Appendix 2：Introduction of each base and archaeological project

1. The Yanchi Base in Ningxia

The Yanchi Base is situated in Yanchi County, Wuzhong City of Ningxia. Its primary structure is a two-story ancient-style building covering a total floor area of 1785 square meters. The facility includes sections dedicated to accommodation, office work, meetings, processing of relics, and two separate warehouses for relics. Each dormitory room, equipped with a private bathroom, spans 25 square meters. The base features a "Classin" smart classroom, a VR classroom, and laboratories for scientific research and teaching. To ensure seamless 5G+ teaching, the Yanchi Base is equipped with five dedicated fiber-optic lines: one 100 Mbps line for the smart and VR classrooms respectively, one 500 Mbps line for the dormitory area, and two 100 Mbps lines for the excavation area. Additionally, two cell towers have been installed.

Overview of the Yanchi Base

Classroom of the Yanchi Base

The Zhangjiachang Site is situated in Zhangjichang Village, Huamachi Town, northwest of Yanchi County, Wuzhong City. It features a rectangular layout, measuring approximately 338 meters north to south and 320 meters east to west, predominantly buried in sand at present. Recent investigations and excavations have revealed that it is remarkably well-preserved, primarily dating back to the Han

Dynasty. The city's structures were predominantly constructed using rammed earth, with an abundance of Han Dynasty flat tiles, tubular tiles, and pottery sherds unearthed within the city and its southeast peripheral area. The surrounding area is dotted with numerous tombs, located on the south, north, and west sides of the city. On June 25, 2006, the Zhangjiachang City site has been recognized as a key historical and cultural site under national-level protection.

The ancient city of Zhangjiachang stands as one of the most well-preserved county-level cities of the Han Dynasty that we know of. Located in the northwest part of China, it lies within a transitional zone bridging agriculture and pastoralism. Its unique geographic location lends itself to discussions regarding topics such as border management by the central government of the Han Dynasty, cultural exchanges between agricultural and pastoral regions, and local government control over crucial resources like salt. Moreover, it holds significant relevance in conversations regarding the diversity and integration of Chinese civilization.

Excavation efforts in 2024 will primarily focus on exploring the layout of Zhangjiachang City and will encompass interdisciplinary research. This year's exchange program is slated to run from May to August, with plans to recruit five students.

2. The Linzi Base in Shandong

The Linzi Base is jointly established by the School of Archaeology and Museology at Peking University, the Shandong Provincial Institute of Cultural Relics and Archaeology, and the Linzi District Government of Zibo City, Shandong Province. Located in Qidu Town, Linzi District, Zibo City, Shandong Province, the base encompasses approximately 3 hectares, with a floor area totaling around 7000 square meters. Its construction concluded in September 2022, marking its official inauguration and commencement of operations.

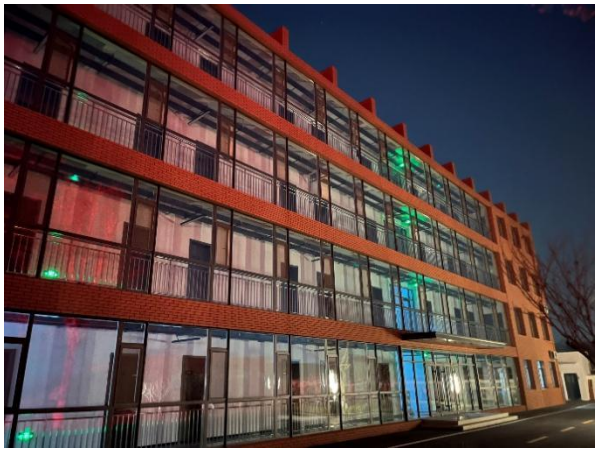
Overview of the Linzi Base

The Linzi Base boasts a comprehensive array of facilities tailored to support diverse archaeological activities. These include dedicated spaces for archaeological remains processing and storage, laboratories, drafting, reading, classrooms, and

conference spaces. Additionally, the base offers ample accommodations, dining areas, and sports facilities capable of hosting over one hundred people.

Equipped to fulfill the demands of daily archaeological work, the base facilitates processing, preservation, and management of excavated relics. Moreover, it supports laboratory procedures for artifact preservation, and analysis in fields such as zooarchaeology, archaeobotany, and spatial analysis. The classroom not only caters to on-site training requirements but also serves as essential hardware for a broad spectrum of activities, including online instruction and academic seminars.

Main Building of the Linzi Base



Dormitory Building of the Linzi Base

Dining Hall of the Linzi Base

Current fieldwork teaching and research at the Linzi Base focus on the Tonglin site. This site spans three villages: Tonglin, Yihe, and Tianwang, encompassing a vast area of approximately 2.3 million square meters. The discovery of this site could be traced back to 1965 when student from Peking University conducting field survey in this region. In 1982, the Shandong Provincial Institute of Cultural Relics and Archaeology conducted a preliminary excavation, affirming that the site's cultural deposits predominantly date back to the Longshan period and the Zhou Dynasty.

Subsequent surveys in 1993 unearthed the remnants of an early Longshan small city. However, it wasn't until the commencement of systematic investigation and excavation in 2001 that the true extent of Tonglin's historical significance unfolded.

This endeavor not only revealed a substantial middle Longshan city but also solidified Tonglin's status as a complex Longshan settlement. Notably, it stands as the largest known Longshan settlement in the Haidai region, boasting a distinctive central building area—a rarity within the region.

Presently, archaeological excavation at the Tonglin site primarily concentrate on elucidating the structure and layout of the Longshan period settlement. Additionally, interdisciplinary research endeavors encompass areas such as zooarchaeology, archaeobotany, physical anthropology, residue analysis, stone tool production and distribution patterns, and pottery production techniques.

The training of students in field archaeology skills comprises two primary components: field archaeology survey and excavation, as well as the indoor processing of excavated materials. The overarching goal is to impart students with the methodology and standards governing basic field archaeology survey, excavation, and indoor processing of relics.

In 2024, the Linzi Base initiated an exchange program aimed at facilitating short-term exchanges with students and faculty from the University of Southampton in the United Kingdom. This program is designed to promote cross-cultural collaboration and knowledge sharing in the field of archaeology, further enriching academic discourse and research endeavors.

3. The Anxi Base in Fujian

In December 2020, the government of Anxi County, Fujian Province, signed an agreement with the School of Archaeology and Museology at Peking University to jointly establish the Anxi Base for archaeological teaching and research, with the intention of utilizing the base as a platform to promote the study of handicraft archaeology and enhance cooperation between the university and local government.

From 2019 to 2023, the School of Archaeology and Museology conducted five consecutive archaeological excavations at the Xiacaopu site in Qingyang Village, Shangqing Township, Anxi County, as well as archaeological surveys on ancient handicraft sites in the Anxi region. Moreover, in 2021, 2022, and 2023, based on excavations at the Xiacaopu site, the School held three sessions of Archaeometallurgy Summer Courses, focusing on the reconstruction of ancient metallurgical techniques. In 2022 and 2023, the “Outstanding High School Students Summer School of Peking University (Archaeology)” was successfully held in Anxi. The in-depth cooperation between the university and the local government has successfully built an innovative platform that supports archaeological excavation, field surveys, summer courses, and talent development, contributing to the conservation, interpretation, and inheritance of local cultural heritage.

The Anxi Base consists of the Anxi Archaeological Workstation and a teaching and research base. The Anxi Archaeological Workstation is located to the west of the

Xiacaopu site and in the west of the Xiacaopu Iron Production Site Exhibition Hall. The exhibition hall was built in the ancient architectural style of southern Fujian, represented by a brick-wood combined structure. It covers an area of more than 2,000 square meters, with a building area of 1,200 square meters, including the 800-square-meter exhibition area and the Anxi Archaeological Workstation covering an area of approximately 400 square meters, equipped with meeting rooms, relic warehouses, a kitchen, a relic photography room, dormitories, etc.

the Anxi Archaeological Workstation

The Teaching and Research Base (the Anxi Office) is located in the Administrative Service Center of Chengxiang Town, Anxi County, with an area of 424 square meters. It was designed to support various kinds of research activities, such as archaeological excavation, public archaeology, and cultural heritage protection conducted by the School of Archaeology and Museology at Peking University in Anxi. So far, there are five rooms (including one laboratory, one warehouse, two offices, and one conference room) equipped with digital conference equipment, VR equipment, cultural relic data reconstruction systems, laboratory equipment for archaeometallurgy, and other office and research equipment.

A interior view of the Anxi Base

The current fieldwork teaching and research at the base mainly rely on the Xiacaopu iron production site in Anxi. The Xiacaopu site is located on a hill about

800 meters southeast of Qingyang Village in Shangqing Township, Anxi County, Quanzhou City, Fujian Province. It is a part of the Wulang Mountains, and the site is named after the local place XiaCaopu. According to the latest archaeological works, the main occupation period of the site fell into the Song and Yuan dynasties. Excavations at the site have disclosed a variety of historical remains, including smelting facilities, residential areas, burials, wells, pits, and stone piles. As the first large-scale iron smelting site excavated in Fujian, the XiaCaopu site was mainly used for the production of bloomery iron, as well as cast iron. Analyses of the small iron blooms unearthed at the site indicate a high proportion of high-carbon steel, which may suggest the use of cast iron smelting technology. A variety of furnaces have been found at the site, with the structures retaining mostly intact, which were the first ones to undergo scientific excavation in China. The compacted soil layers discovered at the site were also first seen at iron production sites in China, showing strong local traits. The site testifies to the integrated system of mining, production, transportation, and sales. Iron products of the site were transported through the waterways from Quanzhou to the sea routes, from which the iron metallurgical economy joined the maritime panorama of the world in the Song and Yuan Dynasties. In July 2021, the Xiacaopu Iron Production Site of Qingyang Village in Anxi was included in the World Heritage List as one of the 22 heritage sites of "Quanzhou: Emporium of the World in Song-Yuan China".

Due to the characteristics of the iron production site itself, excavations at the Xiacaopu site focus on the use of technology, such as the experimental analysis of archaeometallurgy, the compositional analysis of unearthed artifacts, Carbon-14 dating of charcoal samples, analysis of soil microstructures, and the use of aerial magnetic detection for non-destructive detection.

The exchange program for 2024 will run from July to September, with a planned recruitment of 4-5 exchange students.

4、Archaeological Project of Cave Temple, Kizil in Xinjiang

The Kizil Caves are located approximately 60 kilometers east of Baicheng County, Xinjiang Province, in Muzat River Valley about 7 kilometers from Kizil Township. The construction of the caves lasted from the 3rd century to 8th or 9th century AD. There are currently 349 numbered caves with nearly 4,000 square meters of murals, making it the earliest large-scale caves in westernmost China. In 1961, the Kizil Caves were declared a key historical and cultural site under national-level protection. In 2014, the Kizil Caves were included in the World Heritage List. In 2021, the National Cultural Heritage Administration issued the "Medium to Long Term Plan for Archaeological Research on Chinese Cave Temples (2021-2035)," which contains the "Archaeological Report on Caves 26A-40 in the West Valley Part of the Kizil Caves" in the plan.

The West Valley part of Kizil Cave Temple

According to the plan, in 2024, the National Cultural Heritage Administration approved the collaborative archaeological excavation of the front areas of Caves 26A-40 by the School of Archaeology and Museology of Peking University and the Kizil Caves Research Institute. The caves in this area are closely related, with old photographs showing covered caves at the lower level. The archaeological excavation aims to achieve the following academic goals:

（1）To complete a comprehensive survey and recording of the relics inside and outside the caves, and to clarify the relationship between relics from the facade and the front of the caves.

（2）To conduct a comprehensive archaeological excavation of the relics in front of the caves, focusing on the uncovered caves, roads and buildings, to clarify the nature, function and structure of different relics, as well as their spatial and temporal relationships. To undertake detailed analyses of unearthed artifacts and micro-traces of animal and plant remains.

（3）To compile an archaeological report on the caves and the cave-front relics, displaying the systematic cave temple complex of caves, roads, buildings and related remains.

The excavation will begin in late May 2024 and end in November. During the period, a special training course on Buddhist archaeology and cave temple research (the fourth session) will also be conducted. The exchange program plans to recruit 1-2 exchange students.