

# **ARCHAEOLOGICAL STUDIES PROGRAM LABORATORIES**

## **GUIDELINES AND POLICIES**

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### **A) MISSION/ PREAMBLE**

Improve, transmit and preserve the knowledge of past people who lived in the Philippines, Asia-Pacific and other relevant regions of the planet through education, research and public service.

### **B) VISION**

The ASP Laboratories (ASPL) should become regional leaders in teaching and archaeological research, emphasizing interdisciplinary approaches to understand the collective human past and its contributions to heritage in the contemporary world.

### **C) PURPOSE**

The ASPLs are material based facilities where research on archaeological remains can be conducted and scholars from all disciplines and countries shall receive training in specific analyses and methods.

The ASPL are primarily intended to provide students, faculty, research associates and affiliates space, tools and support to address their goals in archaeology.

The ASPL comprise the Lithics Laboratory, the Osteoarchaeology Laboratory, the Zooarchaeology Laboratory, the Plants and Sediments Laboratory, the Ceramics Laboratory, the (upcoming) Archaeogenetics Laboratory, the (proposed) Archaeo / RS-GIS Laboratory and the Microscope Room.

The ASPL are managed by the Heads of the Laboratories.

## **D) HEADS OF THE LABORATORIES**

The Heads of the Laboratories (HL) are designated by the Director or the Official in Charge (OIC) of the ASP in agreement with the ASP Faculty for an indefinite period. Their renewal as HL is up to the Director or the Official in Charge (OIC) of the ASP.

The HL are the managers and curators of the different ASPL in terms of their general use, the storage and analyses of archaeological materials, the reference collections and the technical equipment and books stored in their facilities.

The HL in coordination with the aid of the ASP Administrative Officer in charge of inventory should keep an updated inventory of archaeological materials, reference collections, technical equipment and books stored at each one of the ASPL.

The HL should implement a record system (e.g. record book, software, etc.) to keep permanent track of temporary workers (faculty, graduate and undergraduate students, temporary workers), visitors, storage, loans or removal of materials to/from any of the ASPL.

The HL should always look for means to improve the facilities, collections, equipment, funding and networks of the ASPL to make them points of reference to the national and international scholar communities. This includes: plan and coordination of laboratory activities (teaching, research and public service); keep and improve the operativity of the laboratories; develop and maintain laboratory procedures, experimental protocols and work instructions; ensure those laboratory procedures comply with high quality standards; assess potential risks and develop appropriate mitigation plans; review and recommend improvements to laboratory procedures; provide assistance and conduct trainings to students, faculty, research associates and affiliates of ASP when required; prepare grant proposals to get funds for the benefit of the laboratories.

The HL should meet periodically to discuss emerging issues, ways to improve the laboratories and initiatives to promote inter-laboratory collaborations. The Director or OIC of the ASP, the deputy director and all users of the ASPL may be invited to these meetings.

All major HL actions and initiatives should be conducted in coordination with the Director or the OIC of the ASP.

To be able to fulfil their duties, the HL rely on a set of clearly defined policies.

#### **E) ACCESS TO ASPLs**

The facilities of ASPLs are available for students, faculty and researchers of the ASP for the study of archaeological materials. However, for the efficient management of the resources in the laboratories, access must be secured from the HL. The HL can give access to working spaces, technical equipment, computers, replicas, and reference materials. But, access to project-based archaeological materials will be decided upon by Project Leaders. However, community members of the ASP by default are eligible for access unless a compelling reason for not giving access is presented.

#### **F) POLICIES**

The following laboratory policies, upon the decision of the HL and the Director or OIC of the ASP, apply to everyone using the ASPL.

##### **1. General use**

**1.1.** The ASPL welcome every student, researcher and faculty member who wants to learn specific methods and/or conduct research. Members of the ASP are invited to work and study materials, use the equipment and read the books at the laboratories after following protocols. For ASP graduate students, their thesis advisers or mentors should be full time ASP faculty who will coordinate with the HL access for their advisees. However, the space is limited and using the laboratories requires coordination and agreement with the HL.

**1.2.** Every student, researcher, faculty member or visiting scholar temporarily working at the laboratories will be instructed first on the policies by the HL (orientation or induction seminar). Instructions of the HL must be followed thoroughly. Uninstructed students or scholars are not allowed to work at any ASPL.

**1.3.** All research conducted by students or scholars at any of the ASPL should be approved first and then recorded and monitored by the HL through their respective registration forms (each HL will create their registration record form specific to the nature of their laboratory).

**1.4.** New students and scholars working at any of the ASPL may be required to fulfil and sign a Confidentiality Non-disclosure Agreement (CNDA) to protect the research initiatives of the ASPL, depending on the ASP laboratory they will be working at.

**1.4.** Every student, researcher, faculty member or visiting scholar working at the laboratories will be assigned a temporary working space by the HL. The person is allowed to arrange the assigned space as needed, but is also responsible to keep it clean, tidy and in a way that other researchers and students are not disturbed.

**1.5.** Storage of private belongings in the laboratories, which are not placed on the assigned desks or in the assigned cabinets, is not allowed and those items will be removed by the HL. Such private belongings should have clear markings of ownership.

**1.6.** To provide a good working atmosphere, consumption of alcohol, smoking, playing loud music and social gatherings/ hang-outs are not allowed in the laboratories.

**1.7.** For safety reasons it is not allowed to light candles or set up fires for any purposes. In case fire is required in research experiments it is necessary to ask permission from the HL.

**1.8.** Plates, cups, glasses, and other food and beverage containers (including private ones) must be washed after use or will be removed from the laboratories.

**1.9.** Garbage has to be deposited immediately in the garbage bins set up in the corridors of the ASP.

**1.10.** Consumption of illegal drugs in the laboratories is strictly prohibited and will be immediately reported to the Director or OIC of the ASP and the security guards.

**1.11.** The HL with the aid of the Guard on Duty (GD) is obliged to keep and update a record of persons who are working in the laboratories and inform the director or OIC of the ASP about visiting (non-ASP) students and scholars.

**1.12.** Regular laboratory hours are Monday to Friday from 9am to 5pm. Work outside these hours or during the weekend may be allowed but only under authorization of the HL, made explicit to the GD). Authorization from the HL should be requested in advance. Note that organic laboratory staff have no time limit but non-organic laboratory guest researchers and students can access with prior coordination with HL, within 9 AM to 5 PM.

**1.13.** The keys of the laboratories are kept by the HL. Copies of the keys are also allocated at the Administration Office and/or with the GD of the ASP. These copies may be used for emergencies with the authorization of the HL. Extra copies of the keys may be eventually (and exceptionally) done and used only under authorization of the HL after proper coordination with the ASP Building Administrator.

## **2. Storage and Analyses of the archaeological material**

**2.1.** The Laboratories have limited storage capacity. Thus, storing of archaeological materials is only allowed with written and signed agreement between the HL and the director of the site. Each HL will create a storage registration record form specific to the nature of their laboratory. This should be attached to the official inventory forms of the National Museum (NM) for chain of custody monitoring.

**2.2.** Working on site specific archaeological materials at any of the ASPL is only allowed with the written agreement of the director of the site (authorized by NM by virtue of permit to explore and/or excavate).

**2.3.** The archaeological materials stored at the laboratories are unique and beyond measurable value. They are irreplaceable and thus require to be handled with high care and caution. The HL may take necessary preventive measures to protect these archaeological materials including denying access to violators of unified laboratory rules or unique laboratory rules.

**2.4.** Borrowing and/or removing any of the materials stored at the laboratories is only allowed under written permission of the site director and the loan or removal should be notified and approved by the HL on record before the transfer action. A record system will be implemented to keep track of the loans or removals.

**2.5.** No archaeological material, under any circumstance, will be stored at or removed from the laboratories without written authorization of the HL.

### **3. The reference collections**

**3.1.** The reference collections shall support archaeological research and are also intended to be used for teaching and for training students of all disciplines who are interested.

**3.2.** The specimens of the reference collections of the different laboratories are unique and beyond measurable value. They are irreplaceable and thus require to be handled with high care and caution.

**3.3.** Using the laboratories for teaching purposes by lecturers and faculty of the ASP is highly welcomed, but requires prior permission and coordination with the HL.

**3.4.** Borrowing specimens(s) of the reference collection for teaching and/or research purposes (i.e. taking them outside the laboratories) requires prior coordination with the HL. A record system will be implemented to keep track of the loans.

**3.5.** After using specimens from the reference collection, they must be immediately returned to their original storage box and/or space in the laboratory. A deadline for the return of the specimens will be set in advance and thoroughly followed.

**3.6.** Mixing up material from several boxes or cabinets is strictly prohibited. Violation may result to denial of access.

#### **4. Technical equipment and books**

**4.1.** The equipment and books of the ASPL shall support every student and scholar working at the different laboratories. Thus they need to be handled with caution and care to provide a proper working environment for every laboratory user today and in the future.

**4.2.** Books can be consulted at the laboratories under permission of the HL.

**4.3.** Equipment like computers, printers (including 3D printers) and microscopes can only be used under express authorization of the HL.

**4.4.** If material, equipment and books need to be temporarily used outside of the laboratories (e.g. taken to a classroom for teaching or to a particular office) they can only be removed from the laboratory with the express written authorization of the HL. A deadline will be set for the return of the item(s) and followed strictly. A record system will be implemented to keep track of the loans.

**4.5.** In case any equipment or material from the laboratories got damaged or lost, it needs to be immediately reported to the HL. The HL shall investigate and submit a report to the ASP Director or OIC. Person found liable for the damage will be held accountable for replacement or reparation of the item(s).

#### **5. Violation of the policies**

**5.1.** Violation of one or several of the stated rules can conclude in the denial of access of the violator from the particular laboratory for a certain time period decided by the HL.

**5.2.** In case of the exclusion of a person from a particular laboratory, the HL will report the reason and time period of exclusion of said person to the director or OIC of the ASP.

**G) FUNDING**

Basic laboratory supplies (i.e. printer ink, chemicals, soap, paper, etc.) may be provided by the ASP under its maintenance and operating expenses (MOE). External funding may also be sought out by the HL.

## **APPENDIX-I**

### **HUMAN OSTEOARCHAEOLOGY**

The Human Osteoarchaeology is one of the special profile disciplines of the ASP, where members of the community can receive specialized training in the handling of human skeletal remains from archaeological contexts. The laboratory provides a dynamic environment for students, researchers, and visiting scholars, with a range of research materials, which includes a reference collection, casts to assist in the identification of bone elements, a stereomicroscope, measuring equipment, and a library. Basic research concerning subjects such as biography and demography, disease and trauma, health, and diet, human activities, subsistence economy, social equality, and mortuary practices are conducted in the Osteoarchaeology Laboratory.

Policies: The Osteoarchaeology Laboratory does not require any additional rules and it will strictly comply with those stated in the Unified ASP Labs Policy.

## **APPENDIX-II**

### **ZOOARCHAEOLOGY**

Purpose & scope: Research, teaching, and storage space of interaction for students and scholars pursuing work on faunal remains associated with archaeological sites around the world, with emphasis in Southeast Asia. Particular attention will be paid to identification and quantification of zooarchaeological material, to various cultural and natural processes that affect animal bones pre- and post-burial, and to the use of faunal remains for determining past human behavior, diets and environments. The zooarchaeology laboratory contains a modern comparative faunal collection, including skeletons, shells and taphonomical specimens useful for both research and teaching. The lab is equipped with the necessary tools and storage capacity with which to conduct faunal research.

Policies: The Zooarchaeology Lab does not require any additional rules and it will strictly comply with those stated in the Unified ASP Labs Policy.

## **APPENDIX-III**

### **LITHICS**

Purpose & scope:

The facilities of the Lithic Laboratory are available for students and researchers of UP- ASP primarily for the study of lithic artefacts. Operating the optical and electronic instruments of the lab is only permitted under the guidance of the laboratory staff and after having received proper instructions on their use and handling (orientation).

Policies: The Lithics Lab does not require any additional rules and it will strictly comply with those stated in the Unified ASP Labs Policy.

## **APPENDIX-IV**

### **PLANTS AND SEDIMENTS LAB**

The Plants and Sediment Laboratory (PSL) is a research and teaching laboratory dedicated to the study of botanical materials and sediment from archaeological and palaeoenvironmental sites. It is currently headed by Dr. Armand Mijares and Dr. Victor Paz and manned by Research Associates Emil Robles and Jane Carlos.

#### Laboratory Facilities, Equipment and Other Materials

Any use of microscopes, camera, reference collection, digital weighing scales, sieves, desktop computer, books, and other materials as well as supplies should have the knowledge and consent of the laboratory personnel. In cases where materials have to be taken out of the laboratory, these must be documented in the logbook provided, with prior permission.

The laboratory is not yet equipped with proper instruments for handling chemicals.

Hence, in addition to exercising safety caution, any use and disposal of such materials must involve the presence of a laboratory personnel.

Graduate students and/or researchers working on sedimentological and archaeobotanical materials may use tables in the laboratory for their work. Additionally, cognizant of the situation in which laboratories for other materials are not yet operational (e.g. metals, beads, ceramics), graduate students and/or researchers who are not working on sedimentological or archaeobotanical materials, but in need of workspace, may come to the PSL to work provided there is still space available and the proper permit secured.

Consumption of food and drinks is allowed especially in the attached mess room.

#### Safety

Since the PSL is physically detached from the main Albert Hall building, and in a building shared with another laboratory and an office, utmost caution must be taken to ensure safety.

**... APPENDIX-IV (continued)**

Doors, windows, lights, air-conditioning units, fans, exhaust fans and other electrical devices should be locked, closed or turned off before leaving. Only the Wi-Fi router, dry cabinets, and mini refrigerator are left plugged in their outlets and kept on at all times.

Policies: The Plant and Sediments Laboratory does not require any additional rules and it will strictly comply with those stated in the Unified ASP Labs Policy.

## **APPENDIX-V**

### **ARCHAEOGENETICS LABORATORY**

The Archaeogenetic Lab attempts to explore the genetic history of animals, plants, and humans in the Philippines to better understand the population history of the Philippines. We try to explore topics on evolution, migration, translocation, and the consequent influence of past lifestyles on the genetic structure of populations. The Archaeogenetic Laboratory houses facilities for preparing samples downstream DNA analysis, DNA extraction, PCR preparation and Post-PCR work. The Pre-PCR spaces are under positive pressure and supplied with HEPA filter clean air to restrict contamination from the outside. There is an entrance and changing areas for the donning of full PPE.

Policies: The Archaeogenetics Laboratory does not require any additional rules and it will strictly comply with those stated in the Unified ASP Labs Policy.

## **APPENDIX- VI**

### **ARCHAEO RS-GIS LABORATORY**

The establishment of the Human-Environmental Interaction Archaeological Remote Sensing and Geographic Information Systems (Archaeo/ RS-GIS) Laboratory for the University of the Philippines Archaeological Studies Program (UP-ASP) is in line with the modernization of the data archiving facilities as well as the capacity building towards carrying out multi-scalar analyses at the UP-ASP. This laboratory and research facility will also become a repository for long term archaeological remote sensing data gathering programs of the UP-ASP including, LiDAR, optical satellite, radar satellite, aerial photography data among others.

The establishment of the Archaeo/ RS-GIS laboratory will be the first concrete step towards compiling/ archiving all these data into a single repository that is accessible to researchers and scholars of the UP as well as its official affiliates. This is the first step as well towards carrying out heritage management since real time site data as well as historical site data become the basis towards planning for the conservation of the site.

The repository with its various licensed computing units will also facilitate the carrying out of regional and multiscale analyses that weaves together erstwhile separate single component and multiple component sites. This is the power brought about by high processing computing blended with the optimal Archaeo/ RS-GIS softwares available for educational purposes. UP-ASP faculty, researchers, and students will benefit from the availability of the facilities when they carry out their researches linked to research load credit, extension work, thesis, and research projects. Use of the Archaeo/ RS-GIS laboratory will provide them with the capacity to churn out high precision analyses of high resolution and multispectral imagery of their sites with professional grade maps and plots of their research sites as well as excavation trenches. The Archaeo/ RS-GIS laboratory will also provide the capacity to carry

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out various functionalities such as predictive modelling, visibility and viewshed analysis, archaeological element statistics, analysis of geographic patterns, suitability modelling as well as others.

The Archaeo/ RS-GIS laboratory will serve as both a research laboratory as well as a teaching laboratory with some possibility of providing services to local and international partners, collaborators. Currently the UP-ASP also offers courses that are computing-intensive such as Computers in Archaeology, Statistics in Archaeology, Geospatial Archaeology, among others. The right technology and tools must accompany the teaching of these courses. The Archaeo/ RS-GIS laboratory as a teaching platform will feature the top brands in remote sensing and geographic information systems that are cost-effective (educational license), offers multiple functionalities, tried and tested by industries as well as governments worldwide (*excerpts from OVPAA-BPhD Form 8.5 proposal entitled Human-Environmental Interaction Archaeological Remote Sensing and Geographic Information Systems Laboratory- 'Archaeo / RS-GIS Laboratory' -DTS Number 2019-1204-0968-4826*).

Policies: The Archaeo RS-GIS Laboratory does not require any additional rules and it will strictly comply with those stated in the Unified ASP Labs Policy.

## **APPENDIX-VII**

### **CERAMICS**

Mission: The mission of the Ceramics Laboratory is to provide space for researching, educating, and storing materials collected from both archaeological and ethnographic sites.

This will be for students and scholars associated with the ASP. The lab will include materials used for experiments that aim to answer questions regarding ceramics' use in the past.

Ethnographic and experimental collections, including raw materials related to ceramic and pottery making, are resources that are also studied alongside the ceramic and pottery. The laboratory is equipped with the necessary tools and storage capacity that will be used for further research in accordance with the laboratory's mission.

Policies: The Ceramics Laboratory does not require any additional rules and will adhere to those stated in the Unified ASP Laboratory Policy.

## **APPENDIX XIII**

### **MICROSCOPE ROOM**

Policies: The Microscope Room does not require any additional rules and will adhere to those stated in the Unified ASP Laboratory Policy.

*URA Eleanor Lim and URA Anna Pineda will be in charge*