# JORGE V. JOSÉ

Present Position:	James H. Rudy Professor of Physics
	College of Arts and Sciences; IU Bloomington
	Member of the Stark Neuroscience Research Institute,
	Adjunct Professor of Integrative and Cellular Physiology,
	Indiana University Medical School, Indianapolis
	INDIANA UNIVERSITY

# **Administrative positions**

System Vice President for Research, Indiana University	2010-2016
Vice President for Research, SUNY at Buffalo	2005-2010
Chair, Physics Department, Northeastern University (NU)	2004–2005
Interim Chair, Physics Department, NU	2002-2004
Founding Director, Center for Interdisciplinary Research on	
Complex Systems (CIRCS), NU	1995–2005

# **Academic Positions**

Chinese Academy of Sciences, President's International Fellowship Initiative,	
Award, Beijing; China	5-8-2018
Chinese Academy of Sciences, President's International Fellowship Initiative,	
Award, Beijing; China	4-6-2016
Kavli Institute visiting Scientist, Beijing	4-6 2016
Visiting Scientists, Salk Institute for Biological Sciences, La Jolla, CA	2016-
Visiting Professor, Center for Interdisciplinary Research, NU, Boston	2015
James H. Rudy Distinguished Professor of Physics	2010 -
Adjunct Professor of Integrative and Cellular Physiology, IUSM	2010-
Stark Neuroscience Research Institute, IUSM	2015-
Professor, Physics Department, SUNY at Buffalo	2005 - 2010
Adjunct Professor of Physiology and Biophysics, SUNY at Buffalo	2005 - 2010
Emeritus Matthews University Distinguished Professor, NU	2007-
Visiting Scientists, Salk Institute for Biological Sciences, La Jolla, CA	2000-2001
Visiting Professor, Center for Theoretical Physics,	
University of Utrecht, the Netherlands	1994-1995
Visiting Professor, Centro Atomico, Bariloche, Argentina (1-month/year/13 years)	1984-1997
Matthews University Distinguished Professor, NU	1996 - 2007
Professor of Physics, NU	1988–1996
Visiting Scientist, Saclay Nuclear Research Centre, Paris, France	1985
Visiting Scientists Laue-Langevin Institute, Grenoble, France	1984-1985
Associate Professor, NU	1984-1988
Assistant Professor, NU	1980-1984
Profesor Titular B, Instituto de Física, UNAM	1980-1981
Assistant Research Professor, Rutgers University	1979 - 1980

Guest Scholar, Kyoto University, Yukawa Institute, Japan	1977
1 <sup>st</sup> James Franck Fellow, James-Franck Institute, University of Chicago	1977-1979
Assistant Research Professor, Brown University	1976-1977
Research Associate, Brown University	1974-1976

## Honors/Awards

Indiana University Bicentennial Medal	2020
Chinese Academy of Sciences President's International Fellow award, Beijing	2018
Chinese Academy of Sciences President's International Fellow award, Beijing	2016
Thomas Hart Benton Mural Medallion, Indiana University	2015
Member of the Alliance of Distinguished and Titled Professors, IU	2010-
Outstanding Referee, American Physical Society,	2009
Fellow American Association for the Advancement of Science AAAS	2007-
Manuel Sandoval-Vallarta Prize, Universidad Metropolitana, México	2004
Chercheur Etranger D'Haut Niveau et de Renommée Internationale,	
From the French Government,	2002
Corresponding Member, Mexican National Academy of Sciences	2000-
Fellow, American Physical Society	1997-
Thomas Brody Chair, National University of Mexico	1996
Eizen-Moshinsky Chair, National University of Mexico	1994
Robert D. Klein Distinguished Lecturer, Northeastern University	1993
Guest Scholar, Institute for Fundamental Physics,	
Kyoto University, Yukawa Institute, Japan	1977
James Franck Fellow, James Franck Institute, University of Chicago	1977–1979

# **Education and Training**

Dr. Sc. (Theoretical Physics), UNAM*, (Advisor L. P. Kadanoff, U. Chicago)	1976
M.Sc. (Theoretical Physics), UNAM,	1973
B.Sc. (Theoretical Physics), UNAM,	1971
Research Associate, Brown University	1974 - 1976
Assistant Research Professor, Brown University	1976 - 1977
1st James Franck Fellow, James-Franck Institute, University of Chicago	1977 - 1979
Assistant Research Professor, Rutgers University	1979 - 1980
*UNAM= National Autonomous University of Mexico	

# **Professional Association Activities**

٠	Association of American Universities (AAU)	2005-2015
٠	Association of Public and Land-grant Universities	2005-2015
•	Big Ten Academic Alliance	2010-2015
•	The US National Academies	2013-
٠	American Association for the Advancement of Sciences	2000-
٠	Mexican National Academy of Sciences	1997-
•	American Physical Society	1980-

•	Society for Neuroscience	1994-
•	Program proposal reviewer for AAAS meetings	2013-

### **Consultant**

Corporate Research and Engineering, Exxon Corporation	1982
Research Advisor, National Council of Science and Technology, Mexico	1983-1986
Schlumberger-Doll Research Center, Connecticut	1984
American Association for the Advancement of Sciences	2013-
Reviewer for the National Academies Technical Reports	

## <u>Highlights</u>

- Co-organizer of Workshop on "Topological Phase transitions and new developments", with Prof. M. Kosterlitz (2016 Nobel Laureate in Physics), Prof. L. Brink (former Chair of Nobel Physics Committee), Prof. M. Gunn (University of Birmingham) and Prof. K. K. Phua, Institute for Advance Studies, Nanyang University, Singapore. June 2017. Co-edited, with the organizers the Proceedings of the Meeting. Published by World Scientific, September 2018.
- Appeared before Congress's House Committee on Science, Space and Technology on 7-26-2011. Importance of peer review system
- Funded continuously by NSF for 24 years. Also, by ONR and PRF.
- Funded by NSF as co-PI. Collaboration with UCSD and Salk Institute for Biological Sciences (2016-2020). Title "Learning to Move Moving to Learn".
- Patent in collaboration with Rutgers' Prof. Elizabeth Torres "Methods for the Diagnosis and Treatment of Neurodevelopmental and Neurodegenerative Disorders" Awarded, January 8<sup>th</sup>, 2019. (US 10,176,299 B2).
- "Indiana University Johnson Center for Innovation and Translational Research" Translational Research Pilot Grant Program "App development for extending the patent application for treatments of neurological and learning disorders. May 26, 2016. \$14,726.
- Advisor to 14 Ph.D. graduate students.
- Research advisor to 14 postdoctoral fellows from Mexico, Canada, France, the Netherlands, Poland, and the US.
- Referee of 30 professional national and international journals
- Proposal reviewer for NSF, NIH, DOE, DOD, PRF
- Scientific advisor for the National Council on Research and Engineering (Conacyt), Mexico, 1986-1988
- Reviewer for the National Academy of Sciences Technical Reports (USA) 2013-
- ~300 invited talks, 24 countries.
- Fluent in three languages (English, Spanish, French) and conversant in another three (Italian, Dutch, some Mandarin).
- Member of the Conte ad-hoc NIMH review Panel 2004-2005
- Phi Beta Delta Medallion, Honor Society for International Scholars, Alpha Nu Chapter, Northeastern University, 1998

- Several Professional Committee Activities
- Taught 20 different undergraduate and graduate physics and biophysics courses.
- Several university Committees and Service Activities
- Director and Founder, Center for Interdisciplinary Research on Complex Systems (CIRCS) at Northeastern University 1995-2005

### **Selected Advisory Committees and Boards**

•	Co-Chair Orthoworx (orthopedics) Research & Development Council	1 2014-2015
•	Co-Chair, with the VP for IT and the Dean of the Libraries for the In	diana
	University Bicentennial Digitization Media Preservation Initiative	2013-2015
•	IU Member Rep. in Association of Universities for Research in Astro	onomy
	(AURA).	2010-2015
•	Member of the Research Executive Committee of the Association of	Public and
	Land Grant Universities (APLU).	2007-2015
•	Member of the Executive Committee of APLU	2010-2015
	International Programs	
•	Council Member of the Oak Ridge Associated Universities	2010-2015
•	Member Board of Directors IU Research	2010-2015
	Technology Commercialization	
•	Member of Enterprise IU's Vice Presidents	2013-2015
	Risk Management Committee	
•	IU's two Schools of Public Health Coordinating Council Committee	2010-2015
٠	Member and overseer of the board of the Kinsey Institute	2010-2015
•	New York's State Grid Council Member	2007 - 2010
•	Member Board of Directors: Calspan-University at Buffalo	2007-2010
	Research Center	
•	Vice Chair, Nicholas Metropolis Award, Am. Phys. Society	2007-2009
•	The New York Academy of Sciences	2006–
•	Member representative of the Universities Research Association, Inc	
	2005-2010	
•	Board Member Great Lakes Consortium	2005-2010
•	Association of American Universities (AAU) Senior Research Office	er 2005–2015
•	Board Member of the New York Structural Biology Center	2005-2010
•	Member of the External Advisor Board of the NSF-CREST "Center :	for
	Mesoscopic Modeling and Simulation" City University of New York	. 2002–2007
•	Member of the selection committee of the American Physical Society	y minority
	Edward A. Bouchet Prize	2002-2004
•	National minority motivation Speaker, American Physical Society	1990-
•	Member of the New England Board of Higher Education Minority M	lentor
	Program for under-represented students in science, technology, engin	neering, and
	mathematics, in particularly African Americans, Hispanics, and Nativ	ve Americans
	2001-2005	
•	Secretary-Treasurer, International Physics Group (now FORUM),	
	American Physical Society	1990-1994

_	Level committee member VVI Statistical Machanics Conference Dec	1006
•	Local committee member, XVI Statistical Mechanics Conference, Bos	ston 1986
٠	Book reviewer for Physics Today and New Scientist	1986
٠	Referee for NSF, DOE, NIH, DoD, Conicet (Argentina), Conycit, (Ch	ile) Conacyt
	(Mexico) and DyiCyt (Spain).	
٠	Advisor for Houghton Miflin Publications for High School physics.	1987
٠	NSF Mathematical Physics Review Panel	2006
٠	NIH Conte Center Review Panel	2004-2005
•	NSF Biological Physics Review Panel	2004

## **Conference Organizer**

- Co-organizer of Workshop on "Topological Phase transitions and new developments" with Prof. M. Kosterlitz (2016 Nobel Laureate in Physics), Prof. L. Brink (former Chair of Nobel Physics Committee), Prof. M. Gunn (University of Birmingham) and Prof. K. K. Phua, Institute for Advance Studies, Singapore. June 2017
- "Quantum Manifestations of Classical Chaos". Theoretical Physics Institute, University of Minnesota, 1988.
- **"Fourth Workshop in Condensed Matter Physics"** Universidad Católica de Chile, January 3-7, 1994. Financed by the NSF
- "First Canadian American Mexican Physics Societies Meeting" Cancun, Mexico, 1994.

### Journal refereeing activities.

- Physical Review Letters, Physical Review B, Physical Review E, Physica, Journal de Physique (Paris), Physics Letters A (The Netherlands). European Physics Journal Letters.
- Proceedings of the National Academy of Sciences, Proceedings of the Royal Society. Neurocomputing, Neural Computation, Journal of Mathematical Biology, Journal of Cell Science, Biological Cybernetics.
- American Journal of Physics (education)
- Reviewer for the scientific program of the American Association for the Advancement of Science 2021 meeting.
- Cambridge University Press.
- Reviewer for the Fritz London Memorial Prize, awarded at the International Conference on Low Temperature Physics.

## **Federal Agencies**

- National Science Foundation, Department of Energy, National Institute of Health, DoD,
- CONICYT (National Science Foundation) of Chile, DGICYT (National Science Foundation) of Spain, CONACYT (National Science

Foundation) of Mexico, National Agency for the Development of Science and Technology, Argentina,

• Petroleum Research Fund

### **Selected Advisory Committees and Boards**

•	Vice Chair, Nicholas Metropolis Award, Am. Phys. Society	2007-2009
•	The New York Academy of Sciences	2006–
•	Representative at the Universities Research Association	2005-2010
•	Board Member Great Lakes Consortium, New York	2005-2010
٠	AAU Senior Research Officer	2005-2015
•	Board Member of the New York Structural Biology Center	2005-2010
•	External Advisor Board member of the NSF-CREST "Center for M	esoscopic
	Modeling and Simulation" City University of New York.	2002-2007
•	Selection committee member, Edward Bouchet Prize	2002-2004
•	National minority motivation Speaker, APS	1990-1994
٠	Member of the New England Board of Higher Education Minority N	Mentor
	Program for under-represented students in STEM	2001-2005
٠	Secretary-Treasurer, International Physics Group (now FORUM),	
	American Physical Society	1990-1994
•	Committee member, XVI Statistical Mechanics Conference, Boston	i 1986
•	Book reviewer for Physics Today and New Scientist	1986
•	Referee for NSF, DOE, NIH, DoD, Conicet (Argentina), Conycit, (	Chile)
	Conacyt (Mexico) and DyiCyt (Spain).	
•	Houghton Miflin Publications advisor for High School physics.	1987
٠	NSF Mathematical Physics Review Panel	2006
•	NIH Conte Center Review Panel	2004-2005
•	NSF Biological Physics Review Panel	2004

### **Consultant**

Corporate Research and Engineering, Exxon Corporation	1982
Research Advisor, National Council of Science and Technology, Mexico	1983-
1986	
Schlumberger-Doll Research Center, Connecticut	1984
American Association for the Advancement of Sciences	2013-
Reviewer for the National Academies Technical Reports	2013-

### **Conference Organizer**

• Co-organizer of Workshop on "Topological Phase transitions and new developments" with Prof. M. Kosterlitz (2016 Nobel Laureate in Physics), Prof. L. Brink (former Chair of Nobel Physics Committee), Prof. M. Gunn

(University of Birmingham) and Prof. K. K. Phua, Institute for Advance Studies, Singapore. June 2017

- Quantum Manifestations of Classical Chaos". Theoretical Physics Institute, University of Minnesota, 1988.
- "Fourth Workshop in Condensed Matter Physics" Universidad Católica de Chile, January 3-7, 1994. Financed by the NSF
- "First Canadian American Mexican Physics Societies Meeting" Cancun, Mexico, 1994.

### Journal refereeing activities.

- Physical Review Letters, Physical Review B, Physical Review E, Physica Journal de Physique (Paris), Physics Letters A (The Netherlands).
- Proceedings of the National Academy of Sciences, Proceedings of the Royal Society. Neurocomputing, Neural Computation, Journal of Mathematical Biology, Journal of Cell Science, Biological Cybernetics.
- American Journal of Physics (education)

#### **Federal Agencies**

- National Science Foundation, Department of Energy, National Institute of Health, DoD,
- CONICYT (National Science Foundation) of Chile, DGICYT (National Science Foundation) of Spain, CONACYT (National Science Foundation) of Mexico, National Agency for the Development of Science and Technology, Argentina,
- Petroleum Research Fund

#### <u>Books</u>

**Topological Phase Transitions and New Developments Conference Proceedings.** Edited by Prof. L. Brink, Prof. J. M. Kosterlitz (Nobel Prize), Prof. José, Prof. M. Gunn and Prof. K. K. Phua. World Scientific, (September 2018).

**40 Years of Berezinskii-Kosterlitz-Thouless Theory**, Editor and contributor. Published by World Scientific (July 2013).

**Classical Mechanics: A Contemporary Approach** (with E. Saletan). Graduate textbook. Cambridge University Press, (670 pp), September 1998, 1999, 2002

#### **PUBLICATIONS**

(https://physics.indiana.edu/about/directory/all-faculty-scientists/jose-jorge.html;

https://medicine.iu.edu/faculty/25528/jose-jorge)

~235 publications in the following areas of research:

- Neuroscience,
- Precisions Psychiatry,
- Neurodevelopment, AI applications
- Cell Biology
- Quantum and Classical Josephson Junction Arrays
- Quantum Chaos
- Nonlinear Dynamics, Solitons
- Superconducting and Spin Glasses
- Localization in Lower Dimensional Systems
- General Phase Transitions and Critical Phenomena

### **Recent Invited Talks at Congresses and Universities**

2023 "Charge-vortex interactions between two capacitively coupled arrays made of ultra-small Josephson Junctions. Each array being dominated by either quantum and/or semi-classical fluctuations." International Symposium in honor of A. López and B. Alascio December 2023, Bariloche, Argentina. (Invited lecture).

2021 "Biomarcadores cinemáticos estadísticos caracterizando déficits en el desarrollo neuronal" ("Statistical kinematic biomarkers characterizing neural development") 15<sup>th</sup> January (2021). National Metropolitan University of Mexico.

2020 "Statistical Analysis of Human Motions Unravels Biomarkers Describing Neurodevelopment in Compromised Nervous Systems". Denver, American Physical Society, March 5<sup>th</sup>. (Invited talk).

2018 "How the Kinematic Statistical Properties of Human Motions, Measured at Millisecond Time Scales, Can Reveal Elements of their Cognitive Abilities" Colloquium at Physics Department, SUNY at Buffalo. October 18<sup>th</sup>.

2018 "Motion Biomarkers in Neurodevelopment: Independently Confirmed by Clinical Diagnoses" Institute of Neuroscience, Chinese Academy of Sciences, Shanghai, July 10<sup>th</sup>

2018 "Motion Biomarkers describing neurodevelopment" Theoretical Physics Institute, Chinese Academy of Sciences, Beijing, June 20<sup>th</sup>

2018 "A personal view about the Kosterlitz-Thouless 2016 Nobel Physics Prize". Theoretical Physics Institute, Chinese Academy of Sciences, Beijing, June 12<sup>th</sup>

2018, "Basic and practical questions about, refraction, diffraction and interference in multi slit chaotic and non-chaotic configurations" Electrical Engineering, SUNY at Buffalo, March 22<sup>nd</sup>.

2017 "Precision and Computational Psychiatry in Neurodevelopment". 17<sup>th</sup> International Conference on Complex Systems. Invited talk. September 17-22, Cancun, Mexico. 2017

2017 "Theoretical Physics Developments After 1974 and Their Consequences for the Kosterlitz-Thouless Theory ". Workshop on Topological Phase Transition and New Developments. Institute for Advanced Studies, Nanyang University, Singapore 7-5-17

2016 "On how the Statistical Properties of Human Motions, Looked at Millisecond Time Scales, Can Reveal Quantitative Autism Biomarkers". Stark Neuroscience Institute. Indiana University Medical School. October 27<sup>th</sup>.

2016 "A personal view about the reasons why Kosterlitz and Thouless shared the 2016 Nobel Physics Prize". The Joseph and Sophia Konopinski Colloquium Series. Indiana University, Bloomington. October 12<sup>th</sup>.

2016 "How studying the kinematics of how we move can unravel important physiological information, leading to quantitative classifications of neurological disorders" Peking University, Beijing, June 13<sup>th</sup>.

2016 "A personal perspective about the 21st Century Challenges to understanding how the brain works typically or when affected by neurological disorders". Public Lecture at Indiana University Beijing, China Gateway Office. June 6.

2016 "Micro-movement statistics biomarkers may help diagnose and develop therapies for individuals with compromised nervous systems". Institute of Neuroscience, Shanghai Institute for the Biological Sciences, Chinese Academy of Sciences, Shanghai, May 23<sup>rd</sup>.

2016 "How the Statistical Properties of Human Motions Reveal the Inner Workings of the Central Nervous System". Key Laboratory of Theoretical Physics, Chinese Academy of Sciences, May 13<sup>th</sup>.

2016 "From neurons to behavior: e.g. from the problem of "paying attention" to the "swimming" patterns of larvae zebra fish". Key Laboratory of Theoretical Physics, Chinese Academy of Sciences, May 6<sup>th</sup>.

2016 "How the Statistical Properties of Human Motions Reveal Cognitive Developmental Biomarkers: e.g. the Autism example". Beijing Normal University, May 4<sup>th</sup>.

2016 "A personal Perspective on Theoretical and Computational Neuroscience: Past, Present and Possible 21st Century future": Inaugural lecture, Key Laboratory of Theoretical Physics, Chinese Academy of Sciences, April 29<sup>th</sup>.

2016 "Micro-movement statistics biomarkers may help diagnose and develop therapies for individuals with autism spectrum disorders". Institute for Neural Computation Chalk Talk Series: University of California, San Diego. March 3<sup>rd</sup>.

2016 "How the statistical properties of human movements can lead to quantitative biomarkers characterizing neurological disorders"; University of California, Santa Barbara, March 2<sup>nd</sup>.

2016 "Micro-movement statistics biomarkers may help diagnose and develop therapies for individuals with compromised nervous systems"; Salk Institute for the Biological Sciences, La Jolla, California, February 8<sup>th</sup>.

2015 "New Millisecond Movement Biomarkers to Study and Analyze Individuals with Compromised Nervous Systems"; Center for Interdisciplinary Research on Complex Systems, Northeastern University, September 22<sup>nd</sup>.

2016 "Micro-movement statistics biomarkers may help diagnose and develop therapies for individuals with compromised nervous systems" February 8, 2016

2015 "New Millisecond Movement Biomarkers to Study and Analyze Individuals with Compromised Nervous Systems" Center for Interdisciplinary Research on Complex Systems, Northeastern University, September 22.

2015 "Peripheral Nervous System Approach to Pain" Joint Meeting at Indiana University School of Medicine with Eli Lilly, June 12, 2015.

2015 "Human movements as a kinesthetic percept leading to millisecond biomarkers with potential uses in neurological disorders" Konopinsky Distinguish Lecture, Physics Department, Indiana University, Bloomington, February 18<sup>th</sup>, 2015

2014 "New Biomarkers to diagnose and develop therapies for individuals with compromised nervous systems" Elli Lilly Ground Rounds Lecture, 7-30-2014

2015 "Peripheral Nervous System Approach to Pain" Joint Meeting at Indiana University School of Medicine with Eli Lilly pharmaceuticals, June 12.

2015 "Human movements as a kinesthetic percept leading to millisecond biomarkers with potential uses in neurological disorders" Konopinsky Distinguish Lecture, Physics Department, Indiana University, Bloomington, February 18<sup>th</sup>, 2015

2014 "New Biomarkers to diagnose and develop therapies for individuals with compromised nervous systems" Elli Lilly Ground Rounds Lecture, 7-30-2014

### <u>Recent publications in Neuroscience, Precision Psychiatry,</u> <u>Neurodevelopment</u>

K. Doctor, C. L. McKeever, A. Phadnis, D. Wu, M. H. Plawecki J. I. Nurnberger Jr. and J. V. José. "Deep Learning and a statistical millisecond motor assessment of neurodevelopmental disorders" (under consideration) (2024).

Di Wu, Jorge V. José, John I. Nurnberger and Elizabeth B. Torres (2018) "A Biomarker Characterizing Neurodevelopment with application in Autism" Scientific Reports-Nature. http://rdcu.be/Ez9f. Ranked Top 100 publication out of 1627 papers published in neuroscience in Nature journals in 2018.

Di Wu, Elizabeth B. Torres, Jorge V. José (2018) "Micromovements: The s-Spikes as a Way to 'Zoom In' the Motor Trajectories of Natural Goal-Directed Behaviors" In Autism: The Movement Sensing Perspective, Edition: Neuroscience Series (pp.221-227). CRC Press Taylor and Francis. Torres EB and Whyatt CP (Eds.)

José JV, (2018) "Non-Gaussian Statistical Distributions Arising in Large Scale Personalized Neurological Data Sets" Book Chapter" In Autism: The Movement Sensing Perspective, Edition: Neuroscience Series (pp.155-164). CRC Press Taylor and Francis. Torres EB and Whyatt CP (Eds.)

Wu D, Torres EB., José JV, "Micro-Movements: The s-Spikes as a way to zoom-in the motor trajectories of natural goal-directed behaviors" Book Chapter "Autism: The Movement Sensing Approach" by CRC Press Taylor and Francis Group, Torres EB and Whyatt CP (Eds.) (2018)

Di Wu, Elizabeth B. Torres, Jill Nguyen, Sejal Mistry, A. Kolevzon, Jorge V. José. "Gait kinematics analyses provide information about Autism". (to be submitted)

Di Wu, Lisa Goffman, Lakin Brown, Allison Gladfelter, Jorge V. José "A Quantitative Analysis of Speech Kinematics During Word Learning in Children with Autism". (to be submitted) Torres EB, José JV, et al. "Towards Precision Psychiatry: Statistical Platform for the Personalized Characterization of Natural Behaviors" Frontiers in Neurology, February 2016, Volume 7, Article 8.

José JV, Torres EB et al. "Towards Precision Psychiatry: Statistical Platform for the Personalized Characterization of Natural Behaviors" Frontiers in Neurology, February 2016, Volume 7, Article 8.

Torres EB, Brincker M, Isenhower RW, Yanovich P, Stigler KA, Nurnberger JI, and Metaxas D, and José JV, 2013 The Micro-Movement Perspective In: Autism: Frontiers in Integrative Neuroscience, Volume 7, Article 32

José JV, Torres EB, Isenhower RW, Yanovich P, Stigler KA, and Nurnberger JI 2013 Gender Differences in Autism. The Journal of Neurophysiology, 110: 1646-1662.

José JV, Torres EB, Brincker M, Isenhower RW, Yanovich P, Stigler KA, Nurnberger JI, and Metaxas D 2013 The Micro-Movement Perspective In: Autism: Frontiers in Integrative Neuroscience, Volume 7, Article 32

Hong SL, Eisenhower RW, José JV, and Torres EB 2013 Cognitive load results in motor overflow in essential tremor. In: Neurocase Aug;20(4): 397-406.

#### **Recent contributed presentations at meetings and conferences**

C. Mckeever, K. Doctor, D. Wu, A. Phadnis, J. Nurnberger, M. Plawecki, J. V. José "AI plus Stochastic motor Assessments of Neurodivergent individuals" Society of Neuroscience (SFN), Washington D.C. November 2023.

C. Mckeever, K. Doctor, D. Wu, A. Phadnis, J. Nurnberger, M. Plawecki, J. V. José. "Neurodivergent Biometrics from a Statistical Analysis of Motor Millisecond Fluctuations" Greater Indiana Society for Neuroscience (GISfN) conference on September 8, 2023.

C. Mckeever, K. Doctor, D. Wu, A. Phadnis, J. Nurnberger, M. Plawecki, J. V. José. "A family of neurodevelopmental biomarkers extracted from a statistical analysis of kinematic data measured with high-definition sensors" APS, March Meeting, 2023, Las Vegas, Nevada.

N. W. Parris and J. V. José "From neurons to behavior in the statistical properties of neurodevelopmental disorders". Society of Neuroscience (SFN), San Diego, CA. November 2022.

K. Doctor, D. Wu, A. Phadnis, J. Nurnberger, M. Plawecki, J. V. José. "AI Deep Learning motor diagnostic analysis of neurodevelopmental disorders." Society of Neuroscience (SFN), San Diego, CA. November 2022.

K. Doctor, D. Wu, A. Phadnis, J. Nurnberger, M. Plawecki, J. V. José. "Comparing age dependent statistical motor biomarkers in neurodevelopmental disorders." SFN meeting, delivered virtually. November 2021.

K. Doctor, D. Wu, A. Phadnis, J. Nurnberger, M. Plawecki, J. V. José. "Statistical Motor Biomarkers Characterizing age-dependence in Neurodevelopmental Disorders" APS March Meeting, virtual presentation. March 2021.