Stanford



Angela K. Lumba-Brown

- Clinical Associate Professor, Emergency Medicine
- Clinical Associate Professor (By courtesy), Neurosurgery
- · Clinical Associate Professor, Pediatrics

Bio

BIO

Angela Lumba-Brown, MD, is a recognized physician leader and clinician-scientist in pediatrics and emergency medicine at Stanford University, nationally, and internationally. She is an academic pediatric emergency medicine physician with expertise in injury, neuroscience, and neurocritical emergencies. She is a graduate of the Stanford Leadership Development Program as well as the Stanford Center for Compassion and Altruism, and she uses these skills in addition to formal training in mindfulness and meditation to support her patients, colleagues, and community.

Clinically, Dr. Lumba-Brown had cared for children and young adults in the pediatric emergency department and is board-specialized in pediatric emergency medicine.

She is an Associate Professor of Emergency Medicine and Pediatrics, and by courtesy of Neurosurgery. Dr. Lumba-Brown is the former Associate Vice Chair of the Department of Emergency Medicine.

Dr. Lumba-Brown is an international expert on traumatic brain injury and has led several large clinical care guidelines, as well as successful federally and non-federally funded research. She is a two-times appointee to the Board of Scientific Counselors for the Centers for Disease Control's (CDC) National Center for Injury Prevention and Control, a federal advisory committee. She is also an appointee to the former Pac-12 Brain Trauma Task Force, guiding research and policy in athletes with head injury. Dr. Lumba-Brown held elected leadership positions in the Society for Academic Emergency Medicine (SAEM) and the American Academy of Pediatrics, Section on Emergency Medicine. Internationally, she oversees head injury policy, advising the Ontario Neurotrauma Foundation and co-leading world experts developing new guidelines on penetrating traumatic brain injury.

As former Director of the Emergency Medicine Clinical Research Unit, Dr. Lumba-Brown oversaw all departmental prospective human subjects research in emergency settings, including internal and external research partners. She has a formal focus on research innovation and partnership development that leverages the bioscience and biotech hubs of the University and region.

Dr. Lumba-Brown co-directed the Stanford Brain Performance Center for 7 years, leading in advancing the neuroscience of development, injury, and aging through prevention, novel biomarker discovery and other diagnostics, and treatments.

Dr. Lumba-Brown's work has been highlighted by Stanford Magazine, NPR, the New York Times, the Washington Post, Scientific American, as well as other national outlets.

Dr. Lumba-Brown is also a leader formally trained in compassion, mindfulness, and meditation. She is a graduate of the Stanford Center for Altruism and Compassion's year long applied compassion training. She is also a formally trained yoga and meditation instructor, currently ending an 2-year training under the leadership of Jack Kornfield and Tara Brach.

ACADEMIC APPOINTMENTS

- · Clinical Associate Professor, Emergency Medicine
- Clinical Associate Professor (By courtesy), Neurosurgery
- · Clinical Associate Professor, Pediatrics
- Member, Wu Tsai Human Performance Alliance
- Member, Maternal & Child Health Research Institute (MCHRI)

ADMINISTRATIVE APPOINTMENTS

- Board of Scientific Counselors, Centers for Disease Control and Prevention, (2021- present)
- Clinical Research Unit Director (faculty), Stanford Emergency Medicine, (2022- present)
- Associate Vice Chair, Department of Emergency Medicine, Stanford University, (2021-2023)
- Co-Director, Stanford Brain Performance Center, (2018- present)
- Brain Trauma Task Force, Pac-12, (2021- present)
- Research Director, Stanford Brain Trauma Evidence-Based Consortium, (2017-2019)

HONORS AND AWARDS

- Defense and Veterans Brain Injury Center's Coin honoree, US Department of Defense
- Health Equity Scholar, Academy of Communication in Healthcare
- SAEM Leadership Forum Scholarship, Society of Academic Emergency Medicine
- · Recognition of Leadership Service Award recipient, American Academy of Pediatrics
- Triple Crown Award, St. Louis Children's Hospital, Children's Direct Emergency Medicine Services

BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- Appropriateness Criteria Committee Member, American College of Radiology (2023 present)
- Elected Bylaws Member, Society for Academic Emergency Medicine (2022 present)
- Editorial Board, Frontiers in Neurology: Neurotrauma (2020 present)
- Mild TBI Definition Expert Consensus Group, American Congress of Rehabilitation Medicine (2019 present)
- Editorial Board, Journal of the American College of Emergency Physicians (2019 2021)
- Chair, Committee for the Future, Section on Emergency Medicine, American Academy of Pediatrics (2015 2017)
- Workgroup to Improve the Clinical Care of Youth with Mild TBI, Centers for Disease Control and Injury Prevention (CDC) (2011 present)

PROFESSIONAL EDUCATION

- Board Certification, American Board of Pediatrics , Pediatric Emergency Medicine (2013)
- PEM Fellowship, University of California San Diego, Rady Children's Hospital, Pediatric Emergency Medicine (2012)
- Board Certification, American Board of Pediatrics , General Pediatrics (2009)
- Residency, New York Medical College, Maria Fareri Children's Hospital, Pediatrics (2007)
- Internship, New York Medical College, Maria Fareri Children's Hospital, Pediatrics (2006)
- Medical Doctor (MD), St. George's University Medical School, Medicine (2006)

COMMUNITY AND INTERNATIONAL WORK

- Ontario Neurotrauma Foundation
- Stanford Sports Concussion Summit
- CDC Head Up Educational Materials

PATENTS

Vijay Lumba, Irwin Wunderman, Mearl Naponic, John Missanelli, Angela Lumba. "United States Patent US 20040082842 Lumba VK, Wunderman I, Naponic M, Missanelli J, Lumba AK. "System for Monitoring Fetal Status" Patent US 20040082842. April 2004.", Vijay Lumba, Apr 29, 2004

LINKS

- Stanford Brain Performance Center: http://med.stanford.edu/braincenter.html
- New York Times: https://www.nytimes.com/2018/09/17/well/family/children-concussions-brain-injuries-cdc-guidelines.html
- National Public Radio (NPR): https://www.npr.org/sections/health-shots/2018/12/03/672002830/kids-with-concussions-can-phase-in-exercise-screen-time-sooner-than-before
- NPR News: http://radio.wosu.org/post/wellness-wednesday-food-safety-kids-head-injuries-personality-types#stream/0
- Stanford Sports Concussion Summit: https://www.nbcbayarea.com/on-air/as-seen-on/Steve-Young--Attends-Concussion-Summit-at-Stanford_Bay-Area-509172472.html
- Concussion Subtypes: https://stanfordmag.org/contents/the-5-types-of-concussions

Research & Scholarship

RESEARCH INTERESTS

• Brain and Learning Sciences

CURRENT RESEARCH AND SCHOLARLY INTERESTS

Dr. Lumba-Brown is a specialty-trained, board-certified pediatric emergency medicine physician working clinically in the Stanford Emergency Department and codirecting the Stanford Brain Performance Center.

Her research focuses on traumatic brain injury and brain performance. Dr. Lumba-Brown's previous scholarly work include: a prospective, double-blinded, randomized controlled trial evaluating therapeutic intervention in acute pediatric concussion (Peds Em Care 2014); complicated mild TBI risk score development (Pediatrics and others 2017); and a large systematic review and CDC guideline publication (JAMA Peds and others 2018); concussion subtype classification (Neurosurgery 2019 and others). Her current areas of active research include investigations of diagnosis, management, and therapeutic intervention in traumatic brain injury, subtype classification of concussion, and the pre-hospital management of mild-severe TBI. She also studies brain performance via sensorimotor and sensory-cognitive synchronization to address attentional impairments.

CLINICAL TRIALS

• Hypertonic Saline as Therapy for Pediatric Concussion, Not Recruiting

Publications

PUBLICATIONS

- The American Congress of Rehabilitation Medicine Diagnostic Criteria for Mild Traumatic Brain Injury. Archives of physical medicine and rehabilitation Silverberg, N. D., Iverson, G. L., ACRM Brain Injury Special Interest Group Mild TBI Task Force and the ACRM Mild TBI Definition Expert Consensus Group, A. B., Cogan, A., Dams-O'Connor, K., Delmonico, R., Graf, M. J., Iaccarino, M. A., Kajankova, M., Kamins, J., McCulloch, K. L., McKinney, G., Nagele, et al 2023
- Prehospital Guidelines for the Management of Traumatic Brain Injury 3rd Edition. Prehospital emergency care

Lulla, A., Lumba-Brown, A., Totten, A. M., Maher, P. J., Badjatia, N., Bell, R., Donayri, C. T., Fallat, M. E., Hawryluk, G. W., Goldberg, S. A., Hennes, H. M., Ignell, S. P., Ghajar, et al 2023: 1-32

• ACEP-SAEM Response to the National Institute of Health (NIH) proposal to simplify the review framework for research project grant applications. Academic emergency medicine: official journal of the Society for Academic Emergency Medicine

Knack, S. K., Kim, H., Paxton, J., Garg, N., Brown, A. L., Levy, P., Puskarich, M., Silbergleit, R., D'Onofrio, G., Adeoye, O., Kang, C., Diercks, D., Neumar, et al 2023

 Neuroimaging for mild traumatic brain injury in children: cross-sectional study using national claims data. Pediatric radiology Waltzman, D., Miller, G. F., Patel, N., Sarmiento, K., Breiding, M., Lumba-Brown, A.
 2023

• Multicentre evaluation of anxiety and mood among collegiate student athletes with concussion. *BMJ open sport & exercise medicine* Lumba-Brown, A., Teramoto, M., Zhang, R., Aukerman, D. F., Bohr, A. D., Harmon, K., Petron, D. J., Romano, R., Poddar, S. K., Ghajar, J. 2023; 9 (1): e001446

• Firearm-Related Traumatic Brain Injury Homicides in the United States, 2000-2019. *Neurosurgery* Waltzman, D., Sarmiento, K., Daugherty, J., Lumba-Brown, A., Klevens, J., Miller, G. F.

2023

• Journal update monthly top five. Emergency medicine journal: EMJ

Saxena, M., Altamirano, J., Rose, C., Bennett, C., Govindarajan, P., Lumba-Brown, A., Hirst, R. 2022; 39 (7): 561-562

• Rationale and Methods for Updated Guidelines for the Management of Penetrating Traumatic Brain Injury. Neurotrauma reports

Hawryluk, G. W., Selph, S., Lumba-Brown, A., Totten, A. M., Ghajar, J., Aarabi, B., Ecklund, J., Shackelford, S., Adams, B., Adelson, D., Armonda, R. A., Benjamin, J., Boone, et al

2022; 3 (1): 240-247

• Rationale and Methods for Updated Guidelines for the Management of Penetrating Traumatic Brain Injury NEUROTRAUMA REPORTS

Hawryluk, G. J., Selph, S., Lumba-Brown, A., Totten, A. M., Ghajar, J., Aarabi, B., Ecklund, J., Shackelford, S., Adams, B., Adelson, D., Armonda, R. A., Benjamin, J., Boone, et al

2022; 3 (1): 240-247

• Risk of Concussion After a Targeting Foul in Collegiate American Football. Orthopaedic journal of sports medicine

Aukerman, D. F., Bohr, A. D., Poddar, S. K., Romano, R., Petron, D. J., Ghajar, J., Giza, C. C., Lumba-Brown, A., McQueen, M. B., Harmon, K. G. 2022; 10 (2): 23259671221074656

 A Review of Implementation Concepts and Strategies Surrounding Traumatic Brain Injury Clinical Care Guidelines. *Journal of neurotrauma* Lumba-Brown, A., Prager, E. M., Harmon, N., McCrea, M., Bell, M. J., Ghajar, J., Pyne, S., Cifu, D.
 2021

 $\bullet \ \ \textbf{Sex Differences in Common Measures of Concussion in College Athletes.} \ \textit{The Journal of head trauma rehabilitation} \\$

Teramoto, M., Grover, E. B., Cornwell, J., Zhang, R., Boo, M., Ghajar, J., Lumba-Brown, A. 2021

2021

• The Other Side. Emergency medicine journal: EMJ

Lumba-Brown, A.

2021

• External Lumbar Drainage following Traumatic Intracranial Hypertension: A Systematic Review and Meta-Analysis. Neurosurgery

Badhiwala, J., Lumba-Brown, A., Hawryluk, G. W., Ghajar, J.

2021

Phenotyping the Spectrum of Traumatic Brain Injury: A Review and Pathway to Standardization. Journal of neurotrauma

Pugh, M. J., Kennedy, E., Prager, E. M., Humpherys, J., Dams-O'Connor, K., Hack, D., McCafferty, M. K., Wolfe, J., Yaffe, K. C., McCrea, M., Ferguson, A. R., Lancashire, L., Ghajar, et al

2021

 CDC Guideline on Mild Traumatic Brain Injury in Children: Important Practice Takeaways for Sports Medicine Providers CLINICAL JOURNAL OF SPORT MEDICINE

Sarmiento, K., Waltzman, D., Lumba-Brown, A., Yeates, K. O., Putukian, M., Herring, S. 2020; 30 (6): 612–15

Mentoring Pediatric Victims of Interpersonal Violence Reduces Recidivism JOURNAL OF INTERPERSONAL VIOLENCE

Lumba-Brown, A., Batek, M., Choi, P., Keller, M., Kennedy, R. 2020; 35 (21-22): 4262–75

• Smooth Pursuit Eye-Movement Abnormalities Associated With Cervical Spine Whiplash: A Scientific Review and Case Report. Cureus

Boo, M., Matheson, G., Lumba-Brown, A.

2020: 12 (8): e9872

• Smooth Pursuit Eye-Movement Abnormalities Associated With Cervical Spine Whiplash: A Scientific Review and Case Report CUREUS

Boo, M., Matheson, G., Lumba-Brown, A.

2020; 12 (8)

• Efficacy of levetiracetam, fosphenytoin, and valproate for established status epilepticus by age group (ESETT): a double-blind, responsive-adaptive, randomised controlled trial. Lancet (London, England)

Chamberlain, J. M., Kapur, J., Shinnar, S., Elm, J., Holsti, M., Babcock, L., Rogers, A., Barsan, W., Cloyd, J., Lowenstein, D., Bleck, T. P., Conwit, R., Meinzer, et al

2020; 395 (10231): 1217-1224

• Emergency department treatment of asthma in children: A review JACEP Open

Lee, M. O., Sivasankar, S., Pokrajac, N., Smith, C., Lumba-Brown, A. 2020

• Guidelines for the Management of Severe Traumatic Brain Injury: 2020 Update of the Decompressive Craniectomy Recommendations. Neurosurgery

Hawryluk, G. W., Rubiano, A. M., Totten, A. M., O'Reilly, C. n., Ullman, J. S., Bratton, S. L., Chesnut, R. n., Harris, O. A., Kissoon, N. n., Shutter, L. n., Tasker, R. C., Vavilala, M. S., Wilberger, et al

2020

Post-concussion symptom burden in children following motor vehicle collisions. Journal of the American College of Emergency Physicians open

Lumba-Brown, A. n., Tang, K. n., Yeates, K. O., Zemek, R. n.

2020; 1 (5): 938-46

• Sex-Related Differences in Neurosensory Alterations Following Blunt Head Injury. Frontiers in neurology

Lumba-Brown, A. n., Niknam, K. n., Cornwell, J. n., Meyer, C. n., Ghajar, J. n.

2020; 11: 1051

• Emergency department implementation of abbreviated magnetic resonance imaging for pediatric traumatic brain injury. Journal of the American College of Emergency Physicians open

Lumba-Brown, A. n., Lee, M. O., Brown, I. n., Cornwell, J. n., Dannenberg, B. n., Fang, A. n., Ghazi-Askar, M. n., Grant, G. n., Imler, D. n., Khanna, K. n., Lowe, J. n., Wang, E. n., Wintermark, et al

2020; 1 (5): 994-99

• Emergency Department Implementation of the Brain Trauma Foundation's Pediatric Severe Brain Injury Guideline Recommendations. Pediatric

emergency care

Lumba-Brown, A., Totten, A., Kochanek, P. M.

2019

• Randomized Trial of Three Anticonvulsant Medications for Status Epilepticus. The New England journal of medicine

Kapur, J., Elm, J., Chamberlain, J. M., Barsan, W., Cloyd, J., Lowenstein, D., Shinnar, S., Conwit, R., Meinzer, C., Cock, H., Fountain, N., Connor, J. T., Silbergleit, et al

2019; 381 (22): 2103-2113

 Practice Variation in the Diagnosis of Aneurysmal Subarachnoid Hemorrhage: A Survey of US and Canadian Emergency Medicine Physicians NEUROCRITICAL CARE

Kumar, A., Niknam, K., Lumba-Brown, A., Woodruff, M., Bledsoe, J. R., Kohn, M. A., Perry, J. J., Goyindarajan, P.

2019; 31 (2): 321-28

• Concussion Guidelines Step 2: Evidence for Subtype Classification. Neurosurgery

Lumba-Brown, A., Teramoto, M., Bloom, O. J., Brody, D., Chesnutt, J., Clugston, J. R., Collins, M., Gioia, G., Kontos, A., Lal, A., Sills, A., Ghajar, J.

• Reliable sideline ocular-motor assessment following exercise in healthy student athletes. Journal of science and medicine in sport Sundaram, V., Ding, V. Y., Desai, M., Lumba-Brown, A., Little, J.

• Strengthening the Evidence Base: Recommendations for Future Research Identified Through the Development of CDC's Pediatric Mild TBI Guideline JOURNAL OF HEAD TRAUMA REHABILITATION

Suskauer, S. J., Yeates, K., Sarmiento, K., Benzel, E. C., Breiding, M. J., Broomand, C., Haarbauer-Krupa, J., Turner, M., Weissman, B., Lumba-Brown, A. 2019: 34 (4): 215-23

Practice Patterns in Pharmacological and Non-Pharmacological Therapies for Children with Mild Traumatic Brain Injury: A Survey of 15 Canadian and United States Centers JOURNAL OF NEUROTRAUMA

Mannix, R., Zemek, R., Yeates, K., Arbogast, K., Atabaki, S., Badawy, M., Beauchamp, M. H., Beer, D., Bin, S., Burstein, B., Craig, W., Corwin, D., Doan, et al

Pediatric hypertonic saline use in emergency departments AMERICAN JOURNAL OF EMERGENCY MEDICINE

Niknam, K., Mistry, R., Lumba-Brown, A.

2019; 37 (5): 981-83

 Practice Variation in the Diagnosis of Aneurysmal Subarachnoid Hemorrhage: A Survey of US and Canadian Emergency Medicine Physicians. Neurocritical care

Kumar, A., Niknam, K., Lumba-Brown, A., Woodruff, M., Bledsoe, J. R., Kohn, M. A., Perry, J. J., Govindarajan, P.

 North American survey on the post-neuroimaging management of children with mild head injuries JOURNAL OF NEUROSURGERY-PEDIATRICS Greenberg, J. K., Jeffe, D. B., Carpenter, C. R., Yan, Y., Pineda, J. A., Lumba-Brown, A., Keller, M. S., Berger, D., Bollo, R. J., Ravindra, V. M., Naftel, R. P., Dewan, M. C., Shah, et al

2019; 23 (2): 227-35

 Practice Variation in the Management of Aneurysmal Subarachnoid Hemorrhage-A Survey of US and Canadian Emergency Medicine Physicians Kumar, A., NIknam, K., Lumba-Brown, A., Bledsoe, J., Woodruff, M., Kohn, M., Perry, J., Govindarajan, P.

LIPPINCOTT WILLIAMS & WILKINS.2019

Strengthening the Evidence Base: Recommendations for Future Research Identified Through the Development of CDC's Pediatric Mild TBI Guideline. The Journal of head trauma rehabilitation

Suskauer, S. J., Yeates, K. O., Sarmiento, K., Benzel, E. C., Breiding, M. J., Broomand, C., Haarbauer-Krupa, J., Turner, M., Weissman, B., Lumba-Brown, A. 2019

• Practice Patterns in Pharmacologic and Non-pharmacologic Therapies for Children with Mild Traumatic Brain Injury: A survey of 15 Canadian and United States Centers. Journal of neurotrauma

Mannix, R. n., Zemek, R. n., Yeates, K. O., Arbogast, K. B., Atabaki, S. n., Badawy, M. n., Beauchamp, M. H., Beer, D. n., Bin, S. n., Burstein, B. n., Craig, W. n., Corwin, D. n., Doan, et al 2019

Improving the Care of Young Patients with Mild Traumatic Brain Injury: CDC's Evidence-Based Pediatric Mild TBI Guideline LIFESTYLE MEDICINE, 3RD EDITION

Sarmiento, K., Lumba-Brown, A., Breiding, M. J., Gordon, W., Paulk, D., Vitale, K., Sleet, D. A., Rippe, J. M. 2019: 1319-1326

Representation of concussion subtypes in common postconcussion symptom-rating scales. Concussion (London, England)

Lumba-Brown, A. n., Ghajar, J. n., Cornwell, J. n., Bloom, O. J., Chesnutt, J. n., Clugston, J. R., Kolluri, R. n., Leddy, J. J., Teramoto, M. n., Gioia, G. n. 2019; 4 (3): CNC65

Concussion Subtype Identification With the Rivermead Post-concussion Symptoms Questionnaire. Frontiers in neurology

Maruta, J., Lumba-Brown, A., Ghajar, J.

2018; 9: 1034

Concussion Subtype Identification With the Rivermead Post-concussion Symptoms Questionnaire FRONTIERS IN NEUROLOGY

Maruta, J., Lumba-Brown, A., Ghajar, J.

2018: 9

 CDC Guideline on Mild Traumatic Brain Injury in Children: Important Practice Takeaways for Sports Medicine Providers. Clinical journal of sport medicine: official journal of the Canadian Academy of Sport Medicine

Sarmiento, K., Waltzman, D., Lumba-Brown, A., Yeates, K. O., Putukian, M., Herring, S.

 Centers for Disease Control and Prevention Guideline on the Diagnosis and Management of Mild Traumatic Brain Injury Among Children JAMA PEDIATRICS

Lumba-Brown, A., Yeates, K., Sarmiento, K., Breiding, M. J., Haegerich, T. M., Gioia, G. A., Turner, M., Benzel, E. C., Suskauer, S. J., Giza, C. C., Joseph, M., Broomand, C., Weissman, et al 2018; 172 (11)

Development of the CIDSS2 Score for Children with Mild Head Trauma without Intracranial Injury JOURNAL OF NEUROTRAUMA

Greenberg, J. K., Yan, Y., Carpenter, C. R., Lumba-Brown, A., Keller, M. S., Pineda, J. A., Brownson, R. C., Limbrick, D. D. 2018: 35 (22): 2699-2707

• Emergency Department Implementation of the Centers for Disease Control and Prevention Pediatric Mild Traumatic Brain Injury Guideline Recommendations ANNALS OF EMERGENCY MEDICINE

Lumba-Brown, A., Wright, D. W., Sarmiento, K., Houry, D.

2018; 72 (5): 581-85

Diagnosis and Management of Mild Traumatic Brain Injury in Children A Systematic Review JAMA PEDIATRICS

Lumba-Brown, A., Yeates, K., Sarmiento, K., Breiding, M. J., Haegerich, T. M., Gioia, G. A., Turner, M., Benzel, E. C., Suskauer, S. J., Giza, C. C., Joseph, M., Broomand, C., Weissman, et al 2018; 172 (11)

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2018

• Centers for Disease Control and Prevention Guideline on the Diagnosis and Management of Mild Traumatic Brain Injury Among Children. JAMA

Lumba-Brown, A., Yeates, K. O., Sarmiento, K., Breiding, M. J., Haegerich, T. M., Gioia, G. A., Turner, M., Benzel, E. C., Suskauer, S. J., Giza, C. C., Joseph, M., Broomand, C., Weissman, et al.

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• Diagnosis and Management of Mild Traumatic Brain Injury in Children: A Systematic Review. JAMA pediatrics

Lumba-Brown, A., Yeates, K. O., Sarmiento, K., Breiding, M. J., Haegerich, T. M., Gioia, G. A., Turner, M., Benzel, E. C., Suskauer, S. J., Giza, C. C., Joseph, M., Broomand, C., Weissman, et al

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Mentoring Pediatric Victims of Interpersonal Violence Reduces Recidivism. Journal of interpersonal violence

Lumba-Brown, A., Batek, M., Choi, P., Keller, M., Kennedy, R.

2017: 886260517705662

• Development and Internal Validation of a Clinical Risk Score for Treating Children With Mild Head Trauma and Intracranial Injury. JAMA pediatrics Greenberg, J. K., Yan, Y., Carpenter, C. R., Lumba-Brown, A., Keller, M. S., Pineda, J. A., Brownson, R. C., Limbrick, D. D. 2017

 Service Delivery in the Healthcare and Educational Systems for Children Following Traumatic Brain Injury: Gaps in Care. The Journal of head trauma rehabilitation

Haarbauer-Krupa, J., Ciccia, A., Dodd, J., Ettel, D., Kurowski, B., Lumba-Brown, A., Suskauer, S.

• 183 A Clinical Risk Score for Managing Children With Glasgow Coma Scale 13 to 15 Head Injuries and Intracranial Injury. Neurosurgery

Greenberg, J. K., Yan, Y., Carpenter, C., Lumba-Brown, A., Keller, M. S., Pineda, J. A., Brownson, R. C., Limbrick, D. D.

2016: 63: 172-173

PEMNetwork Barriers and Enablers to Collaboration and Multimedia Education in the Digital Age PEDIATRIC EMERGENCY CARE

Lumba-Brown, A., Tat, S., Auerbach, M. A., Kessler, D. O., Alletag, M., Grover, P., Schnadower, D., Macias, C. G., Chang, T. P. 2016; 32 (8): 565-569

Essentials of PEM Fellowship Part 2: The Profession in Entrustable Professional Activities PEDIATRIC EMERGENCY CARE

Hsu, D., Nypaver, M., Fein, D. M., McAneney, C., Santen, S., Nagler, J., Zuckerbraun, N., Roskind, C. G., Reynolds, S., Zaveri, P., Stankovic, C., House, J. B., Langhan, et al

2016; 32 (6): 410-418

• Firearm injuries in the pediatric population: A tale of one city JOURNAL OF TRAUMA AND ACUTE CARE SURGERY

Choi, P. M., Hong, C., Bansal, S., Lumba-Brown, A., Fitzpatrick, C. M., Keller, M. S. 2016; 80 (1): 64-69

• Emergency Neurological Life Support: Traumatic Brain Injury NEUROCRITICAL CARE

 $Garvin,\,R.,\,Venkatasubramanian,\,C.,\,Lumba\text{-}Brown,\,A.,\,Miller,\,C.\,M.$

2015; 23: S143-S154

• Emergency Neurological Life Support: Traumatic Brain Injury. Neurocritical care

Garvin, R., Venkatasubramanian, C., Lumba-Brown, A., Miller, C. M.

2015; 23 Suppl 2: S143-54

• Evidence-Based Assessment of Severe Pediatric Traumatic Brain Injury and Emergent Neurocritical Care SEMINARS IN PEDIATRIC NEUROLOGY Lumba-Brown, A., Pineda, J.

2014; 21 (4): 275-283

• Hypertonic saline as a therapy for pediatric concussive pain: a randomized controlled trial of symptom treatment in the emergency department. Pediatric emergency care

Lumba-Brown, A., Harley, J., Lucio, S., Vaida, F., Hilfiker, M.

2014; 30 (3): 139-145

PRESENTATIONS

- NFL Concussion Panel 2018 Advances in Neuroscience 9th Bay Area Symposium
- Subtypes of Concussion: DoD Provider Training National Department of Defense Provider Training
- Research Keynote: Classification of Concussion TBI Symposium, OHSU Brain Institute
- · Mild TBI Guidelines for the CDC National Health Providers Centers for Disease Control and Injury Prevention
- Management of Status Epilepticus in Children 2016 ACEP Advanced Pediatric Emergency Medicine Assembly (3/1/2016)
- The Clinical Management of Pediatric Seizure Washington University Pediatric Emergency Medicine Symposium (9/1/2016)
- Morsels and More: Update on Online Educational Tools and the PEMNetwork Pediatric Emergency Medicine Fellows' Conference (3/1/2015)
- Concussion: Making the Diagnosis and Making the Discharge Plan Pediatric Academic Societies Annual Conference (5/1/2014)
- Establishing Evidence for the Subtypes of Concussion Brain Injury Summit
- The Prevalence of Concussion Subtypes Military Health Science Research Symposium (8/22/2018)
- Brain Freeze: Fact Versus Fiction in Concussion Return to Play 2016 ACEP Advanced Pediatric Emergency Medicine Assembly (3/1/2016)
- Evidence for Concussion Subtypes 2018 Advances in Neurosciences 9th Bay Area Symposium
- Head Injury Guideline Materials for Children State of Hawaii Department of Health (2/14/2020)
- The ED Management of Head Injury in Children Dell Children's Hospital (3/4/2020)
- Hypertonic Saline and Strategies for the Management of Traumatic Brain Injury in Children Grand Rounds, Dell Children's Hospital (3/4/2020)
- Update on Care of Pediatric Emergencies, Trauma, Resuscitation National Conference Webinar (April 24, 2020)