Biodiversity and Macroecology Lab Members. ICML, UNAM.

Head of the Lab: Elva Escobar Briones
e-mail: escobri@cmarl.unam.mx

Long Term Project: The study of community structure and function of Mexican benthic marine and saline ecosystems. Deep-sea chemosynthetic ecosystems, habitat characterization, food source modeling.

Image: Rigging a pinguer on the multicorer frame in the Chapopote III cruise on board UNAM's R/V Justo Sierra in a scientific collaboration with Dr. Ian MacDonald.

Master in Sciences student: Biol. León Felipe Álvarez-Sánchez
e-mail: leonfalvarez@gmail.com
Master student at Posgrado en Ciencias del Mar y Limnología, UNAM
Project: The main objective is to determine sediment bacterial biomass and density from Alchichica Lake and evaluate the variability during the anoxic and well oxygenated periods and relate these to environmental factors of the bottom water mass and the sediments.

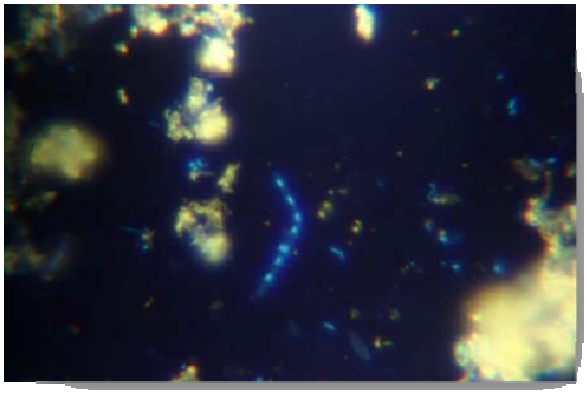

Image:
Bacteria from anoxic sediments of the Alchichica Lake (DAPI technique)

Assistant/Doctoral student: M. en C. Vilma Ardiles Gloria (vilmardi@hotmail.com)
Doctoral student at Posgrado en Ciencias del Mar y Limnología, UNAM
Doctorate Project: "Long term dynamics of phytoplankton biomass in a tropical warm monomictic lake". Record the variability of phytoplankton biomass in Lake Alchichica based on physical and chemical variables, flux of phytoplankton, Si and C in a data series of ten years (1999-2008).

Image: Lake Alchichica

Undergraduate student: Ivette Arredondo-Morales
e-mail: alivette_ciencias@yahoo.com
Facultad de Ciencias, UNAM
Bachelor's thesis: Variability of the benthic biomass in the Sigsbee abyssal plan (central sector of the Gulf of Mexico), description of the benthic biomass variability and its relation to the environmental factors.

Image:
Processing infaunal samples on board R/V "Justo Sierra"

Undergraduate student: Elizabeth Calleja Chávez
e-mail: elizapa04@hotmail.com
Facultad de Ciencias, UNAM.
Bachelor's thesis Project: The study of the microgastropod ecology associated to gray bacterial mats in the Sonora margin cold methane seeps. This study provides data of the morphometry, biometry, abundance, biomass description and habitat selection of the species.

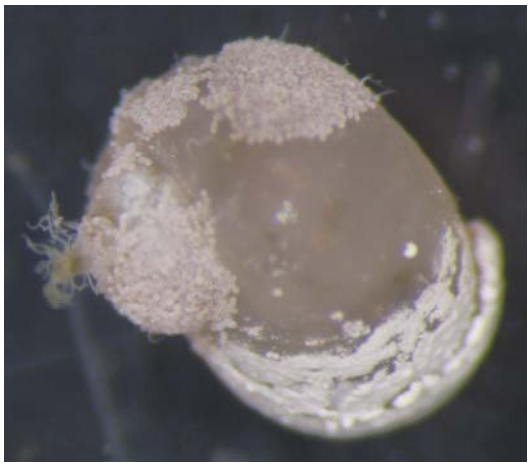

Image:
Shell of the microgastropod with incrustations and filamentous bacteria.

Undergraduate student: Elda Itzel Carrasco-García
e-mail: eldatzelcarrascogarcia@gmail.com
Facultad de Ciencias, UNAM.
Bachelor's thesis: In support to Pedro López' master thesis she is building photomosaics from iron and cupper plates that were left submerged in the Campeche Bay for 15 months; she is currently identifying the non sessile fauna associated with the plates.

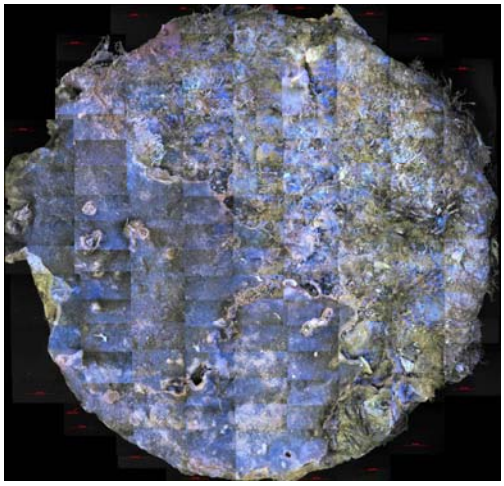

Image:
Photomosaic of one of the iron plates submerged on the seafloor for 15 months.

Master in Sciences student: Biol. Abril Cid-Salinas
e-mail: april_kirikou@yahoo.com.mx
Masters student at Posgrado en Ciencias del Mar y Limnología, UNAM
Master in sciences project: Historical reconstruction of the exploitation of sea turtles in Cozumel, Mujeres and Holbox islands in the XX century. Graduated in June 2011.

Image:
Sea turtles as a marine resource (Anonymous, 1930. Puerto Morelos museum, Mexico)

Doctoral student: M. S. Adriana Gaytán-Caballero
e-mail: adriana.gaytan@gmail.com
Doctoral student at Posgrado en Ciencias del Mar y Limnología, UNAM
Doctoral project: Abyssal distribution in the Atlantic Equatorial Belt taking as example the crustacean fauna of the asphalt volcano "Chapopote" in Southern Gulf of Mexico, with emphasis on *Alvinocaris muricola* and *Munidopsis geyeri* species.

Image:
Munidopsis petila holotype. Collected at 5243m depth, this species has the deepest distribution of the genus.

Master in Sciences student: Circe G. González-Contreras
e-mail: circeggc@gmail.com
Masters student at Posgrado en Ciencias del Mar y Limnología, UNAM
Master in sciences project: Long term variation of the vertical distribution of phytoplanktonic Chlorophyll *a* concentration in Alchichica Lake, Puebla.

Image: Alchichica Lake.

Undergraduate student: Paulina Valeria Guarneros Narváez
e-mail: paguna87@yahoo.com.mx
Facultad de Estudios Superiores Zaragoza. UNAM
Bachelor's thesis: Study of the benthic abyssal macrofauna in the Gulf of Mexico. This study will contribute with data of density, biomass, taxa composition and diversity at phylum, genus and species levels.

Image: Sediment sampling with the Multicorer on board the R/V "Justo Sierra" with Elva Escobar.

Master in Sciences student: Chemist José Ricardo Hernández-Lee
e-mail: xochistlahuaca@yahoo.com.mx
Masters student at Posgrado en Ciencias del Mar y Limnología, UNAM
Master in sciences project: Historical ecology of purple snail (*Plicopurpura pansa*) -tixinda'a kayt ou in mixtec language- and its use by the mixtec dyers community at Pinotepa de Don Luis, Oaxaca.

Image: Detail of a traditional hand-woven cotton skirt (*posahuanco*) dyed with indigo (*Indigofera sp.*), cocchineal (*Dactylopius coccus*) and purple snail (*Plicopurpura pansa*).

Associate: M. S. Angel Balam Jiménez Brito
e-mail: ixbalamquemx@gmail.com
Graduate at Posgrado en Ciencias del Mar y Limnología, UNAM
Masters Project: Diversity of coral reef *Apogon* fishes in Carrie Bow Cay, Belize. Project carried out in collaboration with Dr. Carole Baldwin, fish curator of Smithsonian Institution, Washington, DC. The main objective was to match early life history stages with adults of the current described *Apogon* species through cytochrome oxidase I (COI) gene and identify morphological diagnostic characters of larvae and juveniles. Graduated January 2011.

Image:
Identifying deep sea fishes of the Gulf of Mexico onboard UNAM's R/V Justo Sierra.

Master in Sciences student: Biol. Elvira Leticia Jiménez-Guadarrama.
Masters student at Posgrado en Ciencias del Mar y Limnología, UNAM
e-mail: jgletty@yahoo.com.mx
Master in Sciences Project: Ecology of the abyssal galatheids from the Guaymas Basin hydrothermal vents and the Sonora margin cold seeps.

Image: On board at R/V "Justo Sierra", international area of the Gulf of Mexico.

Master in Sciences student: Biol. Pedro H. López-Garrido.
Formal researcher from Subdirección de Arqueología Subacuática in the Instituto Nacional de Antropología e Historia.
Masters student at Posgrado en Ciencias del Mar y Limnología, UNAM
e-mail: plopezgarrido@gmail.com
Master in sciences project: Asses and study of the degradation and transformation by the biological colonization and corrosion of archeological materials on the seafloor.

Image: Pedro H. López-Garrido holding a colonized iron plate from the Campeche Bay. (image from the Archives of Subdirección de Arqueología Subacuática/INAH)

Undergraduate student: Nayeli Andrea Lucas Aguilar
e-mail: luka.nay@hotmail.com
Facultad de Ciencias UNAM.
Bachelor's thesis: Long term ecological research of the deep-sea macrofaunal diversity in the Sigsbee abyssal plain, Gulf of Mexico. Project ascribed to Red-Mex LTER.

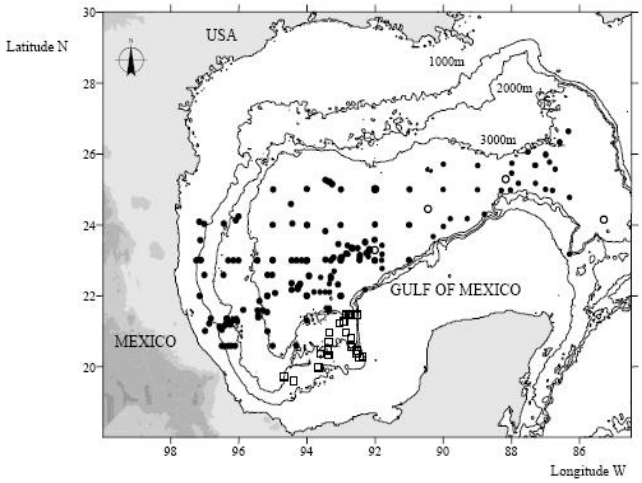

Image:
Stations sampled until 2008 in the abyssal ecosystem in the Gulf of Mexico.

Teacher's assistant: M. S. Myrna Laura Martínez-Robles
e-mail: myrnamar@gmail.com
Student graduated from masters program of Marine Sciences and Limnology at Posgrado en Ciencias del Mar y Limnología, UNAM.
Masters project: Effect on the macrobenthic community structure in an abyssal salt diapir, central Gulf of Mexico. The variability of the macrobenthic community was assessed to evaluate the presence of a salt diapir. Variables such as food availability, superficial sediment and grain size were modified by the presence of the salt diapir affecting the faunal composition, richness, density and biomass.

Image: Multicore used in the sediment sampling on board R/V "Justo Sierra", Gulf of Mexico.

Posdoctorate fellow: Dr. Luciana Raggi Hoyos
e-mail: luciana.raggih@gmail.com
Project: Molecular characterization of the microbiota associated to the meio- and macrofauna. Startegies that are applied include phylogenetic analysis of invertebrates and associated bacteria based on molecular techniques such as DGGE, sequencing and FISH.

Image: Three bacteria phylotypes on mussel gills using FISH.

Graduate student: Biol. Guillermo Sánchez-Rodríguez
e-mail: heimndal@hotmail.com
Masters program of Marine Science and Limnology at Posgrado de Ciencias del Mar y Limnología, UNAM
Masters project: Assessment of the availability and use of water in the *axalapazcos* region of Puebla. Resource management program options for the region.

Image: Alchichica Lake, Puebla, Mexico.

Undergraduate student: C. Victoria Suazo-Yamallel
e-mail: spideys_web45@hotmail.com
Bachelor biology student at Facultad de Ciencias, UNAM.
Master Project: Hydrothermal vent benthic macrofauna from the Guaymas basin.

Image: On board at R/V “Justo Sierra” in the international area of the Gulf of Mexico.

Undergraduate student: Yossellin Tapia-de la O
e-mail: yosse_tapia@hotmail.com
Facultad de Ciencias UNAM.
Bachelor's thesis: Ecological study of the ophiuroids associated to bacterial mats of the cold methane seeps in the Sonora margin. This study will contribute with morphological variations, abundance, biomass and habitat preferences of the ophiuroids.

Image:
Ophiurids inhabiting abyssal soft sediment surrounding the bacterial mats.