

CURRICULUM VITAE

Fabrice Veron

Interim Dean & Professor

School of Marine Science and Policy, University of Delaware
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PROFESSIONAL APPOINTMENTS

- 2021 - **Interim Dean**
College of Earth, Ocean, and Environment, University of Delaware
- 2017 - 2021 **Deputy Dean**
College of Earth, Ocean, and Environment, University of Delaware
- 2016 - **Professor**
School of Marine Science and Policy, University of Delaware
- 2010 - 2017 **Program Director for Physical Ocean Science and Engineering**
School of Marine Science and Policy, University of Delaware
- 2008 - 2016 **Associate Professor**
School of Marine Science and Policy, University of Delaware
- 2003 - 2011 **Adjunct research scientist**
Scripps Institution of Oceanography, USA.
- 2002 - 2008 **Assistant Professor**
College of Earth, Ocean, and Environment, University of Delaware.
- 2002 - **Director of Air-Sea Interaction Laboratory**
School of Marine Science and Policy, University of Delaware, Lewes
- 2002 - **Adjunct professor**
Civil and Environmental Engineering, University of Delaware.
- 2000 - 2001 **Post-Doctoral researcher**
University of California, San Diego, USA.
- 1995 - 2000 **Research Assistant**
University of California, San Diego, USA. (Supervisor: Prof. Melville)
- 1995 **Research Assistant**
University of Toronto, Toronto, Canada. (Supervisor: Prof. Loewen)
- 1994 **Research Assistant**
University College London, London, England. (Supervisor: Prof. Saffari)

EDUCATION

- 2000 **Ph.D. Oceanography - Applied Ocean Sciences**
Scripps Institution of Oceanography, University of California, San Diego, USA
- 1995 **DEA - Mechanical Engineering**
University of Bordeaux France
- 1994 **Maitrise - Mechanical Engineering**
University of Bordeaux France.
- 1993 **Licence - Mechanical Engineering**
University of Bordeaux France.

AWARDS & PRIZES

- 2008 NSF Career award
- 2005 ONR Young Investigator
- 2001 Edward A. Friemann Prize
(Excellence in Graduate Student Research - awarded once a year)
- 2000 Luigi Provasoli Award
(Outstanding paper in the Journal of Phycology - awarded once a year)

BOARD MEMBERSHIPS

Delaware Museum of Nature and Science
President's Advisory Committee on University Relations - NCAR/UCAR

SELECTED LEADERSHIP ACTIVITIES*

INTERIM DEAN OF THE COLLEGE OF EARTH, OCEAN, AND ENVIRONMENT 2021-Present

Administrative responsibilities:

- Administration of three departments (Geography & Spatial Sciences, Earth Sciences, and the School of Marine Science and Policy), Delaware College Sea Grant Program, Delaware Geological Survey, and Special Committee on Oceanic Research (SCOR) Secretariat.
- Oversee management of 75 faculty & research scientists, 95 staff and postdoctoral fellows, 470 undergraduate and 160 graduate students, and R/V Hugh Sharp ships operations
- Develop college budget (approx. \$36M) based on strategic initiatives and allocations of funds within the college
- Provide vision and direction for research and programmatic priorities
- Promote and facilitate the development of high-quality educational programs for students
- Oversee curricular development of the college
- Develop faculty and staff hiring plans and oversee faculty recruitment within the college
- Assign duties for all personnel within the college and oversee the quality of service rendered
- Interface with the Provost and President's offices including recommendations on all salary increases, promotions, and on all appointments, non-reappointments, and terminations
- Cultivate strategic partnerships with other colleges at the University
- Operate college space and guide infrastructure investments to support scholarship and teaching
- Oversee faculty promotion and review process
- Attend and actively participate in President's Executive Council and Dean's council
- Perform annual appraisal and development of direct report staff
- Address college diversity and inclusion challenges
- Engage with external stakeholders including state and federal legislature
- Connect and engage alumni and donors – Fundraising & development (\$1M/year)

College's Accomplishments:

Student Success:

- Admitted our largest undergraduate class to date (project Fall 2022 is 17.5% increase over fall 2021)
- Reorganized student support services to provide consistent, year-around student services

- Hired a full-time undergraduate advisor
- Centralize graduate student support service
- Created new multidisciplinary programs to respond to the market demands
 - MS in Environmental Economics
 - Ph.D in Environmental Economics
 - MS in Environmental Science and Management (professional master)
 - Minor in Human Dimensions of Climate Change
 - Minor in Peace and Justice (CEOE lead)
 - Certificate in Sustainability (CEOE lead with CANR, CAS, COE, Graduate college)
 - Revitalized the Scuba program (including collaboration with Black Girls Dive Foundation)

Scholarly activities:

- Facilitate convergence research initiatives that build upon disciplinary strengths
- Generated large Multi-million collaborative proposals
 - Large-Scale CoPe: SHORES (Science and Hazards of Ocean Rural Environments and Societies) (\$19.9M) NSF; submitted
 - Large-scale CoPe: REACCT - REsilient, Adaptable Communities facing Coastal Threats Hub for integrated research and engagement (\$19.7M) NSF; submitted
 - AI Institute for Coastal Smart Digital Agriculture (AICoSDA) (~\$20M) - NSF (with DTU); submitted
 - Geopath (in progress)
 - OAE Research Award (\$10M - in progress)
 - ERC (\$23M - in progress)
- Provide support for two Congressional Directed Funding
 - Blue Economy tech center (\$1.3M)
 - Offshore wind training center (\$1M)
- Increased F&A and Research expenditure (see below)
- Established the Climate Change Science and Policy Hub
 - Secured \$0.5M in Estate gift
 - Established Climate Scholars affinity program (cohort of 40+ students)
 - Coordinated 9 UD faculty/graduate students for speaking engagements
 - Hosted Elizabeth Kolbert, M Jackson
 - Performed faculty interviews for UN CC conference (Cope26)
 - Helped to coordinate UD's Earth Day events including co-sponsoring a clothing swap and liaison with Student Sustainability Association (SSA)
 - Launched themed monthly UD-wide (faculty and student) Lunch & Learn
 - completed four including one for Polar interested scholars that led to the formation of a Polar Community
 - Participated in Coast Day, NCCL, RASCL, Switch Pitch, Earth Day, Marine Science Colloquium, Bethany Beach Women's Civics Club, Watersheds and UD Decision Days events
 - Moderated UN Ambassador's visit to Lewes campus
 - Co-PI on five collaborative NSF proposal initiatives - Three NSF research proposals submitted (2 CoPe, AI Inst) and two in development (GEOPATHS, ERC)
 - Chaired UD's Earth Day Committee and hosted the 1st Annual Presidential Climate Change Teach-In and Earth Week Environmental Film Festival
 - Funded approx. \$80,000 in Climate Change related Graduate Research Enhancement grants (10 students)
 - Funded \$35,000 in Faculty Course Dev grants with a goal of developing Climate Essential Certificates (14 faculty)

- Funded \$12,000 in Graduate Summer 2022 Policy Internships (2 students)
- Funded \$16,000 in Summer Scholars (4 students)

Enhancing workplace climate

- Supporting and elevating junior colleagues through monthly “lunch and learn”
- Established rationale and plans for staff hybrid work schedule
- Facilitated the development and implementation of faculty mentoring plans
- Conducted a year-long diversity audit (with Adam Foley and OEI)
- Supported URGE pod/discussion (Unlearning Racism in the Geosciences)
- Initiated a code of conduct in all units
- Developed policies for
 - course buyout
 - online overload teaching
- Initiated a comprehensive workload transparency policy for faculty

Community Engagement

- DESG won the Southern Delaware Tourism Partner of the Year Award
- DESG secured a NOAA B-WET grant to develop environmental literacy plans for several schools in DE
- Derelict Crab Pot Roundup resulted in the removal of 99 crab pots equaling almost 2000 pounds of debris from the Indian River
- UD satellite dishes process sea surface data and provide “avoid” maps of protected species for commercial and sport fishing.
- Ed Hale Early Career Achievement Award at Mid-Atlantic Regional Sea Grant meeting for his work on the recovery of shad in the Brandywine, leveraging research to engage and educate the community in Wilmington
- Taught dual enrolment class with Newark High
- Established partnerships with local high schools for dual enrolment courses and two summer camps for rising 8-9 and 10-11-12 high school students

Finances

- Stabilized CEOE budget
 - FY21 deficit was \$1.6M – our projected FY22 deficit is \$~200K (10-fold down from the budget office’s projection of ~\$2.3M)
 - 14.4% increase in F&A (FY22: \$3.25M, up from \$2.84M in FY21)
 - 14.1% increase in research expenditure (\$11.5M up from \$10.1M in FY21)
 - 5.6% increase in enrolment
 - 15% increase in Student Credit Hours delivered during 2021-2022

OTHER LEADERSHIP ACTIVITIES

- Served as Deputy Dean, 2017-2021*
- Served as Program Director; physical Ocean Science and Engineering, 2010-2017
- Led the college strategic planning committee 2018-2019 (Co-chair: Bonnie Ram)
<https://www.udel.edu/academics/colleges/ceoe/about/strategic-plan/>
- Initiated & led the creation of a large University-wide climate change focused Hub
- Secured foundation funding & assisted with fundraising and development activities

- Coordinated a holistic college faculty hiring plan with the department chairs
- Processed international partnerships with Xiamen University, and Korean Institute for Marine Science and Technology
- Serve as college research dean
 - Act as liaison between CEOE research activities and UD research office
 - Review F&A distribution policies at UD
 - Review limited submission proposals
 - Handle grant proposal match funds
- Serve on the University research council
- Champions diversity, equity, and inclusion activities in the College.
 - <https://www.udel.edu/academics/colleges/ceoe/about/dei/>
 - Developed a College-wide code of conduct
 - Bolstered harassment and workplace issues reporting structure
 - Developed educational resources on racism
 - Organized college-wide seminar on racism, micro-aggression, and misogyny in the workplace
 - Initiated workload transparency policy in the departments
- Launched a mentoring program for junior faculty
 - Lead monthly lunches to address issues pertinent to junior faculty such as P&T, Covid accommodation, workload, university policies, grad student recruitment and mentoring, team building, navigating research centers and institutes, etc.
- Chair the college academic council
 - Evaluated several new programs:
 - Eco-entrepreneurship
 - GIS certificate
 - Offshore wind power academy
 - Climate Scholars
 - Generate and review College Policies
- Oversee college space and facilities, and technology services
- Currently serving as the College Covid point of contact
 - Coordinating phased research approvals
 - Balancing online and in-person teaching schedules
 - Assisting faculty navigate Covid new regulations at UD
- Reviewed and update all College policies; created policies on overload online teaching compensation and teaching buy-out
- Assist with annual college budget meeting with UD administration
- Supervise 5-year term review for department chairs
- Led several college convocations and commencement ceremonies
- Attend as the dean's proxy at the university president's council and provost executive committee,
- Member of steering committees for the Delaware Biotech Institute, UD Healthy Communities
- Professional development:
 - Customized the Student Experience Through Peer Mentorship
 - AGU Chair meeting in Austin TX: Summit on Improving Geoscience Graduate Student Preparedness
 - Attended year-long ULEAD (leadership) training
 - Attended Cade webinar LGBT
 - Webinar on AGU's Ethics and Equity Center
 - Overcome Unconscious Bias & Racial Tension,
 - Mentoring Students of Color: Build Relationships That Foster Cross-Cultural Understanding, Trust and Accountability to Ensure Their Success.

Mentoring Graduate Students: Strategic Initiatives to Ensure They Persist & Succeed
Closing the Opportunity Gap in STEM Through Mentorship

- Attend all meetings for the US global coalition & the Consortium for Ocean Leadership
- Served on numerous university-wide search committees for hires of faculty cluster, director of human resources, institute directors, research office grant facilitator, etc...
- Organize Dean's leadership team retreat (Jan 2020)

*The College's success is a team effort. A comprehensive and chronological list of my leadership activities as deputy dean between 2017 and 2021 is provided starting page 37.

SCHOLARLY WORK

RESEARCH INTERESTS

Air-Sea interactions; Turbulence and mixing at free surfaces; Rain-wave interactions, Sea-spray generation and influence on air-sea fluxes; Atmospheric and oceanic boundary layers; Ocean surface infra-red remote sensing; Linear and non-linear surface gravity capillary waves; Wind wave generation; Wave-current interactions;

COLLABORATORS

Archer, A. L. (US)	Melville, W.K. (SIO/UCSD)
Babanin, A.V. (Univ. Adelaide, AU)	McGillis, W.R. (Columbia University)
Banner, M.L. (Univ. New South Wales, AU)	Mieussens, L. (Univ. of Bordeaux, France)
Bazilevs, Y. (UC San Diego)	Misra, S.K. (UD)
Brocchini, M. (Univ. di Genova, IT)	Hafsi, A.A. (Univ. South Florida)
Buckley, M. (Helmholtz-Zentrum)	Harrison E.L. (US Navy)
Carpenter J.R. (Helmholtz-Zentrum)	Ho, D.T. (Columbia University)
Colle, B. A. (SUNY Stony Brook)	Oliver, M. (UD)
Donelan, M.A. (Univ. of Miami)	Richter, D. (Notre Dame University)
Feddersen, F. (SIO/UCSD)	Secora, J. (Rutgers University)
Foster, M. (Rutgers University)	Sienkiewicz, M.J (SUNY Stony Brook)
Funke, C.S. (Helmholtz-Zentrum)	Tejada-Martinez, A. (Univ. South Florida)
Hare, J. (Univ. of Colorado)	Timmermans, M.L., (Yale)
Hara, T. (Univ. of Rhode Island)	Thomas, M. (UD)
Kambhame, C.T (UD)	Veron, D.E. (Rutgers University - UD)
Kobayashi, N. (UD)	Weaver, C. (Rutgers University)
Kukulka, T. (UD)	White, C. (Solar turbines)
Latz, M.I. (SIO/UCSD)	Young, I.R. (Univ. of Adelaide, Au)
Lenain, L. (SIO/UCSD)	Zappa, C.J. (LDEO-Columbia)
Lubin, P. (Univ. of Bordeaux, France)	Zirbel, M.J. (Skidaway institute)
McCormick, C. (Univ. of Miami)	

FIELD EXPERIENCE

2019	Gas flux in shallow water coral reefs - Hawaii (25 days)
2017	Gas flux in shallow water coral reefs - Dongsha Atoll; Taiwan (25 days)
2013 - 2014	Long-term wind and wave monitoring, Cape wind tower, MA. (~30 days)
2010	Hi-Res ONR R/P FLIP (21 days at sea - Chief Scientist)
2009	Hi-Res ONR Pilot R/P FLIP July (12 days at sea)
2003	R/P FLIP August (14 days at sea)
2002	Passas Experiment - R/P FLIP July (10 days at sea)
2002	Mid-Frequency Experiment - R/P FLIP May-June 2002 (12 days at sea)
2003 - 2004	Long-term wave monitoring SIO pier.
1999	Recover buoy and moorings R/V McGaw (8 days at sea)
1999	Deploy buoy and moorings R/V Sproul (4 days at sea)
1998	Deploy/ recover buoy and moorings R/V Sproul (10 days at sea)
1997	Deploy/ recover buoy and moorings R/V Sproul (4 days at sea)
1996	Deploy buoy and moorings R/V Sproul (4 days at sea)
1995 - 2002	Research Scuba Diver certification - Extensive shallow water diving for the deployment of acoustic and oceanographic sensors.

PROFESSIONAL AFFILIATIONS

American Geophysical Union

PUBLICATIONS

Publication Type	Count
Journal articles	56
Other publications	6
Conference proceedings	13
Conference posters	27
Conference presentations	106
Invited presentations	46
Journal articles under review	1
Journal covers	4

Table 1. Summary of my scholarly publication activities.
 h-index:27. i-10 index: 40. Citations: 2501
 (data from Google Scholar – August 2022)

PEER-REVIEWED JOURNAL ARTICLES

Underline indicate graduate students supervised by F. Veron

Double Underline indicate undergraduate students supervised by F. Veron

1. Carpenter, R., M.P. Buckley, **F. Veron**, 2022. Evidence of the critical layer mechanism in growing wind waves. *J. Fluid Mech*, 948, A26. doi.org/10.1017/jfm.2022.714.
2. Ruth, D. J., B. Néel, M.A. Erinin, M. Mazzatent, R. Jaquette., **F. Veron**, & L. Deike, 2022. Three-dimensional measurements of air entrainment and enhanced bubble transport during wave breaking. *Geophysical Research Letters*, 49, e2022GL099436. <https://doi.org/10.1029/2022GL099436>
3. Erinin, M. A., Néel, B., Ruth, D. J., Mazzatenta, M., Jaquette, R. D., **Veron, F.**, & Deike, L. 2022. Speed and acceleration of droplets generated by breaking wind-forced waves. *Geophysical Research Letters*, 49, e2022GL098426. <https://doi.org/10.1029/2022GL098426>
4. Funke, C. S, M.P. Buckley, L.K.P. Schultze, **F. Veron**, M-L. E. Timmermans, and J.R. Carpenter. 2021. Pressure fields in the airflow over wind-generated surface waves. *J. Phys. Oceanogr.* JPO-D-20-0311.1
5. Yousefi, K. and **F. Veron**, 2021: Turbulent and wave kinetic energy budgets in the airflow over wind waves. *J. Fluid Mech*, 920, A33, <https://doi.org/10.1017/jfm.2021.377>
6. Buckley, M.P., **F. Veron**, & K. Yousefi, 2020. Surface viscous stress over wind-driven waves with intermittent airflow separation. *J. Fluid Mech*, 905, A31. doi.org/10.1017/jfm.2020.760
7. **Veron, F.**, & L. Mieussens, L., 2020. An Eulerian model for sea spray transport and evaporation. *J. Fluid Mech*, 897, A6. doi:10.1017/jfm.2020.314
8. Yousefi, K., **F. Veron**, and M.P. Buckley, 2020: Momentum flux measurements in the airflow over wind-generated surface waves. *J. Fluid Mech*, doi.org/10.1017/jfm.2020.276
9. Yousefi, K. and **F. Veron**, 2020: Boundary layer formulations in orthogonal curvilinear coordinates for flow over wind-generated surface waves. *J. Fluid Mech*, 888(A11).
10. Yousefi, K., **F. Veron**, and M.P. Buckley, M. P., 2020: Measurements of airside shear-and wave-induced viscous stresses over strongly forced wind waves. In *Recent Advances in the*

Study of Oceanic Whitecaps (pp. 77-94). Springer, Cham. <https://doi.org/10.1007/978-3-030-36371-06>

11. Hasfi, A. A. Tejada Martinez, and **F. Veron**, 2020: DNS and LES of small-scale Langmuir circulation and scalar transfer across the air-sea interface. *J Fluid Mech.*, DOI: <https://doi.org/10.1017/jfm.2019.802>
12. Husain, N.T., T. Hara, M.P. Buckley, K. Yousefi, **F. Veron**, and P.P. Sullivan, 2019: Boundary Layer Turbulence over Surface Waves in a Strongly Forced Condition: LES and Observation. *J. Phys. Oceanogr.*, 49, 1997-2015, doi: 10.1175/JPO-D-19-0070.1.
13. Davies, A. R., **F. Veron**, and M.J. Oliver, 2019: Biofloat observations of a phytoplankton bloom and carbon export in the Drake Passage. *Deep Sea Res.*, 146, 61-102, doi 10.1016/j.dsr.2019.02.004
14. Kukulka, T, and **F. Veron**, 2019: Lagrangian Investigation of Wave-Driven Turbulence in the Ocean Surface Boundary Layer. *J. Phys. Oceanogr.*, 49, 1997-2015, doi: 10.1175/JPO-D-18-0081.1
15. Lubin P., O. Kimmoun, **F. Veron**, and S. Glockner, 2018: Discussion on instabilities in breaking waves: Vortices, air-entrainment and droplet generation. *Europ. J. Fluid Mech* <https://doi.org/10.1016/j.euromechflu.2018.05.006>
16. Buckley M., and **F. Veron**, 2018: The turbulent airflow over wind generated surface waves, *Europ. J. Fluid Mech.* <https://doi.org/10.1016/j.euromechflu.2018.04.003>
17. Buckley M., and **F. Veron**, 2017: Airflow measurements at a wavy air–water interface using PIV and LIF, *Exp Fluids*. 58: 161. <https://doi.org/10.1007/s00348-017-2439-2>
18. Harrison, E.L., and **F. Veron**: 2017: Near-surface turbulence and buoyancy induced by heavy rainfall. *J. Fluid Mech.* 830, 602-630, DOI: [10.1017/jfm.2017.602](https://doi.org/10.1017/jfm.2017.602)
19. Richter, D. H., and **F. Veron**: 2017: Sea Spray: an outsized influence on weather and climate. *Parity*, July 2017, 57-61. (in Japanese)
20. Hasfi, A., A.A. Tejada Martinez, and **F. Veron**, 2017: Direct numerical simulation of scalar transfer across an air-water interface during inception and growth of Langmuir circulation, *Computers and Fluids*. 158, 49-56. Doi:10.1016/j.compfluid.2017.06.021
21. Richter, D. H., and **F. Veron**: 2016: Sea Spray: an outsized influence on weather and climate. *Physics Today*, November 2016, 34-39.

Journal Cover

22. Archer, C. L., B. A. Colle, D. L. Veron, **F. Veron**, and M. J. Sienkiewicz, 2016: On the predominance of unstable atmospheric conditions in the marine boundary layer offshore of the U.S. northeastern coast. *Journal of Geophysical Research - Atmospheres*, doi: 10.1002/2016JD024896.
23. **Veron, F.**, and L. Mieussens, 2016: A kinetic model for particle-surface interaction applied to rain falling on water waves, *J. Fluid Mech.* 796, 767-787.
24. Hafsi, Y. Ma, M. Buckley, A.E. Tejada-Martinez, and **F. Veron**, 2016: DNS and measurements of scalar transfer across an air-water interface during inception and growth of Langmuir circulation, *IOP Conference Series: Earth and Environmental Science*, 35, 012006. doi:10.1088/1755-1315/35/1/012006
25. Buckley M., and **F. Veron**, 2016: Structure of the airflow above surface waves, *Journal Physical Oceanography*, DOI: <https://doi.org/10.1175/JPO-D-15-0135.1>
26. Colle, B. A., M. J. Sienkiewicz, C. Archer, D. Veron, **F. Veron**, W. Kempton, and J. E. Mak, 2016: Improving the Mapping and Prediction of Offshore Wind Resources (IMPOWR), Experimental Overview and First Results. *Bulletin of the American Meteorological Society*; DOI:10.1175/BAMS-D-14-00253.1.

Journal Cover

27. **Veron, F.** 2015: Ocean Spray. *Annu. Rev. Fluid Mech.*, 47, 507-538. Doi:10.1146/annuerv-fluid-010814-014651.

28. Mueller, J.A., and **F. Veron**, 2014a: Impact of Sea Spray on Air-Sea Fluxes Part I: Results from Stochastic Simulations of Sea Spray Drops over the Ocean. *J. Phys. Oceanogr.*, 44, 2817-2834, doi: 10.1175/JPO-D-13-0245.1.
29. Mueller, J.A., and **F. Veron**, 2014b: Impact of Sea Spray on Air-Sea Fluxes Part II: Feedback effects. *J. Phys. Oceanogr.*, 44, 2835-2853, doi: 10.1175/JPO-D-13-0246.1.
30. Harrison, E.L., **F. Veron**, D. T. Ho, M. C. Reid, P. Orton, and W. R. McGillis. 2012: Nonlinear interaction between rain and wind induced air-water gas exchange. *J. Geophys. Res.*, (117), C03034, 16 PP., 2012, doi:10.1029/2011JC007693.
31. **Veron F.**, C. Hopkins, E. L. Harrison, and J. A. Mueller, 2012: Sea spray spume droplet production in high wind speeds. *Geophysical Research Letters*, 39, L16602, 5 PP., 2012, doi:10.1029/2012GL052603.

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32. **Veron, F.**, W.K. Melville, and L. Lenain, 2011: The Effects of Small-Scale Turbulence on Air-Sea Heat Flux. *J. Phys. Oceanogr.*, 41(1): 205-220.
33. Mueller, J.A., and **F. Veron**, 2010a: Bulk formulation of the heat and water vapor fluxes at the air-sea interface including non-molecular contributions. *J. Atmosph. Sciences.*, 67(1): 234-247.
34. Mueller, J.A., and **F. Veron**, 2010b: A Lagrangian stochastic model for sea spray evaporation in the atmospheric marine boundary layer. *Boundary Layer Meteorology*. 137: 135-152.
35. Mueller, J.A. and **F. Veron**, 2009a: Nonlinear Formulation of the Bulk Surface Stress over Breaking Waves: Feedback Mechanisms from Air-flow Separation. *Boundary Layer Meteorology*. 130(1): 117-134.
36. Mueller, J.A. and **F. Veron**, 2009b: Lagrangian Stochastic Model for Heavy Particle Dispersion in the Atmospheric Marine Boundary Layer. *Boundary Layer Meteorology*. 130(2): 229-247.
37. Veron, D. E., C. P. Weaver and **F. Veron**, 2009: Stochastic Radiative Transfer on Modeled Cloud Fields. *IEEE Geosciences and Remote Sensing Letters*. 6(2): 184-188.
38. **Veron, F.**, W.K. Melville, and L. Lenain, 2009: Measurements of ocean surface waves and surface turbulence interactions. *J. Phys. Oceanogr.*, 39(9): 2310-2323.
39. Mueller, J.A., and **F. Veron**, 2009c: A Sea State-Dependent Spume Generation Function. *J. Phys. Oceanogr.*, 30(9): 2363-2372.
40. **Veron, F.**, W.K. Melville, and L. Lenain. 2008: Infrared techniques for measuring ocean surface processes. *J. Atmos. and Ocean. Technol.*, 25 (2): 307-326.
41. **Veron, F.**, W.K. Melville, and L. Lenain. 2008: Wave-coherent air-sea heat flux. *J. Phys. Oceanogr.*, 38 (4): 788-802.
42. Misra, S.K., J.T. Kirby, M. Brocchini, **F. Veron**, M. Thomas, and C. Kambhamettu, 2008: The mean and turbulent flow structure of a weak hydraulic jump, *Phys. Of Fluids*. 20(3) - 035106.
43. **Veron, F.**, G. Saxena and S Misra. 2007: Measurements of viscous tangential stresses in the separated airflow above wind waves. *Geophysical Research Letters*, 34, L19603, doi: 10.1029/2007GL031242.
44. Misra, S.K., M. Thomas, J.T. Kirby, M. Brocchini, **F. Veron**, and C. Kambhamettu, 2006: Estimation of complex air-water interfaces from PIV images, *Exp. In Fluids*, 40(5), 764-775.
45. Feddersen, F, and **F. Veron**, 2005: Wind effects on shoaling wave shape, *J. Phys. Oceanogr.*, 35(7), 1223-1228.
46. Chruch T. M, **F. Veron** and T.D. Jickells, 2005: "Coastal Atmospheric Chemistry" in Chapter 4, *Coastal Atmospheric circulation dynamics*. Coastal Atmospheric phenomena. Coupled Coastal Wind-Wave-Current Dynamics. SCOR working group.

47. Ho, D.T., **Veron, F.**, Harrison, E.L., Bliven, L.F., Scott, N., McGillis, W.R. 2005: The combined effect of rain and wind on air-water gas exchange: A feasibility study. *J. Mar. Syst.*, 66(1-4), 150-160.
48. Young, I. R., M. L. Banner, M.A. Donelan, A.V. Babanin, **F. Veron**, W.K. Melville, and C. McCormick, 2004: An Integrated Study of the Wind Wave Source Term Balance in Finite Depth Water. *J. Atmos. and Ocean. Technol.*, 22(7), 814-831.
49. Melville, W. K., **F. Veron** and C. White, 2002: The velocity field under breaking waves: coherent structures and turbulence. *J. Fluid Mech.*, 454, 203-233.
50. **Veron, F.**, and W. K. Melville, 2001: Experiments on the stability and transition of wind driven water surfaces. *J. Fluid Mech.*, 446, 25-65.
Award: *Edward A. Frieman Prize.*
51. Zirbel, M. J., **F. Veron**, and M. I. Latz, 2000: The reversible effect of fluid flow on the morphology of the dinoflagellate *Ceratocorys horrida* (peridinales). *J. Phycol.*, 36, 46-58.
Award: *Luigi Provasoli Award.*
Journal Cover
52. **Veron, F.**, and W. K. Melville, 1999: Laboratory studies of the initiation of Langmuir circulations and turbulence. *Fourth International Symposium on Air-Sea Interaction*. Sydney, Australia. M. L. Banner, editors. 265-272.
53. Melville, W. K., C. White, **F. Veron**, and E. Luft, 1999: Laboratory measurements of turbulence under breaking waves. *Fourth International Symposium on Air-Sea Interaction*. Sydney, Australia. M. L. Banner, editors. 211-218.
54. **Veron, F.**, and W. K. Melville, 1999: Laboratory measurements of Langmuir circulations and surface waves. *A Symposium on Fluid Mechanics and the Environment: Dynamical Approaches*. Ithaca, New York, USA. J. L. Lumley, editor. 401-412.
55. **Veron, F.**, and W. K. Melville, 1999: Pulse-to-pulse coherent Doppler measurements of waves and turbulence. *J. Atmos. and Ocean. Technol.*, 16, 1580-1597.
56. Melville, W. K., R. Shear, and **F. Veron**, 1998: Laboratory measurements of the generation and evolution of Langmuir circulations. *J. Fluid Mech.*, 364, 31-58.

NON-REFEREED PUBLICATIONS

1. Harrison, E.L., **F. Veron**, D. T. Ho, M. C. Reid, P. Orton, and W. R. McGillis, 2012: EOS AGU Journal Highlights: In calm seas, precipitation drives air-sea gas exchange.
2. **Veron F.**, C. Hopkins, E. L. Harrison, and J. A. Mueller, 2012: EOS AGU Journal Highlights: High-speed imagery captures new sea spray formation mechanism.
3. **Veron, F.**, W.K. Melville, and L. Lenain, 2010: Wave Modulated turbulence fields at the ocean surface and related air-sea fluxes. *NSF CBMS proceedings*.
4. **Veron, F.**, 2009: Surface turbulence Measurements at Ohmsett. *Report to US Minerals Management Service. SL Ross*.
5. **Veron, F.** 2008: Airflow separation above wind waves. *Solas News*, 8. 24-25.
6. Feddersen, F. and **F. Veron**, 2005: BAMS Research highlights: Wind and waves.

CONFERENCE PROCEEDINGS

1. **Veron, F.**, Y. Ma, M. P Buckley, A Tejada Martinez, Amine Hasfi 2016: Laboratory measurements of the inception and evolution of centimeter-scale Langmuir Turbulence. *Proceedings of ICTAM 16*, Montreal, Canada.
2. Buckley M P., and **F. Veron**, 2016: Structure of the airflow above surface gravity waves, *Proceedings of ICTAM 16*, Montreal, Canada.
3. Hafsi, Y. Ma, M. Buckley, A.E. Tejada-Martinez, and **F. Veron**, 2015: DNS and measurements of scalar transfer across an air-water interface during inception and growth of Langmuir

circulation, *Proceedings of The International Symposium on Gas Transfer at Water Surfaces*, Seattle, USA.

4. Buckley M., and **F. Veron**, 2012: Airflow separation over surface gravity waves, *Proceedings of ICTAM 12*, Beijing, China.
5. Buckley M., F. Bernard, and **F. Veron**, 2010: Donut-shaped Bubbles Formed by Raindrops. *American Physical Society Meeting, Division of Fluid Dynamics*, Long Beach, USA.
6. **Veron, F.**, J. Mueller, and M. Buckley, 2008: Air-flow separation above wind-waves. *Proceedings of ICTAM 08*, Adelaide, Australia.
7. Misra, S.K., J.T. Kirby, M. Brocchini, **F. Veron**, M. Thomas, and C. Kambhamettu, 2005: Coherent turbulent structures in a quasi-steady spilling breaker, *Waves'05*, Madrid, Spain.
8. Misra, S. K., J. T. Kirby, M. Brocchini, M. Thomas, **F. Veron**, and C. Kambhamettu, 2004: Extra strain rates in spilling breaking waves. *Proc. 29th Int. Conf. Coastal Engrng.* Lisbon, Portugal.
9. **Veron F.**, and W.K. Melville: 2004: Measurements of the influence of ocean surface kinematics on air-sea heat fluxes, *Proceedings of ICTAM 04*, Warsaw, Poland.
10. **Veron, F.** and W. K. Melville 2001: Remote observations of the initial generation of surface waves. *IGARSS symposium*, Sydney. Australia.
11. **Veron, F.**, and W. K. Melville, 1998: Laboratory and field measurements of turbulence under breaking waves. *Proceedings Johns Hopkins Conference in Environmental Fluid Mechanics*. pp 155-156. Baltimore, USA.
12. Melville, W. K., E. Terrill, and **F. Veron**, 1997: Bubbles and turbulence under breaking waves. *Natural Physical Processes Associated with Sea Surface Sound*. T. G. Leighton, Editor. pp135-145. Southampton, UK.
13. **Veron, F.**, and W. K. Melville, 1996: Pulse-to-pulse coherent Doppler measurements of waves and turbulence: Laboratory and field testing. *Proceedings Microstructure Sensors Workshop*, Mt Hood, ONR.

CONFERENCE POSTERS

1. **Veron, F.**, and L. Mieussens, 2020: An Eulerian model for sea spray transport and evaporation, *American Geophysical Union. San Diego*.
2. Yousefi, K., **F. Veron**, and M. Buckley, 2020: Momentum flux budget across the air-water interface under strongly forced wind conditions. *American Geophysical Union. San Diego*.
3. Buckley, M., J. Horstmann, J. Carpenter, and **F. Veron**, 2018: Sub-millimeter scale turbulent airflow dynamics above waves, *European Geophysical Union, Vienna, Austria*
4. Yousefi, K., M. Buckley, **F. Veron**, N. Hussain, and T. Hara, 2017: Viscous and turbulent stress measurements over wind driven surface waves. *American Geophysical Union. New Orleans*.
5. **Veron, F.**, M. Buckley, and K. Yousefi, 2017: Airflow separation effects on the surface stress and TKE production over wind-driven waves. *European Geophysical Union, Vienna, Austria*.
6. Buckley M., and **F. Veron**, 2016: Structure of the airflow above surface waves, *European Geophysical Union, Vienna, Austria*.
Award: Outstanding Student Poster (Buckley).
7. Hafsi, Y. Ma, M. Buckley, A.E. Tejada-Martinez, and **F. Veron**, 2016: DNS and measurements of scalar transfer across an air-water interface during inception and growth of Langmuir circulation, *Ocean Science, New Orleans, LA*.
8. Brodie, J. F., D. E. Veron, C. L. Archer, and **F. Veron**, 2014: Modeling offshore wind farm configurations in a mesoscale atmospheric model to optimize power production, *American Geophysical Union – Ocean Science*, Feb 2014, Hawaii, USA.

9. Brodie, J. F., D. E. Veron, C. L. Archer, and **F. Veron**, 2014: Modeling offshore wind farm configurations in a mesoscale atmospheric model to optimize power production, *American Geophysical Union – Ocean Science*, Dec 2014, San Francisco, USA.
 10. Foster, M., and **F. Veron**, 2012: An Investigation of Wave Breaking off the Coast of Northern California, *ASLO*, Salt Lake City, USA.
 11. Brodie, J. F., D. E. Veron, C. L. Archer, and **F. Veron**, 2012: Investigation of turbine spacing on turbulent wake effects and power output using a mesoscale atmospheric model, AWEA Offshore WINDPOWER Conference and Exposition 2012, *American Wind Energy Association*, 9-11 October 2012, Virginia Beach, VA.
 12. Harrison, E.L., and **F. Veron**, 2011: rain effect on air-sea gas transfer, *SOLAS Summer school*, Corsica, France.
 13. Grossi, M.D., E.F., Geiger, A.J. Irwin, **F. Veron**, and M. Oliver, 2010: Predicting Open Ocean Density Profiles from Satellite Observations. *AGU Ocean Sciences*, Portland, USA.
 14. Buckley M., and **F. Veron**: 2010: Airflow separation above wind waves. *AGU Ocean Sciences*, Portland, USA.
 15. Mueller J.A., and **F. Veron**, 2009: Sea spray contributions to the air-sea fluxes at moderate and hurricane wind speeds. *American Geophysical Union meeting*, San Francisco, USA.
 16. LeBars D., and **F. Veron**, 2008: The role of rain in upper-Ocean mixing and momentum transfer. UDRF annual presentation, Newark, USA.
 17. Harrison E.L. and **F. Veron**, 2005: The impact of rainfall on the ocean surface at low wind speed. *Invited presentation, ASLO meeting*. Salt Lake city, USA.
 18. Veron, D., J. Secora, M. Foster, C. Weaver and **F. Veron**, 2005: Application Of Stochastic Techniques To The Arm Cloud-Radiation Parameterization Problem, *Proceedings from the 2005 ARM Science Team Meeting, Atmospheric Radiation Measurement Program*, Daytona Beach, USA.
 19. Mueller J.A., and **F. Veron**, 2005: A Lagrangian turbulent transport model of evolving sea-spray droplets over water waves. *American Meteorological Society annual meeting*. Atlanta, USA.
- Award:** *Best student Presentation* (Mueller).
20. Paterson C. F. and **F. Veron**, 2004: Particle Image Velocimetry analysis of rain induced mixing of the oceanic boundary layer. *Invited presentation, ASLO meeting*, Honolulu, Hawaii, USA.
 21. **Veron F.**, and W.K. Melville: 2004: Measurements of the influence of ocean surface kinematics on air-sea heat fluxes, *ICTAM 04*, Warsaw, Poland.
 22. Feddersen, F., and **F. Veron**, 2004: Wind effects on Shaoling wave shape, *American Geophysical Union meeting*, San Francisco, USA.
 23. Paterson C. F. and **F. Veron**, 2003: Particle Image Velocimetry analysis of rain induced mixing of the oceanic boundary layer. *Murdock conference*, Seattle, USA
 24. Latz, M. I., **F. Veron**, and M. J. Zirbel, 2000: The effect of flow on dinoflagellates: quantifying the shear in shaken flasks using DPIV. *Poster, American Geophysical Union*, San Antonio, USA.
 25. **Veron, F.**, and W. K. Melville, 2000: Laboratory and field measurements of the initiation of Langmuir circulations. *Poster, Fourth international symposium on gas transfer at water surfaces*. Miami, USA.
 26. **Veron, F.**, and W. K. Melville, 1999: Laboratory measurements of Langmuir circulations and turbulence. *100 years of discovery*. San Diego, USA
 27. **Veron, F.**, and W. K. Melville, 1998: Laboratory and field measurements of turbulence under breaking waves. *Poster, Johns Hopkins Conference in Environmental Fluid Mechanics*. Baltimore, USA.

PROFESSIONAL PRESENTATIONS

CONFERENCE PRESENTATIONS

1. Ruth, D. B. Neel, M. A Erinin, M. T. Mazzatenta, R. Jaquette, **F. Veron**, and L. Deike. 2022: Three-dimensional measurements of air entrainment and enhanced bubble transport during wave breaking. *American Physical Society Meeting, Division of Fluid Dynamics, Indianapolis.*
2. Jaquette, R., D. Richter, **F. Veron**, 2022 : Near Surface Dynamics of Inertial Droplets Produced by Wind Forced Mechanical Breaking Waves. *American Physical Society Meeting, Division of Fluid Dynamics, Indianapolis.*
3. Rocha-Brownell, K., S. Wells, K. H. Seh, M. Erinin, L. Deike, R. Jaquette, **F. Veron**, D. Richter, 2022: Large Eddy Simulation of Droplet Transport Near Real Multispectral Waves. *American Physical Society Meeting, Division of Fluid Dynamics, Indianapolis.*
4. Addona, F., T. Hara, **F. Veron**, 2022: Laboratory experiments on air-sea interaction dynamics for shoaling waves. *American Physical Society Meeting, Division of Fluid Dynamics, Indianapolis.*
5. Yang, H., G. Singh Hora, **F. Veron**, K. Yousefi, M. Giometto, 2022: Estimation of surface viscous stress from wave profiles using deep neural networks, *American Physical Society Meeting, Division of Fluid Dynamics, Indianapolis.*
6. Ruth, D.J., B. Neel, M.A. Erinin, M. Mazzatenta, R.D. Jaquette, **F. Veron**, and L. Deike Entrained bubble dynamics under breaking wind-waves, WISE conference
7. Wagner, G., N Pizzo, L. Lenain, and **F. Veron**, 2022: Wind on calm water. WISE conference.
8. Brumer, S., Bouin, M.N., Cathelain, M., Leckler, F., Branger, H., Piazzolla, J., **Veron, F.**, Michelet, N., Filipot, J.F. and Redelsperger, J.L., 2022. Impacts of Sea Spray in a coupled ocean-wave-atmosphere model: Mediterranean Sea case studies (No. EGU22-11717). Copernicus Meetings
9. Mazzatenta, M., M. Erinin, B. Neel, D. Ruth, R. Jaquette, **F. Veron**, L. Deike, 2021: Laboratory experiments on wind-wave breaking dynamics and the associated drops, bubbles, and underwater turbulence. *American Physical Society Meeting, Division of Fluid Dynamics, Phoenix.*
10. Yousefi, K., & **F. Veron**, 2021: The modulation of turbulent kinetic energy production by the presence of surface wind waves, *American Geophysical Union meeting.*
11. Erinin, M., B. Neel, D. Ruth, M Mazzatenta, R. Jaquette, **F. Veron**, L. Deike, 2021: Spray Generation by Naturally and Mechanically Forced Wind-Waves. *American Physical Society Meeting, Division of Fluid Dynamics, Phoenix.*
12. Jaquette, R., **F. Veron**, 2021: Production of Large Marine Aerosols from Wind Forced Mechanical Breaking Waves. *American Physical Society Meeting, Division of Fluid Dynamics, Phoenix.*
13. Rocha-Brownell, K., R. Jaquette, **F. Veron**, & D. Richter, 2020: Turbulent Transport of Spray Droplets Near Realistic Multispectral Surface Waves. *American Physical Society Meeting, Division of Fluid Dynamics, Chicago*
14. Jaquette, R. & **F. Veron**, 2020: The Sensitivity of Spume Droplet Trajectories to Initial Conditions. *American Physical Society Meeting, Division of Fluid Dynamics, Chicago*
15. Yousefi, K., & **F. Veron**, 2020: The Effects of Surface Wind Waves on the Atmospheric Wave and Turbulent Kinetic Energy Budgets, *American Physical Society Meeting, Division of Fluid Dynamics, Chicago*
16. Jaquette, R., **F. Veron**, 2020: Transport of Spume Droplets Produced from Breaking Mechanical Waves in the Presence of Wind. *Ocean Sciences Meeting. San Diego.*

17. Yousefi, K., **F. Veron**, M.P. Buckley, 2020: Momentum flux budget across the air-water interface under strongly forced wind conditions. *Ocean Sciences Meeting. San Diego.*
18. Yousefi, K., **F. Veron**, and M. Buckley, 2019: Wave- and shear-induced viscous stress over wind waves. *American Physical Society Meeting, Division of Fluid Dynamics, Seattle.*
19. **Veron, F.**, and L. Mieussens, 2019: A kinetic approach to estimate air-sea exchanges driven by sea spray in high winds. *American Physical Society Meeting, Division of Fluid Dynamics, Seattle*
20. Moss, S., R. Jaquette, and **F. Veron**, 2019: and Size Distributions and Dynamics of Sea Spray Droplets Produced by Breaking Waves in Various Wind Speeds. *American Physical Society Meeting, Division of Fluid Dynamics, Seattle*
21. Tejada-Martinez A., A. Hafsi, C. Akan, and **F. Veron**, 2019: Large-eddy simulation (LES) of small-scale Langmuir circulation and scalar transport. *American Physical Society Meeting, Division of Fluid Dynamics, Seattle*
22. Jaquette, R., **F. Veron**, and Moss, S 2019: Spume/Splash Droplet Production and Lifetimes, *Thesis workshop, Newark.*
23. Buckley et al, 2019: Momentum and energy exchange mechanisms between wind and surface gravity waves, *European Geophysical Union, Vienna, Austria*
24. Yousefi, K., **F. Veron**, M. Buckley, N. Husain, and T. Hara, 2018: Measurements of the Turbulent Stress over Wind-Driven Surface Waves in the Wave-Boundary Layer, *American Physical Society Meeting, Division of Fluid Dynamics, Atlanta.*
25. Buckley M., **F. Veron**, J. Horstmann, J. Carpenter J, P. Chabert, 2018: "Field observations of the airflow over waves using PIV", *B' Waves workshop, Marseille, France*
26. Yousefi, K., M. Buckley, **F. Veron**, N. Husain, and T. Hara, 2018: Measurements of Turbulent Stress in Curvilinear Coordinates over Wind-driven Surface Waves *AMS 20th Conference on Air-Sea Interaction, Oklahoma City, Oklahoma*
27. **Veron, F.**, and L. Mieussens: 2018: A kinetic approach to estimate air-sea exchanges driven by sea spray in high winds. *AMS Conference, Newark, DE.*
28. Kukulka, T., and **F. Veron**, 2018: A Lagrangian perspective on wave-driven turbulence in the ocean surface boundary layer *European Geophysical Union, Vienna, Austria*
29. Buckley, M.P., J. Horstmann, J. Carpenter, **F. Veron**, 2018: Sub-millimeter scale turbulent dynamics of the airflow above waves, *European Geophysical Union, Vienna, Austria.*
30. **Veron, F**, K. Yousefi, M. P Buckley, N. Husain, and T. Hara, 2018: Turbulent and wave-induced velocity fields over wind-driven surface waves. *B'waves 2018, Marseille, France.*
31. Husain, N., M. P Buckley, K. Yousefi, T. Hara, **F. Veron** and P. P. Sullivan, 2018, Wind turbulence over surface waves in a strongly forced condition – LES and observation, *Ocean Sciences, Portland.*
32. Kukulka, T, and **F. Veron** 2018, Lagrangian Investigation of Wave Effects on Turbulence in the Ocean Surface Boundary Layer, *Ocean Sciences, Portland.*
33. Buckley, M.P., J. Horstmann, J.R. Carpenter, and **F. Veron** 2018, Fine Scale structure of the Airflow above Waves, *Ocean Sciences, Portland.*
34. Davies, A., M. Oliver, and **F. Veron** 2018, Biofloat observations of a naturally occurring phytoplankton bloom and carbon export event in the Drake Passage, *Ocean Sciences, Portland.*
35. Yousefi, K., M. Buckley, **F. Veron**, N. Husain, and T. Hara, 2017, Wave-Induced Momentum Flux over Wind-driven Surface Waves, *American Physical Society Meeting, Division of Fluid Dynamics, Denver.*
36. Yousefi, K., M. Buckley, **F. Veron**, N. Husain, and T. Hara, 2017, Viscous and Turbulent Stress Measurements over Wind-driven Surface Wave, *AGU, New Orleans.*

37. Hara, T., N. Husain, M. Buckley, K. Yousefi, F. Veron, and P. Sullivan, 2017, Wave boundary layer turbulence over surface waves in a strongly forced condition – LES and observation, *IUTAM Wind Waves, London, UK*
38. Veron, **F.**, and L. Mieussens: 2017, A kinetic model for rain falling on water waves, *European Geophysical Union, Vienna, Austria*
39. Veron, **F.**, Y. Ma, M. Buckley, A. Tejada-Martinez, and A. Hafsi : 2016, Laboratory measurements of the inception and evolution of centimeter-scale Langmuir Turbulence, *ICTAM2016, Montreal, CA*
40. Buckley, M., and **F. Veron**, 2016, Structure of the airflow above surface gravity waves, *ICTAM2016, Montreal, CA*
41. Veron, **F.**, and L. Mieussens: 2016, A kinetic model for particle-surface interaction applied to rain falling on water waves, *AMS 20th Conference on Air-Sea Interaction, Madison, WI, USA*
42. Buckley, F., M., and **F. Veron**, 2016, Small scale airflow dynamics above waves, *AMS 20th Conference on Air-Sea Interaction, Madison, WI, USA*
43. Veron, **F.**, Y. Ma, M. Buckley, A. Tejada-Martinez, and A. Hafsi : 2016, Laboratory measurements of the inception and evolution of centimeter-scale Langmuir Turbulence, *AMS 20th Conference on Air-Sea Interaction, Madison, WI, USA*
44. Buckley, M., and **F. Veron**, 2016, Structure of the airflow above wind waves, *Ocean Science, New Orleans, LA.*
45. Buckley, M., and **F. Veron**, 2015, Laboratory and field investigation of the wind stress above waves, *Warnemunde Turbulence days, Warnemunde , Germany.*
46. Buckley, M., and **F. Veron**, 2015, Influence of wave age on the structure of the airflow above surface waves., *American Physical Society Meeting, Division of Fluid Dynamics, Boston MA*
47. Hafsi, A., A. Tejada-Martinez, Y. Ma, and **F. Veron**, 2015, DNS of scalar transfer across an air-water interface during inception and growth of Langmuir circulation, *American Physical Society Meeting, Division of Fluid Dynamics, Boston MA*
48. Ma, Y., and **F. Veron**, 2015, Laboratory measurements of the inception and evolution of Langmuir Turbulence, *American Physical Society Meeting, Division of Fluid Dynamics, Boston MA*
49. Buckley, M., and **F. Veron**, 2015, Experimental study of the wind stress above waves., *American Meteorological Society Meeting, Phoenix, AZ.*
50. Hafsi, Y. Ma, M. Buckley, A.E. Tejada-Martinez, and **F. Veron**, 2015: DNS and measurements of scalar transfer across an air-water interface during inception and growth of Langmuir circulation, *The International Symposium on Gas Transfer at Water Surfaces, Seattle, USA*
51. Veron, **F.**, and M. Buckley, 2014, Airflow above surface waves, *American Physical Society Meeting, Division of Fluid Dynamics, San Francisco CA*
52. Hafsi, A., A.E. Tejada-Martinez and **F. Veron**, 2014, Direct numerical simulation of scalar transfer across a wind-driven air-water interface, *American Physical Society Meeting, Division of Fluid Dynamics, San Francisco CA*
53. Davies A.R., **F. Veron**, and M. J. Oliver 2014, Kinetic Energy, Blooms and carbon export in the Drake Passage, *American Geophysical Union Meeting, San Francisco, USA.*
54. Buckley M., and **F. Veron**, 2014, Experimental study of the wind stress above waves, *American Meteorological Society Meeting, Phoenix AZ.*
Award: *Best student Presentation (first place: Buckley).*
55. Buckley M., and **F. Veron**, 2013, Measurements of turbulence in the airflow above surface wave, *American Physical Society Meeting, Division of Fluid Dynamics, Pittsburg PA*
56. Veron, **F.**, and J. Mueller, 2013, Impact of Sea Spray on Air-Sea Fluxes, *American Physical Society Meeting, Division of Fluid Dynamics, Pittsburg PA*

57. Buckley M., and **F. Veron**, 2012: Laboratory study of the wind structure above waves, *American Meteorological Society meeting*, Boston, USA.
Award: 2nd Best student Presentation (Buckley).
58. VanKirk, Z., **F. Veron**, L. Lenain, and W.K Melville, 2012: Deep Water Surface Gravity Wave Statistics from Stereo Imagery, *American Meteorological Society meeting*, Boston, USA.
59. Buckley M., and **F. Veron**, 2012: Airflow separation over surface gravity waves, *International Conference on Theoretical and Applied Mechanics*, Beijing, China.
60. **Veron F.**, and M. Buckley, 2012: Laboratory study of the structure of the airflow and separation above surface waves *American Physical Society Meeting, Division of Fluid Dynamics, San Diego, CA*.
61. M. S. Long, **F. Veron**, R. Sander, H. Riede, and W. Keene, 2012, Simulated Chemical Interactions and Air-sea Fluxes Associated with Spume Droplets under High Wind Conditions. *American Meteorological Society meeting*, Boston, USA
62. Veron; D.E., F. A. Newton, **F. Veron**, A. C. Trembanis, D.C. Miller, 2012: Exploring Marine Science through the University of Delaware's TIDE camp. *American Geophysical Union Meeting*, San Francisco, USA
63. Buckley M., and **F. Veron**, 2011, Laboratory study of the wind structure over surface waves. *American Physical Society Meeting, Division of Fluid Dynamics, Baltimore, MD*.
64. Harrison, E.L., and **F. Veron**, 2011, Rain-induced momentum exchange at the ocean surface under low wind speed conditions, *American Physical Society Meeting, Division of Fluid Dynamics, Baltimore, MD*.
65. Harrison, E.L., and **F. Veron**, 2011, rain effect on air-sea gas transfer, *SOLAS Summer School, Corsica, France*.
66. Harrison, E. L., P. M. Orton, S. Eggleston, **F. Veron**, W. R. McGillis and D. T. Ho, 2010: Wind and Rain Effects on Air-Water Gas Transfer. *The 6th International Symposium on Gas Transfer at Water Surfaces*. Kyoto, Japan.
67. Orton, P.M., W.R. McGillis, D.T. Ho, **F. Veron**, E.L. Harrison and S. Eggleston, 2010: Laboratory Estimates of Air-Water CO₂ Exchange under Wind and Rain Conditions: A Comparison of Mass Balance and Profile Methods, *The 6th International Symposium on Gas Transfer at Water Surfaces*, Kyoto, Japan.
68. Buckley, M. and **F. Veron**, 2010, Dynamics of the airflow above breaking and non-breaking waves. *American Meteorological Society meeting*, Annapolis, USA.
69. Harrison, E.L., and **F. Veron**, 2010: Measuring rain-induced momentum exchange at the ocean surface under low wind speed conditions. *American Meteorological Society meeting*, Annapolis, USA.
Award: 2nd Best student Presentation (Harrison).
70. Mueller J., and **F. Veron**, 2010: Impact Sea spray effects on the air-sea fluxes at moderate and high wind speeds. *American Meteorological Society meeting*, Annapolis, USA.
71. Buckley M., F. Bernard, and **F. Veron**, 2010: Donut-shaped Bubbles Formed by Raindrops. *American Physical Society Meeting, Division of Fluid Dynamics, Long Beach, USA*.
72. Eggleston, S., E.L. Harrison, D.T. Ho, and **F. Veron**, 2010: Combined Effects of Wind and Rain on Air-Water Gas Exchange, Abstract B31F-0375, *Fall Meeting, AGU*, San Francisco, Calif.
73. VanKirk, Z., J. Mueller and **F. Veron**, 2009: Sea State dependent air-sea gas flux parameterization. *American Meteorological Society meeting*, Phoenix, USA.
74. Mueller J., and **F. Veron**, 2009: Impact of sea spray on air-sea fluxes: a physical model. *American Meteorological Society meeting*, Phoenix, USA.
75. Harrison, E.L., M. Buckley and **F. Veron**, 2009: Quantifying rain-induced momentum exchange at the ocean surface. *American Meteorological Society meeting*, Phoenix, USA.

Award: *2nd Best student Presentation (Harrison).*

76. Buckley, M., Mueller J. and F. Veron, 2009: Airflow separation above wind waves. *American Meteorological Society meeting*, Phoenix, USA.
77. Veron, F., J. Mueller, and M. Buckley, 2008: Air-flow separation above wind-waves. ICTAM 2008, Adelaide, Australia.
78. Veron, F., and W.K. Melville, 2007: Wave Modulated Turbulent Fields at the Ocean Surface and Related Air-Sea Fluxes. *39th International Liege Colloquium on Ocean Dynamics*. Liege, Belgium.
79. Veron, F., G. Saxena, and S Misra, 2007: Airflow separation above wind waves. *American Meteorological Society meeting*, Portland, USA.
80. Mueller J., and F. Veron, 2007: Air-sea surface stress in the presence of air flow and surface separation. *American Meteorological Society meeting*, Portland, USA.
81. Veron F., and W.K. Melville, 2007: Wave-coherent Air-Sea heat flux. *American Meteorological Society meeting*, Portland, USA.
82. Harrison, E.L., and F. Veron, 2007: The effects of rainfall on the ocean surface at low wind speed. *American Meteorological Society meeting*, Portland, USA.
Award: *2nd Best student Presentation (Harrison).*
83. Veron, F., W.K. Melville, and L. Lenain, 2006. Wave-Modulated Air-Sea Fluxes and Ocean Surface Turbulence. *NCAR Geophysical Turbulence Program Workshop*. Boulder, USA.
84. Veron, F., 2006 Wave coherent air-sea heat flux. *American Geophysical Union annual meeting*. San Francisco, USA.
85. Misra, S.K., J.T. Kirby, M. Brocchini, F. Veron, M. Thomas, and C. Kambhamettu, 2005: Coherent turbulent structures in a quasi-steady spilling breaker, *Waves'05*. Madrid, Spain.
86. Ho, D.T., W.R. McGillis, F. Veron, N. Scott, 2005: Rain and Wind-induced air-water gas exchange, *37th International Liege Colloquium on Ocean Dynamics; Gas Transfer At Water Surfaces*. Liege, Belgium.
87. Veron F., and W.K. Melville, 2005: The influence of waves and turbulence on the heat flux at the surface of natural water bodies. *American Physical Society Meeting, Division of Fluid Dynamics, Chicago, USA*.
88. Saxena G., and F. Veron, 2005 Air Flow Separation over Unsteady Breaking Wind Waves. *American Physical Society Meeting, Division of Fluid Dynamics, Chicago, USA*.
89. Mueller J., and F. Veron, 2005 A Lagrangian Turbulent Dispersion Model of Evolving Sea Spray Droplets over the Ocean. *American Physical Society Meeting, Division of Fluid Dynamics, Chicago, USA*.
90. Veron, F., and W.K. Melville, 2005 The influence of waves and turbulence on the oceanic heat flux. *American Meteorological Society annual meeting*. Atlanta USA.
91. Veron F., and W.K. Melville, 2004: Influence of surface kinematics on air-sea heat flux, *American Physical Society Meeting, Division of Fluid Dynamics, Seattle, USA*.
92. Mueller J., and F. Veron, 2004: A Lagrangian Turbulent Dispersion Model of Evolving Sea Spray Droplets Over the Ocean, *American Physical Society Meeting, Division of Fluid Dynamics, Seattle, USA*.
93. Misra, S.K., J. T. Kirby, M. Brocchini, M. Thomas, F. Veron, and C. Kambhamettu, 2004: Extra strain rates in spilling breaking waves. *Int. Conf. Coastal Eng.*, Lisbon, Portugal.
94. Veron, F., and W. K. Melville, 2003: Measurements of ocean surface kinematics and surface turbulence effects on air-sea heat flux. *Euromech, Fluid Mechanics Conference*, Toulouse France.
95. Veron, F., and W.K. Melville, 2003: Measurements of ocean surface kinematics and heat flux. *American Physical Society Meeting, Division of Fluid Dynamics, Meadowlands, USA*.

96. Veron, F., and W.K. Melville, 2002: The Effects of Langmuir Circulations and Turbulence on the Sea-surface Temperature and Heat Fluxes. *AGU Ocean Sciences*, Honolulu, USA.
97. Veron, F., and W.K. Melville, 2002: Measurements of ocean surface kinematics and heat transfer. *American Physical Society Meeting, Division of Fluid Dynamics*, Dallas, USA.
98. Veron, F., and W.K. Melville, 2001: Remote observations of the initial generation of surface waves. *IGARSS symposium*, Sydney. Australia.
99. Veron, F., G.I. Ierley, and W.K. Melville 2001: The initial generation of waves in an accelerated coupled air-water flow. *American Physical Society*, San Diego CA, USA.
100. Veron, F., and W.K. Melville, 2000: The generation of Langmuir circulations, and surface waves, *American Geophysical Union*, San Antonio, USA.
101. Veron, F., and W.K. Melville, 2000: Experiments on the initiation of Langmuir circulations and surface waves. *IUTAM Congress*, Chicago, USA.
102. Melville, W. K., F. Veron, and C. White, 2000: Coherent structures and turbulence under breaking waves. *IUTAM Congress*, Chicago, USA.
103. Veron, F., and W. K. Melville, 2000: Laboratory and field experiments on the stability of wind driven water surfaces. *American Physical Society*, Washington DC, USA.
104. Veron, F., and W.K. Melville, 2000: On the stability of an accelerated coupled air-water flow. *American Physical Society*, Washington DC, USA.
105. Veron, F., and W.K. Melville, 1999: Laboratory measurements of the generation of Langmuir circulations, *American Physical Society*, New Orleans, USA.
106. Melville, W.K., and F. Veron, 1998: The initial generation of wind waves and Langmuir circulations. *IUTAM Symposium on Three-Dimensional Aspects of Air-Sea Interaction*. Nice, France.

INVITED & KEYNOTE PRESENTATIONS

1. Veron, F. 2022: Momentum fluxes in wind-driven seas with intermittent airflow separation and sea spray. *Invited Presentation*, Air-sea interactions and implications for offshore wind energy. Online Symposium, NREL
2. Veron, F. 2021: Estimating air-sea exchanges driven by sea spray in high winds, *Invited Presentation*, University of California Berkeley.
3. Veron, F. 2021: An Eulerian Model for Sea Spray Transport and Evaporation, *Invited Keynote Presentation*, *American Meteorological Society. Virtual meeting.*
4. Veron, F., 2020: Momentum fluxes in the airflow and at the surface of wind-driven waves with intermittent airflow separation, *Invited Presentation – Waves group*, University of California San Diego.
5. Veron, F., 2020: Momentum fluxes in the airflow and at the surface of wind-driven waves with intermittent airflow separation, *Invited seminar*, University of Maryland, College Park.
6. Veron, F., and L. Mieussens: 2019: A kinetic approach to estimate air-sea exchanges driven by sea spray in high winds. *Ed Monahan Symposium, UConn.*
7. Veron, F., 2019: The Role of Breaking waves in air-sea interactions. Xiamen University workshop. Xiamen, China.
8. Veron F., K. Yousefi, M. Buckley, N. Hussain, and T. Hara, 2018: Turbulent and Wave-Induced velocity fields over Wind-driven Surface Waves, *B' WAVES2018*. University of Marseille, France.
9. Veron F. 2017: sea spray: how small water drops can have global scale impact. *Osher Lifelong learning Institute*. Wilmington.
10. Veron F. 2016: Airflow over Ocean surface waves. *Distinguished Lecturer for Silberman award ceremony*. St. Anthony Falls Laboratory – University of Minnesota.

11. **Veron F.** 2016: Near-surface turbulence induced by rainfall, *Invited seminar* – MathOcean. University of Bordeaux, France.
12. **Veron F.** 2016: Airflow over waves, *Invited seminar* – *B' WAVES2016*. University of Bergen, Norway.
13. **Veron F.** 2015: The turbulent airflow above ocean waves, *Invited seminar* – *TREAT (Turbulence Research for Environmental & Astrophysical Transport)*. University of Delaware, Newark, DE, USA.
14. **Veron F.** 2014: Ocean Spray. Lorentz center; Rainfall and marine snow workshop. Leiden, Netherlands. *Invited seminar* – *Keynote speaker*
15. **Veron F.** 2014: Ocean Spray. *Invited seminar* – Princeton University, Princeton, NY, USA
16. **Veron F.** 2014: Ocean Spray. *Invited seminar* – University of Notre Dame. South Bend, IN, USA
17. **Veron F.** 2014 Experimental measurements of air flow above breaking waves, B'Waves, University of Bordeaux, France. *Invited seminar* – *Keynote speaker*
18. **Veron F.** 2014 Air-flow Separation and Sea Spray, *Invited seminar* – Carderock, Bethesda, MD, USA.
19. **Veron F.** 2013: The Role of Sea Spray in Air-sea Interaction. John Hopkins University, Baltimore, MD, USA. *Invited seminar*
20. **Veron F.** 2012: The Role of Water Droplets in Air-sea Interaction: Rain and Sea Spray. NCAR, Boulder, CO, USA. *Invited seminar* – *Keynote speaker*
21. **Veron F.** 2011: Air-flow separation and spray generation above short and steep waves at high wind speeds. *Invited seminar*. Oregon State University, OR, USA.
22. **Veron F.** 2011: Air-flow separation and spray generation above short and steep waves at high wind speeds. *Invited seminar*. University of California, San Diego, CA, USA.
23. **Veron F.** 2011: Air-flow separation and spray generation above short and steep waves at high wind speeds. *Invited seminar*. University of Delaware, Newark, DE, USA.
24. **Veron F.** 2010: Sea spray contributions to the air-sea fluxes at moderate and hurricane wind speeds. *Invited contribution*. *AGU Ocean Sciences*, Portland, USA
25. **Veron F.** 2010: Interaction air-mer: les phénomènes petite échelles qui connectent l'océan et l'atmosphère. EPOC. *Invited seminar*, Université de Bordeaux, France.
26. **Veron F.** 2010: Sea spray contributions to the air-sea fluxes at moderate and hurricane wind speeds. *Invited contribution*. Workshop on air-sea interactions under tropical cyclones (hurricanes), RI, USA.
27. **Veron F.** 2010: Air-flow separation and spray generation above short and steep waves at high wind speeds. *Invited seminar*. University of Rhode Island Graduate School of Oceanography, RI, USA.
28. **Veron F.** 2009: Interaction air-mer: les phénomènes petite échelles qui connectent l'océan et l'atmosphère. TREFLE, Université de Bordeaux, France.
29. **Veron F.** 2008: Wave modulation of air-sea heat fluxes. *Invited seminar*. Howard University, Washington DC, USA. USA.
30. **Veron F.** 2006: Wave modulated air-sea heat flux and ocean surface turbulence. *Invited seminar*. UConn, Avery point. USA.
31. **Veron F.** 2005: The influence of waves and turbulence of the heat flux at the surface of natural water bodies. *Invited seminar*, Cornell University, Ithaca, USA.
32. **Veron F.** 2005: The influence of waves and turbulence on the air-sea heat flux. *Invited seminar*. WHOI, Woods hole, USA.

33. **Veron F.**, 2004: Wind generated mixing and turbulence at the surface of natural water bodies, *Invited seminar*, Massachusetts Institute of Technology, Cambridge, USA.
34. **Veron F.**, 2004: Wind generated mixing and turbulence at the surface of natural water bodies, *Invited seminar*, John Hopkins University, Baltimore, USA.
35. **Veron F.**, 2004: Wind generated mixing and turbulence at the surface of natural water bodies, *Invited seminar*, Old Dominion University, Norfolk, USA.
36. **Veron, F.**, 2002: The initial generation of waves in an accelerated coupled flow. *Invited seminar*, University of Maryland, College Park. Baltimore, USA.
37. **Veron, F.** 2001: Mixing and turbulent transition at the surface of natural water bodies: Langmuir circulations. *Invited seminar*, Purdue University, West Lafayette, USA.
38. **Veron, F.** 2001: Turbulent transition at the surface of natural water bodies: Langmuir circulations. *Invited seminar*, University of Delaware, Newark, USA.
39. **Veron, F.** 2001: Mixing and turbulence the surface of natural water bodies. *Invited seminar*, University of California, Santa Cruz, USA.
40. **Veron, F.** 2001: Stability and transition of wind-driven water surfaces *Invited seminar*, University of Adelaide, Adelaide. Australia.
41. **Veron, F.** 2000: Mixing and turbulence in natural water bodies: Langmuir circulations. *Invited seminar*, Caltech, Pasadena, USA.
42. **Veron, F.** 2000: Turbulent transition at the surface of natural water bodies. *Invited seminar*, Massachusetts Institute of Technology, Cambridge, USA.
43. **Veron, F.** 2000: Stability and transition of wind-driven water surfaces. *Invited seminar*, Caltech, Pasadena, USA.
44. **Veron, F.**, and W. K. Melville, 1998: Coherent acoustic Doppler measurements of turbulence under breaking waves in the laboratory and field. *Invited presentation. Free Surface Turbulent Flows Workshop*, Caltech, Pasadena, USA.
45. Melville, W. K., R. Shear, and **F. Veron**, 1998: Laboratory measurements of Langmuir circulations. *Invited presentation, American Geophysical Union*. San Diego, USA.
46. **Veron, F.**, 1997: Near-shore turbulence measurements. *Invited seminar*. University of Toronto, Canada.

RESEARCH GRANT SUPPORT

Type	Count	Budget (to UD)
Funded grants as PI or co-PI	19	6,330,173
Pending proposals	1	341,469

Table 2. Summary of my research funding activities

Among these grants, I was awarded an **ONR Young Investigator Program** grant and an **NSF Career Award**.

CURRENTLY FUNDED GRANTS

1. Title: Establishing a UD Climate Science and Policy Hub
PI: Veron, F. Siders, A. R., Vargas, R.
Period: 03/01/2021 - 06/30/2023
Sponsor: UNIDEL foundation
Amount: \$446,000
Details: A proposal in support of a UD Climate Science and Policy Hub, a University-wide initiative that will align currently dispersed activities, promote collaboration, enhance funding/development, and position UD as a national leader in climate change education and research. The Hub will be launched by a UD Climate Year, an academic year filled with climate change-related activities
2. Title: Collaborative Research: Wind turbulence over shoaling surface waves and their impact on air-sea fluxes,
PI: Hara T. Co-PI Veron, F.
Period: 03/01/2021 - 02/28/2024
Sponsor: NSF
Amount: \$497,107
Details: A collaborative project, combining high resolution laboratory observations and large eddy simulation (LES), focused on studying wind over shoaling waves. We will investigate how the wind turbulence field (including airflow separations), the wave form drag, and the mean wind profile are modified by the nonlinear/asymmetric shoaling wave shape and the reduced wave phase speed.
- 3 Title: Laboratory measurements of turbulence and coherent structures on both side of a wind-driven air-water interfaces
PI: Veron, F.
Period: 09/01/2020 - 08/31/2023
Sponsor: NSF
Amount: \$549,848
Details: Laboratory experiments to measure the flow on both sides of the air-water interface simultaneously to study the generation of turbulence at the air-sea interface and evaluate the coupling between the turbulent coherent structures.

4. Title: Collaborative Research: Droplet transport in the vicinity of breaking waves: Experiments and simulations
 PI: Veron, F., (Co-PI: Richter, D)
 Period: 10/01/2018 - 03/30/2021
 Sponsor: NSF
 Amount: \$494,079
 Details: An experimental study of sea spray spume droplet generation by breaking waves. Collaboration with D/ Richter at the University of Notre Dame, who will perform numerical modeling.
- 5 Title: Collaborative Research: Influence of wind and bottom generated turbulence on air-sea gas exchange in shallow water environments
 PI: Veron, F., (Co-PI: Ho, D., and Pawlak, G.)
 Period: 10/01/2018 - 03/30/2021
 Sponsor: NSF
 Amount: \$347,203
 Details: This project is a collaborative field study aimed at evaluating Air-sea Carbon fluxes in shallow water environment with rough bottom. The experiments will take place in a coral reef environment where the carbon cycle is also important to the ecosystem.

COMPLETED PROJECTS

- 56 Title: The structure of the air-flow above surface waves
 PI: Veron, F.,
 Period: 09/01/2016 - 08/31/2019
 Sponsor: NSF
 Amount: \$215,415
 Details: This project is student support to analyze existing data from a comprehensive experiment aimed at measuring turbulence in the airflow above surface waves.
7. Title: Collaborative Research: Airflow separations over wind waves and their impact on air-sea momentum flux
 PI: Veron, F., (Co-PI: Hara, T)
 Period: 3/01/2015 - 02/28/2020
 Sponsor: NSF
 Amount: \$398,861 (of \$754,000)
 Details: This project is a collaborative proposal aimed at combining numerical modeling and experimental data of the airflow above breaking waves in order to improve our understanding of the air-sea momentum flux provided by short strongly forced waves.
8. Title: Collaborative Research: DNS and high resolution measurements of scalar transfer across an air-water interface during inception and growth of Langmuir circulation
 PI: Veron, F., (Co-PI: A. Tejada-Martinez).
 Period: 9/15/2013 - 08/31/2017

Sponsor: NSF
Amount: \$354,016 (of \$678,000)
Details: This project is a collaborative proposal in which we will study the details of the molecular boundary layer at the ocean surface using a combination of experimental and numerical approaches.

9. Title: Ocean surface waves attenuation by falling rain: modelling, numerical simulations and laboratory data analysis

PI: Lubin, P. Veron, F., Glockner, S., Mieussens, L

Period: 9/15/2012 - 08/31/2015

Sponsor: Labex - France

Amount: \$258,000 (188,000 Euros)

Details: This project is a collaborative proposal in which we will study the details of the rain impact at the ocean surface using a combination of experimental and numerical approaches.

10. Title: Improving atmospheric models for offshore wind resource mapping and prediction using LIDAR, aircraft, and in-ocean observations

PI: Veron D., C. Archer, F. Veron, B. Colle. W. Kempton.

Period: 10/01/11 - 09/30/16

Sponsor: DOE

Amount: \$294,255

Details: This project proposes a multi-faceted approach to study the marine atmospheric boundary layer and improve upon its parameterization to better serve offshore power potential assessment. In this project, we will instrument in situ meteorological tower, conduct sampling from airplanes, and use modeling to study the wind and potential wind power in the marine atmospheric boundary layer offshore of New England.

11. Title: Spume droplet source function: Measurement and Theory

PI: Veron, F.

Period: 03/01/09 - 02/3/11

Sponsor: NSF

Amount: \$208,307

Details: The proposed research program is concerned with the role of sea-spray in influencing the heat and moisture flux at the surface of the oceans. In particular, this work directly measured the source function for the large spray droplets (spume) and study the details of their generation mechanism. We have observed large supra-millimeter drops not currently accounted for in models.

12. Title: FLIP Experiments in support of: "Surface Waves, Wave Breaking and Wave-Modulated Air-Sea Fluxes"

PI: Veron, F.

Period: 01/01/08 - 12/31/13

Sponsor: ONR (sub-contract through SIO-UCSD)

Amount: \$552,893

Details: The work was performed in support of the program titled “Surface Waves, Wave Breaking and Wave-Modulated Air-Sea Fluxes” proposed by Melville as an expansion proposal for the ONR Hi-Res Wave-Air-Sea DRI. We used optical, active and passive IR, and associated laser and laser and ultrasonic altimetry techniques to image and measure the small scale waves and turbulence at ocean surface. We have deployed the instruments from the port and starboard booms of R/P FLIP during the field test and main experiments in 2009 and 2010 respectively.

13. Title: CAREER: Airflow separation above wind-waves.

PI: Veron, F.

Period: 01/01/08 - 12/31/13

Sponsor: NSF

Amount: \$583,671

Details: This Career proposal is an integrated program of research and education aimed at improving our understanding of the effects airflow separation above the ocean surface waves on the air-sea flux of momentum,. The project also exposed minority high school students to geosciences fields. We performed laboratory and field experiments to study the airflow separation above wind waves. We also developed a physical oceanography curriculum to be taught to promising minor high school students. NSF career awards are competitive and prestigious.

14. Title The Role of Rainfall in the Transfers of Energy between the Atmosphere and the Ocean.

PI: Veron, F.

Period: 06/08/07 - 06/07/08.

Sponsor: University of Delaware Research foundation

Amount: \$25,000

Details: This grant represents seeds money for purchasing equipment and performing some preliminary experiments on the generation of turbulence and the consequent transfers of energy between the atmosphere and the ocean in rainy conditions.

15. Title Collaborative Research: Wind, Waves, Rain and Their Effects on Air-Water Gas and Momentum Exchanges.

PI: Veron, F., (Co-PI: Ho, D.T., and Mc Gillis, W. R.)

Period: 03/01/07 - 02/31/11.

Sponsor: NSF

Amount: Veron - \$311,429 (of \$696,174)

Details: In this work, we performed laboratory experiments to directly measure the turbulence generated by rainfall along with the air-water gas and momentum exchange rates. The dynamic effects of rain-induced stresses on the surface waves was also investigated.

16. Title Generation and Transport of Marine Aerosols in the Residential/Recreation Coastal Zone.

PI: Veron, F.

Period: 02/01/07 - 01/31/09.

Sponsor: NOAA Sea Grant

Amount: \$72,442

Details: This project was concerned with the study of the generation and transport of marine aerosol and sea salt in the coastal and habited area. The work spanned experimental work on the generation of sea spray and numerical studies of the dispersion for the spray as it evaporates and is transported inland.

17. Title Dynamic Effects of Airborne Water Droplets on Air-Sea Interactions: Sea-Spray and Rain.

PI: Veron, F.

Period: 06/01/05 - 05/31/08.

Sponsor: ONR- Young Investigator Program

Amount: \$310,787

Details: This project was focused on the numerical study of the impact of sea spray and rain on the air-sea exchange of momentum, heat, and mass. This grant allowed the PI to purchase the largest computer cluster in the college which was made available to other college PIs based on availability. This grant resulted from a competitive selection and is quite prestigious.

18. Title Longshore Sediment Transport in Surf and Swash Zones.

PI: Kobayashi, N., (Co-PI: Veron, F.)

Period: 02/01/03 - 01/31/05.

Sponsor: NOAA Sea Grant

Amount: \$80,484 (of \$160,968)

Details: This project dealt with the laboratory study of wave generated turbulence on a sloping bottom and its effects on the suspension of sediment. Veron was in charge of performing experiments on the generation of turbulence.

19. Title The Influence of Small Scale Turbulence and Coherent Structures on Air-Sea Heat Flux.

PI: Melville, W. K (Co-PI: Veron, F)

Period: 10/01/01 - 09/30/05.

Sponsor: NSF

Amount: \$330,486 (of \$733,850)

Details: This project was concerned with the study of the effect of the small scale turbulence on the disruption of the thermal molecular layer at the surface of the ocean and the effect on the oceanic heat flux. Veron was responsible for designing and conducting the large field experiments that took place from R/P Flip and Scripps pier. A total of 36 days (at sea) and more than 4 months (on Scripps pier) of data were acquired.

TEACHING AND STUDENT MENTORING

CLASSROOM TEACHING

Student evaluations reported are IQ: Instructor Quality and CQ: Course Quality. They are based on UD's standard questions and scores range from 1(worst) to 5 (best); N/A indicates no evaluations were returned. Fall 2016 reviews are not yet available

* TIDE Summer camp is a residential 2-week camp for high school juniors and seniors organized by SMSP and taught by SMSP faculty.

Year	Course	Credits	Enrollment & Notes	Student Evaluations	
				IQ	CQ
2017	Fluid Dyn. Mar. Syst.	4	Enrollment: 18	4.90	4.60
2016	Waves in the Marine Env.	3	Enrollment: 3		
2016	Analyt. Tech. Mar. Sc.	3	Enrollment: 6	4.60	4.40
2016	POSE seminar	1	Enrollment: 17	4.71	4.86
2015	Fluid Dyn. Mar. Syst.	4	Enrollment: 13	4.71	4.71
2015	Waves in the Marine Env.	3	Enrollment: 8	4.00	4.20
2014	TIDE* Summer camp		Enrollment: 12 3 Lectures, Lab Activities	N/A	
2014	Intro to Phys. Oceanogr.	3	Enrollment: 12	4.36	4.00
2013	Waves in the Marine Env.	3	Enrollment: 8	5.00	5.00
2013	TIDE Summer camp		Enrollment: 18 3 Lectures, Lab Activities		
2013	Intro to Phys. Oceanogr.	3	Enrollment: 21 Incl. 9 undergrads	3.89	4.17
2012	Waves in the Marine Env.	3	Enrollment: 6	5.00	5.00
2012	TIDE Summer camp		Enrollment: 17 4 Lectures, Lab Activities		
2012	Intro to Phys. Oceanogr.	3	Enrollment: 11	4.20	3.80
2011	Special Problem	3	Enrollment: 3		
2011	Waves in the Marine Env.	3	Enrollment: 6	5.00	4.75
2011	TIDE Summer camp		Enrollment: 16 3 Lectures, Lab Activities		
2011	Intro to Phys. Oceanogr.	3	Enrollment: 8	4.33	4.17
2011	POSE Seminar	1	Enrollment: 6	N/A	N/A
2011	Special Problem	3	Enrollment: 3		
2010	TIDE Summer camp		Enrollment: 17 3 Lectures, Lab Activities		
2010	Ocean Fluid Dynamics	4	Enrollment: 16	4.67	N/A
2009	TIDE Summer camp		Enrollment: 14 3 Lectures, Lab Activities		
2009	Waves in the Marine Env.	3	Enrollment: 3	N/A	N/A
2008	Ocean Fluid Dynamics	4	Enrollment: 6	4.50	N/A
2008	TIDE Summer camp		Enrollment: 10 3 Lectures, Lab Activities		
2008	Waves in the Marine Env.	3	Enrollment: 6	N/A	N/A
2007	Ocean Fluid Dynamics	4	Enrollment: 4	5.00	N/A
2006	Ocean Fluid Dynamics	4	Enrollment: 9	5.00	N/A
2006	Waves in the Marine Env.	3	Enrollment: 6 co-taught with M. Badiey	3.75	N/A

2005	Ocean Fluid Dynamics	4	Enrollment: 8	5.00	N/A
2003	Ocean Fluid Dynamics	4	Enrollment: 10	4.50	N/A
2002	Ocean Fluid Dynamics	4	Enrollment: 6	4.80	N/A
			co-taught with P. Huq		

STUDENT MENTORING

Type	Count
Ph.D. Students	6
M.S. Students	6
Post-Doctoral Scholars	2
Undergraduate students	21
Advisory committees	35

Table 3. Summary of my students and Post-doc advisees

GRADUATE ADVISEES

Current

2021 - **Morgan Sommers** (M.S. Student)
Thesis: Air-sea gas transfer in a coral reef.

2017 - **Robert Jaquette** (Ph.D candidate)
Thesis: Measuring Breaking induced sea spray generation function.

Former (including last known position)

2016- 2020 **Kianoosh Yousefi** (Ph.D. Mechanical Eng. Department)
Post-Doc Columbia University
Thesis: Turbulence in the atmospheric wave boundary layer.
Awards: • CIFellows 2020.
• Professional Development Award, University of Delaware, Newark, DE, USA, \$2,000, 2020..
• Summer Doctoral Fellowship, University of Delaware, Newark, DE, USA, \$4,200, 2019.
• Travel Grant for Early Career Scientist Interdisciplinary Workshop, Ocean Observatories Initiative (OOI), Washington, DC, USA, \$2,500, 2019.
• Travel Grant for Early Career Interdisciplinary Workshop, Ocean Observatories Initiative (OOI), Washington, DC, USA, \$2,500, 2018..

2008 - 2015 **Marc Buckley** (Ph.D.)
Research faculty – Helmholtz center, Geesthacht, Germany.
Thesis: Effects of airflow separation on the surface stress and the structure of the turbulence above surface waves. (Defense scheduled for July 17 2015)
Awards: • Best Student Presentation (1st) - American Meteorological Society meeting - Phoenix, 2015.

- 2nd Best Student Presentation - American Meteorological Society meeting - Boston, 2012.
 - Awarded an NSF award (AGS-PRF: Air-Sea Momentum flux at High Wind Speeds in the North Sea). \$98K/year for 2 years in support of a Post-Doc.
- 2010 - 2015 **Alex Davies** (M.S.) (Co-advised with Dr. M. Oliver)
Research Engineer, US Naval Academy
Thesis: Mesoscale kinetic energy as a control on phytoplankton abundance and the biological pump in the Drake Passage.
Awards: • POSE fellowship 2010
- 2012 - 2013 **Hunter Brown** (Ph.D. left before graduating)
Sr. Scientist, L3Harris Technologies
Status: Hunter left the program for personal reasons
- 2011 - 2012 **DeAnna Sewel** (M.S.)
Ph.D Student, University of Colorado
Thesis: Wave load on multi-member offshore wind turbine sub-structures
- 2007 - 2013 **Zackary VanKirk** (M.S.)
Mathematics Teacher
Thesis: Wave statistics from stereo imaging
- 2005 - 2012 **Emily Harrison** (Ph.D.)
Researcher, Naval Surface Warfare Center, Carderock Division, MD.
Thesis: The effects of rainfall on the ocean surface at low to moderate wind speed
Awards: • 2nd Best Student Presentation - American Meteorological Society meeting - Annapolis, 2010.
• 2nd Best Student Presentation - American Meteorological Society meeting - Phoenix, 2009.
• 2nd Best Student Presentation - American Meteorological Society meeting - Portland, 2007.
• Outstanding REU student - Chosen and sponsored for participation in the annual ASLO meeting, 2005.
- 2004 - 2006 **Gaurav Saxena** (M.S.)
Analyst, JP Morgan Chase
Thesis: Airflow separation above wind waves
Awards: • Frances Severance Academic Council awards. Best POSE thesis in 2006
- 2004 - 2008 **James Mueller** (Ph.D.)
Mayor, South Bend Indiana
Thesis: Lagrangian Model of Sea-Spray Dispersion and Evaporation over Complex Seas.
Awards: • POSE student fellowship - 2005
• Best Student Presentation (1st) - American Meteorological Society annual meeting - Atlanta 2005.
• UD Severance Thesis Award 2011

2002 - 2004 **Miyuki Kikuchi** (M.S. left before graduating)
Freelance Entrepreneur and Project Manager, France/Japan
Status: Miyuki left the program to move to Europe with her husband.

POST-DOC ADVISEES

2013 - 2015 **Kianoosh Yousefi**
Current position: Post-Doc Fellow at Columbia University

2013 - 2015 **Mathieu Coquerelle** (co-supervised with P. Lubin, U. Bordeaux)
Current position: Assistant Professor, University of Bordeaux, France

UNDERGRADUATE RESEARCH SUPERVISIONS

2019 **Schuyler Moss**
Research subject: Particle tracking velocimetry of nascent sea spray droplets b wind-ruffled breaking waves.

2018 **Paul Ernst**
Research subject: Sea Spray and airflow separation

2014 - 2016 **Robert Jaquette**
Research subject: Turbulence in the atmospheric boundary layer at the cape wind site in Nantucket sound

2015 - 2016 **Mary (Masha) Edmondson**
Senior Thesis: Rain drop impact on still free surfaces

2013 & 2014 **Gilles Bouille**
Research subject: Inception of wind wave and subsequent development of Langmuir Circulations

2012 **Margaux Lopez**
Research subject: Jet and Film drop generation

2012 **Jacob Steinberg**
Research subject: A Laboratory Investigation of Sea Spray Spume as Produced by wind and Breaking Waves.

2011 **Madeline Foster** NSF REU
Research subject: Whitecap coverage of small wind waves.

2010 **Florian Bernard**
Research subject: Mechanics of drop impacts.

2010 **Kate Foco** NSF REU
Research subject: Wave measurements under heavy rainfall.

2009 **Chelsea Hopkins** NSF REU
Research subject: Generation and measurement of Sea Spray at high wind speed.
Awards: Outstanding REU student - Chosen and sponsored for participation in the annual ASLO meeting - February 2010

2008 **Dewi Lebars**
Research subject: Rain splash products and their influence of the air-sea heat flux.

2008 **Cara Tacoma** NSF REU

Research subject: Generation of Sea Spray at high wind speed.

- 2006 **Leeanne Hazzard** NSF REU
Project: Outreach in Oceanography
- 2006 & 2007 **Marc Buckley**
Research subject: Rain induced momentum and turbulent kinetic energy fluxes
- 2006 **Zackary VanKirk**
Research subject: Vortex ring generation by falling drops.
- 2004 **Emily Harrison** NSF REU
Research subject: Rain induced mixing: a PIV experiment.
Awards: Outstanding REU student - Chosen and sponsored for participation in the annual ASLO meeting - February 2005
- 2004 **Florian Coant**
Research subject: Air-flow separation over wind generated waves.
- 2003 **Clark Paterson** NSF REU
Research subject: Rain induced mixing and wave damping.
Awards: Outstanding REU student - Chosen and sponsored for participation in the annual ASLO meeting - February 2004.
Senior Thesis: Particle Image Velocimetry analysis of rain induced mixing of the oceanic boundary layer. Linfield college, OR.
- 2003 & 2004 **James Mueller**
Research subject: Lagrangian model of sea spray dispersion.
- 2003 **Daniel Vairet**
Research subject: Theoretical development of the damping of surface waves by rain.

GRADUATE COMMITTEES

Current

Dong Wang (SMSP - M.S. Student with Dr. Kukulka)
Arham Amin Khan (Mech. E. - Ph.D. Student with Dr. Kuehl)

Former

- 2021 William Bruch (Committee member and Reviewer). University of Toulon, France
- 2021 Winston Wu (SMSP – Ph.D. Student with Dr. Archer)
- 2021 Tingting Zhu (CEE - Ph.D. Student with Dr. Kobayashi)
- 2021 Florian Desmon (Committee member and Reviewer). University of Bordeaux, France
- 2020 Nyla Hussain (URI – Ph.D. Student with Dr. Hara)
- 2020 Alexis Berny (Committee member and Reviewer). University of Paris, France
- 2019 Dong Wang (SMSP – Ph.D. Student with Dr. Kukulka)
- 2019 Armani Batisda (Mech. E. – Ph.D. Student with Dr. Kuehl)
- 2018 Ken Haulsee (SMSP - M.S. Student with Dr. Trembanis – left before graduating)
- 2017 Amine Hafsi (USF - Ph.D. with Dr. Tejada Martinez)
- 2017 Reviewer for Arvin Saket PhD (with Dr. Pierson) . Univ. New South Whales, Australia
- 2017 Julien Deborde (University of Bordeaux, Ph.D. Student with Dr. P. Lubin)

2017 Zheguang Zou (SMSP-Xiamen University - Ph.D. Student with Dr. Badiey)
2016 Joseph Brodie (SMSP - Ph.D. Student with Dr. D.Veron)
2016 Zhifei Dong (CEE - Ph.D. Student with Dr. Kirby)
2015 Morteza Derakhti (CEE - Ph.D. Student with Dr. Kirby)
2014 Kelsey Brunner (SMSP - M.S. Student with Dr. Kukulka)
2014 Thijs Lanckriet (CEE - Ph.D. Student with Dr. Puleo)
2014 Zheyu (Nancy) Zhou (CEE - Ph.D. Student with Dr. Hsu)
2014 Jia-Lin Chen (CEE - Ph.D. Student with Dr. Hsu)
2013 Reviewer for Nazanin Khezri PhD (with Dr. Chanson) University of Queensland, Australia
2013 Tyler Rabe (SMSP - M.S. Student with Dr. Kukulka)
2013 Carter Duval (Geology - M.S. Student with Dr. Trembanis)
2012 Gangfeng Ma (CEE -Ph.D. Student with Dr. Kirby)
2010 Matthew D. Grossi (SMSP - M.S. student with Dr. Oliver)
2010 Gina Henderson (Geography - Ph.D. Student with Dr. Leathers)
2010 Jens Figlus (CEE - Ph.D. Student with Dr. Kobayashi)
2010 Ali Farhadzadeh (CEE - Ph.D. Student with Dr. Kobayashi)
2009 Philip Muscarella (SMSP - Ph.D. student with Drs. Kirwan and Lipphardt)
2005 Letise Houser (SMSP - Ph.D. student with Dr. Epifanio)
2005 Michael Weed (SMSP - M.S. student with Dr. Kirwan)
2004 Bob Heitsenrether (SMSP - M..S student with Dr. Badiey)
2003 Micah Sklut (Geography - M.S. student with Dr. Hanson)

SERVICE

SERVICE TO THE UNIVERSITY

2017 - University Research Council
2016 - 2017 Committee on committee and nominations.
2003 - 2017 Committee on Instructional, Computing and Research Support Services.
2010 - 2012 University Graduate Council
2010 - 2013 University Research Council
2008 - 2012 Student and faculty honors committee.
2004 - 2007 University Library committee.
2004 Faculty search committee - Coastal Eng. (Civ. Eng.).
2003 Faculty search committee - Coastal Eng. (Civ. Eng.).
2002 Faculty search committee - Coastal Eng. (Civ. Eng.).
2002 Faculty search committee - Environmental science (Civ. Eng.).

SERVICE TO THE COLLEGE AND SCHOOL

2017 - CEOE Deputy Dean
2016 - 2017 SMSP Promotion and Tenure committee
2011 - 2017 POSE program director
2010 - 2017 School of Marine Science and Policy Academic Council
2017 Instructor in the summer TIDE program
2016 Instructor in the summer TIDE program
2014 - 2015 SMSP Faculty search committee
2008 - 2014 Instructor in the summer TIDE program.
2014 SMSP Promotion and Tenure committee
2010 Interim POSE Director
2009 Faculty search committee - POSE. (CEOE).
2003 - 2008 POSE seminar coordinator.
2008 Faculty search committee - POSE. (CEOE).
2007 College of Earth, Ocean, and Environment, ad hoc strategic planning committee.
2007 Presentations to the REU summer interns.
2007 POSE curriculum sub-committee.
2007 College of Earth, Ocean, and Environment, web committee.
2006 CEOE representative for UD discovery days.
2005 College of Earth, Ocean, and Environment Futures II committee.
2005 College of Earth, Ocean, and Environment Web committee.
2004 Participant in the College of Earth, Ocean, and Environment Retreat.
2004 Presentations to the REU summer interns.
2003 - 2003 College of Earth, Ocean, and Environment Web committee.
2003 College of Earth, Ocean, and Environment Web committee.
2002 - 2003 College of Earth, Ocean, and Environment Futures committee.

SERVICE TO THE PROFESSION

Journal articles and proposal reviews:

~ 120 manuscripts in the following Journals:

Journal of Physical Oceanography
Journal of Geophysical Research
Journal of Fluid Mechanics
Measurement Science Technology
Experiments in Fluids
Physics of Fluids
Ocean Modeling
Environmental Fluid Mechanics
Journal of Fluid Engineering
Atmospheric Chemistry and Physics

~ 65 proposals for the following agencies:

National Science Foundation (NSF)
National Science and Engineering Research Council of Canada (NSERC)
German-Israeli Foundation for Scientific Research and Development

~ 100 proposals for a National Science Foundation Panel

~ 10 Career Proposals (Educational and Science Components -2017)

Reviewer for Smith Prize, University of Miami, RSMAS (2017)

Session Chair

2020 Session convener, American Geophysical Society, Ocean Science Meeting, San Diego
2017 Organizing committee – Bwaves 2018
2016 International Conference on Theoretical and Applied Mechanics, Montreal, Canada
2014 American Physical Society Meeting, San Francisco, CA.
2012 International Conference on Theoretical and Applied Mechanics, Beijing China
2007 American Meteorological Society, Portland OR. 2007
2002 American Physical Society Meeting, Division of Fluid Dynamics, Dallas TX. 2002
2001 American Physical Society Meeting, San Diego, CA. 2001

Conference organizing

2021 Organizing committee for B'Waves 2021, online.
2020 Scientific Advisory committee. 5th Symposium on Marine Environmental Sciences, Xiamen, China
2019 Session convener, Ocean Science Meeting, San Diego
2016 Symposium celebrating the Career of Ken Melville, SIO, Oct 2016
2016 Organizing committee for B'Waves 2016, Bergen, Norway.
2012 Session convener, American Geophysical Society Meeting, San Francisco, CA. special session on Education and Research at the K-12 levels
2011 Organizing committee for APS/DFD Annual meeting, Baltimore, 2011

Editorial Committees

- 2016 - Editorial Board for Journal of Wave Waves (Springer)
- 2020 - Guest Editor. Special Issue "Boundary Layer Processes in Geophysical/Environmental Flows. (Fluids, MDPI)

SERVICE TO THE PUBLIC

- 2008 - Now TIDE Camp instructor: Gave lectures to campers every year, Organized visits and demonstrations at the air-sea interaction laboratory, housed informal gatherings in Lewes in Newark for campers.
- 2004 - Now Regular public tours and demonstrations at the air-sea interaction laboratory including some arranged by the docent group and others in coordination with the DE port authority.
- 2017 Presentation to *Osher Lifelong Learning Institute*. Seaspray: how small water drops can have global-scale impact. Wilmington.
- 2012 Gave Lab tour to US Navy Cadets, August 2012
- 2011 Gave public address lecture part of the DNREC "lunch and learn" lecture series. Lewes DE, Dec 2011. Perspective on air-sea interactions.
- 2007 Gave public address lecture part of the "Ocean Currents" lecture series. Lewes DE, August 2007. Where the ocean meets the atmosphere: perspectives on air-sea interactions.
- 2006 Developed and [posted outreach and teaching material](#).
- 2006 Participated in Coast-Day. ~40 people visited the laboratory. Setup demonstrations on surface wave, wind, and sea spray.
- 2005 Participated in Coast-Day, ~40 people visited the laboratory. Setup demonstrations on surface wave, wind, and rain.
- 2004 Participated in Coast-Day, ~40 people visited the laboratory. Setup demonstrations on surface wave and wind.
- 2004 Arranged for a visit and demonstration at the air-sea interaction laboratory for minority high school seniors and juniors participating in the Fame/Unite/Merit program at UD.
- 2003 Participated in Coast-Day and opened the Air-Sea Interaction Laboratory facility for the first time since my arrival at UD. ~40 people visited the laboratory. Setup demonstrations on wind and waves.

In the News:

- 2021 <https://www.udel.edu/udaily/2021/march/computing-innovation-fellow/>
- 2019 Featured article in Delaware Beach Life.
<https://www.delawarebeachlife.com/our-content/262-making-waves>
- 2016 Interview on local NPR station – Seaspray and 2016 Physics Today article.
- 2016 Breakers in the atmosphere. Udaily article about 2016 Physics Today article.
<http://www.udel.edu/udaily/2016/november/ocean-spray-weather-climate/>
- 2014 TIDE Camp: High school students participate in CEOE's summer camp, UDaily, 20 August 2014, (www.udel.edu/udaily/2015/aug/tide-camp-082014.html.)
- 2013 <http://www1.udel.edu/udaily/2013/jan/antarctica-data-011613.html>

- 2013 High school students participate in UD's marine science summer camp. UDaily, 9 August 2013. (www.udel.edu/udaily/2014/aug/tide-camp-080913.html)
- 2012 High school students experience marine science at a two-week summer camp at UD, UDaily, 23 August 2012, (www.udel.edu/udaily/2013/aug/ceoe-tide-camp-082312.html.)
- 2012 AGU research highlights (Veron et al.)
- 2012 AGU research highlights (Harrison et al.)
- 2010 Camp introduces high school students to marine science, Sea Grant Website, August 31, 2010, (www.deseagrant.org/news/camp-introduces-high-school-students-marine-science)
- 2010 Summer TIDE – Kids take an interest in estuary, Southern Delaware, spring 2010, p 41-42. <http://www.udel.edu/ocm/publications/SDG'2010.pdf>, pp.41-42.
- 2008 New summer program to introduce high schoolers to Delaware Bay, UDaily, 30 May 2008 (www.udel.edu/PR/UDaily/2008/may/tide053008.html)
- 2008 College of Earth, Ocean, and Environment press release
- 2008 University of Delaware Press Release 2008
- 2005 WBOC local news interview (www.youtube.com/user/airsealab/videos)
- 2005 Cape Gazette (Lewes DE) article
- 2005 College of Earth, Ocean, and Environment press release
- 2005 University of Delaware Press Release
- 2005 Interviewed for Messenger article
- 2004 Interviewed for San Diego Union Tribune
- 2003 Interviewed for Messenger article

OTHER NOTEWORTHY ACTIVITIES

- 2018 Hosted Pr. Mieussens over a period of 10 days at UD
- 2017 Hosted Pr. Mieussens over a period of 15 days at UD
- 2017 Visiting Scholar, University of Bordeaux I2M/IMB while on semester sabbatical
- 2016 Visiting Scholar, University of Bordeaux I2M/IMB
- 2016 Hosted Pr. Mieussens over a period of 15 days at UD
- 2014 Visiting Scholar, University of Bordeaux I2M/IMB
- 2014 Hosted Pr. P. Lubin over a period of 5 months at UD
- 2014 Hosted Pr. Mieussens over a period of 1 month at UD
- 2009 - 2010 On sabbatical at the University of Bordeaux; Collaborated with Pr. P. Lubin and Pr. Luc Mieussens. That work led to a long-lasting and fruitful work relationship between UD and U-Bordeaux. It led to funding opportunities and team supervision of Post-Doc and students.
- 2008 Consulting for SL-Ross; Mineral Management Services; Performed experiments of breaking waves and surface turbulence on oil dispersal at the surface.

SUPPLEMENTARY MATERIAL:
CHRONOLOGICAL ACTIVITIES AS DEPUTY DEAN

FALL 2017

Chair of Academic council

Eco entrepreneurship (D. Levia)

Changes to Marine Science and Marine Studies curriculum (D. Veron)

Climate Scholar program (J Merrill)

GIS 4+1 (D. Levia)

Research Dean Duties

Reviewers for

EPSCOR proposals

UDRF-SI proposals

NSF MRI proposals (internal to UD)

GUR proposals (internal to UD)

Cluster Hire proposal writing and discussion leader

14 white papers with CEOE involvement

State legislative priority funding

Attended Global Leadership Coalition (Senator Coons, Congresswoman Blunt Rochester, Mark Green, director USAID) (Oct 2017)

Review committee and charge for Director Moline

Chair of the space committee

Review of reclassification for CEOE personnel

Review of organizational chart for CEOE leadership, faculty, and staff

Leading AGU-TV effort

University of Tsukuba, Japan Meeting and MOU

Search committee for GIS (Geography)

Search committee for UD cluster on Data Science - application

Steering committee for UD cluster on Data Science

SPRING 2018

Chaired academic council

Review of GIS 4+1

Review of GEOL P&T documents

Review of GEOG P&T documents

Review committee and charge for Director Moline

Attend National Council for Science and Environment annual meeting (DC)

Review of P&T procedure in College.

Research Dean Duties

Review of Cluster hire proposals 65 proposals

Review of Cluster hire proposals 10 full proposals

Nanofab science and core facility meeting with C. Rjordan

Attended National Council for Science and the Environment (DC) (Jan 2018)

- Setup Data management task force (research office)
- Setup faculty pool for internal proposal review (research office)
- Helped with Power US consortium – brought COE onboard
- Review of UNIDEL proposals
- Attended meeting at UD and Brookhaven for BNL partnerships.
- Attended DOD security meeting
- Professional development
 - Attended ULEAD Class and training (all year)
 - Mentoring Graduate Students: Strategic Initiatives to Ensure They Persist & Succeed
 - Closing the Opportunity Gap in STEM Through Mentorship,
- Search committee for GIS (Geography)
- Search committee for UD cluster on Data Science - application
- Steering committee for UD cluster on Data Science
- Search committee Chair for Marine Advisory Service Director
- Strategic Planning committee (Co-Chair)
- Faculty mentoring
 - Met with Junior Faculty
 - Review of P&T Procedure
 - Setup Faculty mentoring seminars and workshops
- Attending Consortium for Ocean Leadership (DC)
- Attended Sea Grant Knauss fellow dinner (DC)
- Hosted Xiamen delegation in Delaware
- Budget meeting preparation for provost presentation
- MAS director search committee chair
- Reviewed PT documents SMSP
- Reviewed Policy documents CEOE
- Participation and opening address at Convocation
- Robinson Renovations & Space moves
- Attended Chairs meetings
- Attended Leadership meetings
- Created CEOE policy documents:
 - Course buy out policy
 - Code of conduct (coordinated with AAUP reps and OEI)
- Attended several Dean Meetings
- Attended High-performance computing Trabant
- Attended President's Executive Committee
- Attended/Participated in DAC meeting
- Attended UD Advance meeting

FALL 2018

- Research Dean Duties
 - Review of UNIDEL proposals
 - Attended meeting at UD and Brookhaven for BNL partnerships.

NSF MRI proposal review and selection
 UDRF research Dean meetings
 Attended DOD security meeting
 Chaired academic council
 Reviewed SMSP new structure bylaws including P&T (several documents)
 Review of MMS proposal
 Review of CEOE bylaws
 Renaming of two departments
 Onboarding of new faculty
 Faculty mentoring program (setup mentors for new faculty in SMSP)
 Setup Professional development seminars and events for Junior Faculty including a student mentoring workshop and a research office orientation workshop
 Attended MMS workshop
 Participated in the “Bridge to the Doctorate-Cohort XVII Program” proposal
 Participate in interviews for HR Vice Provost
 Teaching annex Lewes meetings
 Setup David Lawson and Ratcliffe foundation link
 Setup Ratcliffe foundation and interested faculty meeting
 Attended Leadership retreat
 Attended Xiamen conference and workshop (Xiamen China)
 Janis Lopez Exit interview
 Professional development
 Attended ULEAD Class and training (all year)
 Cade webinar LGBT
 Webinar on AGU’s Ethics and Equity Center
 Overcome Unconscious Bias & Racial Tension,
 Mentoring Students of Color: Build Relationships That Foster Cross-Cultural Understanding, Trust and Accountability to Ensure Their Success.
 Hosted Xiamen delegation in Delaware (Minhan Dai)
 Attended Concur Training
 Setup and oversee review committee for Dr. Sturchio
 Strategic Planning Committee (Co-Chair)
 Attended Chairs meetings
 Attended Leadership meetings
 Attended Faculty of Color roundtable
 Interview human geography faculty
 Attended AGU and Alumni event
 Interview with Dean’s assistant replacements
 Serve on Campus master plan: Translational Campus Committee
 Serve on Campus master plan: Connected Campus Committee
 Pursued Ratcliffe foundation links with interested faculty

SPRING 2019

Conducted elections for COEO Senators
Conducted elections for COEO Graduate councilors
Co-Chair of the Search Committee for College Chief Business Officer
Attended PEC retreat
Budget meeting with the provost
Hiring meeting with the provost
Attended President's roundtable
Selected Alison Award nominee
Gave a presentation to Parent and Family Weekend Presentation
Brokered Cold room usage in LDL
Oversee GIS lab renovations
Oversee Penny 011 and 012 renovations
Academics & Library Technical Committee
Attending Learning Spaces committee meeting
Professional development:
 Webinar: How Lehigh's Engineering and Applied Science College Customized the Student Experience Through Peer Mentorship
 AGU Chair meeting in Austin TX: Summit on Improving Geoscience Graduate Student Preparedness
 Attended ULEAD Class and training (all year)
Led CEOE Convocation events (opening address)
Participate in all UD commencement events
Attended Chairs meetings
Attended Leadership meetings
Attended High-performance computing Trabant
Attended President's Executive Committee
Attended/Participated in DAC meeting

FALL 2019

Onboarding of new faculty
Faculty mentoring program (setup mentors for new faculty in SMSP)
Strategic Planning Committee (Co-Chair)
Attended Chairs meetings
Attended Research Dean meetings (Review of internal ESPCOR & MRI proposals)
Attended Leadership meetings
Drafted MOU with KIMST
Academic Council Chair
College P&T (election and training)
College P&T oversight
 Setup in-rank reviews in the College
Member of DBI advisory committee
Serve on Committee to examine F&A distribution practices at UD
Serving on UD search committee for Research Development Director
Oversee Renovations in Robinson 101
Serve as Research Dean for CEOE

Serve on Campus master plan: Translational Campus Committee
Serve on Campus master plan: Connected Campus Committee
Pursued Ratcliffe foundation links with interested faculty
Faculty mentoring
 Met with Junior Faculty
 Review of P&T Procedure
 Setup Faculty mentoring seminars and workshops
Attended President's Executive Committee
Reviewed Policy documents CEO
Attended provost council retreat
Attended Global Coalition Leadership meeting
Attended UD Advance meeting
Participated in Provost Executive Council
Participated in UD Advance review meeting
Attended Argonne National Lab workshop
Attended Global Coalition Leadership meeting. Wilmington DE
Manage Nuvve College financial exposure
Participated in Presidential external evaluation
Attended City of Newark Sustainable workshop
Met with all faculty candidates

SPRING 2020

Onboarding of new faculty (2 in SMSP)
Leadership retreat (Chesapeake bay)
Faculty mentoring program (setup mentors seminars and lunches with junior faculty)
Attended Chairs meetings
Attended Research Dean meetings
Member of UD Research council
 Subcommittee on F&A recovery
Attended Leadership meetings
Academic council Chair
College P&T oversight
 Setup in-rank reviews in the College
Member of DBI advisory committee
Serve on Committee to examine F&A distribution practices at UD
Serving on UD search committee for Research Development Director
Serving on UD search committee for Research coordinator director
Oversee Renovations in Robinson 101
Serve as Research Dean for CEOE
Pursued Ratcliffe foundation links with interested faculty
Faculty mentoring
 Met with Junior Faculty
 Review of P&T Procedure

Setup Faculty mentoring seminars and workshops
Attended President's Executive Committee
Reviewed Policy documents CEOE
 Finalize online overload compensation
 Finalize faculty instructional buyout policy
Attended UD Advance meeting
Participated in Provost Executive Council
Participated in UD Advance review meeting
Participated in Engage scholarship day
Attended bystander training seminar
Met with all faculty candidates
Attended decision days for the Dean
Setup Hub meetings & contacted all colleges and college research Deans
Wrote UNIDEL planning letter

Covid-19

Coordinated Provost request for online class conversation preparedness
Coordinated CEOE online class conversation
Compiled lists of Laboratory closure
Compiled lists of PI exceptions
Assisted with technology needs for faculty, staff, and students in CEOE
Coordinated faculty and staff office access
Compiled CEOE essential staff list
Assisted with CEMA and DGS Work exception lists
Attended webinar info meeting with NSF, ONR
Attended COVID-19 Research Contingency Planning
Constant contact with the Provost office for coordination of class transition and cancellations
Point of contact between Research office and research needs at CEOE
Member of research office committee drafting procedure and protocol for research recovery
Hosted meeting with Junior faculty and compiled new policies related to covid crisis
 P&T procedure changes
 Grading policy
 Class attendance policy
 Resources available for teaching, research, personal wellbeing
Set up meetings with Dean and CEOE faculty (coffee hour)
Coordinated Phase return to research
Collated teaching transition to 3/2 AB

FALL 2020

Wrote UNIDEL proposal in support of climate Hub (in collaboration with AR Siders and R. Vargas - funded)

Attended Chairs meetings
 Attended Research Dean meetings (Review of internal ESPCOR & MRI proposals)
 Attended Leadership meetings
 Reviewed Unidel proposals
 Academic Council Chair
 Revised 4+1 and MS program in GIS
 College P&T (election and training)
 College P&T oversight
 Setup in-rank reviews in the College
 Member of DBI advisory committee
 Serve on Committee to examine F&A distribution practices at UD
 Serve as Research Dean for CEOE
 Reviewed internal proposals to UD (UDRF)
 Reviewed limited submissions proposals (Epscor, NSF MRI, etc..)

Faculty mentoring
 Met with Junior Faculty
 Review of P&T Procedure
 Setup Faculty mentoring seminars and workshops for assistant professors
 Met with Associate professors

Reviewed Policy documents CEOE
 Attended Global Coalition Leadership meeting (with Delaware's Senator Coons)
 Followed-up with Nuvve College financial exposure
 Reviewed Policy documents CEOE
 Finalize online overload compensation policy
 Finalize faculty instructional buyout policy
 Setup Ted talks on climate change (with Matt Creasy)
 Coordinated with Research office for new faculty office and lab space in ISE/DBI
 Served on Xiamen/UD joint committee
 Partnership for Healthy Communities Steering committee
 Member of UD Research council
 Subcommittee on F&A recovery

Covid-19
 Attended webinar info meeting with NSF, ONR
 Attended COVID-19 Research Contingency Planning
 Point of contact between Research office and research needs at CEOE
 Hosted meeting with Junior faculty and compiled new policies related to covid crisis
 P&T procedure changes
 Grading policy
 Class attendance policy
 Resources available for teaching, research, personal wellbeing

SPRING 2021

Attended Chairs meetings
Attended Research Dean meetings
Attended Leadership meetings
Prepare and Review Unidel proposals
Academic Council Chair
 Revised 4+1 and MS program in GIS
 Teaching buyout policy
 Online overtime compensation
College P&T election
College P&T oversight
 Setup in-rank reviews in the College
College elections graduate council
College elections for academic senate
 Member of DBI advisory committee
Serve on Committee to examine F&A distribution practices at UD
Serve as Research Dean for CEOE
 Reviewed internal proposals to UD (UDRF)
 Reviewed limited submissions proposals (Epscor, NSF MRI, etc..)
Faculty mentoring
 Met with Junior Faculty
 Review of College centers, research office, team management, graduate student recruitment
 Setup Faculty mentoring seminars and workshops for assistant professors
 Met with Associate professors
Post-doc mentoring
Reviewed Policy documents CEOE
Followed-up with Nuvve College financial exposure
Reviewed Policy documents CEOE
 Finalize online overload compensation policy
 Finalize faculty instructional buyout policy
Coordinated with Research office for new faculty office and lab space in ISE/DBI
Served on Xiamen/UD joint committee
Partnership for Healthy Communities Steering committee
Secured space for REEF program
Oversee space and facilities renovations and RFS
Assist with Seawater lab design and RFS
Coordinate congressional proposals (Sea-water lab, Maersk, etc...)
Coordinate US wind proposals (seawater lab, Maersk, project ABLE, etc...)
Chair of the committee on Review of College centers
Chair of the search committee for the associate director of the climate hub
Member of the search committee for DBI director

Member of UD Research council

Covid-19

Attended webinar info meeting with NSF, ONR

Attended COVID-19 Research Contingency Planning

Point of contact between Research office and research needs at CEOE

Point of contact between Faculty affairs and CEOE