MONICA LOPEZ-GONZALEZ, PHD

EDUCATION

2022 **INDEPENDENT DIRECTOR INITIATIVE CERTIFICATE**
Independent Director Initiative, VC University and University of California, Berkeley School of Law

2022 **ARTIFICIAL INTELLIGENCE POLICY CERTIFICATE**
Center for AI and Digital Policy, Washington, D.C.

2020 **GRADUATE CERTIFICATE IN INTERNATIONAL STUDIES**
Paul H. Nitze School of Advanced International Studies, Johns Hopkins University

2010 **PHD COGNITIVE SCIENCE**
Krieger School of Arts & Sciences, Johns Hopkins University

2009 **CERTIFICATE OF ART: PHOTOGRAPHY**
Maryland Institute College of Art

2007 **MA COGNITIVE SCIENCE**
Krieger School of Arts & Sciences, Johns Hopkins University

2005 **BA PSYCHOLOGY AND FRENCH (DOUBLE MAJOR)**
Krieger School of Arts & Sciences, Johns Hopkins University

PROFESSIONAL ACTIVITIES

– INDUSTRY POSITIONS –

Senior Policy Expert, Holistic AI; 2023 - present

- Provide strategic vision and leadership for the integration of emerging artificial intelligence (AI) policy for AI governance, risk management, and regulatory compliance for product development across different industries.
- Identify novel areas of research and conduct studies on the integration of AI advancements and emerging AI policy.
- Research, report, and present on emerging AI policy and its application to various industries.
- Identify, build relationships with, and advise multiple stakeholders across different sectors developing and/or utilizing AI-enabled systems.
- Provide recommendations related to AI to United States and international government agencies, as well as intergovernmental organizations.

Co-Founder, Principal, Cognitive Insights for Artificial Intelligence (formerly Institute for Human Intelligence)**; 2021 - 2023**

- Provide strategic vision and leadership for innovative business-driven solutions in the safe and ethical adoption, design, development, deployment, and management of artificial intelligence (AI)-enabled systems.
- Identify, build relationships with, and advise multiple stakeholders across different sectors developing and/or utilizing AI-enabled systems.
- Research, report, and present on relevant Human-Centered Design, AI Risk Management, and Responsible AI issues related to policy and governance.

• Provide recommendations related to AI to United States and international government agencies, as well as intergovernmental organizations.

Co-Founder, CEO & Chief Science Officer, La Petite Noiseuse Productions; 2014 - 2020

• Worked worldwide one-on-one with for-profit and nonprofit clients to improve their organizational goals by combining their domain knowledge and business problems with our human cognition and behavior knowledge and research and data analytics (qualitative and quantitative) expertise.

• Designed, executed, and presented innovative research in human creativity and intelligence to inform best AI-enabled technology product development, business and data management practices, public education, and program evaluation and policy reform.

• Led strategic projects for growth of company.

• Identified, negotiated, and interacted with a range of stakeholders from the Autonomous Systems, Healthcare and Biotechnology, Cybersecurity, Entertainment, and Education industries.

• Managed a team of early to mid-career professionals from diverse backgrounds across multiple projects.

• Designed and managed company's branding and marketing strategies.

• Identified and developed short- and long-term sustainable funding strategies.

Executive Director of Business Development, Novodux; 2017 - 2020

• Led business development initiatives to advance Oncology drug development.

• Participated in development of company's business plan and presentations, product evaluation and commercial analysis, data management, analyses and evaluations supporting relevant licensing opportunities.

• Convened strategic partnering activities with multiple stakeholders in various languages (i.e. English, French, Spanish).

Workshop Instructor, Electronic Imaging Symposium Short Courses, Society for Imaging Science and Technology (IS&T); 2018 - 2020

• Created and held original interdisciplinary workshop titled *Using Cognitive and Behavioral Sciences and the Arts in Artificial Intelligence Research & Design*.

• Taught engineering R&D and executive mid and late-career professionals at the annual International Symposium on Electronic Imaging in San Francisco, California.

Director of Business Development, Valens Therapeutics, Inc.; 2008 - 2014

• Led business development initiatives to advance Oncology drug process and product development.

• Participated in development of company's intellectual property, market trend analyses, product evaluation and commercial analysis, and data management.

• Convened strategic partnering activities with multiple stakeholders in various languages (i.e. English, French, Spanish).

Freelance Translator, IMA World Health; 2013

• Translated official organization public health documents from written English to written Spanish.

GGI Brain Awareness Fellow, George Greenstein Institute, Inc.; 2011 - 2012

• Created, developed and taught online lab *Vision & the Brain: Design Thinking with the Brain in Mind* for general audiences.

• Addressed the neuroscience of design thinking as applied to technology and brain health.
• Organized promotional and public engagement strategies for non-technical audiences.

Intern, Boston Life Sciences, Inc.; 2004 - 2007

• Supported execution of projects in company operations, production laboratory, and business development.

– ACADEMIC POSITIONS –

Curriculum Developer, Academic Director and Capstone Director, Georgetown University School of Continuing Studies; 2023 - Present

• Developed, teach and lead inaugural one-week summer academy on *Artificial Intelligence* for the Summer Programs for High School Students.

Senior Lecturer, Computer Science, Whiting School of Engineering, Johns Hopkins University; 2022 - Present

• Developed and teach nterdisciplinary Artificial Intelligence Ethics and Global Policy and Governance course: *The Ethics of Artificial Intelligence and Automation*.

Faculty Lecturer, School of Advanced International Studies, Johns Hopkins University; 2022 - Present

• Developed and teach interdisciplinary global policy and governance course on *Artificial Intelligence: The Science, Ethics, and Politics* for the Master of Arts in International Relations Program.

Lecturer, Engineering for Professionals - Artificial Intelligence Master's Program, Whiting School of Engineering, Johns Hopkins University; 2021 - Present

• Developed and teach interdisciplinary course –*Cognitive and Behavioral Foundations for Artificial Intelligence (AI)*– on the application of cognitive neuroscience to the development of human-like AI.
• Advise graduate students in the AI Master's Program.

Faculty Joint Appointment in Neurology - Division of Cognitive Neurology, Department of Neurology, Johns Hopkins University School of Medicine; 2019 - Present

• Develop innovative cross-disciplinary research collaborations with faculty for novel AI-based healthcare applications.

Lecturer, Executive Education, Carey School of Business, Johns Hopkins University; 2022 - 2023

• Developed online Executive Education course at the intersection of Artificial Intelligence (AI), Ethics, Global Policy and Business Management: *Artificial Intelligence Ethics for Business*.
• Developed and taught webinars at the intersection of AI, Ethics and Business Management: *Fact vs. Fiction: What's AI and how to leverage its power*; *Ethical AI: Why it matters for your business*.

Senior Lecturer, Department of Cognitive Science, Krieger School of Arts & Sciences, Johns Hopkins University; 2019 - 2023

• Develop and teach interdisciplinary STEMM courses at the intersection of the Autonomous Systems, Brain, Behavioral, Cognitive, Data and Health Sciences with Ethics and Public Policy.
• All courses utilize experiential and practice-based learning methods resulting in product deliverables for social impact (e.g. research proposals and papers, policy reports, multimedia products).
• Teach undergraduates and graduates across various programs and departments.
• Advise and mentor undergraduate and graduate students.

Committee Member & Session Chair, Human Vision and Electronic Imaging; 2015 - 2021

- Review and select submitted conference manuscripts and speakers to the annual Society for Imaging Science and Technology (IS&T) International Symposium on Electronic Imaging's *Human Vision & Electronic Imaging* conference.
- Participate in conference organization meetings with committee members.
- Co-chaired new symposium on *Art & Perception* within imaging technology in 2016 and 2017.

Subject Editor, Social Sciences & Humanities Open (SSHO) Journal, Elsevier, Oxford, UK; 2020 - 2021

- Responsible for the peer review process of submitted manuscripts from across the world within the area of the Cognitive and Social Sciences.
- Selected and invited researchers from across the world in academia and industry to review submitted manuscripts.
- Made final decisions on manuscripts for open-access publishing.
- Managed the peer review database platform.

STEAMM Research Mentor, Department of Neurology, Johns Hopkins University School of Medicine ; 2016 - 2016

- Served as a STEAMM research advisor in the Department of Neurology for the annual Johns Hopkins Internship in Brain Science (JHIBS).
- Advised high school students in the areas of industry practices across the brain sciences as well as research design and analysis methods.

Postdoctoral Research Fellow - Department of Otolaryngology: Head and Neck Surgery, Johns Hopkins University School of Medicine; 2010 - 2013

- Designed, executed and published original cognitive neuroscience and psychology research on the behavioral processes and neural correlates of musical creativity.
- Used a variety of behavioral, physiological and brain measures (i.e. functional magnetic resonance imaging (fMRI)) and techniques.
- Presented research at multiple national and international forums.
- Created and managed multiple experimental projects while supervising, mentoring and coaching a team of undergraduates, graduates, and other laboratory members.

FELLOWSHIPS

Fellow, Salzburg Global Seminar, Salzburg, Austria; October 2023

- Fellow and speaker for upcoming *'Promise or Peril? Artificial Intelligence and the Future of Corporate* Governance', Corporate Governance Forum.
- Lead, participate and present in upcoming board meeting, panel discussions, article writing, and project-building activities in Salzburg, Austria.

Research Fellow, Sandra Day O'Connor College of Law, Arizona State University Center for Law, Science & Innovation, March 2023 - Present

- Research project awardee to build, write and publish novel research project on the development of soft law for AI-enabled digital health applications.
- Participate in monthly project discussions.
- Present upcoming workshop and working paper to relevant stakeholders in Washington, D.C.

Fellow, The Independent Director Initiative, UC Berkeley School of Law, Berkeley, CA, August 2022

• Participant in the inaugural Independent Director Initiative for corporate executives and experienced professionals invited to serve on boards of venture backed private companies.

AI and Digital Policy Researcher, Center for AI and Digital Policy, Washington, D.C.; 2021 - 2022

• Research member in the *AI Policy Clinic* covering topics on United States and international AI policy analysis, research, and evaluation. Participated in biweekly meetings, writing reports, and other CAIDP activities. Earned the *Artificial Intelligence Policy Certificate with distinction*.

Fellow, Salzburg Global Seminar, Salzburg, Austria; 2021

• Fellow for *'2021 Salzburg Global Corporate Governance Forum - Responsible Leadership: How do we make businesses more accountable?'*. Participant in various webinars across three days discussing the current state and future of corporate governance from the legal, finance, and management perspectives.

Fellow, Salzburg Global Seminar, Salzburg, Austria; 2021

• Fellow for *'2021 American Studies Program'*. Participant in various webinars and week-long ideation and project-building activities addressing the future of democracy. Topics included: *The President, the Press, and the People: American History, American Culture, American Politics,* and *American Business'*.

Fellow, Speaker and Panelist, Salzburg Global Seminar, Salzburg, Austria; 2018

• Speaker and panelist at the 2018 'Board of Directors Weekend: *Who's Afraid of Artificial Intelligence?'*. Discussed the power and limits of AI-based technologies and their impact on the global economy and our welfare as humans.

• Fellow for Session 593 - '*The Shock of the New: Arts, Technology and Making Sense of the Future*'. Participant in week-long ideation and project-building activities addressing the future role of technology and the arts.

SELECTED RECOGNITIONS

• **2023** - Award for ***Soft Law's Application to Artificial Intelligence (AI) in Healthcare***, Sandra Day O'Connor College of Law, ASU Center for Law, Science & Innovation.

• **2022** - One of ***100 Brilliant Women in AI Ethics*** global list for 2023, Women in AI Ethics.

• **2019** - ***Outstanding Recent Graduate Award***, Office of the President and Alumni Association, Johns Hopkins University.

• **2019** - One of ***Baltimore's Top 10 BioHealth Startup CEOs***, The Business of Biotechnology.

• **2018** - A ***millennial leader of the BioHealth Capital Region*** (MD, DC, VA), BioHealth Innovation, Inc.

• **2016** - A ***particularly imaginative polymath***, Imagination Institute, Positive Psychology Center, University of Pennsylvania.

SELECTED PUBLIC SPEAKING ENGAGEMENTS

• Keynote, Executive Women's Forum on Information Security, Risk Management & Privacy, San Antonio TX

- Speaker, *Preempting the Risks of AI: A human-centered approach to risk management*, Security, Safety and Autonomy Track, 2023 ErgoX Symposium, Human Factors and Ergonomics Society, Washington, D.C.
- Speaker, *Preempting the Risks of Generative AI: Responsible Best Practices for Open-Source AI Initiatives*, Open Source Initiative Webinar, Deep Dive: Defining Open Source AI
- Keynote, *Building Human-Centered AI: Where artistic creativity, entrepreneurship and policy intersect*, 2023 Entrepreneurship/IT Conference 'AI and Fashion - The Emerging Industry', Dialogue on Diversity, Washington, D.C.
- Speaker, *The Science, Ethics, and Geopolitics of Artificial Intelligence*, EP Distinguished Speaker Series 2023, Whiting School of Engineering, Johns Hopkins University
- Panelist, The Future of Legal Professions, Technology and Policy Society and the Johns Hopkins Undergraduate Law Review, Johns Hopkins University
- Panelist, Generative AI: Legal, Safety, and Ethical Considerations, Guidepoint Insights
- Speaker, AI Ethics and Innovation, Artificial Intelligence Society, Johns Hopkins University
- On-demand Speaker, Leading with Human Values in the Age of AI, Leadership & Innovation 2023 Online Conference, International Institute for Learning
- Interviewee, Providing Ethical Clarity To Your AI Business Decisions, IEDP Webinar
- Speaker, The Role of Artificial Intelligence and Digital Innovation in Healthcare, Johns Hopkins Carey Business School
- Interviewee, Artificial Intelligence Series - Parts 1 & 2, The Sci'more Podcast, Project Bridge
- Panelist, Entrepreneurship for Industry, 8th Annual Johns Hopkins Postdoctoral 2022 Conference
- Speaker, Artificial Intelligence Country Policy Assessment: Republic of Costa Rica, Center for AI and Digital Policy (CAIDP)
- Speaker, Ethics and Responsibility in AI-enabled Voice Technology, VoiceLunch US
- Panelist, Industry Panel on Autonomous Vehicles, ForHumanity's 1st 2021 International Conference on Accountability and Trust Powered by Governance and Oversight
- Panelist, Keys to Successful AI Governance, Synthetic Intelligence Forum
- Speaker, 23rd International Conference on Human-Computer Interaction 2021 - Thematic Area on Trustworthy AI for a Human-Centered Future
- Speaker, Association for Unmanned Vehicle Systems International (AUVSI) XPONENTIAL 2021
- Speaker, 2021 Hot Topics in the Science of Security Symposium, The National Security Agency
- Speaker, 6th Annual Meeting of The Society for the Neuroscience of Creativity (SfNC) 2020
- Speaker, VB2020 localhost: 30th Annual Virus Bulletin International Conference - Covering the global threat landscape
- Guest Lecturer: "Androids, Cyborgs, and The Human of Our Dreams", 2020 Hopkins @ Home Online Mini-Course Series, Johns Hopkins University
- Keynote Speaker, IS&T Electronic Imaging Symposium - 2020 Autonomous Vehicles and Machines conference, San Francisco, CA
- Moderator, 2019 Maryland Innovation and Technology Series: Neurotechnology, Maryland Department of Commerce and National Institutes of Health, Bethesda, MD
- Speaker, 2019 International Criminology Conference, Washington, D.C.
- Webinar Speaker, 2019 SINTRA - Sindicato National dos Tradutores, Rio de Janeiro, Brazil
- Panelist on 'Regulations and Standards', 2019 Pennsylvania Automated Vehicle Summit, Poconos, PA

- Panelist on 'Brain-Based Biometric Applications in Forensics', 2019 Maryland Forensics Conference, Frederick, MD
- Speaker, 2019 Women in CyberSecurity Conference, Pittsburgh, PA
- Speaker, IS&T Electronic Imaging Symposium - 2019 Autonomous Vehicles and Machines conference, San Francisco, CA
- Plenary Speaker, 2018 AutoSens International Automotive Sensor Conference, Brussels, Belgium
- Panelist on 'Artificial Intelligence in Healthcare', Business France at 2018 BIO International Convention, Boston, MA
- Speaker & Panelist, 2018 IEEE Women in Engineering (WIE) International Leadership Conference, San Jose, CA
- Plenary Speaker, 2018 AutoSens International Automotive Sensor Conference, Detroit, MI
- Keynote, Speaker, and Panelist, 2018, 2017, 2016, & 2015 Human Vision and Electronic Imaging (HVEI), International Conferences on Perception and Cognition in Electronic Media, San Francisco, CA
- Speaker, 2017 IEEE Women in Engineering Forum USA East, Baltimore, MD
- Moderator, 2017 book launch of *Cajal's Neuronal Forest: Science and Art*, Former Residence of the Ambassadors of Spain, Washington, D.C.
- Discussant and Panelist, 2017 Polymath Retreat, Imagination Institute, Positive Psychology Center, University of Pennsylvania, Philadelphia, PA
- Speaker, 3rd Annual 2017 Meeting of the Society for the Neuroscience of Creativity (SfNC), San Francisco Conservatory of Music, San Francisco, CA
- Speaker, 2016 Diffrazioni Firenze Multimedia Festival, Florence, Italy
- Speaker, Moderator, and Panelist, 2016 International Conference on Mobile Brain-Body Imaging and the Neuroscience of Art, Innovation and Creativity, Cancún, México
- Speaker, HEAD Talk 2016 Series, Department of Neurology, Johns Hopkins School of Medicine, Baltimore, MD
- Speaker and Workshop Instructor, Paul & Louise Miller Lecture 2016 Series at the School of Media Sciences, Rochester Institute of Technology, Rochester, NY
- In-studio Expert and Guest in 2015, StarTalk TV show recording with host Dr. Neil deGrasse Tyson, Hayden Planetarium, American Museum of National History, New York City, NY
- Speaker and Workshop Instructor in 2014, T. Rowe Price's Brand + Creative, Owings Mills, MD
- Speaker and Workshop Instructor in 2014, Capital One's Digital Group, Vienna, VA
- Speaker, Panelist, and Discussant, DOD-DARPA 2013 Workshop on Human Computer Interaction and Multi-Sensory Exploration of Large Datasets, Arlington, VA
- Speaker and Panelist, DC Art Science Evening Rendezvous (DASER) 2012 Series, National Academy of Sciences, Washington, D.C.

SELECTED PUBLICATIONS

REPORTS AND STATEMENTS ON ARTIFICIAL INTELLIGENCE POLICY AND GOVERNANCE

- López-González, M. on behalf of Holistic AI. (August 2023). Response to the U.S. FDA call for comments on *Using Artificial Intelligence and Machine Learning in the Development of Drug and Biological Products*.
- López-González, M. on behalf of Holistic AI. (July 2023). *The Holistic AI View: Progress as 7 US Juggernauts Commit to Managing AI Risk*.

- López-González, M. on behalf of Holistic AI. (July 2023). Response to the White House-Office of Science & Technology Policy RFI on *National Priorities for Artificial Intelligence*.
- López-González, M. on behalf of Holistic AI. (June 2023). Response to the National Telecommunications and Information Administration, U.S. Department of Commerce, RFI on *AI Accountability Policy*.
- López-González, M. and Gonzalez, I. (May 2023). Response to the United States Patent and Trademark Office, U.S. Department of Commerce on *Artificial Intelligence and Inventorship*.
- López-González, M. (June 2022). Input to United Nations Office of the High Commissioner for Human Rights' report on *The Right to Privacy in the Digital Age 2022*.
- López-González, M. (April 2022). Response to NIST's *Initial Draft AI Risk Management Framework*.
- López-González, M. (April 2022). AI Policy Assessment: Republic of Costa Rica.
- López-González, M. (March 2022). Response to White House-Office of Science & Technology Policy RFI on *Support the Development of a Federal Scientific Integrity Policy Framework*.
- López-González, M. (February 2022). Response to White House-Office of Science & Technology Policy RFI on *National Artificial Intelligence Research and Development Strategic Plan*.

PRIVATE SECTOR RESEARCH PAPERS

- Lopez, M. and Gonzalez, I. (in press, forthcoming 2024). Artificial Intelligence Is Not Human: The Legal Determination of Inventorship and Co-Inventorship, the Intellectual Property of AI Inventions, and the Development of Risk Management Guidelines. Journal of the Patent & Trademark Office Society.
- Garibay, O., Winslow, B., Andolina, S., Antona, M., Bodenschatz, A., Coursaris, C., Falco, G., Fiore, S. Garibay, I., Grieman, K., Havens, J.C., Jirotka, M., Kacorri, H., Karwowski, W., Kider, J. Konstan, J., Koon, S., **Lopez-Gonzalez, M.**, Maifeld-Carucci, I., McGregor, S., Salvendy, G., Shneiderman, B., Stephanidis, C., Strobel, C., Ten Holter, C., & Xu, W. (2023). Six Human-Centered Artificial Intelligence Grand Challenges. *International Journal of Human-Computer Interaction*, 39(3): 391-437. Taylor & Francis. https://doi.org/10.1080/10447318.2022.2153320
- López-González, M. (2021). Applying Human Cognition to Assured Autonomy. In: Stephanidis C. et al. (eds) HCI International 2021 - Late Breaking Papers: Multimodality, eXtended Reality, and Artificial Intelligence. HCII 2021. Lecture Notes in Computer Science, vol 13095. Springer, Cham. https://doi.org/10.1007/978-3-030-90963-5_36.
- López-González, M. (2020). Regaining Sight of Humanity on The Roadway towards Automation, IS&T Electronic Imaging Symposium: *Autonomous Vehicles and Machines 2020*, (IS&T, Springfield, VA, 2020); DOI: 10.2352/ISSN.2470-1173.2020.16.AVM-088.
- López-González, M. (2019). Today Is To See and Know: An Argument and Proposal for Integrating Human Cognitive Intelligence into Autonomous Vehicle Perception, IS&T Electronic Imaging Symposium: *Autonomous Vehicles and Machines*, (IS&T, Springfield, VA, 2019). DOI: 10.2352/ISSN.2470-1173.2019.15.AVM-054.
- López-González, M. (2018). Theoretically Automated Conversations: Collaborative Artistic Creativity for Autonomous Machines, IS&T Electronic Imaging Symposium: *Human Vision and Electronic Imaging*, (IS&T, Springfield, VA, 2018). DOI: 10.2352/ISSN.2470-1173.2018.14.HVEI-531.
- López-González, M. (2018). Storyboard of Thoughts: Using Photography and Illustration to Visualize the Mind, IS&T Electronic Imaging Symposium: *Human Vision and Electronic Imaging*, (IS&T, Springfield, VA, 2018). DOI: 10.2352/ISSN.2470-1173.2018.14.HVEI-540.
- Lebowsky, F. & **López-González, M.** (2018). Colorful Insights Supporting the Modeling of Creative Processes Across Language, Music, and Emotion, IS&T Electronic Imaging Symposium: *Color Imaging XXIII*, (IS&T, Springfield, VA, 2018); DOI: 10.2352/ISSN.2470-1173.2018.16.COLOR-364.

- López-González, M. (2017). Manifesto for Empirical Revolution No. 2: the reseARch scienTIST paradigm to unraveling the mind behind musical improvisation. Diffrazioni 2016 Catalogue, (Conservatorio Cherubini, Florence, Italy).
- López-González, M. (2017). Trading Conversations Between Science and Art: When Musical Improvisation Enters the Dialogue on Stage, IS&T Electronic Imaging Symposium: Human Vision and Electronic Imaging, (IS&T, Springfield, VA, 2017); DOI: 10.2352/ISSN.2470-1173.2017.14.HVEI-156.
- López-González, M. (2016). Minds in the Spotlight: Using Live Performance Art To Uncover Creative Thinking Processes, IS&T Electronic Imaging Symposium: Human Vision and Electronic Imaging, (IS&T, Springfield, VA, 2016); DOI: 10.2352/ISSN.2470-1173.2016.16.HVEI-143.
- López-González, M. (2015). Cognitive Psychology Meets Art: Exploring Creativity, Language, and Emotion Through Live Musical Improvisation in Film and Theatre. Proceedings of SPIE 9394, Human Vision and Electronic Imaging XX, 939403 (March 17, 2015); DOI: 10.1117/12.2083880.

BOOK CHAPTER

- López-González, M. (2023). Emotional Creativity. In Gesine Lenore Schiewer, Jeanette Altarriba, & Bee Chin Ng (eds.), *Handbook on Language and Emotion: An International Handbook - Handbooks of Linguistics and Communication Science*. Chapter 69, Volume 3. Berlin: De Gruyter Mouton. DOI: 10.1515/9783110795486-005

LEADERSHIP & EDUCATION

- López, M. (March 2023). Leadership Today Means Leading with Human Values in the Age of Artificial Intelligence. International Institute for Learning (IIL) Blog Article, https://blog.iil.com/leadership-today-means-leading-with-human-values-in-the-age-of-artificial-intelligence/
- López-González, M. (February 2018). An Urgent Appeal for Ethical Changemaking - Taking equitable action now for a better today, Session 593 - The Shock of the New: Arts, Technology and Making Sense of the Future, (Salzburg Global Seminar, Salzburg, Austria, 2018).
- López-González, M. (February 2018). A Scientist-Artist's Address to Today's Future, Op-Ed for Session 593 - The Shock of the New: Arts, Technology and Making Sense of the Future, (Salzburg Global Seminar, Salzburg, Austria, 2018).
- López-González, M. (2017). For Female Leaders of Tomorrow: Cultivate an Interdisciplinary Mindset. *Women in Engineering (WIE) Forum USA East*, *2017 IEEE*. IEEE; DOI: 10.1109/WIE.2017.8285606.
- López-González, M. (2017). STEAM is hotter than STEM: The Why and What of My Teaching Paradigm in Higher Education. SciArt Magazine – Special Topics STEAM Education Issue, August 2017.

ACADEMIC RESEARCH PAPERS

- McPherson M. J., Barrett, F. S., **Lopez-Gonzalez M.**, Jiradejvong, P., Limb, C. J. (2016). Emotional Intent Modulates The Neural Substrates of Creativity: An fMRI Study of Emotionally Targeted Improvisation in Jazz Musicians. *Scientific Reports, 6*, Article Number: 18460; doi:10.1038/srep18460.
- McPherson M. J., **Lopez-Gonzalez M.**, Rankin S. K., Limb C. J. (2014). The Role of Emotion in Musical Improvisation: An Analysis of Structural Features. *PLoS ONE*, *9*(8): e105144. doi: 10.1371/journal.pone.0105144.
- Donnay, G. F., Rankin, S. K., **López-González, M.**, Jiradejvong, P., Limb, C. J. (2014). Neural Substrates of Interactive Musical Improvisation: An fMRI Study of 'Trading Fours' in Jazz. *PLoS ONE, 9*(2): e88665. doi: 10.1371/journal.pone.0088665.
- **López-González, M.** & Limb, C. J. (February 2012). Musical Creativity and the Brain. *Cerebrum*.

OTHER RELEVANT PROFESSIONAL ACTIVITIES

Public Volunteer, NIST Generative AI Public Working Group; 2023 - Present

Working group member to provide comments and suggest edits on a cross-sectoral AI Risk Management Framework (AI RMF) Profile for Generative AI. Topics engaging with include: pre-deployment testing, content provenance, and transparency and disclosure.

Member, Human-Centered Artificial Intelligence (HCAI) International Group; 2021 - Present

Member to support and collaborate on research that integrates human-computer interaction design thinking, development processes and evaluation methods, and to participate in forums and publications for communicating this research to impact AI innovation, governance, and education.

Participant, Collaboratively Envisioning AI and Ethics in Biomedical Research, Office of Data Science Strategy, NIH; 2022 - 2022

Discussant in virtual Micro Labs to identify important areas of consideration and problem-solving strategies at the intersection of AI, machine learning, biomedical and behavioral sciences, and ethics.

Member, The Society for the Neuroscience of Creativity (SfNC); 2019 - 2021

Member to foster research on the neural and cognitive bases of creativity, and to participate in forums for communicating this research to impact education, health, and innovation.

Awards Judge, AutoSens, Sense Media Group, United Kingdom; 2018

Served on the judging panel for the selection of AutoSens Awards presented by AutoSens at AutoSens Brussels - International Automotive Sensor Conference September 19, 2018 in Brussels, Belgium.

Member, Capital Region Chapter, Women in BIO; 2018 - 2019

Member of community of entrepreneurs, leaders, business development professionals, investors, scientists, students, and others who work in the biotechnology and life sciences industries.

Reviewer, Alliance for a Healthier World, Johns Hopkins Bloomberg School of Public Health; 2018

Served as a peer reviewer for the Healthier World Challenge Implementation Grants for the Alliance for a Healthier World (AHW), Baltimore, Maryland.

Session Chair, International Conference on Mobile Brain-Body Imaging and the Neuroscience of Art, Innovation and Creativity; 2016

Served as a session chair for University of Houston's 2016 international conference in Cancún, Mexico.

SELECTED PRESS COVERAGE

- Jan 5, 2021, *Music on the Mind*
  Article by R. Wallach, The HUB, Johns Hopkins University. Web link
- Sept 2, 2020, *Autonomous Cars & Cognitive Brain Science with Dr. Monica Lopez-Gonzalez*
  Video by AutoVisionNews. Web link
- Aug 24, 2020, *Autonomous Cars & Cognitive Brain Science: Is There a Missing Link?*
  Article by C. Anthony, AutoVisionNews. Web link
- Apr 10, 2019, *Baltimore's Top 10 BioHealth Startup CEOs*
  Article by A. Taylor, The Business of Biotech, BioBuzz.io. Web link
- Oct 15, 2018, Ep. 22, Podcast interview for the BioHealth Capital Region (BHCR)
  BioTalk: Biohealth, Entrepreneurs & Capital with Rich Bendis, BioHealth Innovation. Web link

- Dec, 2017, Polymath Imagination Retreat Report
  Report by A. Kaplan and S. B. Kaufman, Imagination Institute, University of Pennsylvania. Web link

PROFESSIONAL SKILLS

Dynamic and self-motivating problem-solver, learner, innovator, collaborator, and leader integrating multiple disciplines with exceptional outside-the-box creative, critical and strategic thinking, multitasking, risk-taking, speaking, writing, and fundraising abilities.

- **ENTREPRENEURSHIP**: Business development, business and project management, market research and data analytics, partnering and team-building in fast-paced entrepreneurial high-risk environments, fundraising, public relations and event planning. Industries involved with: healthcare and biotechnology, automated and AI-enabled systems, cybersecurity, and education.
- **COMMUNICATIONS**: Creative, analytical, and content writing in academic, commercial, and entertainment domains for numerous audiences and stakeholders within the Healthcare, Cyber, Robotics, and Education industries. Multilingual speaking, writing, consulting, translating, and advising in:
  - Analytical Decision-Making, Project/Program Evaluation and Policy Reform
  - Autonomous Systems, Behavioral, Brain, Computational and Health Sciences R&D
  - Data Management and Analytics, Data-Driven Decision Making for Organizational Goals
  - Science, Technology, & Cross-Disciplinary Integration between Private & Public Sectors
  - STEAMM Education and Curriculum Development

  • **Written deliverables**: peer reviewed articles, manuscripts, and abstracts; business plans; reports, briefs, executive summaries, and memos; slide decks; op-eds; newsletters; creative narratives.

  • **Oral deliverables**: keynotes and plenaries; presentations; panels (as speaker and moderator); webinars; workshops; live and pre-recorded radio, TV, and Zoom interviews.
- **SCIENCE & RESEARCH**: Original experimental and theoretical brain, behavioral, cognitive and computational research design, implementation, data acquisition and management, quantitative and qualitative data analysis and visualization, publication, communication, and application.
- **EDUCATION**: Pioneering, creating, teaching, and evaluating novel and unique interdisciplinary curricula in Higher Education from precollege to postgraduate levels. Intersecting the fields of Autonomous Systems, Computational, Brain, Behavioral, Cognitive, Data & Health Sciences, Ethics, and Public Policy.
- **LANGUAGES**:
  - English & Spanish: native
  - French: fluent
  - Italian: proficient
- **SOFTWARE TECHNOLOGY**:
  - Microsoft Office 365, OS X system, Adobe Creative Cloud
  - Adobe Connect Learning, Canvas, Cisco WebEx, Microsoft Teams, SharePoint, Slack, Zoom
  - SPSS, SAS, MATLAB, R; HTML, JavaScript, SQL; Tableau
  - ArcGIS Pro; Google Analytics, Adobe Analytics
  - Social media platforms
  - Editorial Manager
- **STYLE MANUALS**: AMA, APA, Chicago Manual, MLA, IEEE.