct patterns of neuroanatomical injury after stroke. International Stroke Conference. New Orleans, LA 2022.
- 228. **Cramer SC**, McGee B, Cao M, Jubb A, Holman A, on behalf of the STRONG Study Team. The Functional Significance of Distal Arm Motor Deficits After Stroke. International Stroke Conference. New Orleans, LA 2022.
- 229. Braun R, Heitsch L, Sunmonu NA, Cole JW, Lindgren A, de Havenon, A, Lohse K, **Cramer SC**, Bradford B Worrall. Domain-specific endpoints complement the mRS in acute and subacute stroke trials. International Stroke Conference. New Orleans, LA 2022.
- 229. McAllister P, Frishberg BM, Lai A, Yasuhara T, Cramer SC, Kawabori M, Munin MC, Schwartz NE, Nejadnik B, Bates D, Imai H, Weintraub AH. Efficacy and Safety Outcomes in

- Patients with Chronic Traumatic Brain Injury: Final Analysis of the Phase 2 STEMTRA Trial. American Academy of Neurology. Seattle, WA. 2022.
- 230. Braun RG, Lohse KR, de Havenon A, Dude JA, Cole JW, Heitsch LE, Lindgren A, **Cramer SC**, Worrall BB. Differential Effects of Visual Field Deficits and Hemineglect in Stroke Recovery. Association of Academic Physiatrists. New Orleans, LA 2022.
- 231. DiCarlo JA, Erler KS, Jaywant A, Gochyyev P, Ranford J, **Cramer SC**, Lin DJ. Structural Neural Correlates of Objective and Patient-Reported Measures of Function and Health Status After Stroke. American Society of Neurorehabilitation. St. Louis, Missouri. 2022.
- 232. Hardstone R, Ostrowski LM, Dusang AN, Chu C, Cash SS, Cramer SC, Hochberg LR, Lin DJ. Persistent asymmetry of aperiodic resting-state neural activity in both cortical and subcortical strokes. American Society of Neurorehabilitation. St. Louis, MO. 2022.
- 233. Smith JA, Tain R, Sharp KG, Glynn LM, Van Dillen LR, Henslee K, Jacobs JV, Cramer SC. Identifying the neural correlates of postural control: a novel fMRI paradigm. Organization for Human Brain Mapping. Glasgow, Scotland. 2022.
- 234. Lazouras W, Dodakian L, See J, Chan V, Govindu S, Chou C, Wang P, Johnson C, Biswas P, Nguyen D, Reinkensmeyer D, **Cramer SC**, Nenadic Z, Do A. BCI-FES Therapy For Stroke Rehabilitation. California APTA meeting. San Diego, CA 2022.
- 235. **Cramer S**, Kumar S, Nguyen T, Esquenazi A, Brinkman L, Cardoso Ferreira I, Su M, Stein S, May J, Hendrix A, Finley C, Howard E, Edwards E. Intensive Rehabilitation Therapy Using Telehealth Methods Early After Stroke. American Neurological Association 147<sup>th</sup> annual meeting, Chicago, IL. 2022
- 236. Holl C, Ferreira IC, Nguyen T, Brinkman L, Su M, Le V, **Cramer SC**. Bridging the gap: Feasibility of Telerehabilitation from IRF to Home. APTA Combined Sections Meeting, San Diego. 2023.
- 237. DiCarlo JA, Erler KS, Jaywant A, Gochyyev P, Ranford J, Cramer SC, Lin DJ. Distinct Clinical and Neuroanatomic Factors Associated with Function-based versus Patient-Reported Outcome Measures After Stroke. International Neuropsychological Society. Barcelona, Spain. 2022.
- 238. Young BM, Holman EA, **Cramer SC**, for the STRONG Study Investigators. Rehabilitation Therapy Doses Are Low After Stroke And Predicted By Clinical Factors. International Stroke Conference. Dallas, TX. 2023.
- 239. de Havenon A, Skolarus LE, Aldridge CM, Braun RG, Cole JW, **Cramer SC**, Lindgren AG, Sunmonu NA, Worrall BB, Lohse KR. Understanding patterns of missingness in acute ischemic stroke trials: A secondary analysis of pooled patient-level follow-up data. International Stroke Conference. Dallas, TX. 2023.
- 240. Holman EA and **Cramer SC**, on behalf of the STRONG Study Team. Lifetime Stress, Acute Stress, and Long-term Outcomes After Stroke: A Longitudinal Study. International Stroke Conference. Dallas, TX. 2023.

- 241. Young BM, Kim W-S, Yadav R, Rana S, Han S, Batth R, Sakthi S, Liu C, Farahmand E, Patel D, Luo J, Ramsey C, Feldman M, Cardoso Ferreira I, Holl C, Nguyen T, Su M, Chang TY, **Cramer SC**. Wrist Proprioception In The Subacute Period After Stroke. International Stroke Conference. Dallas, TX. 2023.
- 242. Young BM, Holman EA, **Cramer SC**, for the STRONG Study Investigators. Rehabilitation Therapy Doses Are Low After Stroke And Predicted By Clinical Factors. International Stroke Conference 2023.
- 243. **Cramer SC**, Parodi L, Rosand J, Holman EA. Genetic factors and outcomes after stroke: a preliminary analysis of the STRONG Study. International Stroke Conference 2023.
- 244. Weintraub AH, **Cramer SC**, Steinberg GK, Kawabori M, Kesari S, Imai H, Groysman LI, Yasuhara T, Kim AS, Frishberg BM, Schwartz NE, Nejadnik B, Bates D, McAllister P. Final analysis of the double-blind, randomized, surgical sham-controlled, Phase 2 STEMTRA Trial: 1-year safety and efficacy outcomes in patients with chronic motor deficits secondary to traumatic brain injury. IBIA (International Brain Injury Association) World Congress on Brain Injury. Dublin, Ireland. 2023
- 245. Lee JSA, Johnstone A, Evans C, Zich C, Lo BP Borich MR, Boyd LA, Cassidy JM, **Cramer SC**, Donnelly MR, Hanlon CA, Hordacre B, Kautz SA, Liu J, Schranz C, Seo NJ, Soekadar SR, Srivastava S, Winstein CJ, Yu C, Zavaliangos-Petropulu A, Liew S-L, Ward NS, Bestmann S. The impact of individual stroke lesions on tDCS current flow compared to healthy age-matched controls. 5<sup>th</sup> International Brain Stimulation Conference. Lisbon, Portugal. 2023.
- 246. Nejadnik B, Weintraub AH, **Cramer SC**, Steinberg GK, Kawabori M, Kesari S, Imai H, Groysman LI, Yasuhara T, Kim AS, Frishberg BM, Schwartz NE, Bates D, McAllister P. Efficacy and Safety Outcomes in Patients with Chronic Traumatic Brain Injury: Final Analysis of the Randomized, Double-Blind, Surgical Sham-Controlled Phase 2 STEMTRA Trial. 3rd International Conference on Tissue Engineering and Regenerative Medicine (TERMC). London, England. 2023.
- 247. Edwards D, Kumar S, Nguyen T, Esquenazi A, Brinkman L, Cardoso Ferreira I, Su M, Stein S, May J, Hendrix A, Finley C, Howard E, **Cramer S**. The Promise of Telerehabilitation to Increase Upper Limb Therapy Dose and Improve Continuity of Care During Early Post Stroke Recovery. American Society of Neurorehabilitation. Charleston, SC. 2023.
- 248. Hardstone R, Ostrowski L, Dusang AN, Cash SS, Cramer SC, Ramos-Murguialday A, Hochberg LR, Lin D. Linking post-stroke neurophysiology to neuroanatomy: Novel method to extend voxel-lesion mapping to multi-dimensional EEG data. American Society of Neurorehabilitation. Charleston, SC. 2023.
- 249. Aldridge C, Braun R, de Havenon A, Cramer SC, Keene K, Hsu F-C, Lindgren AG, Worrall B. Stroke recovery genome-wide association studies are dependent on the definition of recovery. European Stroke Organisation Conference. Munich, Germany. 2023.
- 250. Holl C, Cardoso Ferreira I, Nguyen T, Brinkman L, Su M, Le V, **Cramer S**. Bridging the Gap: Feasibility of Telerehabilitation from IRF to Home. American Physical Therapy

- 251. Young BM, Sakthi S, Kim W-S, Yadav R, Batth R, Farahmand E, Rana S, Liu C, Han S, Patel D, Luo J, Vo I, Patel K, Ramsey C, Feldman M, Brinkman L, Nguyen T, Su M, Chang TY, **Cramer SC**. Proprioceptive Function Varies With Neural Circuits Used To Measure Error In Patients With Recent Stroke. American Congress of Rehabilitation Medicine. Atlanta, GA. 2023.
- 252. Cho H, Ojemann J, **Cramer SC**, Herron J, OMNI-BIC: A Clinical Research Platform for Delivery for Activity-Dependent and Phase-locked Cortical Stimulation. BRAIN Initiative Meeting. NIH. 2023
- 253. Hardstone, R, Ostrowski, L, Dusang AN, Cash SS, Cramer SC, Ramos-Murguialday A, Hochberg, LR, Lin DJ. Linking post-stroke neurophysiology to neuroanatomy: Novel method to extend voxel-lesion mapping to multi-dimensional EEG data. Society for Neuroscience. Washington, DC. 2023
- 254. Cho H, Buchheit M, Gkogkidis CA, Stolle C, **Cramer SC**, Ojemann J, Herron J. Design and demonstration of an investigational research platform for phase-triggered cortical stimulation. Society for Neuroscience. Washington, DC. 2023
- 255. Liew S-L, Park G, Lo BP, Andrushko JW, Banaj N, Borich MR, Boyd LA, Buetefisch CM, Ciullo V, **Cramer SC**, Donnelly M, Hordacre B, Jahanshad N, Kautz SARevill KP, Schweighofer N, Seo N, Soekadar SR, Srivastava S, Thielman GT, Thomopoulos S, Vecchio D, Westlye LT, Zavaliangos-Petropulu A, Winstein CJ, Thompson P, Kim H. Regional Brain Age Is Associated with Sensorimotor Outcomes in Stroke: An ENIGMA Stroke Recovery Analysis. Society for Neuroscience. Washington, DC. 2023
- 256. Gkogkidis CA, Buchheit M, Cho H, Cramer SC, Ojemann J, Herron J, Schuettler M. The Brain Interchange System for recording and stimulation on the sheep cortex: a case study towards functionality and safety of ECoG-based neural implants. Society for Neuroscience. Washington, DC. 2023
- 257. Smith JA, Tain R, Nguyen T, Glynn LM, Sharp KG, Van Dillen LR, Jacobs JV, Cramer SC. Altered sensorimotor processing during the active straight leg raise test in individuals with back pain. APTA Combined Sessions Meeting. Boston, MA. 2024.
- 258. Dalberg N, Aldridge CM, Sunmonu NA, Braun R, Cole JW, de Havenon A, Heitsch L, Lohse K, Worrall BB, **Cramer SC**, Jern C, Maquire J; GISCOME investigators, Lindgren AG. *BDNF*-Val66Met and *PATJ* polymorphisms are poor biomarkers for functional outcome in large vessel occlusion ischemic stroke. International Stroke Genetics Consortium. Boston, MA. 2023.
- 259. **Cramer SC**, Parodi L, Moslemi Z, Braun R, Aldridge C, Shahbaba B, Rosand J, Holman EA; for the STRONG Study Investigators. Genetic Variation Is Related To Stroke Recovery: the STRONG ("The Stroke, sTress, RehabilitatiON, and Genetics Study") Study. International Stroke Genetics Consortium Workshop. Boston, MA. 2023.
- 260. **Cramer SC**, Parodi L, Moslemi Z, Braun R, Aldridge C, Shahbaba B, Rosand J, Holman EA; for the STRONG Study Investigators. Stroke Recovery And Genetic Variation: Main Results Of The STRONG Study. International Stroke Conference. Phoenix, AZ. 2024.

- 261. Kimberley TJ, Dawson J, Wolf S, Liu C, **Cramer SC**, VNS-REHAB Pivotal Trial Study Group. Vagus Nerve Stimulation Paired With Rehabilitation For Post-stroke Arm Impairment: One Year Follow-up Of The VNS-Rehab Pivotal Trial. International Stroke Conference. Phoenix, AZ. 2024.
- 262. Dalberg N, Aldridge C, Sunmonu NAA, Braun R, Cole JW, de Havenon AH, Heitsch L, Lohse K, Worrall BB, **Cramer SC**, Jern C, Maguire J; GISCOME investigators; Lindgren A. Association Of BDNF, PATJ And LOC105372028 Polymorphisms With Functional Outcomes In Probable LVO. International Stroke Conference. Phoenix, AZ. 2024.
- 263. Holman EA, **Cramer SC**; for the STRONG Study Investigators. Lifetime Trauma Exposure Types Are Linked to Stroke Recovery: Findings From The STRONG Study. International Stroke Conference. Phoenix, AZ. 2024.
- 264. Gkogkidis CA, Buchheit M, Cho H, Cramer SC, Ojemann J, Herron J, Schuettler M. The Brain Interchange System for preclinical ECoG recording and stimulation research in the ovine model. North American Neuromodulation Society 26th Annual Meeting. Las Vegas, NV. 2023
- 265. Schwarz A, Feldman M, Le V, Engineer ND, **Cramer SC**. Predictors of treatment gains in a phase 3 stroke recovery trial of vagus nerve stimulation. World Congress of Neurorehabilitation. Vancouver, BC, Canada. 2024.
- 266. Jaywant A, DiCarlo J, Toglia J, Jamison K, Kuceyeski A, **Cramer S**, Doulatani G, Lin D, O'Dell M, Gunning F. Structural brain connectivity and cortical thickness is associated with gains from cognitive training in middle-aged and older adults post-stroke. American Association of Geriatric Psychiatry Annual Meeting. Atlanta, GA. 2024.
- 267. DiCarlo JA, Jaywant A, McKiernan S, **Cramer SC**, Ward N, Lin DJ. Between thinking and doing: Investigating the relationship between cognition and upper limb motor function after stroke. 2024 Annual Meeting of the American Society for Neurorehabilitation. San Antonio, TX. 2024
- 268. Schwarz A, Feldman M, Le V, Dawson J, Liu CY, Francisco GE, Wolf SL, Dixit A, Alexander J, Ali R, Brow BL, Feng W, DeMark L, Hochberg LR, Kautz SA, Majid, A, O'Delll MW, Redgrave J, Turner DL, Kimberley TJ, **Cramer SC**. Associations between neuroimaging predictors and changes in arm impairment in a phase 3 stroke recovery trial of vagus nerve stimulation. 2024 Annual Meeting of the American Society for Neurorehabilitation. San Antonio, TX. 2024
- 269. Shahbaba R, **Cramer SC**, Holman A. Childhood trauma, loneliness, and stroke recovery: A mediation analysis. Joint Statistical Meetings. Portland, OR, 2024.
- 270. Marin-Pardo O, Khan MH, Chakraborty S, Borich M, Cole J, **Cramer SC**, Fullmer N, Kim H, Rosario E, Schambra H, Schweighofer N, Winstein CJ, Wolf SW, Zheng A, Liew S-L. Brain age is longitudinally associated with mild cognitive impairment, but not sensorimotor impairment, in subacute stroke. Society for Neuroscience 2024. Chicago, IL (in press).
- 271. Khan MH, Marin-Pardo O, Chakraborty S, Borich M, Cole J, Cramer SC, Fullmer N, Kim

C.V.

- H, Rosario E, Schambra H, Schweighofer N, Winstein CJ, Wolf SW, Zheng A, Liew S-L. Association of brain aging and focal brain damage in the subacute phase of stroke recovery. Society for Neuroscience 2024. Chicago, IL (in press).
- 272. Chakraborty S, Marin-Pardo O, Khan MH, Choupan J, Barisano G, Lo BP, Donnelly MR, Abdullah A, Andrushko JW, Banaj N, Borich MR, Boyd LA, Buetefisch CM, Conforto AB, **Cramer SC**, Dimyan M, Domin M, Dula A, Ermer E, Hanlon C, Hordacre B, Kautz SA, Jahanshad N, Lotze M, Nishimura K, Nordvik J, Piras F, Revill KP, Schweighofer N, Soekadar SR, Srivastava S, Thomopoulos S, Vecchio D, Warach S, Westlye LT, Winstein CJ, Wittenberg GF, Wong K, Thompson PM, Liew S-L. Cross-sectional Association of Perivascular Spaces with Sensorimotor Outcomes in Stroke: An ENIGMA Analysis. Society for Neuroscience 2024. Chicago, IL (in press).
- 273. Cho H, Benjaber M, Buchheit M, Gkogkidis CA, Cramer SC, Ojemann J, Denison T, Herron J. Characterization and demonstration of an investigational system's evoked potential functionality. Society for Neuroscience 2024. Chicago, IL (in press).
- 274. Williamson BJ, Behymer T, **Cramer SC**, for the ENIGMA Stroke Recovery Consortium. Optimizing the Approach to Calculating CST Lesion Load for Understanding Motor Outcomes. International Stroke Conference 2025 (submitted).
- 275. Schwarz A, Chakraborty S, Tavenner B, Feldman M, Rosand J, Parodi L, Liew S-L, Holman EA, **Cramer SC**. Association Between Genetic Variation and Acute Stroke Characteristics. International Stroke Genetics Consortium. Los Angeles, CA. 2024.