CV Versión Resumida

Datos Personales

Nombre Completo. José Luis Iriarte Machuca		
Rut: 8.851.896-9		
Institución (Departamento, Facultad u otro) Facultad de Pesquería Y Oceanografía, Universidad Austral de Chile		
Cargo Actual Profesor Titular Categoría 1		
Dirección laboral Facultad de Pesquería Y Oceanografía, Instituto de Acuicultura, Campus Pelluco.	Ciudad Puerto Montt	
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Datos Curriculares

Títulos o Grados	Lugar de Obtención	Fecha de obtención
Biólogo Marino	Universidad Católica del Norte	1989
Bachelor in Marine Sciences	Universidad Católica del Norte	1989
M. Sc. In Oceanography	Texas A&M University	1994
PhD Oceanography	Universidad de Concepción	2005

Investigación durante los últimos 5 años

Doctoral Fellowship-CONICYT-FONDECYT: Relationship between enzymatic activity and phytoplankton biomass in the pelagic system (2002 – 2004). PI.

Phytoplankton primary productivity and its fate in the pelagic food web of Comau fjord (42S): the influence of copepods versus cladocera in fueling classical versus microbial trophic pathways in frontal zones. Grant FONDECYT 1050487 (2005 – 2008). PI.

Pelagic food web structure and carbon budget in a coastal upwelling area off Central Chile: influence of mixotrophy and omnivory. Grant FONDECYT 1060709 (2005-2009). Co-researcher

El rol del nitrógeno disuelto en las floraciones de fitoplancton en ambientes marinos vulnerables de la región sur-austral de Chile. Grant UACh - DID S-2006-61 (2006 – 2008). PI

Primary production and its fate in the pelagic food web of Reloncavi estuary, southern Chile. Grant CONA C12F 06-10 – CIMAR 12 (2005-2007). Co- researcher

Núcleo Científico Milenio FORECOS (FORECOS PO1-057-F) UACh. Forest Ecosystemic services to aquatic systems under climatic variability scenarios (2005-2008) Co- researcher

INNOVA CORFO 05CT6PPT-21 PROJECT: “Herramientas para le gestión del proceso alimentario de salmónidos conducente al mejoramiento del factor de condición biológico, calidad de producto y sustentabilidad ambiental” (2007-2010) Co- researcher

Grant CONA – CIMAR 13: “Producción primaria y su destino en la trama trófica del fiordo Aysen”. (2007-2008) Co- researcher

The role of silicon on phytoplankton blooms in the chilean fjord system: the impact of past and future scenarios of variable freshwater streamflow on marine productivity. Grant FONDECYT 1080187 (2008 – 2011). PI

Modelling the effects of deforestation and land use change on water quantity and quality in lake watersheds in southern Chile. Grant FONDECYT 1080408 (2008 – 2011). Co- researcher

Evaluation of the carrying capacity of the Estuario de Reloncaví, X region. Grant FIP 2007-21 (2008 – 2009). Co- researcher.

Grant CONA – CIMAR 14: “Estudio del flujo de carbono hacia la trama trófica pelágica y acoplamiento pelágico-bentónico en el Estuario del Río Baker y Canal Messier, sur de Chile” (2008 – 2009): Co- researcher.

Estudios oceanográficos y modelo de análisis de riesgo para el manejo integrado y sustentable del fiordo Aysén (LAT. 45º 24´S, LONG. 72º 59´W), XI región. INNOVA - CORFO (2009 – 2011). Co-researcher.

CAN WASTE EMISSION FROM FISH FARMS CHANGE THE STRUCTURE OF MARINE FOOD WEBS? A comparative study of coastal ecosystems in Norway and Chile. Work Programme for the new Research programme on Latin America (2009 – 2011). Co-researcher

Estudio del flujo de carbono hacia la trama trófica pelágica y acoplamiento pelágico-bentónico en los canales Trinidad y Smyth, Sur de Chile. Proyecto CONA-CIMAR 15F 09-06 (2009 – 2010). PI

Publicaciones

Publicaciones ISI durante los últimos 5 años

HE González, D Hebbeln, **JL Iriarte** & M Marchant (2004). Downward fluxes of faecal material and microplankton at 2300 m depth in the oceanic area off Coquimbo (30S), Chile during 1993-1995. Deep Sea Research, II 51: 2457-2474. Citas:2

*HE González, R Giesecke, CA Vargas, M Pavez, **JL Iriarte**, P Santibáñez, L Castro, R Escribano & F Pagès (2004). Carbon cycling through the pelagic food web in the northern Humboldt Current off Chile (23°S). ICES Journal of Marine Science 61: 572-584.Citas:7

***Iriarte JL** & HE González. (2004) Phytoplankton size structure during and after the El Niño of 1997–1998 in a coastal upwelling area of the northern Humboldt Current System. Marine Ecology Progress Series 269: 83-90 Citas:22

***Iriarte JL**, R Quiñones & R González (2005) Relationship between biomass and enzymatic activity of a bloom-forming dinoflagellate (Dinophyceae) in southern Chile (41°S): a field approach. Journal of Plankton Research 27: 159-166 Citas:6

Iriarte JL, RR González, RA Quiñones, SH Kang, JH Shim & CP Valenzuela (2006). Enzyme activities of phytoplankton in the South Shetland Islands (Antarctica) in relation to nutrients and primary production. Revista Chilena Historia Natural 79: 505-516. Citas:0

*Thiel M, Macaya EC, Acuña E, Arntz WE, Bastias H, Brokordt K, Camus PA, Castilla JC, Castro LR, Cortés M, Dumont CP, Escribano R, Fernández M, Gajardo JA, Gaymer CF, Gómez I, González AE, González HE, Haye PA, Illanes JE, **Iriarte JL**, Lancellotti DA, Luna-Jorquera G, Luxoro C, Manríquez PH, Marín V, Muñoz P, Navarrete SA, Perez E, Poulin E, Sellanes J, Sepúlveda HH, Stotz W, Tala F, Thomas A, Vargas CA, Vasquez JA & A Vega (2007). The Humboldt current system of northern-central Chile: oceanographic processes, ecological interactions and socio-economic feedback. Oceanography and Marine Biology: an Annual Review 45: 195-344.Citas:20

***Iriarte JL**, HE González, KK Liu, C. Rivas & C. Valenzuela (2007) Spatial and temporal variability of chlorophyll and primary productivity in surface waters of southern Chile (41.5 – 43°S). Estuarine, Coastal and Shelf Science 74: 471-480. Citas:8

Astorga M, I Arismendi, C Valenzuela & **JL Iriarte (**2008) Non-native Chinook salmon in the Northern Chilean Patagonia: Do they originate from salmon farming? Revista de Oceanografía y Biologia Marina 43: 669 – 674.Citas:0

Iriarte JL & HE González (2008) Phytoplankton bloom ecology of the Inner Sea of Chiloé, Southern Chile. Nova Hedwigia, Beiheft 133: 67-79. Citas:0

Alves-de-Souza C, MT González & **JL Iriarte (**2008) Functional groups in marine phytoplankton assemblages dominated by diatoms in fjords of southern Chile. Journal of Plankton Research 30: 1233-1243.Citas:1

González HG, G Daneri, **J L Iriarte**, B Yannicelli, E Menschel, C Barría, S Pantoja, L Lizárraga (2009) Carbon fluxes within the epipelagic zone of the Humboldt Current System off Chile: The significance of euphausiids and diatoms as key functional groups for the biological pump. Progress in Oceanography (in press).

H. E. González, M. J. Calderón, L. Castro, A. Clement, L.A. Cuevas, G. Daneri, **J.L. Iriarte**,L.Lizárraga, R. Martínez, E. Menschel, N. Silva, C. Carrasco, C. Valenzuela, C. A. Vargas, C. Molinet. Primary production and its fate in the pelagic food web of the Reloncaví Fjord and plankton dynamics of the Interior Sea of Chiloé, Northern Patagonia, Chile. Marine Ecology Progress Series (in press).

***Nota: con * en amarillo están resaltadas las 5 publicaciones más importantes**

Publicaciones ISI con otros investigadores del centro

Iriarte JL, HG González & **L Nahuelhual** (2009) Patagonian Fjord Ecosystems in southern Chile as a Highly Vulnerable Region: Problems and needs**.** AMBIO (in press).

Otras durante los últimos 5 años

Pantoja, S., **Iriarte, JL**, Gutiérrez, M. & Calvete, C. Subpolar Margin: Southern Chile. In: Liu, Atkinson, Quiñones & Talaue-McManus (Eds). Carbon and nutrient fluxes in continental margins: a global synthesis. Global Change. The IGBP Series, Springer Verlag (Book Chapter, 2009).

Presentaciones en Congresos Nacionales/Internacionales

Presentaciones en congreso durante los últimos 5 años

Tipo	**Nº**
Congresos nacionales	3
Congresos internacionales	7
Total	**10**

Congresos nacionales durante los últimos 5 años

J.L. Iriarte. Patrones de Biomasa Autotrófica y Producción Primaria tamaño-dependiente en la costa de Chile. SIMPOSIO: INTERACCIÓN FÍSICO – BIOLÓGICA EN ECOSISTEMAS COSTEROS. XXVIII Congreso de Ciencias de Mar, Viña del Mar, Mayo 26- 29, 2008

J.L. Iriarte & L. Nahuelhual. Flujo/Secuestro de carbono en los fiordos del sur de Chile: rol como un servicio ecosistémico. III congreso Binacional Chileno-Argentino de Ecología La Serena Septiembre 30 a Octubre 4: Simposio: servicios ecosistémicos: desde la ciencia a la toma de decisión. 2007

J.L. Iriarte, Rodríguez, C., Uribe, C., Rivas, C., Leal, C., Arismendi, I., González, H., Quiñones, R., González, R. Eventos Recurrentes de Floraciones algales nocivas (FANs) en el Mar Interior de Chiloé: Importancia de nutrientes disueltos nitrogenados. XLVIII reunión Anual de la Sociedad de Biología de Chile. Pucón, 13-16 Octubre 2005.

Congresos internacionales durante los últimos 5 años

J. L. Iriarte, H E González, G Daneri, L Rebolledo, C Alves-de-Souza[2,3], S Pantoja. The importance of large cell size diatoms to export flux of POC and potential indicators of nutrient change scenarios in Patagonian fjords system. Chapman Conference on the Biological Carbon Pump of the Oceans, England, September 1 – 4, 2009.

J.L. Iriarte, Humberto E. González, Giovanni Daneri, Cristian Vargas, Marcus Sobarzo & Cynthia Valenzuela. Size-fractionated biomass and productivity of phytoplankton in two areas of the Humboldt Current System off Chile: The role of diatoms in coastal upwelling and fjord systems. Eastern boundary upwelling ecosystems: integrative and comparative approaches. Las Palmas, Gran Canaria, España. June 1 – 4, 2008

J.L. Iriarte, Marcus Sobarzo, Humberto E. González, Nicolas Sanchez, Cynthia Valenzuela, Jorge Mardones, & Luis A. Cuevas. Phytoplankton carbon flux in a highly stratified Chilean fjord: the role of zooplankton in the pelagic food web. 4th International Zooplankton Symposium: Human and Climate Forcing of Zooplankton Populations. Hiroshima, Japan. May 28 – June 1, 2007

J.L. Iriarte, Sobarzo, M., González, H. E., Sanchez, N., Mardones, J., Cuevas, L. Primary production and downward flux of organic material in a highly stratified fjord in southern Chile. ASLO Summer Meeting, Victoria, Canada, June 4 - 9, 2006.

J. L. Iriarte, H. González, J. León, C. Leal, S. Marín, V. Haeussermann, M. Sobarzo. Marine Carbon Flow in a Fjord pelagic food web: fjords as main carbon sink in southern Chile?. International Congress on Ecosystem Services in the Neotropics: State of the art and future challenges. Valdivia, November 13-19, 2006

J.L. Iriarte, R.R. González, R.A. Quiñones & S.-H. Kang. Enzymatic activities of Antarctic microplankton: Relationship with primary productivity, phosphate and nitrate. ASLO 2004 Summer Meting: The changing landscape of ocean and freshwater ecosystems. Savannah, Georgia, USA. 13-18 June, 2004.

J.L. Iriarte, R.A. Quiñones, R.R. González & C.P. Valenzuela. Glutamine synthetase and nitrate reductase activities of a bloom-forming dinoflagellate (Dinophyceae) in Southern Chile (41°S): a field approach. GEOHAB: Global Ecology and Oceanography of Harmful Algal Blooms. Open Science Meeting: HABs in fjords and coastal embayments. Viña del Mar, Chile. 26-29 April 2004

Formación de Capital Humano

Iriarte have taught five undergraduate courses: Experimental Design, Basic Statistics, Limnology and Oceanography, General Oceanography, Methods in Scientific Research (three courses per year). Since 2004 Iriarte have been involved as adviser of 19 undergraduate Thesis for Aquaculture Enginneer and Marine Biology carrers. Currently, Iriarte is advising one Doctoral (Ph.D. Forestry Sciences, Jorge León) and one Master (MSc. Oceanography, Pamela Labbe) Theses.

Iriarte is also part of committee member of three Ph.D. students (Catharina Alves-de-Souza, Systematic and Ecology; Iván Arismendi, Forestry Sciences; Alejandra Lafon, Environmental Sciences Programs). As a collaborator Iriarte have been involved in one Doctorate course (Estuaries) for the Forestry Science PhD program at Universidad Austral de Chile. Currently, Iriarte is involved in two new Ph.D. Programs at Universidad Austral de Chile (Marine Biology and Aquaculture programs).

Número de tesis dirigidas durante el total de la carrera del investigador (2004 – 2009)

Tipo	Nº
Pregrado	19
Master	0
Doctor	0
Total	**19**