

best-selling novels in the 20's and 30's. He will look at the articles as popular literature, at the relationship between this literature and power, and at its role in the shaping of the nationalist culture of the Republican period.

George and Ilse Hanfmann Fellows

Mr. Güneş Duru, Archaeology, Istanbul University, *An Architectural Perspective on the Issue of the Origins of Settled Society in the Mid-Anatolian Region: a Comparison with Developments in the Levant, Middle Euphrates and Eastern Taurus Cultural Regions*. Mr. Duru will carry out his MA Thesis Research, for five months in England.

Dr. Namık Erkal, Architecture, METU, *'Excavating' the Visual Sources Depicting Istanbul's Maritime Frontier: the Case of the Golden Horn Extra-Mural Zone*. Dr. Erkal will work for six months in four European cities where selected libraries and archives have important visual material on Istanbul from the early Ottoman period.

Dr. Ahmet Yaraş, Archaeology, University of Thrace, *The Allianoi Salvage Project: Research in Preparation for Publication*. Dr. Yaraş will conduct research for seven months in Germany, at Münster University and then in Berlin at the DAI and at the Free University, for work on the Roman and Byzantine city and thermal spa.

ARIT Mellon Fellows

Dr. Constantin Iordachi, Center for Historical Studies, Central European University, Budapest, Hungary, *Unmixing the Ottoman Jigsaw: the Making of Nation-State Citizenship in the Balkans, 1804-1923*. Dr. Iordachi plans to research the emergence and development of Ottoman legislation on state-citizenship. He will look at archival legal documents, legal journals, and collaborate with colleagues in Turkey.

REPORT ON ARIT FELLOWSHIP

Southeastern Turkey: Homeland of Winemaking and Viticulture? by Dr. Patrick E. McGovern, Museum Applied Science Center for Archaeology (MASCA), The University of Pennsylvania Museum

The history of western civilization is, in many ways, the history of wine. This unique beverage made from the Eurasian grape (*Vitis vinifera*) served as a medicine, social lubricant, mind-altering substance, and highly valued commodity. Archaeologically and historically, one can follow the spread of viticulture, including the cultivation of the grapevine and winemaking, from the mountainous, northern region of the Near East to more southerly, lowland areas where the grape had never grown. In a process that can still be observed today in California and elsewhere in the New World, viticulture slowly but surely made its way across the Mediterranean and up into Europe by the Roman period.

Dr. Svetlana Ivanova, History, Sofia University, Sofia, Bulgaria, *Ethno-Religious Groups in Trade in Rumeli, 16th-18th Centuries: Toward the Problem of the Formation of the Imperial Subject*. Dr. Ivanova is looking at the involvement in trade of certain ethnic and religious groups of the former Ottoman Rumeli (today included within Bulgaria). She will use archival resources in Istanbul and Ankara and coordinate with materials in Sofia that she has already studied.

Dr. Arkadiusz Marciniak, Institute of Prehistory, University of Poznan, Poland, *Social and Economic Transformations at the End of the Neolithic in Central Anatolia and the Lakes District*. Dr. Marciniak will examine the transition at the end of the period of highly developed Neolithic communities in the later 7th millennium to the smaller and more dispersed settlements that mark the Early Chalcolithic farming villages, using evidence from the Polish excavations at Çatal Höyük.

Dr. János Sipos, Institute for Musicology, Hungarian Academy of Sciences, Budapest, *Karachays, Turkic Refugees in Turkey*. Dr. Sipos aims to make a 'musical mapping' of the Turkic Karachay-Balkar people, of whom one group emigrated to Turkey and is living there now, while another was exiled to Central Asia, a remnant of which now lives in the Caucasus. He will document the Karachay musical inheritance and cultural development within the Turkish context.

New Book on Gordion available February 2005:

THE ARCHAEOLOGY OF MIDAS AND THE PHRYGIANS Recent Work at Gordion

Edited by Lisa Kealhofer, Santa Clara University

With contributions from ARIT fellows and affiliates

www.museum.upenn.edu/new/publications/Midas.shtml

Is it possible to know when and where the Eurasian grapevine was first domesticated and winemaking discovered, thus launching the millennia-long "love affair" with wine? Significantly, 99% of the world's wine today is made from the domesticated Eurasian grape species (*L. subsp. vinifera*). The wild Eurasian grape sub-species (*Vitis vinifera L. subsp. sylvestris*) thrives in the mountainous region of the Near East – broadly, the Taurus Mountains of eastern Turkey, the Caucasus Mountains, and the northern Zagros Mountains of Iran. Because the plant exhibits its greatest genetic diversity there, botanists have argued that the wild grape was likely first taken into domestication in this so-called "world center." Supporting this contention, grape seeds have been recovered from numerous archaeological sites throughout the region, including pips shaped like those of the wild species (short and broad) as early as 11,000 BC. The botanical argument for an initial domestication of the Eurasian vine in the Near East

– the so-called "Noah Hypothesis" – is also in accord with the now well-supported theory that the hypothetical proto-Indo-European (PIE) root for the word 'wine' (**woi-no* or **wei-no*) had its origin in eastern Turkey or Transcaucasia.

Since the shapes of grape seeds can be misleading, linguistic affiliations debatable and archaeological analogies suspect, this author is coordinating an "Ancient DNA Grape and Wine Project" to place the beginnings of viticulture on a sounder footing. By collecting wild and domesticated grapevines from throughout the modern geographic range of the Eurasian grapevine, one of the goals is to trace the domestication of the plant back in time and space using DNA analysis. During an early phase of the project in 2001-2002, some 300 grape cultivars were collected throughout Turkey. DNA analyses of a group of micro-satellites – multiply repeated short base sequences – suggested that the native Turkish plant was the "progenitor" of domesticated vines elsewhere in Europe. However, our database lacked crucially important wild populations in southeastern Turkey, which has now been filled in by an expedition there in May-June 2004, with the generous support of an ARIT fellowship grant.

Together with colleagues from the University of Ankara's Faculty of Agriculture (Gökhan Söylemezoğlu and Ali Ergül) and José Vouillamoz of the Istituto Agrario di San Michele all'Adige in Trento, Italy, we successfully located and collected wild grapevines from the upper reaches of the Tigris River. Just downstream from Lake Hazar and the city of Elazığ. Here, the river cuts through one of the most metallurgically important areas in the Near East, Maden (Turkish "mine"), an area that is still tectonically active and about 25 kms. from the important Neolithic site of Çayönü. Other areas where we collected wild grape are similar river valleys cutting through the Taurus Mountains, in the region of Bitlis and Siirt, and along the Euphrates River, north of Şanlıurfa, at Halfeti. An especially dramatic setting for our collecting was in a deeply cut ravine below the famous site of Nemrud Dağı where the first-century BC ruler, Antiochus I Epiphanes, had statues of himself in the company of the gods hewn out of limestone on a mountaintop at an elevation of 2,150 m. As a side note, except for the sure hands of Ali, I might have been lost into the raging waters of the gorge as we scaled the shaley slopes for the elusive vine.

Along with the DNA study to establish the time and place of the Eurasian grape's initial domestication, another prong of the 2004 expedition was to collect Neolithic stone and pottery vessels, possibly related to winemaking and consumption. By extracting the ancient organics with solvents and using chemical techniques such as liquid and gas chromatography and infrared and mass spectrometry, our laboratory had been able to identify wine inside Neolithic storage jars from Hajji Firuz in the northern Zagros Mountains, dated ca. 5400-5000 BC. Even earlier pottery from Çayönü and Mazraa-Teleilat,

close to Birecik on the Euphrates, was obtained during the recent expedition through the kind collaboration of Aslı Erim Özdoğan and Mehmet Özdoğan of Istanbul University's Prehistoric Department. Nineteen sherds, representing a range of wine-related types – bowls, jars (some with clay appliques suggesting grape clusters, similar to those at contemporaneous sites in Transcaucasia), cups, and sieves – are to be tested. While stone bowls were also examined in the Diyarbakir and Şanlıurfa Museums and in the Classical Department of the Tigris University, the hard, polished surfaces of this material make the recovery of ancient organics less likely than from pottery.

The focus of our project on the Neolithic period is deliberate, since this is the first time in human prehistory when the necessary preconditions came together for the momentous invention of viticulture. Year-round habitation in villages assured that the grapevines, which usually only bear fruit after five years or more, were properly tended. With a more secure, even more restricted, food supply than nomadic groups and with a more stable base of operations, what might be termed a Neolithic cuisine emerged. Using a variety of food processing techniques – fermentation, soaking, hearing, spicing and so forth – Neolithic peoples are credited with first producing bread, beer, and an array of meat and grain entrees that we continue to enjoy today. Recent DNA and botanical studies point to southeastern Turkey as home to three of the Neolithic 'founder plants:' einkorn wheat, bitter vetch, and chickpea. Assuming that early humans had a sharp eye and some incipient horticultural knowledge, all the pieces are there for early domestication of the Eurasian grape and production of wine on a large scale. Analyses over the coming year will reveal whether these hypotheses are borne out.

For additional information, please see "The Origins and Ancient History of Wines" at http://www.museum.upenn.edu/new/exhibits/online_exhibits/wine/wineintro.html.

ARIT Newsletter Number 38, Fall 2004

Published for the Alumni and Friends

of the Institute

Andrew Goldman, Editor

Nancy Leinwand, Assistant

American Research Institute in Turkey

University of Pennsylvania Museum

33rd and Spruce Streets

Philadelphia PA 19104-6324

(215) 898-3474

fax (215) 898-0657

leinwand@sas.upenn.edu

<http://ccat.sas.upenn.edu/ARIT>

