CURRICULUM VITAE – 08-20
Jeffrey J. McDonnell, FRSC

Global Institute for Water Security
11 Innovation Boulevard
Saskatoon SK, S7N 3H5, Canada
Web of Science Researcher ID I-6400-2013

Tel: +1-306-966-1990
E-mail: Jeffrey.McDonnell@usask.ca
http://www.usask.ca/watershed/
ORCID 0000-0002-3880-3162

EDUCATION

1989 **Ph.D., Forest Hydrology**. University of Canterbury, Christchurch, New Zealand.
Thesis: "The age, origin and pathway of subsurface stormflow in a steep humid headwater catchment", 270p.

1985 **M.Sc., Watershed Ecosystems Graduate Program**, Trent University, Peterborough, Canada.
Thesis: "Snowcover ablation and meltwater runoff on a small Precambrian Shield watershed", 127p.

1983 **B.Sc. (Honors), Physical Geography** (now Physical & Environmental Sciences), University of Toronto, Toronto, Canada.
Thesis: "Storm waves, sediment flux and beach morphodynamics in a barred nearshore zone, Wymbolwood Beach, Ontario", 110p.

REGISTRATION

1999- P.H., Registered Professional Hydrologist (reg'n #1506), American Institute of Hydrology.

CITIZENSHIP

Canadian, British, American

PROFESSIONAL EXPERIENCE

2012- ***Associate Director (International)****,* Global Institute for Water Security; ***Professor***, School of Environment and Sustainability, University of Saskatchewan, Saskatoon, Saskatchewan.

1999-2012 ***Richardson Chair in Watershed Science*** *(1999-12);* ***University Distinguished Professor*** *(2009-12)*, Department of Forest Engineering, Resources and Management; ***Director*** *(2010-12)*, Institute for Water and Watersheds, Oregon State University, Corvallis Oregon.

1993-99 ***Associate Professor*** (1993-97); ***Professor*** (1997-99), SUNY College of Environmental Science and Forestry, Syracuse, New York.

1989-93 ***Assistant Professor***, Department of Forest Resources, Utah State University, Logan Utah.

1989-90 ***Research Hydrologist***, NASA Marshall Space Flight Center, Universities Space Research Assoc., Huntsville, Alabama.

GS h index = 87 July 2020 (Total citations 28,446); WOS h index = 70

EXECUTIVE SUMMARY

Jeffrey McDonnell was the inaugural Richardson Chair in Watershed Science at Oregon State University and University Distinguished Professor prior to joining the Global Institute for Water Security at the University of Saskatchewan. In 2016 he received the **International Hydrology Prize** (Dooge Medal) from the International Association of Hydrological, UNESCO and the World Meteorological Organization (2016). His work includes two studies highlighted on the cover of *Nature Geoscience* (2010; 2017) and further international recognition including the election as **Fellow of the Royal Society of Canada** (Canada's National Academy of Science), **Fellow of the American Geophysical Union** (2009), **Fellow of the Geological Society of America** (2014)**, Fellow and Life Member, International Water Academy** (2005) and **Fellow of the European Union Academy of Sciences** (2019). He has received the **Dalton Medal** (2009) from the European Geophysical Union and the **Birdsall-Dreiss Distinguished Lecturer Award** (2011) from the Geological Society of America and the **Gordon Warwick Medal** (1998) from the British Society for Geomorphology. He has delivered the **Penman Lecture** to the British Hydrology Society, the **Woo Lecture** to the Canadian Geophysical Union and the **Boussinesq Award Lecture** to the Royal Netherlands Academy of Arts and Sciences. Most recently, he was awarded the University of Saskatchewan's **Distinguished Researcher Award** and the **J.W. George Ivany Internationalization Award** where he is now Professor of Hydrology and Associate Director of the Global Institute for Water Security.

Over the past thirty years, McDonnell and colleagues' work has expanded the fundamental understanding of hillslope hydrology with important implications for our understanding of catchment hydrology and models of rainfall-runoff:

- Pioneering approaches in stable isotope tracing of water infiltrating into and transiting catchments—from the first field deployment of laser spectrometer for rainfall-runoff analysis to the first lab intercomparison of soil water extraction techniques.
- Discovery of common runoff behavior across diverse hillslope systems, leading to the first recognition that all runoff is the same and leading the development of new theory of "fill-and-spill" for runoff generation across scale.
- Discovery of ecohydrological separation—that different pools of water supply plant transpiration vs groundwater recharge and streamflow generation, with related publications in Nature-Geoscience and Nature.
- Discovery of new ways to bring field-based process understanding into models through new concepts of soft data and virtual experiments, innovations in perceptual model development and hillslope and watershed classification.

Beyond his science, McDonnell has served as **President of the AGU Hydrology Section** and served as **President of the IAHS International Commission on Tracers**. He has also been an ardent early career supporter with seven early mentoring articles that have appeared in Science and Nature with a combined Altmetric score of over 3000. All this has culminated in his 2020 book *Navigating an Academic Career: A Brief Guide for PhD Students, Postdocs and Early Career Faculty*, published by John Wiley and Sons and AGU.

HONORS and AWARDS

2020	First Prize, Outstanding Scientific Publication Award, Luxembourg National Research Foundation (FNR)
2019	Elected Fellow, EU Academy of Sciences

2018	Distinguished Researcher Award, University of Saskatchewan
2017	Leonardo Lecture, European Geophysical Union, EGU Leonardo Conference, Saig, Germany
2016	Gallagher Lecturer, Department of Geoscience, University of Calgary, Alberta
2016	International Hydrology Prize (Dooge Medal), International Association of Hydrological Sciences/UNESCO/World Meteorological Organization.
2015	J.W. George Ivany Internationalization Award, University of Saskatchewan
2015	Elected to the Royal Society of Canada (Canada's National Academy of Science)
2015	Boussinesq Award Lecture, Royal Netherlands Academy of Arts and Sciences, Amsterdam, Netherlands
2015	EGU Dooge Award for best paper in *Hydrology and Earth System Science* "Hydrological connectivity inferred from diatom transport through the riparian system".
2015	Nature, 'Multimedia Editor's top picks of 2015' for "Global separation of plant transpiration from groundwater and streamflow"
2014	Elected Fellow, Geological Society of America
2014	Fellow, Royal Geographical Society (UK)
2014	NSERC Accelerator Award ($120,000)
2013	Nannerl Keohane Distinguished Lecture and Award, UNC Chapel Hill and Duke University
2012	Borland Lecture Award, Hydrology Days, Colorado State University, Fort Collins CO
2011	Birdsall-Dreiss Distinguished Lecturer, Geological Society of America (50 university lecture tour)
2011	EPA Scientific and Technological Achievement Award (for 2010 Nature-Geoscience paper)
2009	University Distinguished Professor, Oregon State University
2009	Doctor of Science (DSc), University of Canterbury
2009	John Dalton Medal, European Geosciences Union
2009	Woo Lecturer, Canadian Geophysical Union
2009	Elected Fellow, American Geophysical Union
2008	Teaching and Mentoring Award, College of Forestry, Oregon State University
2006	Frontier Lecturer, American Geophysical Union
2006	Penman Lecturer, British Hydrological Society, Durham, UK
2005	Elected Fellow and Life Member, International Water Academy, Oslo Norway
1998	Gordon Warwick Medal, British Society for Geomorphology
1995	Scientific Literacy and Information Scholar Award, State University of New York
1990	Warren Nystrom Award, Association of American Geographers
1987	Canterbury Earth Science Prize, Geological Society of New Zealand
1987	Horton Research Grant Award, American Geophysical Union
1986	Commonwealth Scholarship and Research Fellowship, New Zealand/Canada
1985	John B. Webb Memorial Trophy, Canadian Society of Petroleum Geologists

OTHER PROFESSIONAL DISTINCTIONS

Visiting Professorship:

2020	Foreign Affairs Canada, Visiting Professor, Universidad Nacional de San Luis, Argentina (3 months)
2019-	Visiting Professor, Beijing Normal University
2019	Visiting Professor, Luxembourg Institute for Science and Technology (9 months)
2018-20	Distinguished Visiting Professor, Tsinghua University, Beijing, China
2018-	Adjunct Professor, University of the Sunshine Coast, Tropical Forests and People Research Centre (3 months)
2018-2023	Distinguished Visiting Professor, Beijing Forestry University, Beijing, China
2018-2023	Distinguished Visiting Professor, Ludong University, Yantai, China
2017-	Honorary Professor, University of Aberdeen UK
2017	Visiting Professor, Luxembourg Institute for Science and Technology (3 months)
2016	Visiting Professor, Institute for Geological and Nuclear Science (IGNS) and University of Victoria, Wellington NZ (3 months)
2015	CONICYT Visiting Professor, Universidad Austral de Chile (3 months)
2014	Visiting Professor, University of Arizona and Biosphere-2 (3 months)
2013	Nannerl Keohane Distinguished Visiting Professor, University of North Carolina at Chapel Hill and Duke University (3 months)
2009-2017	6th Century Chair of Hydrology, University of Aberdeen, Scotland
2009-2014	Visiting Professor, Hohai University, Nanjing China
2008-2013	Honorary Professor, Nanjing Hydraulic Research Institute, China
2009	Visiting Project Scientist, Isotope Hydrology Division, International Atomic Energy Agency, Vienna, Austria (1 month)
2006-07	Fellow and Visiting Professor, Dept. Civil Engineering, Delft, The Netherlands (3 months)
2006	DIG Scholar, Dept. of Geography, University of Durham.
2005	STINT Fellow, Swedish National Science Foundation, University of Stockholm.
2004	Institute for the Study of Planet Earth Speaker, University of Arizona.
2003	Gledden Fellow, Center for Environmental Fluid Dynamics, University of Western Australia (3 months)
2000	Visiting Professor, Institute of Hydrology, Freiburg University (1 month)
1999-2012	Named Chair, Richardson Chair in Watershed Science, Oregon State University
1999	Bristol Benjamin Meaker Distinguished Visiting Professor, Institute for Advanced Studies, Bristol University (7 months)
1998	Hayward Fellow, LandCare New Zealand Ltd. (2 months)
1997	Invited Visiting Hydrologist, LandCare New Zealand.
1997	STA Fellow, Japan Science and Technology Agency, Japan Forestry and Forest Products Research Institute (3 months)
1989	Invited Fellow, Universities Space Research Association (USRA), NASA Marshall Space Flight Center (12 months)

Journal Editorships:

2017-	Editorial Board, *MASKANA* (the multidisciplinary journal of the University of Cuenca).

2015- Editorial Board, Rhyzosphere, Elsevier.
2015- Editorial Board, Sustainable Water Developments (Book Series), CRC Press.
2014-16 Editorial Board, *Forest Research—Open Access*, OMICS Publishing Group
2014- Editorial Board, *Wires Water*, John Wiley and Sons
2014- Editorial Board, *Hydro-Science and Engineering*, Nanjing Hydraulic Res. Institute, China
2014-18 Associate Editor, *Journal of Hydrology and Hydromechanics*, Open access journal.
2014- Editorial Board, *Asian Journal of Geosciences*, Hindawi Publishers
2012- Editorial Board, *Journal of Hydrogeology and Hydrologic Engineering*, Sci-Technol.
2012- Editorial Board, *Water*, MDPI Publishers, Switzerland
2011- Editorial Board, *Advances in Water Science* (China), UNESCO
2011- Editorial Board, *International Journal of Hydrology Science and Technology* Inderscience Enterprises Ltd (UK).
2007- Editorial Board, *Ecohydrology*, John Wiley and Sons.
2006-11 Editorial Board, *Geography Compass*, Blackwell Publishers
2005-10 Associate Editor, *Hydrology and Earth System Science (HESS)*, European Geophysical Union
2004- Editorial Advisory Board, Forest Science and Technology, Taylor and Francis Ltd
2003-05 Associate Editor, *Journal of Hydrologic Engineering*, ASCE
2004-2014 Editor-in-Chief, *Benchmark Papers in Hydrological Sciences*, Book Series, IAHS Press
2004- Senior Advisory Editor, *Encyclopedia of Hydrology*, John Wiley and Sons.
2005 Associate Editor (Rainfall-Runoff Processes), *Encyclopedia of Hydrology*, John Wiley and Sons.
1999-05 Founding Editor, *Hydrological Processes* HP*Today,* John Wiley and Sons.
1999-2006 Associate Editor, *Hydrological Sciences Journal*, IAHS Press*.*
1998-01 Editorial Advisory Board, *Progress in Environmental Science*, Edward Arnold.
1997-2007 Associate Editor, *Journal of Hydrology*, Elsevier Science Publishers.
1995-98 Associate Editor, *Water Resources Research*, American Geophysical Union
1994- Associate Editor, *Hydrological Processes*, John Wiley and Sons.

Guest Editorships:

2016 *Hydrological Processes*, Special Issue on Tribute to Keith Beven, (co-edited with Jake Peters, George Hornberger, Andrew Binley and Mike Kirkby).
2015 *Hydrological Processes*, Special Issue on Isotope Tracers in Hydrology (co-edited with Kevin McGuire).
2015 *Hydrological Processes*, Special Issue on Hydropedology (co-edited with Henry Lin, John Nimmo and Yakov Pachepsky)
2012 Content Consultant, *Hydrology Careers*, Scholastic Books Inc,
2011 Content Consultant, *Hydrology*, Scholastic Books Inc,
2002 *Hydrological Processes*, Special Issue on Runoff Generation Modeling (co-edited with Stefan Uhlenbrook and Chris Leibundgut).
2001 *Hydrological Processes*, Special Issue on Forest Hydrology and Biogeochemistry (co-edited with Tadashi Tanaka).

Invited/Elected International Boards, Committees and Commissions:

2020-	CIFAR Azrieli Global Scholar Selection Committee Member
2019-	CIFAR Advisory Board Member, Earth 4D - Subsurface Science and Exploration
2019-	International Advisory Board, The “Lancang-Mekong Watershed Project”, Climate and Water Resources Change in Mainland Southeast Asia
2019-2020	Past President, AGU Hydrology Section
2019-2020	Chair, AGU Hydrology Section Nominations Committee
2017-18	Elected Member, AGU Council
2017-18	President, AGU Hydrology Section
2016	Chair, Editor-in-Chief Search Committee, Water Resources Research (AGU)
2015-16	Chair, AGU Fellows Selection Committee, Hydrology Section
2015-16	President-Elect, AGU Hydrology Section
2014	NSERC Joint Prizes Selection Committee (for the John C. Polanyi Award, the Brockhouse Canada Prize, and the Gerhard Herzberg Canada Gold Medal).
2014	Scientific Advisory Board, Plant-water interlinkages in northern uplands – mediation of climate change”. Leverhulme Trust UK
2013-17	Scientific Advisory Board, Water Institute, University of Waterloo
2014	Invited Delegate, Commonwealth Science Conference, Bangalore India
2012-	Scientific Advisory Board, TERENO (Terrestrial Environmental Observatories), Helmholtz UFZ, Germany.
2011-14	AGU Fellows Selection Committee, Hydrology Section
2011	Member, Search Committee for EPA Director of the Environmental Sciences Division, National Exposure Lab, Las Vegas
2010-12	Scientific Advisory Committee, German Water Science Alliance, Helmholtz UFZ, Germany.
2010-	Science Advisory Group, International Association of Hydrological Sciences, Prediction in Ungauged Basin (PUB) Initiative.
2009-12	Member, Dalton Medal Selection Committee
2009-11	Member, EGU Nominations Committee
2007-10	Member, AGU Nominations Committee
2006-09	Member, UNESCO PUB-HELP-FRIEND Technical Working Group
2005-07	Chair, Science Steering Group, International Association of Hydrological Sciences, Prediction in Ungauged Basin (PUB) Initiative.
2004-12	Chair, PUB Working Group on Slope Intercomparison Experiment (SLICE)
2004-12	Member, PUB Working Group on Hydrological Theory
2004-07	Member, UN Committee on IDP-PUB relations
2004-07	USA Representative, UNESCO HELP Program and network of hydrological observatories
2003-05	Member, Science Steering Group, International Association of Hydrological Sciences, Prediction in Ungauged Basin (PUB) Initiative.
2003-06	Member, IAPSO-IAHS Joint Commission on Groundwater-Seawater Interactions
2002-05	Member, Science Steering Group SSG, International Association of Hydrological Sciences (IAHS) Prediction in Ungauged Basin (PUB) Initiative.
2001-03	Member, CUASHI Instruments Committee, AGU/NSF
2001-05	President, IAHS International Commission on Tracers (ICT),
2000-04	Member, AGU Horton Research Grant Committee.

1999	Member, Experts Group for IAEA-UNESCO-WMO Joint International Isotope Hydrology Program (JIIHP).
1999-01	President-Elect, IAHS International Commission on Tracers (ICT)
1999-02	Member, Science Steering Committee SSC, IGBP Biospheric Aspects of the Hydrological Cycle (BAHC).
1998-00	Chair, Surface Water Committee, American Geophysical Union (AGU).
1996-00	Member, UNESCO International Hydrological Program, Working Group 6 - Hydrological Processes in the Humid Tropics.
1995-98	Deputy Chair, Surface Water Committee, American Geophysical Union (AGU).
1993-94	Member, New York City, Scientific Working Group on Hydrologically Sensitive Areas, New York City Water Supply, New York City, NY.
1991-	Member, Surface Water Committee, American Geophysical Union (AGU).
1991-94	Wildland Erosion Committee, American Water Resources Association (AWRA)
1991-94	NASA Earth System Science Education Steering Committee, NASA.
1991-93	Chair, USU Global Change Fellowship Committee for U.S. Department of Energy (DOE) and Oak Ridge National Lab Associated Universities.

Review Panels:

2018	External Reviewer, Helmholtz Association of German Research Centers (Environmental Program), Leipzig
2018	External Reviewer, IUFRO "Forests and Water " by the Global Forest Expert Panel.
2017	NSERC Site Review Team Member, Network Program Evaluation, Calgary.
2016	Rountable Panel Member, Advisory Panel and Secretariat for Canada's Science Review, Department of Innovation, Science and Economic Development, Calgary.
2014	External Reviewer, State Water Resources Control Board, Cal/EPA Division of Water Rights Volume Depletion Approach Study, Sacramento CA.
2012-	UN International Atomic Energy Agency (IAEA) Expert for *BRA7010 Sustainable Water Resources Management in a Uranium Production Site*, Instituto de Radioproteção e Dosimetria, Rio de Janeiro, Brazil
2011	Member, Review Team, Tsinghua University, Dept. Civil and Hydraulic Engineering
2008	NSF Committee of Visitors (COV), for the overall review of the NSF Geobiology and Low Temperature Geochemistry, Geomorphology and Land-Use Dynamics, Hydrological Sciences and Sedimentary Geology and Paleobiology programs, Washington DC
2005	Korean Sustainability of Water Resources Research Program, Seoul South Korea
2005	US Forest Service, Air and Water Research Logic Model review, Riverside CA.
1998	National Science Foundation Annual Review Panel Member, Civil Infrastructure
1994-98	Research Center, Puerto Rico EPSCoR Program (annual review in Mayaguez)
1998-00	Advisory Board and Peer Review Panel, Adirondack Park Agency.
1996	Environmental Protection Agency Review Panel Member, Ecological Assessment and Restoration Program, Washington, DC.
1995	McIntire-Stennis Review Panel, State of New York.

Keynote Addresses and Invited Talks at International Conferences:

2019 UC Berkeley, Catchment Sciences Symposium, Berkeley, CA
2019 IUGG-IAHS, Session on *How to write and publish a paper in hydrology*, Montreal
2019 International Symposium on Water Security and Climate Change, SUSTech, Shenzhen, China
2017 EcoHydro2017: International Multidisciplinary Conference on: Hydrology and Ecology, Birmingham UK [Conference Keynote]
2017 AWRA Spring Specialty Conference on Aquatic System Connectivity, Alta Utah [Conference Keynote]
2017 European Geophysical Union, *Meet the Expert* Session, Vienna
2016 American Geophysical Union, Session on *Preferential flow and transport across scales in the Critical Zone*, San Francisco
2016 Joint European Stable Isotopes User Group (JESIUM) Meeting, Ghent Belgium.
2016 3rd International Conference on Hydropedology, Beijing, China.
2016 AGU Chapman Conference on Tropical Ecohydrology, Cuenca Ecuador
2015 American Geophysical Union, Session on *DEMs in watershed modeling*, San Francisco
2015 American Geophysical Union, Session on *Critical zone at large watershed scales*, San Francisco
2015 International Conference on Forests and Water, Kelowna, BC Canada
2014 American Geophysical Union, Session on Ecohydrological Change, San Francisco CA
2014 Soil Science Society of America, Session on Hydropedology, Long Beach CA
2014 Geological Society of America, Session on Critical Zone Hydrology, Vancouver BC
2014 Japan Geophysical Union, Session on Insight into Change and Evolution in Hydrology, Yokohama, Japan
2013 AGU Chapman Conference on Soil Mediated Drivers of Coupled Hydrological and Biogeochemical Processes, Tucson, AZ
2013 Hydropedology and Sustainable Natural Resource Mgmt, Beijing Normal Univ.
2013 Gordon Research Conference on Catchment Science, Holderness, NH
2013 Washington Hydrogeology Symposium, Tacoma WA
2012 American Geophysical Union, Session on *Hydrogeophysics*, San Francisco
2012 American Geophysical Union, Session on *Scaling in hydrology*, San Francisco
2012 IAHS Prediction in Ungauged Basins Decadal Celebration, Delft, NL
2012 50 Years of Watershed Modeling: Past, Present and Future. Boulder CO
2012 2nd International Conference on Hydropedology, Leipzig, Germany
2012 Joint Canadian Geophysical Union / Canadian Water Resources Association meeting, Banff AB
2011 50th Anniversary Meeting, New Zealand Hydrological Society, Wellington NZ
2011 Geological Society of America, Birdsall-Dreiss Lecture, Minneapolis, MN
2011 Modflow and More 2011, International Groundwater Modeling Center, Golden, CO
2011 Canadian GEOHAZARDS 5 Conference, Kelowna, BC
2011 IAHS PUB Meeting: Putting PUB into Practice, Canmore, AB
2011 National Groundwater Association Annual Meeting, Baltimore, MD
2011 BASIN: Role of Stable Isotopes in Water Cycle Research, Keystone CO

2010 First Annual Water Research Horizon Conference, Berlin Germany.
2010 CUAHSI Biennial Conference, Lunchtime Keynote on “How to Publish a Paper”, Boulder CO
2010 International Conference on Triggering of Mass Movements in Steep Terrain, Monte Verita, Switzerland.
2009 American Geophysical Union, Session on *The Fellows Speak*, Toronto Canada
2009 Canadian Geophysical Union, Woo Lecture, Toronto Canada
2009 European Geosciences Union, Vienna, Keynote lectures in five different sessions, including the Dalton Lecture, Vienna.
2008 2nd China PUB Conference on Integrated Water Management in Mountainous Areas, Chengdu China.
2008 Geological Society of American and Soil Science Society of America, Session on *Variably Saturated Flow in Soil and Rock*, Houston TX
2008 1st International Hydropedology Conference, Penn State University, College Park PA
2008 CUAHSI Biennial Conference, Session on New Hydrological Theory, Boulder CO
2007 University of California at Berkeley, Catchment Sciences Symposium, Berkeley, CA
2007 American Geophysical Union Fall Meeting, Session on *Contributions by the US to International Hydrology,* San Francisco.
2007 American Geophysical Union Fall Meeting, Session on *Advances in Water Quality Modeling,* San Francisco. **
2007 IUGG/IAHS General Assembly, Session on *Patterns, Thresholds and Non-linearities: Towards a new Theory of Catchment Hydrology*, Perugia, Italy.
2007 European Geophysical Union, Session on *Gauging the Ungauged Basin*, Vienna, Austria.**
2007 IAEA International Conference on *Advances in Isotope Hydrology and its Role in Sustainable Water Resource Management*, Vienna, Austria.
2006 American Geophysical Union Fall Meeting, Session on *From Karst to Catchment—Preferential Flow Processes Within Surface and Subsurface Hydrologic Systems*, San Francisco.
2006 American Geophysical Union Fall Meeting, Session on *Bridging Hydrology, Soil Science, and Ecology: Hydropedology and Ecohydrology*, San Francisco (given by co-author)
2006 British Hydrological Society, 9th National Symposium, Durham, UK
2006 China PUB Conference on Flood Forecasting and Water Resources Assessment. Beijing China.
2006 IAHS 2020 1-Day Conference, IHE Delft, *The Future of Hydrology*, Delft NL
2005 American Geophysical Union Fall Meeting, Frontier Lecture on *The Future of Runoff Generation in Gauged and Ungauged Basins*, San Francisco
2005 American Geophysical Union Fall Meeting, Session on *Hydropedology,* San Francisco
2005 American Geophysical Union Fall Meeting, Session on *Watershed Characterization,* San Francisco
2005 Stockholm Water Conference, Session on *Policy Implications of PUB*, Stockholm, Sweden
2005 Sir Mark Oliphant Conference on *Thresholds and Pattern Dynamics*, Perth

Australia

2005 IAHS Symposium on *Model Improvements Through Detailed Process Studies*, Foz Iguacu, Brazil

2004 American Geophysical Union Fall Meeting, Session on *Process Heterogeneity and Model Predictability,* San Francisco

2004 American Geophysical Union Fall Meeting, Session on *Experimental Catchments and Observatories for Cold Season Hydrologic Analysis,* San Francisco

2004 Geological Society of America, Session on *Upcoming Revolutions in Observing Systems: Implications for Hydrogeology*, Denver CO

2004 International Instrumented Watershed Symposium, Edmonton, Canada.

2004 American Geophysical Union Spring Meeting, Session on *Runoff Processes Identification,* Montreal**

2004 American Geophysical Union Spring Meeting, Session on *Scale in Catchment Hydrobiogeochemistry,* Montreal**

2004 European Geophysical Union, Session on *Links Between Vadose Zone and Catchment Hydrology,* Nice, France**

2003 Water and Environment 2003: Indian Water Resources Engineering Society, Bhopal India

2003 American Geophysical Union Fall Meeting, Session on *Prediction in Ungauged Basins,* San Francisco

2003 American Geophysical Union Fall Meeting, Session on *Linkages Between Hydrology and Geomorphology,* San Francisco

2003 American Geophysical Union Fall Meeting, Session on *Hillslope Hydrology*

2003 International Association of Hydrological Sciences, Session on *Parameter Estimation Techniques*, Sapporo Japan

2003 IAEA 40th Anniversary Conference on Isotopes in Hydrology, Vienna Austria

2003 European Geophysical Society, Session on *Tracers and Biogeochemistry*, Nice France

2003 European Geophysical Society, Session on *Prediction in Ungauged Basins*, Nice

2001 American Geophysical Union Fall Meeting, Session on *Watershed Intercomparison*, San Francisco**

2001 American Geophysical Union Fall Meeting, Session on *Non-Linear Geophysics,* San Francisco

2001 IGBP Global Change Forum, Session on *Mountains and Global Change*, Amsterdam

2000 European Geophysical Union, Session on *Mountain Hydrology*, Nice France.

2000 IUFRO and UNESCO Symposium *Forests-Water-People in the humid tropics Past, Present and Future Hydrological Research for Integrated Land and Water Management,* Kuala Lumpur, Malaysia.

1999 IAHS/IUGG, Session on *Integrated Methods in Catchment Hydrology—Tracer, Remote Sensing and New Hydrometric Techniques*, Birmingham, UK

1998 IUFRO Conference on Environmental Forest Science*,* Session on *Progress of Field Studies on the Water Cycle in Forests,* Kyoto Japan.

1998 American Geophysical Union Fall Meeting, Session on *The Links Between Soil Properties, Terrain Features, and Runoff Processes in Catchments.* San

Francisco.

1996 American Geophysical Union Fall Meeting, Session on *Spatial Processes and Scaling: Merging Field Data Collect and Distributed Modeling*, San Francisco.

1995 International Association of Hydrological Sciences, Session on *Biospheric and Hydrological Aspects of Land-Surface Process Studies, Experiments and Modeling in Mountain Areas*, Boulder.

1994 American Geophysical Union Gordon Research Conference on *Hydrological-Biologic-Geochemical Interactions in Forest Watersheds*, New Hampshire.

1995 American Geophysical Union Spring Meeting, Session on *Innovative Techniques in Groundwater Hydrology*, Baltimore.

1993 European Geophysical Meeting, Session on *Spatially-Distributed Hydrological Modeling*, Wiesbaden, Germany.

1992 Association of American Geographers Annual Meeting, Session on *Dilettantism in Hydrology*, San Diego.

Keynote Addresses and Invited Talks at International Workshops:

2020 Regional Workshop on "Forest Hydrology: A National Strategy", Concepcion Chile

2020 Regional Workshop on Isotope Ecohydrology, Universidad Nacional de San Luis, Argentina, San Luis, Argentina

2019 Toward an International Critical Zone Network-of-Networks for the Next Generation through Shared Science, Tools, Data and Philosophy, San Francisco, CA

2018 US DOE Watershed Collaboration Workshop, Crested Butte, CO (via Skype)

2017 Workshop on 'Water Ages', Freiburg, Germany

2017 Workshop on 'Isotope-based studies of water partitioning and plant-soil interactions in forested and agricultural environments', Tuscany, Italy (via Skype)

2016 TERENO Workshop on Ecology and Water Quality, Leipzig, Germany

2015 Workshop on Forest Hydrology: Future research questions and challenges, OSU Foundation, Portland OR

2015 Workshop on Critical Puzzles about Trees, Water, and Soil, Penn State University, University Park, PA

2015 PEDOFRACT Workshop, A Coruña, Spain

2014 Third International Tropical Hydrology Workshop, Malaysian Borneo.

2013 Ecohydrology of Semi-Arid Environments. Ben-Gurion University of the Negev, Israel

2013 US-Japan Hydrology and Biogeochemistry workshop, East-West Center, Hawaii

2011 Tropical Hydrology Workshop, U.S. Army Research Office, Maui, Hawaii

2009 Tropical Hydrology Workshop, U.S. Army Research Office, Republic of Panama

2009 Workshop on State-of-the-art of Residence Time Modeling, IAEA Vienna

2008 Invited Panelist, The California Flood Management Association, Panel on Climate Change Impacts on Flood Management, San Diego, CA

2008 Invited Panelist, The Nature Conservancy-USGS workshop on Regional Scale Streamflow-Ecological Relationships, Seattle.

2008 Biosphere 2 Hillslope Planning Workshop, National Center for Hydrological Synthesis and Biosphere 2, Oracle AZ **

2008 Northwest Forest Soils Council, Workshop on Soil-Plant-Water Relations,

Bellingham WA

2007 PUB Workshop on Conceptualizing Process Heterogeneity, Aberdeen, Scotland

2007 Multiscale Nonlinear Systems Workshop, Dept. of Mathematics, Oregon State University, Corvallis OR

2006 USA PUB Workshop, Oregon State University, Corvallis OR

2005 All-Sweden Hydrology Workshop on *State of the Art of Catchment Hydrology*, Stockholm

2005 Slope Intercomparison Experiment (SLICE) Workshop, HJ Andrews, Oregon

2004 UNESCO Workshop on *Pesticide Fate and Transport at the Hillslope and Watershed Scale*, GSF Munich, Germany.**

2004 NATO Workshop on *State of the Art of Physically Based Modeling*, Moscow, Russia

2004 CUASHI Vision Workshop on *New Theory in Hydrology*, Corvallis OR

2004 Australia-Japan Workshop on *Prediction in Ungauged Basins*, Perth, Australia.

2002 Peter Wall Institute Workshop on *Scaling and Non-linearity*, UBC, Canada

2002 IAHS Inaugural Workshop on *Prediction in Ungauged Basins (PUB)*, Kofu Japan

2002 BC Workshop on *Small Stream Channels and Their Riparian Zones: Their Form, Function and Ecological Importance in a Watershed Context*, University of British Columbia, Canada

2001 IAEA Workshop on *Isotopes in Water Cycle Models*, Vienna, Austria

2001 CSIR Workshop on *Isotope Tracers in Catchment Hydrology,* Stellenbosch, South Africa,

2001 IGBP Joint BAHC and GEWEX Workshop, Amsterdam, The Netherlands.

2000 IGBP Joint IGBP BAHC & WCRP/GEWEX-ISLSCP Workshop, Caracas, Venezuela.

1999 NSF Joint Seminar on *Hydrology and Biogeochemistry of Forested Catchments*, East-West Center, Hawaii.

1999 IGBP BAHC Workshop on *Global Change and Mountain Regions*, Shonan Village, Japan.

1998 IGBP BAHC Workshop on *Mountain Headwater Hydrology and Ecology*, Pontresena, Switzerland.

1998 UNESCO Hydrology of the Humid Tropics Workshop on *Hydrological Processes and Modeling in the Humid Tropics*, Umea, Sweden.

1996 New Zealand Forest Research Institute (LandCare NZ) Workshop on *Future of Forest Catchment Research in New Zealand - planning through the year 2000*, Christchurch, NZ

1996 IGBP BAHC Workshop on *Predicting Global Change Impacts on Mountain Hydrology and Ecology*, Katmandu, Nepal.

1994 NATO Advanced Science Workshop on *Global Change Research and Education*, London, Ontario.

1994 IBGP BAHC Workshop on *Continental-Scale Transport of Nutrients and Sediments to Oceans*, Durham, New Hampshire.

***given on my behalf by one of my Post Docs or PhD students*

Invited Talks at Universities:

2020 Nanshan Distinguished Lecture on the Environment, Southern University of Science and Technology (SUSTech), Shenzhen China (via Zoom)

2020 Ludong University, Yantai China (via Zoom)
2020 Beijing Forestry University, Beijing China (via Zoom)
2020 Tsinghua University, Beijing China (via Zoom)
2020 77th Master Forum Talk, Westlake University, China (via Zoom)
2020 Beijing Normal University, Beijing, China (via Zoom)
2020 Universidad Nacional de San Luis, Argentina
2019 Ryerson University, Department of Geography & Environmental Studies, Toronto
2019 University of Padua, Dept. of Land, Environment, Agriculture and Forestry, Padua, Italy
2019 University of Florence, Dept. of Agriculture, Food, Environment and Forestry, Florence, Italy
2019 Beijing Forestry University, Beijing China
2019 Beijing Normal University, College of Water Science, Beijing China
2019 Tsinghua University, Dept of Hydraulic and Civil Engineering, Beijing China
2019 Glasgow University, Dept of Geography, Glasgow, Scotland
2019 Strasbourg University, Dept of Geology, Strasbourg France
2019 Ludong University, Dept of Natural Resources, Yantai China
2019 Bristol University Dept of Civil Engineering, Bristol UK
2019 University of Virginia, Water Resilience Program, Dept. Environmental Science
2018 University of Nevada, Reno, Graduate Program of Hydrologic Sciences, Reno
2018 University of Alabama, Dept of Geography, Tuscaloosa
2018 McMaster University, Global Water Futures, Early Career Mentoring, Hamilton.
2018 Ludong University, Yantai, China
2018 Tsinghua University, Dept of Civil and Hydraulic Engineering, Beijing China
2018 McMaster University, GWF Early Career Mentoring Event, Hamilton
2018 Northwest Agriculture and Forestry University, Yangling China
2018 Beijing Normal University, Beijing China
2018 Faculty of Soil and Water Conservation, Beijing Forestry University
2018 Distinguished Lecture, SUSTech, Shenzhen China
2018 Birmingham University, Campus World Water Day celebration, Birmingham UK
2018 Melbourne University, School of Engineering, Melbourne, Australia
2018 Monash University, Dept. of Civil Engineering, Melbourne, Australia
2018 University of the Sunshine Coast, Sustainability Institute, Sippy Downs, Australia
2017 Concordia University, Faculty of Engineering and Computer Sciences Distinguished Speaker Series, Montreal
2017 McGill University, Dept. of Earth and Planetary Sciences, Montreal
2017 Durham University, Dept. of Geography, Durham UK
2017 Kyoto University, Dept. of Civil Engineering, Kyoto, Japan.
2017 Giessen University, Institute for Landscape Ecology and Resources Management, Giessen, Germany
2017 Freiburg University, Faculty of Environment and Natural Resources, Freiburg, Germany
2017 University of Lausanne, Institute of Earth Surface Dynamics, Lausanne, Switzerland
2017 University of Luxembourg, Doctoral Training Program, Luxembourg
2016 Saskatchewan Polytechnic, Simulcast across 4 campus in Saskatchewan, Canada

2016 Oregon State University, Post Doc Association, Corvallis Oregon
2016 National Autonomous University of Mexico (UNAM), Mexico City, Mexico
2016 University of Victoria, Dept. of Earth and Environmental Science, Wellington NZ
2016 University of the Sunshine Coast, Sustainability Research Centre, Queensland, Australia
2015 Institute for Atmospheric and Climate Science, ETH Zurich, Switzerland
2015 Faculty of Geo-information Science and Earth Observation, Twente University, The Netherlands
2015 Dept. Civil Engineering, TU Delft, The Netherlands
2015 State Key Laboratory for Soil Erosion, NW Agriculture and Forestry University, China
2015 Dept. of Geology, University of Manitoba, Winnipeg MB
2015 Campus-Wide Lecture, Universidad San Francisco de Quito, Ecuador
2015 Dept. of Civil Engineering, Universidad Cuenca, Cuenca Ecuador
2015 Universidad Catolica de Chile, Santiago Chile
2015 Dept. of Resources, Water and Environmental Sciences, University of Cuenca, Ecuador
2014 Dept. Civil Engineering, Indian Institute of Science, Bangalore
2014 University of Southern California, Dept. of Earth Science, Los Angeles
2014 NW Agriculture and Forestry University, Yangling China
2014 Kyoto University, Dept. of Civil Engineering, Kyoto Japan
2014 Tohoku University, Dept. of Civil Engineering, Sendai Japan
2014 UC Irvine, Dept. of Civil and Environmental Engineering, Irvine CA
2013 Tsinghua University, Dept. of Hydraulics and Civil Engineering, Beijing.
2013 Virginia Tech, College of Natural Resources, Blacksburg, VA
2013 NC State University, Dept. Marine, Earth, & Atmospheric Sciences, Raleigh NC
2013 University of North Carolina, Ecology Program, Chapel Hill, NC
2012 University of South Carolina, Dept. of Earth and Ocean Science, Columbia SC
2012 CUASHI Cyber Seminar, 50 member universities. Broadcast from Savannah River Site
2012 University of Waterloo, The Water Institute, Waterloo ONT
2011 University of Victoria, Dept. of Geography, Wellington NZ
2011 Tsinghua University, Dept. of Civil and Hydraulic Engineering, Beijing China.
2011 University of Oregon, Dept. of Geography, Eugene OR
2011 University of Oregon, Dept. of Geology, Eugene OR
2011 University of Western Oregon, Dept. of Earth Sciences, Monmouth OR
2011 University of British Columbia, Kelowna Campus, Kelowna BC
2011 University of Calgary, Dept of Geosciences, Calgary AB
2011 University of Delaware, Delaware Environmental Institute, Newark, DE
2011 Syracuse University, Dept of Geology, Syracuse NY
2011 SUNY Oswego, Dept of Geology, Oswego NY
2011 SUNY Oneonta, Dept of Geology, Oneonta NY
2011 University of Massachusetts, Amherst MA
2011 Portland State University, Dept of Geology, Portland OR
2011 University of Arizona, Dept of Geology, Tucson, TX
2011 Florida International University, Dept of Earth System Science, Miami FLA
2011 University of Memphis, Dept of Geology, Memphis TN

2011 Baylor University, Dept of Earth Sciences, Waco TX
2011 University of Texas-Austin, Dept of Geology, Austin TX
2011 University of Texas-Arlington, Dept of Geology, Arlington TX
2011 Utah State University, Dept of Geology, Logan UT
2011 University of Alberta, Dept of Natural Resources, Edmonton, Canada
2010 Yale University, School of Forestry and Environmental Studies, New Haven, CT
2009 UC Santa Barbara, Bren School of the Environment, Santa Barbara CA
2009 University of Aberdeen, Dept. of Geography, Aberdeen, Scotland
2008 University of Connecticut, Dept of Civil and Env. Engineering, Storrs, CT
2008 Washington State University, Dept of Civil and Environmental Engineering, Pullman, WA
2007 Texas A & M University, Distinguished Lecture in Multi-Scale Nonlinear, College Station, TX
2007 University of Colorado, Hydrological Sciences Program, Boulder, CO
2006 National Center for Earth-Surface Dynamics, St. Anthony Falls Laboratory, University of Minnesota, Minneapolis
2006 Durham University, Dept. of Geography, Durham, UK
2005 CUAHSI Cyber Seminar, 50 member US universities, Broadcast from Corvallis
2005 University of Stuttgart, Dept. of Civil and Environmental Engineering, Stuttgart, Germany
2005 University of Uppsala, Dept of Physical Geography, Uppsala, Sweden
2005 University of Stockholm, Dept. of Geography and Quaternary Geology, Stockholm Sweden
2005 Swedish Agricultural University, Dept. of Environmental Science, Uppsala, Sweden
2005 University of Oregon, Dept of Geography, Eugene, OR
2005 University of Nevada Reno, Desert Research Institute, Reno NV
2004 University of Arizona, Dept. of Hydrology, Tucson AZ
2004 ETH Zurich, Dept. of Civil, Environmental and Geomechanics Engineering, Switzerland
2004 EAWAG Dubendorf, Dept. of Environmental Chemistry, Zurich Switzerland
2004 University of Bern, Dept. of Geographical Sciences, Bern Switzerland.
2004 University of Illinois, Center for Water as a Complex System, Urbana-Champaign IL
2004 CUAHSI Cyber Seminar, 50 member US universities, Broadcast from Corvallis OR
2004 Boise State University, Dept. of Geology, Boise ID
2004 UC Berkeley, CUAHSI Hydrological Synthesis Center Review, Berkeley CA
2003 University of Western Australia, College of Geosciences, Perth, Australia
2003 University of Melbourne, Dept. of Civil Engineering, Melbourne, Australia
2003 Newcastle University, Dept. of Civil and Environmental Engineering, Newcastle, Australia
2003 University of New South Wales, Dept. of Civil and Environmental Engineering, Sydney, Australia
2003 Australia National University, iCAM Center, Canberra Australia
2003 Technical University of Vienna, Dept. of Civil Engineering, Vienna Austria
2003 University of Western Australia, Center for Water Research, Perth, Australia

2003 University of Oregon, Dept. of Geosciences, Eugene, OR
2003 Utah State University, Dept. of Civil and Environmental Engineering, Logan UT
2003 Stanford University, Dept. of Earth Science, Palo Alto, CA
2003 UC Davis, Dept. of Land Atmosphere and Water Science, Davis CA
2002 Uppsala University, Dept. of Earth Sciences, Uppsala, Sweden
2001 Colorado State University, Dept. of Earth Science, Fort Collins, CO
2000 Swiss Federal Institute (ETH) Zurich, Institute of Hydrology, Zurich Switzerland
2000 Freiburg University, Institute of Hydrology, Freiburg Germany (a 4-lecture series)
2000 Dartmouth University, Dept. of Earth Sciences, Hanover NH
1999 Imperial College London, Dept. of Civil Engineering, London UK
1999 Exeter University, Dept. of Geography, Exeter UK
1998 Princeton University, Distinguished Lecturer Series, Dept. of Civil and Environmental Engineering, Princeton, NJ.
1998 University of Waterloo, Groundwater Center, Waterloo, Canada.
1998 Uppsala University, Dept. of Hydrology, Uppsala Sweden.
1998 Trent University, Watershed Ecosystems Program, Peterborough, Canada.
1997 University of Toronto, Dept. of Geography, Toronto, Canada.
1997 University of Tsukuba, Dept. of Earth Sciences, Tsukuba, Japan.
1997 University of North Carolina, Dept. of Earth Sciences, Charlotte, NC.
1996 Harvard University, Dept. of Earth and Planetary Sciences, Cambridge, Mass.
1996 Carnegie Mellon University, Dept. of Civil and Env. Engineering, Pittsburgh, Penn.
1996 University of Puerto Rico, Dept. of Civil Engineering, Mayaguez, Puerto Rico.
1996 Free University, Department of Hydrology, Amsterdam, The Netherlands.
1996 Freiburg University, Institute of Hydrology, Freiburg, Germany.
1994 Cornell University, Center for the Environment, Ithaca, New York.
1994 University of Puerto Rico, Dept. of Civil Engineering, Mayaguez, Puerto Rico.
1993 University of Florida, Department of Geology, Gainsville, Florida.
1993 University of Puerto Rico, Dept. of Civil Engineering, Mayaguez, Puerto Rico.
1992 University of Southern California, Department of Geography, Catalina Island Field Station, Catalina Island, California
1991 University College, Galway, Department of Civil Engineering, Galway, Ireland
1991 University of British Columbia, Department of Geography, Vancouver, Canada
1991 Simon Fraser University, Department of Geography, Vancouver, Canada
1990 University of Iowa, Department of Geography, Iowa City, Iowa
1989 Pennsylvania State University, Environmental Resources Research Institute, College Park, Pennsylvania

Invited Talks at Research Institutes:

2019 Grand Ducal Institute, Academy of Sciences of Luxembourg, Luxembourg
2018 Lawrence Berkeley Lab, UC Berkeley, Berkeley CA
2017 Luxembourg Institute for Science and Technology (LIST), Luxembourg
2017 Helmholz Agrosphere Institute, Forschungszentrum, Juelich, Germany
2017 Federal Institute for Geosciences and Natural Resources, Geozentrum, Hanover, Germany
2016 Institute for Geological and Nuclear Sciences, Lower Hutt, New Zealand
2013 National Hydrology Research Center, Environment Canada, Saskatoon SK
2011 National Institute for Water and Atmospheric Research (NIWA), Christchurch, NZ

2011 USGS Cascades Volcano Observatory, Vancouver WA
2008 Nanjing Hydraulic Research Institute, Nanjing China.
2008 Oak Ridge National Lab, Oak Ridge, TN
2008 Environmental Protection Agency, Ecological Services Group, Corvallis OR
2007 National Science Foundation, Hydrological Sciences Division and Earth Sciences Directorate, Washington DC
2007 NOAA National Weather Service, Washington DC
2006 Los Alamos National Lab, Los Alamos NM
2006 Savannah River Ecology Lab, Savannah River SC
2005 Korean Forest Research Institute, Seoul, Korea
2005 Environmental Protection Agency (EPA), Corvallis OR
2004 USGS Northwest Regional Science Meeting, HJ Andrews Conference Center
2004 USGS, Portland District Office, Water Resources Division, Portland OR
2004 Environmental Protection Agency (EPA), Corvallis OR
2003 US Forest Service, Savannah River Site, Aiken, SC
2003 US Forest Service, Watershed Research Group, Juneau, AL
2002 Environmental Protection Agency (EPA), Corvallis OR
2001 International Atomic Energy Agency (IAEA), Vienna, Austria
2001 CSIR, Ministry of Forests, Pretoria, South Africa
2001 CSIR, Ministry of Forests, Stellenbosch, South Africa
2000 Forschungszentrum fur Umwelt und Gesundheit (GSF), Institute of Hydrology, Munich
2000 USRA/ARS Northwest Watershed Research Center, Boise ID
1999 Potsdam Institute for Climate Change (PIK), Berlin Germany
1998 Chinese Water Resources Agency, Nanjing, China
1998 Forest Research Institute, Seoul, South Korea
1998 Institute for Geological and Nuclear Sciences, Wellington, New Zealand
1997 Japan Forestry and Forest Products Research Institute, Tsukuba, Japan
1997 LandCare New Zealand, Christchurch, New Zealand
1997 U.S. Forest Service, Cooperative Research Unit, Syracuse, NY
1996 Nepal Institute of Forestry, Pokhara, Nepal
1995 LandCare New Zealand, Christchurch, New Zealand
1989 Environmental Sciences Division, Oak Ridge National Laboratory, Oak Ridge, Tenn.
1989 NASA, Earth Science and Applications Division, Marshall Space Flight Center, Huntsville, Alabama

Invited Shortcourses:

2020 11th Annual *Catchment Science Summer School (5-days),* University of Birmingham, UK
2020 *Launching an Academic Career: A 4-Day Shortcourse for PhD students and Post Docs*, Ludong University China (via Zoom)
2019 Invited Panelist, *Beyond Grad School: A guide to landing your dream job.* CUAHSI Cyber-Seminar, two sessions, ~120 attendees for each
2019 10th Annual *Catchment Science Summer School (5-days),* University of Birmingham, UK
2018 9th Annual *Catchment Science Summer School (5-days),* University of

Birmingham, UK

2018 Introduction to Stable Isotopes in Aquatic Systems, Universidad de Las Américas, Ecuador

2018 1st Annual National Shortcourse *Isotope Tracers in Catchment Hydrology*, National Hydrology Research Centre, Saskatoon (with 9 co-instructors)

2018 *Launching an Academic Career: A 1-Day Shortcourse for PhD students and Post Docs*, University of Saskatchewan (with Maureen Reed)

2017 8th Annual *Catchment Science Summer School (5-days),* University of Aberdeen, Scotland

2017 *Launching an Academic Career: A 1-Day Shortcourse for PhD students and Post Docs*, University of Saskatchewan (with Maureen Reed)

2016 Isotope Tracers in Catchment Hydrology, (4-days), Global Institute for Water Security, via WebEx to 55 USGS employees (with 4 co-instructors)

2016 7th Annual *Catchment Science Summer School (5-days),* University of Aberdeen, Scotland

2016 Advanced Ecohydrology: A 1-Day Shortcourse for Graduate Students, University of Cuenca, Ecuador.

2016 *Launching an Academic Career: A 1-Day Shortcourse for PhD students and Post Docs*, University of Saskatchewan (with Maureen Reed).

2015 *Isotope Hydrology Shortcourse (2 Days),* St Petersburg University, St. Petersburg, Russia

2015 6th Annual *Catchment Science Summer School (5-days),* University of Aberdeen, Scotland

2015 How to Write a Scientific Paper: A ½ Day Shortcouse for PhD students. Northwest Agriculture and Forestry University, Yangling China

2015 *Launching an Academic Career: A 1-Day Shortcourse for PhD students and Post Docs*, University of Saskatchewan (with Maureen Reed)

2015 Forest Hydrology Shortcourse (4 days), Universidad Austral de Chile, Valdivia Chile

2014 5th Annual *Catchment Science Summer School (5-days),* University of Aberdeen, Scotland

2014 IAEA *Isotope Hydrology Shortcourse* (3-days), Manila, Philippines

2014 CUASHI *Watershed Hydrology Masterclass* (5-days), University of Arizona and Biosphere 2, Oracle AZ

2014 *Launching an Academic Career: A 1-Day Shortcourse for PhD students and Post Docs*, University of Saskatchewan (with Maureen Reed)

2013 4th Annual *Catchment Science Summer School (5-days),* University of Aberdeen, Scotland

2013 *Advanced Isotope Hydrology for Uranium Mining Applications (3-days)*, Federal University of Rio de Janeiro and Instituto de Radioproteção e Dosimetria, Rio de Janeiro, Brazil

2013 *Launching an Academic Career: A 1-Day Shortcourse for PhD students and Post Docs*, University of Saskatchewan (with Maureen Reed)

2012 *Launching an Academic Career: A 1-Day Shortcourse for PhD students and Post Docs*, San Francisco, CA (with Brian McGlynn, Thorsten Wagener and Kamini Singha)

2012 3rd Annual *Catchment Science Summer School (5-days) I,* University of

Aberdeen, Scotland

2012 *Isotope Hydrology Shortcourse (1-day)*, Federal University of Rio de Janeiro and Instituto de Radioproteção e Dosimetria, Rio de Janeiro, Brazil

2012 *Forest Hydrology Masterclass (2-days)*, Arauco Ltd, Conception, Chile.

2011 2nd Annual *Catchment Science Summer School (5-days),* University of Aberdeen, Scotland

2011 *Launching an Academic Career* (1-day), University of Aberdeen, Scotland.

2010 IAEA *Isotope Hydrology Shortcourse for Nile Basin Water Managers* (3-days), Cairo, Egypt

2010 *How to Succeed in an Academic Career* (1-day), San Francisco, CA

2010 1st Annual *Catchment Science Summer School (5-days),* University of Aberdeen, Scotland

2010 *Catchment Hydrology Monitoring (2-days)*, Federal University of Rio de Janeiro and Instituto de Radioproteção e Dosimetria, Rio de Janeiro, Brazil

2010 *Ethics in Peer Review*, Dept. of Fisheries and Wildlife Annual Graduate student conference, Corvallis OR

2010 *How to Write and Publish a Paper*, CUAHSI Science Conference, Boulder CO

2009 *How to Write and Publish a Paper*, Taught at the European Geosciences Union, Vienna.

2007 *Advanced Techniques in Experimental Hydrology, Winter School*, Delft University of Technology, UNESCO-IHE, Gabrielle Lippmann Institute.

2006 *Runoff Generation Processes and Modeling*, Taught at TU Delft, 1-Day

2005 *Runoff Generation in Forested Watersheds*, Taught at Stockholm University, 1-Day

2005 *Isotope Tracers in Catchment Hydrology*, Taught at Stockholm University, 1-Day

2004 *Runoff Generation in Forested Watersheds*, Taught at the USFS National Science Conference, San Diego, CA, 1-Day

2004 *Isotope Tracers in Catchment Hydrology*, Taught at Australia CSIRO Catchment Modeling School, Melbourne Australia, 1-Day

2003 *Isotope Hydrology in Environmental Engineering: A Primer*, Taught at the Center for Environmental Fluid Dynamics, University of Western Australia, 2 Days

2002 *Isotope Hydrology*, A shortcourse taught on behalf of the UN and the International Atomic Energy Agency IAEA, Nanjing China, 4 days.

2001 *Quantifying groundwater-surface water interactions using isotope tracers*, A shortcourse taught on behalf of the UN and the International Atomic Energy Agency IAEA at the CSIR Stellenbosch, South Africa, 2 days.

2001 *Tracers in Catchment Hydrology and Biogeochemistry* Taught with Rick Hooper and Carol Kendall at Oregon State University, 2 Days

PUBLICATIONS

A. BOOKS, EDITED BOOKS AND BOOK SERIES

McDonnell, J.J., 2020. Navigating an Academic Career: A Brief Guide for PhD Students, Postdocs and New Faculty. AGU/Wiley, 96p, ISBN: 1119642108

McDonnell, J.J., Editor-in-Chief. 2006-2012. Benchmark Papers in Hydrology Book Series, IAHS Press, 9 volumes 2006-2012.

Anderson, M.G., Editor; J.J. McDonnell, Senior Advisory Editor. 2005. Encyclopedia of Hydrological Sciences, John Wiley and Sons, 5 volume set, 3,456 pages.

Kendall, C. and J.J. McDonnell, Editors, 1998. Isotope Tracers in Catchment Hydrology, Elsevier Science Publishers, 816p.

Uhlenbrook, S., J.J. McDonnell and C. Leibundgut, Editors. 2003. Runoff Generation Modeling. Hydrological Processes. Special Issue, Volume 17 (10), 377 pages.

McDonnell, J.J. and T. Tanaka, Editors. 2001. Hydrology and Biogeochemistry of Forested Catchments. John Wiley and Sons, 435p.

Leibundgut, C., J.J. McDonnell and G. Schultz, Editors. 1999. Integrated Methods of Catchment Hydrology: Tracer, Remote Sensing and New Hydrometric Techniques. IAHS Publication 258, Wallingford UK, 284pp.

McDonnell, J.J., S. Stribling, B. Neville, D. Leopold, Editors. 1996. Watershed Restoration Management: Physical, Chemical and Biological Considerations. American Water Resources Association, 514p.

McDonnell, J.J., D. Leopold, B. Neville, S. Stribling, Editors. 1996. New York City Water Supply Studies. American Water Resources Association, 174p.

B. PEER-REVIEWED PAPERS

2020

Amin, A., G. Zuecco, J. Geris, L. Schwendenmann, J.J. McDonnell, M. Borga, D. Penna, 2020. Depth distribution of soil water sourced by plants at the global scale: a new direct inference approach. Ecohydrology, in press.

Amin, A., G. Zuecco, J. C. Marchina, M. Engel, D. Penna, J.J. McDonnell and M. Borga, 2020. No evidence of isotopic fractionation during transpiration in olive trees (*Olea europaea*): a simple greenhouse experiment. Ecohydrology, in review.

Camporese, M., C. Paniconi, M. Putti and J.J. McDonnell, 2020. Fill and spill hillslope runoff representation with a Richards equation-based model. Water Resources Research, DOI: 10.1029/2019WR025726.

Condon, L., K. Markovich, C. Kelleher, J.J. McDonnell, G. Ferguson and J. McIntosh, 2020. Where is the bottom of a watershed? Water Resources Research, 56(3), DOI: 10.1029/2019WR026010

Gabrielli, C.P. and J.J. McDonnell, 2020. Modifying the Jackson index to quantify the relationship between geology, landscape structure and water transit time in steep wet headwaters. Hydrological Processes, DOI:10.1002/hyp.13700.

McDonnell, J.J., 2020. The Maimai catchment, New Zealand. In Burt, T., D. Thompson and A. Serocka (eds). Curious About Nature: A Passion for Field Work. Cambridge University Press, DOI:10.1017/9781108552172

McDonnell, J.J., C Spence, D. Karran and C. Harman, 2020. Fill and spill: A framework for runoff generation at the scale of the beholder. Water Resources Research [Invited AGU 100 Centennial Paper], in review.

Millar, C., D. Pratt, D. Schneider, G. Koehler and J.J. McDonnell, 2020. Further experiments comparing direct vapor equilibration and cryogenic vacuum distillation for plant water stable isotope analysis. Rapid Communications in Mass Spectrometry, DOI: 10.1002/rcm.8530.

Peskett, L., A. MacDonald, K. Heal, J.J. McDonnell, J. Chambers, S. Uhlemann, K. Upton and A. Black, 2020. The impact of across-slope forest strips on hillslope subsurface hydrological dynamics. Journal of Hydrology, 581: DOI:10.1016/j.jhydrol.2019.124427

Pfister, L., S. Schymanski, R. Nijzink, E. Zehe and J.J. McDonnell, 2020. On the importance of subsurface storage for departures from the Budyko curve. Hydrological Processes, in review.

Schöne, B. R., Meret, A. E., Baier, S. M., Fiebig, J., Esper, J.J., McDonnell and L. Pfister, 2020. Freshwater pearl mussels from northern Sweden serve as long-term, high-resolution stream water isotope recorders, Hydrology and Earth System Science, DOI:10.5194/hess-24-673-2020.

Stamenković, V., K. Lynch, P. Boston, J. Tarnas (plus J.J. McDonnell and 98 others). Deep Trek: Science of Subsurface Habitability & Life on Mars: A Window into Subsurface Life in the Solar System, White Paper for the US National Academy of Science (NAS), 7-pages.

2019

Benettin, P., P. Queloz, M. Bensimon, J.J. McDonnell and A. Rinaldo, 2019. Velocities, residence times, tracer breakthroughs in a vegetated lysimeter: a multitracer experiment. Water Resources Research, DOI:10.1029/2018WR023894

Blöschl, G., M. Bierkens, A. Chambel, C. Cudennec, G. Destouni, A. Fiori, J. Kirchner, J.J. McDonnell, H. Savenije, M. Sivapalan, C. Stumpp, E. Toth, E. Volpi, G. Carr, J. Salinas, B. Széles, A. Viglione and 200 others, 2019. 23 unsolved problems in hydrology – a community perspective. Hydrological Sciences Journal, 64:10, 1141-1158, DOI:10.1080/02626667.2019.1620507

Coles, A.E., B. McConkey and J.J. McDonnell, 2019. Fifty years of recorded hillslope runoff on seasonally-frozen ground: The Swift Current, Saskatchewan, Canada dataset. Earth System Science Data, in press.

Evaristo, J., M. Kim, J. van Haren, L. Pangle, C. Harman, P. Troch and J.J. McDonnell, 2019. Characterizing the fluxes and age distribution of soil water, plant water, and deep percolation in a model tropical ecosystem. Water Resources Research, DOI:10.1029/2018WR023265.

Evaristo, J. and J.J. McDonnell, 2019. Global analysis of streamflow response to forest management. Nature, DOI:10.1038/s41586-091-1306-0 (retracted Feb 2020 in issue 578:326, DOI: 10.1038/s41586-020-1945-1)

Fan, Y, M. Clark, D. Lawrence, S. Swenson, L. Band, S. Brantley, P. Brooks, W.E. Dietrich, A. Flores, G. Grant, J. Kirchner, D. Mackay, J.J. McDonnell, P. Milly, P. Sullivan, C. Tague, H. Ajami, N. Chaney, A. Hartmann, P. Hazenberg, J. McNamara, J. Pelletier, J Perket, E. Rouholahnejad-Freund, T. Wagener, X. Zeng, E. Beighley, J. Buzan, M Huang, B. Livneh, B. Mohanty, B. Nijssen, M. Safeeq, C. Shen, W. van Verseveld, J. Volk and D Yamazaki, 2019. Structures and functions of hillslope hydrology with relevance to Earth System Modeling: Syntheses and testable hypotheses. Water Resources Research, DOI:10.1029/2018WR023903.

Gaj, M. and J.J. McDonnell, 2019. Soil tension controls the isotopic fractionation factor for evaporation from soil. Hydrological Processes, DOI:10.1002/hyp.13418.

Gaj, M., A. Lamparter, S. Woche, J. Bachmann, J.J. McDonnell and F. Stange, 2018. The role of matric potential, solid interfacial chemistry and wettability on isotopic equilibrium fractionation. Vadose Zone Journal, DOI:10.2136/vzj2018.04.0083.

Lazo, P., G. Mosquera, J.J. McDonnell and P. Crespo, 2019. The role of vegetation, soils, and precipitation on water storage and hydrological services in Andean Páramo catchments. Journal of Hydrology, DOI:10.1016/j.jhydrol.2019.03.050.

Li, H., B. Si, P. Wu and J.J. McDonnell, 2019. Water mining from deep critical zone by apple trees growing on loess in monsoonal climate. Hydrological Processes, DOI:10.1002/hyp.13346.

López-Días, V., N. Martínez-Carreras, F. Barnich, T.Wirtz, J.J. McDonnell and L. Pfister, 2019. Fractionation of 2H/H and 18O/16O isotopic ratios in water through nafion membranes. Journal of Membrane Science, 752:128-139, DOI:10.1016/j.memsci.2018.11.003.

McDonnell, J.J., 2019. Step up to leadership for mid-career growth. Nature, DOI:10.1038/d41586-019-01936-7.

Nehemy, M., C. Millar, K. Janzen, M. Gaj, D. Pratt, C. Laroque and J.J. McDonnell, 2019. ^{17}O-excess as a detector for co-extracted organics in vapor analyses of plant isotope signatures. Rapid Communications in Mass Spectrometry, 33(16): 1301-1310.

Pfister, L., C. Grave, J. Beisel and J.J. McDonnell, 2019. A global assessment of freshwater mollusk shell oxygen isotope signatures and their relation to precipitation and stream water. Scientific Reports, DOI:10.1038/s41598-019-40369-0.

Sprenger, M., C. Stumpp, S. Allen, P. Benettin, M. Dubbert, A. Hartmann, M. Hrachowitz, J. Kirchner, J.J. McDonnell, N. Orlowski, D. Penna, S. Pfahl, M. Rinderer, N. Rodriguez, C. Werner and M Weiler, 2019. The demographics of water: A review of water ages in the critical zone. Reviews of Geophysics, DOI:10.1029/2018RG000633

2018

Ameli, A.A., C. Gabrielli, U. Mortgenstern and J.J. McDonnell, 2018. Groundwater subsidy from headwaters to their parent water watershed: A combined field-modeling approach. Water Resources Research, 54, DOI:10.1029/2017WR022356.

Caldwell, P., R. Jackson, C. Miniat, S. Younger, J. Vining, J.J. McDonnell, and D. Aubrey, 2018. Woody bioenergy crop selection can have large effects on water yield: A southeastern United States case study. Global Change Biology and Bioenergy, 117: 180-189, DOI:10.1016/j.biombioe.2018.07.021.

Coles, A.E. and J.J. McDonnell, 2018. Fill and spill drives runoff connectivity over frozen ground. Journal of Hydrology, 558:115-128, DOI:10.1016/j.jhydrol.2018.01.016.

Gabrielli, C.P. and J.J. McDonnell, 2018. No linkage between event based runoff and groundwater recharge on the Maimai hillslope. Water Resources Research, DOI:10.1029/2017WR021831.

Gabrielli C.P, Morgenstern U, Stewart M. and J.J. McDonnell, 2018. Contrasting groundwater and streamflow ages at the Maimai watershed. Water Resources Research, 54(6): 3937-3957, DOI:10:1029/2017WR021825.

Hu, H., F. Dominguez, P. Kumar, J.J. McDonnell and D. Gochis, 2018. Numerical water tracer model for understanding event-scale hydrometeorological phenomena. Journal of Hydrometeorology, 19(6):378-389, DOI:10.1175/JHM-D-17-0202.1.

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Buttle, J.M. and J.J. McDonnell, 1987. Modeling the areal depletion of snowcover in a forested catchment. Journal of Hydrology, 90(1-2):43-60, DOI:10.1016/0022-1694(87)90172-7.

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Papers in preparation, conference papers, abstracts and reports are omitted

PROFESSIONAL SERVICE

Academic Courses Taught

2019-	Fundamentals of Hydrology, Geog 427, taught at Beijing Normal University as part of the joint BNU-UofS Masters of Water Security degree)
2016-	Isotope Tracers in Catchment Hydrology, (graduate course, SENS), Univ. of Saskatchewan.
2015	Isotopes in the Biosphere (graduate course, SENS), Univ. of Saskatchewan.
2013-	Breakthroughs in Water Security Research (graduate course, SENS), Univ. of Saskatchewan.
2012	The Hydrology of Canada (2nd year Undergraduate Course), Univ. of Saskatchewan.
2008-2012	*The Future Professoriate* (a course for PhD students, Post Docs and Assistant Professors interested in pursuing an academic career), Oregon State University
1989-2012	*Hillslope and Watershed Hydrology* (senior undergraduate/graduate course), USU, ESF, OSU and University of Saskatchewan (now in shortcourse format)
1990-2012	*Field Hydrology* (senior undergraduate/graduate course), ESF, OSU.

Proposal Reviewer for: National Science Foundation (Programs: Hydrological Sciences, Geosciences, Geographical and Regional Science, Ecology, EPSCoR), Environmental Protection Agency, Canadian GEWEX Program, National Science and Engineering Research Council (Canada), Utah State University, University of Puerto Rico, State University of New York, New York McIntire-Stennis Program, Longman Group Publishing Ltd. (UK), John Wiley and Sons (UK), U.S. Geological Survey (Water Resources Centers in Pennsylvania and New York), University of North Carolina, Canada Center for Innovation, ETH Zurich, Illinois Water Survey, Oregon State University; Swiss National Science Foundation; Australia National Science Foundation; The Nuffield Foundation (UK); The Leverhulme Trust (UK), NERC Program, LOCAR Instrumented Catchment Network, Government of Western Australia, Utah State University.

Journal Reviewer for: Nature, Nature-Geoscience, PNAS, Wires Water, Water Resources Research, Hydrological Processes, Journal of Hydrology, Water Resources Bulletin, Advances in Water Resources, ASCE Journal of Irrigation and Drainage ASCE Journal of Hydrologic Engineering, Atmospheric Research, Water Air and Soil Pollution, Geofísca Internacional, Boreal Environment Research, Soil Science Society of America Journal, Hydrological Sciences

Journal, Hydrology and Earth Systems Science, Review of Environmental Science, Water SA, Ecohydrology.

External International Examiner (PhD Theses, Faculty Review): UC Santa Barbara, Duke University, The University of Western Australia, University of Waterloo, University of Toronto, ETH Zurich, University of British Columbia, University of Adelaide; University of Edinburgh; SUNY-ESF; UC Berkeley; Australia National University; University of Maryland; University of Western Ontario; University of South Carolina; Portland State University; University of San Diego; Louisiana State University; University of Canterbury; University of Melbourne; University of Newcastle; UBC Kelowna; University of Mass.; Freiberg University; Utah State University; Colorado State University, Delft University of Technology, The Royal Society (UK), The Royal Society (New Zealand), University of North Carolina, CSIRO (Australia), Canada Research Chair Program..

Conference and Workshop Organization:

2020	Experimental Research Watersheds: Past, Present and Future. Beijing Normal University, Beijing China (Co-organized Fuqiang Tian and Chengzhong Pan)
2019	Hillslope Hydrology: Past, Present and Future, University of Luxembourg, Belval
2015	Forest Hydrology: Vision and outlook, Portland Oregon.
2014	Chapman Conference on Spatial organization and complex behavior of intermediate scale catchments (Co-convener with 5 others), Luxembourg
2013	Subsurface Networks in Ecohydrology (with Larry Band), Chapel Hill, NC.
2009	Chapman Conference on Examining Ecohydrological Feedbacks of landscape change along elevation gradients in semi-arid regions, (with Brad Wilcox, David Breshears, Mark Seyfried), Sun Valley Idaho.
2009	State of the Art of Residence Time Computation, Analysis and Modeling, IAEA Vienna Austria
2007	IAHS-IUGG General Assembly, IAHS Main Program, Perugia, Italy
2006	NSF-sponsored USA PUB Workshop, October 2006 Corvallis OR
2005	UNESCO-sponsored PUB-HELP-FRIEND Workshop, Corvallis OR
2005	*Slope Intercomparison Experiment (SLICE)* International Workshop, HJ Andrews Experimental Forest, September 2005
2004	CUAHSI Vision Workshop on *Confronting the Theory Vacuum in Catchment Hydrology*, Corvallis OR (with Kellie Vache)
2003	Workshop Organizer; IAHS/IUGG *Isotopes in Water Cycle Models,* Sapporo Japan (with John Gibson and Pradeep Aggarwal), Sapporo Japan.
2003	Symposium Organizer, IAHS/IUGG, Prediction in Ungauged Basins, (with Enda O'Connell and M. Sivapalan), Sapporo Japan.
2001	Conference Co-organizer, Chapman Conference on *Catchment Runoff Processes and Modeling* (with Larry Band), American Geophysical Union, Sunriver OR
2000	Conference Co-Convener, International Workshop on Runoff Generation and Implications for River Basin Modeling, Freiburg, Germany (with Stefan Uhlenbrook and Chris Leibundgut).
2000	Conference Organizing Committee member, IUFRO and UNESCO Symposium *Forests-Water-People in the humid tropics Past, Present and Future Hydrological Research for Integrated Land and Water Management,* Kuala Lumpur, Malaysia

2000 Conference Organizer, USA-Japan Workshop on Forest Catchment Hydrology and Biogeochemistry, National Science Foundation, Japan JSPS and IGBP BAHC.

2000 Symposium Co-convener, Symposium 4: Integrated Methods of Catchment Hydrology - Tracer, Remote Sensing and New Hydrometric Techniques (with Chris Leibundgut, G. Schultz and D. Collins), IUGG/IAHS International Union of Geodesy and Geophysics and International Association of Hydrological Sciences, Birmingham, UK,

1997 Conference Organizer, *Syracuse Catchment Hydrology Meeting*, Syracuse New York

1996 Symposium Technical Chair, AWRA Summer Symposium *Watershed Restoration: Physical, Chemical and Biological Controls*, AWRA (American Water Resources Association) Symposium, Syracuse, NY.

1995 Symposium Co-convener, *Tracer Technologies in Hydrology* (with Chris Leibundgut), IUGG/IAHS International Union of Geodesy and Geophysics and International Association of Hydrological Sciences, Boulder, Colorado.

1993 Conference Organizer, *Syracuse Catchment Hydrology Meeting*, Syracuse New York

Conference Session Organization:

2014 American Geophysical Union Fall Meeting, Session on *Ecohydrology.* (with Brad Wilcox and others), San Francisco CA

2014 1st International TERENO Conference, Session on *Modelling the Hydrosystem – Balancing of complexity and uncertainty* (with Sabine Attinger), Bonn, Germany

2013 American Geophysical Union Fall Meeting, Session on *Hydropedology* (with Henry Lin and others), San Francisco CA

2013 Canadian Geophysical Union Meeting, Isotope Hydrology and Climatology (with Julian Klaus and others), Saskatoon SK.

2012 American Geophysical Union Fall Meeting, Session on The value of long term streamflow records.(with Tim Burt and others), San Francisco CA

2008 European Geophysical Union, Session on *Benchmarking the prediction in ungauged basin (PUB) initiative*, (with Guenter Bloeschl), Vienna Austria.

2006 American Geophysical Union Fall Meeting, Session on *DOC fate and transport: from molecular to catchment scales* (with Tim Burt and others), San Francisco CA

2006 American Geophysical Union Fall Meeting, Session on *Watershed Characterization.* (with Andrew Binley and others), San Francisco CA

2005 American Geophysical Union Fall Meeting, Session on *The life and contributions of John Hewlett,* (with Doug Burns), San Francisco CA

2005 American Geophysical Union Fall Meeting, Session on Hydropedology (with Henry Lin)

2005 American Geophysical Union Fall Meeting, Session on Prediction in Ungauged Basins (with Thorsten Wagener, Brian McGlynn)

2005 International Association of Hydrological Sciences, Session on *Tracers and Remote Sensing*, (with John Gibson and Al Pietroniro), Foz Iguacu, Brazil

2004 American Geophysical Union / Canadian Geophysical Union Meeting, Session on *Isotope Tracing of Water and Carbon Cycling in Large River Basins,* (with P. Agarwal and J. Gibson), Montreal Canada

2004 Geological Society of America, Session on *Future of Applied Tracers in Hydrogeology*, (with Craig Devine), Denver CO

2004 American Geophysical Union / Canadian Geophysical Union Meeting, Session on *Catchment Classification* (with Kellie Vache), Montreal Canada

2003 American Geophysical Union Fall Meeting, Session on *Hillslope Hydrology* (with Larry Band and Markus Weiler), San Francisco CA

2003 MODSIM 2003, Session on *Measurements and Modeling in Catchment Hydrology*, (with Markus Weiler) Townsville, Australia

2002 American Geophysical Union Fall Meeting, Session on *Watershed Hydrology and Biogeochemistry* (with Mike Goeseff and Dave DeWalle), San Francisco CA

American Geophysical Union Fall Meeting, Session on *Hydroecology of Mountain Catchments* (with Mark Williams), San Francisco CA

1999 American Geophysical Union Spring Meeting, Session on *Watershed Hydrology: Physical, Chemical and Policy Issues,* Boston Mass.

1997 American Geophysical Union Fall Meeting, Session on *Use of Tracers for Understanding Hydrological Processes*, (with Chris Leibundgut), San Francisco CA.

1997 Gordon Research Conference on Hydrobiogeochemistry of Forested Watersheds, Workshop Leader *Innovations in Field Monitoring Techniques* (with Frank Bowles and Greg Lawrence), Plymouth, New Hampshire.

1997 American Geophysical Union Spring Meeting, Session on *Hydrograph Separation Techniques in Catchment Hydrology*, (with Jamie Shanley), Baltimore MD.

1995 American Geophysical Union Spring Meeting, Session on *Interactions Between Water and Solutes in Small Catchments*, (with Carol Kendall), Baltimore MD.

1994 Western Pacific Geophysical Meeting, Session on *Headwater Hydrology and Slope Stability*, (with Roy Sidle), Hong Kong.

1993 American Geophysical Union Fall Meeting, Session on *Runoff Pathways in Small Catchments*, San Francisco, CA.

1992 Western Pacific Geophysical Meeting, Session on *Hillslope Hydrology*, Hong Kong.

1991 American Geophysical Union Fall Meeting, Session on *Isotope Tracing in Small Catchments*, (with Carol Kendall), San Francisco, CA.

International Conference Steering Committees:

2008 Member, Science Steering Committee, 2nd China-PUB Conference, Sichuan University, Chengdu, China.

2006 Member, Science Steering Committee, 1st China-PUB Conference, Tsinghua University, Beijing China.

2004- Member, International Technical Committee, *International Conference on Reservoir Operation & River Management (ICROM)*, Sun Yat-sen University, China

2003 Member, Science Steering Committee, *British Hydrological Society 2nd International Hydrology Conference*, Imperial College London, London UK

2000 Member, Scientific Advisory Committee, *Workshop on Runoff Generation Modeling*, Freiburg University, Freiburg Germany.

1998 Member, International Technical Committee, *Civil and Environmental Engineering -- Year 2000, New Frontiers and Challenges*, Asian Institute of Technology, Bangkok, Thailand.

RESEARCH GRANTS (APPLIED RESEARCH) FUNDED

Evaluation and testing of soil amendments for mine covers in cold regions (Principal Investigator):
Funded by NSERC Alliance Grant Program and Profile Products USA, ($126,176), 2020-2021

The GREEN Facility (Principal Investigator):
Funded by Western Economic Diversification (WED) ($643,701, with match to total $1.3M), 2017-2020

Quantifying the effect of freeze-thaw cycles on mine cover design and performance; NSERC Collaborative Research and Development Grant (Principal Investigator):
Funded by NSERC and O'kane Consultants ($200,000)

The Mine Overlay Soil Test (MOST) Facility (Principal Investigator):
Funded by Western Economic Diversification (WED) ($1,846,000, with match to total $5M), 2015-2018

Salt release from soil sands reclamation covers, Co-Principal Investigator
Funded by Syncrude ($85,000), 2014-2015.

Water use by Eucalyptus, Co-Principal Investigator
Funded by the US Dept of Energy ($1.2M USD; $208,512 to U of S), 2014-2019

Hydrological impacts of cellulosic-based biofuel production: Principal Investigator
Funded by the Dept. of Energy ($325,000), 2009-2010.

Combining field work and modeling to explore forest management effects on streamflow: Phase 1: Principal Investigator
Funded by the National Council for Air and Stream Improvement ($75,000), 2006-2007.

Hydrological performance of cover systems at the Green Creek Mine: A combined field-modeling analysis: Principal Investigator
Funded by Kennecott Greens Creek Mine ($420,000), 2006-2009.

Hillslope Hydrology of the Savannah River Site—Watershed Scale Analysis: Principal Investigator
Funded by the US Forest Service ($100,000), 2006-2007

Hillslope Hydrology of the Savannah River Site for Tritium Phytoremediation: Principal Investigator
Funded by the US Forest Service ($90,000), 2004-2005

A Combined Watershed-Reservoir Model for the Croton Watershed, New York; Co-Principal Investigator.
Funded by: New York City, Dept. of Environmental Protection, ($6,300,000), 1999-2002.

Preliminary evaluation of linked watershed reservoir models; Co-Principal Investigator
Funded by: New York City, Dept. of Environmental Protection, ($65,000), 1998-1999.

Contaminant Transport from Buried Galleys: A combined Physical, Chemical and Isotopic Study; Principal Investigator
Funded by: New York City, Dept. of Environmental Protection ($1,400,000), 1997-1998.

Subsurface Stormflow and Contaminant Transport; Principal Investigator
Funded by: New York City, Dept. of Environmental Protection ($600,000), 1997-1998

Evaluation of Non-Point Pollutant Removal by Best Management Practices; Principal Investigator
Funded by: New York City, Dept. of Environmental Protection ($275,000), 1994-1996.

RESEARCH GRANTS (BASIC RESEARCH) FUNDED
Storage, mixing and release of water at the catchment scale (Principal Investigator)
Funded by NSERC Discovery Grant Research Accelerator ($570,000), 2019-2024

Global Water Futures, (Co-Principal Investigator)
Funded by NSERC ($77M), 2016-2023

Water storage and release (Principal Investigator)
Funded by NSERC Discovery Grant Program ($425,000), 2014-2019

Water storage and release (Principal Investigator)
Funded by NSERC Discovery Grant Research Accelerator ($120,000), 2014-2019

Isotope studies of watershed storage and release in the CCRN watersheds. (Principal Investigator)
Funded by NSERC Network Program, ($32,000), 2014-2015.

Vegetation effects on water flow in high-latitude ecosystems (Co-Investigator)
Funded by the European Research Council, (1.5M Euros, no direct $ to U of S; funds U of S Post Doc visits and travel), 2014-2019.

Water sustainability in the Willamette Basin, Oregon (Principal Investigator)
Funded by NSF Hydrological Science ($4.3 M), 2010-2015.

Development of a new field based water isotope analyse, Phase II: Principal Investigator

Funded by the Dept. of Energy, ($70,000), 2010-2011.

Development of a new field based water isotope analyse, Phase 1: Principal Investigator
Funded by the Dept. of Energy, ($35,000), 2009-2010.

An integrated investigation of nutrient generation and delivery processes and pathways from paddock to small catchment scales
Co-Principal Investigator
Funded by the Australian Research Council, ($440,000 AUS) 2009-2012.

Ecohydrological controls on watershed response to land use change in the montane cloud forest zone in Central Veracruz, Mexico
Co-Principal Investigator
Funded by NSF Hydrological Sciences and NSF Ecology Programs ($1,500,000) 2007-2011

Headwater stream processes revealed by continuous ultra-high resolution thermal measurement
Co-Principal Investigator
Funded by NSF Hydrological Sciences Program ($193,000), 2007-2009.

Understanding ecohydrological coupling in upland humid watersheds for soil and water management
Principal Investigator
Funded by International Atomic Energy Agency (IAEA) (8,000 Euros per year), 2008--

USA PUB Workshop for defining CUAHSI community science questions, Principal Investigator
Funded by NSF Hydrological Sciences Program ($80,000) 2005-2007

Processes of Water Cycling and Streamflow Generation in Semi-Arid Watersheds in Eastern Washington (3) – Isotope Tracing of Water Sources; Principal Investigator
Funded by the US Forest Service ($50,000), 2004-2005

Development of the Willamette Basin Watershed for UNESCO Hydrology, Environment, Life and Policy Program, Principal Investigator
"Funded" by UNESCO, 2004-

Towards a new theoretical framework for watershed hydrology, Principal Investigator
Funded by: Consortium of Universities for the Advancement of Hydrological Sciences, ($9,000) 2004

Use of isotope tracers to detect water source and water age at the HJ Andrews Experimental Forest; Principal Investigator
Funded by NSF HJ Andrews LTER Program ($20,000) 2004-2005

The Institute for Water and Watersheds Initiative; Co-Principal Investigator
Funded by the OSU Provost's Office, ($1,500,000), 2005-2009

Catchment water residence time: understanding the relation between landscape organization and runoff characteristics, Co-Principal Investigator
Funded by Dutch Science Foundation ($250,000 EU), 2005-2007

A Physically Based Method for Spatial Interpolation of Soil Measurements; Co-Principal Investigator
Funded by the Australia Research Council ($260,825 AU), 2005-2007

Processes of Water Cycling and Streamflow Generation in Semi-Arid Watersheds in Eastern Washington (2) – Snowmelt Hydrology: Principal Investigator
Funded by the US Forest Service ($50,000), 2004-2005

Modeling Mesoscale Flows in the Maybeso Catchment; (2) – Documenting Rainfall Spatial Patterns, Principal Investigator
Funded by the US Forest Service ($50,000), 2004-2005

Processes of Water Cycling and Streamflow Generation in Semi-Arid Watersheds in Eastern Washington (1) – Understanding Landuse Effects on Water quantity and Quality: Principal Investigator
Funded by the US Forest Service ($100,000), 2003-2004

Modeling Mesoscale flows in the Maybeso Catchment (1) - Principal Investigator
Funded by the US Forest Service ($86,000), 2003-2004

Hillslope Hydrology of the Oregon Coast Range: Principal Investigator
Funded by: BLM and US Forest Service ($218,000), 2002-2003

US-German Exchange Proposal for Hydrological Modeling; Principal Investigator
Funded by: National Science Foundation International Division ($8,000), 2001-2002.

Sources and Sinks of Nitrogen Within a Forested Watershed; Co-Principal Investigator
Funded by: NSF Environmental Biology and Ecosystem Studies ($659,000), 2000-2002.

Topographical Linkages Between Nitrogen and Organic Carbon Solutes Within a Forested Watershed; Co-Principal Investigator
Funded by: USDA Competitive Grants Program ($100,000), 1999-2002

Hillslope hydrology of the Maybeso Watershed, SE Alaska; Principal Investigator
Funded by the US Forest Service ($50,000), 2001-2002

Joint Seminar on Hydrology and Biogeochemistry of Forested Headwater Catchments; Principal Investigator.
Funded by: NSF International Programs, ($20,000), 1999-2000.

BAHC Workshop on Hydrology and Biogeochemistry of Forested Headwater Catchments; Principal Investigator.
Funded by: International Geosphere-Biosphere Program, ($5,000), 2000.

International Supplement: Hillslope-Riparian Zone Reservoir Mixing: A Multi-Catchment Test of a New Methodology for Predicting Stream Chemistry; Principal Investigator
Funded by: NSF International Programs, ($63,242).

Hillslope-Riparian Zone Reservoir Mixing: A Multi-Catchment Test of a New Methodology for Predicting Stream Chemistry; Principal Investigator
Funded by: NSF Hydrological Sciences Program ($330,000), 1999-2001

Effects of Forest Harvesting on Streamflow Generation and Water Quality in a Catskill Mountain Watershed; Co-Principal Investigator
Funded by: USDA McIntire Stennis Program ($75,630), 1997-1999.

Development of an Evolutionary Flow Path Model of Water and Solutes; Principal Investigator
Funded by: NSF Hydrological Sciences Program ($300,000), 1994-1997.

A Spatial/Temporal Investigation of the Hydrology and Biogeochemistry of N Transport within a Forested Hillslope/Wetland/Lake Ecotone; Principal Investigator
Funded by: USDA Competitive Grants Program ($120,000), 1994-1996.

Mapping Soil Macropores in a Japanese Cedar Catchment; Principal Investigator.
Funded by: EARTHWATCH ($11,000), 1994.

A Water Module for the NY State Environmental Science Program; Co-Principal Investigator
Funded by: SUNY Central Office of Educational Technology ($12,000), June - Dec. 1994.

Evaluation of Hydrological and Biogeochemical Pathways and Fluxes in a Forested Watershed in the Adirondack Mountains; Co-Principal Investigator
Funded by: USDA McIntire Stennis Program ($66,630), 1994-1997.

A Watershed Simulation Model With Vegetation; Principal Investigator.
Funded by: NSF Hydrological Sciences Program ($156,559), 1993-1994.

Mapping Soil Macropores in a New Zealand Rainforest Catchment; Principal Investigator.
Funded by: EARTHWATCH ($35,000), 1992.

Earth Systems Science Education Program for Utah State University; Principal Investigator/Instructor.
Funded by: NASA Headquarters and USRA ($105,000), 1992-1993.

Watershed Runoff Production in the Intermountain West at Varying Forested Basin Scales; Principal Investigator.
Funded by: Utah Agricultural Experiment Station ($13,900), 1991-1995.

Snowmelt Erosion From Simulated Waste Burial Trench Caps; Co-Investigator.
Funded by: U.S. Department of Energy ($101,000), 1991-1992.

Improvement and Further Development of SSM/I Overland Parameter Algorithms Using the WetNet Workstation; Co-Principal Investigator.
Funded by: NASA Headquarters ($225,926), 1991-1994.

A Spatially Distributed Water Balance Based on Physical, Isotopic and Airborne Remotely Sensed Data; Co-Principal Investigator.
Funded by: U.S. Geological Survey 105 Program ($350,234), 1991-1993.

Snowmelt Energy Balance and Melt Infiltration in Complex Terrain; Principal Investigator.
Funded by: Utah State University ($16,000), 1991-1992.

Effects of Streambank Erosion on Water Quality; Co-Principal Investigator.
Funded by: U.S. Department of Agriculture Competitive Grants Program ($282,353), 1991-1993.

Landslide Generation in a Laboratory Rainfall-Runoff Simulator; Principal Investigator.
Funded by: Utah State University ($15,179), 1990.

Snowmelt Processes in Northern Utah; Principal Investigator.
Funded by: Ecology Center, Utah State University ($11,000), 1989.

Vegetation-induced Moisture Flux, With Implications for Global Climate Modeling; Co-Principal Investigator.
Funded by: NASA Marshall Space Flight Center ($51,000), 1989.

Rainfall Oxygen-18 Variations in Mesoscale Events; Principal Investigator.
Funded by: NASA Marshall Space Flight Center ($1,200), 1989.

OTHER PRESENTATIONS:
Local University Seminars:
2018 Dept of Civil and Geological Engineering, UofS, Saskatoon SK
2012 School of Environment and Sustainability, Saskatoon SK
2011 Dept. of Geosciences Seminar Series, OSU Corvallis OR
2011 Dept of Botany Seminar Series, OSU Corvallis OR
2010 OSU Stream Team Seminar Series, Corvallis OR
2006 Institute for Water and Watershed Graduate Orientation, OSU Corvallis OR
2004 OSU Math Department Seminar Series, OSU Corvallis OR
2004 HJA Science Hour, OSU Corvallis OR
2003 HJA Science Hour, OSU Corvallis OR
2003 OSU Hydrology Seminar Series, OSU Corvallis OR
2002 Dept. of Crop and Soil Science, OSU Corvallis OR
2002 Dept. of Bioresource Engineering, OSU, Corvallis OR
2002 Forest Engineering Seminar series, OSU Corvallis OR
2001 Oregon Dept of Forestry Workshop on Headwater Streams, Corvallis OR
2001 College of Forestry Freshman Class, Corvallis, OR
2000 HJ Andrews Annual Research Symposium, Corvallis, OR
2000 OSU Hydrophiles Group, Corvallis OR
2000 Dept. of Forest Engineering, OSU Corvallis OR

1998 Faculty of Forestry, SUNY-ESF, Syracuse, New York.
1996 Syracuse University, Dept. of Geology, Syracuse New York.
1996 Syracuse University, Dept. of Civil and Environmental Engineering, Syracuse, New York.
1996 Faculty of Forestry, SUNY-ESF, Syracuse, New York.
1995 Syracuse University, Dept. of Civil and Environmental Engineering, Syracuse, New York.
1992 Utah State University, Dept. of Civil and Environmental Engineering, Logan, Utah.
1991 Utah State University, Ecology Center, Logan, Utah.

Public Lectures:
2011 Society of American Foresters, North Coast Chapter, Cannon Beach OR
2009 Distinguished Professor Inaugural lecture, Memorial Union OSU.
2007 President's Circle, Development Fund Event, Seattle Athletic Club, Seattle WA
2006 Golder and Associates, Mining Engineering Group, Vancouver BC Canada
2003 CH2MHill, Portland OR office
2002 Golder and Associates, Mining Engineering Group, Vancouver BC Canada
1999 State Legislature of New York, SMART-NY Forum.
1998 SUNY-ESF Board of Trustees Meeting, Syracuse, New York.
1997 SUNY Brockport, Dept. of Earth Sciences, Keynote Speech for the Annual Awards Banquet.
1994 American Water Resources Association, Salt City Student Chapter, Syracuse, New York.
1994 Society of American Foresters, Syracuse New York Student Chapter, Syracuse, New York.
1992 California Earthwatch Society, Los Angeles, California, New York.
1990 Huntsville Geological Society, Huntsville, Alabama, New York.
1988 Royal Commonwealth Society, Keynote Speech for Annual Meeting, Christchurch, New Zealand.

GRADUATE PROGRAM (* denotes co-supervision)**:**

MS Theses Directed

Allen, S., Isotopic composition of throughfall (co-advised with Barb Bond). MS Water Resources Engineering, OSU, June 2012. **[now Post Doc, University of Utah].**

Alley, D. Sources of storm runoff in a semi-arid basin. MF in Forest Engineering, OSU. Feb 2007. **[now Forest Hydrologist, Valley Forestry, Oregon].**

Awasthi, K. 1995. A laboratory model of hillslope runoff. M.S. Plan B, SUNY-ESF, 35pp. **[now Dean of the Forestry School, Pokera Nepal**

Brammer, D. 1996. Hillslope hydrology of a small forested catchment, Maimai New Zealand. M.S. SUNY-ESF, 90pp. plus appendices. **[now Research Hydrologist, U.S. Army Corps of Engineers, New England District].**

Brown, V. 1996. The role of event water, rapid shallow flowpaths and catchment size in summer stormflow. M.S. SUNY-ESF, 73pp. plus appendices.

Callery, D. Assessment of DEM-based terrain indices. MS in Water Resources Science, OSU, June 2007. **[now Forest Hydrologist, USFS Helena-Lewis and Clark, MT].**

Chad, S., Evaporation from tailings ponds, Oil Sands Alberta. MSc in Civil Engineeirng, UofS, expected completion December 2018 (co-advised with Lee Barbour).

Gabrielli, C. A new portable drill rig for remote rock aquifer study. MS in Water Resource Science, OSU, June 2011. **[now Post Doc, Oregon State University]**.

Guselle. Isotope analysis of the water balance of a lysimeter. Masters of Water Security, UofS, expected completion Sept 2018.

Kendall, K. 1997. Snowmelt runoff in steep humid areas: A test of the transmissivity feedback mechanism at the Sleepers River watershed. M.S. SUNY-ESF, 142pp.* **[now Staff Scientist, Vermont Natural Resources Council].**

Kumar, V. 1993. Development of GIS-based water quality model using AgNPS. M.S. Thesis, Civil and Environmental Engineering. Utah State University, 56pp.

Mazurkiewicz, A. 2006. Modeling snowmelt hydrology using the physically-based SNOBAL model. MS in Forest Engineering, OSU. 82pp. **[now Senior Scientist, City of San Francisco].**

McGlynn, B. 1997. Flowpaths in the riparian zone: Reconciling hydrometric, chemical and isotopic evidence. M.S. SUNY-ESF 78pp.* **[now Professor, Duke University]**.

McIntosh, J. 1996. The effects of preferential flow on soil water movement and conservative solute transport in large intact soil cores. M.S. SUNY-ESF, 69pp. **[now Senior Scientist, CH2MHill].**

Millar, C., 2016. Soil water extraction effects on stable isotope composition. MSc SENS and CREATE Program in Water Security, U of S., expected completion date Sept. 2018.

Patchett, S. 1999. Comparison of mixing models for isotope hydrograph separation. M.S. SUNY-ESF, 49pp.*

Sauter, K. 1991. The use of bulk aerodynamic formulae for determining latent and sensible heat flux over melting snow: A field-based approach. M.S. Watershed Science, Utah State University, 110, pp. **[now Senior Scientist, Campbell Scientific Inc].**

Taratoot, M. 1993. Moisture and energy conditions in a sloping laboratory soil mass. M.S.Watershed Science, Utah State University, 75pp. **[now Senior Scientist, City of Corvallis].**

Victory, N. 2007. Quantifying dispersion in subsurface stormflow. MS in Civil and Environmental Engineering, OSU June 2007 *

Welsch, D. 1999. Nitrogen flushing in the Catskill Mountains. M.S. SUNY-ESF, 74pp.* **[now Professor, American University].**

Zumbuhl, A. 1998. Spatial modeling of soil depth and landscape variability in a small forested catchment. M.S. SUNY-ESF, 119pp.

PhD Theses Directed

Barnard, H. Ecohydrological processes at the HJ Andrews LTER. PhD (Forest Science; co-advised with Barb Bond), Aug 2008. **Awarded AGU Horton Research Grant, 2009 [now Associate Professor, University of Colorado, Boulder].**

Burns, D. 1999. The hydrochemical evolution of stormflow in a forested Piedmont catchment. Ph.D. SUNY-ESF, 192pp**. [now Senior Scientist, USGS Troy NY].**

Coles, A., 2017. Overland flow processes on Prairie plots: the role of microtopography. PhD University of Saskatchewan **[now Post Doc, Wilfred Laurier University].**

Evaristo, J., 2016. The two water worlds hypothesis. PhD University of Saskatchewan, 172pp.**[now Assistant Professor, Utrecht University, The Netherlands].**

Frentress, J, 2015. The role of riparian zones in controlled water and chemical flux. Oregon State University, 197pp. **[now Post Doc, University of Florence].**

Gabrielli, C., 2018, The role of bedrock groundwater at multiple stream scales. PhD. **Awarded Horton Research Grant, AGU 2014 [now Senior Research Scientist, Selkermetrics Inc]**

Graham, C. Bedrock influences on subsurface stormflow generation. PhD. Aug. 2008. **[now Senior Scientist, City of San Francisco].**

Goff, B.G. 1991. Hydrologic and erosion response of a disturbed sagebrush hillslope. Ph.D. Watershed Science, Utah State University, 138pp. **[now Senior Scientist, GeomorphIS, San Diego].**

Hale, C. Effects of forest harvesting on streamflow generation processes, Ph.D. Forest Engineering, Oregon State University, anticipated completion date summer 2011
Awarded AGU Horton Research Grant 2010 [now Senior Scientist and Principal, Nutter and Associates].

Harris, D. 1995. A watershed simulation model with vegetation. Ph.D. Watershed Science, Utah State University, 285pp. **[now retired].**

Hjerdt, N. 2002. Scale effects on streamflow generation processes in till catchments. Ph.D. SUNY-ESF, 183pp **[now Senior Scientist, SMHI Sweden].**

McGuire, K. 2004. Water residence time distribution and water age spectra. Ph.D. Oregon State University, 232pp**.[now Associate Professor, Virginia Tech University].**

McGlynn, B. 2002. Characterizing Hillslope–Riparian–Stream Interactions: A scaling Perspective. Ph.D. SUNY ESF. 194 pp., **Awarded AGU Horton Research Grant 2003 [now Professor, Duke University].**

McHale, M. 1999. Hydrological controls of nitrogen cycling in an Adirondack watershed. Ph.D. SUNY-ESF, 221pp.* **[now Senior Scientist, USGS Troy NY].**

Nehmey, Magali, 2020. Plant water transpiration: sources and ages. PhD, UofS, expected completion May 2020 (co-advised with Colin Laroque) **Awarded AGU Horton Research Grant 2019.**

Pangle, L. 2012, Ecohydrological interactions at the plot scale: Asymmetrical warming. Oregon State University, 231pp. **[now Assistant Professor, Georgia State University].**

Peskett, L., 2019, Runoff processes in peat covered Scottish catchments. PhD University of Edinburg, expected completion May 2019 (co-advised with Kate Heal)

Poor, CJ., 2006. Effect of landuse on streamwater nitrate. PhD (Civil and Environmental Engineering, 172 pp* **[now Associate Professor, Oregon State University].**

Sowat, S., Examination of tree source water in a tropical forest. PhD (Forestry), University of the Sunshine Coast, Sippy Downs, Australia, (co-advised with John Herbohn), anticipated completion December 2018.

Sun, C. 1995. Integration of special sensor microwave imager (SSM/I) and in situ data for snow studies from space. Ph.D. Watershed Science, Utah State University, 140pp. **[now Senior Scientist, USDA California].**

Tromp-VanMeerveld (now van Meerveld), I. 2004. Hillslope hydrology: from patterns to processes, Ph.D. Oregon
State University, Corvallis. 270 p. **[now Associate Professor, University of Zurich].**

Unnikrishna, P.V. 1995. Stable isotope tracer study of flow generation mechanisms in a small, semi-arid mountain watershed. Ph.D. Civil and Environmental Engineering. Utah State University, 230pp. **[now Senior Scientist, International Boundary and Water Commission, USA].**

VanVeersveld, W. Hydrological controls on nutrient flushing at the hillslope scale. PhD. Sept. 2007 **[now, Senior Scientist, DELTARES, The Netherlands].**

Vega, A., University of Queensland, Plant wáter extractions from bauxite tailings. PhD (co-advised with John Herbohn), expected completion date Sept 2021.

Post-Doctoral Scholars

Ali, Genevieve, PhD from University of Montreal, worked on *Process Hydrological Classification*, Sept 2010-Dec 2011 (co-advised with Doerthe Tetzlaff and Chris Soulsby). **[now Associate Professor at University of Guelph].**

Ameli, Ali, PhD from University of Waterloo, working on *Numerical models of overland- and subsurface flow*, September 2014-January 2015; Sept-Dec 2016 **[now Assistant Professor, UBC].**

Appels, Willemijn., PhD from Wageningen University, working on *Overland Flow Modeling with Synthetic Microtopography*, November 2012 – June 2013 **[now Assistant Professor at Lethbridge University].**

Cirmo, Chris., Ph.D from Syracuse University, worked on *Hydrological-Biogeochemical Linkages in Nitrogen Cycling*, May 1994 - August 1994 **[was Dean at University Wisconsin Stephens Point; now deceased].**

Coles, Anna, PhD from UofS, worked on Mine Cover Hydrology During Melt of Frozen Ground, April-Dec 2017. **[now Post Doc, Laurier University].**

Evaristo, J., PhD from UofS, worked on Isotope tracing of plant water, Jan-Dec 2017. **[now Assistant Professor, Utrecht University].**

Freer, Jim., Ph.D. from Lancaster University, England, worked on *Development of a Hydrogeochemical Version of TOPMODEL*, January 1995 - January 1997. **[now Professor at Bristol University; retired].**

Gaj, Marcel, PhD from Freiburg University, working on Tracing water vapour isotope composition in soils, November 2016 – October 2018.

Green, Hannah., Ph.D. from Lancaster University, England, worked on *Stormwater Management Modeling*, January 1995 - January 1997 **[now Senior Scientist at the UK Environment Agency].**

Inamdar, Shreeram, PhD from U. of West Virginia, worked on *Hydrobiogeochemical Modeling*, September 1999 – August 2001 (co-supervised with main advisor Myron Mitchell) **[now Professor at University of Delaware].**

James, April, PhD from McGill University, working on *Hillslope Flow Theory and Modeling*, Sept 2005-Aug 2007 **[now Associate Professor at Nipissing University].**

Jameel, Y, PhD from University of Utah, working on Bayesian Modeling of Dual Isotope Data, July-Dec 2018. **[Now Post Doc MIT]**

Jansen, Daryl., PhD from University of Saskatchewan, working on Directional Percolation Theory Approaches to Hydrological Modeling, October 2012 – September 2013 **[now Assistant Professor at University of Saskatchewan].**

Jasechko, Scott, PhD from University of New Mexico, worked on Fractions of Young Water in Global streamflow, May-September, 2014 **[now Assistant Professor at UC Santa Barbara].**

Karran, Dan, PhD from University of Saskatchewan, working on Fill and Spill theory, April-Oct 2018 **[now Assistant Professor, Olds College, Olds Alberta].**

Hopp, Luisa, PhD from Braunsweig University, working on Hydrology of Mine Covers, Oct 2006-Dec 2011 **[now Professor at Bayreuth University].**

Keim, Richard, PhD from Oregon State University, worked on *Hillslope flow modeling with Throughfall Intensity Smoothing*, August 2003 – January 2004 **[now Professor at Louisiana State University].**

Kim, Kyongha, PhD from Seoul University, South Korea, worked on *Dynamics of Subsurface Stormflow and Macropore-Matrix Interactions*, June 1994 - June 1996 **[now Director, Forest Research Institute, Seoul].**

Klaus, Julian, PhD from University of Munich, Germany, working on *Time Varying Residence Time Distributions at the Watershed Scale*, April 2011-2016 **[now Senior Scientist at the Luxembourg Institute for Science and Technology].**

Munos-Villers, Lyssette, PhD from INECOL Mexico, working on *Cloud Forest Hydrological Processes*, August 2008-July 2011 **[now Associate Professor at UNAM, Mexico City].**

Orlowski, Natalie , PhD from University of Giessen, working on *Soil Water Extraction Techniques*, June 2014-June 2015 **[now Assistant Professor at Freiburg University].**

Pratt, Dyan, PhD from University of Saskatchewan, working on *Mine Cover Hydrology* and as MOST Facility Research Engineer, Jan 2016-19.

Rodriguez, Nicolas, PhD from KIT Germany, working on Travel Time Modeling using oxygen deuterium and tritium, April-June 2020.

Sayama, Takahiro, Ph.D. from Kyoto University, working on Incorporating Residence Times Estimates Into Model Structures and Testing, Aug 2007-July **2009 [now Associate Professor at Kyoto University].**

Seibert, Jan, Ph.D. from Uppsala University, worked on *Distributed Watershed Modeling*, January 2000 – January 2001 **[now Professor at University of Zurich].**

Sherlock, Mark, Ph.D. from Lancaster University, England, worked on *Hillslope Tracer Experiments of Septic Leachate in the New York City Water Supply Watershed*, April 1998 - March 2001. **[now, Senior Instructor, Breda International School, The Netherlands].**

Simin, Qu, PhD from Hohai University, working *on Isotope Hydrology of the HJ Andrews Experimental Forest* (Sept 2006-Mar 2007**) [now Professor at Hohai University].**

Timsic, Sandra, PhD from University of Saskatchewan, working on *Isotope Tracing of Water Balance Components Using Water and Vapor Extraction*, April 2013 – January 2014 **[now Senior Research, Dept of Geological Sciences, UofS].**

Uchida, Taro, PhD from Kyoto University, worked on *Hillslope Hydrology Intercomparison and Classification*, (August 2002-January 2003) **[now senior scientist at National Institute for Land and Infrastructure Management, Japan].**

Vaché , Kellie, PhD from Oregon State University, worked on *Mesoscale Watershed Modeling* (June 2003-May 2005) **[now Associate Professor, Oregon State University].**

Vitvar, Tomas, PhD from ETH Zurich, worked on *Residence Time Modeling of Urban Waters*, January 2000-July 2003 **[now Professor at University of Guayaquil, Ecuador].**

Weiler, M., PhD from ETH Zurich, worked on *Hydrology of Alaska Headwater Catchments*, October 2001-September 2003 **[now Professor, Freiburg University].**

Youn, HoJoong, Ph.D. from Seoul University, South Korea, worked on *Subsurface Flow and Landslide Initiation*, December 1995 - May **1996 [now Senior Scientist at the Forest Research Institute, Seoul].**

International Student Interns and Visitors

Amed, S., IAEA and NRC Fellow from the Bangladesh Water Development Board, Isotope Traineeship, March-May, 2002

Anderson, Axel, PhD student from University of British Colombia, *Effect of forest roads on lateral flow interception,*.Sept 2006. **[now Associate Professor, University of Alberta].**

Biondi, Daniela, Recent PhD from University of Calabria, Italy, *Development of physically based watershed models with realistic internal flowpaths,* Sept-Dec 2008.

Barthold, Frauke, PhD student from Giessen University, *Development of model structures for ungauged basins in Inner Mongolia*, Sept-Dec. 2007.

Bustamante, Ramon, MSc student, Concepcion University, Chile, *Isotope applications in forest hydrology.* Oct 2014 -Jan 2015 **[now Senior Scientist, Arauco Inc, Chile].**

Castro, Ariel, MSc student from Sonora Inst. Of Technology, Mexico. *Isotope tracers in watershed hydrological modeling*, May/June 2015.

Chaffe, Pedro, PhD student from Kyoto University, Japan, *Climate change induced changes in snowmelt runoff regime at the HJ Andrews Experimental Watershed*, May-August 2011. **[now Associate Professor, Federal University of Santa Catarina, Brazil].**

Cloke, Hannah, PhD student from Bristol University, *Capillary fringe modeling, 2001.* **[now Professor, University of Reading].**

Coles, Anna, PhD student from Durham University, UK, High frequency isotope tracing using a new nebulizer and gas analyzer, Sept-Dec., 2011. **[now Post Doc, Laurier University].**

Fabrizio Fenicia, PhD student from TU Delft, Parsimonious watershed modeling—evaluating the value of data, Sept-Dec 2006. **[now Senior Scientist, EAWAG/ETH Zurich].**

Frey, Martin, PhD student from EAWAG/ETH Zurich, *A hillslope scale model experiment of threshold behavior*, Sept-Dec 2004. **[now Assistant Professor, ZHAW School of Engineering, Zurich].**

Garvelmann, Jakob, Pre-diplome student from Freiburg University, *Field measurements of water flux in steep coast range watersheds*, Sept-Dec 2008. **[now Assistant Professor, Karlsruhe Institute of Technology].**

Geris, Josie, Post Doc from University of Aberdeen, Tree water source quantification using stable isotopes, 2013. **[now Senior Lecturer, University of Aberdeen].**

Gerits, Miriam, PhD student from TU Delft, *Interception modeling and effects of subsurface runoff, 2007.* **[now Associate Professor, TU Delft].**

Holwerda, Friso, Post Doc from University of New Hampshire, Tropical cloud forest hydrology, August 2008-July 2011 **[now Associate Professor at UNAM, Mexico City].**

Lanni, Cristiano, PhD student from University of Trento, Effects of bedrock topography on landslide triggering, Sept 2010-March 2011.

Laine-Kaulio, Hanne, PhD student from Aalto University, Finland, **[now Senior Researcher, Aalto University, Finland].**

Martius, Olivia, Pre-diplome student from ETH Zurich, *EM Analysis of volumetric water content*, April – July 2001.

Min, Lan, PhD student from Tsinghua University, Beijing*, Hillslope hydrological modeling to quantify the interactions of factors influencing runoff generation*, Sept 2011-June 2012. **[now Staff Scientist, Tsinghua University].**

Penne, Daniele, PhD student from Padua University, *Spatial patterns of soil moisture at the catchment scale*, Sept 2006-June 2007. **[now Associate Professor, University of Florence].**

Marijn Piet, MS student from TU Delft, Freezer experiments on the effect of soil moisture content on frozen soil infiltrability, June-August, 2014 **[now Project Manager, Shell, The Netherlands].**

Pitt, Iris, MS Student from Utreckt University, *Parameterizing 2-water worlds into the WALNUTS biogeochemical model*, January-May 2011 **[now PhD student, Utrecht University].**

Roman Portmann, MSc student, Forest hydrological processes, University of Basel

Mario Martina, PhD student, Watershed modeling, University of Bologna, Feb-May 2005 **[now, Senior Hydrologist, Risk Engineering and Development Inc., Italy].**

Reiter, Mattias, Diplome student from Freiburg University, Germany, *Hillslope Hydrology of the Oregon Coast Range*, March 2003 – May 2003.

Ritter, Matthias, MS student from Freiburg University, Germany, *Forest transpiration controls on stream diel flux, Sept-Dec 2010* **[now Senior Scientist, Price-Waterhouse, London].**

Santos, Camyla, PhD student from Federal University of Santa Catarina, Brazil, *Plant wáter source apportionment*, Sept-Dec 2018.

Sebestyen, Stephen, PhD student from SUNY-ESF, Catchment hydrological processes and biogeochemistry, July-Dec 2004**. [now Senior Scientist, USDA Minnesota].**

Seifert, Winnie, MSc student from Bayreuth University, Infiltration tests with brilliant blue dye in an ag field., Apr-Dec 2013

Spaaks, Jurriaan, PhD student from University of Amsterdam, The Netherlands, *Conceptual models of hillslope runoff generation*, Sept.-Dec 2008, **[now Assistant Professor, University of Amsterdam].**

Starcke, Corinna, Pre-diplome student from Braunsweig University, Germany, *Isotopic Analysis of Columbia River Waters*, Sept 2000 – June 2001

Stöcker, Falko, MS student from Stuttgart University, Germany, *High frequency sampling of rainfall isotope composition: relationships with rainfall and air temperature*, Oct 2011-June 2012.

Stockinger, Michel, student from Helmoltz Julich, Germany, Interception effects on streamwater transit time modeling, Aug-Dec 2014. **[now Post Doc, Helmholtz UFZ, Leipzig].**

Tritschler, Felix, MS student from the University of Dresden Germany, *Runoff generation in the Canadian Rockies., Sept-Dec 2012.* **[now Post Doc, the University of Dresden].**

Voss, Svenja, MS student from Freiburg University, Runoff on an ag field., Apr-Dec 2013.

Westhoff, Martin, PhD student, Hillslope hydrology, Apr-Dec 2004. TU Delft **[now Assistant Professor, Karlsruhe Institute of Technology].**

Yerikuly, Zhayik, PhD student from Kazakhstan National Technical University, April-Oct 2014.

Sabbatical Visitors Hosted

Barrios, Miguel, Assistant Professor, Universidad del Tolima – Colombia, April – July 2013.

Burt, Tim, Professor of Geography, Durham University, July-Dec., 2010.

Dunn, Sarah, Senior Scientist, McCauley Institute (now James Hutton Institute), July-Dec 2007.

Gu, Wei-Zu, Senior Scientist, Nanjing Hydraulic Research Institute, Sept—Dec 2010.

Hancock, Greg, Professor and Head, Dept. of Geography, University of Newcastle, Australia, June-Dec., 2010.

Hooper, Rick, Research Hydrologist USGS (Now CUAHSI), Sept 2001-June 2002.

Keller, Kent, Professor, Washington State University, Pullman WA, Sept 2015-Aug 2016.

Li, Zhi, Associate Professor, NW Agriculture and Forestry University, China, April 2015 – March 2017.

Ma, Haiyam, Associate Professor, Lanzhou University, Lanzhou China, Sept 2014-Dec 2015.

Pfister, Laurent, Senior Research Hydrologist, Lippmann Institute Luxembourg, April – July 2013.

Reaney, Sim, Senior Lecturer, Durham University, UK, July-Sept. 2009.

Smettem, Keith, Professor of Ecohydrology, University of Western Australia, April-June 2011.