



# Approved Data Requests

Last update: October 23, 2023

## Table of Contents

Projects proposed by investigators within SCIMS or Form II Centers .....	1
Projects proposed by non-SCIMS investigators .....	11
DeVivo Mentored Research Award projects.....	14
Courtesy notice of SCIMS Database Research -- Site or Module data only .....	16



## Projects proposed by investigators within SCIMS or Form II Centers

**Archives of Physical Medicine and Rehabilitation** special issues published in November 1999, November 2004, March 2011, October 2016, and April 2022 also feature the approved SCIMS Database Research projects over the years.

### 2023

Month	Lead investigators	SCIMS Collaborators	Project title
Oct	Steven Kirshblum, MD ( <a href="mailto:skirshblum@selectmedical.com">skirshblum@selectmedical.com</a> ) & Snider, Haber, Botticello, Benedetto; Kessler Foundation	Tefertiller (Craig), Field-Fote (Shepherd)	Motor 'Incomplete-Like' Status in Complete Injuries and the Effects on Neurological Recovery after Traumatic SCI
Jul	Ana Valeria Aguirre Guemez, MD ( <a href="mailto:AnaValeria.AguirreGuemez@medstar.net">AnaValeria.AguirreGuemez@medstar.net</a> ) & Groah, Bregman; MedStar	Tefertiller (Craig), Cowan (UAB), Field-Fote (Shepherd)	Pilot data to develop a multivariate classification system for upper extremity function and participation among people with tetraplegia
Apr	Salma Aly, MD, ( <a href="mailto:salma88@uab.edu">salma88@uab.edu</a> ) & Chen, Wen; NSCISC	Heinemann (SRALab), Peterson (Michigan)	Prediction of rehospitalization 1-year post traumatic spinal cord injuries using Machine Learning algorithm
Feb	Christopher Elliott, MD, PhD ( <a href="mailto:christopher.elliott@hhs.sccgov.org">christopher.elliott@hhs.sccgov.org</a> ), Shem; Santa Clara Valley Medical Center	Heinemann (SRALab), Botticello (Kessler), Slocum (Spaulding), Meade (UM), Perrin (VCU)	How does neighborhood affect health outcomes after spinal cord injury
Feb	Lynn Worobey, PhD, DPT ( <a href="mailto:lynn.worobey@pitt.edu">lynn.worobey@pitt.edu</a> ) ; Pitt	Heinemann (SRALab), Field-Fote (Shepherd)	Prediction of Short- and Long-Term Mobility Outcomes Among Participants in the National Spinal Cord Injury Model Systems Database

### 2022

Month	Lead investigators	SCIMS Collaborators	Project title
Sep	Karen Kowalske, PhD ( <a href="mailto:Karen.Kowalske@UTSouthwestern.edu">Karen.Kowalske@UTSouthwestern.edu</a> ); BMS. Chen&Wen; NSCISC	Heinemann (SRALab), Morse (UMN), Botticello (Kessler), Felix (Miami)	Comparison of Adult Patient Demographics in Burn, Spinal Cord, and Traumatic Brain Injury
Jul	Ashraf Gorgey, MPT, PhD ( <a href="mailto:Ashraf.Gorgey@va.gov">Ashraf.Gorgey@va.gov</a> ) ; VCU	Heinemann (SRALab), Morse (UMN)	Testing physical activity guidelines for recreation time and determining relationships with obesity, urinary tract infection, and hospitalization after spinal cord injury
Jul	Jia Li, PhD ( <a href="mailto:jjiali@uabmc.edu">jjiali@uabmc.edu</a> ) & Chen, Wen; NSCISC	MacIntyre (Craig), Dirlikov (SCVMC),	Race, food access, and obesity after spinal cord injury

		Callender (BSW), Fyffe (Kessler), Nash (Miami), Field-Fote (Shepherd), Heinemann (SRALab), Slocum (Spaulding)	
Apr	Andrew Dean Delgado, MS ( <a href="mailto:Andrew.Delgado@mountsinai.org">Andrew.Delgado@mountsinai.org</a> ); Mt Sinai		Pain after Neurotrauma: a comparative approach in model selection between literature-guided hierarchical regression and machine learning
Mar	Christopher Elliott, MD, PhD ( <a href="mailto:christopher.elliott@hhs.sccgov.org">christopher.elliott@hhs.sccgov.org</a> ), Shem, Crew; Santa Clara Valley Medical Center	Kreydin (Rancho)	Urinary Incontinence and Urinary Tract Infection in Those Unable to Volitionally Void After Spinal Cord Injury – How Are We Doing as Practitioners?
Feb	Tyler Moon, MD ( <a href="mailto:Tyler.Moon@UHhospitals.org">Tyler.Moon@UHhospitals.org</a> ) & Anderson, Wilson, Ahn; Case Western		Impact of Smoking and Diabetes on Spinal Cord Injury Outcomes

## 2021

Month	Lead investigators	SCIMS Collaborators	Project title
Oct	Shu Cole, PhD ( <a href="mailto:colest@indiana.edu">colest@indiana.edu</a> ) & Charlifue; Craig Hospital	Heinemann (SRALab)	Longitudinal Impacts of Travel on Social Integration and Life Satisfaction
Oct	Han Su, PhD, RN ( <a href="mailto:han.su@northwestern.edu">han.su@northwestern.edu</a> ), Deutsch, Heinemann; Shirley Ryan AbilityLab	Chen & Wen (NSCISC), Charlifue (Craig)	Prediction of Functional and Employment Outcomes 5 years After Spinal Cord Injury
Sep	Draganich, DO ( <a href="mailto:cdraganich@gmail.com">cdraganich@gmail.com</a> ), Charlifue, Berliner, Smith; Craig Hospital	Worobey (Pitt), Heinemann (SRALab), Schwab (OSU)	Predictive Modeling of Ambulatory Outcomes After Spinal Cord Injury Using Machine Learning
Sep	Nima Baradaran, MD ( <a href="mailto:Nima.Baradaran@osumc.edu">Nima.Baradaran@osumc.edu</a> ), Schwab, Peng; Ohio State University	Berliner & Charlifue (Craig), Heinemann (SRALab)	Racial Disparity in Bladder Management Strategies in People with Spinal Cord
May	Tyler K. Yoshida, BS ( <a href="mailto:tyoshida@sralab.org">tyoshida@sralab.org</a> ), Heinemann; Shirley Ryan AbilityLab	Chen (NSCISC)	Demographic and socioeconomic factors associated with disparities in urinary health outcomes in persons with spinal cord injury
Feb	Sameer Ashaie, PhD, MS ( <a href="mailto:sashaie@sralab.org">sashaie@sralab.org</a> ), Deutsch, Heinemann, London,	Robinson-Whelen (TIRR)	Longitudinal Network Analysis of Depressive Symptoms in Persons with Spinal Cord Injury

	Shankman; Shirley Ryan AbilityLab		
Jan	Christopher Elliott, MD, PhD ( <a href="mailto:christopher.elliott@hhs.sccgov.org">christopher.elliott@hhs.sccgov.org</a> ), Shem, Crew; Santa Clara Valley Medical Center	Baradaran (OSU), Stampas (TIRR)	Change in clean intermittent catheterization (CIC) policy effect on GU related hospitalizations and CIC adoption/adherence

## 2020

Month	Lead investigators	SCIMS Collaborators	Project title
Sep	Gary Farkas, PhD ( <a href="mailto:gjf50@med.miami.edu">gjf50@med.miami.edu</a> ), Felix and Gator (mentors), Gomes-Osman; University of Miami. Berg; Penn State	Chen (NSCISC), Heinemann (SRALab)	The association of the spinal cord injury-specific body mass index to psychosocial and cardiometabolic health
Aug	Jan Schwab, MD, PhD ( <a href="mailto:Jan.Schwab@osumc.edu">Jan.Schwab@osumc.edu</a> ), Harrigan, Peng; Ohio State University. Kopp. Kramer.	Chen (NSCISC), Kirshblum (Kessler), Marino (Thomas Jefferson)	Loss of Regained or spared function after SCI (Neuroworsening) - Spinal Cord Injury Model Systems
May	Letitia Graves, PhD ( <a href="mailto:letitia.graves@nih.gov">letitia.graves@nih.gov</a> ), Saligan and Juneau (mentors); NIH/NINR. Worobey, Greenwald; University of Pittsburgh	Chen (NSCISC), Heinemann (SRALab), Taylor (TIRR), Schwab (OSU), Gater (Miami)	Using Predictive Modeling to Identify Co-occurring Symptom Classes Following Traumatic Spinal Cord Injury
May	Anne Deutsch, PhD ( <a href="mailto:adeutsch@sralab.org">adeutsch@sralab.org</a> ); Shirley Ryan AbilityLab. Amtmann, McMullen, Bamer; UW Burn Model system National Data and Statistical Center	Taylor (TIRR), Heinemann (SRALab), Worobey (Pitt), Coker (Craig)	Crosswalking the 4-item and 5-item Versions of the Satisfaction with Life Scale for Persons with Traumatic Brain Injury, Spinal Cord Injury and Burns
Apr	Amanda Botticello, PhD ( <a href="mailto:abotticello@kesslerfoundation.org">abotticello@kesslerfoundation.org</a> ), Didesch, Murphy; Kessler Foundation	Heinemann (SRALab), Worobey (Pitt), Charlifue (Craig), Mulroy (Rancho)	The Association of County-Level Healthcare Resources with Secondary Medical Complications after SCI
Mar	Huacong Wen, MS, ( <a href="mailto:hcwen@uab.edu">hcwen@uab.edu</a> ), Chen (mentor); NSCISC	Charlifue (Craig), Heinemann (SRALab), Taylor (TIRR), Anderson (CWRU), Jackson (OSU)	Sex differences in life satisfaction trajectories after spinal cord injury
Feb	Michael L. Boninger, MD, ( <a href="mailto:boninger@upmc.edu">boninger@upmc.edu</a> ); University of Pittsburgh	Roach (CWRU), Charlifue (Craig), Fyffe & Kirshblum (Kessler), Tabacof (Sinai), Heinemann (SRALab), Slocum & Zafonte (Spaulding), Schmidt	Association of socioeconomic status on rehabilitation and discharge for patients with high-tetraplegia and ventilator-dependence

		(Thomas Jefferson), Field-Fote (Shepherd)	
--	--	--	--

## 2019

Month	Lead investigators	Collaborators	Project title
Aug	Nima Baradaran, MD ( <a href="mailto:nima.baradara@osumc.edu">nima.baradara@osumc.edu</a> ), Schwab, Peng; Ohio State University Wexner Medical Center	DeVivo (NSCISC), Kirshblum (Kessler), Krause (Shepherd), Taylor (TIRR), Heinemann (SRALab), Zafonte & Slocum (Spaulding)	Impact of indwelling catheter for bladder management on overall survival in patients with spinal cord injury and neurogenic bladder in a large prospective national cohort (Spinal Cord Injury Model Systems)
Jul	Steven Kirshblum, MD ( <a href="mailto:skirshblum@selectmedical.com">skirshblum@selectmedical.com</a> ), Donovan, Eren, Botticello, Benedetto; Kessler Foundation	Marino (Thomas Jefferson), Schwab (OSU), Gater (Miami)	An investigation of clinical factors related with motor recovery after traumatic spinal cord injury based upon the zone of partial preservation (ZPP)
Jun	Kody K. Barrett, MD ( <a href="mailto:kbarrett@dhs.lacounty.gov">kbarrett@dhs.lacounty.gov</a> ), Rolfe, Mulroy; Rancho Los Amigos National Rehabilitation Center	Kolakowsky-Hayner (Sinai), Heinemann (SRALab)	Differences in outcomes between AIS A and AIS B spinal cord injury patients
Mar	Huacong Wen, MS , ( <a href="mailto:hcwen@uab.edu">hcwen@uab.edu</a> ), Chen (mentor); NSCISC	Heinemann (SRALab), Robinson-Whelen (TIRR), Krause (Shepherd), Monden (Craig), Kolakowsky- Hayner (Sinai)	The impact of body mass index on mortality after spinal cord injury
Mar	Michael L. Boninger, MD, ( <a href="mailto:boninger@upmc.edu">boninger@upmc.edu</a> ), Worobey, Hibbs, Rigot; University of Pittsburgh	Roach (CWRU), Monden (Craig), Fyffe (Kessler), Robinson- Whelen (TIRR), Schwab (OSU), Kolakowsky-Hayner (Sinai), Heinemann (SRALab), Zafonte (Spaulding), Hoffman (UW)	Changes in Means of Accessing the Internet Over Time
Mar	Christopher Elliott, MD, PhD ( <a href="mailto:christopher.elliott@hhs.sccgov.org">christopher.elliott@hhs.sccgov.org</a> ), Shem, Crew; Santa Clara Valley Medical Center	Schwab (OSU), Kopp (Germany), Huang (Sinai), Stampas (TIRR)	The Effects of Early Infection on Recovery of Volitional Voiding in Those with Spinal Cord Injury
Jan	Tiffany Wong, MD ( <a href="mailto:tiffanywon@gmail.com">tiffanywon@gmail.com</a> ), Kolakowsky-Hayner; Mt Sinai	Krause (Shepherd), Robinson-Whelen (TIRR), Botticello (Kessler), Heinemann (SRALab)	The Effect of Smoking on Spinal Cord Injury Outcomes

**2018**

Month	Lead investigators	Collaborators	Project title
Nov	Steven Kirshblum, MD ( <a href="mailto:skirshblum@selectmedical.com">skirshblum@selectmedical.com</a> ); Kessler Foundation. Haber & Zeilig; Israel	Worobey (Pitt)	Clinical prediction rule for ambulation outcomes in individuals with traumatic spinal cord injuries – the influence of age and its validity in patients in their 60s
Apr	Leslie Morse, DO, ( <a href="mailto:LMorse@craighospital.org">LMorse@craighospital.org</a> ), Charlifue, Monden, Sevigny, Ketchum; Craig	Kolakowsky-Hayner (Sinai), Bogner (OSU), Worobey (Pitt), Taylor (TIRR)	Assistive Technology and Functional Outcomes following Spinal Cord Injury

**2017**

Month	Lead investigators	Collaborators	Project title
Oct	Amanda Botticello, PhD ( <a href="mailto:abotticello@kesslerfoundation.org">abotticello@kesslerfoundation.org</a> ); Kessler Foundation	Chen (NSCISC), Heinemann (SRALab), Bogner (OSU), Kolakowsky-Hayner (Sinai), Houlihan (Spaulding), Boninger (Pitt)	Who Moves and Who Stays? An Exploration of Geographic Mobility in the National Spinal Cord Injury Model Systems Database
Aug	Katharine Tam, MD, ( <a href="mailto:ktam02@sralab.org">ktam02@sralab.org</a> ), Deutsch, Chen; SRALab	Botticello (Kessler), Kolakowsky-Hayner (Sinai), Schwab (OSU)	Functional outcomes of older adults with a new spinal cord injury
Aug	Steven Kirshblum, MD ( <a href="mailto:skirshblum@selectmedical.com">skirshblum@selectmedical.com</a> ), Kline-Quiroz, Donovan, Botticello; Kessler Foundation	Heinemann (SRALab), Taylor (TIRR), Kolakowsky-Hayner (Sinai), Houlihan (Spaulding)	Factors associated with return to education after spinal cord injury
Apr	Huacong Wen, MS, ( <a href="mailto:hcwen@uab.edu">hcwen@uab.edu</a> ), Chen (mentor); NSCISC	Botticello (Kessler), Heinemann (SRALab), Boninger (Pitt), Houlihan (Spaulding)	Race, neighborhood, and obesity after spinal cord injury
Mar	Steven Kirshblum, MD ( <a href="mailto:skirshblum@selectmedical.com">skirshblum@selectmedical.com</a> ), Waggeman, Botticello; Kessler Foundation	Zafonte (Spaulding), Marino (Thomas Jefferson)	The impact of sensory sacral sparing in motor complete SCI
Mar	Ryan McGrath, PhD ( <a href="mailto:m McGrath@med.umich.edu">m McGrath@med.umich.edu</a> ), Hall, Peterson, Kalpakjian; University of Michigan	Heinemann (SRALab), DeVivo (UAB)	The effect of etiology of injury on the incidence of mortality in persons with a spinal cord injury

Mar	O Trent Hall, DO ( <a href="mailto:ohall@med.umich.edu">ohall@med.umich.edu</a> ), NcGrath, Chadd, Peterson, Kalpakjian; University of Michigan	Heinemann (SRALab), Taylor (TIRR), DeVivo (UAB)	The burden of spinal cord injury in the United States: Disability- adjusted life years
Jan	Christopher Elliott, MD, PhD ( <a href="mailto:christopher.elliott@hhs.sccgov.org">christopher.elliott@hhs.sccgov.org</a> ), Shem; Santa Clara Valley Medical Center	Stampas (TIRR), Schwab (OSU)	Return of Volitional Voiding After Spinal Cord Injury

## 2016

Month	Lead investigators	Collaborators	Project title
Dec	Ryan McGrath, PhD ( <a href="mailto:mcgratry@med.umich.edu">mcgratry@med.umich.edu</a> ), Hall, Forchheimer, Peterson, Kalpakjian; University of Michigan	Heinemann (SRALab), Bogner (OSU)	The independent and joint effects of smoking and heavy drinking on diabetes in persons with a spinal cord injury
Sep	Stephen Burns, MD ( <a href="mailto:Stephen.Burns@va.gov">Stephen.Burns@va.gov</a> ), Kou, Radkevich; University of Washington	Heinemann (RIC), Krause (Shepherd), Boninger (Pitt)	United States Veterans in the Spinal Cord Injury Model Systems (SCIMS) Database
Aug	Ralph Marino, MD ( <a href="mailto:Ralph.Marino@jefferson.edu">Ralph.Marino@jefferson.edu</a> ), Harrop, Leiby; Thomas Jefferson University	Chen (RIC), Kirshblum (Kessler), Donovan (Spaulding), Cardenas (Miami)	Trends in ASIA Impairment Scale conversion in spinal cord injury
Jun	Huacong Wen, MS , ( <a href="mailto:hcwen@uab.edu">hcwen@uab.edu</a> ), Bickel (mentor), Chen, He; NSCISC	Heinemann (RIC), Robinson-Whelen (TIRR)	Racial differences in weight gain after spinal cord injury

## 2015

Month	Lead investigators	Collaborators	Project title
Nov	Kelli W. Gary, PhD, MPH, OTR/L ( <a href="mailto:williamsjonk@vcu.edu">williamsjonk@vcu.edu</a> ), Graham, McDonald; VCU/ Hunter Holmes McGuire VA Center. Hudson, Krause; Shepard Center	Heinemann (RIC), Burns (UW), Tate (UM), Felix (Miami), Cooper (Pitt)	Employment, Health, and Quality of Life Outcomes after Spinal Cord Injury: Comparison of Veterans and Non-Veterans
Sep	Mary Jo Roach, PhD ( <a href="mailto:mroach@metrohealth.org">mroach@metrohealth.org</a> ), Kelly, Nemunaitis; MetroHealth, Cleveland. Chen; NSCISC	Bombardier (UW)	Long-term outcomes in patients with penetrating spine trauma: a multi-center longitudinal observational study
Jan	Christopher Elliott, MD, PhD ( <a href="mailto:christopher.elliott@hhs.sccgov">christopher.elliott@hhs.sccgov</a> )		Why Do Patients with Spinal Cord Injury Stop Performing

	<a href="#">.org</a> ), Shem; Santa Clara Valley Medical Center		Intermittent Catheterization? – A Risk Factor Analysis
Jan	Christopher Elliott, MD, PhD ( <a href="mailto:christopher.elliott@hhs.sccgov.org">christopher.elliott@hhs.sccgov.org</a> ), Shem; Santa Clara Valley Medical Center		What Improvements in Upper Extremity Function Should Spinal Cord Injury Patients Expect as it Relates to Performing Intermittent Catheterization?
Jan	Dagmar Amtmann, PhD ( <a href="mailto:dagmara@uw.edu">dagmara@uw.edu</a> ), Bombardier, Hoffman, Johnson, McMullen; UW Burn Model system National Data and Statistical Center, UW SCIMS, and UQ TBIMS	Heinemann (RIC), Cardenas (Miami), Richards (UAB)	The Satisfaction with Life Scale using Burn Model System, Spinal Cord Injury Model System, and Traumatic Brain Injury Model System Data

## 2014

Month	Lead investigators	Collaborators	Project title
Nov	James Krause, PhD ( <a href="mailto:krause@musc.edu">krause@musc.edu</a> ), Saunders & Cao; Medical University of South Carolina/Shepherd Center	Cardenas (Miami), Richards (UAB), Bombardier (UW), Heinemann (RIC), Tate (UM), Botticello (Kessler)	Prevalence of smoking and alcohol use after spinal cord injury: Relationship with secondary health conditions
Oct	Michael Wandling, MD ( <a href="mailto:mwandling@gmail.com">mwandling@gmail.com</a> ), Chen, Deutsch, Heinemann & Shapiro; Northwestern University Feinberg School of Medicine	Hoffman (UW)	The Effect of Payer on Acute Inpatient Rehabilitation Length of Stay and Functional Status in Patients with Spinal Cord Injuries: Do Payer-Based Outcome Disparities Exist?
Mar	James Krause, PhD ( <a href="mailto:krause@musc.edu">krause@musc.edu</a> ), Saunders & Cao; Medical University of South Carolina/Shepherd Center	DeVivo (UAB); Heinemann (RIC)	Risk and protective factors for cause-specific mortality after spinal cord injury
Mar	David Apple, MD & John Kramer, PhD ( <a href="mailto:John.Kramer@Shepherd.org">John.Kramer@Shepherd.org</a> ); Shepherd Center	Borisoff & Cragg (University of British Columbia); Chen (UAB); Hoffman (UW)	Relationship between secondary complications following spinal cord injury: a longitudinal analysis
Feb	Jayne Donovan, MD ( <a href="mailto:jdonovan13@partners.org">jdonovan13@partners.org</a> ), Vora, Morse & Zafonte ; Spaulding Rehabilitation Hospital	Dijkers (Mt Sinai); Krause (Shepherd)	Life Satisfaction and Self-Perceived Health as Predictors of Mortality and other Adverse Events in Individuals with Spinal Cord Injury
Feb	Christopher Elliott, MD, PhD ( <a href="mailto:christopher.elliott@hhs.sccgov.org">christopher.elliott@hhs.sccgov.org</a> ), Shem, Kolakowsky-	Tate (UM)	Epidemiology of Bladder Management in Patient with Spinal Cord Injury



	Hayner & Wright; Santa Clara Valley Medical Center		
Feb	Timothy Belliveau, PhD, ABPP ( <a href="mailto:tbelliveau@hfsc.org">tbelliveau@hfsc.org</a> ), Alan Jette, PhD, PT ( <a href="mailto:ajette@bu.edu">ajette@bu.edu</a> ), Seetharama, Breitburg, Axt, Rosenblum, Houlihan, Slavin & Zazula; New England Regional Spinal Cord Injury Center		Development of a clinical decision support tool for optimal prognostication of functional recovery after spinal cord injury
Jan	Shu Cole, PhD ( <a href="mailto:colest@indiana.edu">colest@indiana.edu</a> ) & Whiteneck; Craig Hospital	Houlihan (BUMC)	The importance of travel to life satisfaction of people with SCI

### 2013

Month	Lead investigators	Collaborators	Project title
June	Felipe Fregni, MD PhD MPH ( <a href="mailto:felipe.fregni@ppcr.hms.harvard.edu">felipe.fregni@ppcr.hms.harvard.edu</a> ) & Morse; Spaulding Rehabilitation Hospital	Tate (UM)	A longitudinal analysis of the association of total score from functional independence measure and pain scores in individuals with spinal cord injury
May	Chuck Bombardier, PhD ( <a href="mailto:chb@u.washington.edu">chb@u.washington.edu</a> ); University of Washington	Heinemann (RIC), Tate (UM)	Validity of the TBI self-report questions (site data only); Incidence and correlates of probable TBI; Relationship between comorbid TBI and outcomes at one year post injury
Feb	Elham Mahmoudi, PhD ( <a href="mailto:elham.mahmoudi@gmail.com">elham.mahmoudi@gmail.com</a> ), Meade, Tate & Forchheimer; University of Michigan	Fyffe (Kessler) & Krause (Shepherd)	Racial/Ethnic Disparity in Re-hospitalization among Individuals with Spinal Cord Injury

### 2012

Month	Lead investigators	Collaborators	Project title
Nov	Shilpa Krishnan, MS ( <a href="mailto:shk59@pitt.edu">shk59@pitt.edu</a> ), Boninger, Brienza, Karg & Oyster; University of Pittsburgh	Heinemann (RIC)	Association of presence of pneumonia and incidence of pressure ulcers in individuals with spinal cord injury
Sep	Josie M Tyrer, BA ( <a href="mailto:jtyrer@uab.edu">jtyrer@uab.edu</a> ), Richards, Richardson, Vance & Galindo; University of Alabama at Birmingham	Aisen (Rancho), Taylor (TIRR), Cardenas (Miami), Bombardier (UW), Tate (UM)	The effect of trauma etiology and depressive symptoms on pain severity following spinal cord injury

June	Ralph Marino, MD ( <a href="mailto:ralph.marino@jefferson.edu">ralph.marino@jefferson.edu</a> ) & Lee; Thomas Jefferson	Kirshblum (Kessler)	Neurological recovery after traumatic thoracic spinal cord injury
May	Juleen Rodakowski, OTD, OTR/L ( <a href="mailto:jur17@pitt.edu">jur17@pitt.edu</a> ), Boninger, Skidmore, Anderson & Buhule; University of Pittsburgh	Charlifue (Craig) & Jensen (UW)	The additive effect of age on disability for adults aging with a spinal cord injury
Apr	Chuck Bombardier, PhD ( <a href="mailto:chb@u.washington.edu">chb@u.washington.edu</a> ), Cook, Bamer & Kim; University of Washington	Taylor (TIRR) & Dyson_Hudson (Kessler)	Evaluating differential item function of the PHQ-9 depression scale items between early and late injury persons with SCI
Apr	Narineh Hartoonian ( <a href="mailto:narhart@uw.edu">narhart@uw.edu</a> ), Bombardier & Hoffman; University of Washington	Taylor (TIRR) & Kalpakjian (UM)	Towards a SCI-Specific Model of Depression: Spinal Cord Injury Model Systems data from the 2006-2011 NSCI Database
Apr	Danielle K Powell, MD ( <a href="mailto:dkpowell@uab.edu">dkpowell@uab.edu</a> ) & Chen; University of Alabama at Birmingham	Dyson_Hudson (Kessler) & Crane (UW)	Weight Changes after Spinal Cord Injury: Racial and Gender Differences
Feb	Christopher R Pretz, PhD ( <a href="mailto:cpretz@craighospital.org">cpretz@craighospital.org</a> ), Cuthbert & Charlifue; Craig Hospital	Kozlowski, Heinemann (RIC), Chen (UAB), Tate (UM), Krause (Shepherd), Aisen (Rancho) & Taylor (TIRR)	Modeling of Various Longitudinal Outcome Measures within the SCI Model Systems National Database

## 2011

Month	Lead investigators	Collaborators	Project title
Nov	Jim Krause, PhD ( <a href="mailto:krause@musc.edu">krause@musc.edu</a> ), Saunders, Cao & McArdle; Shepherd Center	Heinemann (RIC)	Work life after SCI
July	Denise Fyffe, PhD ( <a href="mailto:dfyffe@kesslerfoundation.org">dfyffe@kesslerfoundation.org</a> ), Dyson-Hudson, Botticello & Kirshblum; Kessler Foundation Research Center	Boninger (Pitt), Krause (Shepherd), Deutsch (RIC) & Ottenbacher	“Predictors of functional disparities among individuals living with SCI”. This project was recently awarded pilot grant through the Center for Rehabilitation Research Using Large Datasets (PI: Ottenbacher)
Jun	Jeffrey Cuthbert, MPH, MS ( <a href="mailto:JCuthbert@craighospital.org">JCuthbert@craighospital.org</a> ), Whiteneck, Charlifue & Lammertse; Craig Hospital	Heinemann (RIC), Dijkers (Mt Sinai), Corrigan, Graham, Coronado, Deutsch, D Chen (RIC) & Y Chen (UAB)	Evaluation of the representativeness of the SCIMS National Dataset

Apr	Allan J Kozlowski, PhD ( <a href="mailto:akozlowski@ric.org">akozlowski@ric.org</a> ) & Heinemann; Rehabilitation Institute of Chicago	Botticello (Kessler), Pretz, Cuthbert, Kreider (Craig)	"Modeling Post-Acute Recovery in Activity Limitations for Persons with Traumatic Spinal Cord Injury," will apply individual latent growth modeling methodology to describe the long-term outcome after SCI as non-linear trajectories using FIM data
Apr	Juan Carlos Arango, PhD ( <a href="mailto:jcarangolasp@vcu.edu">jcarangolasp@vcu.edu</a> ), Ketchum, Cifu, Castillo & Jennings; Virginia Commonwealth University	Dijkers (Mt Sinai) & investigators (RIC & Shepherd)	1. "The association between FIM items and extended rehabilitation length of stay following traumatic SCI" 2. "Predictors of Extended Inpatient Rehabilitation Length of Stay after Traumatic SCI"
Jan	Dan Graves, PhD ( <a href="mailto:dgraves@bcm.edu">dgraves@bcm.edu</a> ); TIRR		PhD dissertation project to investigate the computer usage, internet access and depression

## 2010

Month	Lead investigators	Collaborators	Project title
Nov	Jim Krause, PhD ( <a href="mailto:krause@musc.edu">krause@musc.edu</a> ); Shepherd Center		Manuscript preparation: 1. Relationship of behaviors and health conditions with all-cause mortality 2. Development of models for specific causes of death, starting with a competing risk model
Nov	Stephen Burns, MD ( <a href="mailto:Stephen.Burns@va.gov">Stephen.Burns@va.gov</a> ); University of Washington		Descriptive analysis of colorectal cancer deaths for a review article or commentary

## Projects proposed by non-SCIMS investigators

- De-Identified data sets are freely available for download via NSCISC website since December 2018, [https://www.nscisc.uab.edu/Research/NSCISC\\_DatabasePublicUse](https://www.nscisc.uab.edu/Research/NSCISC_DatabasePublicUse)
- Limited data sets are available by request to independent researchers and those seeking SCIMS comments or collaboration. Data use agreement is required.

### 2023

Month	Lead investigators	Collaborators	Project title
July	Audrey Chun, MD, Indiana University School of Medicine	Chen (NSCISC, SCIMS mentor) & Wen	Disparities Among Persons with Traumatic Spinal Cord Injury Secondary to Gunshot Wound: Opportunities in the Field of Preventative Spinal Cord Injury Medicine
March	Saad Javeed, MBBS; Wilson Z. Ray, MD, Washington University School of Medicine	Chen (NSCISC, SCIMS mentor)	A Mixed Methods Analysis of Sociodemographic Inequities in Spinal Cord Injury Outcomes

### 2022

Month	Lead investigators	Collaborators	Project title
May	Saad Javeed, MBBS; Wilson Z. Ray, MD, Washington University School of Medicine	Chen (NSCISC, SCIMS mentor)	A Clinical Prediction Rule for Prognosis of Functional Outcomes after Traumatic Cervical Spinal Cord Injury

### 2021

Month	Lead investigators	Collaborators	Project title
Oct	Yuntao Wang, MD; Liu, Liu Southeast University, Nanjing, China	Chen (NSCISC, SCIMS mentor)	Impact of Concurrent Traumatic Brain Injury on Functional Prognosis of Patients with Spinal Cord Injury

### 2018

Month	Lead investigators	Collaborators	Project title
Oct	Mohamad Bydon, MD; Kerezoudis, Alvi, Goyal, Concalves, Yolcu, Wahood, Moinuddin; Mayo Clinic	Heinemann (SRALab, SCIMS mentor)	#1 Minimum Clinically Important Difference in FIM Score and ISNCSCI Score for Patients with SCI: Analysis from the NATIONAL SPINAL CORD INJURY DATABASE; #2 Predicting Functional Neurological Recovery in Patients with SCI

Sep	Blaise Morrison, PhD, University of North Carolina at Chapel Hill	Heinemann (SRALab), Kolakowsky-Hayner (Sinai)	Employment, Participation, and Rehospitalization Trajectories among Individuals with Spinal Cord Injury: Investigating the Effect of Secondary Health Conditions.
Apr	Jenna Koblinski (mentor: Valentine Nfonsam, MD), medical student, University of Arizona	Devivo & Chen (NSCISC, SCIMS mentors), Zafonte (Spaulding), Heinemann (SRALab)	Colorectal Cancer Mortality after Spinal Cord Injury
Jan	Yu-Hsiang Kao, PhD (mentor: Tung Sung Tseng, PhD), post- doctoral fellow, Louisiana State University School of Public Health	Chen (NSCISC, SCIMS mentor), SCIMS Health Policy SIG (Deutsch)	Effects of Length of Stay Patterns in Both Acute and Rehabilitation Care on Functional Status and Rehospitalization among Patients with Spinal Cord Injury

#### July 2017

1. The InVivo Therapeutics Corporation (Alex Aimetti, PhD) was provided database statistics by the NSCISC to be used as comparators for the ongoing INSPIRE (InVivo Study of Probable Benefit of the *Neuro-Spinal Scaffold™* for Safety and Neurologic Recovery in Subjects with Complete Thoracic AIS A Spinal Cord Injury) project. The responsible party agrees that these data will not be used for marketing purposes by InVivo and that the NSCISC and SCIMS Executive Committee will have an opportunity to review and approve a manuscript draft before submission to a journal for peer review.

#### June 2017

2. Brittney Otruba, MA (mentor: Henry Soper, PhD), a PhD student of Psychology at The Fielding Graduate University, was granted a limited data set for a project entitled “Premorbid Mental Health Impact Upon Post-Injury Perceived Life Satisfaction: Spinal Cord Injury Versus Concomitant Traumatic Brain Injury.” Collaborators included Yuying Chen (SCIMS mentor), Allen Heinemann, and Liz Felix.

#### August 2016

3. The InVivo Therapeutics Corporation (Alex Aimetti, PhD) and Policy Analysis Inc (Gerry Oster, PhD and Ellen Dukes, PhD) were provided database statistics by the NSCISC to: 1) examine the relationship between AIS grade at post-injury year 1, functional outcomes, and healthcare utilization and 2) estimate expected financial burden for persons with these injuries. The responsible party agrees that these data will not be used for marketing purposes by InVivo and that the NSCISC and SCIMS Executive Committee will have an opportunity to review and approve a manuscript draft before submission to a journal for peer review.

#### December 2015

4. Larry Miller, PhD and Louise Anderson, PhD, Miller Scientific Consulting, Inc., were provided database statistics by the NSCISC to conduct Markov model and cost analysis to assess the influence of ambulatory ability on 5-year complication rates and health care costs. This project is financially supported by the ReWalk Robotics. The responsible party agrees that these data will not be used for marketing purposes by ReWalk and that the NSCISC and SCIMS Executive Committee will have an opportunity to review and approve a manuscript draft before submission to a journal for peer review.

#### May 2015

5. Kurt Herzer, MSc (mentor: Marlis Gonzalez-Fernandez, MD, PhD, [mgonzal5@jhmi.edu](mailto:mgonzal5@jhmi.edu)), a MD/PhD student at Johns Hopkins University, was granted limited access to the database for a project entitled "Time-To-Rehabilitation and Outcomes in Spinal Cord Injury". Collaborators included Dr. Yuying Chen (SCIMS mentor) and Dr. Allen Heinemann.

#### December 2014

6. Annette Bourbonniere (mentor: Dr. James Opaluch [Jimo@uri.edu](mailto:Jimo@uri.edu)), a doctoral student in the Department of Environmental and Natural Resource Economics, University of Rhodes Island, was granted limited access to the database for her dissertation project entitled "Using revealed preferences to eliminate work disincentives for persons with disabilities." Dr. Mike DeVivo served as the SCIMS mentor for this project.

#### September 2010

7. Josh Cohen, PhD ([jcohen@tuftsmedicalcenter.org](mailto:jcohen@tuftsmedicalcenter.org)) of the Tufts Medical Center, Boston, MA was granted limited access to the database for a project entitled "*Clinical benefits and health care cost savings associated with improved Functional Independence Measure scores following spinal cord injury*". Dr. Marcel Dijkers was appointed by projects directors as a mentor for this project.

#### December 2007

8. James Gear, PhD ([JGear@mwecc.com](mailto:JGear@mwecc.com)) of the Midwest Employers Casualty Company was granted limited access to the SCIMS database to investigate occupational and work-related SCI and associated trend and costs. The results will primarily be for the internal use of Midwest Employers Casualty Company to help support internal risk analyses so that more precise future cost estimates can be derived and better decisions regarding such estimates may be made.

## **DeVivo Mentored Research Award projects**

### 2022

1. Einat Engel-Haber (mentor: Steven Kirshblum, MD and Amanda Botticello, PhD, MPH), Rutgers-New Jersey Medical School, Kessler Institute for Rehabilitation, West Orange, NJ. Project title "Defining New, Quantifiable Criteria for Central Cord Syndrome".

### 2019

2. Kelly Spellman (mentor: Alan Jette, PT, PhD), Massachusetts General Hospital Institute of Health Professions, Charlestown, MA. Project title "The Impact of Resilience on Functional Gains in Early Spinal Cord Injury Recovery".
3. Navneet Kaur Baidwan, PhD (mentor: Tapan Mehta, PhD), UAB School of Health Professions, Birmingham, AL. Project title "Extending the generalizability of the Spinal Cord Injuries Model Systems to United States adults under rehabilitation due traumatic spinal cord injuries".

### 2017

4. Cristina Kline-Quiroz, DO (mentor: Jayne Donovan, MD and Amanda Botticello, PhD), Rutgers-New Jersey Medical School, Kessler Institute for Rehabilitation, West Orange, NJ. Project title "Factors Associated with Return to Education after Spinal Cord Injury".

### 2014

5. Hannah W Mercier, MS, OTR/L (mentor: Alan Jette, PhD, PT), Massachusetts General Hospital Institute of Health Professions, Charlestown, MA. Project title "Effects of Rehospitalization among Adults with Spinal Cord Injury on Quality of Life, Independence, and Participation".
6. Jordan Garman, DO (mentor: Keneshia Kirksey, MD and Elizabeth Richardson, PhD, MSPH), UAB Department of Physical Medicine and Rehabilitation, Birmingham, AL. Project title "Factors Contributing to Transition of Bladder Management Method Following Traumatic Spinal Cord Injury".

### 2012

7. Hwasoon Kim, MS (mentor: Garry Cutter, PhD), UAB Department of Biostatistics, Birmingham, AL. Project title "Modeling to Predict Loss to Follow-up In the Spinal Cord Injury Model Systems Database".

### 2010

8. Katya Radkevich, MD (mentor: Stephen Burns, MD), VA Puget Sound Health Care Systems, Seattle, WA. Project title "United States Veterans in the Spinal Cord Injury Model Systems Database".

9. Katherine W Stenson, MD (mentor: Anne Deutsch, PhD, CRRN, RN and David Chen, MD), Rehab Institute of Chicago, Chicago, IL. Project title "A Comparison of Medicare Patients in the SCI Model System Database and the National Medicare Databases"

2009

10. Gina Armstrong, MD (mentor: Marcel Dijkers, PhD), Mt. Sinai School of Medicine, New York, NY. Project title "Do Gender Differences Exist in Patterns and Consequences of Alcohol Use Following Spinal Cord Injury?"
11. Yue Cao, MS (mentor: Sean-Shong Hwang, PhD), UAB Department of Sociology, Birmingham, AL. Project title "Cumulative Advantage of Education on the Health and Life Quality After Spinal Cord Injury".



**Courtesy notice of SCIMS Database Research -- Site or Module data only**

**2020**

Month	Lead investigators	SCIMS Sites	Project title
Oct	Shivayogi Hiremath PhD, Marino MD, Amol Karmarkar PhD, Donna Coffman, PhD	2 SCIMS sites in Pennsylvania	Evaluating associations between trauma-related characteristics and functional recovery in individuals with spinal cord injury

**2019**

Month	Lead investigators	SCIMS Sites	Project title
Feb	Candy Tefertiller, PT, DPT, NCS; Craig Hospital	5 SCIMS sites that also participate in NeuroRecovery Network (NRN)	Comparison of One Year Post- Injury Outcomes Between Intensive Locomotor Training and Conventional Therapy after Motor Incomplete Spinal Cord Injury

**2015**

Month	Lead investigators	SCIMS Sites	Project title
Nov	Alan Jette, PhD, PT; New England Regional Spinal Cord Injury Center	Module and Form I data from SCI-FI module collaborating centers	The Spinal Cord Injury Functional Index (SCI-FI) Enhancement and Evaluation study

**2012**

Month	Lead investigators	SCIMS Sites	Project title
Feb	Don Gerber, PsyD MEd ABPP; Craig Hospital	Craig data only	Dual Diagnosis Spinal Cord Injury and Traumatic Brain Injury: the TBI Effect on Outcome