Christopher J. Nowinski

Curriculum Vitae:

Address:

Center for the Study of Traumatic Encephalopathy Boston University School of Medicine 72 East Concord Street Robinson Complex, Suite 7380 nowinski@bu.edu www.bu.edu/cste

Education:

- A.B. Harvard University, 2000, cum laude
- Ph.D. Candidate, Behavioral Neuroscience, Boston University School of Medicine. 2010 current

Employment:

- Co-Director, Center for the Study of Traumatic Encephalopathy, Boston University School of Medicine. 2008 current
- Co-Founder & CEO, Sports Legacy Institute, Waltham, MA. 2007 current
- Consultant, Trinity Partners, LLC, Waltham, MA. Global Life Sciences Strategic and Tactical Consulting. 1999-2002, 2005 to 2010
- Professional Wrestler, Spokesman. World Wrestling Entertainment, Stamford, CT. 2002-2007

Appointments:

- Board of Directors, Brain Injury Association of America. 2009-current
- Mackey/White Traumatic Brain Injury Committee, National Football League Players Association. 2009-current
- Consultant, Ivy League Multi-Sport Concussion Committee. 2010-current
- Scientific Planning Committee, One Mind for Research. 2011-current
- Chair, Chicago Concussion Coalition. 2011- current

Scientific Publications:

- 1. Stern RA, Riley DO, Daneshvar DH, Nowinski CJ, Cantu RC, McKee AC. Long-term Consequences of Repetitive Brain Trauma: Chronic Traumatic Encephalopathy. Phys Med Rehabil Clin N Am. 3, S460-S467, October 2011.
- 2. Daneshvar DH, Riley DO, Nowinski CJ, McKee AC, Stern RA, Cantu RC. Long-Term Consequences: Effects on Normal Development Profile After Concussion. Phys Med Rehabil Clin N Am, 22, 603-670, October 2011.
- 3. Gavett BE, Stern RA, McKee AC. Chronic Traumatic Encephalopathy: A Potential Late Effect of Sport-Related Concussive and Subconcussive Head Trauma. Clinics in Sports Medicine, 30(1), 179-188, 2011.
- 4. Stern RA, Gavett BE, Baugh C, Nowinski CJ, Cantu RC, McKee AC. Recurrent sports-related traumatic brain injury and tauopathy. Edited by M. Oria and J. Erdman. Washington, DC: The National Academies Press. 2011 (In Press)

- 5. Daneshvar DH, Nowinski CJ, McKee AC, Cantu RC. The epidemiology of sport-related concussion. Clin Sports Med. 2011 Jan;30(1):1-17.
- 6. Daneshvar DH, Baugh CM, Nowinski CJ, McKee AC, Stern RA, Cantu RC. Helmets and mouth guards: the role of personal equipment in preventing sport-related concussions. Clin Sports Med. 2011 Jan;30(1):145-63.
- 7. McKee A, Gavett B, Stern R, Nowinski C, Cantu R, Kowall N, Perl D, Hedley-Whyte E, Price B, Sullivan C, Morin P, Lee H-S, Kubilus C, Danshevar D, Wulff M, Budson A. TDP-43 Proteinopathy and Motor Neuron Disease in Chronic Traumatic Encephalopathy, *J Neuropath Exp Neurol*, 2010 Sep;69(9):918-29
- 8. Gavett, B, Stern R, Cantu R, Nowinski C, McKee A. Mild traumatic brain injury: A risk factor for neurodegeneration, *Alzheimer's Research and Therapy*, 2010, 2:18 (June 25, 2010)
- 9. McKee AC, Cantu RC, Nowinski CJ, Hedley-Whyte ET, Gavett BE, Budson AE, Santini VE, Lee H-Y, Kubilus CA, *Stern* RA. Chronic Traumatic Encephalopathy in Athletes: Progressive Tauopathy following Repetitive Head Injury. *J Neuropath Exp Neurol*, 2009; 68(7): 709-735.

Lay Publications:

- 1. Special Report on Sports Related Brain Injures. Britannica Book of the Year. 2011.
- 2. The Concussion Crisis in Hockey. *The Hockey News*. November, 2006.
- 3. Leak had symptoms of concussion: QB's injury was more serious than just a headache. *SI.com*. November 1, 2006.
- 4. Headed for trouble? With a history of concussions, LB Dan Morgan faces a life-altering decision whether to return to NFL. *SI.com*. October 13, 2006.

Books:

1. Head Games: Football's Concussion Crisis; Drummond Publishing Group, 2006.

Awards:

- Eisenhower Fellow, 2011
- President's Medal. Western New England College. 2011
- HealthLeaders 20 People Who Make Healthcare Better, HealthLeaders Media, 2011
- Zach Lystedt Angel Award, Sarah Jane Brain Foundation, 2011
- Hockey News 40 Under 40 Most Powerful People in Hockey, 2011
- Sports Illustrated Sportsman of the Year Finalist, 2010
- Patrick Brady Award, Brain Injury Association of Illinois, 2010
- CoBI Award, Council on Brain Injury, 2008
- PETA Compassionate Action Award, 2008
- WWE Newcomer of the Year, WWE RAW Magazine, 2002
- Football All-Ivy League, Harvard University, 1999

Testimony:

- 1. Legal Issues Relating to Football Head Injuries. House Committee on the Judiciary. Chairman John Convers. Washington D.C. October 28, 2009
- 2. Legal Issues Relating to Football Head Injuries, Part II. House Committee on the Judiciary. Chairman John Convers. Detroit, MI. January 4, 2010
- 3. Hearing on Sports Concussion Ordinance. Chicago City Council. Chairman Ed Burke.

Presentations and Panels:

- Professional Athlete's Experience with Sports Concussion. 2004 Sports Related Conference on Concussion and Spine Injury. The Neurological Sports Injury Center at Brigham and Women's Hospital and Harvard Medical School. Boston, MA. March 14, 2004
- 2. Conquering Concussions. The Fessenden School. Newton, MA. April 18, 2005
- 3. Conquering Concussions. Swampscott High School. Swampscott, MA. September 22, 2005
- 4. The Epidemiology of Concussions in Athletes. 2006 Sports-Related Conference on Concussion and Spine Injury. The Neurological Sports Injury Center at Brigham and Women's Hospital and Harvard Medical School. Boston, MA. May 19, 2006
- Keynote Address Head Games: Football's Concussion Crisis. Brain Injury Association of Massachusetts Conference on Youth Sports Concussion. Marlborough, MA. October 24, 2006
- 6. Conquering Concussions. St. Mary's High School. Lancaster, NY. February 12, 2007
- 7. The Epidemiology of Concussion in Athletes Lessons for a New Approach. Third International Meeting on Minor Traumatic Brain Injury in Sports. St. Moritz, Switzerland. March 15, 2007
- 8. The NFL's Concussion Research: Fact, Fantasy, or Fabrication? Third International Meeting on Minor Traumatic Brain Injury in Sports. St. Moritz, Switzerland. March 15, 2007
- 9. Head Games: Football's Concussion Crisis. Tatnuck Booksellers. Westborough, MA. April 14, 2007
- 10. The Culture of Competition: Implications for Concussion Management. Concussion in Sports: The Under-Recognized Public Epidemic. The National Concussion Summit sponsored by the Sports Concussion Institute. Marina del Ray, CA. April 20, 2007
- 11. The NFL's Concussion Research: Fact, Fantasy, or Fabrication? 2007 Sports-Related Conference on Concussion and Spine Injury. The Neurological Sports Injury Center at Brigham and Women's Hospital and Harvard Medical School. Boston, MA. April 27, 2007
- 12. Head Games: Football's Concussion Crisis. New Hampshire Athletic Directors Association Annual Conference. North Conway, NH. May 24, 2007
- 13. The NFL's Concussion Research: Fact, Fantasy, or Fabrication? American College of Sports Medicine 54th Annual Meeting. New Orleans, LA. June 2, 2007

- 14. Conquering Concussions. Brookline High School. Brookline, MA. June 7, 2007
- 15. Head Games: Football's Concussion Crisis. Westport Police Athletic League. Westport, CT. June 12, 2007
- 16. The Sports Concussion Crisis. Workers' Compensation Research Institute Annual Conference. Boston, MA. October 25, 2007
- 17. Head Games: Football's Concussion Crisis. Independent School Health Association Fall Conference Concussion & Sudden Death: Coping with Two Crises. New Canaan, CT. October 26, 2007
- 18. Conquering Concussions. Needham High School. Needham, MA. November 13, 2007
- 19. Conquering Concussions. Sponsored by the Northeast Rehabilitation Health Network. Merrimack College. North Andover, MA. November 15, 2007
- 20. Conquering Concussions. Apple Therapy. Bedford, NH. March 25, 2008
- 21. Conquering Concussions. Alzheimer's Association of WA. Seattle, WA. April 4, 2008
- 22. Conquering Concussions. New Hampshire Brain Injury Association. Manchester, NH. May 21, 2008
- 23. Featured Speaker The Sports Concussion Crisis. 9th Annual University of California Neurotrauma Symposium. Carmel, CA. June 23, 2008
- 24. Coaches Concussion Clinic. New Hampshire Pop Warner. Hooksett, NH. June 25, 2008
- 25. Head Games. Rhode Island and Southeast Massachusetts Pop Warner and Spirit League. Seekonk, MA. July 26, 2008
- 26. Coaches Concussion Clinic. Westport PAL. Westport, CT. August 18, 2008
- 27. Conquering Concussions. Wilmington High School. Wilmington, MA. September 9, 2008
- 28. Head Games, Council on Brain Injury, Philadelphia, PA. September 22, 2008
- 29. The Sports Concussion Crisis. St. Joseph's University. Philadelphia, PA. September 23, 2008
- 30. Cocktails and Conversation. Brain Injury Association of America. Las Vegas, NV. November 10, 2008
- 31. Coaches Concussion Clinic. Ashland High School. Ashland, MA. January 12, 2009

- 32. Head Games. Massachusetts Interscholastic Athletic Association. Franklin, MA. February 9, 2009
- 33. Concussions and the Athlete. Mike Boyle's Strength and Conditioning Winter Seminar. Winchester, MA. February 14, 2009
- 34. Coaches Concussion Clinic. Dimond High School. Fall River, MA. February 15, 2009
- 35. Head Games. Belmont Hill School. Belmont, MA. March 2, 2009
- 36. What Parents Need to Know About Concussion. Belmont Hill School. Belmont, MA. March 9, 2009
- 37. Coaches Concussion Clinic. Westport Police Athletic League. Westport, CT. March 14, 2009
- 38. Head Games. American Tung Soo Doo Association. Woburn, MA. March 21, 2009
- 39. Mild Traumatic Brain Injuries: From the Football Field to the Battlefield. Congressional Brain Injury Task Force. Brain Injury Awareness Day. Washington, DC. March 25, 2009
- 40. CTE in Professional Wrestling. Booker T's Legends of Wrestling Fanfest. Houston, TX. April 3, 2009
- 41. Head Games. Keeping Cape Cod Alive: Automobile and Youth Safety Summit. Yarmouth, MA. April 7, 2009
- 42. Head Games. Sports Law: Representing the Professional Athlete. Professor Peter Carfagna. Harvard Law School. Cambridge, MA. April 9, 2009
- 43. Head Games. National Council of Self-Insurers. Palm Springs, CA. May 18, 2009
- 44. Brain Trauma in Football. Independent Retired NFL Players Summit. Las Vegas, NV. May 29, 2009
- 45. Head Games. Brookfield High School. Brookfield, CT. June 3, 2009
- 46. Coaches Concussion Clinic. Children's Home. Endicott, NY. June 25, 2009
- 47. Coaches Concussion Clinic. Westport Police Athletic League. Westport, CT. July 18, 2009
- 48. Coaches Concussion Clinic. Westport Police Athletic League. Westport, CT. August 23, 2009
- 49. Conquering Concussions. John Hersey High School. Arlington Heights, IL. August 26, 2009

- 50. Conquering Concussions. Brookfield High School. Brookfield, CT. September 22, 2009
- 51. Keynote: Athlete's Experience with Concussion. Boston University School of Medicine: Concussion and the Athlete. Foxboro, MA. October 2, 2009
- 52. Athlete's Experience with Concussion, American Association of Professional Ringside Physicians. Uncasville, CT. October 16, 2009
- 53. Keynote Moss Rehabilitation Research Institute Conference. November 7, 2009
- 54. Concussion Clinic. Massachusetts Association of School Committees Conference. Hyannis, MA. November 20, 2009
- 55. Concussion Clinic. Wayland Middle School. Wayland, MA. December 7, 2009
- 56. The Sports Concussion Crisis. Sports Law: Representing the Professional Athlete. Professor Peter Carfagna. Harvard Law School. Cambridge, MA. January 13, 2010
- 57. Latest Research on Sports Concussions. Eastern Athletic Trainers Association Annual Conference. Boston, MA. January 10, 2010
- 58. Coaches Concussion Clinic. Westport Police Athletic League. Westport, CT. January 16, 2010
- 59. CTE in Athletes. Boston University Alumni Weekend. Boston University, Boston, MA. January 23, 2010
- 60. The Concussion Crisis. Nichols College. Dudley, MA. January 24, 2010
- 61. The Concussion Crisis. University of Utah/RMCOEH. Salt Lake City, UT. January 28, 2010
- 62. The Sports Concussion Crisis. Suffolk University Leadership in Sports. Boston, MA. February 12, 2010
- 63. Athlete's Experience with Concussion. American Physical Therapy Association. San Diego, CA. February 18, 2010
- 64. Coaches Concussion Clinic. Big New England Football Clinic. Newport, RI. March 6, 2010
- 65. Concussions in Sports. Massachusetts Interscholastic Athletic Association. Franklin, MA. April 5, 2010
- 66. CTE in Retired NFL Players. Independent Retired NFL Players Summit II. Las Vegas, NV. April 16, 2010

- 67. CTE and Concussions in Hockey. American Hockey Coaches Association. Naples, FL. April 30, 2010
- 68. Concussion Clinic. Mid-State Sharks Youth Hockey. Worcester, MA. May 11, 2010.
- 69. Concussion Clinic. John Hersey High School. Arlington Heights, IL. June 15, 2010.
- 70. Concussion Clinic. Endicott High School. Endicott, NY. June 24, 2010.
- 71. Concussion Clinic. Fairfield County Police Athletic League. Westport, CT. June 26, 2010.
- 72. Concussion Clinic. New Hampshire Pop Warner. Hooksett, NH. June 28, 2010.
- 73. Concussion Clinic. Winchendon Pop Warner. Winchendon, MA. June 30, 2010.
- 74. Brain Trauma in Sports. Virginia Department of Public Health. Richmond, VA. July 21, 2010.
- 75. Solving the Concussion Crisis. Baylor Medical Center Sports Medicine Symposium. Frisco, TX. August 8, 2010.
- 76. Solving the Concussion Crisis. Rhode Island Interscholastic League. Providence, RI. August 11, 2010.
- 77. Concussion Clinic. Maryville Institute and Country Day School. St. Louis, MO. August 12, 2010.
- 78. Solving the Concussion Crisis. Montana Tech. Butte, MT. August 23, 2010.
- 79. Concussion Clinic. Fairfield County Police Athletic League. Westport, CT. August 30, 2010.
- 80. Concussion Clinic. Groton-Dunstable High School. Groton, MA. September 7, 2010.
- 81. Concussions in Hockey. Excelon Discharge & Beyond. Toronto, ON, CA. September 11, 2010.
- 82. New Recommendations to Improve the Safety of Football. Boston University School of Medicine Head Trauma & the Athlete. Waltham, MA. October 1, 2010.
- 83. Concussion Clinic. Lincoln-Sudbury High School. Lincoln, MA. October 13, 2010.
- 84. Brain Trauma & Law. Harvard Law School. Cambridge, MA. October 21, 2010.
- 85. Keynote. Brain Injury Association Illinois. Educational Conference. October 23, 2010.

- 86. Solving the Sports Concussion Crisis. University of Pennsylvania Center for Brain Injury and Repair. October 25, 2010.
- 87. Concussion Clinic. St. Mary's Hospital. Amsterdam, NY. November 1, 2010.
- 88. The Sports Concussion Crisis. St. Joseph's University. Philadelphia, PA. November 8, 2010.
- 89. Solving the Sports Concussion Crisis. Pacific Northwest Brain Injury Conference. Vancouver, BC, CA. November 18, 2010.
- 90. Solving the Concussion Crisis. Conway MacKenzie Firm Retreat. Detroit, MI. December 3, 2010.
- 91. Solving the Sports Concussion Crisis. St. Vincent Hospital. Worcester, MA. December 9, 2010.
- 92. Solving the Concussion Crisis. Maryville Country Day School. St. Louis, MO. January 18, 2011.
- 93. Concussion Clinic. Suffolk Y Jewish Community Center. Commack, NY. January 30, 2011.
- 94. Advanced Concussion Training. University of Texas at Arlington. Arlington, TX. February 4, 2011.
- 95. Solving the Concussion Crisis. Western New England College. Springfield, MA. February 22, 2011.
- 96. Sports Injury Panel. MIT Sports Analytics Conference. Boston, MA. March 4, 2011.
- 97. Solving the Sports Concussion Crisis. Baystate Medical Center Department of Surgery. Springfield, MA. March 10, 2011.
- 98. Keynote Solving the Sports Concussion Crisis. Brain Injury Association of Connecticut. Hartford, CT. March 11, 2011.
- 99. Keynote Solving the Sports Concussion Crisis. Brain Injury Association of Virginia: Opening Doors Communities, Partnerships, Opportunities. Richmond, VA. March 12, 2011.
- 100. Advanced Concussion Training. Westport Police Athletic League. March 20, 2011.
- 101. Solving the Concussion Crisis. St. Francis Medical Center. Cape Giraudoux, MO. March 24, 2011.
- 102. Concussions in Collegiate Athletics Panel. Harvard Law School Sports Law Symposium. Cambridge, MA. March 25, 2011.

- 103. Sports Concussion Panel. The Fordham Sports Law Forum. New York City, NY. April 1, 2011.
- 104. Advanced Concussion Training. Caritas Health Care. Roanoke, VA. April 4, 2011.
- 105. Concussions and Your Athlete. North Shore Harvard Club. Swampscott, MA. April 26, 2011.
- 106. Advanced Concussion Training. Swampscott High School. Swampscott, MA. April 26, 2011.
- 107. Solving the Concussion Crisis. University of Tennessee Memphis. Memphis, TN. April 28, 2011.
- 108. Advanced Concussion Training. USA Football Coach Conference at Gillette Stadium. Foxboro, MA. May 7, 2011.
- 109. Advanced Concussion Training. Bowdoin College, Maine. May 13, 2011.
- 110. Advanced Concussion Training. Calgary Bulldogs Youth Football. Calgary, AB, Canada. May 15, 2011.
- 111. Advanced Concussion Training. Middlesex High School. Middlesex, MA. May 17, 2011.
- 112. Concussion and the Athlete. Trinity College American Football Team. May 29, 2011.
- 113. The Worldwide Concussion Crisis. Trinity College American Football Coaches. Dublin, Ireland. May 31, 2011
- 114. The Worldwide Concussion Crisis. Zentrum für Klinische Neuropsychologie Experts Meeting. Wurzburg, Germany. June 6, 2011.
- 115. The Worldwide Concussion Crisis. Italian Olympic Federation. Carlo Tranquilli. Rome, Italy. June 22, 2011.
- 116. Solving the Concussion Crisis. Brain Injury Association of Pennsylvania. Lancaster, PA. June 26, 2011.
- 117. Advanced Concussion Training. Chicago Public Schools. June 28, 2011.
- 118. Brain Trauma and Dementia. Alzheimer's Association of Houston. June 29, 2011.
- 119. Advanced Concussion Training. Winchester Pop Warner. Winchester, MA. July 26, 2011.

- 120. Advanced Concussion Training. Virginia Department of Public Health. Harrisonburg, VA. July 27, 2011.
- 121. Advanced Concussion Training. Virginia Department of Public Health. Lynchburg, VA. July 27, 2011
- 122. Concussions for Clinicians. Memorial Sportscare. Springfield, IL. August 5, 2011.
- 123. Advanced Concussion Training. Virginia Department of Public Health. Norfolk, VA. August 6, 2011.
- 124. Advanced Concussion Training. Virginia Department of Public Health. Falls Church, VA. August 8, 2011.
- 125. Advanced Concussion Training. Virginia Department of Public Health. Richmond, VA. August 9, 2011.
- 126. Advanced Concussion Training. Tampa Prep. Tampa, FL. August 16, 2011.
- 127. CTE in Athletes. Chicago Retired Players Chapter. Chicago, IL. August 23, 2011.
- 128. Advanced Concussion Training. Chicago Public Schools/Chicago Concussion Coalition. August 31, 2011
- 129. Advanced Concussion Training. Chicago Public Schools/Chicago Concussion Coalition. September 1, 2011
- 130. Advanced Concussion Training. D1/Kevin Turner Foundation. Birmingham, AL. September 8, 2011
- 131. Advanced Concussion Training. Loyola High School. Missoula, MT. September 14, 2011.
- 132. Advanced Concussion Training. Montana Technical College. Butte, MT, September 15, 2011.
- 133. Concussions for Athletes. Bates College. September 21, 2011.
- 134. Advanced Concussion Training. Bates College. September 22, 2011
- 135. Concussion and the Athlete. Williams College. September 22, 2011.
- 136. Advanced Concussion Training. Chicago Public Schools/Chicago Concussion Coalition. September 23, 2011 (2 sessions).
- 137. Advanced Concussion Training. Boston Public Schools/Boston Scholar Athletes. September 26, 2011.

- 138. Concussion for Clinicians. Hampden Medical Society. September 27, 2011.
- 139. The Concussion Crisis. The Beacon Society. Boston, MA. October 1, 2011.
- 140. Solving the Concussion Crisis. St. Vincent's Hospital Community Outreach. Worcester, MA. October 13, 2011
- 141. We Have Come So Far, but Have So Far to Go: Public Awareness and Policy Change in Sports-Related Brain Trauma. Boston University School of Medicine: Brain Trauma and the Athlete. Framingham, MA. October 28, 2011
- 142. Keynote Solving the Sports Concussion Crisis. Braintree Rehabilitation Conference. November 13, 2011
- 143. Concussions in Sports: Care, Conflict, Controversy. New York University Langone Medical Center. November 16, 2011.
- 144. Advanced Concussion Training. Chicago Concussion Coalition. Chicago, IL. November 19, 2011.
- 145. Solving the Concussion Crisis. Boston University Photonics 15TH Annual Boston University Photonics Center "Future of Light" Symposium. December 1, 2011
- 146. Concussions for Clinicians. Boston Medical Center Pediatric Grand Rounds. December 8, 2011.
- 147. Solving the Sports Concussion Crisis. Casa la Ciudad de Mexico City. Mexico City, MX. December 15, 2011.