The Simeria region in Southwestern Transylvania (Hunedoara County) is a nexus of development throughout the prehistoric and classical periods, as shown by the high concentration of sites, historical and prehistorical settlements, and castles. Situated on the Mures River, having access to one of the main axes of communication in the region and the fertile lands along the Mures and Strei Valley, the importance of the area increased dramatically during the metal ages due to its proximity to sources of copper, iron, tin, gold and easy access to coal. Furthermore, the imposing Magura Uroiului rock formation stands as a natural fortress, overlooking all natural and manmade elements of the surrounding landscape. By its position and aspect, it provided both the practical and mystical components to ensure an intensive and quite often specialized use throughout Prehistory.

During the Iron Age, the Magura Uroiului natural ensemble was almost continuously used for various purposes. Hallstatt, Celtic and Late Iron Age Dacian fortified settlements have been identified on the various terraces and the upper plateau, including the “funerary monument” that is the focus of the present study.

This workshop is unique in its holistic focus. From excavation to cleaning to recording and data entry into a custom data base, participants will have a very unique field-experience. They will be involved with every step of the process, from excavation to analysis. Our participants will be involved with both the excavation and the analysis of a large commingled assemblage consisting of human and animal bone. As such, the students will identify and quantify skeletal remains and place them within a larger cultural context.

For more information: www.archaeotek-archaeology.org
Contact us: archaeology@archaeotek.org
Bioarchaeological and Zooarchaeological Approaches to Collective Burial Analysis: An Integrated Workshop

Anna Osterholtz, Ph.D., University of Nevada, Las Vegas
Daniel Lowery, M.A., T.G. Earnest and Associates
**WORKSHOP OVERVIEW**

As a student, you’ll be involved with the analysis of a large commingled assemblage consisting of human and animal bone. You’ll identify and quantify skeletal remains and place them within a larger cultural context.

This workshop is unique in its holistic focus. From excavation to cleaning to recording and data entry into a custom database, you’ll have a very unique field-experience. You’ll be involved with every step of the process, from excavation to analysis. The first week will involve excavation of the assemblage, with the remainder focused on lab analysis.

Lab analysis will involve species identification, taphonomic analysis (including representation of elements, and evidence of processing and manipulation), and the use of data gathered to form a cohesive picture of Early Iron-Age mortuary processes.

The first week of the workshop consists of six days of excavation. The remaining three weeks will consist of lab work. You can anticipate spending at least 48 hours in the field conducting excavations during the first week, and a minimum of 120 hours of lab-based analysis. This intensive approach is an excellent way to learn both bioarchaeological and zooarchaeological techniques.

**SITE BACKGROUND**

The Simeria region in Southwestern Transylvania (Hunedoara County) is a nexus of development throughout the prehistoric and classical periods. Situated on the Mures River providing both access to one of the main axes of communication in the region and fertile lands along the Mures and Strei Valley, the importance of the area increased dramatically during the metal ages due to its proximity to sources of copper, iron, tin, gold and easy access to coal. Furthermore, the imposing Magura Uroiului rock formation stands as a natural fortress, overlooking all natural and manmade elements of the surrounding landscape. By its position and aspect, it provided both the practical and mystical components to ensure an intensive and quite often specialized use throughout Prehistory.

During the Iron Age, the Magura Uroiului natural ensemble was almost continuously used for various purposes. Hallstatt, Celtic and Late Iron Age Dacian fortified settlements have been identified on the various terraces and the upper plateau.

The “funerary monument” that is the focus of the present study is situated at the base of the rock face, on one of the high terraces facing the river. Discovered in 2001, the structure appears to be a compact stone platform, at 1.14m below the surface. This feature was cut by several later Iron Age trenches and pits. The platform appears to be a regular shape - being almost 2m wide and 0.8m thick. A length of 15.5m is known. After removing the stone structure, researchers discovered human and animal bones, a considerable quantity of snail shells, and pottery from the First Iron Age.
WORKSHOP EXPECTATIONS

Excavations: During excavations, you’ll be expected to responsibly document and remove both human and animal skeletal remains and other archaeological materials. Excavations will take place the first week of the workshop and will be supervised by a local official of the museum as well as the co-directors. Strict methodology will be followed regarding mapping, photography and removal of the remains as well as the screening of all earth removed from the excavation squares. Excavation days will consist of a minimum of 8 hours of excavation.

Lab Work: During the rest of the workshop, you’ll be washing, documenting, and curating these remains for future analyses. The opportunity to work with such a unique and complex assemblage requires a professional atmosphere and professional interactions both with the other students, museum officials, and the co-directors. The database we’ll be using is a custom creation and is designed to deal with commingled and fragmentary assemblages containing both human and animal assemblages. Once data entry is complete, you’ll analyze these data for cultural patterns revolving around mortuary ritual, economic indicators, and social/status differences of the individuals interred in the grave. There will be timed bone quizzes to assess the students’ identification of species and features as these figure in heavily into the tabulation of MNI and demographic profile. Lab days will be 8 hour work days, consisting of a minimum of two hours of lecture (one in the morning and one in the afternoon) with the remaining time devoted to analysis.

Bone Quizzes: Students will be periodically quizzed on species identification as well as feature identifications in a timed format. Typically, bones will be passed from student to student and the students will have 45 seconds to identify the element and/or feature indicated.

Final Projects: Students will be required to formulate a small research project, either in small groups or individually using the materials from the commingled burial. They will create a research design that includes both human and non-human analysis, including the formulation of a research question, collection of suitable data, and the presentation of their results at the end of the workshop. Presentations will follow a standard conference format (15 minute presentations utilizing powerpoint).

Evaluation of performance: Students will be evaluated based on their contributions to both excavation and lab components. If students arrange for independent study credit, the co-directors will design a course of study in cooperation with a professor in the student’s home university that will allow for comprehensive grading and evaluation.
REQUIRED MATERIALS

If you have a laptop with Access installed on it, please bring it so that you can contribute to the data collection.

Required Texts (bring with you):
White and Folkens The Human Bone Manual (available on Amazon for $32 for the kindle version and $40 for the paper version).
Diane France’s Human and Non-Human Bone Identification: A Concise Field Guide is also a good source (available from $26 to rent or $65 to buy).
Additional materials will be provided by the co-directors, including book chapters from Osterholtz et al (2014) Commingled and Disarticulated Human Remains: Working Toward Improved Theory, Method, and Data, numerous faunal identification guides, and general references.

Other equipment: Bring an excavation kit including soft bristle brushes, at least one trowel, a line level, nylon string, and wooden tools for the careful excavation of bones. You should also bring pencils, graph paper for sketching, and a clipboard.

WORKSHOP DIRECTORS

Anna Osterholtz: Anna has completed her Ph.D. from the University of Nevada, Las Vegas. She is a specialist in the analysis of commingled and fragmentary human remains and has developed a recording methodology focused on identification of skeletal features for the determination of demographic profiles. She has worked with commingled assemblages from the American Southwest, Mediterranean, and Near East. Current research interests include the present excavations in Romania, as well as commingled assemblages on the island of Cyprus to examine issues of culture change.

Jonathan “Daniel” Lowrey: Daniel has completed his graduate work at the University of Alabama and is currently working as a CRM zooarchaeologist. His research focuses on the study of animal bones from Historic and Protohistoric archaeological sites in Syria-Palestine. Currently, he is investigating how the Roman annexation of the Nabataean Kingdom affected the subsistence strategies employed in the urban centers of Roman Arabia, using the analysis of animal bones to assess health, differences in class and status, ritual and other cultural phenomena.

MUSEUM AND EXCAVATION STAFF

1. Scientific Director (Excavation): Dr. Gica Baestean (Museum of Dacian and Roman Civilizations)
2. Excavation Director: Angelica Balos (Romanian Ministry of Culture)
3. Program Director: Andre Cortal (ArchaeoTek - Canada)
4. Field Research Staff: Dr. Marius Barbu, Alexandru Barbat, Antoniu Marc, Romica Pavel (Museum of Dacian and Roman Civilizations)
**WORKSHOP DATES AND COSTS**

**Dates:** July 6 — August 2, 2015

**Total Cost:** $2475 per participant. This includes project fees, housing in double or triple occupancy in a hotel in Simeria, Breakfast Monday-Friday.

Additional Costs: Transportation to and from Simeria, Romania, lunch and dinner each night and all meals on the weekends. Food costs in this region of Romania are typically low. You’ll also be responsible for any fieldtrip costs.

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**VOLUNTARY SIDE TRIPS**

**Trip 1 - day trip - US$75/person (minimum 10 participants) - the fees don’t include meals, museum entry fees and photographic rights (in museums)**

This trip will be a long one day adventure through heart of Romanian history and archaeology. We will take our students to Sarmizegetusa Regia, the military and spiritual capital of the mighty Dacians, and the fortress of Costesti, one of the best preserved example of Dacian military architecture. Moving through time and space, we will descend from the mountains into Sarmizegetusa Ulpia Traiana, the Roman capital of the Dacian Provinces and the first Roman city north of the Danube. After visiting the site and the museum, we will take a short ride to the Densus church, one of the oldest stone churches in Romania, built with the spoils from the Roman Sarmizegetusa. No trip through the Hunedoara region can be complete without a visit to the amazing Corvin Castle, home of the Hunyad dynasty and birth place of the greatest Hungarian king, Mathias Corvinus.

**Trip 2 - weekend trip - US$160/person (minimum 10 participants) - the fees don’t include housing, meals, museum entry fees and museum photographic rights.**

No trip to Transylvania is complete without seeking out Dracula! This trip will take our participants to the beautiful medieval city of Brasov on Fridaynight. Early Saturday morning, we'll take off for a long drive to Bram Stocker's Bran Castle and then to the real Dracula Castle, the fortress of Poenari.Sunday morning, we’ll explore Brasov and start heading home. Time permitting, we’ll stop on the way to the Fagaras Castle, a very imposing medieval fortress, where Dracula was imprisoned up on his way to Budapest.

**Other Side Trips available for Students:**

- Sighisoara: Dracula's birth place and a UNESCO Medieval heritage city
- Sibiu: the “red city”, named for its imposing red brick fortifications, is a beautiful late medieval cosmopolitan city, packed with art and archaeology museums as well as a huge open-air ethnographic museum
- Deva: a 20 minute train ride away, with its medieval fortress and museum.

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**FOR QUESTIONS AND TO APPLY**

Questions regarding accommodations, fees and logistics should be directed to our program director Andre Gonciar (gonciar@archaeotek.org). Please see the Archaeotek website for information regarding the research center and other workshops offered! www.archaeotek-archaeology.org

Questions regarding workshop content and the possibility of gaining undergraduate credit for this workshop should be directed to Anna Osterholtz (anna.osterholtz@gmail.com).
<table>
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<tr>
<th>Sunday</th>
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**July 5**  
Arrival and Orientation  
Overview of Region and Site (AG)

**July 6**  
Excavations

**July 7**  
Excavations

**July 8**  
Excavations

**July 9**  
Excavations

**July 10**  
Excavations

**July 11**  
Excavations

**July 12**  
AM: Overview of Bioarchaeology (AO)  
PM: Overview of the database (AO)

**July 13**  
AM: Overview of Zooarchaeology (DL)  
AM: Human/Nonhuman Differentiation (DL/AO)

**July 14**  
AM: Taphonomy (DL)  
PM: Taphonomy (AO)

**July 15**  
AM: Age at Death and Sex estimation—Human (AO)  
PM: Taphonomy (AO)

**July 16**  
AM: Health and Disease (AO)  
PM: No Lecture

**July 17**  
AM: Taphonomy—Human (AO)  
PM: DL

**July 18**  
AM: Bone Quiz  
PM: DL

**July 19**  
AM: Health and Disease (AO)  
PM: No Lecture

**July 20**  
AM: DL  
PM: No Lecture

**July 21**  
AM: DL

**July 22**  
AM: Taphonomy—Human (AO)  
PM: No Lecture

**July 23**  
AM: DL

**July 24**  
AM: Constructing Demography—Human (AO)  
PM: DL

**July 25**  
AM: Tying this all together: putting commingled remains in a social context (AO)  
PM: DL

**July 26**  
AM: DL  
PM: No Lecture

**July 27**  
AM: DL  
PM: No Lecture

**July 28**  
AM: DL

**July 29**  
Work on Final Projects

**July 30**  
Work on Final Projects

**July 31**  
Presentation of Final Projects  
Lab pack up

**August 1**  
Heading Home

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Schedule is tentative and may be modified or changed at the discretion of the instructors. Excavation and laboratory days may need to be changed due to weather conditions. In case the excavation component is not realized during the time allotted, additional Saturdays may be devoted to field-work.