

Senior Faculty Research Assistant II

Yvan Alleau

Senior Faculty Research Assistant I
College of Earth, Ocean and Atmospheric Sciences
Oregon State University (OSU)
537A Weniger Hall
Corvallis, OR 97331
Yvan.alleau@oregonstate.edu

EDUCATION

MS Oceanography

July 2002

Oregon State University, Corvallis, Oregon, USA

Emphasis on biological, chemical, physical and geological aspects of oceanography. Advanced aquatic chemistry. Stream ecology. Geochemistry of soil ecosystems. Advisor: Dr F. G. Prahl

Thesis: "Characterization of organic matter quality and content in Columbia River suspended particulate matter by cupric oxide oxidation"

BS Chemistry

June 1997

University of Poitiers, France

RESEARCH POSITIONS

Senior Faculty Research Assistant I: Lab manager

February 2017 – present

OSU, College of Earth, Ocean and Atmospheric Sciences (CEOAS)

1 research group, 2 labs, 7 people

Supervisor: Dr. Clare E. Reimers

Independently manage all aspects pertaining to running a scientific biogeochemical research labs, including: planning work & training of employees/students/PostDocs, install/maintaining & troubleshooting of new/old instruments, design & build parts needed for lab & field work, preparing/analyzing samples, creating/maintaining database, generating reports and contribution to scientific publications, development and testing of new sensors, refine/develop experimental protocols/experiments for all group members, purchase needed parts/supplies/equipment, organize & participate various aspect of cruises, process and synthesize cruise and lab generated data, concurrently run several projects; keeping work environment up to date with safety regulations

Senior Faculty Research Assistant I: Lab manager

January 2014 - present

OSU, Forest Engineering, Resources & Management (FERM)

2 research groups, 3 labs, 15-20 people

Supervisor: Dr. Jeff Hatten

Independently manage all aspects pertaining to running a scientific forestry research labs, including: planning work & training of employees/students/PostDocs, install/maintaining & troubleshooting of new/old instruments, preparing/analyzing samples, creating/maintaining database, generating reports and contribution to scientific publications, refine/develop experimental protocols/experiments for all group members and visiting scholars, purchase needed parts/supplies/equipment, process and report field and lab generated data, concurrently run several projects; keeping work environment up to date with safety regulation, design & build mechanical parts needed for lab & field work, participating to

field work in various terrestrial landscapes, rivers and at sea, setup and develop a service account (facility) to process samples for other labs

Senior Faculty Research Assistant

November 2013 – November 2014

Collaborative research with the National Energy Technology Laboratory (U.S. Department of Energy) in Albany, OR. “Feasibility of Biogeochemical Sealing of Wellbore Cements: Lab and Simulation Tests”.

Supervisor: Dr. Marta Torres (CEOAS) and Dr. Circe Verba (NETL)
Performed growth experiments of *Sporosarcina pasteurii* in different medium, followed by cell counts. Assisted with experimental and sampling designs, installation and sampling procedure of subsequent high temperature and pressure rocking autoclave experiment.

Senior Faculty Research Assistant: Lab manager

December 2005 – June 2016

OSU, College of Earth, Ocean and Atmospheric Sciences (CEOAS)

1 research group, 1 lab, up to 12 people

Supervisor: Dr. Miguel A. Goni

Managerial descriptions above apply to this position

Faculty Research Assistant

September 2003 – November 2005

OSU, College of Earth, Ocean and Atmospheric Sciences (CEOAS)

Supervisor: Dr. Clare E. Reimers

Highlight: full responsibility for the Sediment Oxidation Oscillation project founded by the National Science Foundation. It aimed to determine the comparative effects of oxygen exposure, redox oscillation and anaerobic conditions on sedimentary organic matter degradation. My responsibilities included the full experimental design, building, testing, troubleshooting, maintenance and experiment sampling scheduling. The project included triplicate electrically isolated microbial fuel cells in four different treatments. A complex and electronically controlled plumbing system delivered filtered sea water to each fuel cell in a temperature-controlled lab, while data, such as whole cell voltage, anode voltage and fuel cell current were continuously monitored and logged by a computer in a control room

Temporary Faculty Research Assistant

January - August 2003

OSU, College of Earth, Ocean and Atmospheric Sciences

Supervisors: Dr. Ricardo Letelier and Dr. Clare E. Reimers

Research Assistant

September 1998 – August 2002

OSU, College of Earth, Ocean and Atmospheric Sciences

Supervisor: Dr. Fredrick G. Prahl

OTHER RELEVANT EXPERIENCE

Teaching Assistant for Chemical Oceanography

September – December 2002

OSU, College of Earth, Ocean and Atmospheric Sciences

Teaching Assistant for Spanish/French

1998

OSU, Department of Foreign Languages and Literatures

Internship in Research and Development

3 months in 1997

ZOLUX-FRANCE (#1 wholesaler for pet products, Saintes, France)

SKILLS

Techniques: I have intimate knowledge of the following laboratory equipment:

- Elemental Analysis (EA): CosTech ECS 4010, Thermoquest NC-2500, Carlo Erba NA-1500, Thermo FlashEA 1112
- Gas Chromatography (GC): HP-5890
- Gas Chromatography-Mass Spectrometry (GCMS): HP6890 - HP5973
- Isotope Ratio Mass Spectrometry (EA-IRMS): Carlo Erba NA 1500 + ThermoQuest Delta plus XP
- Picarro L2130-i High Precision water isotope analyzer for $\delta^{18}\text{O}$ and δD
- DOC/DON: Shimadzu TOC-5000A
- Fluorometry: Tuner Designs IO-AU
- Spectrophotometry: Cary300 UV/VIS
- Surface Area: Micromeritics Gemini-V, Coulter SA-3100
- Lignin work: CEM MDS-2000, CEM MARS-6 microwaves, CuO oxydation, extractions, standards
- Amperometry (H₂S, pH, O₂)
- Microelectrode construction / calibration

Computer: I am well versed in the use of the following software

- | | |
|--------------------------|--------------------------|
| • Isodat NT | • ChromPerfect |
| • EAS Clarity | • Picarro CRDS software |
| • MSD ChemStation | • Eager Xperience |
| • Gemini | • Microsoft Office Suite |
| • Visual Studio, LabView | |

Others

- Methods development
- Research & Development: conceptual design of experiments and parts needed for projects; building, testing and troubleshooting; final production of parts for said projects; data production; reports and participation to subsequent papers
- Coordination of numerous concurrent projects
- Lab Setup: design of lab layout and ground up installation to match or exceed existing safety regulations. Coordination with all relevant administrative and facility personal to organize installations
- Lab development: permanent improvement on established labs setup, methods and equipment. Lab established as a Service Account to analyze samples for other research groups, generating revenue used for further lab maintenance and development
- Lab managing: safety, repairs, maintenance, troubleshooting, ordering, optimization, setup, multiple research groups and people-training/managing, data processing, general organization
- Soldering, welding, electrical work, plumbing, electronics troubleshooting
- Computer/printer installation, network setup: maintenance/troubleshooting
- Provide advice, technical support and methods/instrument training to undergraduate and graduate students, Postdocs, Professors and Researchers

Languages

- Native speaker in French, Spanish and Catalan
- Fluent in English

Certifications

- First Aid and CPR
- Forklift trained

Special training

- Various Laboratory Safety Training

- 1 week training in May 2007 from Isomass Scientific Inc at the University of Ottawa for EA-RMS, GC-IRMS, MS-IRMS

TECH SUPPORT and LAB TEACHING/SUPERVISING

Postdocs

Dr. Jeff Hatten: 2007-2009, OSU
 Dr. Tommaso Tesi: 2008-2010, Stockholm University
 Dr. Sharon Bywater, 2016-2017, University of Montana
 Dr. Kristen Fogaren, 2017-present, University of Hawaii
 Dr. Cheng Li, 2017-present, OSU
 Dr. Lauren Matosziuk: 2018-present, OSU

Visiting Scholars

Zou Zou Kuzyk, Ph.D., Oceanography, 2008. University of Winnipeg (Canada).
 Eric Moore, Ph.D., Geological Sciences, Boston University
 Catalina Pascual, Ph.D., Marine Geosciences, 2011. Universitat de Barcelona (Spain)
 Maria Winterfeld, Ph.D., Geosciences, 2011, A. Wegner Institute for Polar & Marine Research (Germany)
 Si Chen, Ph.D., Marine Sciences, 2012. University of South Carolina
 Pamela Godin, MS, Geography, University of Manitoba (Canada)
 Janet Dewey, MS, Associate Research Scientist, 2014, University of Wyoming
 Antra Boca, Ph.D., Wildland Resources, 2014, 2016 & 2017. Utah State University

Graduate Students

Rachel Holser, M.S., Oceanography, OSU 2007-2009
 Roxanne Hastings, M.S., Oceanography, OSU, 2008-2010
 Adrian Gallo, M.S and PhD, Sustainable Forest Management, OSU, 2014-present
 Francisco Guerrero, PhD, Sustainable Forest Management, OSU, 2014-present
 Kristin Richardson, M.S., Water Resources Science, OSU, 2014-2016
 Lauren Matosziuk, M.S., Sustainable Forest Management, OSU, 2015-2018
 Dave Frey, M.S., Sustainable Forest Management, OSU, 2015-2018
 Peter Chace, M.S., Oceanography, OSU, 2017-present
 Adrienne Chan, MS., Oceanography, OSU, 2017-present

SUPERVISING and MENTORING of Undergraduate Workers

Christina Loewy, B.S., Engineering, OSU 2005-2007
 Chris Reade, B.S., Engineering, OSU 2005-2007
 Daniella Jansik, B.S., Engineering, OSU 2006
 David Merrel, B.S., Engineering, OSU 2006-2008
 Sara Belson, B.A., OSU, 2007
 Casey Sande, B.S., Education, OSU 2007-2009
 Eman Rushdi, B.S., Pharmacy, OSU 2007
 Conner Burck, B.S., Geosciences, OSU 2009
 Erik Mulrooney, B.S., Biology, OSU 2008-2010
 Una Monaghan, B.S., Honor's College, OSU, 2009
 Aparna Narayan, B.S., Chemistry, OSU 2009
 Colleen Collins, B.S. Biology, OSU, Summer 2009
 Rebekah Ebel, B.S., Biology, OSU, Summer 2009
 Maryann Tkverk, B. S., Haverford College, Summer 2009
 Jessica Bechler, B.S., Biological Sciences, OSU, 2009-2010

Danielle Asson, B.S., Biological Sciences, OSU, 2009-2010
Danielle Heston, B.S., Geosciences, OSU, 2010-2012
Jennifer Nguyen, B.S., Biochemistry, OSU, 2010-2011
Lauren Smith, B.S., Biology, OSU, 2010-2014
Minh-Chau Nguyen, B.S., Biology, OSU, 2010-2012
Sheanna Steingass, B.S., Fisheries and Wildlife, OSU, Summer 2011
Jackie Helm, B.S., Biochemistry, OSU, 2011-2013
Lauren Kolczynski, B.S., Engineering, OSU, 2011-2012
Caroline Coccoli, B.S., Northwestern University, 2013 Summer REU
Elizabeth Corvi, B.S., Environmental Sciences, OSU, 2013-December 2014
Kylie Welch, B.S., Environmental Sciences, OSU, 2013-December 2014
Kaitlin Lebon, B.S., Marine Biology, OSU, 2014-December 2014
Carrie Weekes, B.S., Marine Biology, OSU, 2014-June 2014
Philip Aulie, B.S., Biological Engineering, OSU, January 2014-2016
Emily Day, B.S., Natural Resources, OSU, January 2014-2015
Raven Chavez, B.S., Natural Resources, OSU, January 2015-present
Amanda Allen-Kahl, BS, Natural Resources, OSU, June 2015-July 2017
Hayden England, BS, Natural Resources, OSU, September 2016-May 2018
Ethan Donoghue, BS, Forest Management, OSU, September 2016-present
Chantal Jorgensen, BS, Natural Resources, OSU, September 2016-present
Maylita Brougher, BS, Chemistry, OSU, June 2018-present

SUPERVISING and LAB/FIELD TEACHING of Research Experiences for Undergraduates (REU)

Trevor Nace, B.S., Univ. of North Carolina, Summer 2007
Louis Prah, B.S., Physics, L&C College, Summer 2007
Benjamin Klein, B.S., Amherst College, Summer 2008
Kether Schrarff-Gray, B.S., University of New England, Summer 2008
Maryann Tkverk, B. S., Haverford College, Winter 2010
Evan Portier, B.S., Univ. California Berkley, Summer 2010
Alison O'Connor, B.S., Oberlin College, Summer 2010
Devon McLane, B.S., Skidmore College, New York, Summer 2018

PUBLICATIONS

Peer reviewed papers

2001

1. Y. Alleau, D. Colbert, P. Covert, B. Haley, X. Qiu, R. Collier, K. Falkner, B. Hales, F. Prah and L. Gordon, (2001). Th^{234} applied to particle removal rates from the surface ocean: a mathematical treatment revisited. *Geophysical Research Letters*, Vol. 28, No. 14, p. 2855-2857.

2002

2. Y. Alleau Characterization of organic matter quality and content in Columbia River suspended particulate matter by cupric oxide oxidation. Master's thesis (2002).

2007

3. Reimers, C.E., Stecher, H.A., III, Westall, J.C., Alleau, Y., Howell, K.A., Soule, L., White, H.K., and Girguis, P.R. (2007) Substrate degradation kinetics, microbial diversity, and current efficiency of microbial fuel cells supplied with marine plankton. *Appl. Env. Microbiology* 73, 7029-7040.
4. Goñi M. A., Alleau, Y., Corbett, R., Walsh, J. P., Mallinson, D., Allison, M. A., Gordon, E., Petsch, S., Dellapenna, T. (2007) The effects of Hurricanes Katrina and Rita on the seabed of the Louisiana shelf. *The Sedimentary Record* 5, 4-9.

2013

5. Reimers, C.E., Alleau, Y., Bauer, J.E., Delaney, J., Girguis, P.R., Schrader, P.S., and Stecher, H.A., III. (2013) Redox effects on the microbial degradation of refractory organic matter in marine sediments. *Geochim. Cosmochim. Acta*, 121, 582-598.

2014

6. Goñi, M.A., Moore, E., Kurtz A, Portier, E., Alleau, Y, Merrell, D. Organic matter compositions and loadings in soils and sediments along the Fly River, Papua New Guinea. *Geochim. Cosmochim. Acta*, 140, 275-296.

2016

7. C. Verba, A.R. Thurber, Y. Alleau, D. Koley, F. Colwell, M.E. Torres. (2016) Mineral changes in cement-sandstone matrices induced by biocementation. *International Journal of Greenhouse Gas Control* 49. 312-322.
8. D. Harris, J.G. Ummadi, A.R. Thurber, Y. Alleau, C. Verba, F. Colwell, M.E. Torres, D. Koley. (2016) Real-time monitoring of calcification process by *Sporosarcina pasteurii* biofilm. *The Analyst*.
9. Harris, D., Ummadi, G., Colwell, F., Verba, C., Thurber, A., Alleau, Y., Koley, D., Peszynska, M., and M. Torres. "Real time chemical mapping of *S pasteurii* biofilm calcification process using scanning electrochemical microscopy (SECM). *Royal Society of Chemistry* (2016).

Submitted

10. Lauren M. Matosziuk, Yvan Alleau, Becky K. Kerns, John Bailey, Mark G. Johnson, Jeff A. Hatten. Effects of season and interval of prescribed burns on pyrogenic carbon in ponderosa pine stands in Malheur National Forest. *Environmental Science and Technology*
11. Miguel Goni, Elizabeth R. Corvi, Kylie A. Welch, Maggie Buktenica, Kaitlin Lebon, Yvan Alleau, Lauren Juranek. Particulate Organic Matter Distributions in Surface Waters of the Pacific Arctic Shelf during the late Summer and Fall Season. *Marine Chemistry*

In Preparation

12. Hatten J.A., M. Goñi, A. Gray, J. Warrick, E. Watson, G. Pasternack, R. Wheatcroft, and Y. Alleau. Source and flux of particulate organic carbon from a burned small, mountainous, semi-arid watershed. *Journal of Geophysical Research-Biogeosciences*
13. Gallo, A., J. Hatten, S. Holub, K. Lajtha, D. Maguire, Y. Alleau. Root carbon contributions are uniform across Long-Term Soil Productivity (LTSP) treatments in a western Oregon Douglas-fir Forest. Being prepared for *Forest Ecology and Management*.

Technical support, sample processing, written contribution, other participation leading to the following publications

2007

14. Tesi T., Miserocchi S., Goñi M.A., and Langone, L. (2007) Source, transport and fate of terrestrial organic carbon on the western Mediterranean Sea, Gulf of Lions, France. *Marine Chemistry* 105, 101-117.
15. Tesi T., Miserocchi S., Goñi M.A., Langone L., Boldrin A., and Turchetto M. (2007) Organic matter origin and distribution in suspended particulate material and surficial sediments from the western Adriatic Sea (Italy). *Estuarine, Coastal and Shelf Science* 73, 431-446.

2008

16. Alin S.R., Aalto R., Goñi M.A., Richey J.E., and Dietrich W.E. (2008) Biogeochemical characterization of carbon sources in the Strickland and Fly Rivers, Papua New Guinea. *J. Geophys. Res.* 113, F04S05, doi:10.1029/2006JF000625.
17. Goñi M. A., Monacci N., Gisewhite R., Crockett J., Nittrouer C., Ogston A., Alin, S. R., Aalto, R. (2008) Terrigenous organic matter in sediments from the Fly River Delta (Papua New Guinea). *J. Geophys. Res.* 113, F01S10, doi:10.1029/2006JF00065.
18. Ogston A. S., Sternberg R. W., Nittrouer C. A., Martin D. P., Goñi M. A., and Crockett J. S. (2008), Sediment delivery from the Fly River tidally dominated delta to the nearshore marine environment and the impact of El Niño, *J. Geophys. Res.* 113, F01S11, doi:10.1029/2006JF000669.
19. Tesi T., Langone L., Goñi M.A., Miserocchi S., and Bertasi F. (2008) Changes in the composition of organic matter from prodeltaic sediments after a large flood event (Po River, Italy). *Geochimica et Cosmochimica Acta* 72, 2100-2114.
20. Kuzyk Z.Z.A., Goñi M.A, Stern G.A, Macdonald R.W. (2008) Sources, pathways and sinks of particulate organic matter in Hudson Bay: evidence from lignin distributions. *Marine Chemistry* 112, 215-229, doi:10.1016/j.marchem.2008.08.001.
21. Tesi T., Langone L., Goñi M.A., Turchetto M., Miserocchi S., and Boldrin A. (2008) Source and composition of organic matter in the Bari canyon (Italy): dense water cascading vs. particulate export from the upper ocean. *Deep Sea Research I* 55, 813-831, doi: 10.1016/j.dsr.2008.03.007.

2010

22. Wheatcroft R., A., Goñi M. A., Hatten J. A., Pasternack G. B., Warrick J. A. (2010) The role of effective discharge in the ocean delivery of particulate organic carbon by small, mountainous river systems. *Limnology and Oceanography* 55, 161-171.
23. Tesi T., Puig P., Palanques A. Goñi M. A. (2010) Lateral advection of organic matter in cascading-dominated submarine canyons. *Progress in Oceanography* 84, 185-203, doi:10.1016/j.pocan.2009.10.004.
24. Tesi T., Goñi M.A., Langone L., Puig, P., Canals, M., Nittrouer C.A., Durrieu de Madron X., Calafat A., Planques A., Heussner S., Davies M.H., Drexler T.M., Fabres J., Miserocchi S. (2010) Reexposure and advection of ¹⁴C-depleted organic carbon from old deposits at the upper continental slope. *Global Biogeochemical Cycles* 24, doi:10.1029/2009GB003745.

2011

25. Holser R.R., Goñi M.A., Hales B. (2011) Design and application of a semi-automated filtration system to study the distribution of particulate organic carbon in the water column of a coastal upwelling system. *Marine Chemistry* 123, 67-77.
26. Tesi, T., Miserocchi, S., Goñi M.A., Turchetto, M., Langone, L., De Lazzari, A., Albertazzi, S. Correggiari (2011). Influence of distributary channels on sediment and organic matter supply in event-dominated coastal margins: the Po prodelta as a study case. *Biogeosciences* 8, 365-385 (doi:10.5194/bg-8-365-2011).
27. Pasqual, C., Lee, C., Goñi, M., Tesi, T., Sanchez-Vidal, A., Calafat, A., Canals, M., Heussner, S. (2011) Use of organic biomarkers to trace the transport of marine and terrigenous organic matter through the southwestern canyons of the Gulf of Lion. *Marine Chemistry* 126, 1-12.

2012

28. Hatten, J.A., Goñi, M.A., Wheatcroft, R.A. (2012) Chemical characteristics of particulate organic matter from a small mountainous river in the Oregon Coast Range, USA. *Biogeochemistry* 107: 43-66 (DOI 10.1007/s10533-010-9529-z).

29. Hastings, R.H., Goñi, M.A., Wheatcroft R.A., Borgeld J. (2012) A terrestrial organic matter depocenter on a high-energy margin: the Umpqua River system, Oregon. *Continental Shelf Research* 39-40: 78-91 (DOI 10.1016/j.csr.2012.04.002).
30. Warrick, J.A., Hatten, J.A., Pasternack G.B., Gray, A.B., Goñi, M.A., Wheatcroft R.A. (2012) The effects of wildfire on the sediment yield of a coastal California watershed. *Geological Society of America Bulletin* 124: 1130-1146 (DOI 10.1130/B30451.1).
31. Tesi, T., Langone, L., Goñi, M.A., Wheatcroft, R.A., Miserocchi, S., Bertotti, L. (2012) Early diagenesis of recently deposited organic matter: A 9-yr time-series study of a flood deposit. *Geochimica et Cosmochimica Acta* 83, 19-36.

2013

32. Goñi, M.A., Hatten, J.A., Wheatcroft R.A., Borgeld J. (2013) Particulate organic matter export by two contrasting small mountainous rivers in the Pacific Northwest, U.S.A. *Journal of Geophysical Research – Biogeosciences* 118: 112-134 (doi:10.1002/jgrg.20024).
33. Warrick, J.A., Hatten, J.A., Pasternack, G.B., Gray, A.B., Goñi, M.A., Wheatcroft, R.A. (2013) The effects of wildfire on the sediment yield of a coastal California watershed. *Geological Society of America Bulletin* 124 (7-8): 1130-1146 (doi: 10.1130/B30451.1).
34. Roy, M., McManus, J., Goñi, M.A., Chase, Z., Borgeld, J.C., Wheatcroft, R.A., Muratli, J.M., Megowan, M.R., Mix, A. (2013) Reactive iron and manganese distributions in seabed sediments near small mountainous rivers off Oregon and California, (USA). *Continental Shelf Research* 24: 67-79 (doi: 10.1016/j.csr.2012.12.012).
35. Warrick, J.A., Madej, M.A., Goñi, M.A., Wheatcroft R.A. (2013) Trends in the suspended-sediment yields of coastal rivers of northern California, 1955–2010. *Journal of Hydrology* 489: 108-123 (doi: 10.1016/j.jhydrol.2013.02.041).
36. Moskalski, S.M., Torres, R., Bizimis, M., Goñi, M., Bergamaschi, B., Fleck, J. (2013) Low-tide rainfall effects on metal content of suspended sediment in the Sacramento-San Joaquin Delta. *Continental Shelf Research* 56: 39-55 (doi: 10.1016/j.csr.2013.02.001).
37. Watson, E.B., Pasternack, G.B., Gray, A.B., Goñi, M., Woolfolk, A.M. (2013) Particle size characterization of historic sediment deposition from a closed estuarine lagoon, Central California. *Estuarine, Coastal and Shelf Science* 126: 23-33 (doi: 10.1016/j.ecss.2013.04.006).
38. Wheatcroft, R.A., Goñi, M.A., Richardson, K.N., Borgeld, J.C. (2013). Natural and human impacts on centennial sediment accumulation patterns on the Umpqua River margin, Oregon. *Marine Geology* 339: 44-56 (doi: 10.1016/j.margeo.2013.04.015).
39. Goñi, M.A., O'Connor, A., Kuzyk, Z.Z., Yunker, M., Gobeil, C. (2013) Distribution and sources of organic matter in surface sediments across the North American Arctic margin. *Journal of Geophysical Research – Oceans* 118: doi:10.1002/jgrc.20286.
40. Pasqual, C., Goñi, M., Tesi, T., Sanchez-Vidal, A., Calafat, A., Canals, M. (2013) Composition and provenance of terrigenous organic matter transported along submarine canyons in the Gulf of Lion (NW Mediterranean). *Progress in Oceanography*, 2013.07.013.
41. Bianchi, T.S., Goñi, M.A., Allison, M.A., Chen, N., McKee, B.A. Sedimentary carbon dynamics of the Atchafalaya and Mississippi River Delta system and associated margin. *Biogeochemical Dynamics at Large River-Coastal Interfaces: Linkages with Global Climate Change* (Eds. T. Bianchi, M. Allison, W. Cai). Cambridge University Press, pp. 473-502
42. Gray, A., Warrick, J.A., Pasternack, G.B., Watson, E.B., Goñi, M.A. (2014) Suspended sediment behavior in a coastal dry-summer subtropical catchment: Effects of hydrologic preconditions. *Geomorphology*. 214, 485-501.

43. Gray A.B, Pasternack, G.B., Watson E.B., Warrick J.A., Goñi, M.A. (2015) Effects of antecedent hydrologic conditions, time dependence, and climate cycles on the suspended sediment load of the Salinas River, California. *Journal of Hydrology* 525, 632-649, 2015.04.025.
44. Gray, A., Pasternack, G.B., Watson, E.B., Warrick, J.A., Goñi, M.A. (2015) The effect of El Niño Southern Oscillation cycles on the decadal scale suspended sediment behavior of a coastal dry-summer subtropical catchment. *Earth Surface Processes and Landforms* 40, 272-284, doi: 10.1002/esp.3627.
45. Gray, A.B., Pasternack, G.B., Watson, E.B., Goñi, M.A., Hatten J.A., Warrick, J.A. (2016) Conversion to drip irrigated agriculture may offset historic anthropogenic and wildfire contributions to sediment production. *Science of the Total Environment*. DOI: 10.1016/j.scitotenv.2016.03.018.
46. Gray, A.B., Pasternack, G.B., Watson, E.B., Goñi, M.A. (2016) Abandoned channel fill sequences in the tidal estuary of a small mountainous, dry-summer river. *Sedimentology*. DOI: 10.1111/sed.12223.
47. Chen, S., Goñi, M.A., Torres, R. (2016) The Role of Salt Marsh Structure in the Distribution of Surface Sedimentary Organic Matter. *Estuaries and Coasts*. DOI: 10.1007/s12237-015-9957-z.
48. Hatten, JA., Goñi, M.A. (2016) Cupric oxide (CuO) oxidation detects pyrogenic carbon in burnt organic matter and soils. *PLOS ONE*. DOI: 10.1371/journal.pone.0151957

Posters & Presentations

2005

1. Howell K. A., Reimers C. E., Alleau Y., Stecher H. A. Analytical optimization and inter-comparison of voltametric, amperometric and spectrophotometric methods for determination of μM sulfide in anoxic seawater. Gordon Research Conference on Chemical Oceanography. August 8 – 12, 2005, Tilton, NH

2008

2. Goñi, M.A., Alleau, Y., Woodworth, M.P., Thunell, R.T. High resolution record of organic matter fluxes in the Cariaco Basin over the past two millennia. 2008 Ocean Sciences Meeting, Orlando, FL, March 2 – 7, 2008.
3. Goñi, M.A., Y. Alleau, N. Monacci, M. Cathey, Y.H. Kim, G. Voulgaris. 2008. Contrasts in the flux and composition of particulate organic matter in a temperate estuary as a function of river discharge. AGU Fall Meeting, San Francisco, CA, December 15 -19, 2008.

2010

4. Goni, M., Alleau, Y., Klein, B. Z., Macdonald, R., Yunker, M., Gobeil, C., Kuzyk, Z.Z. 2010. Carbon distribution and sources in surface margin sediments from the North American Arctic. 2010 Ocean Sciences Meeting, Portland, Oregon, 22-26 February 2010

2011

5. Portier, E., Kurtz, A., Moore, E., Alleau, Y., Goni, M. 2011. Sources and Distribution of Organic Matter Sequestered in Floodplain Sediments from the Fly River, Papua New Guinea. AGU Chapman Conference on Source to Sink Systems Around the World and Through Time. Oxnard, California, USA, 24–27 January 2011.
6. Heston, D., Goni, M.A., Alleau, Y., Pakenham, A., Wheatcroft, R.A. 2011. Organic matter burial in estuarine sediments affected by subduction zone earthquakes. AGU Chapman

Conference on Source to Sink Systems Around the World and Through Time. Oxnard, California, USA, 24–27 January 2011.

7. Smith, S.D., Goni, M.A., Alleau, Y., Borgeld, J., Wheatcroft, R.A. 2011. Chemical Composition of Organic Matter in Surface Sediments of the Eel River Shelf Depocenter. American Geophysical Union Fall Meeting 2011: 5-9 December, San Francisco, CA, USA.

2012

8. Goni, M.A., Hastings, R., Wheatcroft, R., Steingass, S., Alleau, Y., Smith, S., Hatten, J., Borgeld, J., Pasternack, G., Gray, A., Watson, E. 2012. Delivery and accumulation of particulate organic matter along the west coast of North America: the importance of small mountainous rivers. 2012 Ocean Sciences Meeting, 20-24 February 2012, Salt Lake City, UT, USA.
9. Kolczynski, L., Alleau, Y., Goñi, M., St-Onge, G., Habertzettl, T., Lajeunesse, P. (2012) Organic matter accumulation in Hudson Bay over the Late Holocene. Goldschmidt 2012 Conference, June 24-29, 2012, Montreal, Canada.

2014

10. Coccoli, C., Goñi, M., Alleau, Y., Smith, L. (2014). Long-term patterns in organic matter burial off the Oregon coast over the Holocene. 2014 Ocean Sciences Meeting: 23-24 February 2014. Honolulu, HI, USA.
11. Corvi, E., Goñi, M., Alleau, Y. (2014). Characterization and spatial distribution of particulate organic matter in the Arctic Ocean. 2014 Ocean Sciences Meeting: 23-24 February 2014. Honolulu, HI, USA.
12. Welch, K., Goñi, M., Alleau, Y. (2014). Analysis of particulate organic matter concentration, composition and distribution along the Cascadia margin of the Pacific Ocean. 2014 Ocean Sciences Meeting: 23-24 February 2014. Honolulu, HI, USA.
13. Goñi, M.A., Lerczak J., Smith, L., Lemagie, E., Helm, J., Alleau Y., Thomas, J. (2014). Sediment and particulate organic matter transport dynamics across a small mountainous river estuary during winter flood conditions – Alsea Bay, Oregon. 2014 Ocean Sciences Meeting: 23-24 February 2014. Honolulu, HI, USA.
14. Goñi, M., Alleau, Y., Kolczynski, L., St-Onge, G., Habertzettl, T., Lajeunesse, P. (2014) Organic matter accumulation in sediments from Hudson Bay - a high-resolution record of climate/watershed processes over the Late Holocene. Arctic Change 2014 Conference, 8-12 December 2014, Ottawa, Canada.
15. Coccoli, C.A., Goñi, M.A., 2, Alleau, Y., Smith, L. (2014) Organic Matter Sequestration in Oregon Margin Sediments: Tectonic, Climatic and Oceanographic Controls. American Geophysical Union Fall Meeting 2014: 15-19 December, San Francisco, CA, USA.
16. Alleau, Y., Goñi, M., Kolczynski, L., St-Onge, G., Lajeunesse, P., Habertzettl, T. (2014) Terrestrial and Marine Organic Matter Accumulation in Hudson Bay: A High-Resolution Record of Climate/Watershed Processes over the Late Holocene. American Geophysical Union Fall Meeting 2014: 15-19 December, San Francisco, CA, USA.
17. Goñi, M.A., Lerczak, J.A., Smith, L., Lemagie, E.P., Alleau, Y. (2014) Seasonal and Event Scale Forcing on the Magnitude and Composition of Particulate Organic Matter Fluxes Across a Small Mountainous River Estuary. American Geophysical Union Fall Meeting 2014: 15-19 December, San Francisco, CA, USA.

2015

18. Lerczak, J., Goñi, M., Lemagie, E., Winters, D., Alleau, Y. (2015) The timing of suspended sediment flux at the riverine and ocean boundaries of a small mountainous river estuary. CERF 23rd Biennial Conference November 8-12, 2015 in Portland, OR.
19. Goñi, M.A., Lerczak, J., Smith, L., Welch, K., Lemagie, E., Alleau, Y (2015) Hydrological controls on particulate organic matter transport across a small, mountainous river estuary. CERF 23rd Biennial Conference November 8-12, 2015 in Portland, OR.

MAJOR SEAGOING / FIELD EXPEDITIONS

- ◆ January, February, May, July, and October 2018. *RV Oceanus*, weeklong cruises, Dr. C. Reimers chief scientist. Study of the role of seafloor processes in ocean chemical cycles and ecology: Multiple CTD/Niskin bottles casts near bottom water sampling for nutrients, [O₂], organic matter content/composition, and dissolved inorganic carbon. Landers deployment for Eddy covariance measurements. Discrete slow coring and subsequent 36-72hrs cores incubation studies
- ◆ December 2017. *RV Oceanus*, weeklong cruises, Dr. C. Reimers chief scientist. Same as above.
- ◆ January, February and March 2016. *RV Oceanus*, weeklong cruises, Dr. M. Goni chief scientist. Discrete water-column and flow-through surface water sampling, CTD/Niskin bottles casts
- ◆ Winter 2012, 2013 and 2014. Intensive small boat day cruises on Alsea River estuary for water/sediment collection
- ◆ July 11-23, 2012. *RV Oceanus*, Seasonal hypoxia off Cascadia; Dr. B. Hales chief scientist. Discrete water-column and flow-through surface water sampling, CTD/Niskin bottles casts
- ◆ September 6-12, 2011. *RV Wecoma*, Seasonal hypoxia off Cascadia; Dr. B. Hales chief scientist. Discrete water-column and flow-through surface water sampling, CTD/Niskin bottles casts
- ◆ August 11-September 3, 2011. *RV Wecoma*, Seasonal hypoxia off Cascadia; Dr. R. Feely/Dr. L. Juranek chief scientists. Discrete water-column and flow-through surface water sampling, CTD/Niskin bottles casts
- ◆ April 28-May 6, 2011. *RV Wecoma*, Seasonal hypoxia off Cascadia; Dr. B. Hales chief scientist
- ◆ June-July, 2009. *RV Wecoma*, Carbon delivery/deposition to US west coast. Coring cruise off Oregon and California rivers. Lead day-team for extensive sediment coring, sample cutting effort. Dr. M. Goñi chief scientist
- ◆ DARPA and NSF SFC2: *R/V Wecoma*. July 2005. Dr. C. Reimers chief scientist. “Seafloor bio-fuel cell: long-term power and effects on sedimentary organic matter”. Cruise preparation. Responsible for in-situ microprofiler setup (pH, H₂S, O₂, conductivity amperometric sensors), deployment/recovery. Recovery of bio-fuel cells, of lost equipment. Coring, core extruding and sampling/analyzing, Conductivity-Temperature-Depth/Rosette casts. A-frame operator and other deck work
- ◆ DARPA and NSF SFC1: *R/V Wecoma*. September 2004. Dr. C. Reimers chief scientist. Cruise preparation. Responsible for in-situ microprofiler setup (pH, H₂S, O₂, conductivity amperometric sensors), deployment/recovery. Deployment of bio-fuel cells. Coring, core extruding and sampling/analyzing, CTD/Rosette casts. A-frame operator and other deck work
- ◆ DARPA and NSF SFC: *R.V Elakah*, 2004
Multiple day-cruises: phytoplankton/zooplankton material collection for microbial fuel cell experiments
- ◆ NSF research: *R/V Point Lobos*. May 2003. Dr. C. Reimers chief scientist
Preparation of bio-fuel cells to be deployed in the Monterey bay canyon cold seeps. Amperometric profiling (pH, H₂S, O₂, conductivity) of sediment cores brought back to land. Sample analysis

- ◆ GLOBEC: *R/V Wecoma*. March 2003. Dr M. Levine chief scientist. Multiple deployment of a Tethered Spectral Radiometer Buoy for data collection and comparison with satellite measurements. A-frame operator and other on-deck work including deployment/recovery of other equipment
- ◆ COAST: *R/V Revelle*. January-February 2003. Dr Pat Wheeler chief scientist. Multiple deployment of a Tethered Spectral Radiometer Buoy. Water column sample collection for HPLC, Chl and absorption spectra. CTD/Rosette casts. A-frame operator and other on-deck work
- ◆ CRETM: *R/V Robert Gordon Sproul*. June 1999. Dr C. Simenstad chief scientist. Suspended particle material collection for the Columbia River Estuary Turbidity Maximum project, part of the Land Margin Ecosystem Research program. Samples prepared for total suspended material, particulate organic carbon/nitrogen content, lignin analysis, liquid/gas chromatography.

SERVICE

- ◆ Committees, Commissions and Boards
 - Served on the College of Earth, Ocean and Atmospheric Sciences Student Advisory Committee for the school year 1998-1999. Audited COAS about its computer capability and its relevance to the students and other users of the computer labs. Submitted a report to the Dean/computer committee pointing out strength and weaknesses and stressing out needs and possible improvements.
 - 2017- present: Emergency Preparedness Weniger Hall monitor
 - Regularly provide technical support and lab space for students and PIs who do not have such access/support, both in CEOAS and FERM
- ◆ Service to the public (professionally related)
 - Volunteered for the 2005 SeaFest at the Hatfield Marine Science Center in Newport, OR. I was giving tours of the *R/V Wecoma* to groups of people, providing them not only with the history and specificities of the vessel but also introducing the types of oceanographic research done on board the ship. Interesting conversations emerged from the public curiosity and questions
- ◆ Service to the public (non-professionally related)
 - Involved in many construction projects within the Corvallis/Newport communities: Spend 6 months rebuilding a burned house (electricity, plumbing, insulation, walling, tiling, main structure...) for a family of four who stayed at my house meanwhile.
 - Participated in the re-roofing of neighbor's houses.
 - Helped building a garage.
 - Multiple mechanical work done on friends & family vehicles
 - Landscaping, yard cleanup for several people.
 - Cut down trees to provide fire wood for people needing it
 - Served one year in the French military (1997-1998)

AWARDS, HONORS and DISTINCTIONS

2017 College of Forestry Dean's Award for outstanding achievement. "In recognition of efforts to create safe and high-functioning labs that generates reliable data; mentorship and training of students; devotion to work going above and beyond expectations"

ACTIVITIES / INTERESTS

Certified in Scuba Diving (Open Water)

Small business owner of Classic Cars and Motorcycle restoration

Community building through neighborhood BBQs, tool-share program, gardening and yard/house work-party organizing

Hiking / backpacking

Fishing