

Stanford



David Camarillo

Associate Professor of Bioengineering

Bio

BIO

David B. Camarillo is Associate Professor of Bioengineering, (by courtesy) Mechanical Engineering and Neurosurgery at Stanford University. Dr. Camarillo holds a B.S.E in Mechanical and Aerospace Engineering from Princeton University, a Ph.D. in Mechanical Engineering from Stanford University and completed postdoctoral fellowships in Biophysics at the UCSF and Biodesign Innovation at Stanford. Dr. Camarillo worked in the surgical robotics industry at Intuitive Surgical and Hansen Medical, before launching his laboratory at Stanford in 2012. His current research focuses on precision human measurement for multiple clinical and physiological areas including the brain, heart, lungs, and reproductive system. Dr. Camarillo has been awarded the Hellman Fellowship, the Office of Naval Research Young Investigator Program award, among other honors including multiple best paper awards in brain injury and robotic surgery. His research has been funded by the NIH, NSF, DoD, as well as corporations and private philanthropy. His lab's research has been featured on NPR, the New York Times, The Washington Post, Science News, ESPN, and TED.com as well as other media outlets aimed at education of the public.

ACADEMIC APPOINTMENTS

- Associate Professor, Bioengineering
- Member, Bio-X
- Member, Wu Tsai Human Performance Alliance
- Member, Maternal & Child Health Research Institute (MCHRI)
- Member, Wu Tsai Neurosciences Institute

BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- Member, Program in Biodesign (2012 - present)
- Member, Biomedical Engineering Society (BMES) (2014 - present)
- Member, National Neurotrauma Society (NNS) (2014 - present)
- Member, American Society of Mechanical Engineers (ASME) (2012 - present)
- Member, Institute of Electrical and Electronics Engineers (IEEE) (2005 - present)

PROFESSIONAL EDUCATION

- PhD, Stanford University , Mechanical Engineering (2008)
- BSE, Princeton , Mechanical and Aerospace Engineering (2001)

LINKS

- CamLab Website: <https://camlab.stanford.edu/>

Research & Scholarship

CLINICAL TRIALS

- Correlation Between Oocyte and Embryo Mechanical Properties on Embryo Development and Clinical Pregnancy After In Vitro Fertilization, Not Recruiting

Teaching

COURSES

2022-23

- Introduction to Biomechanics and Mechanobiology: ME 283 (Spr)
- Needs Finding in Healthcare: BIOE 10SC (Sum)
- Promoting Effective and Equitable Teaching in Bioengineering: BIOE 296 (Spr)

2021-22

- Needs Finding in Healthcare: BIOE 10SC (Sum)

2020-21

- Needs Finding in Healthcare: BIOE 10SC (Sum)

STANFORD ADVISEES

Doctoral Dissertation Reader (AC)

Mackenzie Carlson, Lu Yang, Yuanjia Zhu

Postdoctoral Faculty Sponsor

Enora Le Flao

Doctoral Dissertation Advisor (AC)

Nicholas Cecchi, Xianghao Zhan

Doctoral (Program)

Michelle Joyce, Wally Niu

Publications

PUBLICATIONS

- **Correction: Identifying Factors Associated with Head Impact Kinematics and Brain Strain in High School American Football via Instrumented Mouthguards.** *Annals of biomedical engineering*
Cecchi, N. J., Domel, A. G., Liu, Y., Rice, E., Lu, R., Zhan, X., Zhou, Z., Raymond, S. J., Sami, S., Singh, H., Rangel, I., Watson, L. P., Kleiven, et al
2023
- **Laboratory And On-field Testing Of A Commercially Available Padded Helmet Cover**
Cecchi, N. J., Callan, A. A., Watson, L. P., Liu, Y., Zhan, X., Zeineh, M. M., Grant, G. A., Camarillo, D. B.
LIPPINCOTT WILLIAMS & WILKINS.2022: 45
- **Piecewise Multivariate Linearity Between Kinematic Features and Cumulative Strain Damage Measure (CSDM) Across Different Types of Head Impacts.** *Annals of biomedical engineering*
Zhan, X., Li, Y., Liu, Y., Cecchi, N. J., Gevaert, O., Zeineh, M. M., Grant, G. A., Camarillo, D. B.
2022
- **A REAL-TIME SYSTEM TO MONITOR BRAIN STRAIN TO DETECT DANGEROUS HEAD IMPACTS**
Zhan, X., Liu, Y., Gevaert, O., Zeineh, M., Camarillo, D.
MARY ANN LIEBERT, INC.2022: A22

- **Find the spatial co-variation of brain deformation with principal component analysis.** *IEEE transactions on bio-medical engineering*
Zhan, X., Liu, Y., Cecchi, N. J., Gevaert, O., Zeineh, M., Grant, G., Camarillo, D. B.
2022; PP
- **Physics-Informed Machine Learning Improves Detection of Head Impacts.** *Annals of biomedical engineering*
Raymond, S. J., Cecchi, N. J., Alizadeh, H. V., Callan, A. A., Rice, E., Liu, Y., Zhou, Z., Zeineh, M., Camarillo, D. B.
2022
- **A low-cost, highly functional, emergency use ventilator for the COVID-19 crisis.** *PloS one*
Raymond, S. J., Baker, S., Liu, Y., Bustamante, M. J., Ley, B., Horzewski, M. J., Camarillo, D. B., Cornfield, D. N.
2022; 17 (3): e0266173
- **Translational models of mild traumatic brain injury tissue biomechanics** *Current Opinion in Biomedical Engineering*
Zhan, X., Oeur, A., Liu, Y., Zeineh, M. M., Grant, G. A., Margulies, S. S., Camarillo, D. B.
2022; 24
- **The Presence of the Temporal Horn Exacerbates the Vulnerability of Hippocampus During Head Impacts.** *Frontiers in bioengineering and biotechnology*
Zhou, Z., Li, X., Domel, A. G., Dennis, E. L., Georgiadis, M., Liu, Y., Raymond, S. J., Grant, G., Kleiven, S., Camarillo, D., Zeineh, M.
2022; 10: 754344
- **Towards a comprehensive delineation of white matter tract-related deformation.** *Journal of neurotrauma*
Zhou, Z., Li, X., Liu, Y., Fahlstedt, M., Georgiadis, M., Zhan, X., Raymond, S. J., Grant, G., Kleiven, S., Camarillo, D. B., Zeineh, M.
2021
- **Identifying Factors Associated with Head Impact Kinematics and Brain Strain in High School American Football via Instrumented Mouthguards.** *Annals of biomedical engineering*
Cecchi, N. J., Domel, A. G., Liu, Y., Rice, E., Lu, R., Zhan, X., Zhou, Z., Raymond, S. J., Sami, S., Singh, H., Rangel, I., Watson, L. P., Kleiven, et al
2021
- **Neuroradiologic Evaluation of MRI in High-Contact Sports.** *Frontiers in neurology*
McAllister, D., Akers, C., Boldt, B., Mitchell, L. A., Tranvinh, E., Douglas, D., Goubran, M., Rosenberg, J., Georgiadis, M., Karimpoor, M., DiGiacomo, P., Mouchawar, N., Grant, et al
2021; 12: 701948
- **Neuroradiologic Evaluation of MRI in High-Contact Sports** *FRONTIERS IN NEUROLOGY*
McAllister, D., Akers, C., Boldt, B., Mitchell, L. A., Tranvinh, E., Douglas, D., Goubran, M., Rosenberg, J., Georgiadis, M., Karimpoor, M., DiGiacomo, P., Mouchawar, N., Grant, et al
2021; 12
- **Identifying Risk Factors For Head Impact Exposure In High School Football Using A Validated Instrumented Mouthguard**
Cecchi, N. J., Domel, A. G., Liu, Y., Raymond, S. J., Zeineh, M., Camarillo, D., Grant, G.
LIPPINCOTT WILLIAMS & WILKINS.2021: 148
- **Predictive Factors of Kinematics in Traumatic Brain Injury from Head Impacts Based on Statistical Interpretation.** *Annals of biomedical engineering*
Zhan, X., Li, Y., Liu, Y., Domel, A. G., Alizadeh, H. V., Zhou, Z., Cecchi, N. J., Raymond, S. J., Tiernan, S., Ruan, J., Barbat, S., Gevaert, O., Zeineh, et al
2021
- **Time Window of Head Impact Kinematics Measurement for Calculation of Brain Strain and Strain Rate in American Football.** *Annals of biomedical engineering*
Liu, Y., Domel, A. G., Cecchi, N. J., Rice, E., Callan, A. A., Raymond, S. J., Zhou, Z., Zhan, X., Li, Y., Zeineh, M. M., Grant, G. A., Camarillo, D. B.
2021
- **Collapsible fluid-filled fabric shock absorber with constant force** *JOURNAL OF INTELLIGENT MATERIAL SYSTEMS AND STRUCTURES*
Alizadeh, H., Fanton, M., Camarillo, D. B.
2021
- **A new open-access platform for measuring and sharing mTBI data.** *Scientific reports*
Domel, A. G., Raymond, S. J., Giordano, C., Liu, Y., Yousefsani, S. A., Fanton, M., Cecchi, N. J., Vovk, O., Pirozzi, I., Kight, A., Avery, B., Boumis, A., Fetters, et al
2021; 11 (1): 7501

- **Correction to: Validation and Comparison of Instrumented Mouthguards for Measuring Head Kinematics and Assessing Brain Deformation in Football Impacts.** *Annals of biomedical engineering*
Liu, Y., Domel, A. G., Yousefsani, S. A., Kondic, J., Grant, G., Zeineh, M., Camarillo, D. B.
2021; 49 (3): 1119-1120
- **Validation and Comparison of Instrumented Mouthguards for Measuring Head Kinematics and Assessing Brain Deformation in Football Impacts (vol 48, pg 2580, 2020)** *ANNALS OF BIOMEDICAL ENGINEERING*
Liu, Y., Domel, A. G., Yousefsani, S., Kondic, J., Grant, G., Zeineh, M., Camarillo, D. B.
2021
- **White matter tract-oriented deformation is dependent on real-time axonal fiber orientation.** *Journal of neurotrauma*
Zhou, Z. n., Domel, A. G., Li, X. n., Grant, G. n., Kleiven, S. n., Camarillo, D. B., Zeineh, M. n.
2021
- **The relationship between brain injury criteria and brain strain across different types of head impacts can be different** *Journal of Royal Society Interface*
Zhan, X., Li, Y., Liu, Y., Domel, A. G., Vahid Alidazeh, H., Raymond, S. J., Ruan, J., Barbat, S., Tienan, S., Gevaert, O., Zeineh, M., Grant, G., Camarillo, et al
2021; 18 (20210260)
- **Rapid Estimation of Entire Brain Strain Using Deep Learning Models** *IEEE Transactions on Biomedical Engineering*
Zhan, X., Liu, Y., Raymond, S. J., Vahid Alizadeh, H., Domel, A. G., Gevaert, O., Zeineh, M. M., Grant, G. A., Camarillo, D.
2021: 11
- **A Computational Study of Liquid Shock Absorption for Prevention of Traumatic Brain Injury.** *Journal of biomechanical engineering*
Vahid Alizadeh, H., Fanton, M. G., Domel, A. G., Grant, G., Camarillo, D.
2020
- **Variable area, constant force shock absorption motivated by traumatic brain injury prevention** *SMART MATERIALS AND STRUCTURES*
Fanton, M., Alizadeh, H., Domel, A. G., Devlin, M., Kurt, M., Mungal, M., Camarillo, D. B., Hawkes, E.
2020; 29 (8)
- **Analysis of head acceleration events in collegiate-level American football: A combination of qualitative video analysis and in-vivo head kinematic measurement.** *Journal of biomechanics*
Tierney, G. J., Kuo, C., Wu, L., Weaving, D., Camarillo, D.
2020; 110: 109969
- **Characterizing head impact exposure in youth female soccer with a custom-instrumented mouthpiece** *RESEARCH IN SPORTS MEDICINE*
Miller, L. E., Pinkerton, E. K., Fabian, K. C., Wu, L. C., Espeland, M. A., Lamond, L. C., Miles, C. M., Camarillo, D. B., Stitzel, J. D., Urban, J. E.
2020; 28 (1): 55–71
- **Validation and Comparison of Instrumented Mouthguards for Measuring Head Kinematics and Assessing Brain Deformation in Football Impacts.** *Annals of biomedical engineering*
Liu, Y. n., Domel, A. G., Yousefsani, S. A., Kondic, J. n., Grant, G. n., Zeineh, M. n., Camarillo, D. B.
2020
- **MR elastography frequency-dependent and independent parameters demonstrate accelerated decrease of brain stiffness in elder subjects.** *European radiology*
Lv, H. n., Kurt, M. n., Zeng, N. n., Ozkaya, E. n., Marcuz, F. n., Wu, L. n., Laksari, K. n., Camarillo, D. B., Pauly, K. B., Wang, Z. n., Wintermark, M. n.
2020
- **Longitudinal alteration of cortical thickness and volume in high-impact sports.** *NeuroImage*
Mills, B. D., Goubran, M. n., Parivash, S. N., Dennis, E. L., Rezaei, P. n., Akers, C. n., Bian, W. n., Mitchell, L. A., Boldt, B. n., Douglas, D. n., Sami, S. n., Mouchawar, N. n., Wilson, et al
2020: 116864
- **Viscoelasticity of children and adolescent brains through MR elastography.** *Journal of the mechanical behavior of biomedical materials*
Ozkaya, E. n., Fabris, G. n., Macruz, F. n., Suar, Z. M., Abderezaei, J. n., Su, B. n., Laksari, K. n., Wu, L. n., Camarillo, D. B., Pauly, K. B., Wintermark, M. n., Kurt, M. n.
2020; 115: 104229
- **Comment on "Frequency and Magnitude of Game-Related Head Impacts in Male Contact Sports Athletes: A Systematic Review and Meta-Analysis".** *Sports medicine (Auckland, N.Z.)*

Fanton, M., Wu, L., Camarillo, D.
2019

● **DYSFUNCTION OF BLOOD BRAIN BARRIER IN CONCUSSIVE HEAD TRAUMA**

Liu, Y., Tiernan, S., Campbell, M., Camarillo, D.
MARY ANN LIEBERT, INC.2019: A97–A98

● **Optimization of a Multifrequency Magnetic Resonance Elastography Protocol for the Human Brain** *JOURNAL OF NEUROIMAGING*

Kurt, M., Wu, L., Laksari, K., Ozkaya, E., Suar, Z. M., Lv, H., Epperson, K., Sawyer, A. M., Camarillo, D., Pauly, K., Wintermark, M.
2019; 29 (4): 440–46

● **Longitudinal Changes in Hippocampal Subfield Volume Associated with Collegiate Football** *JOURNAL OF NEUROTRAUMA*

Parivash, S. N., Goubran, M., Mills, B. D., Rezaei, P., Thaler, C., Wolman, D., Bian, W., Mitchell, L. A., Boldt, B., Douglas, D., Wilson, E. W., Choi, J., Xie, et al
2019

● **Lateral impacts correlate with falx cerebri displacement and corpus callosum trauma in sports-related concussions** *BIOMECHANICS AND MODELING IN MECHANOBIOLOGY*

Hernandez, F., Giordano, C., Goubran, M., Parivash, S., Grant, G., Zeineh, M., Camarillo, D.
2019; 18 (3): 631–49

● **Passive cervical spine ligaments provide stability during head impacts.** *Journal of the Royal Society, Interface*

Kuo, C., Sheffels, J., Fanton, M., Yu, I. B., Hamalainen, R., Camarillo, D.
2019; 16 (154): 20190086

● **Optimization of a Multifrequency Magnetic Resonance Elastography Protocol for the Human Brain.** *Journal of neuroimaging : official journal of the American Society of Neuroimaging*

Kurt, M., Wu, L., Laksari, K., Ozkaya, E., Suar, Z. M., Lv, H., Epperson, K., Sawyer, A. M., Camarillo, D., Pauly, K. B., Wintermark, M.
2019

● **Dependency of Head Impact Rotation on Head-Neck Positioning and Soft Tissue Forces** *IEEE TRANSACTIONS ON BIOMEDICAL ENGINEERING*

Fanton, M., Kuo, C., Sganga, J., Hernandez, F., Camarillo, D. B.
2019; 66 (4): 988–99

● **Characterizing head impact exposure in youth female soccer with a custom-instrumented mouthpiece.** *Research in sports medicine (Print)*

Miller, L. E., Pinkerton, E. K., Fabian, K. C., Wu, L. C., Espeland, M. A., Lamond, L. C., Miles, C. M., Camarillo, D. B., Stitzel, J. D., Urban, J. E.
2019: 1–17

● **Lateral impacts correlate with falx cerebri displacement and corpus callosum trauma in sports-related concussions.** *Biomechanics and modeling in mechanobiology*

Hernandez, F., Giordano, C., Goubran, M., Parivash, S., Grant, G., Zeineh, M., Camarillo, D.
2019

● **Multi-directional dynamic model for traumatic brain injury detection.** *Journal of neurotrauma*

Laksari, K. n., Fanton, M. n., Wu, L. n., Nguyen, T. n., Kurt, M. n., Giordano, C. n., Kelly, E. n., O'Keeffe, E. n., Wallace, E. n., Doherty, C. n., Campbell, M. n., Tiernan, S. n., Grant, et al
2019

● **OffsetNet: Deep Learning for Localization in the Lung using Rendered Images**

Sganga, J., Eng, D., Graetzel, C., Camarillo, D., IEEE, Howard, A., Althoefer, K., Arai, F., Arrichiello, F., Caputo, B., Castellanos, J., Hauser, K., Isler, Kim, et al
IEEE.2019: 5046–52

● **Orienting Oocytes using Vibrations for In-Vitro Fertilization Procedures**

Meyer, D., Colon, M., Alizadeh, H., Su, L., Behr, B., Camarillo, D. B., IEEE, Howard, A., Althoefer, K., Arai, F., Arrichiello, F., Caputo, B., Castellanos, J., et al
IEEE.2019: 4837–43

● **Vulnerable locations on the head to brain injury and implications for helmet design.** *Journal of biomechanical engineering*

Fanton, M. G., Sganga, J. A., Camarillo, D. n.
2019

● **Dynamic Blood-Brain Barrier Regulation in Mild Traumatic Brain Injury.** *Journal of neurotrauma*

- O'Keefe, E. n., Kelly, E. n., Liu, Y. n., Giordano, C. n., Wallace, E. n., Hynes, M. n., Tiernan, S. n., Meagher, A. n., Greene, C. n., Hughes, S. n., Burke, T. n., Kealy, J. n., Doyle, et al
2019
- **Longitudinal changes in hippocampal subfield volume associated with collegiate football.** *Journal of neurotrauma*
Pariyash, S. N., Goubran, M. n., Mills, B. D., Rezaii, P. n., Thaler, C. n., Wolman, D. n., Bian, W. n., Mitchell, L. A., Boldt, B. n., Douglas, D. n., Wilson, E. n., Choi, J. n., Xie, et al
2019
 - **Voluntary Head Rotational Velocity and Implications for Brain Injury Risk Metrics** *JOURNAL OF NEUROTRAUMA*
Hernandez, F., Camarillo, D. B.
2019; 36 (7): 1125–35
 - **Head Impact Kinematics Estimation With Network of Inertial Measurement Units.** *Journal of biomechanical engineering*
Kuo, C., Sganga, J., Fanton, M., Camarillo, D. B.
2018; 140 (9)
 - **Comparison of video-based and sensor-based head impact exposure** *PLOS ONE*
Kuo, C., Wu, L., Loza, J., Senif, D., Anderson, S. C., Camarillo, D. B.
2018; 13 (6)
 - **Spinal constraint modulates head instantaneous center of rotation and dictates head angular motion.** *Journal of biomechanics*
Kuo, C., Fanton, M., Wu, L., Camarillo, D.
2018
 - **Voluntary Head Rotational Velocity and Implications for Brain Injury Risk Metrics.** *Journal of neurotrauma*
Hernandez, F., Camarillo, D. B.
2018
 - **Validation of a Custom Instrumented Retainer Form Factor for Measuring Linear and Angular Head Impact Kinematics** *JOURNAL OF BIOMECHANICAL ENGINEERING-TRANSACTIONS OF THE ASME*
Miller, L. E., Kuo, C., Wu, L. C., Urban, J. E., Camarillo, D. B., Stitzel, J. D.
2018; 140 (5)
 - **Validation of a Custom Instrumented Retainer Form Factor for Measuring Linear and Angular Head Impact Kinematics.** *Journal of biomechanical engineering*
Miller, L. E., Kuo, C., Wu, L. C., Urban, J. E., Camarillo, D. B., Stitzel, J. D.
2018; 140 (5)
 - **Common Data Elements (CDEs) for Biomechanical Devices used in Blunt Head Impact and Blast Exposure Dynamics: The National Institute of Neurological Disorders and Stroke (NINDS), National Institutes of Health (NIH) and Department of Defense (DOD) Version 1.0 Recommendations**
Joseph, K., Gay, K., Bartsch, A., Camarillo, D., Taylor-Burds, C., Alai, S., Esterlitz, J., Bellgowan, P.
LIPPINCOTT WILLIAMS & WILKINS.2018
 - **Mechanistic Insights into Human Brain Impact Dynamics through Modal Analysis** *PHYSICAL REVIEW LETTERS*
Laksari, K., Kurt, M., Babae, H., Kleiven, S., Camarillo, D.
2018; 120 (13): 138101
 - **Propagation of errors from skull kinematic measurements to finite element tissue responses** *BIOMECHANICS AND MODELING IN MECHANOBIOLOGY*
Kuo, C., Wu, L., Zhao, W., Fanton, M., Ji, S., Camarillo, D. B.
2018; 17 (1): 235–47
 - **Comparison of video-based and sensor-based head impact exposure.** *PloS one*
Kuo, C., Wu, L., Loza, J., Senif, D., Anderson, S. C., Camarillo, D. B.
2018; 13 (6): e0199238
 - **Detection of American Football Head Impacts Using Biomechanical Features and Support Vector Machine Classification.** *Scientific reports*
Wu, L. C., Kuo, C., Loza, J., Kurt, M., Laksari, K., Yanez, L. Z., Senif, D., Anderson, S. C., Miller, L. E., Urban, J. E., Stitzel, J. D., Camarillo, D. B.
2017; 8 (1): 855
 - **Pilot Findings of Brain Displacements and Deformations during Roller Coaster Rides** *JOURNAL OF NEUROTRAUMA*

-
- Kuo, C., Wu, L. C., Ye, P. P., Laksari, K., Camarillo, D. B., Kuhl, E.
2017; 34 (22): 3198–3205
- **Performance Evaluation of a Pre-computed Brain Response Atlas in Dummy Head Impacts** *ANNALS OF BIOMEDICAL ENGINEERING*
Zhao, W., Kuo, C., Wu, L., Camarillo, D. B., Ji, S.
2017; 45 (10): 2437–50
 - **Modeling and Optimization of Airbag Helmets for Preventing Head Injuries in Bicycling** *ANNALS OF BIOMEDICAL ENGINEERING*
Kurt, M., Laksari, K., Kuo, C., Grant, G. A., Camarillo, D. B.
2017; 45 (4): 1148-1160
 - **Microfluidic analysis of oocyte and embryo biomechanical properties to improve outcomes in assisted reproductive technologies** *MOLECULAR HUMAN REPRODUCTION*
Yanez, L. Z., Camarillo, D. B.
2017; 23 (4): 235-247
 - **Microfluidic analysis of oocyte and embryo biomechanical properties to improve outcomes in assisted reproductive technologies.** *Molecular human reproduction*
Yanez, L. Z., Camarillo, D. B.
2016: -?
 - **Modeling and Optimization of Airbag Helmets for Preventing Head Injuries in Bicycling.** *Annals of biomedical engineering*
Kurt, M., Laksari, K., Kuo, C., Grant, G. A., Camarillo, D. B.
2016: -?
 - **Bandwidth and sample rate requirements for wearable head impact sensors** *JOURNAL OF BIOMECHANICS*
Wu, L. C., Laksari, K., Kuo, C., Luck, J. F., Kleiven, S., Bass, C. R., Camarillo, D. B.
2016; 49 (13): 2918-2924
 - **Effect of the mandible on mouthguard measurements of head kinematics** *JOURNAL OF BIOMECHANICS*
Kuo, C., Wu, L. C., Hammor, B. T., Luck, J. F., Cutcliffe, H. C., Lynall, R. C., Kait, J. R., Campbell, K. R., Mihalik, J. P., Bass, C. R., Camarillo, D. B.
2016; 49 (9): 1845-1853
 - **In Vivo Evaluation of Wearable Head Impact Sensors** *ANNALS OF BIOMEDICAL ENGINEERING*
Wu, L. C., Nangia, V., Bui, K., Hammor, B., Kurt, M., Hernandez, F., Kuo, C., Camarillo, D. B.
2016; 44 (4): 1234-1245
 - **Six Degree-of-Freedom Measurements of Human Mild Traumatic Brain Injury (vol 43, pg 1918, 2015)** *ANNALS OF BIOMEDICAL ENGINEERING*
Hernandez, F., Wu, L. C., Yip, M. C., Laksari, K., Hoffman, A. R., Lopez, J. R., Grant, G. A., Kleiven, S., Camarillo, D. B.
2016; 44 (3): 828–29
 - **Human oocyte developmental potential is predicted by mechanical properties within hours after fertilization.** *Nature communications*
Yanez, L. Z., Han, J., Behr, B. B., Reijo Pera, R. A., Camarillo, D. B.
2016; 7: 10809-?
 - **Human oocyte developmental potential is predicted by mechanical properties within hours after fertilization.** *Nature communications*
Yanez, L. Z., Han, J., Behr, B. B., Pera, R. A., Camarillo, D. B.
2016; 7: 10809-?
 - **Evaluation of a laboratory model of human head impact biomechanics.** *Journal of biomechanics*
Hernandez, F., Shull, P. B., Camarillo, D. B.
2015; 48 (12): 3469-3477
 - **Six Degree-of-Freedom Measurements of Human Mild Traumatic Brain Injury** *ANNALS OF BIOMEDICAL ENGINEERING*
Hernandez, F., Wu, L. C., Yip, M. C., Laksari, K., Hoffman, A. R., Lopez, J. R., Grant, G. A., Kleiven, S., Camarillo, D. B.
2015; 43 (8): 1918-1934
 - **Six Degree-of-Freedom Measurements of Human Mild Traumatic Brain Injury.** *Annals of biomedical engineering*
Hernandez, F., Wu, L. C., Yip, M. C., Laksari, K., Hoffman, A. R., Lopez, J. R., Grant, G. A., Kleiven, S., Camarillo, D. B.
2015; 43 (8): 1918-34

- **Resonance of human brain under head acceleration.** *Journal of the Royal Society, Interface / the Royal Society*
Laksari, K., Wu, L. C., Kurt, M., Kuo, C., Camarillo, D. C.
2015; 12 (108)
- **Resonance of human brain under head acceleration.** *Journal of the Royal Society, Interface / the Royal Society*
Laksari, K., Wu, L. C., Kurt, M., Kuo, C., Camarillo, D. C.
2015; 12 (108)
- **A Head Impact Detection System Using SVM Classification and Proximity Sensing in an Instrumented Mouthguard** *IEEE TRANSACTIONS ON BIOMEDICAL ENGINEERING*
Wu, L. C., Zarnescu, L., Nangia, V., Cam, B., Camarillo, D. B.
2014; 61 (11): 2659-2668
- **Model-Less Feedback Control of Continuum Manipulators in Constrained Environments** *IEEE TRANSACTIONS ON ROBOTICS*
Yip, M. C., Camarillo, D. B.
2014; 30 (4): 880-889
- **A Head Impact Detection System Using SVM Classification and Proximity Sensing in an Instrumented Mouthguard.** *IEEE transactions on bio-medical engineering*
Wu, L., Zarnescu, L., Nangia, V., Cam, B., Camarillo, D.
2014
- **Multicellular architecture of malignant breast epithelia influences mechanics.** *PloS one*
Venugopalan, G., Camarillo, D. B., Webster, K. D., Reber, C. D., Sethian, J. A., Weaver, V. M., Fletcher, D. A., El-Samad, H., Rycroft, C. H.
2014; 9 (8)
- **Model-less Feedback Control of Continuum Manipulators in Constrained Environments** *IEEE Transactions on Robotics*
Yip, M. C., Camarillo, D. B.
2014; 30 (4): 880-889
- **Outcomes from a Postgraduate Biomedical Technology Innovation Training Program: The First 12 Years of Stanford Biodesign** *ANNALS OF BIOMEDICAL ENGINEERING*
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