

MEMBER COUNTRY: CHILE

National Report to SCAR for year:

2007-2008

Activity	Contact Name	Address	Telephone	Fax	Email	web site
National SCAR Committee						
SCAR Delegates						
1) Delegate	León Bravo	Departamento de Botánica, Universidad de Concepción. Casilla 160-C, Concepción, CHILE	56-41- 2204115	56-41-2246005	lebravo@udec.cl	www.natura.udec.cl
2) Alternate Delegate	José Retamales	Instituto Antártico Chileno, Plaza Muñoz Gamero 1055, Punta Arenas, CHILE	56-61-298100	56 -61-298149	jretamales@inach.cl	www.inach.cl
Standing Scientific Groups						
Life Sciences						
1)	Elie Poulin	Facultad de Ciencias Universidad de Chile Casilla 653, Santiago, CHILE	56-2-9787298	56-2-2727363	epoulin@uchile.cl	www.ieb-chile.cl, www.lem.dm.cl
2)	Carlos Moreno	Instituto de Ecología y Evolución, Universidad Austral de Chile PO Box 567, Valdivia, CHILE	56-63-221486	56-63-221344	cmoreno@uach.cl	www.ciencias.uach.cl
Geosciences						
1)	Francisco Herve	Plaza Ercilla #803 Casilla 13518 - Correo 21 Santiago, CHILE	56-2- 9784541	56-22-6963050	fherve@cec.uchile.cl	www.geologia.uchile.cl
2)	Andres Rivera	Centro de Estudios Científicos. Arturo Prat 514, Valdivia, CHILE	56-63-234531	56-63-234517	arivera@cecs.cl	www.glaciologia.cl www.cecs.cl
Physical Sciences						
1)	Alberto Foppiano	Facultad de Ciencias Físicas y Matemáticas Departamento de Geofísica Casilla: 160-C, Avda. Esteban S. Iturra S/N Campus Universitario Concepción, CHILE	56-41-2204136	56-41-2220104	foppiano@udec.cl	www.dgeo.udec.cl
2)	Jorge Carrasco	Dirección Meteorológica de Chile Av. Portales 3450, Estación Central, Santiago, CHILE	56-2-4364538	56-2-4378212	jcarrasco@meteochile.cl	www.meteochile.cl

Activity	Contact Name	Address	Telephone	Fax	Email	web site
Scientific Research Program						
ICESTAR						
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EBA						
1)	Elie Poulin	Facultad de Ciencias Universidad de Chile Casilla 653, Santiago, CHILE	56-2-9787298	56-2-2727363	epoulin@uchile.cl	www.ieb-chile.cl, www.lem.dm.cl

Activity	Contact Name	Address	Telephone	Fax	Email	web site
ACTION GROUPS						
1)						
2)						
3)						
4)						
insert others as needed						
EXPERT GROUPS						
1) SC-AGI	Patricia Vicuña	Instituto Antártico Chileno, Ministerio de Relaciones Exteriores. Teatinos 180, piso 7, Santiago, CHILE	56-2-8274694	56-2-3801421	pvicuna@inach.cl	www.inach.gob.cl
2)						
3)						
4)						
insert others as needed						
JCADM						
1)						
2)						
NATIONAL ANTARCTIC DATA CENTRE						
SCAR DATABASE						
insert name of database for which your country has responsibility						

A BRIEF SUMMARY OF SCIENTIFIC HIGHLIGHTS:						
Subject	Project	Investigation/Objectives	Locality	Duration	Principal Investigator	Email address
Life Science	ANTARCTICA : SOURCE OF BIOLOGICAL RESOURCES FOR NATIONAL BIOTECHNOLOGY	Create a platform that facilitates the access to Antarctic resources, as microorganisms and plants, allowing a valuation, for the Chilean biotechnology as well as the scientific development.	South Shetland Island, Antarctic Peninsula	4 years	Jenny BLAMEY, Fundación Biociencia	jblamey@bioscience.cl
Life Science	PRODUCTION OF <i>DESCHAMPSIA ANTARCTICA</i> CELLS IN BIOREACTORS. USES FOR THE COSMETIC DERMATOLOGY INDUSTRY INCLUDING CRYOPRESERVATION AND PHOTOPROTECTIVE AGENTS	Develop a technology and methodology of cellular culture of <i>Deschampsia antarctica</i> in bio reactors in order to obtain viable photo protectors extracts from the plant.	King George Island	2 years	Manuel GIDEKEL, Universidad Adolfo Ibañez	manuel.gidekel@uai.cl.
Life Science	<i>DESCHAMPSIA ANTARCTICA</i> : HYDROLYTIC AND METABOLIC ENZYMES FOR USE IN BIOTECHNOLOGY	Study the hydrolytic and metabolic enzymes of the <i>Deschampsia antarctica</i> , in order to use them in biotechnology	King George Island	2 years	Claudia RABERT, Universidad de la Frontera	claudia_rabert@yahoo.com.ar
Life Science	PHOTOPROTECTIVE MECHANISMS IN <i>COLOBANTHUS QUITENSIS</i> UNDER COLD-INDUCED PHOTOINHIBITION CONDITIONS	Study the contribution of different resistance mechanisms of photo inhibition in two eco types of <i>C. quitensis</i> : Antarctic and Andean.	King George Island	2 years	Luisa BASCUÑAN, Universidad de Concepción	lubascun@udec.cl
Life Science	EFFECTS OF SALINE STRESS IN THE COMPOSITION OF PHENOLIC COMPOUNDS AND IN GENETIC REGULATON THROUGH THE PHENYLPROPANOID PATHWAY IN <i>DESCHAMPSIA ANTARCTICA</i>	Study the participation of the fenilpropanoide route in the cellular detoxication systems in response to salty stress conditions in <i>D. antarctica</i> .	Home Lab	2 years	Pablo ZAMORA, Universidad de Santiago de Chile	zamora@usach.cl

Life Science	TEMPERATURE INCREASE EFFECT ON THE RESPONSES OF <i>STERECHINUS NEUMAYERI</i>	Identify, characterize and compare the expression profile of immune genes in the Antarctic equinoderm <i>S. neumayeri</i> .	King George Island	3 years	Marcelo GONZÁLEZ, Instituto Antártico Chileno	mgonzalez@inach.cl
Life Science	MOLECULAR DIVERGENCE AND CONNECTIVITY IN THE SOUTHERN OCEAN: A MODEL OF ANTARCTIC AND SUBANTARCTIC RINGS	Evaluate the existence of pliocenic or pleistocenic contacts between faunas, observing the molecular divergence in mitochondrials sequences of co generic benthonic invertebrates species from Antarctica and South America.	King George Island	3 years	Elie POULIN, Universidad de Chile	epoulin@uchile.cl
Life Science	RECONSTRUCTION OF THE EVOLUTIONARY AND DEMOGRAPHIC HISTORY OF GENUS <i>NACELLA</i> , THROUGHOUT THEIR DISTRIBUTION IN THE ANTARCTIC AND SUBANTARCTIC REGIONS	Estimate the time of divergence between the marine benthonic fauna from Antarctica and South America based in the species <i>Nacella</i> spp.	Home Lab	2 years	Claudio Gonzalez, Universidad de Chile	cagonzalez@uach.cl
Life Science	DIVERSITY STUDIES OF PSYCHROPHILIC PROKARYOTES FROM THE INSULAR ANTARCTIC TERRITORY	Contribute to the understanding of the Antarctic micro biota, using microbiological and phylogenetic characterization of psychrophilic microorganisms isolated from different sites in Antarctica.	Home Lab	2 years	Jenny BLAMEY, Fundación Biociencia	jblamey@bioscience.cl
Life Science	BACTERIAL MICROBIOTA OF THE FILDES PENINSULA, KING GEORGE ISLAND: BEHAVIOR RELATIVE TO ANTIBACTERIAL AGENTS AND PRODUCTION OF COMPOUNDS WITH ANTIBACTERIAL CHARACTERISTICS	Create a collection of isolated bacteria of different ecological niches from Fildes Peninsula, King George Island; study its behavior with anti-bacterial agents, and the production of components with anti-bacterial activity.	Home Lab	2 years	Mariana DOMÍNGUEZ , Universidad de Concepción	mdomingu@udec.cl

Life Science	PHYLOGEOGRAPHY AND GENETICS OF POPULATIONS OF GIGARTINA SKOTTSBERGII SEPARATED BY THE CIRCUMPOLAR CURRENT	Analyze the genetic diversity of the <i>Gigartina skottsbergii</i> , from Antarctic Peninsula and South America.	Home Lab	2 years	Sylvain FAUGERON, Pontificia Universidad Católica de Chile	sfaugeron@bio.puc.cl
Life Science	GENETIC POPULATION STRUCTURE OF THE ANTARCTIC PENINSULA AND SOUTHERN SOUTH AMERICA HUMPBACK WHALE FEEDING AREAS USING MITOCHONDRIAL AND NUCLEAR DNA MARKERS	Analyze the genetic relationships between the humpback whales of three feeding areas in summer, investigating the potential diversity in the migratory tendency of the whales population.	Home Lab	2 years	Carlos OLAVARRÍA, Cequa	carlos.olavarria@cequa.cl
Life Science	ORIGIN AND EVOLUTION OF ANTARCTIC BENTHIC MARINE FAUNA: GENETIC AND MOLECULAR DIVERSITY AMONG CONGENERIC ANTARCTIC AND SOUTH AMERICAN SPECIES OF ECHINOIDEA	Evaluate the divergence time between co generic species of the Antarctica benthonic marine fauna and the South Americans ones, in relation to its potential of dispersion.	Home Lab	2 years	Elie POULIN, Universidad de Chile	epoulin@uchile.cl
Life Science, Ecology	LOCAL PATTERNS OF SHALLOW ANTARCTIC ECHINODERMS WITH CONTRASTING DEVELOPMENTAL MODES: THE RELATIVE IMPORTANCE OF PREDATION, FOOD AVAILABILITY AND ICE-RELATED DISTURBANCES	Investigate shallow coastal equinoderms development, related to ecological success and evolution of the species, considering that the system is under the effect of an important regional climatic change.	South Shetland Island, Antarctic Peninsula	3 years	Álvaro PALMA, Pontificia Universidad Católica de Chile	apalma@bio.puc.cl
Life Science, Ecology	ECOLOGICAL STUDIES OF THE ANTARCTIC FUR SEAL, <i>ARCTOCEPHALUS GAZELLA</i>	Develop studies in dynamic population of <i>A. gazella</i> in Cape Shirreff using censuses and studies of production, growth and diverse causes of mortality.	Livingston Island	3 years (last season)	Daniel TORRES, Instituto Antártico Chileno	dtorres@inach.cl

Life Science, Ecology	CETACEAN ECOLOGY IN THE WATERS OF THE SOUTHERN OCEAN AND RELATED ECOSYSTEMS	Study the ecology of the main populations of cetaceans in Antarctic and sub Antarctic waters of Chile	Drake passage, Gerlache Strait	3 years (last season)	Anelio AGUAYO, Instituto Antártico Chileno	aaguayo@inach.cl
Life Science	ECO-PHYSIOLOGICAL OUTCOMES FOR ANTARCTIC FLORA UNDER A GLOBAL WARMING SCENARIO	Evaluate the size changes of the vascular plants population and the diversity and richness of species in the South Shetland islands and in the Antarctic Peninsula	South Shetland Islands and Antarctic Peninsula	3 years	María Angélica CASANOVA, Universidad de Concepción	angecasanova@udec.cl
Geoscience	STABILITY AND RECENT BEHAVIOUR OF GLACIERS IN THE ANTARCTIC PENINSULA – THE INTERACTIONS WITH ICE SHELVES	Study the stability and recent behavior of glaciers in the Antarctic Peninsula and the interactions with ice shelves.	Antarctic Peninsula	3 years	Anja WENDT, Centro de Estudios Científicos	awendt@cecs.cl
Geoscience	ANTARCTIC AND SOUTH AMERICAN CLIMATE: JOINT EXTRACT OF BRAZILIAN-CHILE-USA ICE CORE SAMPLING IN THE DETROIT PLATEAU OF THE ANTARCTIC PENINSULA	Recover paleoclimatic information using ice core sampling , undertaking a joint study of the glacial systems and their answers to the environmental changes in a regional scale.	Antarctic Peninsula	2 years	Ricardo JAÑA, Instituto Antártico Chileno	rjana@inach.cl
Geoscience	GEOLOGICAL CONNECTION BETWEEN WEST ANTARCTICA AND PATAGONIA SINCE THE LATE PALEOZOIC: TECTONISM, PALEOGEOGRAPHY, BIOGEOGRAPHY AND PALEOCLIMATE	Investigate the paleogeographical, paleoclimatic and tectonic relations between the Antarctic Peninsula and the southern Patagonia, from late Paleozoic to recent Paleozoic.	Chilean Patagonia, Antarctic Peninsula, South Shetland Island	3 years	Teresa TORRES, Universidad de Chile	ttorres@uchile.cl
Geoscience	CHEMICAL FINGERPRINT OF TEPHRA FROM HOLOCENE/QUATERNARY VOLCANOES AROUND THE NORTHERN ANTARCTIC PENINSULA: A KEY TO REGIONAL VOLCANIC HISTORY AND CLIMATE RECONSTRUCTION	Reconstruct the regional volcanic history and climate evolution of the northern Antarctic Peninsula area, studying chemical fingerprint of tephra from holocene/quaternaly volcanoes	Antarctic Peninsula	2 years	Stefan KRAUS, Instituto Antártico Chileno	skraus@inach.cl

Geoscience	WATER MASSES AND FRONTS IN THE SOUTH SHETLAND ISLAND AREA	Study the space and temporary variations of the water masses and fronts presents in the vicinity of the South Shetland Island, Antarctica.	Home Lab.	3 years	Nelson SILVA, Pontificia Universidad Católica de Valparaíso	nsilva@ucv.cl
Geoscience	ICHTHYOSAURS OF THE LATE JURASSIC AND EARLY CRETACEOUS IN THE TORRES DEL PAINE NATIONAL PARK IN SOUTHERN CHILE	Study ichthyosaurs and the environment in which they lived, in the present area of the Glacier Tyndall (Torres del Paine), to understand how the climatic changes of the past, the massive extinction and the separation of South America and Antarctica, conditioned the existence of life.	Antarctic Peninsula, Chilean Patagonia	3 years	Wolfgang STINNESBECK, Marcelo LEPPE	stinnesbeck@uni-heidelberg.de mleppe@inach.cl
Geoscience	RECONSTRUCTION OF THE PALEOENVIRONMENT OF THE CHILEAN PATAGONIAN CENTRAL LATITUDES AND SOUTHERN (MAGALLANES) REGIONS UNDER THE EFFECTS OF GLACIAL DYNAMICS	Reconstruct the vegetal dynamics of the ecosystem and the landscape through the Paleogene and Neogene of the austral region of Chile (46°-55°S), using the interpretation of the palinological registry of glacial sediments from Southern Chile.	Home Lab	2 years	Mauricio RONDANELLI	mrdane@udec.cl
Physical Science	CHARACTERIZATION OF FINE ANTARCTIC TROPOSPHERIC AEROSOLS OF THE NORTH END OF THE ANTARCTIC PENINSULA AND LINKAGE WITH THEIR SOURCES	Analyze the impact of human influence on the environmental chemical system and quantify the elementary chemical composition of six components of the Antarctic environmental system, with a certain degree of human intervention.	King George Island and Antarctic Peninsula	3 years	Margarita PRÉNDEZ	mprendez@ciq.uchile.cl
Physical Science	NEUTRON MONITOR MN-64 FOR THE CHILEAN ANTARCTIC TERRITORY	Contribute to the study of the Sun-Earth relationships, especially on the effects induced by the Sun in the Antarctic continent.	King George Island	3 years	Enrique Cordaro	ecordaro@dfi.uchile.cl

Social Sciences	HISTORICAL ARCHEOLOGY IN THE SOUTH SHETLAND ISLANDS	Study the material and architectonic remains, left by the fur seals hunters from the first half of the XIX century, in the South Shetland Islands.	South Shetland Islands	3 years (last season)	Rubén STEHBERG, Museo Nacional de Historia Natural	rstehberg@mnhn.cl
Technology	BIODIESEL: A GREEN ALTERNATIVE TO DIESEL IN ANTARTIC STATIONS	Study of the use of biodiesel as an alternative energy source in the Antarctic territory	Home Lab.	2 years	Pedro CID, Universidad de Magallanes	pedro.cid@umag.cl
Technology	UV RADIATION IN ANTARCTIC CHILEAN STATIONS	Characterize the total RUV-B variations and spectral values, during the year, inter-annual cycles, with special emphasis in the period of the Antarctic Ozone hole.	King George Island and Antarctic Peninsula	3 years	Claudio CASICCIA, Universidad de Magallanes	claudio.casiccia@umag.cl