

**Current Positions:**

Associate Professor, Ecology Department, Biological Sciences Faculty, Pontificia Universidad Católica de Chile, Facultad de Ciencias Biológicas

*Teaching: In charge of two full-time undergraduate classes (General Oceanography and Physical-Biological Oceanography). Collaborating professor in Marine Botany. Regular contributor to three other undergrad courses. Tutor of undergrad and grad students and postdocs.*

*Institutional Representative of the Pontificia Universidad Católica in the Chilean Comité Oceanográfica Nacional (National Oceanographic Committee organized by the Chilean Navy).*

*Institutional Representative in the Chilean national committee for SCOR (Scientific Committee on Oceanic Research).*

*Co-creator and co-director of the algal culture collection South East Pacific Algae of the Pontificia Universidad Católica. <http://sepa.bio.puc.cl/>*

*Scientific sub-director of the Flow Cytometry Platform of the Biological Sciences Faculty, Pontificia Universidad Católica de Chile. Trained operators of InFlux Cell Sorter.*

*Member, committee of the Advanced Microscopy Platform of the Biological Sciences Faculty, Pontificia Universidad Católica de Chile.*

Associate Investigator, Instituto Milenio de Oceanografía de Chile, Concepción, Chile

**Contact Details:**

Avenida Libertador Bernardo O'Higgins #340, Código Postal 8331150, Santiago, Chile

Tel: (+56 2) 2354-2640, (+56 9) 6192-0020.

[pvondassow@bio.puc.cl](mailto:pvondassow@bio.puc.cl)

<http://imo-chile.cl>

**Academic Qualifications:**

B.Sc.: Cell and Molecular Biology, University of Washington, Seattle, USA, (1997).

Ph.D.: Oceanography, University of California San Diego, San Diego, USA (2003)

**Employment History (since PhD)**

<b>Dates</b>	<b>Position</b>	<b>Employer or Host institution</b>
2016-present	Associate Professor	Pontificia Universidad Católica de Chile
2010-2016	Assistant Professor	Pontificia Universidad Católica de Chile
2008-2010	Marie Curie Postdoctoral Fellow (Eur. Comm.)	CNRS, France
2007-2008	Postdoctoral Fellow	CNRS, France
2007	Postdoctoral Research Associate	University of Washington
2006	Instructor	University of Washington
2003-2006	NSF Postdoctoral Fellow	University of Washington

## **Research Funding (Since 2016).**

Principal Investigator. FONDECYT 1181614 “Speciation and adaptation in marine diatoms and coccolithophores” 2018-2022. CLP\$ 177,155,000.

Co-investigator. Iniciativa Científica Milenio ICN\_12019. Instituto Milenio de Oceanografía. Renovation for 2nd five-year period for research center of excellence, 2018-2024 (PI Osvaldo Ulloa). Aprox. CLP\$ 840,000,000/year.

Alternate Principal Investigator. FONDEF IT17F10011 “Sistema masivo y de bajo costo para el monitoreo in situ de algas nocivas en toda la costa Chilena” (PI Chris Aiken). 2018-2019. CLP\$ 229,622,000 (aprox. 252000 euros)

Co-investigator. Gordon and Betty Moore Foundation GBMF4981.01 “Development of an open source, universal, simple and efficient DNA fabrication kit for marine organisms (and other organisms)” (PI Fernan Federici). 2017-2018. US\$ 209,000.

Co-investigator. FONDECYT 1170065. “CARbon Cycling and Physiological Traits in Phytoplankton Functional Groups under low pH/low OXYgen conditions (CARpHOX)” (PI Cristian Vargas). 2017-2021.

Principal Investigator. Gordon and Betty Moore Foundation GBMF4981. “Selecting new model marine eukaryotic microbes based on ability to express exogenous genetic material”. 2015-2016. US\$ 170,000.

Co-investigator. CNRS bi-national research unit. Unité Mixte International 3614 UPMC Sorbonne Université, PUCCh, UACH. “Evolutionary Biology and Ecology of Algae” (Principal investigators Myriam Valero of CNRS, Sylvain Faugeron of PUCCh). 2014-2021.

Co-investigator, CNRS International Research Network "Diversity, Evolution and Biotechnology of Marine Algae" (GDRI N° 0803; PI Mark Cock, CNRS). 2014-present.

## **Mentoring and supervision**

Post-docs: 4 at 100% (2011-2013, 2014-2017, 2018-2019, 2020-), 1 at 50% (2013-2015)  
PhDs: 1 starting (PUCCh), 2 finished (1 grad. Jul. 2021 PUCCh; 1 grad. Nov. 2019 U de Concepción)

Masters (UPMC Sorbonne Université): 3 Master-1 completed, 2 Master-2 completed

Masters (U de Concepción): 1 in progress.

15 undergrad students

## **Publications**

ORCID ID: <https://orcid.org/0000-0002-1858-1953>

Google Scholar Profile:

[https://scholar.google.com/citations?hl=en&user=NyoMp5EAAAAJ&view\\_op=list\\_works&sortby=pubdate](https://scholar.google.com/citations?hl=en&user=NyoMp5EAAAAJ&view_op=list_works&sortby=pubdate)

Research Gate Profile: [https://www.researchgate.net/profile/Peter\\_Von\\_Dassow2](https://www.researchgate.net/profile/Peter_Von_Dassow2)

Articles in peer-reviewed journals:

1. Goverman, J., Brabb, T., Paez, A., Harrington, C. and von Dassow, P. 1997. Initiation and regulation of CNS autoimmunity. *Critical Reviews in Immunology* 17: 469-480.
2. Brabb, T., Goldrath, A. W., von Dassow, P., Paez, A., Liggitt, H. D. and Goverman, J. 1997. Triggers of autoimmune disease in a murine TCR-transgenic model for multiple sclerosis. *Journal of Immunology* 159: 497-507.
3. Brabb, T., von Dassow, P., Ordonez, N., Schnabel, B., Duke, B. and Goverman, J. 2000. In situ tolerance within the central nervous system as a mechanism for preventing autoimmunity. *Journal of Experimental Medicine* 192: 871-880.
4. Mallipattu, S. K., Haidekker, M. A., von Dassow, P., Latz, M. I., and Frangos, J. A. 2002. Evidence for shear-induced increase in membrane fluidity in the dinoflagellate *Lingulodinium polyedrum*. *Journal of Comparative Physiology A* 188: 409-416.
5. von Dassow, P. and Latz, M. I. 2002. The role of Ca<sup>2+</sup> in stimulated bioluminescence of the dinoflagellate *Lingulodinium polyedrum*. *Journal of Experimental Biology* 205: 2971-2986.
6. von Dassow, P., Bearon, R. N. and Latz, M. I. 2005. Bioluminescent response of the dinoflagellate *Lingulodinium polyedrum* to developing flow: Tuning of sensitivity and the role of desensitization in controlling a defensive behavior of a planktonic cell. *Limnology and Oceanography* 50: 607-619.
7. Chepurnov, V. A., Mann, D., von Dassow, P., Armbrust, E. V., Sabbe, K., Dasseville, R., Vyverman, W. 2006. Oogamous reproduction, with two-step auxosporulation, in the centric diatom *Thalassiosira punctigera* (Bacillariophyta). *Journal of Phycology* 42: 845-858.
8. von Dassow, P., Chepurnov, V. A., and Armbrust, E. V. 2006. Relationships between growth rate, cell size, and induction of spermatogenesis in the centric diatom *Thalassiosira weissflogii* (Bacillariophyta). *Journal of Phycology* 42: 877-899.
9. Iglesias-Rodriguez, M. D., Halloran, P. R., Rickaby, R. E. M., Hall, I. R., Colmenero-Hidalgo, E., Gittins, J. R., Green, D. R. H., Tyrrell, T., Gibbs, S. J., von Dassow, P., Rehm, E., Armbrust, E. V., and Boessenkool, K. P. 2008. Phytoplankton calcification in a high CO<sub>2</sub> world. *Science* 320: 336-340.
10. von Dassow, P., Petersen, T. J., Chepurnov, V., and Armbrust, E. V. 2008. Inter- and intraspecific relations between nuclear DNA content and cell size in selected members of the diatom genus *Thalassiosira* (Bacillariophyta). *Journal of Phycology* 44: 335-349. <https://doi.org/10.1111/j.1529-8817.2008.00476.x>
11. Chepurnov, V. A., Mann, D. G., Sabbe K., Vanormelingen, P., von Dassow, P., and Vyverman, W. 2008. In search of a tractable diatom for experimental biology and genomics. *BioEssays* 30: 692-702.
12. Bowler, C., Allen, A. E., Badger, J. H., Grimwood, J., Jabbari, K., Kuo, A., Maheswari U., Martens, C., Maumus, F., Otiillar R. P., Rayko, E., Salamov, A., Vandepoele, K., Beszteri, B., Gruber A., Heijde, M., Katinka, M., Mock, T., Valentin, K., V rret, F., Berges, J. A., Brownlee, C., Cadoret, J.-P., Chiovitti, A., Choi, C. J., Coesel, S., De Martino, A., Detter, J. C., Durkin, C., Falciatore, A., Fournet, J., Haruta, M., Huysman, M., Jenkins, B. D., Jiroutova, K., Jorgensen, R. E., Joubert, Y., Kaplan, A., Kroeger, N., Kroth, P., La Roche, J., Lindquist, E., Lommer, M., Martin-J z quel, V., Lopez, P. J., Lucas, S., Mangogna, M., McGinnis, K., Medlin, L. K., Montsant, A., Oudot-Le Secq, M.-P., Napoli, C., Obornik, M., Petit, J.-L., Porcel, B. M., Poulsen, N., Robison, M., Rychlewski, L., Rynearson, T. A., Schmutz, J., Schnitzler Parker, M., Shapiro, H., Siaut, M., Stanley, M., Sussman, M. J., Taylor, A., Vardi, A., von Dassow, P., Vyverman, W., Willis, A., Wyrwicz, L. S., Rokhsar, D. S., Weissenbach, J., Armbrust, E. V., Green, B. R., Van de Peer, Y., Grigoriev, I. V. 2008. The *Phaeodactylum* genome reveals the

- dynamic nature and multi-lineage evolutionary history of diatom genomes. *Nature* 456: 239-244.
13. Lakeman, M. B., von Dassow, P., and Cattolico, R. A. 2009. The strain concept in phytoplankton ecology. *Harmful Algae*. 8: 746-758.
  14. Worden A. Z., Lee J.-H., Mock, T., Rouz , P., Simmons, M. P., Aerts, A. L., Allen, A. E., Cuvelier, M. L., Derelle, E., Everett, M. V., Foulon, E., Grimwood, J., Gundlach, H., Henrissat, B., Napoli, C., McDonald, S. M., Parker, M. S., Rombauts, S., Salamov, A., von Dassow, P., Badger, J. H., Coutinho, P. M., Demir, E., Dubchak, I., Gentemann, C., Eikrem, W., Gready, J. E., John, U., Lanier, W., Lindquist, E. A., Lucas, S., Mayer, K. F. X., Moreau, H., Not, F., Otilar, R., Panaud, O., Pangilinan, J., Paulsen, I., Piegu, B., Poliakov, A., Robbens, S., Schmutz, J., Toulza, E., Wyss, T., Zelensky, A., Zhou, K., Armbrust, E. V., Bhattacharya, D., Goodenough, U. W., Van de Peer, Y., Grigoriev, I. V. 2009. Green evolution and dynamic adaptations revealed by genomes of the marine picoeukaryotes *Micromonas*. *Science*. 324: 268-272.
  15. von Dassow, P., Ogata, H., Probert, I., Da Silva, C., Claverie, J.-M., Audic, S., Wincker P., de Vargas, C. 2009. Unveiling the hidden life of a very visible phytoplankton cell: Deep transcriptomic comparison of haploid and diploid life phases of the bloom-forming coccolithophorid *Emiliana huxleyi*. *Genome Biology*. 10:R114.
  16. Harrison, J. A., J. H. Cohen, E. Hinchey, A. Moerke, and P. von Dassow. 2009. Developing and implementing an effective public outreach program, *Eos Trans. AGU*, 90(38), 333–334.
  17. Koester, J., Swalwell, J., von Dassow, P., Armbrust, E., V. 2010. Genome size differentiates co-occurring populations of the planktonic diatom *Ditylum brightwellii* (Bacillariophyta). *BMC Evolutionary Biology*. 10:1.
  18. Cock J. M, Sterck L., Rouz , P., Scornet, D., Allen, A. E., Amoutzias, G. Anthouard, V., Artiguenave F., Aury, J.-M., Beszteri, B., Billiau, K., Bonnet, E., Bothwell, J. H., Bowler, C., Boyen, C., Brownlee, C., Carrano, C. J., Charrier, B., Coelho, S. M., Coll n, J., Corre, E., Delage L., Delaroque, N., Dittami, S. M., Doulebeau, S., Elias, M., Farnham G., Gachon, C. M. M., Gschloessl, B., Heesch, S., Jabbari, K., Jubin, C., Kawai, H., Kimura, K., Kloareg, B., K pper, F. C., Lang, D., Le Bail, A., Leblanc, C., Lerouge, P., Lohr, M., Lopez, P. J., Martens, C., Maumus, F., Michel, G., Miranda-Saavedra, D., Morales, J., Moreau, H., Motomura, T., Nagasato, C., Nelson, D. R., Nyvall-Coll n, P., Peters, A. F., Potin, P., Poulain, J., Quesneville, H., Read, B., Rensing, S. A., Ritter, A., Rousvoal, S., Samanta, M., Samson, G., Schroeder, D., S gurens, B., Strittmatter, M., Tonon, T., Tregear, J., Valentin, K., von Dassow, P., Yamagishi, T., Van de Peer, Y., Wincker, P. 2010. The *Ectocarpus* genome and the independent evolution of multicellularity. *Nature*. 465: 617-621.
  19. Richier, S., Fiorini, S., Kerros, M.-E., von Dassow, P. and Gattuso, J.-P. 2011. Response of the calcifying coccolithophore *Emiliana huxleyi* to low pH/high pCO<sub>2</sub>: from physiology to molecular level. *Marine Biology*. 158-551-560.
  20. von Dassow, P., Montresor, M. 2011. Unveiling the mysteries of phytoplankton life cycles: Patterns and opportunities behind complexity. *Journal of Plankton Research*. 33:3-12.
  21. Mackinder, L., Wheeler, G., Schroeder, D., von Dassow, P., Riebesell, U., and Brownlee, C. 2011. Expression of biomineralization related ion transport genes in *Emiliana huxleyi*. *Environmental Microbiology and Environmental Microbiology Reports*. 13(12): 3250-3265.
  22. Cock, M. J., Sterck, L., Ahmed, S., Allen, A. E., Amoutzias, G., Anthouard, V., Artiguenave, F., Arun, A., Aury, J.-M., Badger, J. H., Beszteri, B., Billiau, K., Bonnet, E., Bothwell, J., Bowler, C., Boyen, C., Brownlee, C., Carrano, C. J., Charrier, B., Cho, G. Y., Coelho, S. M., Coll n, J., Le

- Corguillé, G., Corre, E., Darteville, L., Da Silva, C., Delage, L., Delaroque, N., Dittami, S. M., Doulebeau, S., Elias, M., Farnham, G., Gachon, C. M. M., Godfroy, O., Gschloessl, B., Heesch, S., Jabbari, K., Jubin, C., Kawai, H., Kimura, K., Kloareg, B., Küpper, F. C., Lang, D., Le Bail, A., Luthringer, R., Leblanc, C., Lerouge, P., Lohr, M., Lopez, P. J., Macaisén, N., Martens, C., Maumus, F., Michel, G., Miranda-Saavedra, D., Morales, J., Moreau, H., Motomura, T., Nagasato, C., Napoli, C., Nelson, D. R., Nyvall-Collén, P., Peters, A. F., Pommier, C., Potin, P., Poulain, J., Quesneville, H., Read, B., Rensing, S. A., Ritter, A., Rousvoal, S., Samanta, M., Samson, G., Schroeder, D. C., Scornet, D., Ségurens, B., Strittmatter, M., Tonon, T., Tregear, J. W., Valentin, K., von Dassow, P., Yamagishi, T., Rouzé, P., Van de Peer, Y., Wincker, P.. 2012. "The *Ectocarpus* genome and brown algal genetics". Capítulo 5 en *Genomic insights into the biology of algae*. (G. Piganeau, ed.). *Advances in botanical research*. 64: 141-184.
23. von Dassow, P., van den Engh, G., Iglesias-Rodriguez, M. D., Gittins, J. R. 2012. Calcification state of coccolithophores can be assessed by light scatter depolarization measurements with flow cytometry. *Journal of Plankton Research*. doi: 10.1093/plankt/fbs061. 34(12): 1011-1027.
  24. Read, B. A., Kegel, J., Klute, M. J., Kuo, A., Lefebvre, S., C., Maumus, F., Mayer, C., Miller, J., Allen, A., Bidle, K., Borodovsky, M., Bowler, C., Brownlee, C., Claverie, J.-M., Cock, J., M., de Vargas, C., Elias, M., Frickenhaus, S., Gladyshev, V. N., Gonzalez, K., Groth, M., Guda, C., Hadaegh, A., Herman, E. K., Iglesias-Rodriguez, D., Jones, B., Lawson, T. Leese, F., Lin, Y.-C., Lindquist, E., Lobanov, A., Lucas, S., Malik, S.-B., Marsh, M. E., Mock, T., Monier, A., Mueller-Roeber, B., Napier, J., Ogata, H., Pagarete, A., Parker, M., Probert, I., Quesneville, H., Raines, C., Rensing, S., Riano-Pachon, D. M., Richier, S., Rokitta, S., Salamov, A., Sarno, A. F., Schmutz, J., Schroeder, D., Shiraiwa, Y., Soanes, D. M., Valentin, K., van der Giezen, M., Van der Peer, Y., Verret, F., von Dassow, P., Wahlund, T. M., Wheeler, G., Williams, B., Wilson, W., Wolfe, G., Wurch, L. L., Young, J., Dacks, J. B., Delwiche, C. F., Dyhrman, S., Glöckner, G., John, U., Richards, T., Worden, A. Z., Zhang, X., and Grigoriev, I. V. 2013. *Emiliana*'s pan genome drives the phytoplankton's global distribution. *Nature*. 499: 209-213. doi: 10.1038/nature12221
  25. Oppliger, L., von Dassow, P., Bouchemousse, S., Valero, M., Correa, J., Mauger, S., Destombe, C. 2014. Alteration of sexual reproduction and genetic diversity in the kelp species *Laminaria digitata* at the southern limit of its range. *PLoS ONE* 9(7): e102518. doi: 10.1371/journal.pone.0102518
  26. von Dassow, P., Collado, S. 2014. The biological oceanography, biogeochemical cycles, and pelagic ecosystem functioning of the east-central South Pacific Gyre: Focus on Easter Island and Sala-y-Gómez. *Latin American Journal of Aquatic Research*. 42(4): 703-742. DOI: 10.3856/vol42-issue4-fulltext-4.
  27. Rokitta, S. D., von Dassow, P., Rost, B., John, U. 2014. *Emiliana huxleyi* endures N-limitation with an efficient metabolic budgeting and effective ATP Synthesis. *BMC Genomics*. 15: 1051. <http://www.biomedcentral.com/1471-2164/15/1051>.
  28. Alvaro M Plominsky, Nathalie Delherbe, Juan A Ugalde, Eric E Allen, Marine Blanchet, Priscila Ikeda, Francisco Santibañez, Kurt Hanselmann, Osvaldo Ulloa, Rodrigo De la Iglesia, Peter von Dassow, Marcia Astorga, María Jesús Gálvez, María Lorena González, Carlos Henríquez-Castillo, Daniel Vaultot, Adriana Lopes do Santos, Gerrit van den Engh, Carla Gimpel, Florencia Bertoglio, Yolaine Delgado, Felipe Docmac, Claudia Elizondo-Patrone, Silvia Narváez, Fernando Sorroche, Marcelo Rojas-Herrera, \*Nicole Trefault. 2014. Metagenome sequencing of the microbial community of a solar saltern crystallizer pond at Cahuil Lagoon, Chile. *Genome Announcements*. 2(6): e01172-14. doi: 10.1128/genomeA.01172-14.
  29. von Dassow, P., John, U., Ogata, H., Probert, I., Bendif, E.-M., Kegel, J. U., Audic, S., Wincker, P., Da Silva, C., Claverie, J.-M., Doney, S., Glover, D. M., Mella Flores, D., Herrera, Y., Lescot, M., Garet-Delmas, M.-J., de Vargas, C. 2015. Life cycle modification in open oceans accounts for

- genome variability in a cosmopolitan phytoplankton. *ISME Journal* 9:1365-1377. doi:10.1038/ismej.2014.221.
30. Bendif, E.-M., Probert, I., Young, J., von Dassow, P. 2015. Morphogenetic characterization of new *Gephyrocapsa* isolates suggests introgressive hybridization in the *Emiliana/Gephyrocapsa* complex (Haptophyta). *Protist*. 166: 323-366.
  31. Patil, S., Moeys, S., von Dassow, P., Huysman, M. J. J., Mapleson, D., De Veylder, L., Sanges, R., Vyverman, W., Montresor, M., Ferrante, M. I. 2015. Identification of the meiotic toolkit in diatoms and exploration of meiosis-specific SPO11 and RAD51 homologs in the sexual species *Pseudonitzschia multistriata* and *Seminavis robusta*. *BMC Genomics*. 16:930. 10.1186/s12864-015-1983-5 <https://doi.org/10.1186/s12864-015-1983-5>
  32. Bendif, E.-M., Probert, I., Díaz-Rosas, F., Thomas, D., van den Engh, G. Young, J., von Dassow, P. 2016. Recent reticulate evolution in the ecologically dominant lineage of coccolithophores. *Frontiers in Microbiology*. 7:784. doi.org/10.3389/fmicb.2016.00784
  33. Rokitta, S. D., von Dassow, P., Rost, B., John, U. 2016. P- and N-starvation trigger the same cellular responses to promote senescence in eukaryotic phytoplankton. *Frontiers in Marine Science*. 3:109.
  34. Jacob, B., von Dassow, P., Salisbury, J., Navarro, J., Vargas, C. A. 2017. Impact of low pH/high pCO<sub>2</sub> on the physiological response and fatty acid content in diatom *Skeletonema pseudocostatum*. *Journal of the Marine Biological Association of the UK*. 97: 225-233.
  35. Alves-de-Souza, C., Benevides, T. S., Santos, J. B. O., von Dassow, P., Guillou, L., Menezes, M. 2017. Does environmental heterogeneity explain temporal  $\beta$  diversity of small eukaryotic phytoplankton? Example from a tropical eutrophic coastal lagoon. *Journal of Plankton Research*. 39 (4): 698-714.
  36. Echeveste, P., Croot, P., von Dassow, P. 2018. Differences in the sensitivity to Cu and ligand production of coastal vs offshore strains of *Emiliana huxleyi*. *Science of the Total Environment*. 625: 1673-1680. <https://doi.org/10.1016/j.scitotenv.2017.10.050>
  37. von Dassow, P., Díaz-Rosas, F., Bendif, E.-M., Gaitán-Espitia, J.-D., Mella-Flores, D., Rokitta, S. D., John, U., Torres, R. 2018. Overcalcified forms of the coccolithophore *Emiliana huxleyi* in high CO<sub>2</sub> waters are not pre-adapted to ocean acidification. *Biogeosciences*. 15: 1515-1534. <https://doi.org/10.5194/bg-15-1515-2018>
  38. Plominsky, A. M., Trefault, N., Podell, S., Blanton, J. M., De la Iglesia, R., Allen, E. E., von Dassow, P. Ulloa, O. 2018. Metabolic potential and in situ transcriptomic profiles of previously uncharacterized key microbial groups involved in coupled carbon, nitrogen and sulfur cycling in anoxic marine zones. *Environmental Microbiology*. 20(8): 2727-2742. <https://doi.org/10.1111/1462-2920.14109>
  39. Waller, R. F., Cleves, P. A., Rubio-Brotons, M., Woods, A., Bender, S. J., Edgcomb, V., Gann, E. R., Jones, A. C., Teytelman, L., von Dassow, P., Wilhelm, S. W., Collier, J. L. 2018. Strength in numbers: collaborative science for new experimental model systems. *PLoS Biology*. 16(7): e2006333. <https://doi.org/10.1371/journal.pbio.2006333>.
  40. Mella-Flores, D., Machon, J., Contreras-Porcía, L., Mesa-Campbell, S., von Dassow, P. 2018. Differential responses of *Emiliana huxleyi* (Haptophyta) strains to copper excess. *Cryptogamie, Algologie*. 39(4): 481-509. <https://doi.org/10.7872/crya/v39.iss4.2018.481>
  41. Spilling, K., Camarena Gomez, M. T., Lipsewers, T., Martinez-Varela, A., Diaz-Rosas, F., Eronen-Rasimus, E., Silva, N., von Dassow, P., Montecino, V. 2019. Impacts of reduced inorganic N:P ratio on three distinct plankton communities in the Humboldt upwelling system. *Marine Biology*. 166:114. <https://doi.org/10.1007/s00227-019-3561-x>

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43. Pollak, B., Matute, T., Nuñez, I., Cerda, A., Lopez, C., Vargas, V., Kan, A., Bielinski, V., von Dassow, P., Dupont, C., Federici, F. 2020. Universal Loop assembly (uLoop): open, efficient, and species-agnostic DNA fabrication. *Synthetic Biology*. 5 (1) : 2020, ysa001. <https://doi.org/10.1093/synbio/ysaa001>
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48. Cantarero SI., Henríquez-Castillo C., Dildar N., Vargas C. A., von Dassow P., Cornejo-D'Ottone M. and Sepúlveda J. 2020 Size-fractionated contribution of microbial biomass to suspended organic matter in the Eastern Tropical South Pacific Oxygen Minimum Zone. *Frontiers in Marine Science*. 7:540643. doi: 10.3389/fmars.2020.540643
49. Díaz-Rosas, F., Alvez-de-Souza, C., Alarcón, E., Menschel, E., González, H. E., Torres, R., von Dassow, P. *Accepted* 2021. Abundances and morphotypes of the coccolithophore *Emiliania huxleyi* in southern Patagonia compared to neighboring oceans and northern-hemisphere fjords. *Biogeosciences*. [preprint <https://doi.org/10.5194/bg-2020-449>]

#### Other publications and solicited reports

1. Villagrán, M., Almar R. 6, Cienfuegos, R., Catalán P.4, Navarrete, S.A., Finke, R., Von Dassow, P., De la Iglesia, R., Flores G., Figueroa, D., Abarca, R., Sepúlveda H., Aguilera J.C. 2012. Desafíos para una red chilena de monitoreo costero en base a video. *XXV Congreso Latinoamericano de Hidráulica. IAHR CIC*. Conference paper.
2. von Dassow P, S Collado & JF Santibañez. 2013. *Revisión de la oceanografía biológica, ciclos biogeoquímicos y funcionamiento ecosistémico pelágico de la parte central-oriental del Giro del Pacífico Sur: Enfoque en las islas de Pascua y Sala-y- Gómez*. En “Síntesis del estado del conocimiento sobre los ecosistemas marinos en aguas de Isla de Pascua y Salas y Gómez: caracterización de elementos distintivos e identificación de objetos de conservación: Informe para el Proyecto Global Ocean Legacy (Pew Environment Group)” (M. Fernandez y J.-C. Castilla, ed.).
3. Peter von Dassow, Carmen E. Morales, Cristian A. Vargas, Oscar Pizarro, Samuel Hormazábal, Rodrigo Torres, P. A. Auger. 2017. Geo-ingeniería marina en Chile: Experimentos comerciales de fertilización con hierro en aguas jurisdiccionales de Chile. Informe y antecedentes solicitados por DIRECTEMAR. Entregada a DIRECTEMAR 6 de Julio de 2017. doi: 10.13140/RG.2.2.26209.40805
4. Víctor Aguilera, Catalina Aguirre, María Ángela Barbieri, Manuel Castillo Silva, Manuel Contreras-López, Boris Dewitte, Pedro Echeveste, Laura Farías, Camila Fernández, Paúl Gómez-Canchong, Nelson A. Lagos, Luis E. Lara, Pablo Marquet, Juan Carlos Miquel, Mauricio Molina, Vivian Montecino, María Cristina Morales, Diego Narváez, Sergio Navarrete, Verónica Oliveros Clavijo, Eduardo Quiroga, Laura Ramajo, Maisa Rojas, Luisa Saavedra, Ximena Salinas, Claudio Silva, Mauricio Urbina, Cristian Vargas, Gastón Vidal, Peter von Dassow, Patricio Winckler Grez y Eleuterio Yáñez R, 2019. *Océano y Cambio Climático : 50 preguntas y respuestas*. Coordinadora L. Farías. Comité Científico COP25. Santiago, Chile.
5. Aguilera, V., González, H. E., Morales, C. E., Torres-Saavedra, R., von Dassow, P. 2020. Fertilización del océano con hierro (OIF): Antecedentes científicos para la región y evaluación de la Enmienda 2013 del Protocolo de Londres y otras actividades de geoingeniería marina. Report solicited by the Comité Oceanográfico Nacional and DIRECTEMAR of the Chilean Navy for the Chilean Ministry of Foreign Relations. [Currently awaiting release by DIRECTEMAR for public distribution]

## **Other notable recent public contributions**

### Invited presentations related to national issues

“La propuesta de una empresa extranjera de fertilizar el ambiente marino de Chile con hierro por fines comerciales : Antecedentes científicos, Reacción de comunidad científica”. P. von Dassow. 07-07-2017. Sesión N°138 de la Asamblea Plenaria del Comité Oceanográfico Nacional. Universidad Arturo Prat de Iquique. Iquique, Chile.

*In 2017 a foreign company attempted to conduct commercial iron fertilization in Chilean waters. I helped lead the Chilean scientific community in responding, and was asked by the Dirección General del Territorio Marítimo y de Marina Mercante (DIRECTEMAR), the branch of the Chilean Navy in charge of Chile’s obligations under the London Protocol, to prepare an urgent scientific report, and CONA asked for this talk to scientists, national and regional decision makers, and stakeholders.*

“Fertilización del océano con hierro (OIF): Antecedentes científicos para la región y evaluación de la Enmienda 2013 del Protocolo de Londres y otras actividades de geoingeniería marina”. Peter von Dassow y Carmen E. Morales. 30-09-2020. Sesión N°143



de la Asamblea Plenaria del Comité Oceanográfico Nacional. Servicio Hidrográfico y Oceanográfico de la Armada de Chile. Valparaíso, Chile.

*As a result of the events of 2017, Chile is evaluating to become one of the first nations to formally ratify the 2013 amendment to the London Protocol, the first international mechanism to govern marine geoengineering activities. DIRECTEMAR asked me, via CONA, to organize a report on the relevant scientific aspects for Chile to be included in their technical report to the Ministry of Foreign Relations, and I was also asked to present this to CONA.*

#### Notable appearances in the media and press

Interviewed for national newspapers El Mostrador (6 Apr. 2017), Qué Pasa (19 May 2017), and for the radio program Empíricos (radio Universidad de Chile) (18 May 2017) about the opposition of the scientific community to a proposal for commercial iron fertilization in Chilean waters.

Interviewed for the international news site Observatorio Latinoamericano de Conflictos Ambientales “Piratas en el Pacífico” <http://olca.cl/articulo/nota.php?id=107487> (9 Jun. 2018)

Participation in documentary “Exploradores: del átomo al cosmos” about marine microbiology and oceanography research in Chile, including follow-up interview on Chilean national television Canal 24H de TVN. 14 de octubre de 2020. <https://www.24horas.cl/programas/exploradores/>

#### Examples of other advanced human capital formation

Lecturer: ECODIM 2012. Advanced international intensive course in Ecology and Diversity of Marine Microbes organized by the Austral Summer Institute in the Estación Costera de Investigaciones Marinas de la Pontificia Universidad Católica de Chile.

Coordinated and co-taught an Advanced Course in Flow Cytometry financiado por el Instituto Milenio de Oceanografía. 21-30 Enero 2015 in the Marine Biological Station of the Universidad de Concepción in Dichato, Chile.

Invited professor in course “Técnicas Avanzadas en Genética Molecular y Genómica (DGIN1021)”, Universidad Mayor, 2019 (Profesor encargado: Dra. Nicole Trefault): Lecture on advanced flow cytometry followed by demonstration performed in the Flow Cytometry Platform of the Biological Sciences Faculty of the Pontificia Universidad Católica de Chile.