

# Research & Collections Newsletter



Winter 2016

**re•search** (ri-sûrch', rē'sûrch) n. **1.** Scholarly or scientific investigation or inquiry. See synonyms at *inquiry*. **2.** Close, careful study. **3.** When performed on collections, the *raison d'être* of all great natural history museums.

## Collection News

### Conservation

The Conservation Section recently completed treatments and condition documentation for twenty-one early Hollywood artifacts to prepare them for an exhibition loan to a museum in Stuttgart, Germany. The artifacts all relate to the life and works of Carl Laemmle, famed founder of Universal Studios, and include treasures from our collection such as the prop bat from *Dracula* (1931) and the make-up kit belonging to actor Lon Chaney, known as the Man of a Thousand Faces. Seen in the image, Assistant Conservator Marina Gibbons is consolidating a crack in a prop French horn from the film *King of Jazz* (1930) to stabilize it for travel.



### Dinosaur Institute

#### *Getting the paperwork right*

The Dinosaur Institute has accessioned a small collection of dinosaur eggshells from the South of France, originally acquired in 2006. With only a photocopy of the original Deed of Gift, the document required for the museum to accept the specimens, the donation would be held in limbo for 10 years when, after much effort, the DI received an updated Deed of Gift and original signatures guaranteeing the specimens' provenance. Collected in 2003 from the Aix Basin in SE France by Dr. Monique Vianey-Liaud of the Institute of Science and Evolution in Montpellier, the accession contains six ootaxa. Ootaxa are equivalent to a species and used to classify fossilized dinosaur eggs. Included are fragments of *Megaloolithus pseudomamillare* from Les Breguieres, *Megaloolithus microtuberculato* from La Cairanne, Rousset, *Megaloolithus sirugeim* from Rousset, *Megaloolithus aureliensis* from Sacaron, Pourrieres,

*Megaloolithus mamillare* from Roques, Hautes/Les Grands-Creux, and *Cairanolithus dughrii* from La Cairanne, Rousset, France.



The morphology and microstructure of fossil eggshells are used to classify them, and can also provide information about the taxon that laid the egg.

### Search for dinosaur bones at Vernon Warehouse

As part of ongoing collections work, the last dinosaur jackets have been removed from the Marine Mammal Warehouse in Vernon. In late November, DI Collections Manager Maureen Walsh and Paleontological Preparator Jose Soler worked with Dr. Jorge Velez-Juarbe, Assistant Curator, Mammalogy, Department of Vertebrate Paleontology, to locate and remove the few remaining dinosaur jackets from amongst the hundreds of whale jackets collected and stored at this location for well over 50 years. Assisting with the jacket relocation were Glendale Community College interns Sara McDonald and Isabella Miranda.



Jose Soler searches for the diagnostic features of dinosaur bones in the dark.



Dr. Velez-Juarbe is dwarfed by the racks of fossil whale jackets.

### Dinosaur PenPals

Originally from the Republic of Swaziland, Nicky O'Byrne is a professional children's book author and illustrator. She visited the Dinosaur Institute collection storage areas in early December for real context to illustrate a "behind the scenes" spread for her upcoming book, *Dear Dinosaur*. After visiting the field gear storage room and other spaces at the North Grand Warehouse, Nicky commented that "there's enough inspiration here for the whole series!"



The Dinosaur Institute hopes to have her back participating in the 2nd Annual Dino Fest, engaging the visitor with readings, coloring books and dino skill workshops.

*Check out Nicky's book Dear Dinosaur. She took some of her inspiration from the Haaga Family Rotunda.*

## Marine Biodiversity Center

### *Bight 2013 Regional Monitoring Project*

Every 5 years, the Southern California Coastal Water Research Project (SCCWRP) organizes multiple agencies and coordinates the Bight Regional Monitoring Project. They monitor 400 miles of coastline from Point Conception, California to just south of Ensenada, Mexico. Specimens from various habitats are sampled, preserved and identified.

NHM has been the repository for the reference collection from these collecting events since 1998.



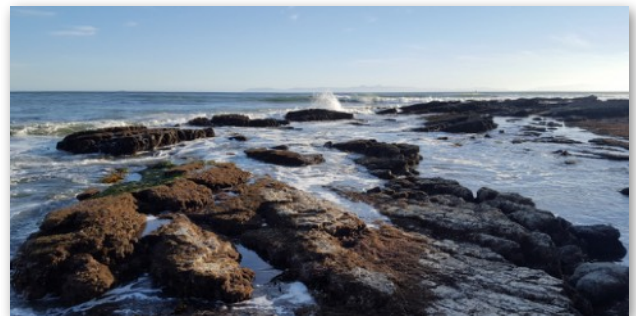
*A few specimens from the Bight 2013 reference collection.*

In September, approximately 670 identified reference specimens from the Bight 2013 collecting event were deposited with the Marine Biodiversity Center. Approximately 34% of the samples were preserved in 95% ethanol and are molecular-grade specimens. Preliminary results are showing some of these specimens to be of high enough quality for molecular analysis and possibly DNA barcoding for the DISCO project.



### *Collaborative collecting for DISCO*

On 17 November, Dean Pentcheff of NHM's *Diversity Initiative for the Southern California Ocean* (DISCO) accompanied researchers in their regular intertidal survey at Pt. Fermin, San Pedro. Steve Lee (UCLA), Lisa Gilbane (U.S. Bureau of Ocean Energy Management), Rich Ambrose (UCLA), and other participants regularly survey sites to monitor biotic change over time along most of the North American Pacific coast. Our collaboration with them allows for specimens to be collected for the DISCO project.



*The incoming tide at Pt. Fermin, making surveying increasingly difficult!*

## Marine Biodiversity Center & Polychaetes

### *Surveying at the Port of Los Angeles*

Once again, the Cabrillo Marine Aquarium (CMA) invited MBC and Polychaete staff to help out with the Cabrillo Inner Beach Survey. These regular surveys are a great collaborative venture: we get to sample specimens for NHM's DISCO project, and CMA gets survey assistance and species identification tools. This time, on October 13,

MBC's Regina Wetzer and Dean Pentcheff, and Polychaetes' Leslie Harris, came from NHM. Accompanying them on the trip were Katya Balakovsky and Shaina Wooley, students in a class at USC's Cinematic Arts program. They took the opportunity to get some video for a documentary they are filming about the MBC's collection and research work.

*Katya and Shaina filming at the Cabrillo Inner Beach Survey, surrounded by survey volunteers.*



## Field Work

### Dinosaur Institute

#### *Birds of Stone arrives in Beijing*

From November 4–13, Dr. Chiappe travelled to Beijing, China for ongoing research, and was honored to deliver a copy of the new book, *Birds of Stone*, to its co-author, Dr. Meng Qingjin. Marking a collaborative milestone of over 25 years, Drs. Meng and Chiappe



*Meng Qingjin (left) and Luis Chiappe (right) sign collaborative agreement for their new book published by John Hopkins University Press, October 2016.*

have sought out China's most exquisite fossil birds, acquiring them to build the collections and research capability of the Dalian Natural History Museum of Liaoning Province and the Beijing Natural History Museum (BMNH), Beijing. Dr. Meng is the current Director of the BMNH, Vice Chairman of the Chinese Association of Natural Science Museums, the Beijing Zoological Society and the director of China's Natural History Museum Committee. This is their first book and the Chinese edition will be published in China during 2017. This beautiful book is available in the Museum gift shop and would make a lasting gift to any bird lover.



### Photographing ancient birds in Brazil

Stephanie Abramowicz, Dinosaur Institute Illustrator, traveled to Sao Paulo and Taubaté, Brazil to photograph tiny Cretaceous avian specimens for Drs. Luis Chiappe and Herculano Alvarenga who have collaborated for many years on the evolution of birds. She traveled for ten days in mid-November 2016.

*Stephanie Abramowicz (left) and Natural History Museum of Taubaté Director Dr. Herculano Alvarenga (right).*



## Marine Biodiversity Center, Crustacea, & Polychaetes

### *Pacific Rocky Intertidal*

Long-term monitoring surveys use fixed plots to document changes in percent cover or abundance of targeted species. This fixed-plot approach allows the dynamics of rocky intertidal species to be monitored with reasonable sampling effort and provides sufficient statistical power to detect change over space or time. Our team joined the UCLA, Cal. State Fullerton, and BOEM (Bureau of Ocean Energy Management) team at low tide on 29 November to sample the “Old Stairs” long-term sampling site at Pt. Mugu in southern Ventura County. Our collections of common intertidal invertebrates complement these long-term surveys and provide museum voucher material, fresh tissue for DNA, and documentation of the organisms present on our shores.

To learn more about coastal long-term monitoring surveys visit: <https://www.marine.gov> and <http://cbsurveys.ucsc.edu>



At left, visitor Tatiana Magalhães and Regina Wetzer prepare to sample invertebrates at the Old Stairs site.

At right, MARINe researchers flying a surveying drone as part of data collection at the site.

### *Sequencing for DISCO at Smithsonian Institution*

The Marine Biodiversity Center has prepped the first batch of DISCO samples for sequencing! The team selected several hundred specimens from the MBC’s molecular-grade collection to fill six 96-well plates with crustaceans, mollusks, and polychaetes. These samples will be transported to the Smithsonian National Museum of Natural History where MBC staff will use the sequencing center within the Laboratories of Analytical Biology to produce DNA barcodes to contribute California marine invertebrates to the library on the Barcode of Life Database.

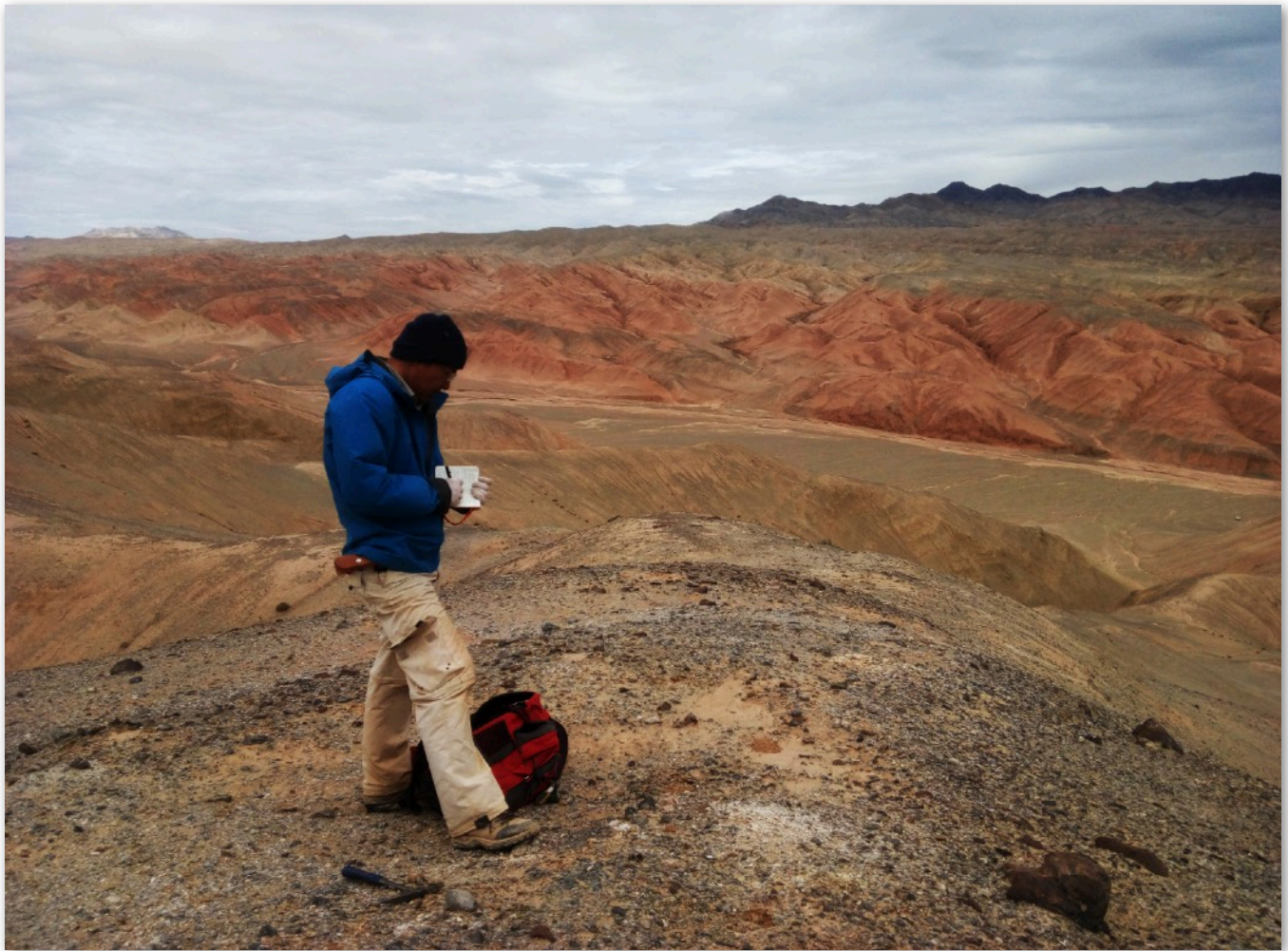


At left, a few of the DISCO specimens awaiting tissue-sampling. At right, one specimen’s tissue being sampled and put in one vial of the 96-well plate.

## Vertebrate Paleontology

### *Field work in Tibetan Plateau*

During August and September, Vertebrate Paleontology Curator Xiaoming Wang was back at the Xorkol Basin in the Altyn Tagh Mountain of the northern Tibetan Plateau. Continued paleontological exploration in the Xorkol Basin has yielded fossil mammals from the Eocene Epoch about 45–35 million years ago. This year the focus was on a younger set of rocks in the basin during the Oligocene through Miocene (34 to about 15 million years ago), when global climates underwent dramatic changes. The latest discoveries include a partial skull of a beardog in the family Amphicyonidae, an extinct group of carnivores that share dental features of both the bear family (Ursidae) and dog family (Canidae). This is the first discovery of a beardog in Tibet.



*Xiaoming Wang taking notes in eastern Xorkol Basin. Patches of red (middle distance) and buff-colored (both foreground and in distance) signal dramatic changes in depositional environment (probably related to temperature and precipitation), one of the focuses of the paleontologic investigation.*

## Polychaetes

### *Mud, glorious mud*

Leslie Harris and visitors Isabel Molina and Tulio Villalobos happily spent a day sunk up to their knees in mud and dodging flying mullets (the fish, not the hair-style) for Cabrillo Marine Aquarium's salt marsh survey. The CMA has done bi-annual monitoring of this man-made marsh through mud cores and beach seines for 10 years. Thanks to Julianne Kalman Passarelli (CMA's Exhibits and Collections Curator) a nice set of representative specimens were taken for the museum's permanent collection and the MBC's DISCO project.



## Cruisin'

Leslie Harris and Kirk Fitzhugh, along with visitors Tulio Villalobos and Isabel Molina, were invited by good friend and polychaete aficionado Dr. Kimo Morris (Santa Ana College) to accompany his marine biology class aboard the R/V Yellowfin on a cruise off Palos Verdes. Grabs, trawls, and rocks brought up by a bio-dredge provided a great haul of inverts for the museum's collection and the DISCO project. Among the animals were several polychaetes belonging to an undescribed species in the genus *Compositia*, a genus previously unknown from the northeast Pacific (2nd from right in the photo).



(L-R) *Ophiothrix spiculata*, *Alpheus bellimanus*; Kirk, Kimo, Leslie, Isabel, and Tulio; *Compositia* new species, *Callistochiton palmulatus*.

# Meetings, Workshops, and Presentations

## Dinosaur Institute

*Tales from the Nevada Desert:*

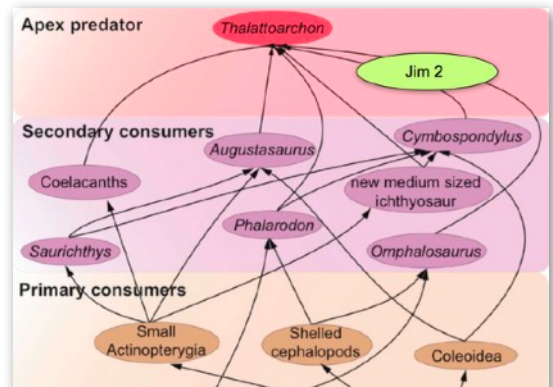
*The Giant Triassic Ichthyosaur "Jim 2" or The "Ruler of the Seas" that Wasn't*

A special Halloween lecture by Dr. Martin Sander of the University of Bonn, Germany, presented evidence for a completely new top predator of the Triassic seas. This incredible specimen, currently on display in the Dino Lab's largest air chamber, is the snout of what was thought to be a *Thalattoarchon*, the largest ichthyosaur known, and the apex predator during the Triassic some 241 million years ago.



A new and undescribed species "Jim 2" is on display in the Dino Lab. Check out the massive jaws and teeth.

Jim 2's position in the Triassic food web. The teeth reveal it consumed small, slippery animals like fish, although it grew to a huge size.



## Annual Society of Vertebrate Paleontology Meeting

In late October, DI staff members traveled to Salt Lake City to meet with colleagues from around the world at the 76th Annual Meeting of the Society of Vertebrate Paleontology. Collections Manager Maureen Walsh met with Dr. Jason Head to “hand pass” a package of valuable snake specimens on loan to Cambridge University, U.K. She also picked up a collection of Late Jurassic (150 million year old) early mammal specimens from the Fruita Paleontological Area or FPA previously on loan to the University of Nebraska. Ms. Walsh met with representatives from the Bureau of Land Management (BLM) New Mexico region to discuss annual permits for the 2017 Augustyn Dinosaur expedition.



Jose Soler in front of poster coauthored by Bryan Gee, Jose Soler and Dr. William Parker of the Petrified Forest National Park. Bryan and Jose discovered this potentially new species while on expedition to the Petrified Forest National Park in 2014.



VANDERBILT  
UNIVERSITY

From November 15-30, Rachel Racicot traveled to Nashville, TN, to give a guest lecture on the interplay between earth systems and marine mammal evolution for the *Earth Systems Through Time* course at Vanderbilt University. While visiting, she also took advantage of the available CT scanner and continued ongoing research on the inner ear labyrinths of globicephaline or oceanic dolphins (*Odontoceti: Delphinidae*).

Nate Smith participated in a career path mentoring workshop at the USC Department of Earth Sciences on November 4th, along with 11 Earth Sciences alums employed in various industries and non-academic settings.



## History

William Estrada, as one of the 44-member San Gabriel Mountains National Monument Community Collaborative, was part of a year-long study, resulting in a final report and recommendations to the National Forest Service, to enhance the NFS's overall Management Plan for the Angeles National Forest and San Gabriel Mountains National Monument. More than 15 million people live within 90 minutes of the San Gabriel Mountains, which provides 70 percent of the open space for Angeleños and 30 percent of their drinking water. The 346,177 acre site contains high-quality wilderness areas, habitat for rare and endangered animals like the California condor, and a rich array of cultural and historical features.

*Shown are members of the Collaborative.*



## NHM Hosts Scientists and Collection Specialists

### Second “Directors’ Dashboard” Meeting

On November 15th–17th, NHM hosted scientists and collection specialists from 11 of the largest natural history museums in North America and Europe to discuss and compare collections data and other relevant information that could be of use to the Directors of these institutions. This was the second time this team got together (the first meeting took place in Washington, DC, in April 2016). One task of the group is to compile relevant data that make meaningful comparisons of the greatest natural history museums possible for the first time. The aspiration is to



assemble key information of a “Global Collection” of natural history specimens and objects, one with the power to address a diversity of issues faced by society. Represented were the Denver Museum of Nature and Science (Denver), the National Museum of Natural History (Washington, DC), the American Museum of Natural History (New York), the Royal Ontario Museum (Toronto), the Field Museum (Chicago), the Museum für Naturkunde (Berlin), the Natural History Museum (London), the Muséum national d’Histoire naturelle (Paris), the Natural History Museum of Denmark (Copenhagen), and Naturalis Biodiversity Center (Leiden). Drs. Luis Chiappe and Jody Martin represented our Museum, and President and Director Dr. Lori Bettison-Varga welcomed the group to



Los Angeles and took part in the discussions. The next meeting is planned for April in London, hosted by the United Kingdom’s Natural History Museum.

*Second Meeting of the “Directors’ Dashboard” working group. Left to right: Crystal Maier (Chicago), Ian Owens (London), David Evans (Toronto), Kelly Tomajko (Denver), Fiona Williams (London), Kirk Johnson (Washington, DC), Luis Chiappe (Los Angeles), Carol Butler (Washington, DC), Bob Corrigan (Washington, DC), John Demboski (Denver), Jody Martin (Los Angeles), Pierre-Yves Gagnier (Paris), Nikolaj Scharff (Copenhagen). Not shown: Steven van der Mije (Leiden), Christiane Quaisser (Berlin), Scott Schaefer (New York), Lori Bettison-Varga (Los Angeles).*

## External Funding

### Dinosaur Institute

#### *Research and Collections VP scores for Rancho La Brea*

Luis Chiappe was awarded a collaborative NSF grant (*Collaborative Research: Assessing millennial-scale community dynamics using highly-resolved mammal and vegetation food webs*) with UC Merced and the University of Maine. The grant uses the rich record of plants and small mammals from RLB to understand changes in food webs over time. The award brings close to \$400,000 of support for funding two new positions.

#### *Fieldwork support bequest*

The Dinosaur Institute has been bequeathed endowment funds to create the “Gretchen Augustyn Dinosaur Expedition Fund” which will support fieldwork in perpetuity for researchers and students from Southern California and across the globe.

## Public Outreach

### Dinosaur Institute

#### *The first Annual Dino Fest was a resounding success*

Exhibiting dinosaur fossils in the foyer were DI staff member Jose Soler supported by DI volunteers (left to right) Corinna Bechko, Sara Edwards, Carrie Wade, Karen Kent, and Sara Edwards. Special thanks to Izchel Moreno (not pictured) and Grayson Kent, owner/operator of *Rock & Roll Reptiles* for his



“hands-on” demonstrations. DI PhD students Nathan Carroll and Becky Wu talked about their individual research projects and answered questions about the Dinosaur Institute’s collection of Burmese Cretaceous amber and some newly collected amber from the Hell Creek Formation of Montana. These chunks of fossilized tree resin captured insects and even feathers as the resin oozed from pine trees throughout the Mesozoic Era. They are the rarest fossils from the Cretaceous.



PhD students Nathan Carroll and Becky Wu.



Dr. Alyssa Bell sits behind a magnificent fossil of palm fronds discovered at local development sites.

DI Postdoctoral researcher and SWCA Lead Paleontologist Dr. Alyssa Bell represented the environmental firm SWCA, Pasadena, highlighting an important aspect of paleontology — Cultural Research Management work — about which the public is often unaware. As Lead Paleontologist, Dr. Bell makes sure that both public and private developers maintain protocol and act to protect fossil resources on newly developed land. When fossils are found by paleo-monitors in the field, they are collected and brought to the museum for cleaning and storage. These requirements are part of California’s Environmental Protection Act of 1970.

DI preparator Doug Goodreau demonstrated the art of plaster jacketing, located under the shade of the Lorraine Otter Leventhal Bridge in the Nature Gardens. Preparation equipment was demonstrated by Colin Weightman, President of Comco, Inc., Burbank. Comco donated a number of blasters last summer to the DI and services them as well.

NHM Paleo Artist Stephanie Abramowicz led the “Draw Your Own Dino” in the Otis Booth Pavilion. Ms. Abramowicz demonstrated the basics of scientific illustration and talked about the career opportunities associated with this field. It was the best seat in the house.



Paleo Pit Chats: Drs. Luis Chiappe, Diego Paul, Mary Schweitzer, Nathan Smith, Bill Parker, and Jack Horner shared lab and field stories with interested guests. Behind the Scenes Tours were led by DI Collections Manager Maureen Walsh and completely sold out in just a few hours. There will be many more on the schedule next year.





## Haunted Museum

The Dino Lab displayed a slideshow with specimens from the *Birds of Stone* book authored by Dinosaur Institute Director Dr. Luis Chiappe and displayed casts of some of those specimens. Photos showed how UV lighting can reveal evidence of soft tissue and feather detail. The team talked about how scientists are able to detect different colors for feathers based on the size/shape of their melanosomes.

*From left to right are DI volunteers Tony Turner, Eric Schlegel, Erin Perez, and Preparator Erika Canola.*



*Some of the Christmas cards are visible in this photo by the entry hall.*

On October 15th *L.A. as Subject* hosted the Archives Bazaar, an annual event held at USC's Doheny Library. The Seaver Center displayed prints of Yosemite National Park taken by photographer Adam Clark Vroman. The public enjoyed these prints, which were especially meaningful as 2016 marks the centennial year of the creation of the U.S. National Parks Service.

Shown at the Bazaar are collections managers Betty Uyeda and John Cahoon, along with History Curator Emeritus Tom Sitton.

## History

The Seaver Center lent the William S. Hart Museum a dozen historical Christmas cards for a holiday exhibit in the entry hall of Hart's home. The cards are original paintings by some of his famous artist friends James Montgomery Flagg, Joe De Yong, and Joseph Scheuerle with western scenes and personal notes to Hart. John Cahoon, Seaver Center Collections Manager, helped with some of the installation of this exhibit, which is an annual event at the Mansion to coincide with William S. Hart's birthday. The cards will be on view until the end of January, 2017.



## Malacology & Echinoderms

### *Dino Fest*

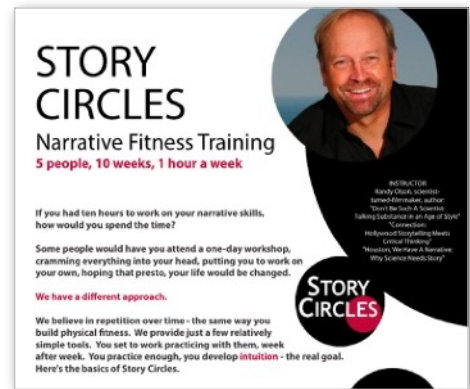
Cathy Groves (Echinoderms) and Jann Vendetti and Lindsey Groves (Malacology) participated in the Dino Fest on September 24–25 and exhibited Jurassic and Cretaceous fossil invertebrates including ammonites, nautiloids, gastropods, rudists, oysters, sea urchins, and a horseshoe crab. Several members of the Southern California Paleontological Society also participated in the event.

*Cathy Groves (Echinoderms) discussing fossil echinoderms with a future scientist at Dino Fest.*

## Marine Biodiversity Center

### *Improving science communication*

Regina Wetzer and Dean Pentcheff attended a training session on improving the flow of narrative as a key tool for science communication. The program was offered by Randy Olson, a research marine biologist who has spent the past 25 years exploring the sorry state of science communications and adapting narrative tools from Hollywood to fix the problem. This session was an introduction to the full program that Dr. Olson offers for groups of participants at select institutions to hone their science storytelling skills.



## Marine Biodiversity Center, Polychaetes, & Crustacea

### *UCLA IoES Earth Now/Earth 2050 Symposium*

The Marine Biodiversity Center was invited by Cully Nordby, Academic Director of UCLA's Institute of the Environment and Sustainability, to lead a teaching activity as part of the *Earth Now/Earth 2050* symposium, held 18–20 October. This was the inaugural annual Luskin Symposium, part of the opening events for UCLA's new Meyer & Renee Luskin Conference Center. The request was for a hands-on biodiversity activity for 150 high school students attending the conference. Combining collections staff from MBC (Kathy Omura, Dean Pentcheff, Jenessa



MBC's Jenessa Wall persuading students to get their fingers wet.

Wall, and Regina Wetzer), Polychaetes (Leslie Harris), and Crustacea (Adam Wall), we decided to do live animal sorting of marine invertebrates in the brand new, carpeted conference center. What could possibly go wrong? We collected animals from marina docks and a seafood market, transported them to UCLA prior to 8am, then guided rounds of students through an exploration of Southern California's amazing invertebrate diversity. Fortunately, the wettest parts of the program were held on a narrow adjoining balcony. The lesson learned: we can do hands-on live animal education with 150 students in one morning, but it's not something we're eager to do every week!

### *A Closer Look*

Katya Balakovskiy and Shaina Woolley directed and filmed a short documentary film, *A Closer Look*, that takes a peek into the work and motivations of some NHM marine collections staff. The film was created as part of a documentary film-making course at USC's School of Cinematic Arts, and had its public screening at USC's Eileen Norris Cinema Theatre on December 2. Katya has worked with us as a volunteer (and will be returning in Spring as a USC Environmental Studies intern) and found the collections side of NHM to be sufficiently strange and intriguing that it was a natural choice of subject for her class project. The video can be viewed at:

<https://vimeo.com/194199778>



The Butterfly Pavilion was Shaina's top filming target.



## Vertebrate Paleontology

On July 12, 2016, Museum Associate Howell Thomas and VP volunteers Grayson Kent and Debora Lee participated in the Santa Barbara Museum of Natural History's "T. rex Tuesday." Howell and Grayson spoke about pathology-riddled specimens on the NHM table (modern orca, Pygmy Mammoth, and modern elk), then conducted tours of the "A T. rex Named Sue" exhibit.

On July 2, 2016, Museum Associate Howell Thomas and VP volunteer Debora Lee participated in *Shark Week* at Santa Monica Pier Aquarium. The NHM's departments of Anthropology, Ichthyology, Mammalogy, and Vertebrate Paleontology provided support for this event.

# Student Mentoring and Research

## Dinosaur Institute

### Glendale Community College Internships

This semester the DI welcomed Luc Myers, Isabell Miranda, and Sara McDonald, interns from Glendale Community College. This semester's Research Seminar included Luc Myers presenting on identifying taxa such as the ancient lizard *Opisthias*. Noting the unique characters of its dentary (a mandible with teeth), Luc was able to identify this specimen from the Morrison Formation of Colorado (150 million years ago). Myers worked with and directed



the preparation of this specimen to uncover characters that were not previously visible, but diagnostic and necessary for the identification of this particular specimen.



This semester's Research Seminar, Luc Myers tackled the Late Jurassic *Fruita*, Colorado collection.

# Volunteers and Research Associates

## Dinosaur Institute

### James Tsuda

Jim is a *Sansei*, i.e. a third generation Japanese American, born and raised in Fresno, California. Jim has a BA in Anthropology from Cal State Long Beach, a Masters of Public Administration from USC, and a JD from Lewis and Clark Law School. Last year, Jim was in the Oklahoma panhandle excavating a 9,300 yr. old Paleoindian bison kill site with the University of Oklahoma. This past August, Jim went to Rebus Island off the northwestern cor-



ner of Hokkaido, Japan, excavating Jomon and Okhotsk culture sites under the auspices of Hokkaido University. He is a member of the Society for American Archeology and the Archeological Institute of America.

### Corinna Bechko

Corinna Bechko has a degree in zoology, which she has put to use as a behavioral research assistant at the Los Angeles Zoo, a wildlife vet tech at the California Wildlife Center, and as a zoo keeper at the Playboy Mansion.

She has made her living as a writer, mostly of comics, since her horror graphic novel *Heathentown* was published by Image/Shadowline in 2009. Since then she has worked with Marvel, DC, Boom!, Image, Dynamite, and Dark Horse, among other publishers. She currently co-writes the Image title *Invisible Republic*, which was nominated for a Hugo award in 2016. But through it all her passion has always been fossils and extinct ecosystems. She is thrilled beyond measure to be fulfilling a lifelong dream by volunteering with the Dinosaur Institute.



## Distinguished Visitors



### Anthropology

The Anthropology Club from El Camino College visited NHM on November 18th to take a tour of the Ethnology Storeroom and the *Visible Vault*. The group was led by Prof. Marianne Waters (holding the baby in the photo) who teaches several courses for El Camino College's Anthropology Department. While here the group spoke with KT Hajeian about the many possible paths to take when studying Anthropology and the types of training that may be required. They also discussed the importance of volunteering and /or interning to gain practical experience in the field. The enthusiastic group then spent the rest of the day exploring the museum since it was the first time visiting for many of the members.

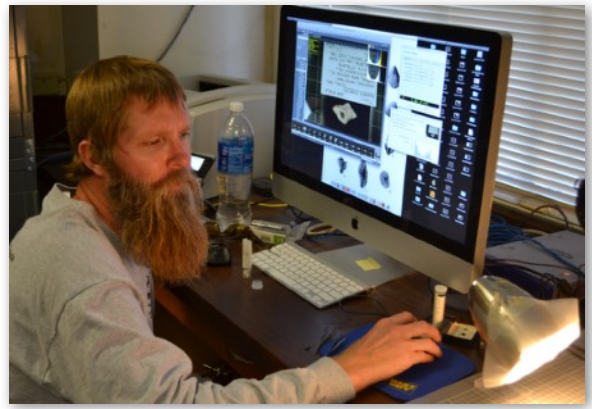
### Malacology

Angel Valdes (Cal. Poly. Pomona) made two visits to examine opisthobranch and nudibranch holdings. Associate Roger Clark (Eagle Mountain, UT) visited to survey Malacology holdings of buccinid gastropods for a paper on species from the Bering Sea. Tom DeVries (Burke Museum, Univ. Washington) examined several species of architectonicid gastropods and compared them to Miocene fossil specimens from Peru. Brianna Group, Emily Read, Colleen Grant, and Desmond Ho (SoCal Oysters Group, UC Santa Barbara) are studying the native oyster *Ostrea lurida* and assessing its habitat for potential restoration and providing habitat for economically viable fish populations based on historical records. Calyptraeid specialist Rachel Collin (Smithsonian Tropical Research Institute, Panama) visited Malacology for four days to examine NE Pacific *Crepidula* specimens. Kaustuv Roy and student Elizabeth Bullard (UC San Diego) examined the Malacology holdings of *Lottia* limpets to determine shell calcification rates in living and fossil specimens. Kim Scott (Cogstone Resource Management) visited to confirm mollus-



can fossil identifications from the Miocene Castaic Formation. Artist Dawn Navarro Ericson (Manta Publications, Malibu) is preparing guides on tide pools and seashores of southern California and visited Malacology to confirm identifications of the illustrated mollusks. Calif. State Univ. Fullerton grad student and Malacology Associate Shawn Wiedrick made four visits to study ocinebrinid gastropods for his thesis work.

*Malacology Associate and Calif. St. Univ., Fullerton grad student Shawn Wiedrick photographing ocinebrinid gastropods for his thesis work.*



## Dinosaur Institute

### Garbani Family Visit



*Nicky Twitchell and family.*

The Dinosaur Institute and Collections Manager Maureen Walsh welcomed Mrs. Nicole Twitchell and her family and friends on their first visit to the Jane G. Pisano Dinosaur Hall since its completion in 2011. Nicky is the granddaughter of Mr. Harley Garbani, collector of many specimens in the Hall.



## Polychaetes

Erica Keppel of the Smithsonian Environmental Research Center (SERC) joined us for a week in October to review specimens with Leslie Harris. Her lab's main focus is distribution and effects of introduced species, one of Leslie's research interests. Leslie has trained SERC personnel and collaborated with them on several projects.

Tulio Villalobos and Isabel Molina, graduate students from El Colegio de la Frontera Sur (Chetumal, Mexico), are in the middle of a 5-week stay. Our collection is particularly rich in specimens necessary for their Ph.D. studies on the genera *Alitta* (Tulio) and *Marphysa* (Isabel).



*Erica Keppel admiring some of our specimens.*



*Tulio Villalobos @ Isabel Molina.*

## Marine Biodiversity Center

### *Field Museum Director and Trustees visit*

Regina Wetzler had the privilege of providing behind-the-scenes tours to the Crustacea Collections for the Director of Field Museum and their Trustees. Last year the group toured the American Museum. During their two day visit to the NHM, it was our pleasure to showcase our collections and chat about programs, galleries, and more.

# Recent Publications

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# Staff Departures & New Staff

## Vertebrate Paleontology

Alan Zdinak has joined the Vertebrate Paleontology Department as Preparator. Alan's professional path began at the AMNH in New York, then continued to the Yale Peabody Museum and most recently the Smithsonian NMNH. A late bloomer, he embarked on his career in fossil prep after years producing and directing children's television.



# Miscellaneous

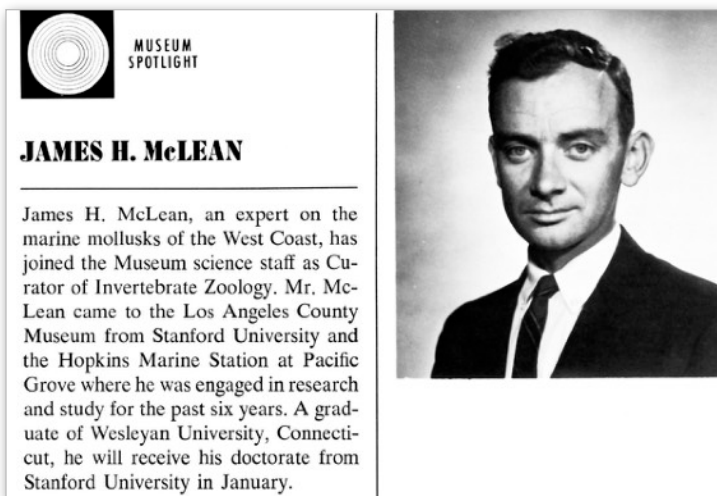
## Malacology

### *The passing of James H. McLean by Lindsey Groves*

Long-time Malacology curator James H. McLean passed away on Friday, November 11th, 2016 at The Residence at South Windsor Farms care facility in South Windsor, Connecticut, with his family at his side. His passing has created a massive hole in the Eastern Pacific marine shelled-gastropod knowledge-base that may never be filled. Jim joined the museum staff in September of 1964 whilst completing his PhD at Stanford on the archaeogastropod fauna of the northeastern Pacific Ocean. He retired in March of 2001 but remained a fixture on the 3rd floor of the museum diligently working on research projects until late 2014 when his declining health forced his move to a local care facility prior to the move to Connecticut. From the beginning of his career at LACM, he had long-term goals of producing a monograph of the northeastern Pacific shelled-gastropod fauna and building the collection. The Malacology collection is currently the largest on the Pacific rim and 3rd largest in the nation thanks to Jim's active field collecting program and his acquisition of several major collections and many private collections. He published over 100 peer-reviewed papers in major malacological journals world-wide and described over 300 new molluscan taxa. Jim was an early contributor to the descriptions of hydrothermal vent gastropod communities, especially the limpets, in the late 1970s and continued through the early 1990s. Work on his northeast Pacific shelled-gastropod monograph is being continued by over 30 world-wide experts and edited by Daniel Geiger (SBMNH), Jann Vendetti (LACM), and yours truly. Jim was a devout liberal, a Rolling Stones fan, collected worldwide succulent specimens, especially Euphorbiaceae, and enjoyed bicycling. I will always be grateful to Jim as he hired me in 1988 to fulfill a NSF grant, and I'm still here nearly 29 years later. Thank you, Jim!

*Former curator Jim McLean at work in Malacology, ca. 1995.*

*Jim McLean as he appeared in Museum Quarterly 3(3) in 1964.*



## New R & C Council

In an ongoing process of streamlining communications and procedures, and strengthening representation within R & C, a new group called the R & C Council has been formed to better represent the diverse departments and activities of Research & Collections. The Council is composed of (from left to right in the photograph) Emily Lind-



sey, Brian Brown, Nate Smith, Jody Martin, Bill Estrada, Susan Oshima, Luis Chiappe, Christine Thacker, and Aaron Celestian; not shown is council member Lila Higgins. The Council will meet regularly to discuss how to advance our scholarly departments and their integration within NHM's mission.



## Vertebrate Paleontology/Dinosaur Institute

Renovation on the Paleontology Laboratory has begun! Staff Jose Soler, Maureen Walsh (DI), Sam McLeod, Vanessa Rhue, Alan Zdinak (VP), and Postdoctoral Associate Pedro Mocho (DI) cleared the West Deck of equipment, furniture and specimens so that Operations could resurface the floor. That phase was completed over the month of October (thanks to Exhibits for temporary specimen parking space on the East Deck). Renovation on the lab interior is slated to commence in early 2017.



*The West Deck before renovation...*



*...and after.*



Alan and Jose traveled to the Society of Vertebrate Paleontology annual meeting in Salt Lake City to interview colleagues from the Smithsonian, Field Museum and elsewhere on lab design in advance of our upcoming renovation.

*(l-r) Pedro Mocho, Alan Zdinak, and Jose Soler at SVP.*

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