I grew up in a college town (Amherst, Massachusetts), and so I have always had an inquired view of the seasons. In the academic world, spring is the time of maturation (not to say fatigue), and fall is the season of renewal. This is especially exciting time for the University of Michigan and the Kelsey Museum. There are, as always, new students in town, including three newcomers to the Interdepartmental Program in Classical Art and Archaeology, but also a new University President, Dr. Mark Schlissel, and a new dean of the college to which the Kelsey belongs (Literature, Science, and the Arts). Professor Andrew Martin. I had the pleasure of showing Dr. Schlissel around the Kelsey last week—and of course I did not lose the opportunity to remind him that at least one of his predecessors (Alexander Ruthven) also paid a visit to one of our overseas archaeological projects (Karanis in Egypt); we hope that he will follow that precedent! As Members of the Museum know, the Kelsey is currently sponsoring a total of eight archaeological expeditions, including two new digs, one at Olynthos in Greece and another at Notion in Turkey, both of which are featured in this newsletter together with Gabii and Sant’Omobono in Italy, directed by Kelsey Research Associate Nicola Terrateno, and the work of Kelsey Research Scientist Richard Redding at Giza in Egypt.

To celebrate this time of new beginnings, we have recreated a group of undergraduate- and graduate-student volunteers to write short (100-word) essays on their favorite objects in the collections. Inspired by a similar project at the Smith College Museum of Art, we thought that this would be an appealing way to introduce newcomers—from freshman to the University President—to the Kelsey Museum. Each of the nine objects featured will be identified by a special label, on which the relevant short essay is reproduced. A map showing the locations of the featured objects will be available at the entrances to the Museum, so that visitors can use this project to structure self-guided tours of the galleries. We hope that you will find this very personal approach to the objects in the Museum interesting and rewarding.

This season’s main event is of course our fall show, “Pearls of Wisdom: The Arts of Islam at the University of Michigan” (see essay by guest curator Professor Chrisheen Grubler below). Many of the objects featured in this exhibition were initially acquired by Peter Ruthven, a draftsman on the dig at Karanis. Peter was the son of University President Alexander Ruthven, who eventually donated the collection to the Kelsey. Thus the work of archaeological interest in the ancient history of Egypt and the Near East was instrumental in making the Kelsey the University’s principal repository of Islamic art and artifacts. Visitors to this exhibition will learn about the dynamic visual culture of medieval and contemporary Islam, and since they will have a need to walk by the displays of objects from Karanis on their way to the special exhibitions galleries, they will also be confronted with the long-term history of the parts of the world in which Islam is a majority religion—and that historical perspective is a salutary one. Religion is often perceived as the root cause of many of the conflicts in the contemporary Middle East, but history suggests that the reality is more complicated—and if that is so, then historical understanding can play an important role in the resolution of these conflicts. The exhibition will be on view from October 15 to December 11, and we hope you will have the opportunity to see it!

The Kelsey Museum Newsletter is sponsored by the Member of the Kelsey Museum.

“I REA D AND LOOK” TARGETS PRESCHOOLERS

Here at the Kelsey Museum we offer tours for almost every age group—tours for university students, for adults, for seniors, for K-12 students, for families. I have noticed that many groups of home-school families also arrange tours and make use of resources like our “Civilizations in a Crate.” It struck me that this audience presented an exciting opportunity for more targeted programming that could combine different types of learning objectives, such as knowledge of ancient history and reading skills.

Also, I noticed that many of our tours for families and school groups include younger siblings, in the three- to six-year-old range, who come along because their big sister or brother is going to the Museum. So they do not specifically belong to the target audience for these tours, these younger children tend to get unintentionally left out. The group moves either too fast or too slow, or explanations are too far over their heads to hold their attention, and they get bored quickly (especially while their big siblings are telling us everything they know about Herakles and mummys). But on one such tour, it was the little brother who had some of the best responses I’ve heard to questions like “what do you think this is?” and “how do you think it was made?” It seemed to me that there was an opportunity here to engage the youngest of our visitors.

For many years now two of the Kelsey Museum’s docents, Jean Mervis and Mary Lou Gillard, have been offering an informal program for teachers and parents called “Archaeological Stories,” combining a tour with storytelling. Building on their work, this summer we began the Kelsey Museum “Read and Look” program as a resource for pre-kindergarten households and students.

This program met four times this summer, all on Thursday mornings, to read a short story about the ancient world or museums. After storytelling, the children then explored the museum with one of our expert docents to find artifacts related to the story.

The tours focus on a few objects instead of the whole museum, and they are meant to engage the three- to six-year-old group’s unique perspective on the world. The children are invited to make connections from their lives with the objects of the past. One young visitor, for example, mentioned that the handprint in the mudbrick looks like the turkey decorations one makes at Thanksgivng. The children have enjoyed telling their own stories about these objects as well as listening to books such as In Egyptian Times and Rosaleen. And their parents have been enthusiastic about this combination of reading with museum-based learning.

We plan to continue this program into the fall on the third Thursday of every month. Please join us for our next meeting on October 16th, when we will read about and then look at objects related to a mummy theme. And follow us on Facebook to see what topics and titles will be featured in the future (https://www. facebook.com/kelseymuseum/events).
"PEARLS OF WISDOM" ILLUMINATES ISLAMIC ART

The exhibition “Pearls of Wisdom: The Arts of Islam at the University of Michigan” (October 15 to December 21, 2014) showcases the rich collections of Islamic art at the University of Michigan. The selected objects highlight how patrons, artists, and other individuals have used the expressive arts in order to promote social order and spiritual harmony in both the secular and the religious spheres. They also reveal how the visual arts help envision and implement a harmonious order of living in various Islamic cultures from the seventh century until the present day. The show is a result of numerous efforts and collaborations, beginning first with a graduate seminar offered by Christiane Gruber, Associate Professor of Islamic Art in the History of Art Department. During fall 2013, Professor Gruber and a dozen students worked through the holdings of Islamic art in the Kelsey Museum. The course combined primary and secondary source readings with hands-on curatorial sessions across campus institutions, including the University’s own maize and blue colors. This color palette has been extended to the show’s permanent online catalogue (http://unes.hr.lib.umich.edu/museum/pearls/index.html), which includes all exhibition objects as well as further resources, photographs, and a program of all events and lectures that will take place in conjunction with the show during Fall 2014.

Although permanent museum displays of Islamic art are often arranged chronologically and geographically, this exhibition is organized by themes integral to the conception and production of art in the Islamic world from the medieval to the contemporary period. These include the intersections between function and decoration; the aesthetic power of everyday objects; and light, metaphor, and the radiant nature of his Prophet. Some of the objects on view are lighthearted and playful, others cater to the more serious business of imparting wisdom and tending to ailments. For both practical and spiritual reasons, there are many objects that literally emit light. Whether glass or ceramic—emitted light, chief among them—illuminates the world around us. Some oil lamps are also covered in monochrome glazes, some of which appear iridescent. Each type of lamp—whether of glass, ceramic, or metal—emits light and can also play with it. As it illuminated a space, light also projected the screen, clouding reflective surfaces, once again placing artistic practice, the exhibition “Pearls of Wisdom” aims to pay tribute to the wisdom and beauty of Islamic art at the University of Michigan. Thus, the curators decided that the show’s key image was a mosaic of the lamps’ glowing light (fig. 6) would be a textile whose hues recall the University’s own maize and blue colors. This color palette has been extended to the show’s permanent online catalogue (http://unes.hr.lib.umich.edu/museum/pearls/index.html), which includes all exhibition objects as well as further resources, photographs, and a program of all events and lectures that will take place in conjunction with the show during Fall 2014.

Christiane Gruber

The Arts of Islam at the University of Michigan
HUMANIZING THE PYRAMIDS OF GIZA

Where are the humans at the pyramids of Giza? The apparent absence of human settlements around the pyramids has led to many popular myths about pyramids and pyramid construction. With the absence of evidence for a large workforce, pseudo-scientists are free to speculate on who built the pyramids and when they were built. In 1989 Ancient Egypt Research Associates (AERA) went to Giza to answer this simple question. “Where are the Humans?” We ran test excavations in two areas. The first was behind the second pyramid, where air photos showed surface evidence of a series of long rooms. We explored this area and found no evidence that it was residential. The rooms are probably a series of storerooms to maintain the cult of Khafre. The second area was about 500 meters south of the Sphinx, just south of the Wall of the Crow (Heit el-Ghurab). This large, flat area was newly being covered by the garbage of the nearby village of Nazlet el-Zeim. It proved to be a large settlement that housed thousands of royal workers during the reign of Menkaure, the builder of the third pyramid at Giza.

I have worked with the AERA team since 1989 excavating at the Heit el-Ghurab site. My goal in this research has been to reconstruct the Old Kingdom economic infrastructure that supported, indeed, allowed the construction of these massive temples. We now know the workers consumed, on average, 74 cattle and 247 sheep and goats, large amounts of fish, and over 100,000 pounds of what each week. Where did all come from? How big was the workforce needed to produce these foodstuffs? How was it all managed? Answering these questions has been the focus of several articles in the last five years and my current research. Over twenty-five years of excavation we have slowly revealed a residential site that is about the size of six football fields. At the core of this settlement are four Galleries, each composed of a number of long, narrow rooms that were barracks (fig. 1). Around the Galleries were workshops, storage areas, bakeries, and breweries. A large wall surrounded all of these structures. To the southeast of the Galleries was a Royal Administration Building with large silos to hold grain to feed the workers (fig. 2). To the southwest was a large settlement that housed individuals whose titles included: Scribe of the Royal Box, Scribe of the Royal School, and Overseer of Royal Works. Further to the south was a large coral— the OK (Old Kingdom) Corral—to hold the cattle, sheep, and goats imported from the Nile Delta to feed the workers. To the east was a more organic (less planned) settlement that housed individuals who, though not directly connected to the workforce, made a living servicing their needs.

Our research design has evolved over the years as we define new questions that guide each season’s work. Over the last five years we have moved to other areas of Giza to discover and compare different types of residential areas. We moved to an area south of the anomalous pyramid of Khentkawes, which was built near the end of the 4th Dynasty (fig. 3). Khentkawes, who may have been a ruler in the Old Kingdom, is the only woman in the Old Kingdom to have an independent pyramid. Her pyramid has its own mortuary temple on its east side, its own causeway, and, as we found in 2015, its own valley temple.

In the process of exploring Khentkawes’s valley temple, we identified the first known harbor at Giza. Harbors have been expected in front of all the pyramids, but no harbor had been found or delineated at Giza. A German team working near the Pyramids at Dashur has found a mudbrick quay that fronted onto a harbor in front of the valley temple of the Red Pyramid. At Giza five years ago we encountered a depression in the sand in front of the valley temple of the pyramids of Menkaure and Queen Khentkawes.

Excavating this depression, we found a mudbrick glacis. Coring in this depression revealed evidence of Nile mud at 11–12 meters above sea level. In the Old Kingdom at Giza the Nile flood plain was at 12.5 meters above sea level. So with an average flood of 2 meters, the water in the harbor would have been 2.5 meters (8.2 feet) deep during the flood. Last winter we moved east of the harbor to investigate an elaborate mudbrick depression that we have named the Silo Building Complex (SBC) because of the presence of four large silos (fig. 4). We had uncovered this building in 2013 on the south side of the Red pyramid of Khafre. The priests making the offerings would have consumed them, suggesting that the individuals using the SBC were offering priests. Interestingly, in the large houses of high-ranking individuals at the Heit el-Ghurab we found almost exclusively fragments from the hind limbs of cattle. They were consuming the leftovers from the offerings. We excavated under the silos at the SBC and found walls of an earlier structure. The pottery in these deposits was entirely from the 4th Dynasty, whereas the pottery associated with the upper walls is a mixture of 4th and 5th Dynasty. This suggests that the underlying building may have been used only in the 5th Dynasty. The stone tools from SBC were almost all finished blades and knives. No evidence of local manufacture (cores, flakes) was found. This suggests that the occupants of SBC were receiving finished tools for their use.}

Overall the architecture and material culture we found in the SBC suggest that its residents were offering priests who were maintaining the cult of one or more of the 4th Dynasty pharaohs buried at Giza. Given the position of the site less than 50 meters from the Valley Temple of Khafre, the priests may have been maintaining the cult of Khafre. This coming season (January through March 2015), when we continue excavations at the SBC, the questions we will try to answer are the extent and use of the building under the SBC. Was the 4th Dynasty iteration of the SBC used in the same way as the SBC? We will excavate additional rooms in the SBC to increase our sample of the material culture and look for variation among rooms. Were some rooms associated with particular activities? We will attempt to connect the SBC to surrounding buildings by looking at access points (doors) and their relationship to buildings like the Valley Temple of Khafre. How did people move around in the SBC, and where were they going?
NEW FIELD PROJECT AT OLYNTHOS

This year marks the start of a new field project in Greece, cosponsored by the University of Michigan along with the 16th Ephorate of Prehistoric and Classical Archaeology (Thessaloniki) and the University of Liverpool (U.K.), under the auspices of the British School at Athens. The project seeks the return of U-M archaeologists to Greece after a break of nearly twenty years, in order to work the city of Olynthos in northern Greece. In its heyday during the late fifth and early fourth centuries BC, Olynthos was a regional power, before it was (reportedly) destroyed by Philip II of Macedon in 348 BC. To archaeologists, the city is equally famous for the large numbers of houses excavated there in the 1920s and 1930s, which remain our single best source of information about ancient Greek households. The research design of our new project is a multidisciplinary one that focuses on the use of modern scientific techniques to extend and enhance our understanding of Olynthian households, while at the same time contextualizing them within a larger urban framework. The project is also intended to build on the research of the excavations, a field survey team also in progress, in order to evaluate the range of activities undertaken in different areas. Neither of these techniques has previously been used in Greece on a site of this date. Alongside the excavations, a field survey team also spent two weeks recording surface finds in the cultivated area east of the site, in order to establish the original boundary of the settlement. Excavation and survey work at Olynthos is planned to continue next year.

EXCAVATING MONUMENTAL ASHlar ARCHITECTURE AT GABII

The Kelsey Museum has just completed a six-week season of excavations at the Latin city of Gabii, Italy. The Gabii Project, directed by Professor Nicola Terrenato, had as one of its main objectives in 2014 the investigation of a monumental building complex that was, until recently, known only very partially. The Soprintendenza Speciale per i Beni Archeologici di Roma exposed tantalizing fragments of early Roman architecture in the 1960s, but systematic excavation was first launched by the Gabii Project in 2012. In 2013 the discovery of a grandiose staircase belonging to the complex broke through important media outlets, including the leading Italian newspaper La Repubblica, The New York Times, and Archaeology Magazine. Deﬁning the limits of the building, revealing its complete plan, and recording extant features digitally were among the goals for 2014. A generous gift from Ann and Clayton Wilhide provided funding to tackle the many logistical challenges posed by the excavation, consolidation, and conservation of the monumental remains.

The results allowed us to clarify the relationship between the complex and the local topography and to reconstruct the construction phases. The complex, also known as “Area F Building,” occupies an entire city block, measuring some 60 x 35 m. It is prominently situated at one of the most central locations within the city, on the main urban thoroughfare at the important intersection of the ancient roads from Tibur, Praeneste, and Rome. The building is organized on three artificial terraces that regularized the slope of the volcanic terrain. The lower terrace was dominated by a monumental portico, the column bases of which survive and which opened onto a series of rooms paved in tufo slabs. The middle terrace develops around a large courtyard, paved in slabs, delimited to the east and west by a symmetrical arrangement of alae and small rooms, and to the north by three larger rooms. Most of these rooms were adorned with fine mosaic floors consisting of geometric patterns of limestone tesserae in a field of crushed red ceramic, and with painted plaster walls reminiscent of the First Style. To the west is a smaller portico delineating a courtyard with an amphitheater at the center, one of several features that attest an elaborate subterranean hydrological engineering system. Access to the upper terraces—a large, open space with walls in semi-polygonal masonry—was gained by means of the now famous staircase, and the transition between elevations was further emphasized by a spectacular façade, a retaining wall built in ashlar blocks.

The complex has no parallel in the region of Rome, so its interpretation is difﬁcult. The preliminary hypothesis is that it was a public building, with spaces designed for a variety of political and ritual functions. Stratigraphic evidence and construction techniques tentatively date the original phase of the building to the middle of the third century BC, making it one of the ﬁrst—certainly the grandest—examples of mid-republican public architecture other than temples and porticoes in central Italy. Study of the architecture in the coming seasons will shed important light on the development of Latin cities in the crucial and obscure period between the end of the Latin Revolt and the beginning of the Second Punic War.

Lucia Nevatt

NEW FIELD PROJECT AT NOTION

A major concern of contemporary archaeology is how archaeological sites come to be the way they are when we find them. How are settlement mounds formed? What causes buildings to fall down, and why do they decay the way they do? Why are archaeological sites buried? The technical name for this set of concerns—what a normal person might call “ruination”—is “taphonomy,” the law of burial. As readers of this newsletter know, the Kelsey Museum began a new archaeological project at the site of Notion in western Turkey in June, together with the Joekowsky Institute of Archaeology at Brown University. Notion is a port town about 15 miles northwest of Ephesus, and it was occupied from the early first millennium BC through the Middle Ages. The ﬁrst stage in our project is a thorough survey of the site, and it seems we are naturally concerned to understand the “taphonomic” processes that lie behind its current condition. In the case of Notion, however, taphonomy is something of a misnomer because in fact the site is not at all deeply buried. It occupies a pair of isolated promontories projecting into the Aegean Sea, and apart from airborne sediment, and earth that erodes down from the upper parts of the site to the lower parts, there is really nowhere for earth to bury it to come from. One interesting index of this condition is the number of exposed thresholds visible throughout the site—we counted a total of forty-six—so at least forty-six places, not even enough sediment to cover the entrances to buildings has collected.

The thresholds have survived because they are large and well-built blocks of stone. The walls of the rooms and buildings associated with them were generally built out of rubble, and they have almost all crumbled to the ground. The remains of these walls are clearly visible, however, as lines of stones, and thus the ground plans of individual buildings—and indeed the layout of the entire city plan—are quite legible, especially when seen from the air. In this respect, the site is extremely well preserved.

That makes it all the more surprising that there are very few traces of colon- nus buildings. We know, for example, that the agora, the main public square, was enclosed on all sides by colonnaded porticos, but very few column drums or pieces of the entablatures (the monument lintels could be these porticos remain. Where have all these large blocks gone? Examination of nearby villages suggests that they were not reused in medieval and modern buildings, nor do they seem to have been burnt into lime, for there are no traces of limekilns on the site. We considered the possibility that they had all rolled down the hillside and into the sea, but if that were the case, they would surely be visible in the clear waters along the rocky shoreline, and they are not. There is, however, at least one other possible answer to this conundrum, in a word, Constantinople. The new Rome was built substantially out of reused materials, and port cities such as Notion were prime sources of readymade columns and other architectural blocks. In this way, the buildings of Notion may have continued to function long after the site had been largely abandoned.

Christopher Ratté
SUMMER’S WORK IN ROME

Thanks to generous support from the John G. Pedley Award for Travel and Research, I was able to participate in the Sant’Omobono Project in Rome for eight weeks this summer. Located in the ancient Forum Boarium, this remarkable site preserves over a millennium of continuous activity, extending from the Archaic to the Imperial period. The site consists of two temples positioned at the foot of the Capitoline Hill on the bank of the Tiber River.

Under the direction of Professors Nicola Terrenato and Paolo Brocato, I had the opportunity to supervise a deep trench in the area of the western cells. By the end of the summer, the trench reached over 5 meters below the excavation level. That is more than 10 meters below the modern street level!

This experience included exposure to a unique method of digging inside a steel support structure, which was put in place to keep the trench walls from collapsing, and alongside pumps, which ran constantly to remove the groundwater. Without the pumps, the trench would have been flooded beneath 3 meters of standing water. Fortunately, these temporary excavation conditions did not prevent us from producing some amazing results.

First, our team had to excavate very thick layers associated with the ancient fill of the Forum Boarium valley. These levels included few artifacts but represent a massive endeavor in the city’s early history to raise the ground level and protect the valley from floods. Before we could begin the actual excavations, we accessed the Archaic occupation levels and the bottom of the massive appaliaco wall, which serves as the podium of the early Republican twin temples.

After completing this deep trench, I embarked on a new phase in my research project, specifically a 10-meter-long microdebris survey of the entire Sant’Omobono excavation area. Using a drilling machine that most closely resembles a jackhammer, our team drilled a series of boreholes across the site. Each core was capable of revealing over 6 meters of stratigraphic data beneath the excavation level.

This strategic method of investigation is especially applicable in urban archaeology. Sites such as Sant’Omobono are blanketed with countless generations of building activity, from the Archaic through the modern era. The presence of substantial architectural remains prevents excavation in many areas of the site. To put it simply, one cannot destroy an Imperial floor in order to dig down to Archaic levels. Thus, we used coring survey to complement and extrapolate from data from a few deep trenches. Capable of penetrating to levels of Archaic habitation, this relatively inexpensive and noninvasive method of archaeological investigation produces an abundance of data from across the site.

After drilling in the field, we opened each core to begin analysis, which included stratigraphic descriptions and sampling for a variety of laboratory tests. Although these cores only occasionally include artifacts, the sediment itself provides a wealth of information on the earlies levels of activity in the valley as well as underlying natural geology.

Now I have the opportunity to process these large data sets for my dissertation. My research topic revolves around the Forum Boarium and how the valley transitioned from a natural to an urban landscape. With a range of research questions related to topography and environment, I rely on a mix of excavation and coring data from Sant’Omobono to begin reconstructing the ancient landscape. In particular, I hope to better understand the natural environment in the river valley and the effects of flooding on a cult site like Sant’Omobono.

In addition to studying material already excavated, while in Athens I also prepared for a brand new project: the excavations at Olynthos in the Chalkidiki. As Professor Lisa Nevet notes in her contribution to this newsletter, the site was extensively excavated in the 1920s and 1930s by David Robinson of Johns Hopkins University. While his work has served as a foundation for domestic archaeology and a goldmine of data for those interested in Greek housing during the Classical period, the methods he used now seem outdated in places, and many questions about the site are difficult to answer using only the data preserved in his notebooks, publications, and artifact collections.

The new five-year project aims to use geophysical and field survey, excavation, and a range of scientific methods to gain a better understanding of Greek domestic space and the site of Olynthos, particularly in terms of the life span of the site (previously described as a “single-phase”) and the use of different rooms and spaces.

During this first season, I worked as both a trench supervisor and the micro-debris specialist. Many thanks are due to Lynn Rainville, who was my mentor on micro-debris as I prepared for the first two weeks I spent excavating through topsoil and disturbed contexts, opportunities for applying micro-debris analysis were limited.

We were successful, however, in instituted a systematic, rigorous sampling program, and the few samples I had time to fully process have already shed light on some issues, such as recognizing some of our decomposed mudbrick deposits with confidence, as well as confirming the curious lack of bone across our trenches.

I was happy for this opportunity to iron out some kinks in our system before we reach floor levels that necessitate careful, organized sampling and sample processing next year.

Finally, in between Thessaly and the Chalkidiki, I was able to begin the daunting and yet exciting task of compiling data for my dissertation on Macedonian and Hellenistic tombs. To do this, I traveled to several tombs in the area of ancient Macedon to record their location and their relationship to the surrounding landscape. This was just the beginning of a long project that will take over my life in the coming years, but I am very grateful for the opportunity to get started in it with the support of the John G. Pedley Award for Travel and Research.

Elena Salminen, IPCAA Ph.D. Candidate
SPECIAL EXHIBITION

Pearls of Wisdom: The Arts of Islam at the University of Michigan
October 15–December 21, 2014

RELATED EVENTS
Islamic Art at the Met: New Galleries, New Challenges, lecture by Sheila Canby, Curator of Islamic Art, Metropolitan Museum of Art, New York
Wednesday, October 15, 6:00 pm
Exhibition opening reception follows

Drop-in Tours with Exhibition Curators
Sunday, November 9, 2:00 pm
Sunday, December 7, 2:00 pm

Family Day
Exhibition-related family activities
Saturday, October 18, 1:00–3:00 pm

Islamic Textiles as Political Tools: Conspicuous Display of Wealth, Power, and Authority through Textile Displays and Gift-giving
lecture by Sumru Belger Krody, Senior Curator, Textile Museum, Washington, DC
Wednesday, November 19, 6:00 pm

Calligraphy Workshop
Josh Berer, founder, Society of Arabic Script Calligraphers of North America
Saturday, December 6, 12:30–4:00 pm
Preregistration required; materials fee: $20 members, $25 non-members

OTHER ACTIVITIES
For a complete list of Kelsey events, see the “Events” column on the Kelsey homepage: www.lsa.umich.edu/kelsey