

Evaluation of the Research and Professional Activity of the Institutes of the Czech Academy of Sciences (CAS) for the period 2010–2014

Final Report on the Evaluation of the Institute

Name of the Institute: Institute of Archaeology of the CAS, Prague, v. v. i.

Fields, in which the Institute registered its teams:

History and archaeology

Observer representing the Academy Council of the CAS: Pavel Baran

Observer representing the Institute: Petr Květina

Commission No. 11: History and archaeology

Chair: Prof. Dr. Marie-Elizabeth Ducreux

Date(s) of the visit of the Institute: October 20, 2015

Programme of the visit of the Institute: see attached Minutes from the visit

Evaluated research teams:

No. 1 - Department of prehistorical archaeology; No. 2 - Department of rescue excavations;

*No. 3 - Department of medieval archaeology; No. 4 - Department of the archaeology of
landscape and archaeobiology*

A. Evaluation of the Institute as a whole

1. Introduction

The Institute of Archaeology, Prague, whose history dates back to 1919 (National Archaeological Institute), always held a key role in the Czechoslovak/Czech archaeology. In last two decades it has undergone a number of conceptual and structural changes associated with a rapid development in contemporary archaeology. The Institute has shifted from a very large central institution covering nearly all specialisations within archaeology towards a scientific centre with clearly defined main research areas.

Currently the Institute represents the leading institution in the field of archaeology in the Czech Republic, however it has also an excellent position in a broad international context. Together with its partner Institute of Archaeology in Brno, it has irreplaceable role in archaeological research at both the national and international level. The Institute is mainly focused on basic archaeological research, however it covers also other areas of research activities as applied research (rescue excavations) and highly specialized cross-disciplinary subfields as landscape archaeology, non-destructive field research (aerial archaeology and geophysical survey), environmental archaeology and archaeobiology (biological anthropology, archaeozoology, palaeobotany and radiocarbon dating). It disposes also of experts and facilities for preservation and restoration of artefacts. Due to the Heritage Act Institute of Archaeology is guarantor of the archaeological field research activities and coordinator of the archaeological heritage care. It manages a central repository of field documentation and an electronic registration system of field research.

2. Strengths and Opportunities

- Central position in the Czech archaeology reflected in long-term continuity of basic archaeological research, archaeological theory and method development and formulation of key research topics.
- Excellent position and visibility in the international context, representation of the Czech Republic on European level (European Archaeological Council), representation of the staff in numerous international organizations, mediation of international contacts at the national level.
- An appropriate strategy regarding clearly defined research areas including chronological specialization (periods covering the Neolithic – the Iron Age and the Early – High Middle Ages); well defined spheres of scientific interests regarding the partner Institute of Archaeology in Brno.
- Personal qualification and capacity (concentration of leading scientists in the field of archaeology and in the related interdisciplinary research, balanced age structure, involvement of successful young researchers).
- International collaboration (esp. at the European level).
- A large number of successful grants, ability to implement scientific projects of national importance and involvement in international projects.
- A large number of excellent outputs, including papers in impacted journals.
- Publishing activities of a fundamental importance (2 WOS journals and series of monographs).
- Top technical, instrumental equipment and software.

- Management of central information sources and archive of the Czech archaeology, management of the largest library specialised on archaeology in the Czech Republic.
- Fruitful collaboration with universities, intensive involvement in educational activities in the field of archaeology (7 universities).
- Internal evaluation rating system of researchers, attestation process and related qualification degrees.
- Well-qualified Direction team and effective executive management.

3. Weaknesses and Threats

- Although the Institute has significantly focused on selected research areas, it still performs a wide range of activities (due to its traditional role within Czech archaeology) extending costs and depleting staff; heritage management represents the biggest problem in this respect.
- Some activities of individual departments partly overlap (see below).
- Even if it may represent a strength, significant funding of the Institute by applied research (rescue excavations) can bring problems as this sort of revenue from own activity is very unpredictable.
- Although some Commission members stress that rescue research activities may represent a potential problem, they share the same opinion about outbalancing advantages of the combination of both applied and basic research under given conditions.
- Insufficient institutional funding for basic research resulting in necessary partial substitution by unpredictable rescue excavations' revenue.
- Lack of own internal doctoral students (due to current legislation), though a significant number of researchers are involved as tutors in university teaching.

4. Recommendations

- It seems necessary to continue in the current strategy of clearly defined research areas reflected in objectives of individual departments.
- Problems associated with the heritage management may be soon solved by a new Heritage Act which is currently being discussed.
- Despite achieved results in international cooperation the Commission recommends to increase the collaboration with key foreign partners to establish strong international research teams capable to obtain European grants (Horizon 2020, ERC, HERA etc.); it is also recommended to target existing international scientific networks for joint-publications
- Necessity to keep on with the cross-disciplinary character of projects (esp. involvement of natural scientists)
- To think about possibilities in attracting foreign researchers in order to internationalize the staff (e. g. recruitment of Post-Docs from abroad).

5. Detailed evaluations

Declaration on the quality of the results and share in their acquisition

- Overview of project activities: A total of 67 grant projects, including international grants obtained in the last 5 years is a remarkable success. The Institute has proven ability for the development and implementation of several leading grants running parallel.

- Publication results: 979 publications (including numerous outputs with international impact) and 15 applied results proves high efficiency of the staff; 32 articles in journals with impact factor, 503 articles in other journals, 83 books and 361 other publication outputs.
- Place of the Department of prehistorical archaeology (Team I) in phase I. of the evaluation: evaluated outputs 19 (out of 228), 4 publications ranked into “world leading quality” (quality group outputs 1) and 9 into the “internationally excellent” category (group 2), 4 into the “recognized internationally” category (group 3), only 2 in group 4 (“recognized nationally”) and none in group 5.
- Place of the Department of rescue excavations (Team II) in phase I. of the evaluation: evaluated outputs 9 (out of 191), 2 publications ranked into “world leading quality” (quality group outputs 1), 2 into the “internationally excellent” category (group 2), 5 into the “recognized internationally” category (group 3) and none in groups 4 and 5.
- Place of the Department of medieval archaeology (Team III) in phase I. of the evaluation: evaluated outputs 14 (out of 269), 2 publications ranked into “world leading quality” (quality group outputs 1), 7 into the “internationally excellent” category (group 2), 3 into the “recognized internationally” category (group 3), only 2 in group 4 (“recognized nationally”) and none in group 5.
- Place of the Department of the archaeology of landscape and archaeobiology (Team IV) in phase I. of the evaluation: evaluated outputs 16 (out of 255), 7 publications ranked into “world leading quality” (quality group outputs 1) and 5 into the “internationally excellent” category (group 2), 3 into the “recognized internationally” category (group 3), only 1 in group 4 (“recognized nationally”) and none in group 5.

Declaration on the involvement of students in research

- The Commission stresses the good politics of involvement of young researchers and research assistants, whom are given great opportunities to be involved in research projects and improve their knowledge and abilities.
- A majority of scientists are involved in university teaching including tutoring of doctoral students.
- Several doctoral students are staff members of the Institute of Archaeology as research assistants (starting positions usually in the Department of rescue excavations).
- The Institute was involved in the project “Doctoral School of Archaeology” (GA CR) and it also organized “Summer Field Schools of Archaeology”.

Declaration on societal relevance

- Services for research.
The Institute of Archaeology provides most valuable and unique services in the field of archaeology:
The Archive – central national repository of field documentation (for Bohemia)
National electronic registration system of field research for professional organisations (for Bohemia)
Largest specialized library in the Czech Republic
- Research facilities and cross-disciplinary services:
The Institute possesses high-level equipment as well as experts providing cross-disciplinary research disciplines which are unique at the national level and comparable with leading European archaeological institutions, esp.:
Aerial prospection including extensive archive of aerial photographs of archaeological sites.
Geophysics (a variety of devices for resistive geoelectric survey, magnetometric survey, electromagnetic survey, for measuring magnetic susceptibility etc.)

Comparative archaeozoological collection (most extensive collection in the Czech Republic)

Laboratory for archaeogenetics (molecular biology laboratory equipment, unique collection of samples from Africa, Asia and Europe)

Radiocarbon laboratory (mutual laboratory of the Institute and the Institute of Nuclear Physics AS CR)

-Due to the Heritage Act, the Institute of Archaeology is the main guarantor of the professional standards in the field archaeological research. It is also the coordinator of the archaeological heritage protection.

- Teaching:
7 researchers work also as cooperating associate professors and full professors at 8 Universities in the Czech Republic and 6 Universities abroad (Great Britain, Germany, Poland and Slovakia).
Many researchers are also members of academic boards and scientific councils of numerous universities and faculties in the Czech Republic and abroad.
Supervision of students: 79 Bachelors, 69 Masters and 46 Doctoral. Numerous consultants and co-supervisors.
- Activities in popularisation:
Dozens of popularisation activities every year like interviews in newspapers and magazines, appearances in radio and television broadcasting, lectures for learned societies and general public, exhibitions etc.

Declaration on the position in the international and national context

- Partnerships with mostly European institutions.
- Participation in international inquiries.
- International grant projects.
- Number of publications in journals with international impact.
- Completion of the most comprehensive English-written synthesis of the Czech prehistory (1300 pages).
- Leading position at the national level and an excellent position at the international level.

Declaration on the vitality and sustainability

- The Institute has a balanced age structure and a good proportion of young researchers as well as experienced senior researchers.
- The institute has implemented an effective internal evaluation system regarding annual assessment of each researcher.
- The budget is complemented from grants and applied research.

Declaration on the strategy and plans for the future

- The Institute is aware of the major risks associated with the further development of basic research in archeology like restricted institutional support (covers ca. 50% of institutional costs) and limited funds for grants in humanities at the national level.
- The proposed strategy is well-thought and realistic: focus on various available sources of specific founding, evaluation and publication of available sources and data (using unique electronic database system), focus on research topics of European importance, support and further development of unique cross-disciplinary specialisations.

B. Evaluation of the individual teams

Evaluation of the Team No. 1: Department of prehistorical archaeology

1. Introduction

The largest Department of prehistorical archaeology is focused on fundamental theoretical and empirical research of prehistoric periods. The research concept of the DOP is theoretically and methodologically deeply founded. The department demonstrates a great innovative potential and the capacity to significantly extend the knowledge of the Central European prehistory covering periods from the Neolithic to the Iron Age. Main recent research topics are represented esp. by the research on Neolithic rondels, evaluation and interpretation of Bylany Neolithic settlement, Czech lands and Central Europe in the Bronze Age, Hallstatt and La-Tène centres of power and structure of prehistoric settlement areas.

2. Strengths and Opportunities

- Ability to develop new insights in prehistoric archaeology.
 - Long tradition of fundamental research in prehistoric archaeology
 - A large number of successful grants.
 - A large number of publication outputs, including papers published abroad and shared papers with international partners.
 - Personal qualification.
 - Implementation of digital technologies for documentation and presentation.
 - International collaboration.
- A balanced age structure of the team.

3. Weaknesses and Threats

- Insufficient institutional funding.
- Relatively small number of researchers due to the extent of research activities.

4. Recommendations

- Keep on with efforts in international scientific networking and cooperation aiming to - European research programmes (Horizon 2020, ERC, HERA etc.).
- Reinforce the team (recruit foreign Post-Doc/s using European Programmes).
- Think about ERC, COST or Marie Curie Fellowship applications.
- To clarify the links and interactions with another team dealing with the complex analysis -of prehistoric sites and prehistoric glass (Team 4). Are glass studies involved in the archaic technologies project?

5. Detailed evaluations

Declaration on the quality of the results and share in their acquisition

-Place of the Department of prehistorical archaeology (Team I) in phase I. of the evaluation: evaluated outputs 19 (out of 228), 4 publications ranked into “world leading quality” (quality group outputs 1) and 9 into the “internationally excellent” category (group 2), 4 into the “recognized internationally” category (group 3), only 2 in group 4 (“recognized nationally”) and none in group 5.

This outstanding ranking is supported by a relatively high citation level (for this field of research).

Declaration on the involvement of students in research

Students are widely involved in the research projects of the DOP.

Declaration on societal relevance

Team members are very intensively engaged in teaching activities at many Czech universities (Charles University, Masaryk University, University of West Bohemia, University of South Bohemia, University of Hradec Králové, University of Pardubice and Silesian University), including the supervision of both theses and dissertations. They also cooperate in foreign study programmes (Germany and France). Extensive involvement in rescue excavations prove the ability of the team in the area of applied research. Large use of digital technology is employed to communicate the Neolithic settlement research outcomes with the academic as well as the general public (3D virtual museum). Team members are very active in popularization.

Declaration on the position in the international and national context

The team consists of leading researchers in both national and international context for chronological periods from the Neolithic to the Iron Age.

Declaration on the vitality and sustainability

Organisation and management procedures are adequate. The team has a balanced age structure and its members have demonstrated successful career growth. Involvement of PhD. students may guarantee future perspectives of the department. DOP has shown considerable successes in grant applications.

Declaration on the strategy and plans for the future

The strategy is ambitious but does not appear unrealistic. The conceptual framework of the research plan for 2015 – 2019 is well-thought and consistent in focusing on synchronous topics of general importance. The future plan encompasses also excellently chosen interdisciplinary research area of archaic technologies aiming at establishing work packages networks.

Evaluation of the Team No. 2: Department of rescue excavations

1. Introduction

Established in 2007, the Department originated from three units of the Institute of Archaeology (Prague castle, Conservation laboratories and rescue archaeology team). The Prague castle division is responsibly not only for archaeological heritage and rescue excavations in the castle and broader hinterland but it has been also dealing with the evaluation and the interpretation of unique sets of data collected during continuous research activities dating back to the 1925. Supported by the Czech Science Foundation a centre of excellence has been set up focusing on multidisciplinary research on the early mediaeval cemeteries (Prague castle, Central and Eastern Bohemia). The conservation laboratories division concentrates on restoration and conservation of archaeological finds (providing also service for other institutions), including specialised analysis, expertises and material studies. The rescue excavation group provides rescue excavation service in number of regions and localities of interest in cooperation with other Departments.

2. Strengths and Opportunities

- Successful grants including the centre of excellence (since 2015).
- A large number of publication outputs, including papers published abroad.
- Personal qualification.
- International collaboration.
- Cross-disciplinary research.
- Societal attractive topic associated with the Prague castle.
- Service in the restoration and the conservation of archaeological finds.

3. Weaknesses and Threats

- The Department seems to be more dependent on applied research than the other teams.
- Lack of young researchers.

4. Recommendations

- To increase the collaboration with foreign partners in order to apply for European grants (Horizon 2020, ERC, HERA etc.).
 - To attract young researchers.
- To clarify the links and interactions with another team dealing with the early mediaeval centres (Team 3) and archaic production technologies (Team 1).
- Successful research on the 16th-18th century find collections of the Prague castle may lead to the establishment of the Post-mediaeval research centre. Such a topic is absent in the Institute and generally neglected in the Czech Republic.

5. Detailed evaluations

Declaration on the quality of the results and share in their acquisition

-Place of the Department of rescue excavations (Team II) in phase I. of the evaluation: evaluated outputs 9 (out of 191), 2 publications ranked into “world leading quality” (quality group outputs 1), 2 into the “internationally excellent” category (group 2), 5 into the “recognized internationally” category (group 3) and none in groups 4 and 5. This outstanding ranking is supported by relatively high citation level (for this field of research).

Declaration on the involvement of students in research

Students are regularly involved in the research activities of the Department.

Declaration on societal relevance

The team members are very intensively engaged in teaching activities at many Czech universities (Charles University, Masaryk University, University of West Bohemia, University of South Bohemia, University of Hradec Králové, University of Pardubice, Silesian University, Palacký University, University of Chemistry and Technology and Technical University of Liberec) and also abroad (Slovakia), including supervision of both

theses and dissertations. The Department is in charge of the rescue excavations in the Institute. Team members are very active in popularization.

Declaration on the position in the international and national context

Researchers of the Department are leading experts in their fields at the national level and also recognized internationally. They are involved in international cooperation.

Declaration on the vitality and sustainability

Organisation and management procedures are adequate. The Department is successful in grant applications and applied research.

Declaration on the strategy and plans for the future

The team has developed satisfying and well-thought out projects and strategy for the future. The Department will continue in the three above mentioned areas covered by individual divisions. Some of the topics are already supported by grants (Prague castle, textile research).

Evaluation of the Team No. 3: Department of medieval archaeology

1. Introduction

Mediaeval archaeological research has a long tradition in the Institute of Archaeology, originally being divided into early mediaeval (traditional “Slavic”) and mediaeval archaeology. Due to recent personal changes and demises the Department currently concentrates its work on the early mediaeval period. The main research topic is represented by the early mediaeval state formation process as reflected in material evidence, including esp. settlement and settlement forms, elite formation and social changes, Christianisation and church archaeology which extends into further activities (interdisciplinary studies and applied research).

2. Strengths and Opportunities

- Long tradition of fundamental research in mediaeval archaeology.
- Ability to develop new insights in the early mediaeval archaeology.
- Ability to develop research projects where archaeologists, historians and other experts are working together.
- Personal qualification.
- A large number of successful grants.
- A large number of publication outputs, including numerous papers published abroad.
- International collaboration.

3. Weaknesses and Threats

- Insufficient institutional funding.
- Small number of researchers due to the extent of research activities.
- Lack of young researchers.

4. Recommendations

- To keep on with efforts in international scientific networking and cooperation aiming at European research programmes (Horizon 2020, ERC, HERA etc.).
- To reinforce the team.
- To attract young researchers.
- To clarify the links and interactions with another team dealing with the early mediaeval archaeology and artefact material analysis as well as with the team engaged in complex analyses of archaeological localities, including early mediaeval sites (Team 4).

5. Detailed evaluations

Declaration on the quality of the results and share in their acquisition

Place of the Department of medieval archaeology in phase I. of the evaluation: evaluated outputs 14 (out of 269), 2 publications ranked into “world leading quality” (quality group outputs 1), 7 into the “internationally excellent” category (group 2), 3 into the “recognized internationally” category (group 3), only 2 in group 4 (“recognized nationally”) and none in group 5.

This outstanding ranking is supported by relatively high citation level (for this field of research).

Declaration on the involvement of students in research

Students (including foreign students) are widely involved in research projects of the Department.

Declaration on societal relevance

The team members are very intensively engaged in teaching activities at many Czech universities (Charles University, University of West Bohemia, University of South Bohemia, University of Hradec Králové, Palacký University, Silesian University, Czech Technical University, Academy of Arts, Architecture and Design and Academy of Fine Arts in Prague), including supervision of both theses and dissertations. Extensive involvement in rescue excavations proves the ability of the team in the area of applied research. Team members are very active in popularisation.

Declaration on the position in the international and national context

The team consists of several leading researchers in both national and international context.

Declaration on the vitality and sustainability

The organisation and management procedures are adequate. The Department has proven considerable success in grant applications.

Declaration on the strategy and plans for the future

The team has developed an appropriate strategy focusing on 3 main topics. The research on state formation processes will continue and will be complemented with two other topics of great importance at both national and European level: settlement structure and

settlement forms (6th – early 10th century) and mediaeval town formation. The team will also be engaged in interdisciplinary activities and applied research.

Evaluation of the Team No. 4: Department of the archaeology of landscape and archaeobiology

1. Introduction

The merger of two former departments (spatial and environmental archaeology) laid the foundation for the Department of the archaeology of landscape and archaeobiology in 2007. Thus a unique team was established combining archaeologists specialised mainly in landscape and spatial archaeology, but also excellent researchers in archaeological theory, and natural scientists dealing with archaeogenetics, archaeozoology and archaeobotany. Forming such a team, which has no comparison in any Czech archaeological institution, was a bold attempt and a real challenge which, however, has proven successful. Work of the team fully demonstrated its necessity and ability to cross narrow borders of individual disciplines aiming at extending the knowledge of the biological variability of man, the human subsistence, environment and cultural landscape formation in the past.

2. Strengths and Opportunities

- Structure of the team consisting of archaeologists and natural scientists ensures true interdisciplinarity.
- A large number of successful grants, including international projects.
- A large number of publication outputs, including papers published abroad and shared papers with international partners.
- Personal qualification.
- International collaboration.
- A balanced age structure of the team.

3. Weaknesses and Threats

- Insufficient institutional funding.
- Part-time jobs of too many staff members.

4. Recommendations

- Reinforce the department in terms of increased workload of some staff members.
- Keep on with efforts in international scientific networking and cooperation aiming at European research programmes (Horizon 2020, ERC, HERA etc.).
- To clarify the links and interactions with team 1 and 3.
- The strength of the DoLA lies in cross-disciplinary cooperation and integration of separate subfields. Departmental ability to integrate them into excellent outputs and pushing the boundaries are key to the unleashing of its full potential.

5. Detailed evaluations

Declaration on the quality of the results and share in their acquisition

Place of the Department of the archaeology of landscape and archaeobiology (Team IV) in phase I. of the evaluation: evaluated outputs 16 (out of 255), 7 publications ranked into “world leading quality” (quality group outputs 1) and 5 into the “internationally excellent” category (group 2), 3 into the “recognized internationally” category (group 3), only 1 in group 4 (“recognized nationally”) and none in group 5. This outstanding ranking is supported by high citation level.

Declaration on the involvement of students in research

Students are widely involved in research projects of the Department.

Declaration on societal relevance

-The team members are very intensively engaged in teaching activities at the Czech universities (Charles University, University of West Bohemia, University of South Bohemia, University of Hradec Králové, University of Pardubice and Silesian University), including supervision of both theses and dissertations. Involvement of the Archaeogenetics laboratory in doctoral study programme of the Department of Anthropology and Human Genetics of the Faculty of Sciences of Charles University is an ideal example of cooperation between the Academy and the University sphere. Extensive involvement in rescue excavations proves the ability of the team in the area of applied research. The team members are also very active in various areas of research popularisation.

-Providing research facilities and cross-disciplinary services is of a great importance for archaeological research activities at the national level and abroad (aerial prospection, archaeobotanical database of the Czech Republic, geophysics, laboratory for archaeogenetics, archaeozoological collection, radiocarbon laboratory and VITREA – on-line database of chemical analyses of archaeological glass from the Czech Republic).

Declaration on the position in the international and national context

DoLA represents a unique team in its specialisation in the national context and is comparable with leading European teams focusing on landscape and environmental archaeology/ archaeobiology.

Declaration on the vitality and sustainability

Organisational structure and management procedures are adequate. The team is successful in grant applications. The team has a balanced age structure.

Declaration on the strategy and plans for the future

Organisation and management procedures are adequate. The team has a balanced age structure and its members have demonstrated successful career growth. Involvement of PhD. students in research may guarantee the future perspective of the Department. DoLA has shown considerable success in grant applications, including international grants.

Declaration on the strategy and plans for the future

Research plan for 2015 – 2019 is well-thought out and will focus on further development of non-destructive archaeology, archaeometry, complex processing of significant excavated sites, subsistence strategies of the past and natural environment, anthropology and archaeogenetics.

Date: January 31, 2015

Commission Chair: Prof. Dr. Marie-Elizabeth Ducreux