Curriculum Vitae

1. Personal Information

Name: Robert Owain Smith

2. Qualifications

(a)	Qualification name:	Institution:	Date of Graduation:
	Ph.D. Marine Science	University of Otago	May 2018
	B.Sc. (Hons). Oceanography	University of Southampton	June 2007

3. Employment History

(a) Present Position

Lecturer, Department of Marine Science, Feb 2017 - Present

(b) Employment History

Casual lecturer, University of Otago, Department of Marine Science. 2013-2016.

Demonstrator, University of Otago, Department of Marine Science. 2011-2013.

Marine Data Research Scientist, Met Office Hadley Centre (UK). 2007-2010.

Research Assistant, National Oceanography Centre (UK). 2007.

4. Other Relevant Experience

(b) National/International Collaboration

Key Researcher in MBIE Smart Idea "Mitigating climate risks: Identifying ocean internal wave hotspots and their cooling potential" 2024 – Present.

Researcher in Endeavour Research Programme "Natural carbon sequestration in our southern fjords – a pathway towards carbon neutrality" 2021 - Present.

Member - Coastal People: Southern Skies Centre of Research Excellence (https://www.otago.ac.nz/sciences/research/coastal-people.html). 2021 - Present.

Researcher in Endeavour Research Programme "The Moana Project" (http://www.moanaproject.org). 2019 - 2024.

Visiting Scientist. Met Office Hadley Centre (UK). Inter-comparison of oceanic fronts detected in remotely-sensed and model-derived images for ESA CCI Ocean Colour project. Mar-Apr 2012.

5. Research Activities

(a) Research Expertise

I am a physical oceanographer interested in meso- and submesoscale (1-100 km) ocean processes. My research group and I currently focus on oceanic front dynamics, shelf-slope exchange processes and the variability and drivers of upper-ocean temperature, including marine heatwaves. I have demonstrated expertise in synthesising in-situ observations (ships, drifters and moored instruments), satellite remote-sensing and numerical modelling to address questions related to my research and that of interdisciplinary collaborations I contribute toward. Since 2020, I have garnered 862 citations and have an h-index of 15 (Google Scholar, Dec 2024).

(c) Research Grants (significant grants only)

(1) Please list below any research grants you have received where you are the first named principal or joint principal investigator.

Physical control of nutrient fluxes on the inner continental shelf. University of Otago Research Grant. Dr Robert Smith. Prof Steve Wing. **$28,703**. Jan 2025 – Mar 2026. Principal Investigator at 0.2 FTE for 2025.

Understanding Local and Regional Thermal Regimes to Prepare for Climate Change. Coastal Peoples Southern Skies Center of Research Excellence. Dr Robert Smith; Dr Peter Russell, **$324,344**. 2022-2024. Joint Principal Investigator at 0.1 FTE for 2022-2024.

Shelf-Ocean Exchange at the Southland Front, New Zealand. University of Otago Research Grant. Dr Robert Smith; Dr Ata Suanda. **$21,769**. Nov 2018. Principal Investigator at 0.15 FTE for 2018.

(2) Please list below any research grant on which you are a named contributing researcher.

Mitigating climate risks: Identifying ocean internal wave hotspots and their cooling potential. 2024 MBIE Smart Idea; Macdonald; Behrens; Smith; Stevens; Mason; Shakespeare; Smith; Stone; 2024-2027. **$1,000,000**. Key Researcher at 0.1 FTE.

Assessing the effects of marine heatwaves on New Zealand rock lobster (Jasus edwardsii); 2022 University of Otago Resarch Grant; Gnanalingam; Allan; Smith; **$59,091**, 2023. Researcher at 0.1 FTE.

Natural carbon sequestration in our southern fjords – a pathway to carbon neutrality; 2021 Endeavour Fund – Research Programmes; Moy; Wilson; Baisden; Arnaud; Gerrard; McLeod; Turnbull; Saunders; Beltran; Gorman; Gilmer; Keller; Riesselman; Stirling; Savage; Smith; Vandergoes; Arz; Austin; Dunbar; Lamy; Bianchi; **$8,605,643**; 2021-2026. Researcher at 0.1 FTE for 2021-2025.

Coastal People: Southern Skies; Royal Society Te Apārangi Centre of Research Excellence (CoRE) fund; Hepburn; Jackson; Allan; Carson; Cornwall; Currie; Dillingham; Greig; Knapp; McGraw; Phillips; Pritchard; Rayment; Rewi; Richards; Rock; Rogers; Sabetian; Shears; Simmonds; Stephenson; Suanda; Taylor; Tidey; Waiti; Bell; Camp; Carter; Connell; Cutler; D'ARchino; Desmond; Dickson; Dickson; Elder; Flack; Ford; Fraser; Gnanalingam; Hakopa; Hewitt; Hoffmann; Hokowhitu; Housiaux; Hurd; Jackson; Kainamu-Murchie; Kenny; Lane; Law; Leoni; Masters-Awatere; Mercier; Miller; Mita; Morrison; Nelson; Ngarimu; Pirker; Poa; Poto; Poulin; Raureti; Rewi; Riesselman; Ross; Ruru; Russell; Ryan; Savage; Sirguey; Smith; Stephenson; Strack; Tibble; Walter; Walter; Waters; Wheen; White; Wikaira; Halderen; **$32,250,000;** 2021-2018; Associate Investigator at 0.1 FTE for 2021-2024.

The Moana Project; 2018 MBIE Endeavour Fund – Research Programmes; $11,500,000; 2019–2023. Research Subcontract to the University of Otago; Suanda; Smith; **$650,000**; 2019-2023; Researcher at 0.1 FTE for 2019-2023.

Hydrography and productivity in the Otago submarine canyons. University of Otago Research Committee, Marsden Near-miss Fund. Rayment; Smith. **$10,000**. Jul 2017.

Southern right whales as indicators of Southern Ocean productivity. New Zealand Antarctic Research Institute. Dawson; Rayment; Moore; Bejder; Christiansen; Smith. **$100,000**. 2017-2018. Associate Investigator at 0.1 FTE for 2017-2018.

(d) Supervision of Postgraduate Students

<u>Current Students</u>

Felix Cook. PhD. Marine Heatwaves Around New Zealand: Identification and Causes. **Dr. Robert Smith** (40%), Prof. Moninya Roughan (University of New South Wales, Sydney) (27%), Prof. Nicholas Cullen, (33%). Start date: Sep 2020. PhD submitted: Sep 2024.

Jackson Beagley. PhD. Circulation modelling in fjords enhances understanding of carbon burial. **Dr Robert Smith** (40 %), Associate Prof. Chris Moy (33 %), Dr. Gary Wilson (GNS, NZ) (10 %), Dr. Gael Arnaud (Met Ocean Solutions, NZ) (17 %). Start date: Feb 2023.

Bridgit Smerdon. MSc in Marine Science. Drivers of extreme temperature variability in southern New Zealand coastal kelp forests. **Dr. Robert Smith** (70%), Dr. Pete Russell (30%). Start Date: Feb 2023.

Cassidy Collier. MSc in Marine Science. Interannual variability of upper ocean heat content over the Campbell Plateau. **Dr Robert Smith** (70%), Dr Phil Sutton (30%). Start Date: Feb 2024.

Nicholas Daudt. Doctor of Philosophy. Spatiotemporal patterns and environmental drivers of seabird assemblages in Australasia, a world hotspot of seabird diversity. **Dr Will Rayment** (60%), Dr Matthew Schofield (20%), Dr Robert Smith (20%). Start Date: Oct 2020.

William Carome. Doctor of Philosophy. Putting a decline into context: examining the body condition, distribution, and future habitat suitability of parāoa sperm whales at Kaikōura and beyond . **Dr Will Rayment** (60%), Dr Robert Smith (15%), Dr Matthew Schofield (15%), Dr Sofie van Parijs (10%). Start Date: Oct 2020.

Completed

Yuna Barnbel. BSc (Hons) in Marine Science. Predicting thermal refuges from a warming ocean . **Dr Robert Smith** (60%), Dr Pete Russell (40%).

Jordan Sparrow. MSc in Marine Science. Seasonal Chl-a variability in the presence of thermal and haline stratification over the mid-shelf. **Dr. Robert Smith (50%),** Assoc. Prof. Linn Hoffmann (50%).

Finn Ryder. Doctor of Philosophy. Drivers of population dynamics and fishery status of pāua (Haliotis iris). **Prof Chris Hepburn** (35%), Dr Gaya Gnanalingam (35%), Dr Will Rayment (10%), Dr Robert Smith (10%), Dr Daniel Pritchard (10%).

Katie Nelson. MSc in Marine Science. Controls on the Heat Budget of a Mid-Latitude Coastal Inlet. **Dr. Robert Smith** (50%), Prof. Steve Wing (50%).

Kieva Dunlop. BSc (Hons) in Marine Science. Where do the wild things go? Understanding the transport and connectivity of Pāua across a customary fisheries management area. **Dr. Robert Smith** (50%), Dr. Gaya Gnanalingam (25%), Dr. Pete Russell (25%).

Erik Johnson. PhD. Physical Properties and Processes in New Zealand's Dynamical Subtropical Front. **Dr. Robert Smith** (40%), Prof. Steve Wing (33%), Dr. Ata Suanda, (27%).

David Johnston. Doctor of Philosophy. Sentinels of the Southern Ocean: Southern Right Whales (Eubalaena australis) as indicators of oceanic productivity. **Prof. Steve Dawson** (50%), Dr. Will Rayment (40%), Dr. Robert Smith (10%).

Andrew Hurley. Master of Science in Marine Science. Internal Tidal Bores as a Driver of Slope-Shelf Transport in the Otago Submarine Canyon System. **Dr Robert Smith** (50%), Prof. Steve Wing (50%),

Tim Baxter. Master of Science in Marine Science. The influence of tidal mixing on a cold-water pool surrounding the Three Kings Island's, New Zealand. **Dr Robert Smith** (65%), Dr. Ata Suanda (35%).

Emma Harte. Master of Science in Marine Science. The influence of oceanographic controls on dispersal of the Patagonian toothfish on the Falkland Island Plateau. **Prof. Gary Wilson** (80%), Dr. Robert Smith (20%).

Mitchell Chandler. B.Sc. (Hons.) in Geophysics. Tracing the 'Tasman Leakage': Flow in the boundary current off Fiordland. **Dr. Melissa Bowen** (University of Auckland) (75%), Dr. Robert Smith (University of Otago) (15%).

Tim Baxter. Postgraduate Diploma in Science in Marine Science. Topographic Upwelling at the Three Kings Islands, New Zealand. **Dr. Robert Smith** (100%).

My supervision has been formally assessed through Individual Postgraduate Student Evaluation Questionnaires at the University of Otago (2020, 2022) and also peer reviewed by Prof Steve Wing (Jan 2022).

6. Distinctions

Early-Career Teacher of the Year, Division of Sciences Awards 2018, University of Otago, Nov 2018

Nominated by students for Otago University Student's Association Teaching Award, Sep 2017.

Nominated by students for Otago University Student's Association Teaching Award, Sep 2016.

University of Otago Doctoral Scholarship, 2010-2013.

Outstanding Scientific Achievement Award, Met Office, Dec 2008.

Best Graduating Student Prize from the School of Ocean and Earth Science, University of Southampton, Jun 2007.

7. Teaching Activities

(a) Range and level of teaching (Last three years only)

EAOS111, Earth and Ocean Science. 2022 - 2024.

MARI112, Global Marine Systems. 2022 - 2023.

MARI/OCEN201, Physical Oceanography. 2022 - 2024.

MARI301, Marine Ecology. 2022 - 2024.

MARI322, Coastal and Shelf Sea Oceanography. 2022 - 2024.

MARI401, Advanced Methods in Marine Science. 2022 - 2024.

(b) Teaching administration and leadership, quality assurance, evaluation

Coordinator – MARI201 Physical Oceanography (2022 - 2024)

(c) Professional development achievements

I have attended the following HEDC teaching development courses:

A conversation on student motivation to attend, and to learn, during a pandemic and later (Feb-2022).

Recruiting and selecting postgraduate research students (Apr-2020)

Providing quality postgraduate supervision (Oct-2018)

Course Design (Sep-2018)

Assisting postgraduate students to write (Sep-2018)

Assisting postgraduate students to engage with the literature (Aug-2018)

New Academic Staff Conference (Oct-2017)

An Introduction to University Teaching (Feb-2017)

I have attended the following IT Training and Development Courses:

R – Data Analysis Walkthrough (Mar-2020)

I have also attended the following workshop run by Te Whare Tāwharau:

Handling Disclosures of Sexual Assault for Staff Members (Aug-2021)

8. Publications

I am generally listed as the second or last author on manuscripts where I have significantly contributed to the study design, data analysis and writing the manuscript, including cases where I have been the primary supervisor of a student. In papers with >5 authors, co-authors are listed alphabetically, due to our approximately equal philosophical and/or analytical contributions to the research.

(a) Refereed Journal Articles

Suanda, H.S. and Smith, R.O. Spring stratification and internal temperature oscillations near a coastal inlet. New Zealand Journal of Marine and Freshwater Research. Accepted (03 Dec 2024). *I conducted fieldwork, undertook analysis of moored thermistor data, contributed text to the introduction, results and discussion and edited the manuscript.*

Pearman, W.S., Duffy, G.A., Smith, R.O., Currie, K.I., Gemmell, N.J., Morales, S.E. and Fraser, C.I. Host dispersal relaxes selective pressures in rafting microbiomes, triggering successional changes. Nature Communications. Accepted (27 Nov 2024). *I conducted analysis of SVP drifter tracks, oceanographic modelling with Duffy, wrote text for the methods and helped revise the manuscript.*

Salinger, M.J., Trenberth, K.E., Diamond, H.J., Behrens, E., Fitzharris, B.B., Herold, N., Smith, R.O., Sutton, P.J. and Trought, M.C.T. (2024), Climate Extremes in the New Zealand Region: Mechanisms, Impacts and Attribution. Int. J. Climatol. https://doi.org/10.1002/joc.8667 *I undertook the analysis of historical marine heatwaves that supports the oceanic component of the manuscript using remotely sensed oceanic temperature data, contributed text to the results and helped edit the manuscript.*

Bell, J. J., Micaroni, V., Strano, F., Ryan, K. G., Mitchell, K., Mitchell, P., Wilkinson, S., Thomas, T., Batchiar, R., & Smith, R. O. (2024). Marine heatwave-driven mass mortality and microbial community reorganisation

in an ecologically important temperate sponge. Global Change Biology, 30, e17417. https://doi.org/10.1111/gcb.17417 *This is a follow-up to our study in Current Biology (Bell et al., 2023). I undertook the marine heatwave analysis of ocean temperature and rainfall data, wrote text for relevant sections in the Introduction, Methods, Results and Discussion, and helped revise the manuscript.*

Jakoboski, J., Roughan, M., Radford, J., de Souza, J.M.A.C., Felsing, M., Smith, R.O., Puketapu-Waite, N., Orozco, M.M., Maxwell, K.H. and Van Vranken, C., 2024. Partnering with the Commercial Fishing Sector and Aotearoa New Zealand's Ocean Community to Develop a Nationwide Subsurface Temperature Monitoring Program. Progress in Oceanography, 225, https://doi.org/10.1016/j.pocean.2024.103278. *This manuscript was a contribution to the MBIE-funded Moana Project. I contributed an analysis to the results, text in the discussion section and helped edit the manuscript.*

Johnson, E. J., Collins, C., Suanda, S.H., Wing, S.R., Currie, K.I., Vance, J. and Smith, R.O. 2024. Drivers of neritic water intrusions at the subtropical front along a narrow shelf, Continental Shelf Research, 105248, https://doi.org/10.1016/j.csr.2024.105248. *I was the primary supervisor of Johnson's PhD. Johnson led the analysis and writing. I regularly provided Johnson with advice on all aspects of the study, including support analyzing model experiments, as well as feedback on various versions of the manuscript.*

Daubt, N.W., Schofield, M.R., Bugoni, L., Woehler, E.J., Smith, R.O. and Rayment, W. J. 2024. Seabird assemblages are linked to the major western boundary current off eastern Australia. Progress in Oceanography, 223, 103215, https://doi.org/10.1016/j.pocean.2024.103215. *I co-supervise Daubt's PhD thesis. I provided Daubt with guidance on study design, analysis and data interpretation and provided written feedback on drafts of the manuscript.*

Johnson, E. E., Suanda, S. H., Wing, S. R., Currie, K. I., & Smith, R. O. 2023. Episodic Summer Chlorophyll-a Blooms Driven by Along-Front Winds at Aotearoa's Southeast Shelf Break Front. Journal of Geophysical Research: Oceans, 128, e2022JC019609. https://doi.org/10.1029/2022JC019609. *I was the primary supervisor of Johnson's PhD. Johnson led the analysis and writing. I regularly provided Johnson with advice on all aspects of the study, including support undertaking fieldwork, as well as feedback on various versions of the manuscript.*

Montie, S., Thoral, F., Smith, R.O., Cook, F., Tait, L.W.., Pinkerton, M.H., Schiel, D.R. and Thomsen M.S. 2023 Seasonal trends in marine heatwaves highlight vulnerable coastal ecoregions and historic change points in New Zealand, New Zealand Journal of Marine and Freshwater Research, https://doi.org/10.1080/00288330.2023.2218102. *I undertook the comparison of satellite and in- situ data, supported oceanographic interpretation and refinement of results, and contributed to relevant sections in the discussion and revisions of the manuscript.*

Salinger, M., Diamond, H., Bell, J., Behrens, E., Blair, B., Fitzharris, N. H., McLuskie, M., Parker, A. K., Ratz, H., Renwick, J., Schofield, C., Shears, N., Smith, R. O., Sutton, P. J. and Trought, M. C. T. 2023. Coupled ocean-atmosphere summer heatwaves in the New Zealand region: An update. Weather and Climate, 42, 18-41. *I undertook the statistical analysis of historical marine heatwaves that underpinned the oceanic component of the manuscript using remotely sensed oceanic temperature data, contributed text to the results and helped edit the manuscript.*

James J. Bell, Robert O. Smith, Valerio Micaroni, Francesca Strano, Celia A. Balemi, Paul E. Caiger, Kelsey I. Miller, Arie J.P. Spyksma, Nick T. Shears. 2023. Marine heat waves drive bleaching and necrosis of temperate sponges. Current Biology, 9, 158-163, https://doi.org/10.1016/j.cub.2022.11.013. *The idea for the study was developed jointly by Bell, myself and Shears. I helped design the study, undertook the analysis and interpretation of marine heatwaves data and helped to write and edit the manuscript will Bell.*

Souza, J., Suanda, A., Couto, P., Smith, R.O., Kerry, C. and Roughan, M. 2023. The Moana Backbone Model: a 25-year hindcast simulation for New Zealand waters using the ROMSv3.7 model. https://doi.org/10.5194/gmd-16-211-2023. Geoscientific Model Development, 16, 211-231. *This manuscript is a contribution to the MBIE-funded Moana Project. I contributed the statistical analysis of observed- and model-derived mixed layer depths, contributed results and discussion text and helped edit the manuscript.*

Cook, F., Smith, R. O., Roughan, M., Cullen, N., Shear, N., Bowen, M. 2022. Marine heatwaves in shallow coastal ecosystems are coupled with the atmosphere: Insights from half a century of daily in situ temperature records. Frontiers in Climate, 4, https://doi.org/10.3389/fclim.2022.1012022. *This manuscript is a contribution to the MBIE-funded Moana Project. I am the primary supervisor of Cook's PhD. Cook led the analysis and writing. I regularly provided Cook with advice on all aspects of the study, as well as feedback on various versions of the manuscript.*

Stevens, C., Spillman, C., Behrens, E., Broekhuizen, N., Holland, P., Matthews, Y., May, K., O'Callaghan, J., Rampal, N., Smith, R., Soltanzadeh, I., Tait, L., Taylor, D., Thoral, F., Williams, M. 2022. Horizon scan on the benefits of ocean seasonal forecasting for Aotearoa New Zealand in a warming climate. Frontiers in

Climate, 4, https://doi.org/10.3389/fclim.2022.907919. *Stevens and Spillman lead the writing and co-ordinated the workshop that this manuscript has developed from. Along with the other authors, I participated in the December workshop, contributed text to the manuscript, and edited and provided feedback on various versions of the manuscript.*

Cooper, J. K., Gorman, A. R., Bowman, H. M. and Smith, R. O. 2021. Temporal variability of thermohaline fine-structure associated with the Subtropical Front off the southeast coast of New Zealand in high-frequency short-streamer multi-channel seismic data. Frontiers in Marine Science, 8, https://doi.org/10.3389/fmars.2021.751385. *This manuscript is based on a chapter of Cooper's PhD thesis. Cooper led the analysis and writing. I provided Cooper guidance on analysis and data interpretation and provided written feedback on drafts of the manuscript.*

Durante, L. M., Smith, R.O., Kolodzey, S., McMullin, R. M., Salmond, N., Schlieman, C., O'Connell-Milne, S. A., Frew, R. D., Van Hale, R. and Wing, S. R. 2021. Oceanographic transport along frontal zones forms carbon, nitrogen, and oxygen isoscapes on the east coast of New Zealand: Implications for ecological studies, Continental Shelf Research, 104368, https://doi.org/10.1016/j.csr.2021.104368. *This manuscript is based on a chapter of Durante's PhD thesis. Durante led the analysis and writing. I provided Durante guidance on analysis and interpretation of oceanographic data, gave written feedback on drafts of the thesis chapter and manuscript and helped to edit the manuscript.*

Salinger, J.M., Diamond, H. J., Behrens, E., Fernandez, D., Fitzharris, B.B., Herold, N., Johnstone, P., Kerckhoffs, H., Mullan, B.A., Parker, A.K., Renwick, J., Scofield, C., Siano, A., Smith, R.O., South, P.M., Sutton, P.J., Teixeira, E., Thomsen, M.S. and Trought, M.C.T. 2020. Unparalleled coupled ocean-atmosphere summer heatwaves in the New Zealand region: Drivers, Mechanisms and Impacts. Climatic Change, 162, 485-506, https://doi.org/10.1007/s10584-020-02730-5.*This study is a follow-up to our study of a marine heatwave that affected New Zealand during summer 2017/18 (Salinger et al., 2019). I contributed an analysis of the nearshore characteristics of three previously reported summer MHW events in the Tasman Sea, using data ocean remote sensing data and observations collected at the Portobello Marine Laboratory, contributed text to the results and discussion sections and helped edit the manuscript.*

Beltran, C., Golledge, N.R., Ohneiser, C., Kowalewski, D., Francois, M., Sicre, M.A., Hageman, K.J., Smith, R.O., Wilson, G. 2020. Southern Ocean temperature records and ice-sheet models demonstrate rapid Antarctic ice sheet retreat under low atmospheric CO2 during Marine Isotope Stage 31. Quaternary Science Reviews, 228, https://doi.org/10.1016/j.quascirev.2019.106069. *I was invited in by Beltran in 2017 to provide a conceptual contribution to this multidisciplinary study. I contributed to the interpretation of results, helped write the introduction and discussion and reviewed and commented on the draft manuscript.*

Chandler, M., Bowen, M., Smith, R.O. 2019. The Fiordland Current, southwest New Zealand: mean, variability and trends. 2019. New Zealand Journal of Marine and Freshwater Research, 55, https://doi.org/10.1080/00288330.2019.1629467. *This paper arose from Chandler's BSc Honours dissertation that I co-supervised with Bowen. The idea for the study was developed jointly by myself and Bowen. Chandler led the analysis and writing. I regularly provided Chandler with advice on all aspects of the study during his Honours, as well as feedback on various versions of the dissertation and manuscript.*

Salinger, J.M., Renwick, J., Behrens, E., Mullan, B.A., Diamond, H.J., Sirguey, P., Smith, R.O., Trought, M.C.T., Alexander, L.V., Cullen, N.J., Fitzharris, B.B., Hepburn, C.D., Parker, A.K., Sutton, P.J. 2019: The unprecedented coupled ocean-atmosphere summer heatwave in the New Zealand region 2017/18: drivers, mechanisms and impacts. Environmental Research Letters, 14, 044023, https://doi.org/10.1088/1748-9326/ab012a. *I undertook the statistical analysis of historical marine heatwaves that underpinned the oceanic component of the manuscript using in-situ and remotely sensed oceanic temperature data, contributed text to the result and discussion and helped edit the manuscript.*

O'Callaghan, J., Stevens, C., Roughan, M., Cornelisen, C., Sutton, P., Garrett, S., Giorli, G., Smith, R.O., Currie, K. I., Suanda, S.H., Williams, M., Bowen, M., Fernandez, D., Vennell, R., Knight, B.R., Barter, P., McComb, P., Oliver, M., Livingston, M., Tellier, P., Meissner, A., Brewer, M., Gall, M., Nodder, S.D., Decima, M., Souza, J., Forcén-Vazquez, A., Gardiner, S., Paul-Burke, K., Chiswell, S., Roberts, J., Hayden, B., Biggs, B., Macdonald, H. 2019. Developing an integrated ocean observing system for New Zealand. Frontiers in Marine Science, https://doi.org/10.3389/fmars.2019.00143. *J.O. led the writing and the NZ-OOS workshop that this paper developed from. Along with the other authors, I participated in the August workshop and provided feedback on various versions of the manuscript.*

Smith, R.O., Vennell, R., Bostock, H.C. and Williams, M.J.M. 2013. Interaction of the subtropical front with topography around southern New Zealand, Deep Sea Research Part 1, 76, https://doi.org/10.1016/j.dsr.2013.02.007. *The idea for this paper was developed by myself, Vennell, Bostock and Williams. I was involved extensively in the fieldwork, I carried out all of the data analysis, wrote the manuscript and incorporated thoughts and content revisions from co-authors.*

Atkinson, C.P., Rayner, N.A., Roberts-Jones, J. and Smith, R.O. 2013. Assessing the quality of sea surface temperature observations from drifting buoys and ships on a platform-by-platform basis. Journal of Geophysical Research: Oceans, 118, 3507-3529, https://doi.org/10.1002/jgrc.20257. *I provided the idea for this project, I developed the in-situ - satellite inter-comparison method, advised on aspects of the study and provided feedback on various versions of the manuscript.*

Kennedy, J.J., Smith R.O. and Rayner, N.A. 2013. Using AATSR data to assess the quality of in situ sea-surface temperature observations for climate studies. 2012. Remote Sensing of Environment, 116, 79-92, https://doi.org/10.1016/j.rse.2010.11.021. *Kennedy wrote the initial draft of the paper. I provided technical support on the buoy-satellite data comparisons, contributed to refining the ideas and to writing the paper.*

Kennedy J.J., Rayner, N.A., Smith, R.O., Saunby, M. and Parker, D.E.. 2011. Reassessing biases and other uncertainties in sea-surface temperature observations since 1850 part 1: measurement and sampling errors. 2011. Journal of Geophysical Research – Atmospheres, 116, https://doi.org/10.1029/2010JD015218. *Kennedy drove this project. I conducted the comparison and interpretation of drifter and ship-based sea surface temperature measurements that helped make this study possible, and also helped write the results sections of the two papers (see below).*

Kennedy J.J., Rayner, N.A., Smith, R.O., Saunby, M. and Parker, D.E. 2011. Reassessing biases and other uncertainties in sea-surface temperature observations since 1850 part 2: biases and homogenisation. Journal of Geophysical Research – Atmospheres, 116, https://doi.org/10.1029/2010JD015220. *Contribution described above.*

Kent, E.C., Kennedy, J.J., Berry, D.I. and Smith, R.O. 2010. Effects of instrumentation changes on ocean surface temperature measured in situ. Wiley Interdisciplinary Reviews: Climate Change, 1, 718-728, https://doi.org/10.1002/wcc.55. *Kent drove this project. I provided technical advice on the measurement of ocean surface temperatures from oceanic drifters and provided feedback on various versions of the work..*

Smith R.O., Bryden, H.L. and Stansfield, K. 2008. Observations of new western Mediterranean deep water formation using Argo floats (2004-2006). Ocean Science, 4, 133-149, https://doi.org/10.5194/os-4-133-2008. *This paper arose from a project I completed during my undergraduate degree that was supervised by Bryden. I carried out all the data analysis, and drafted the manuscript and incorporated suggestions and revisions from co-authors.*

(b) Other Significant Conference Involvement

Smith, R.O., Wing, S.R. Historical Heatwaves: The Untold Stories of Fiordland's 1970s Marine Event. 2024 New Zealand Physical Oceanography Workshop, Wellington, Sep 2024. Verbal Presentation.

Smerdon, B., Russell, P., Smith, R.O. Drivers of temperature variability in a southern New Zealand forest of giant kelp. 2024 New Zealand Physical Oceanography Workshop, Wellington, Sep 2024. Verbal Presentation.

Beagley, J., Arnaud, G., Moy, C., Wilson, G., Smith, R.O. Characteristics and Drivers of Deep Water in Patea / Doubtful Sound. 2024 New Zealand Physical Oceanography Workshop, Wellington, Sep 2024. Verbal Presentation.

Jakoboski, J. K., Roughan, M., Radford, J., Felsing, M., Souza, J. M., Smith, R., Van Vranken, C. (2024). A nation-wide fishing-vessel ocean temperature observing programme in Aotearoa New Zealand. Proceedings of the Ocean Sciences Meeting (OSM). New Orleans, USA, Feb 2024, Verbal presentation.

Johnson, E. E., Suanda, S. H., Wing, S. R., Currie, K. I., & Smith, R. O. (2024). Episodic summer chlorophyll-a blooms driven by along-front winds at Aotearoa's southeast shelf break front. Proceedings of the Ocean Sciences Meeting (OSM). New Orleans, USA, Feb 2024, Poster presentation.

Cook, F., Smith, R., Roughan, M., & Cullen, N. J. (2024). Understanding the spatio-temporal influence of climate variability on marine heatwaves in aquaculture regions: A New Zealand perspective. Proceedings of the Ocean Sciences Meeting (OSM). New Orleans, USA, Feb 2024, Poster presentation.

Beagley, J., Smith, R., Moy, C. M., Arnaud, G., & Wilson, G. S. (2024). Characteristics and drivers of deep-water properties in Patea/Doubtful Sound: A temperate fjord in SW Aotearoa/New Zealand. Proceedings of the Ocean Sciences Meeting (OSM). New Orleans, USA, Feb 2024, Poster presentation.

Cook, F., Cullen, N., Roughan, M., Smith, R.O. Understanding the spatio-temporal influence of climate variability on marine heatwaves in aquaculture regions: A New Zealand perspective. Climate Change Resilience in Aquaculture Symposium, Cawthron Institute, Nelson, New Zealand, August 2023.

Smith, R.O., Jakoboski, J. and Roughan, M. Cumulative effects of convergence and downwelling generate an extreme marine heatwave in coastal New Zealand. New Zealand Marine Studies Society 2022 Conference, Nov 2022. Verbal Presentation.

Hurley, A., Wing, S., Smith, R.O., Internal Tidal Bores as a Driver of Slope-Shelf Transport in the Otago Submarine Canyon System. New Zealand Marine Studies Society 2022 Conference, Nov 2022. Poster Presentation.

Smith, R.O., Jakoboski, J. and Roughan, M. Cumulative effects of convergence and downwelling generate an extreme marine heatwave in coastal New Zealand. 2022 New Zealand Physical Oceanography Workshop, Wellington, Sep 2022. Verbal Presentation.

Smith, R.O., Jakoboski, J. and Roughan, M. Cumulative effects of convergence and downwelling generate an extreme marine heatwave in coastal New Zealand. Invited oral seminar. Climateextremes.org.au Marine heatwave meetings, Aug 2022. Verbal Presentation.

Smith R. O., and Suanda, S. The Nature of Shelf-Ocean Exchange around Southern New Zealand. ICSHMO 2022, Online, Feb 2022. Verbal Presentation.

Johnson, E., Suanda, S., Wing, S., Currie, K., Smith, R.O. Episodic Summer Chlorophyll-a Blooms Driven by Synoptic Winds at Aotearoa's Southeast Shelf Break Front. ICSHMO 2022, Online, Feb 2022. Verbal Presentation.

Cook, F., Smith, R. O., Roughan, M., Cullen, N., Shears, N., Bowen, M. Marine heatwaves in shallow water ecosystems of New Zealand. ICSHMO 2022, Online, Feb 2022. Verbal Presentation.

Hurley, A., Wing, S., Smith, R.O., Internal Tidal Bores as a Driver of Slope-Shelf Transport in the Otago Submarine Canyon System. ICSHMO 2022, Online, Feb 2022. Verbal Presentation.

Smith R. O., and Suanda, S. The Nature of Shelf-Ocean Exchange around Southern New Zealand. 2021 NZ Marine Sciences Society Conference, Tauranga, Jul 2021. Verbal Presentation.

Cook, F., Smith, R.O., Cullen, N., Roughan, M., Bowen, M., and Shears, N. Marine heatwaves in shalllw water ecosystems of New Zealand. 2021 NZ Marine Sciences Society Conference, Tauranga, Jul 2021. Verbal Presentation.

Johnson, E, Smith, R.O., Suanda, S., Wing, S. Wind-related chlorophyll variability at New Zealand's subtropical front. 2021 NZ Marine Sciences Society Conference, Tauranga, Jul 2021. Poster Presentation.

Cook, F., Smith, R.O., Cullen, N., Roughan, M., Bowen, M., and Shears, N. Marine heatwaves in shallow water ecosystems of New Zealand. AMOS2021, Online, Jan 2021. Poster Presentation.

Smith, R.O., and Suanda, S. Shelf-ocean exchange at the Southland Front, New Zealand. 2020 New Zealand Physical Oceanography Workshop Online, Nov 2020. Verbal Presentation.

Cook, F., Smith, R.O., Cullen, N., Roughan, M., Bowen, M., and Shears, N. Marine heatwave detection and analysis in two long-term NZ climate records. 2020 New Zealand Physical Oceanography Workshop Online, Nov 2020. Verbal Presentation.

Johnson, E., Smith R.O., Suanda, S., and Wing, S. Shelf Concious: Understanding physical processes over the Otago shelf break using remotely sensed images. 2020 New Zealand Physical Oceanography Workshop Online, Nov 2020. Verbal Presentation.

Baxter, T., Smith R.O., and Suanda, S., Tidal mixing over the northern continental shelf of New Zealand. 2020 New Zealand Physical Oceanography Workshop Online, Nov 2020. Verbal Presentation.

Hurley, A., Smith R.O., and Wing, S. Mechanisms of slope-shelf exchange at the Otago shelf-break. 2020 New Zealand Physical Oceanography Workshop Online, Nov 2020. Verbal Presentation.

Chandler, M., Bowen, M., and Smith, R.O. The Fiordland Current: mean, variability and trends. 2020 New Zealand Physical Oceanography Workshop Online, Nov 2020. Verbal Presentation.

Smith, R. O., Marine Heatwaves around New Zealand: Identification and Causes. Moana Project Science Hui #2, May 2020, Verbal Presentation.

Beltran, C., Golledge, N.R., Ohneiser, C., Kowalewski, D., Francois, M., Sicre, M.A., Hageman, K.J., Smith, R.O., Wilson, G. Rapid Antarctic ice sheet retreat under low atmospheric CO2. EGU General Assembly 2020 / Sharing Geoscience Online, May 2020, Verbal Presentation.

Smith, R. O. and Vennell, R. Seasonal Variability of the Subtropical Frontal Zone in the Tasman Sea Inferred Using Remotely Sensed SST and SSS data. 2020 Ocean Sciences Meeting, San Diego, USA, Feb 2020. Verbal Presentation.

Suanda, S., Smith, R. O., and Russell, P. Three-dimensional inner-shelf circulation downstream of Otago peninsula, New Zealand. 2020 Ocean Sciences Meeting, San Diego, USA, Feb 2020. Poster Presentation.

Smith, R.O. and Rayment, W.R. Synoptic-scale variability of subsurface ocean thermal structure within the Otago submarine canyons. Fluids in New Zealand 2020 Conference, Jan 2020, Verbal Presentation.

Shears, N., Bowen, M., Smith, R.O.: Is the intensity and frequency of marine heatwaves increasing in New Zealand's coastal waters? New Zealand Marine Sciences Society Conference, Jul 2019. Verbal Presentation.

Guerra, M., Somerford, T., Dawson, S., Smith, R.O., Slooten, L., Rayment, W.: Inter-annual variability in abundance of sperm whales at Kaikōura in relation to ocean conditions. New Zealand Marine Sciences Society Conference, Jul 2019. Verbal Presentation.

Suanda, A., Smith, R.O.: High-frequency temperature oscillations on the Otago inner shelf. Fluids in New Zealand 2019 Conference, Jan 2019. Poster Presentation.

Guerra, M., Somerford, T., Smith, R., Dawson, S., Slooten, L. and Rayment, W.: Environmental drivers of the foraging distribution of sperm whales in the submarine canyon of Kaikōura, New Zealand. 4th International Submarine Canyon Symposium, Shenzhen, China, Nov 2018. Verbal Presentation.

Clar, S., Gorman, A., Smith, R.O.: Seismic Imaging of Stationary Mesoscale Eddies East of Cook Strait, New Zealand. European Geosciences Union General Assembly 2018, Vienna, Austria, Apr 2018. Verbal Presentation.

Gorman, A., Cooper, J., Clar, S., Smith, R.O., Bowan, H. Imaging of water masses SE of New Zealand using high-, medium- and low-resolution seismic reflection data. European Geosciences Union General Assembly 2018, Vienna, Austria, Apr 2018. Verbal Presentation.

Smith, R.O. and Vennell, R.: Seasonal variability of the Subtropical Front in the Tasman Sea. 4th Physical Oceanography Workshop (POW) Wellington, NZ, Aug 2017. Verbal Presentation.

Smith, R.O. and Vennell, R.: Understanding decadal-scale variability of the subtropical front in the South Pacific. 2014 Ocean Sciences Meeting, Hawaii, USA, Feb 2014. Poster Presentation.

Smith, R.O., Vennell, R., Bostock, H., Williams, M, Forcen, A, Fernandez, D. Where is the Subtropical Front? New observations south of New Zealand. 2nd Physical Oceanography Workshop (POW) Wellington, NZ, Jun 2012. Verbal Presentation.

Smith, R.O. and Vennell, R.: Satellite mapping of the subtropical front. Extreme Weather, Wellington, New Zealand, Feb 2011. Verbal Presentation.

Smith, R.O., Kennedy, J.J. and Rayner, N.: Assessing the long-term stability of drifting buoys. 2010 Ocean Sciences Meeting, Portland, USA, Feb 2010. Verbal Presentation.

Smith, R.O., Kennedy, J.J. and Rayner, N.: The new and improved HadSST3: an analysis of sea surface temperature (1850-2009). Royal Meteorological Society annual conference, Reading, UK, Jul 2009. Poster Presentation.

Smith, R.O., Bryden, H.L. and Stansfield, K.: Observations of new western Mediterranean deep-water formation using Argo floats (2004-2006). CLIMAR-III, Gdynia, Poland, May 2008. Poster Presentation.

9. University Service

(a) Significant positions held within Department/School/Division

Committee Member - Early Career Research Group, Division of Science (2022 - present).

Committee Member - Teaching and Learning Committee, Department of Marine Science (2022 – present)

Committee Member - Future Ocean Research Theme, Division of Science (2022 - present)

Committee Member - CAPEX Committee, Department of Marine Science (2018 – present)

Committee Member / Reviewer - Graduate Research Committee, Department of Marine Science (2017 - present)

Committee Member – OCEN Degree Steering Group, Department of Marine Science (Feb 2017 – Dec 2021)

Coordinator - Seminar Series, Department of Marine Science (2017 – 2021)

Selection Panel - Appointment of Lecturer in Marine Science (June - November 2017)

Panel Member - Division of Sciences Awards Panel (Oct 2020)

10. Professional Activities and commercialisation of Research Activities

(a) Academic and Professional Advice and Services

(i) Service to public sector departments and statutory authorities, agencies, boards, committees and inquiries

I have provided ongoing professional advice to the Fiordland Marine Guardians, a statutory advisory body appointed by the Minister for the Environment (https://www.fmg.org.nz/), since 2022, primarily through short talks and Q/A sessions:

Invited presentation (15-minute talk and 10-minute Q/A session) to Fiordland Marine Guardians on ongoing marine heatwave conditions impacting the Fiordland Marine Area (Feb 2023)

Invited presentation (15-minute seminar and 30-minute Q/A session) to Fiordland Marine Guardians marine heatwave conditions impacting the Fiordland Marine Area during 2022 (Aug 2022)

I have provided advice to Sarah Cumming, Senior Aquaculture Analyst, Fisheries New Zealand / Ministry of Primary Industries regarding current and future trends in temperature extremes / marine heatwaves and planning for open-ocean aquaculture (May, 2022).

(ii) Professional advice to commercial/industrial organisations

I am providing ongoing professional advice to the CRA8 Rock Lobster Industry Association (https://www.fmg.org.nz/) and the Fiordland Lobster Company (https://lobster.co.nz/) regarding marine heatwave / temperature extremes in the Fiordland Marine Area through email and phone correspondence, and provided a talk and Q/A session at the 2022 and 2023 CRA8 AGM:

Invited presentation (15-minute seminar and 15-minute Q/A session) at the CRA8 Rock Lobster Industry Association AGM on marine heatwave conditions impacting the Fiordland Marine Area (December 2022).

(b) Service to external academic and/or professional activities

(i) Service to, or leadership in, academic discipline or professional associations

During 2023, I provided an Expert International Review for the CSIRO Marine National Facility of a 20-page funding application (approx. value of $3,500,000) for 28 days ship time on the R/V Investigator.

I have provided invited peer reviews for the following journals:

Communications Earth & Environment, 2024 (one manuscript)

Ocean Science, 2023 (one manuscript)

Journal of Earth System Science, 2021 (one manuscript)

Limnology and Oceanography, 2020, 2021 (two manuscripts)

New Zealand Journal of Marine and Freshwater Research, 2018, 2019, 2022 (three manuscripts)

Deep Sea Research Part I, 2019 (one manuscript).

Deep Sea Research Part I, 2015 (one manuscript).

Journal of Climate, 2009 (one manuscript).

I have examined PhD theses for the following universities:

University of Waikato, 2024 (one thesis)

University of Otago, 2021, 2022, 2023 (two theses)

University of Auckland, 2021 (one thesis)

I have examined MSc theses for the following universities:

University of Otago, 2023 (one thesis)

11. Community Service

(a) Continuing Education, Community Debate and Community Development

(i) Media commentaries and columns on professional matters.

Provided interview with Otago Daily Times as part of feature article on the Southland Current Aug 2024 https://www.odt.co.nz/lifestyle/magazine/sea-change

Provided commentary on new paper we published in Global Change Biology in bleaching of sea sponges in Fiordland national park Aug 2024 https://www.rnz.co.nz/news/national/524348/mass-bleaching-of-nz-marine-sponges-largest-ever-recorded-globally

Provided interview and supporting figures to Seafood New Zealand magazine for article covering my groups research into shelf-slope exchange and internal tides within the Otago Submarine Canyon network. Nov 2023. https://www.seafood.co.nz/publications/magazine

Interview with The Guardian and contributed analyses / figures to an interactive, web-based story on recent marine heatwaves around New Zealand and their ecosystem impacts May 2023 https://www.theguardian.com/environment/ng-interactive/2023/may/13/are-new-zealands-marine-heatwaves-a-warning-to-the-world

TV interview with Newshub for TV3 6 pm news on bleaching of sea sponges in Fiordland Marine Area 4th Feb 2023 https://www.newshub.co.nz/home/new-zealand/2023/02/climate-change-killing-off-sea-sponges-in-fiordland.html

Interview with Southland Times on marine heatwave conditions impacting the Fiordland Marine Area 21st Jan 2023 https://www.stuff.co.nz/environment/climate-news/131015001/marine-heatwave-brings-surface-delights-atop-deeper-environmental-perils

Co-authored an article for The Conversation regarding nationwide bleaching of native sea sponges driven by marine heatwaves December 2022 https://theconversation.com/loss-decay-and-bleaching-why-sponges-may-be-the-canary-in-the-coal-mine-for-impacts-of-marine-heatwaves-194146

Interview with Stuff.co.nz about Moana Project and marine heatwave conditions in the Marlborough Sounds 15th November 2022 https://www.stuff.co.nz/environment/climate-news/300738243/sounds-boaties-carry-sea-sensors-to-keep-tabs-on-marine-heat-waves

Interview with Stuff.co.nz about marine heatwave conditions in the Bay of Plenty 11th November 2022 https://www.stuff.co.nz/national/300736566/hot-water-beaches-record-ocean-heatwave-may-lure-sharks-and-cyclones

Live interview with Llyod Burr for TodayFM Drive Show about marine heatwave conditions in the Bay of Plenty 9th November 2022 https://www.todayfm.co.nz/home/national/2022/11/marine-heatwave-part-of-recordbreaking-year-in-upper-north-island.html

Live interview with One Double X | Whakatāne on marine heatwave conditions in the Bay of Plenty 9th November 2022.

Interviewed by Jamie Morton at the New Zealand Herald regarding year-long marine heatwave that developed in the Bay of Plenty 9th November 2022 https://www.nzherald.co.nz/nz/record-breaking-marine-heatwave-lingers/NZB2P25ZHJCFDGE6KROZAN33YM/

Interviewed live by Tova O'Brien on TodayFM about new publication (Cook et al., 2022) on trends in marine heatwaves across New Zealand 7th November 2022 https://omny.fm/shows/today-breakfast/marine-heatwaves-are-they-going-to-harm-our-seafoo

Interviewed by Emile Donovan for Radio New Zealand The Detail podcast on marine heatwaves 19 October 2022 https://www.rnz.co.nz/programmes/the-detail/story/2018863161/the-cost-of-riding-more-marine-heatwaves

Interviewed by Jamie Morton at the New Zealand Herald regarding looming summer marine heatwave 18 Sep 2022. https://www.nzherald.co.nz/nz/weather-what-looming-marine-heatwave-means-for-our-ocean-species/GCN6XYY2QK2AJMBG2KRQHOWE2M/

Provided interview and images to Stuff.co.nz regarding recent marine heatwave along Wairarapa coast 06 July 2022. https://www.stuff.co.nz/environment/climate-news/129137338/surge-of-warm-water-sees-marine-heatwave-develop-off-wairarapa-coast

Provided interview and images to The Guardian highlighting record breaking marine heatwaves impacting New Zealand over summer 2021/22 – June 23 2022 https://www.theguardian.com/world/2022/jun/23/new-zealand-records-largest-ever-bleaching-of-sea-sponges

Provided interview and images to RNZ on characteristics, causes and impacts of recent marine heatwave conditions around NZ – June 20 2022. https://www.rnz.co.nz/news/national/469636/scientists-fear-mass-bleaching-of-fiordland-sea-sponges-the-largest-of-its-kind

Provided interview to 1 News for 6 pm news feature on mass bleaching of native sea sponges across Fiordland National Park – May 18 2022 https://www.1news.co.nz/2022/05/18/mass-bleaching-of-sea-sponges-possibly-devastating-for-nz-marine-life/

Provided interview to RNZ on mass bleaching of native sea sponges across Fiordland National Park – May 16 2022. https://www.rnz.co.nz/news/national/467177/mass-bleaching-of-native-sea-sponges-in-fiordland-shocks-scientists

Provided live interview on RNZ Checkpoint on unusual fish sighting and marine heatwave around South Island New Zealand – Apr 27 2022. https://www.rnz.co.nz/national/programmes/checkpoint/audio/2018839688/locals-worried-as-strange-fish-wash-up-on-otago-beaches

Provided interview to Otago Daily Times on appearance of Rays Bream and marine heatwave around South Island New Zealand – Apr 21 2022. https://www.odt.co.nz/news/dunedin/bream-me-it%E2%80%99s-dinner-time-fur-seal

Provided interview to Northland Age / on summer 2021/22 Marine Heatwave affecting North Island New Zealand – Feb 23 2022. https://www.nzherald.co.nz/northland-age/news/marine-heatwaves-expected-to-become-norm-for-northland/UNH6HTJNOKAQHWFU54JKKAVPVY/

Provided Radio / Podcast interview to 95bFM (University of Auckland Student Radio) on February 2022 Marine Heatwave affecting the Hauraki Gulf – Feb 23 2022. https://95bfm.com/bcast/record-breaking-marine-heatwave-w-dr-robert-smith-23-february-2022

Provided Zoom Interview to 1 News for 6 pm news feature on summer 2021/22 marine heatwave around New Zealand – Jan 2022. https://www.1news.co.nz/2022/01/06/marine-heatwave-expected-to-stick-around-for-rest-of-summer/

Co-authored an article for The Conversation regarding winter marine heatwaves around New Zealand that was re-published by Stuff.co.nz and RNZ and read >15,000 times – Oct 2021. https://theconversation.com/marine-heatwaves-during-winter-could-have-dire-impacts-on-new-zealand-fisheries-and-herald-more-summer-storms-167967

Interviewed by stuff.co.nz regarding a new marine heatwave forecast tool developed in collaboration with MetOcean Solutions – Mar 2021. https://www.stuff.co.nz/science/124382007/nz-marine-heatwave-forecasts-now-available-to-public-show-chatham-islands-event-starting

Provided commentary to the Otago Daily Times regarding new marine heatwave forecasting tool – Mar 2021.
https://www.odt.co.nz/news/dunedin/otago-academic-helps-forecast-marine-heatwaves

Provided commentary to the Otago Daily Times regarding the Moana Project – Jun 2020.
https://www.odt.co.nz/news/dunedin/campus/university-of-otago/moana-work-models-sea-heatwaves

I undertook an interview with Radio New Zealand regarding a new manuscript in Environmental Research Letters (Salinger et al., 2019) that I co-authored, examining an unprecedented ocean-atmosphere summer heatwave in the New Zealand region 2017/18. Extracts from this interview were featured on the 9 am morning news on Jan 29 2019 and are available online (Transcript: https://www.rnz.co.nz/news/national/381488/unprecedented-rise-in-south-island-ocean-temperatures).

Provided commentary in press release published in the Otago Daily Times regarding a new manuscript in Environmental Research Letters (Salinger et al., 2019) that I co-authored, examining an unprecedented ocean-atmosphere summer heatwave in the New Zealand region 2017/18. Jan 2019. (Article: https://www.odt.co.nz/news/dunedin/campus/university-of-otago/its-hot-out-there-sea-temps-rise).

Initiated and contributed to press release for our journal article on the 2017/18 New Zealand Ocean-Atmosphere Heatwave (Salinger et al., 2019) through the University of Otago Media Engagement Team (Jan 2019): https://www.otago.ac.nz/news/news/otago703557.html

Provided commentary to the Otago Daily Times regarding a new manuscript in Nature Scientific Reports from the University of Auckland examining ocean temperature change around coastal New Zealand. Nov 2017. (Article: https://www.odt.co.nz/news/dunedin/warmer-southern-waters-may-affect-fisheries-wildlife).

(ii) Conferences, seminars and workshops

Presented a 15-minute public talk on our groups research on recent marine heatwaves in the Fiordland Marine Area at the 2024 Fiordland Marine Research Symposium https://fmg.org.nz/news/fiordland-marine-research-symposium-tuesday-5th-march. Te Anau, March 2024.

I presented a 15-minute talk on marine heatwaves and contributed to discussions during a 4-hour public workshop led by BSc Science Communications students at the University of Otago on the topic of coral bleaching. October 2023.