EFI FOUFOULA-GEORGIOU (PhD, NAE)

UCI Distinguished Professor, Civil and Environmental Engineering, Henry Samueli School of Engineering
UCI Distinguished Professor, Earth System Science, School of Physical Sciences
Associate Dean for Research and Innovation, Henry Samueli School of Engineering
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EDUCATION

May 1985 **University of Florida,** Doctor of Philosophy in Environmental Engineering
Dec. 1982 **University of Florida,** Master of Science in Environmental Engineering
July 1979 **National Technical University of Athens, Greece,** Diploma in Civil Engineering

POSITIONS HELD

2017-	Associate Dean for Research and Innovation, Samueli School of Engineering, UCI
2016 -	Distinguished Professor, Department of Civil and Environmental Engineering & Department of Earth System Science, University of California, Irvine
2016-	Professor Emerita, University of Minnesota
2012 -	Presidential Appointee to the Nuclear Waste Technical Review Board (NWTRB), Special Government Employee
2008 - 2016	Joseph T. and Rose S. Ling Endowed Chair, Department of Civil Engineering, University of Minnesota, Minneapolis
2002 - 2016	McKnight Distinguished Professor, University of Minnesota
2008 - 2013	Director, National Center for Earth-surface Dynamics, University of Minnesota
1999 - 2003	Director, St. Anthony Falls Laboratory, University of Minnesota
1996 - 2016	Professor, Department of Civil Engineering, University of Minnesota
1989 - 1996	Associate Professor, Department of Civil Engineering, University of Minnesota
1986 - 1989	Assistant Professor, Department of Civil & Construction Engineering, Iowa State University, Ames
1985 - 1986	Research Associate, St. Anthony Falls Hydraulic Laboratory, University of Minnesota
1984 - 1985	Graduate Research Assistant, Department of Civil Engineering, University of Washington, Seattle
1980 - 1983	Graduate Research Assistant, Dept. of Environmental Engineering, University of Florida, Gainesville
1979 - 1980	Engineer, River Management and Urban Planning Division, Ministry of Public Works, Athens, Greece

HONORS AND AWARDS

2018	Elected Member of the National Academy of Engineering (NAE)
2018	Elected Fellow, American Association for the Advancement of Science (AAAS)
2017	Hydrologic Sciences Medal, American Meteorological Society (AMS)
2017	Hydrology Days Award, Colorado State University
2016	Robert E. Horton Lecturer in Hydrology, American Meteorological Society (AMS)
2015	NASA Group Achievement Award – GPM Post-Launch Team
2012	Presidential Appointee to the Nuclear Waste Technical Review Board – NWTRB
2012	Kiesel Distinguished Lecturer, University of Arizona
2008	Joseph T. and Rose S. Ling Chair in Environmental Engineering, UMN
2008	Borland Distinguished Lecturer, Hydrology Days
2007	Hydrologic Sciences Award, American Geophysical Union (AGU)
2007	Honorary Professor, Sichuan University, China

2007	Moore Distinguished Lecturer, University of Virginia
2005	Fellow, American Meteorological Society (AMS)
2003	Elected Member, European Academy of Sciences
2002	Distinguished McKnight University Professor, University of Minnesota
2002	John Dalton Medal, European Geophysical Society
1999	Fellow, American Geophysical Union
1998	Fellow, Minnesota Supercomputer Institute
1995	Bush Sabbatical Fellow, University of Minnesota
1989	Presidential Young Investigator Award, National Science Foundation
1989	Editor's Citation for Excellence in Refereeing, Water Resources Research
1989	Certificate of Commendation for Contributions in Water Resources National Association of Water Institute Directors and National Association of State Universities
1988	Travel award from NATO (to present two lectures at the NATO Advanced Study Institute on Recent Advances in the Modelling of Hydrological Systems, Sintra, Portugal)
1986	National Science Foundation Engineering Initiation Award
1974	Outstanding Student Fellowship, National Technical University of Athens, Greece
1973	Second Honor, Nationwide Competition in Mathematics, Hellenic Mathematical Society

TEACHING EXPERIENCE

Engineering Hydrology and Hydraulics (senior level); Surface Water Hydrology (graduate level); Stochastic Hydrology (graduate level); Water Resources Systems (graduate level); Hydrology and Hydrologic Design (senior level); Advanced Topics in Hydrology (graduate level); Multi-scale Analysis of Geophysical and Engineered Systems (graduate level)

PROFESSIONAL SOCIETY MEMBERSHIP

American Geophysical Union (AGU); European Geosciences Union (EGU); American Meteorological Society (AMS); American Association for the Advancement of Sciences (AAAS); American Society of Civil Engineers (ASCE); American Water Resources Association (AWRA); Institute of Mathematical Statistics (IMS); Society of Women Engineers (SWE)

PROFESSIONAL ACTIVITIES AND PUBLIC SERVICE

Elected positions

- President, Hydrology section, American Geophysical Union, 2014-2016
- Elected member, AGU Council Leadership Team, 2015-2017
- Elected Chair, Board of Directors, Consortium of Universities for the Advancement of Hydrologic Sciences (CUAHSI), 2007-2009
- Elected member, Board of Trustees, University Corporation for Atmospheric Research (UCAR), 2007-2008, 2009-2010

National Academies/ National Research Council Committees

- U.S Representative to the International Association for Hydrologic Sciences (IAHS), National Committee for the International Union of Geodesy and Geophysics (IUGG), 2016-
- NRC Decadal Survey for Earth Science and Applications from Space -- Panel on Global Hydrological Cycle and Water Resources, 2016-2017
- NRC Committee on Earth Science and Applications from Space (CESAS), 2012-2016; re-appointed: 2017-2018
- NRC Mapping Sciences Committee, Board of Earth Sciences and Resources, National Academies of Sciences, 2013-2017
- NRC Committee on "Opportunities and Challenges in Hydrologic Sciences", 2010-2012

- WSTB (Water Science and Technology Board), NRC, National Academies, appointed member, 2000-2004
- NRC Committee on "Progress and Priorities on US Weather Research and Research to Operations Activities", 2009-2010
- NRC Committee on "Assessment of the NWS Advanced Hydrologic Prediction System", National Research Council, 2003-2005
- NRC, Committee on "Risk-based Analysis Methods for Flood Damage Reduction Studies," National Research Council, 1998-2000

Service on National/International Advisory Boards and Committees

- Advisory Committee, CUAHSI workshop to envision a terrestrial modeling system to encode and formalize the knowledge from WSC/INFEWS projects, 2019
- Reviewer and Advisory Panelist, European Research Council (ERC), Brussels, 2018-
- Panelist, AGU-IUGG Centennial Symposium on "Disaster Science: Risk Reduction, Resilience, Response and Recovery", 2018
- Panelist, Water Policy, Water and Society Technical Committee, AGU, 2018
- Reviewer, NAS Report on "Future Water Needs for the Nation: Water Science and Research at the U.S. Geological Survey, Water Science and Technology Board, NAS, 2018
- Scientific Session Proposal Reviewer, Annual AAAS Meeting, 2018
- Community Advisory Committee for Water Prediction (CAC-WP), National Water Center, NOAA, 2018-
- Member, NSF Panel on CAREER awards, 2017-
- AMS, vice chair of Hydrologic Sciences Medal, 2017-
- AMS, Suomi Award Committee, 2018-
- Steering Committee, Community Surface Dynamics Modeling Systems (CSDMS), 2016 –
- Advisory Committee, Earth and Biological Sciences (EBSD) Directory, Pacific Northwest National Laboratory (PNNL), 2016-
- Advisory Committee, Annual Reviews of Earth and Planetary Sciences, 2017
- Faculty Advisory Council, Institute on the Environment, Univ. of Minnesota, 2016 - 2016
- AMS, Hydrology Research Awards (HRA) Committee, 2015-2016
- Member, search committee for CUAHSI president, 2016
- Stockholm Water Prize (SWP) Nominating Committee, Swedish Academy of Sciences, 2012-2018
- NASA Science Advisory Council -- Earth Sciences Subcommittee, 2011-2018
- Search Committee, Executive Director of CUAHSI, 2015-2016
- NOAA Science Advisory Council -- Ecosystem Science and Management Working Group, 2011-2013
- NSF, Advisory Council for Geosciences Directorate, 2008-2011
- USGCRP (U.S. Global Change Research Program) Water Cycle Initiative Study Group (1999-2000)
- Helmholtz Research Programme on "Sustainable Water Resources Management and Perspective towards a Water Science Alliance", Helmholtz Center for Environmental Research, Leipzig, Germany, Advisory Review Committee, 2009
- Argentinean Water Resources Advisory Board, Minister for Planning and Agriculture, 2010-2013
- EU (European Union)– Framework 7 Environmental Infrastructure and Collaboratories, Advisory Panel, Brussels, 2008
- NCAR, Member Nominating Committee, 2015- 2018
- Chair, AGU Fellows Committee - Hydrology section, 2012-2014
- Advisory Board, NSF Center, Sustainable Environment Actionable Data (SEAD), 2012-2016
- Scientific Council, CIMA Research Foundation, Savona, Italy, 2012-2016
- Review Editor, Third National Climate Assessment Report, Water Chapter, 2013
- Chair, Search committee, Editor-in-Chief of Water Resources Research, AGU, 2012
- Member, AGU Publications Committee, 2010-2012
- Advisory Board, EU Project DRIHM (Distributed Infrastructure for Hydrometeology), 2011-

- Advisory Board, NSF Project NGCHC (Northern Gulf Coastal Hazards Collaboratory), 2011-
- APLU (Association of Public and Land-grant Universities), Board of Atmospheric Sciences and Climate (BOAC), Executive Committee, 2009-
- NCAR, Science Advisory Board, Research Applications Laboratory, (2005-2012)
- NASA/PMM, Precipitation Science Team (2007-present)
- Science Museum of Minnesota Water Planet Program, Science Advisory Board (2005-present)
- Chair, Horton Medal Committee, AGU (2008-2010)
- Panelist, Water section, Midwest Climate Change Assessment Forum, Chicago, 2010
- EGU, European Geophysical Union, Member, Scientific Committee, Plinius Conference (2007)
- University of Illinois, Urbana, Scientific Advisory Board, Hydrologic Synthesis Activities (2007-2011)
- NSF, Proposal Evaluation Panel, Cyberinfrastructure for Environmental Observatories (2006)
- AGU Fellows Nomination Committee, Hydrology Section (2005-2010)
- CUAHSI, Member, Executive Committee (2003-2010)
- Chair, CUAHSI, Board of Directors (2003-2010)
- UCAR/URC Liaison with the Research Applications Laboratory of NCAR (2003-2006)
- CUAHSI, Search Committee for Executive Director (2003)
- UCAR/NCAR, University Relations Committee (URC) (2000-2007)
- U.S. Weather Research Program Science Steering Committee (1999-2003)
- AGU, Fellow Nomination Committee (1999-2002)
- University of Western Australia, Review Committee of Center for Water Research (CWR) (1999)
- NASA, Tropical Rainfall Measuring Mission (TRMM) Science Team (1998-present)
- European Commission, Proposal Evaluation Panel, Water and Climate Programme (1997)
- NOAA, Proposal Evaluation Panel, GCIP (1995, 1997)
- Global Energy and Water Cycle Experiment, Chair, Precipitation Principal Research Area (1994)
- NSF, Proposal Review Panel, Hydrologic Sciences (1993-1996)
- AGU, Chair, Precipitation Committee, Hydrology Section (1992-1996)

Editorial Duties

- Editorial Board, Geography Compass (2006-2012)
- Guest Editor, Water Resources Research (2005)
- Editorial Board, Nordic Hydrology (2003-present)
- Editorial Board, Advances in Water Resources (2000-2012)
- Associate Editor, Hydrologic and Earth Systems Science, European Geophysical Society (1997-2010)
- Associate Editor, Journal of Geophysical Research-Atmospheres, AGU (1997-2005)
- Editor, Journal of Hydrometeorology, AMS (1999-2001)
- Associate Editor, Water Resources Research (1992-1995)

Initiatives/Meetings/Conference Organization

- Organizer, 12th International Precipitation Conference (IPC12), Irvine, CA, June 2019
- Organizer, Data Analytics for Climate and Earth (DANCE) Workshop, Arrowhead, CA, March 2019
- Organizer, First "LIFE-ECOPOTENTIAL" meeting on ecosystem management of protected areas, University of California, Irvine, November 2016.
- Founder of the "Sustainable Deltas 2015" initiative endorsed by ICSU (International Council of Scientific Unions) to be launched internationally
- Founder and co-organizer, NCED Summer Institute on Earth-surface Dynamics (SIESD), 2009 -- annually
- Founder and co-organizer, Working group on "Stochastic Transport and Emergent Scaling in Earth-surface Processes" (STRESS), Lake Tahoe, 2007, 2009, 2011, 2013

- Organizer, Special session on "Predictability of Extreme Hydrometeorological Events", EGU meeting, Vienna, April, 2009
- Organizer, Special session on "Stochastic Transport and Emergent Scaling on Earth's Surface", EGU meeting, Vienna, April, 2009
- Organizer, Special session on "Rainfall Downscaling", EGU Plinius Conference, Cyprus, July 2008
- Organizer, AGU Fall meeting, Special session on "Stochastic Transport and Emergent Scaling in Earth-surface Processes", Dec. 2008
- Organizer, Special session on "Precipitation Downscaling: Recent advances and hydro-geomoprhologic impacts", EGU Plinius Conference, Lake Como, Italy (2007)
- Organizer, Special session on "Stochastic Geomorphology: The role of variability and uncertainty in prediction", American Geophysical Union Spring Meeting, Baltimore (2006)
- Organizer, Special session on "Geomorphological organization and its physical basis," American Geophysical Union Fall Meeting, San Francisco (2003)
- Organizer, "Stream Restoration Workshop", NCED-NAS sponsored workshop to define challenges on the science and practice of stream restoration, Minneapolis (2003)
- Organizer, 5th International Conference on Precipitation, Elounda, Crete, Greece (1995)
- Organizer, Special session on "Applications of Wavelet Transforms in Geophysics," American Geophysical Union Spring Meeting, Baltimore (1993)
- Organizer, Special session on "Self-Similarity in Hydrologic Processes: Identification, Estimation, and Use in Modeling/Measurement/Prediction" American Geophysical Union Fall Meeting, San Francisco (1991)
- Organizer, Conference on "Operational Precipitation Estimation and Prediction", American Meteorological Society Annual Meeting, Anaheim (1990).
- Organizer, Special session on "Multisensor observations and space-time rainfall modeling," American Geophysical Union Spring Meeting, Baltimore (1989)
- Organizer, Special session on "Extreme rainfall and hydrologic design," American Geophysical Union Fall Meeting, San Francisco (1989)

University of Minnesota Selected Committees

- International Research Task Force, VP's Office, University of Minnesota (2014-2016)
- Provost's Grand Challenges Research Strategy Team (2015-2016)
- Search Committee, Director, Institute on the Environment (2014-2015)
- Institute on the Environment, Advisory Council (2014-)
- Search Committee, Gibson chair, Dept. of Earth Sciences (2014-2015)
- Search Committee, Transportation faculty, Civil Engineering (2014)
- Science Advisory Committee, VP's Office (2007- 2010)
- Distinguished McKnight University Professors, Selection Committee (2007-2012)
- Chair, Search committee for Founding Director of the Institute on the Environment (2008)
- Provost's Advisory Committee on the new Institute on the Environment, University of Minnesota (2006)
- Science and Scholarly Advisory Board, University of Minnesota (2006 - 2010)
- Search Committee for Department Chair, Department of Geology and Geophysics (2005)
- Environmental Sciences and Engineering Initiative, Strategic Planning Committee, Institute of Technology, University of Minnesota (2005)
- Search Committee for a faculty hire, Department of Ecology and Evolutionary Behavior, University of Minnesota (2003)
- Promotion and Tenure Committee, Institute of Technology, University of Minnesota (2002-2005)
- Chair, Search committee for 3 new faculty hires, Department of Civil Engineering, University of Minnesota (1999)
- Chair, Research Fellow Selection Committee, Minnesota Supercomputer Institute (MSI) (1998- 2001)
- Director of Graduate Studies, Department of Civil Engineering, University of Minnesota (1997- 1998)

Journal Reviewer: Water Resources Research, Journal of Hydrology, Journal of Applied Meteorology, International Journal of Mathematical Geology, ASCE Journal of Hydraulic Engineering, ASCE Journal of Water Resources Management and Planning, ASCE Journal of Hydrologic Engineering, Canadian Meteorological and Oceanographical Society Journal, Journal of Stochastic Hydrology and Hydraulics, Hydrology and Earth System Sciences, Journal of Geophysical Research, Journal of Hydrometeorology, Journal of Climate, Nordic Hydrology, Hydrologic Processes, Physical Review E, Geophysical Review Letters, Reviews of Geophysics, Journal of Geophysical Research-Atmospheres, Journal of Geophysical Research-Earth Surface.

Proposal reviewer: National Science Foundation, European Union, U. S. Geological Survey, National Aeronautics and Space Administration, Environmental Protection Agency, National Oceanic and Atmospheric Administration, Swiss National Science Foundation, Swedish National Science Foundation, Australian Science Foundation, National Environmental Research Council, UK

REFEREED JOURNAL PUBLICATIONS
(Italics indicates student or post-doc)

198. *Mamalakis, A.* and **E. Foufoula-Georgiou**, A multivariate probabilistic framework for tracking the intertropical convergence zone: Analysis of recent climatology and past trends, *Geophysical Research Letters*, doi:10.1029/2018GL079865, 2018.

197. *Papalexiou, S.* M., Y. Markonis, F. Lombardo, A. AghaKouchak, and **E. Foufoula-Georgiou**, Precise temporal Disaggregation Preserving Marginals and Correlations (DiPMaC) for stationary and non-stationary processes, *Water Resources Research*, 54, doi:10.1029/2018WR022726, 2018.

196. *Guo, L.*, M. Brand, B. F. Sanders, **E. Foufoula-Georgiou**, and E. D. Stein, Tidal asymmetry and residual sediment transport in a short tidal basin under sea level rise, *Advances in Water Resources*, 121, 1-8, doi.org/10.1016/j.advwatres.2018.07.012, 2018.

195. *Guilloteau, C.*, **E. Foufoula-Georgiou**, C. D. Kummerow, and V. Petković, Resolving Surface Rain from GMI High-Frequency Channels: Limits Imposed by the Three-Dimensional Structure of Precipitation, *J. Atmos. Oceanic Technol.*, 35, 1835-1847, doi:10.1175/JTECH-D-18-0011.1, 2018

194. Kumar, P., P.V.V. Le, A.N.T. Papanicolaou, B.L. Rhoads, A.M. Anders, A. Stumpf, C.G. Wilson, E.A. Bettis III, N. Blair, A.S. Ward, T. Filley, H. Lin, L. Keefer, D.A. Keefer, Y.-F. Lin, M. Muste, T.V. Royer, **E. Foufoula-Georgiou**, and P. Belmont, Critical Transition in Critical Zone of Intensively Managed Landscapes, *Anthropocene*, doi:10.1016/j.ancene.2018.04.002, 2018.

193. *Tejedor, A., A. Longjas,* P. Passalacqua, Y. Moreno, and **E. Foufoula-Georgiou**, River deltas as Multiplex networks: A framework for studying multi-process multi-scale connectivity via coupled-network theory, *Geophysical Research Letters*, doi:10.1029/2018GL078355,2018.

192. *Mamalakis A.*, J.-Y. Yu, J.T. Randerson, A. AghaKouchak, and **E. Foufoula-Georgiou**, A new inter-hemispheric teleconnection increases predictability of winter precipitation in southwestern US, *Nature Communications*, 9(1), 2332, doi:10.1038/s41467-018-04722-7, 2018.

191. *Papalexiou, S.*, A. AghaKouchak, and **E. Foufoula-Georgiou**, A diagnostic framework for understanding climatology of the tails of hourly precipitation extremes in the United States, *Water Resour. Res.*, 54, doi:10.1029/2018WR022732, 2018.

190. *Wu, Z.*, D. Furbish, and **E. Foufoula-Georgiou**, A regime shift in bedload particle motions unifies disparate views of particle velocities and generalizes hop distance-time scaling, *Geophysical Research Letters*, 2018.

189. *Tejedor, A., A. Longjas*, **E. Foufoula-Georgiou**, T. Georgiou, and Y. Moreno, Diffusion Dynamics and Optimal Coupling in Directed Multiplex Networks, *Physic Review X*, , 2018.

188. *Longjas, A., A. Tejedor*, and **E. Foufoula-Georgiou**, Inferences on predator-prey vulnerabilities via spectral graph analysis of food webs, *Ecological Modeling*, in revision, 2018.

187. *Czuba, J. A., A. T. Hansen,* **E. Foufoula-Georgiou**, and J. C. Finlay, Contextualizing Wetlands Within a River Network to Assess Nitrate Removal and Inform Watershed Management, *Water Resources Research*, Accepted, doi:10.1002/2017WR021859, 2018.

186. *Hansen, A. T., C. L. Dolph,* **E. Foufoula-Georgiou**, and J. C. Finlay, Contribution of wetlands to nitrate removal at the watershed scale, *Nature Geosciene*, doi:10.1038/s41561-017-0056-6, 2018.

185. *Papalexiou, S. M.*, A. AghaKouchak, K. E. Trenberth, and **E. Foufoula-Georgiou,** Global, Regional, and Megacity Trends in the Highest Temperature of the Year: Diagnostics and Evidence for Accelerating Trends, *Earth's Future*, doi:10.1002/2017EF000709, 2018.

184. *Tejedor, A., A. Longjas*, D. A. Edmonds, I. Zaliapin, T. Georgiou, A. Rinaldo, and **E. Foufoula-Georgiou,** Entropy and optimality in river deltas, *Proceedings of the National Academy of Sciences, USA*, 114(44), 11651-11656, doi:10.1073/pnas.1708404114, 2017.

183. *Tejedor, A., A. Singh*, I. Zaliapin, A.L. Densmore, and **E. Foufoula-Georgiou**, Scale-dependent erosional patterns in steady and transient state landscapes, *Science Advances*, 3(9), e1701683, doi:10.1126/sciadv.1701683, 2017.

182. *Guilloteau, C.,* **E. Foufoula-Georgiou**, and C.D. Kummerow, Global multiscale evaluation of satellite passive microwave retrieval of precipitation during the TRMM and GPM eras: effective resolution and regional diagnostics for future algorithm development, *Journal of Hydrometeorology*, 18(11), 3051-3070, doi:10.1175/JHM-D-17-0087.1, 2017.

181. *Tejedor, A., A. Longjas*, **E. Foufoula-Georgiou**, T. Georgiou, and Y. Moreno, Diffusion Dynamics and Optimal Coupling in Directed Multiplex Networks, Arxiv, arxiv:1708.01951, 2017

180. *Tejedor, A., A. Longjas,* I. Zaliapin, S. Ambroj, and **E. Foufoula-Georgiou**, Network robustness assessed within a dual connectivity framework: joint dynamics of the Active and Idle Networks, *Scientific Reports* 7, 8567, doi:10.1038/s41598-017-08714-3, 2017.

179. *Danesh-Yazdi, M.,* A. Tejedor, and **E. Foufoula-Georgiou**, Self-Dissimilar Landscapes: Revealing the Signature of Geologic Constraints on Landscape Dissection via Topologic and Multi-Scale Analysis, *Geomorphology*, 295, 16-27, doi:10.1016/j.geomorph.2017.06.009, 2017.

178. *Takbiri, Z.,* A. M. Ebtehaj, and **E. Foufoula-Georgiou**, A Multi-sensor Data-driven methodology for all-sky Passive Microwave Inundation Retrieval, *Hydrol. Earth Syst. Sci.*, 21, 2685-2700, doi:10.5194/hess-21-2685-2017, 2017.

177. *Danesh-Yazdi, M.,* G. Botter, and **E. Foufoula-Georgiou**, Time-Variant Lagrangian Transport Formulation Reduces Aggregation Bias of Water and Solute Mean Travel Time in Heterogeneous Catchments, *Geophysical Research Letters*, 44, doi:10.1002/2017GL073827, 2017.

176. Parodi, A., D. Kranzlmueller, A. Clematis, E. Danovaro, A. Galizia, L. Garrote, M. Llasat, O. Caumont, E. Richard, Q. Harpham, F. Siccardi, L. Ferraris, N. Rebora, F. Delogu, E. Fiori, L. Molini, **E. Foufoula-Georgiou**, and D. D'Agostino, DRIHM(2US): an e-Science environment for hydro-meteorological research on high impact weather events, *Bull. Amer. Meteor. Soc.*, doi:10.1175/BAMS-D-16-0279.1, 2017.

175. Belmont, P., and **E. Foufoula-Georgiou**, Solving water quality problems in agricultural landscapes: new approaches for these nonlinear, multi-process, multi-scale systems, *Water Resources Research*, 53, doi:10.1002/ 2017WR020839, 2017.

174. *Czuba, J.A.*, **E. Foufoula-Georgiou**, K. Gran, P. Belmont, and P. Wilcock, Interplay between Spatially-Explicit Sediment Sourcing, Hierarchical River-Network Structure, and In-Channel Bed-Material Sediment Transport and Storage Dynamics, *JGR Earth Surface*, 122, 1090-1120, doi:10.1002/2016JF003965, 2017.

173. *Kelly, S., Takbiri, Z.,* Belmont, P., **Foufoula-Georgiou, E**., Human amplified changes in precipitation-runoff patterns in large river basins of the Midwestern United States, *Hydrology and Earth System Sciences*, 21, 5065-5088, doi:10.5194/hess-21-5065-2017, 2017.

172. Hajra, R., S. Szabo, *Z. Tessler, T. Ghosh,* Z. Matthews, and **E. Foufoula-Georgiou**, Unravelling the association between the impact of natural hazards and household poverty: evidence from the Indian Sundurban delta, *Sustainability Science*, 12, 453-464, doi:10.1007/s11625-016-0420-2, 2017.

171. *Schwenk J*., and **E. Foufoula-Georgiou**, Are process nonlinearities encoded in meandering river planform morphology?, *JGR Earth Surface*, 2017.

170. *Schwenk J.,* A. Khandelwal, M. Fratkin, V. Kumar, and **E. Foufoula-Georgiou**, High spatio-temporal resolution of river planform dynamics from Landsat: the RivMAP toolbox and results from the Ucayali River, *Earth and Space Science*, 4, 46–75, doi:10.1002/2016EA000196, 2017.

169. *Schwenk J.,* and **E. Foufoula-Georgiou**, Meander cutoffs nonlocally accelerate upstream and downstream migration and channel widening, *Geophysical Research Letters*, 43, 12,437-12,445, doi:10.1002/2016GL071670, 2016.

168. Szabo S., R.J. Nicholls, B. Neumann, F.G. Renaud, Z. Matthews, Z. Sebesvari, A. AghaKouchak, R. Bales, C.W. Ruktanonchai, J. Kloos, **E. Foufoula-Georgiou**, P. Wester, M. New, J. Rhyner, C. Hutton,

Making SDGs Work for Climate Change Hotspots, *Environment: Science And Policy For Sustainable Development*, 58:6, 24-33, 2016.

167. *Danesh-Yazdi, M.*, **E. Foufoula-Georgiou**, D. L. Karwan, and G. Botter, Inferring Changes in Water Cycle Dynamics of Intensively Managed Landscapes via the Theory of Time-Variant Travel Time Distributions, *Water Resources Research*, 52, doi:10.1002/2016WR019091, 2016.

166. Szabo, S., E. Brondizio, F.G. Renaud, S. Hetrick, R. J. Nicholls, Z. Matthews, Z. Tessler, A. *Tejedor, Z.* Sebesvari, **E. Foufoula-Georgiou**, S. da Costa, and J. A. Dearing, Population dynamics, delta vulnerability and environmental change: comparison of the Mekong, Ganges–Brahmaputra and Amazon delta regions, *Sustainability Science*, doi: 10.1007/s11625-016-0372-6, 2016.

165. Brondizio, E., **E. Foufoula-Georgiou**, S. Szabo, N. Vogt, Z. Sebesvari, F. G. Renaud, A. Newton, E. Anthony, A. V. Mansur, Z. Matthews, S. Hetrick, S. M. Costa, Z. Tessler, *A. Tejedor, A. Longjas,* J. A. Dearing, Catalyzing action towards the sustainability of deltas, *Current Opinion in Environmental Sustainability*, 19, 182-194, doi:10.1016/j.cosust.2016.05.001, 2016.

164. *Fan, N., A. Singh*, M. Guala, **E. Foufoula-Georgiou**, and B. Wu, Exploring a semimechanistic Episodic Langevin model for bed load transport: Emergence of normal and anomalous advection and diffusion regimes, *Water Resources Research*, doi:10.1002/2015WR018023, 2016.

163. *Tejedor, A., A. Longjas*, R. Caldwell, D.A. Edmonds, I. Zaliapin, and **E. Foufoula-Georgiou**, Quantifying the signature of sediment composition on the topologic and dynamic complexity of river delta channel networks and inferences toward delta classification, *Geophysical Research Letters*, 43, doi:10.1002/2016GL068210, 2016.

162. *Gangodagamage, C.*, **E. Foufoula-Georgiou**, S.P. Brumby, R. Chartrand, A. Koltunov, D. Liu, M. Cai, and S.L. Ustin, Wavelet-compressed representation of landscapes for hydrologic and geomorphologic applications, *IEEE Geoscience and Remote Sensing Letters*, 13(4), 480-484, doi:10.1109/LGRS.2015.2513011, 2016.

161. Sebesvari, Z., **E. Foufoula-Georgiou**, I. Harrison, E.S. Brondizio, T. Bucx, J.A. Dearing, D. Ganguly, T. Ghosh, S.L. Goodbred, M. Hagenlocher, R. Hajra, C. Kuenzer, A.V. Mansur, Z. Matthews, R.J. Nicholls, K. Nielsen, I. Overeem, R. Purvaja, Md.M. Rahman, R. Ramesh, F.G. Renaud, R.S. Robin, B. Subba Reddy, G. Singh, S. Szabo, Z.D. Tessler, C. van de Guchte, N. Vogt, and C.A. Wilson, Imperatives for sustainable delta futures, *Global Sustainable Development Report (GSDR) 2016 Science Brief*, 2016.

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THESES OF ADVISED GRADUATE STUDENTS:

Kumar, Praveen. Master of Science, 1989 April, *"A Stochastic Simulation Model for Space-time Description of Rainfall"* Adv. E. Foufoula-Georgiou, Iowa State University, Civil Engineering.

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Carsteanu, Alin-Andrei. PhD, 1997 December, ***"****Space-Time Rainfall Modeling: Considerations of Scaling and Dynamics*", Adv. E. Foufoula-Georgiou, University of Minnesota, Civil Engineering.

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NSF–Mesoscale Meteorology Program:	2001-2004	$286,000
NSF–Hydrology Program:	2002-2006	$262,000
NASA–Land Surface Hydrology:	2002-2005	$232,700
NASA–Global Precipitation Mission:	2003-2006	$300,000
NSF–Science and Technology Center (NCED)	2002-2012	$40 million (20 PIs)
NSF–Hydrology Program (with F. Porte-Agel):	2005-2008	$300,000
NASA – Land Surface Hydrology (with F. Porté-Agel):	2005-2008	$320,000
NASA – Global Precipitation Mission:	2006-2009	$340,000
NSF – Cyber Enabled Discovery and Innovation	2008-2011	$300,000
NSF – Geomorphology and Land-use Dynamics	2008-2011	$230,000
NSF – Mathematics in Geosciences (Geomorphic Transport Laws):	2008-2011	$150,000
NASA – GPM data fusion with emphasis on extremes	2009-2012	$280,000
Institute on the Environment – U of Minnesota	2011-2013	$200,000
Google.org	2011-2013	$200,000
NSF – Mathematics in Geosciences (Environmental Transport on river networks):	2009-2013	$230,000
NASA Climate Change Education Partnership (co-PI):	2011-2013	$420,000
NASA -- Global Change Fellowship (M. Ebtehaj)	2012-2015	$150,000
NASA – Towards the next generation of multi-sensor multi-scale precipitation fusion: a variational approach in the wavelet domain (GPM)	2013-2016	$415,000
NSF – Water Sustainability and Climate: Climate and human dynamics as amplifiers of natural change: a framework for vulnerability assessment and mitigation planning (lead PI)	2012-2017	$4.3 M ($2.3 U of M)
NSF -- National Center for Earth Surface Dynamics NCED 2 (co-PI)	2012-2017	$3.5 M
NSF – Linked Institutions for Future Earth (LIFE) (lead PI)	2012-2017	$800,000
NSF - Belmont Forum – DELTAS (lead PI; 7 countries)	2013-2017	$2.0 M ($750K US part)
NASA – Global Precipitation Program (lead PI)	2016-2019	$350,000
NSF – National Research Training (co-PI)	2017-2020	$2.5 M
NSF—TRIPODS+CLIMATE, Div. of Mathematical Sciences (DMS) (lead PI)	2018-2021	$300K
NSF—Delta Channel Networks, Earth Sciences Div., Geomorphology and Land use Dynamics (GLD) Program (lead PI)	2018-2021	$350K

NSF—Finest Time Resolution Dynamic Modeling, Engineering Directorate (co-PI)	2018-2020	$200K
NASA—Earth Sciences Fellowship to L. Vulis	2018-2021	$300K
NASA – Global Precipitation Measuring Mission (GPM)	2019-2021	$400K

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