Report on the Cascade Training at the Castle of Bertinoro
(10-15 December 2018)

WALADU Trainers:

Name	Surname	Institution
Nicolò	Marchetti	University of Bologna
Federico	Zaina	University of Bologna
Sara	Pizzimenti	University of Bologna
Mohammed	Al-Khalid	University of Bologna
Emmanuel	Di Tommaso	University of Bologna

Participants:

Name	Surname	Institution
Shaimaa Salah Ahmed	Al-Janabi	University of Baghdad
Qusay Subhi Abbas	Al-Jumaili	University of Baghdad
Qusay Abdulhadi Rashid	Al-Maawi	University of Baghdad
Awsam Bahr Churak	Al-Saleem	University of Baghdad
Haider Farhan Hussein	Al-Subaihawi	University of Baghdad
Huda Hadi	Alwash	University of Baghdad
Adil Shakir	Waham	University of Baghdad
Hameed Mustafa Naji	Al Yasiri	University of Kufa
Munther Ali	Abdulmalek	University of Kufa

Nashat Ali Imran	Al-Khafani	University of Kufa
Sattar Jabbar	Ahmed	University of Kufa
Hasan Mahdi Hammoodi	Kola	University of Kufa
Fatimah Abbas Salman	Al Mamoori	University of Kufa
Hayder Aqeel Abed	Al Qaragholi	University of Qadissiyah
Jassib Abid Al Ameer Jassim	Al Janabi	University of Qadissiyah
Lateef Tayyeh Hassoon	Al Yasari	University of Qadissiyah
Salah Hatif Hatem	Algabri	University of Qadissiyah
Raed Abbas Fadhil	Altoba	University of Qadissiyah
Ahmed Lefta	Rehma	University of Qadissiyah
Fawaz	Al-Naish	University of Mosul

10th December 2018, Monday

The trainees of the Cascade Training arrived at the Bologna Airport in the afternoon. A deputed service took both the trainees and the University of Bologna staff members to the University Residential Centre of Bertinoro, where they made the check-in and had the dinner.

11th December 2018, Tuesday

Morning session
The meeting was opened with the project members registration followed by a **welcoming session** by Dr. Federico Zaina from the UNIBO of the WALADU coordination team.

A first introductory presentation on the **WALADU project and its results actually achieved together with the challenges and goals expected** was given by Dr. Federico Zaina from the UNIBO coordination team. Regarding the WP3 and WP4 Dr. Federico Zaina analyzed the BA courses in Archaeology at the University of Bologna, with a general introduction about the Italian university system. Through the explanation of the Archaeology degree system at the University of

Bologna, its evaluation system, and the job opportunities it creates, this last presentation aimed at giving additional tools for the creation of new courses and internships (WP3).

See pdf in the Project Dropbox folder:
1 - WALADU Presentation
2 - UNIBO BA courses

During the rest of the morning Dr Sara Pizzimenti from the University of Bologna started the first teaching and research session on technology in archeological research. After a brief presentation about modern technology in archaeological surveys, such as LIDAR and Aerial Thermography, the session focused on managing archaeological data through the use of database.

See pdf in the Project Dropbox folder:
3 - The Past meets the Future

Morning training program		
Time	**Trainer**	**Title of the lesson**
9:00-10:00	Dr. Federico Zaina	WALADU Presentation. Objectives and expected outcomes
10:00-11:00	Dr. Federico Zaina	The UNIBO way of teaching. BA courses in Archaeology at the University of Bologna
11:30-13:00	Dr. Sara Pizzimenti	The Past meets the Future

Afternoon session
During the afternoon session Dr Sara Pizzimenti gave a lesson of how to manage data from archaeological excavations. She started with the history of methodology in archeological research since the '800, then introducing the new stratigraphic methods and the computer programs that can actually be used to manage stratigraphic data and the related material. She highlighted how this can be helpful if used by students for their researches.

See pdf in the Project Dropbox folder:
4- Data from Archaeological Excavation

Afterwards, Dr. Sara Pizzimenti continued the lecture about methodology in archaeological research, focusing on topographic data. In particular, she illustrated the use of photogrammetry in archaeological excavation and its utility. The production of a 3D digital model of the stratigraphy of an archaeological excavation can improve the teaching of how to approach the work on the field, as well as the subsequent study of the data recovered.

See pdf in the Project Dropbox folder:
5- Topographic data

Afternoon training program		
Time	**Trainer**	**Title of the lesson**
14:00-15:30	Dr Sara Pizzimenti	Data from Archaeological Excavation
16:00 - 18:00	Dr Sara Pizzimenti	Topographic data

12th December 2018, Wednesday

Morning session

During the first part of the morning Dr. Sara Pizzimenti illustrated the use of photogrammetry for the study and preservation of material culture such as pottery and objects.

See pdf in the Project Dropbox folder:
6 Photogrammetry of objects

Afterwords, Dr. Sara Pizzimenti continued the lecture about the use of photogrammetry for objects, organizing a practice exercise, during which the trainees could try to use the technique.

Morning training program		
Time	**Trainer**	**Title of the lesson**
9:00-11:00	Dr. Sara Pizzimenti	Photogrammetry of objects
11:30-13:00	Dr. Sara Pizzimenti	Photogrammetry of objects - practice exercise

Afternoon session

During the first part of the afternoon session of the second day of the meeting Dr. Mohammed Al-Khaled of the University of Bologna gave a lecture on the post-excavation research. In particular, he focused on:

1-Radio Carbon dating (C14)

2-Ceramic petrographic analysis

3-Isotopic analysis

4-DNA and archaeogenetics

He highlighted the importance of the application of scientific techniques in archaeological research, in particular in the post-excavation process.

See pdf in the Project Dropbox folder
7- From dig to lab

During the last part of the afternoon session Prof. Nicolò Marchetti from the University of Bologna and WALADU project coordinator gave a lecture about the importance of WALADU. He illustrated the main aims of the project, in particular the improving of the iraqi scholars and the research quality, as well as the production of new courses syllabi as one of the goal of the training in Bertinoro.

See pdf in the Project Dropbox folder:
8- Why WALADU is important?

Morning training program		
Time	**Trainer**	**Title of the lesson**
14:00-15:30	Dr. Mohammed Al-Khaled	Archaeologyfrom Digto Lab: Post ExcavationResearch
16:00-18:00	Prof. Nicolò Marchetti	Why WALADU is important?

13th December 2018, Thursday

Morning session
During the first part of the morning Dr. Emmanuel Di Tommaso from the WALADU coordination team gave a lecture about Internationalization of Higher education. He illustrated the importance of internationalization as the way to sustain and grow science, build social and economic capacity, as well as improve academic quality. He then illustrated how internationalization is part of the WALADU project and how both scholars and university can improve their internationalization.

See ppt presentations in the Project Dropbox folder:
9 - *Internationalization*

During the last part of the morning Dr. Emmanuel Di Tommaso, Dr. Sara Pizzimenti and Dr. Mohammed Al-Kaled illustrated the course syllabus.

Morning training program		
Time	**Trainer**	**Title of the lesson**
9:00-11:00	Dr. Emmanuel Di Tommaso	Internationalization of higher education
11:30-13:00	Dr. Emmanuel Di Tommaso - Dr. Sara Pizzimenti - Dr. Mohammed Al-Khaled	How to do a course syllabus

Afternoon session

During the afternoon session the participants to the training, under the supervision of Dr. Emmanuel Di Tommaso, Dr. Sara Pizzimenti and Dr. Mohammed Al-Kaled, worked on their own course syllabus.

At the end of the morning 20 new course syllabi have been produced.

Afternoon training program		
Time	**Trainer**	**Title of the lesson**
14:00-15:30	Dr. Emmanuel Di Tommaso - Dr. Sara Pizzimenti - Dr. Mohammed Al-Khaled	How to do a course syllabus - practice
16:00-18:00	Dr. Emmanuel Di Tommaso - Dr. Sara Pizzimenti - Dr. Mohammed Al-Khaled	How to do a course syllabus - practice

14th December 2018, Friday

Morning session

During morning session the participant to the training produced the final reports, under the supervision of Dr. Emmanuel Di Tommaso and Dr. Mohammed Al-Khaled, in order to have a feedback about the various activities and lectures given during the previous days.

After the session a deputed service took the participants to the training to Bologna where they had lunch.

Morning training program		
Time	**Trainer**	**Title of the lesson**
9:00-12:00	Dr. Emmanuel Di Tommaso - Dr. Mohammed Al-Khaled	Elaboration of final reports and other supporting elements

Afternoon session
The participant of the training had a free afternoon in Bologna.
At 20:00 a deputed service took them back to Bertinoro where they had dinner.

Afternoon training program		
Time	**Trainer**	**Title of the lesson**
13:00-20:000		Visit of Bologna

15th December 2018, Saturday

Morning session
During the morning the participant to the training had a guided tour to the inter-religious museum of Bertinoro

Morning training program		
Time	**Trainer**	**Title of the lesson**
10:00-13:00		Visit of the inter-religious museum of Bertinoro

Afternoon session
After lunch a deputed service took the trainees of the Cascade Training to the Aiport of Bologna, where they leaved for Iraq.