# **CRUSTUMERIUM**

Ricerche internazionali in un centro latino

Archaeology and identity of a Latin settlement near Rome

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# PREMESSA

Il 5 marzo 2008 si è svolto a Roma un incontro sul tema "Alla ricerca dell'identità di *Crustumerium*". La manifestazione è stata ospitata nella prestigiosa dimora di Villa Turini-Lante al Gianicolo, sede dell'*Institutum Romanum Finlandiae*, grazie all'offerta di Simö Örmä, Intendente e Bibliotecario dell'Istituto; Kaj Sandberg, Direttore dell'*IRF* ha aperto l'incontro con un saluto e ha offerto ai partecipanti l'opportunità di consumare il pasto conviviale nella magnifica loggia affacciata sulla città.

Successivamente, in collaborazione con lo stesso Simö Örmä, i contributi sono stati messi in rete nel sito web dell'*Institutum Romanum Finlandiae*.

Nel corso della giornata di studi crustumini si tenne anche una discussione sui contributi, animata specialmente da Giovanni Colonna, una sorta di padrino delle ricerche archeologiche di *Crustumerium*<sup>1</sup>, che nell'occasione dimostrò anche un interesse e una sorprendente informazione sulle recenti vicende belliche e immediatamente postbelliche con riferimento alla zona compresa tra Monterotondo e Roma.

Il gruppo di relazioni presentate in quella sede viene pubblicato in questo volume a distanza di quasi cinque anni poiché si ritiene tuttora utile la disponibilità allargata dei contributi, che marcano una definita fase delle ricerche a *Crustumerium*, quella dell'apertura internazionale delle attività, voluta dalla Soprintendenza Speciale per i Beni Archeologici di Roma, e che dal 2006 ha visto la presenza contemporanea di più istituzioni europee insieme alla Soprintendenza stessa; la piena e continuativa accoglienza di *partners* stranieri è stata preceduta da un periodo di alcuni anni in cui l'area si è giovata dell'attività di singoli gruppi esteri (*University of Iowa e Universität Leipzig*); pertanto la presente pubblicazione può offrire un panorama delle conoscenze riferito ad una fase immediatamente precedente a quella presentata nel settembre 2008 al XVII Congresso internazionale dell'A.I.A.C.

In particolare, il titolo proposto nell'occasione "Alla ricerca dell'identità di *Crustumerium*"<sup>2</sup>, si è rivelato ben scelto, anche considerando la successiva ripetuta riproposizione del concetto di individuazione e definizione dell'identità di questa comunità micro-urbana antica, tanto da potersi considerare una valida linea guida per la continuazione degli studi su *Crustumerium*.

Il lavoro di adeguamento editoriale dei testi e delle immagini è stato svolto da Angelo Amoroso che ha raccolto dagli autori le modifiche e le integrazioni richieste; Siebe Boersma, del Groningen Institute of Archaeology, in collaborazione con Peter Attema, ha curato l'impaginazione. Francesca Ippolito e Kayt Armstrong hanno collaborato alla traduzione dei testi.

<sup>1</sup> Un riferimento è in A. Amoroso "Il territorio di *Crustumerium* e dei centri limitrofi nella prima età del Ferro. Dati e prospettive", questo volume, p. 131, nota 1.

 <sup>2</sup> E ripreso nel primo tra i contributi che seguono; alcune premesse a questo approccio erano state poste in F. di Gennaro, A. Amoroso, P. Togninelli, "*Crustumerium* e *Fidenae* tra Etruria e Colli Albani", TUSCULUM 2007, pp. 139-141.

# PREFACE

On the 5<sup>th</sup> of March, 2008, a conference took place in Rome entitled "In Search of the Identity of *Crustumerium*". The manifestation was accommodated in the prestigious Villa Turini-Lante on the Gianicolo hill, home to the *Institutum Romanum Finlandiae*, on invitation of Simö Örmä, intendant and librarian of the Institute; Kaj Sandberg, Director of the *IRF* opened the meeting with a warm welcome and offered the participants to take part in a convivial lunch in the magnificent loggia looking out over the city.

In collaboration with Simö Örmä, the contributions were subsequently put on-line on IRF's website.

In the course of the conference on *Crustumerium*, a discussion fuelled by Giovanni Colonna, whom we can characterise as the father of archaeological research at *Crustumerium*, was held concerning the various contributions.1 During these discussions Colonna displayed quite a bit of knowledge of and interest in World War II and the immediate post-war events in the zone between Monterotondo and Rome.

Although the collection of papers presented in this volume appears almost five years after the conference, the editors are of the opinion that publishing the extended papers in book form is none-theless worthwhile as the papers demarcate a specific phase in the archaeological investigations of *Crustumerium*. More precisely, the contributions in the book reflect the opening up of the site to international activities, as desired by the Soprintendenza Speciale per i Beni Archeologici of Rome, which resulted in the contemporary presence of multiple European institutions working together with the Soprintendenza; the general and continued welcoming of international partners was preceded by a number of years in which the area had already benefited from activities of single international groups (University of Iowa and Universität Leipzig); as such the present publication offers a new panorama of knowledge with respect to the one immediately preceding the overview presented in September 2008 at the XVII International Congress of the A.I.A.C.

In particular, the proposed title for the conference "In Search of the Identity of *Crustumerium*"<sup>2</sup> has proven to be well-chosen, considering the current revival of the concept of identification and definition of the identity of this ancient micro-urban community. Indeed, to such an extent that it may be a valid guideline for the continuation of studies on *Crustumerium*.

Editorial work on texts and images was carried out by Angelo Amoroso, who collected corrections and modifications required by the authors; Siebe Boersma, of the Groningen Institute of Archaeology is responsible for the lay-out, thanks to the intermediacy of Peter Attema. Thanks are due to Francesca Ippolito and Kayt Armstrong for their help in translating texts.

<sup>1</sup> A reference is given in the contribution by A. Amoroso "Il territorio di *Crustumerium* e dei centri limitrofi nella prima età del Ferro. Dati e prospettive", this volume, p.13, note 1.

<sup>2</sup> This theme is taken up in the first of the papers that follow; some first ideas concerning this approach can be found in F. di Gennaro, A. Amoroso, P. Togninelli, "*Crustumerium e Fidenae* tra Etruria e Colli Albani", TUSCULUM 2007, pp. 139-141.

# TWO EXCAVATION CAMPAIGNS OF THE UNIVERSITY OF GRONINGEN AT CRUSTUMERIUM, MONTE DEL BUFALO. PRELIMINARY RESULTS

# Peter Attema - Albert Nijboer - Gert van Oortmerssen Jorn Seubers - Sarah Willemsen

## Abstract

The contribution discusses a selection of tombs excavated by the Groningen Institute of Archaeology (GIA) of the University of Groningen (the Netherlands), in two excavation campaigns at Monte Del Bufalo, *Crustume-rium*, during the summers of 2006 and 2007. The tombs selected for discussion are two well preserved early 7th century BC tombs and a chamber tomb that dates around 600 BC. Furthermore it elaborates briefly on conservation and restoration of some of the objects in GIA's Laboratory for Conservation and Material Studies (LCM). The contribution concludes with an outline of current initiatives for prolonging and extending the collaboration project.

# Sommario: Due campagne di scavo dell'Università di Groningen a Crustumerium, Monte Del Bufalo. Risultati preliminari

Il contributo esamina una serie di tombe scavate dall'Istituto olandese di Archeologia di Groningen (GIA), durante due campagne di scavo a Monte Del Bufalo, *Crustumerium*, svoltesi nell'estate del 2006 e in quella del 2007. Sono state selezionate due tombe in buono stato di conservazione degli inizi del VII sec. a.C. ed una tomba a camera del 600 a.C. circa. Si illustreranno inoltre brevemente le procedure di conservazione e restauro di alcuni degli elementi di corredo eseguite dal Laboratorio per la Conservazione e lo Studio dei Materiali del GIA (LCM). Il contributo si conclude con il profilo delle vigenti iniziative atte a prolungare ed estendere il progetto di collaborazione in corso.

# Introduction

Since 2006, a team of the Groningen Institute of Archaeology (GIA) directed by Peter Attema and Bert Nijboer has been involved in the excavation of Orientalising and Archaic tombs at the Monte Del Bufalo funerary area at Crustumerium. The excavations are carried out as part of a collaboration project between the GIA and the Soprintendenza Speciale per i Beni Archeologici di Roma (SSBAR) coordinated by Francesco di Gennaro<sup>1</sup>. In the first section of this paper we discuss two well preserved early 7<sup>th</sup> century BC tombs, one of which untouched by looters. We further report on a chamber tomb that was found intact, dating around 600 BC. These tombs are located in the central part of the Monte Del Bufalo funerary area in a sector that is under study by the SSBAR. In the second section of the paper we discuss aspects of the conservation and restoration of the objects found in the tombs. In the third and final section we outline current initiatives for prolonging and extending the collaboration project.

#### *Tomb 223*

Tomb 223 is a NNW-SSE oriented, rectangular fossa tomb with head niche of which the fossa was preserved to a depth of ca. 1 m. On the floor of the fossa the well-preserved skeleton of a woman was found, almost 160 cm long and aged between 45 and 50. She was buried in supine position in a wooden coffin, probably a hollowed-out tree trunk, and her hands were folded in her lap. Two bronze fibulae were found on top of the clavicles. The niche with the ceramic grave inventory was located at the head end of the fossa, on the NNW side. The floor of the niche was 20 cm higher than the floor of the fossa. The loculus was separated from the fossa by means of a vertically placed, closing slab of local tuff-stone. The inventory of the loculus consisted of an olla of impasto rosso, four tazzine attingitoio, five ciotole, two anforette, an attingitoio and a bacile su piede.

Figure 1a and 1b illustrate the restored contents of Tomb 223. The pottery was largely intact, though sometimes compressed due to the weight of the soil above it. Among others it contained two *anforette con anse pseudo-elicoidali* both of *impasto bruno scuro* as well as two *tazze con due anse cuspidate*. One of the bowls is a handmade, elaborately decorated *tazza cratere con ansa bifora* that appears to be specific for female tombs at *Crustumerium*<sup>2</sup>. Having been fired at a low temperature deposition inside the tomb for a very long period of time had caused considerable damage to the object. As a result it was extremely friable upon excavation. The bowl is likely to have been made especially for the burial ritual.

The pottery assemblage found in the niche of the tomb is clearly associated with eating and drinking during banqueting rituals attended by members of the community living at *Crustumerium*. A number of the vessels have parallels in tombs 5 and 7 of the Monte Del Bufalo funerary area and tomb 34 of the Sasso Bianco funerary area<sup>3</sup> at *Crustumerium*<sup>4</sup>. The tomb can be assigned to Latial period IV, phase A, the early 7<sup>th</sup> century BC.

## *Tomb 232*

Tomb 232 is a *fossa* tomb with a head niche oriented to the north (fig. 2). The tomb is assigned to Latial period IV, phase A. The depth of this shallow tomb is at the most 30 to 35 cm. Furrows of ploughing were clearly visible on the surface of the tuff bedrock and just above the skeleton in the fill of the *fossa*. Most of the tomb must have disappeared as a consequence of past erosion and ploughing. In addition, the niche had been looted by grave robbers.

The presupposed coffin in the centre of the trench, consisting of the typical dark brown 'terra della morte', measured ca.  $2.00 \ge 0.50-0.60$  m. In it we found the remains of the skeleton of a lady, 40 to 50 years old, together with her personal ornaments. In the vicinity of bronze objects the bones of the skeleton were well preserved, while they had completely disappeared at other places. The teeth of the woman were green through and through on account of the corrosion of copper-alloy artefacts.

The skull of the deceased had slid to the right, onto the chest. It was crowned with a headdress or diadem, an artefact so far without parallel. The head-

4 Belelli Marchesini 2006, cit. note 2.

The authors thank Francesco di Gennaro, Barbara Belelli 1 Marchesini, Barbara Barbaro and Pietro Barbina for sharing their experience and excavation skills with the Dutch team and for their daily advice. Thanks are also due to Stefania Di Giannantonio, external partner of the Anthropological Service of the SSBAR who determined gender and age of the human skeletal remains and Pietro Bassanelli for lifting parts of Tomb 232 'en bloc'. Conservation and restoration of artefacts took place in GIA's Laboratory for Conservation and Material studies (LCM) by Gert van Oortmerssen (www. lcm.rug.nl). The temporary export to Groningen of objects from the tombs was made possible by special permit of the Ministero per i Beni e le Attività Culturali. Finally we would like to thank Erik Seiverling, Wim Tukker, Rienart Wolf and colleagues of the University Medical Centre Groningen (UMCG) for CT-scans and X-ray photographs.

<sup>2</sup> В. Belelli Marchesini, 'Tomba 34 Località Sasso Bianco', in Roma. Memorie dal sottosuolo 2006, p. 223.

<sup>3</sup> F. di Gennaro, 'Primi risultati degli scavi nella necropoli di *Crustumerium*. Tre complessi funerari della fase IVa', in *Quaderni del centro di studio per l'archeologia etrusco-italica* 16, 1988 (Archeologia Laziale IX), pp. 117-122.

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Fig. 1. Contents of Monte Del Bufalo Tomb 223

dress/diadem was found 5 cm below the surface. It is heavily corroded and pseudomorphic imprints of textiles occur in the corrosion products. This and other details imply that the lady wore a veil, a sort of *infula* or *cuffia*. The upper arms were each adorned with two *fibulae*. On her chest at least six objects were found, most of them of copper alloy. Two *fibulae*  with a long pin were more or less symmetrically placed just below the skull near the clavicles. They must have kept a shroud or garment in place on the shoulders. At the left side of the chest an instrument was found that so far has no clear parallel.

Some centimetres to the north of the implement a sequence of small bronze 'pearls' or globules, each 3



*Fig. 2. Overview of the deposition and associated objects inside Monte Del Bufalo Tomb 232, just before it was lifted.* 

to 4 mm in diameter, was found just below the skull. In addition two ivory fibula-bows inlaid with amber knobs were found in the centre and at the left side of the chest area. Around her waist, the lady may have worn a belt, fastened with bronze clasp-hooks.

On account of the intricate nature of the associated artefacts such as the ivory fibula-bows inlaid with amber and the tiny bronze globules, the skeleton was lifted in two parts using the block-lift method; a large block of the head, arms and chest and a small block of the waist with the clasps.

These block lifts were transported to Groningen and were excavated and investigated at the Laboratory for Conservation and Material Studies. CT-scans and X-ray photographs were taken in the University Medical Center Groningen (UMCG), to reveal details of the artefacts in the block-lifts, such as the three hooks of the clasp illustrated in figure 3. The CT-scans and X-ray photographs of the block-lift of the upper part of the body revealed numerous tiny copper-alloy globules behind the skull of the deceased, as well as the intricate construction of the copper-alloy headdress/diadem.

The sherds found in the niche of Tomb 232 mainly pertained to small drinking cups. We also encountered part of a white-on-red *holmos* (the first *holmos* of *Crustumerium* from a grave context so far). Its lower part could be restored to a height of 30 cm. Other sherds belonged to at least five small *tazze*.

The red slip of the *holmos* was largely abraded, leaving very few traces of the original white-on-red decoration. A UV-photograph was taken to improve the visibility of the white decoration on the *holmos*. At the moment we interpret this decoration as the rear part of an animal, possibly a horse, within a panel of two horizontal lines<sup>5</sup>.

#### *Tomb* 222

Tomb 222 is an example of a subterranean chamber tomb with a stepped *dromos*. The floor of the *dromos* was found at approximately 3.00 m below the surface level of the bedrock. The entrance (about 1 m high) was closed off with four vertically placed tuff blocks and some small tuff chunks. The chamber, somewhat irregularly shaped, measured 440 x 470 x 140 cm, giving its maximum dimensions. It had three laterally placed *loculi*, one on the left and two on the right of the entrance to the chamber. Around the *loculi* and on the transition to the ceiling, we noticed clear chiselling marks.

Upon entering the chamber, the floor and *loculi* were covered with a thick deposit of fine clay layers alternating with large sheets of tuff that had come down from the walls and ceiling. During two campaigns in 2006 and 2007, the *dromos* and the chamber were excavated. The fill of the *dromos* did not contain finds of any significance. Inside the chamber, five individuals had been buried over a relatively short time span, judging from the associated finds. One burial was of a 20 year old woman buried in supine position on a wooden bier placed on the floor in front of the *loculus* at the rear of the chamber. The

<sup>5</sup> The technical details of the artefacts of Tomb 232 have been studied at the LCM; for the results see: A.J. Nijboer, P.A.J. Attema, 'Cultural Characteristics of the Ancient Community living at *Crustumerium* and the Excavations of the Groningen Institute of Archaeology at the Monte Del Bufalo', in: Crustumerium: *I Latini tra Etruschi e Sabini*, in: XVII *International Congress of Classical Archaeology, Meetings between Cultures in the Ancient Mediterranean* (Roma 22-26 September 2008), *Bollettino di Archeologia on Line*, Volume Speciale, at www.archeologia.beniculturali.it/pages/pubblicazioni.html; A.J. Nijboer, S.L. Willemsen, 'Three ladies from *Crustumerium*, ca. 675-650 BC', in *BABesch*, 87, 2012, pp. 29-44.

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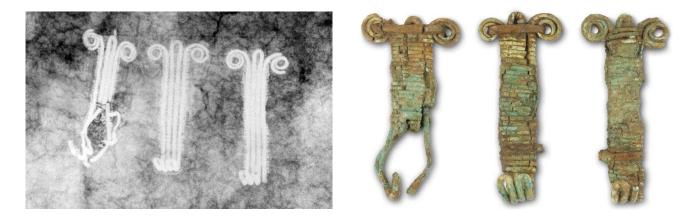


Fig. 3. Clasps of Monte Del Bufalo Tomb 232; a. X-ray photograph of the clasps inside the block lift, b. Clasps after restoration.

skeleton was very poorly preserved; only part of the legs could be recuperated. A small child of about 6 years old had been buried at the feet of the woman, of which we recovered some of the milk teeth.

In the *loculus* at the back of the chamber another young female was discovered, aged 16 to 18. She lay in supine position on the floor of the *loculus* that had been closed off with large tiles of red clay. The *tegulae* had slid slightly downwards towards the floor of the chamber.

In the *loculus* to the right of the entrance, the skeleton of a third female was attested, 20 to 30 years old. This grave had been closed with horizontally placed *tegulae* as well.

On the floor of the *loculus* to the left of the entrance, the well-preserved skeleton of a man was excavated, aged 30 to 40 years. This man had a quite exceptional length of 175 cm. The *tegulae* in front of the *loculus* indicate that it had been closed off as well.

On account of the associated artefacts in Tomb 222, the tiles must date around 600 BC and indicate that at that time, houses at *Crustumerium* were roofed with *tegulae* around that time.

Figure 4 presents some of the artefacts in the chamber such as etrusco-corinthian ceramics as well as a coarse ware olla. The *aryballos*, *pyxis* and *alabastra* were found near the female skeletons. The *pyxis* for example, was found next to the skull of the young woman buried in the *loculus* at the rear of the chamber. A comparable *pyxis* is recorded in Tomb VIII at Poggio Buco, a tomb that is assigned to the first half of the 6<sup>th</sup> century BC, although it contained also artefacts dated to the late 7<sup>th</sup> century BC<sup>6</sup>. Etrusco-corinthian ceramics similar to those found in MDB

Tomb 222, are generally dated to the late 7<sup>th</sup> century BC, but also occur in contexts assigned to the early 6<sup>th</sup> century BC<sup>7</sup>.

The majority of the finds was found on the floor of the chamber. Quite a few miss fragments, as is the case with the coarse-ware olla. The artefacts might not have been complete when the burial chamber was last used. Some of the artefacts may have been relocated during a subsequent funeral or have slid down from a loculus. Most artefacts were found on the right hand side of the entrance to the chamber. Futher research will enable the allocation of the objects to a specific burial.

In the clay fill of the coarse-ware olla, we found the oldest shard recovered from the chamber, a rim fragment of an impasto tazza decorated with geometric incisions assigned to Latial period IIB/IIIA.

It is probably an accidental intrusion in the tomb as a result of reopening in antiquity for a subsequent burial. A sherd of comparable date was found in the fill of the *dromos*.

Figure 4 presents the two *olle* of *impasto rosso*, as well as a *bucchero oinochoe*. The *bucchero* pouring jug resembles *oinochoe* type 7 in the classification of Rasmussen<sup>8</sup> and can be dated around 600-575 BC.

At the end of the campaign, the architecture of the *dromos* and chamber were recorded using a 3D scanner<sup>9</sup>.

<sup>6</sup> G. Bartoloni, *Le tombe da Poggio Buco nel Museo Archeologico di Firenze*, Firenze 1972, p. 135.

<sup>7</sup> M.H. Marchetti, 'Tomba 7 (Località Lucrezia Romana (Municipio X)', in ROMA. MEMORIE DAL SOTTOSUOLO 2006, pp. 369-371; G. Colonna (ed.), Il santuario di Portonaccio a Veio I. Gli scavi di Massimo Pallottino nella zona dell'altare (1939-1940), in *Monumenti antichi* VI, Roma 2002, p. 235, tav. XLVII.

<sup>8</sup> Rasmussen 1979, pp. 84-86.

<sup>9</sup> The data were acquired by E. Bolhuis and S.E. Boersma of the Groningen Institute of Archaeology and processed by E. Bolhuis. The 3-D model was computed by F. van Hoesel and M. Kragtwijk of the Centre for High Performance Computing & Visualisation of the University of Groningen.

### Two excavation campaigns of the University of Groningen



Fig. 4. Contents of Monte Del Bufalo Tomb 222.



### **Conservation and restoration**

The illustrations in this paper show the results of the conservation work carried out at GIA's Laboratory for Conservation and Material Studies<sup>10</sup>. We elaborate on the conservation and restoration of objects from three tombs excavated by the SSBAR in 2006 and that date around 800 BC.

Restoration procedures, ethics and use of consolidants/adhesives in the Laboratory are best characterized as "restrained", meaning that only a limited number of techniques and materials are used that form no risk to the artefact or to the restoration specialist. The consolidants and adhesives used are of high-quality, being reversible and stable. We have restored most objects to museum level so that they can be exhibited. This is best illustrated by the gap filling of recent fractures, cracks and gaps in the artefacts. These gap-fills were painted in order to make them almost unnoticeable. The gap-fills clearly stand out within about 50 cm distance ("handheld") but are not noticeable from a distance of about 2 meters. Old gaps have been filled and repainted only when this was necessary to make a reconstruction safe enough for handling, study and presentation.

<sup>10</sup> Explained on website www.lcm.rug.nl

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Fig. 5. Copper alloy bowl from MDB Tomb 156; a. before restoration, b. gap fill with acid-free Japanese paper.

The restoration of the copper-alloy, hammered bowl with raised handle, can serve as an example of the restoration of artefacts at the Laboratory. Figure 5a shows the bowl before restoration. Most of the time spent on its conservation was devoted to the mechanical removal of the fill of the bowl that consisted of an extremely hard, clay-rich soil, whereas the copper-alloy bowl itself was friable. Impregnation of the bowl with various solutions of Paraloid B-72 in acetone/ethanol was necessary to strengthen the thin and fragile copper sheet. Paraloid B72 is a highly suitable consolidant and adhesive for restoration since it is stable and reversible<sup>11</sup>.

Figure 5b gives a detail photograph of the gapfill of part of the rim with acid-free Japanese paper, impregnated with Paraloid B72. Filling of the gap was necessary to secure the internal coherence of the bowl. Afterwards, the Japanese paper was painted in the colours of the corroded copper sheet, suiting the requirements for museum presentation of the object.

#### Settlement investigations

In the final days of the campaign of 2007, GIA commissioned the company GeA s.r.l. to carry out geophysical prospections in order to trace the course of the 'fossato' excavated by the SSBAR earlier that campaign. The preliminary results of those prospections are here presented by Barbara Barbaro *et al.*<sup>12</sup>. Moreover, in 2008, a study of the rows of parallel walls on the inner side of the fossato that had been excavated in earlier years<sup>13</sup> was carried out by one of GIA's Research Master students as part of an internship at the SSBAR<sup>14</sup>. This work has resulted in an internal report that is yet unpublished<sup>15</sup>.

14 K. van der Veer, 'A study of the wall remains between the settlement and necropolis of Crustumerium (Rome, Lazio)', Internal report GIA, 2009.

15 UPDATE ON THE PROJECT SINCE 2007: in the meantime the GIA has pursued its annual excavations at the Monte Del Bufalo funerary area including the restoration and conservation of its artefacts with summer campaigns in 2008, 2009, 2010 and 2011. It has prepared the excavated tombs and their inventories for publication in a series that is foreseen by the Crustumerium project of the SSBAR and its international partners. The study of tombs dating to the late 7th and early 6th century BC of the Crustumerium funerary areas, in the context of the Latial phenomenon of the progressive reduction of grave goods, is since 2008 part of a PhD project by Sarah Willemsen based at the GIA. In addition the GIA acquired a subsidy from the Netherlands Organization for Scientific Research (NWO) in 2010 to carry out the research project 'The People and the State, Material Culture, Social Structure and Political Centralisation in central Italy (800-450 BC)'. This project aims at studying changes in burial practices and settlement organization during the transition from the Latial Orientalizing/Archaic period to the Roman period, using Crustumerium as a case study. The project is articulated in two sub-projects. The first is a PhD project, carried out by Jorn Seubers, designed to study the settlement and territory of Crustumerium in relation to early state formation in central Italy. The second is a post-doc project focussing on the cemeteries of Crustumerium from a spatial and artefactual perspective to obtain insight in social change. The latter project is carried out by Barbara Belelli Marchesini. The 5-year project is supervised by Peter Attema and Bert Nijboer and is carried out in close collaboration with Francesco di Gennaro (formerly inspector of SSBAR, as of 2012 Soprintendente of the Museo Nazionale Preistorico Etnografico 'Luigi Pigorini'), director of the International Crustumerium Project.

<sup>11</sup> C.V. Horie, *Materials for Conservation*, London 1987, pp. 106-109.
12 B. Barbaro, P. Barbina, R. Borzetti, 'L'abitato di *Crustumerium*: acquisizioni del 2007', in this volume.

<sup>13</sup> CRUSTUMERIUM 1999, pp. 24-25; A. Amoroso, 'Nuovi dati per la conoscenza dell'antico centro di *Crustumerium*', in *ArchClass* 53, 2002, p. 314.