Coordinator’s Column

Hello everybody! My name is Mariana Di Giacomo, and I am the new Coordinator for our group. In 2017, I was approached by a former Assistant Coordinator to see if I wanted to submit a proposal to become the new Coordinator, but due to time constraints, I could not do so. After the 2017 Triennial Conference in Copenhagen, I approached the Secretariat and Directory Board liaison to express my interest in becoming the Coordinator, since the position was still vacant. The Directory Board accepted me in October of last year, and since then, I have brought on Irene Finkelde as Assistant Coordinator.

In March of this year I attended the Coordinators meeting with the Directory Board, in Paris. It was a truly great experience. Getting to meet other Coordinators and learning from them has been key to better understanding my role as Coordinator. One of the highlights of the meeting was the encouragement from the Directory Board to focus on topics of sustainability, something I had included on my Triennial Programme and wanted to promote since before this meeting.

Irene and I have started a Facebook page (www.facebook.com/icomccnathist/), and have decided to do a newsletter every year. In it, we want to include treatment reports, collections work, new sustainable ways of doing things, and any other news the Natural History Collections world has to share. We are both really excited to be working with this amazing group and following the steps of very talented previous Coordinators and Assistant Coordinators!
Get to know your working group

Working Group Coordinator

What is your name?
Mariana Di Giacomo

What is your position?
PhD candidate, Preservation Studies Program, University of Delaware Conservation Fellow, Smithsonian Institute National Museum of Natural History (NMNH)

When did you join ICOM-CC?
I joined in 2017, but had been wanting to join for a while. My plan was to become a student member, but decided to be a full member, so I could apply to become the Coordinator. I am currently the Coordinator for the group for the 2017-2020 Triennial, something I am very excited about.

What first attracted you to the natural history field? How did you start out working in natural history conservation?
I wanted to become a paleontologist since I was seven years old. My grandmother was buying dinosaur magazines for my brother, but he was too young to read them, so I decided I would. From then on, I was hooked. I wanted to work with fossil collections, I wanted to dig fossils out, I wanted to clean them in a lab. That enthusiasm never went away, and I studied paleontology for both my undergraduate and master’s degrees, at the Universidad de la República in Montevideo, Uruguay.

In 2011, my advisor gathered a team to excavate at the Arroyo del Vizcaino site, which had been discovered in 1997, but had never been explored by paleontologists. I was part of that team, and loving every minute of it. We collected over 300 bones from the waterlogged site, and took them to a small room in the Municipal Building of the town of Sauce, the closest to the site. A few months later, we were given a room to turn into a preparation lab/collection space, and were allowed to bring fossils that had been collected from the site in 1997. Both collections were similar, but different at the same time. I started learning about how to manage them, as well as how to prepare the bones, while ensuring their preservation. In 2014, I began my studies in the Preservation Studies Program at the University of Delaware, doing a PhD on conservation of fossils. In 2016, I started my fellowship at the Smithsonian NMNH, and they have not been able to get rid of me yet.

What sort of collections do you work with and what are your responsibilities for them?
I work mostly with vertebrate fossils, but have worked with many other types of collections as well. I am a researcher, and my interest is on analytical techniques applied to conservation, but I have worked on condition reporting, photographic documentation, and preparation of fossils.

Describe some of your work activities
While at NMNH, I have researched organic materials used for mounting specimens on slides, as well as the effects fossil
preparation techniques have on the long-term stability of bones. I have applied Fourier Transform Infrared spectroscopy (FTIR) to determine the composition of mounting media, and old adhesives and consolidants. I have also used X-ray spectroscopy to identify the composition of fossils and other materials. My interest is to aid in the use of analytical techniques, so that conservators, collections managers, curators and other museum staff can learn more about their collections and preserve them better. I also teach undergraduate students at the University of Delaware. My class focuses on condition reporting, photo documentation, and examination techniques.

Do you have a favorite object or material you have worked on?
Yes! In 2012, a saber-tooth cat’s fang was collected at the Arroyo del Vizcaino site, where I used to work in Uruguay. I had to travel to Argentina to purchase Paraloid B72, because it was not sold by any companies in Uruguay. This made the repair of the original three pieces wait a few months. Once I got the adhesive, I opened the package, only to find the tooth was in 30-40 pieces of very different sizes. I cleaned and consolidated it, and then restored it to its Pleistocene glory.

What do you find fulfilling about your work?
Nowadays I do not participate in fieldwork and fossil preparation as much as I did in Uruguay, which were the things I enjoyed the most. However, I get to do fascinating research on the different adhesives and other organic coatings museum people used in the past, and I get to teach the next generation of conservators! I believe conservation is about connections and collaboration. We all need to seek the advice of someone else, or learn how others do their work. We need to get in touch with first responders, cleaning staff, construction workers, exhibits staff, scientists, and anyone we can think of, so that we can do a better job ourselves. That is what makes conservation such an incredible field!

What have you learned from ICOM-CC that has been particularly helpful?
I had been using ICOM-CC’s resources from before I became a member, so the knowledge that the members have is certainly the best asset of the organization. Since becoming the Coordinator, I have to say I have been learning from other Coordinators, and I am very grateful to have them as my support system.

Working Group Assistant Coordinator

What is your name?
Irene Finkelde

What is your position and where do you work?
Conservation Fellow, Smithsonian Institute National Museum of Natural History (NMNH).

When did you join ICOM-CC?
I joined as a student member in 2014, and attended the Triennial in Melbourne and then the 2017 Triennial in Copenhagen. I am now a full member and the Assistant Coordinator of the Natural History
Collections Working Group for the 2017-2020 Triennial.

What first attracted you to the natural history field? How did you start out working in natural history conservation?
I have always loved visiting natural history museums. They are such vast repositories of all known life and are full of ‘treasures’! These collections are so important because they support scientific research, teaching and exhibitions. They can help scientist develop a greater understanding of the natural world and evolution. Many collections hold specimens from plants or animals that are now threatened or extinct and this makes the conservation of these specimens highly important.

I completed my Masters in Cultural Materials Conservation at the University of Melbourne in 2017. During my degree I focused my studies on objects conservation, but took up many opportunities to work with natural history collections. I took short courses in fluid preservation and conservation of geological collections at the Melbourne Museum, and I volunteered at the university’s small zoological museum, the Tiegs Museum of Zoology. I did my internship at the Smithsonian National Museum of Natural history, working on a project to clean and consolidate fragile archaeological human remains.

Describe some of your work activities
My research for my fellowship aims to test and build upon current methods for distinguishing between fluid preservatives, such as ethanol, isopropanol and formalin, without sniffing the fluid, which can cause exposure to hazardous chemicals. I am also testing methods of determining the pH of ethanol and methods to determine formaldehyde concentrations in the fluid. My research aims to develop simple and inexpensive methods. I am working with conservation scientists and physical scientists from the Museum Conservation Institute to utilise instrumental analysis to correlate the results of the simpler methodologies.

This research will assist collections managers, curators, conservators, and researchers working with fluid preserved specimens to be able to determine the type of fluid, the pH and the formaldehyde concentrations of the fluid that the specimens they work with are stored in. This will also aid in developing a better understanding of the effects of pH, fluid type and formaldehyde concentration on the long-term preservation of fluid preserved specimens.

Do you have a favourite object or material you have worked on?
I really enjoyed researching the historical collections of fluid preserved specimens at the Tiegs Museum of Zoology for my thesis. It was fascinating to learn about historical preparation methods and to use analytical methods to determine the materials used in preparation.

What do you find fulfilling about your work?
I find conservation treatments very satisfying. It’s great to be able to compare the before and after photos and see the
impact of the treatment on the long-term preservation of an object. I love working with natural history collections, and knowing that my work is aiding other researchers. By conserving these collections, we ensure that the specimens are available for research not just now but also in the future. With greater impacts on species from environmental changes and habitat destruction on species, these collections are vital for our understanding of the natural world. We do not yet know what we may be able to discover in these collections from future investigative techniques.

**What have you learned from ICOM-CC that has been particularly helpful?**
The best thing about ICOM-CC is the networking opportunity provided by the triennial meetings. They are a fantastic way to meet conservators from all over the world. Through ICOM-CC I have developed a network and community of colleagues who I can contact about conservation issues or treatments.

**Member Feature Profiles**
We would like the working group to get to know more about each other and what we do in our roles, if you would like to be featured in the next newsletter, please get in touch at marudigi@udel.edu

**Social Media**
As part of the Triennial goals, we plan to communicate more through social media. We hope for this to be a platform for us to reach wider audiences interested in conservation of natural history collections. Please follow us on Facebook: www.facebook.com/icomccnathist/

**Call out for Papers**
We aim to publish the newsletter for the ICOM-CC Natural History Collections Working Group yearly. We would like to put a call out for papers to publish in the next newsletter. We would like this newsletter to be a more informal publication, where you can share treatment reports, conference or workshop reviews and attendance reports, and technical papers. If you have a project you would like to publish in the next newsletter, please contact the Working Group Coordinator, Mariana Di Giacomo at marudigi@udel.edu

**Call for peer reviewers**
We are looking for peer reviewers for our Group, to aid in the selection of papers for the Triennial Conference in 2020. The peer reviewer will review and grade all the contributions for the conference. This involves both preliminary abstracts (1000 words) and final papers (3500 words plus figures). Peer reviewers will not receive compensation for their work, other than a digital copy of the conference Preprints. They should have demonstrated experience in the field. Current or previous membership of ICOM-CC is not a requirement, though knowledge of the Committee is encouraged. We recognize there are a limited number of qualified professionals in our field; in cases where there is a conflict of interest, the peer reviewer will recuse themselves from the specific contribution, and arrangements for an alternate reviewer of that contribution will be made.

For peer reviewer suggestions, contact the Working Group Coordinator, Mariana Di Giacomo at marudigi@udel.edu
Triennial programme 2017-2020

Specific themes for investigation/ideas

- **Sustainability**
  - Encourage members to share their sustainability ideas on the website and social media
  - Increase the knowledge of sustainable materials
- **Alternative materials for natural history collections where conservation supplies are not available**
  - Encourage the members to share which materials they use in their countries, making clear we are interested in material composition and not in brands or manufacturers
  - Communicate which materials have been tested for safety of specimens, artifacts and users
  - Open discussions on testing, results and proposal of new methodologies
  - Natural history collections have such broad range of materials, that we will encourage the exchange of information on what people use for mounting microscope slides, storing fluid collections, taxidermy, fossils, skins, botany specimens, anthropology artifacts and even field notebooks and photographs
  - In addition, smaller institutions and those in developing nations or places with low access to conservation supplies have to buy materials that may be used for more than one type of collection, so we will be interested in finding those types of solutions
- **Environment management in collections**
  - Most environmental parameters set in manuals and publications relate to art collections, archives and libraries, only commenting on natural history collections
  - Do research on specific parameters for each type of collection
  - Focus on passive and sustainable ways to achieve or come close to those parameters

Projects

- **Promote the group internationally, especially with non-conservators and in underrepresented areas**
  - Reach out via email to specific institutions (museums and other collections) to introduce us as a group and attract interested members
  - Encourage membership by those individuals and institutions to make our membership grow
  - Include new members in our “Alternative materials” initiative, so we can learn what has been used in these countries and how we can help them find archival and non-hazardous options
- **Develop Facebook and LinkedIn groups to see which the membership prefers**
  - Make the sharing of news and websites more fluid
  - Promote discussion and ideas, troubleshooting and reach out for help
  - Differentiate group emails from social media. Our emails will remain our main means of communication, especially for announcements that need to reach the whole group without exception. They will also be a place where members can share information that may be too sensitive for Facebook or LinkedIn (information that museums or their staff may not be comfortable with sharing in social media, like issues with how the materials arrived from donors or the difficulties some employees may have with budgets, etc.).
Triennial programme 2017-2020

Projects (cont’d)

• Advocate for collaborations between institutions and departments within institutions
  • Since not every institution has a conservator on staff, reaching out to collections managers, fossil preparators and curators becomes an important way to help them address their problems or concerns. In addition, sometimes departments within an institution work on similar specimens and do not communicate with one another, creating silos.
  • The idea is that our group become a place of reference between institutions and departments within those institutions to break such information silos

• Create “blog style” documents for the website
  • Short articles like those found in blogs are the most effective when sharing information on the internet, due to the fact that they are read quickly and have concise information. Since the website does not have a blog section, we will create short articles that resemble those found in blogs to address the topics the membership is interested in
  • We will share links to the articles via email and also on our social media platforms to engage the membership in discussion of these topics and proposal of new ones. By doing this and not posting directly on social media, we are also adding traffic to the website.

• Publish an annual newsletter

• Emerging Professionals
  • Send a survey to understand which the needs of our Emerging Professionals are and identify members who would like to be mentors
  • Ask on the survey what topics our members are interested in, to help develop the “blog style” documents and find members who would want to write some

• Further or initiate collaborations with the Society for the Preservation of Natural History Collections (SPNHC), ICOM NATHIST, the Society of Vertebrate Paleontology (SVP) and the Association for Materials and Methods in Paleontology (AMMP), and others the membership may suggest
  • Contact members from these organizations and develop projects we could work on together
  • Since our membership is small and scattered, meetings are challenging. However, teaming up with one of these organizations to celebrate a joint meeting could be a motivation factor (and budget justification for funding) to organize a meeting and publish proceedings

• Compilation of list of past publications by the Working Group
Upcoming meetings, conferences and workshops:

July 25 2018 – Nottingham, UK
Making replicas of your specimens – a beginner’s course, National Geological Repository, British Geological Survey, Keyworth, Nottingham, UK.
https://www.geocurator.org/events/77-moulding-and-casting-workshop

August 25 – September 1 2018, Otago New Zealand
‘Collections & Data in an Uncertain World’, The Society for the Preservation of Natural History Collections (SPNHC) and Biodiversity Information Standards (TDWG) joint conference in Otago, New Zealand

September 10-14 2018, Turin Italy
2018 Turin Congress on Preventive Conservation, International Institute for Conservation of Historic and Artistic Works (IIC)
http://iicturincongress2018.com/

September 25-27 2018, London UK
Sixth International Mountmakers Forum at the Natural History Museum, London,
http://www.nhm.ac.uk/events/mountmakers-forum.html

October 17, 2018, Oxford UK
‘Caring for Natural Science Collections: a one-day conference exploring advances in conservation’ Natural Science Collections Association, Oxford University Museum of Natural History, Oxford UK, Call for papers by 8th July.
https://www.natsca.org/event/2419

November 12-16, 2018, Barcelona, Spain
Fluid Preservation Course run by Dr. Simon Moore and John Simmons,
Transmitting Science, Institut Català de Paleontologia Miquel Crusafont (ICP), Barcelona, Spain.
https://www.transmittingscience.org/courses/museums-and-collections/fluid-preservation/

December 5-7 2018, Paris, France
https://pfc2018.sciencesconf.org/

May 13th -17th 2019, New England, USA
http://www.conservation-us.org/annual-meeting/aic-annual-meeting/2019-meeting

May 25th-31st 2019, Chicago, USA
‘Making the Case for Natural History Collections’, The Society for the Preservation of Natural History Collections (SPNHC) 34th Annual Meeting.
https://www.spnhccchicago2019.com/

September 1st-7th 2019, Kyoto, Japan
http://icom-kyoto-2019.org/#

September 14th-18th 2020, Beijing, China
ICOM-CC 19th Triennial Conference
More details to come
Useful Websites

ACGIH  American Conference of Governmental Industrial Hygienists
www.acgih.org

ACS  American Chemical Society
www.acs.org/content/acs/en.html

AIC  American Institute for Conservation of Historic and Artistic Works
www.conservation-us.org/

ALCA  American Leather Chemists Association
leatherchemists.org/

ANSI  American National Standards Institute
www.ansi.org/

C2CCare  Connecting to Collections Care
www.connectingtocollections.org

CDC  Centre for Disease Control and Prevention
www.cdc.gov/

CHIN  Canadian Heritage Information Network
www.canada.ca/en/heritage-information-network.html

CIC  Canadian Conservation Institute

CITES  Convention on International Trade in Endangered Species of Wild Fauna and Flora
www.cites.org

Conservation distribution list
cool.conservation-us.org/byform/mailing-lists/cdl/

CoOI  Conservation on Line
cool.conservation-us.org/

DHHS  Department of Health and Human Services
www.hhs.gov/

English Heritage
www.english-heritage.org.uk/

EPA  Environmental Protection Agency
www.epa.gov/

Federal Historic Preservation Tax Incentives
www.nps.gov/tps/tax-incentives.htm

GCG  Geological Curator’s Group
geocurator.org/

HSDB  Hazardous Substances Data Bank
toxnet.nlm.nih.gov/newtoxnet/hpdb.htm

ICCROM  International Centre for the Study of the Preservation and Restoration of Cultural Property
www.iccrom.org/

ICOM  International Council of Museums
icom.museum

ICOM-CC  International Council of Museums Committee for Conservation
www.icom-cc.org/

ICON  The Institute of Conservation
icon.org.uk

IIC  International Institute for Conservation of Historic and Artistic Works
www.iiconservation.org/
IMLS  Institute of Museum and Library Services  
www.imls.gov

IRUG  The Infrared and Raman Users Group  
http://www.irug.org/

ISO  International Organization for Standardization  
www.iso.org/

MRS  Materials Research Society  
www.mrs.org

NatSCA  Natural Sciences Collections Association  
www.natsca.org

NCPTT  National Center for Preservation Technology and Training  
www.ncptt.nps.gov

NCSHPO  National Conference of State Historic Preservation Officers – Historic Preservation Fund  
nchshpo.org/issues/historic-preservation-fund/

NHCOLL  The Natural History Collections List Server  
mailman.yale.edu/mailman/listinfo/nhcoll-

NIOSH  National Institute for Occupational Safety and Health  
www.cdc.gov/niosh/index.htm

NISO  National Information Standards Organization  
www.niso.org/

OEHHA  Office of Environmental Health Hazard Assessment  
oehha.ca.gov/

OSHA  The Occupational Safety and Health Administration  
www.osha.gov/

RAP  Regional Alliance for Preservation  
www.rap-arcc.org/

SiC  Sustainability in Conservation  
www.sustainabilityinconservation.com

SHNH  The Society for the History of Natural History  
shnh.org.uk

SPNHC  The Society for the Preservation of Natural History Specimens  
www.spnhc.org/

The Textile Conservation Centre  
www.textileconservationcentre.org.uk/

UNESCO  United Nations Educational, Scientific and Cultural Organization  
en.unesco.org