

# ICHSEA 2023

16TH INTERNATIONAL CONFERENCE ON  
THE HISTORY OF SCIENCE IN EAST ASIA

AUGUST 21 (MON.) - 25 (FRI.), 2023, GOETHE UNIVERSITY, FRANKFURT, GERMANY



## Program Book



### International Society for the History of East Asian Science, Technology, and Medicine

International Union of History and Philosophy of Science and Technology

# IUHPST/DHST

Division of History of Science and Technology



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# Campus Guide Map



- Red:**
  - 7: Registration Monday (Casino Building)**
  - 7: Lunch (Casino Mensa)**
  - 19/26: Conference Venue (Seminarhaus, SKW, Library)**
- Yellow:** **Public Transportation (Bus/Underground)**
- Purple:** **Meeting Point Bus Departure Wednesday (IG-Farbenhaus)**

## Program at a Glance

Day	Time/Slot	0.109	0.105	0.107	3.104	1.101	1.104	2.101	2.104	3.101	0.101	HA	1.107	1.108
<b>Monday</b>														
21.08.	I: 9:00-9:25	Opening, Welcome Addresses: 09:00-09:05: Head of Local Organizing committee Prof. Dr. Amelung, 09:05-09:15: Vice-												
	I: 9:30-10:40	Plenary Lecture Prof. Chu Pingyi												
	Coffee													
	II: 11:10-12:50	P14	IP33	P11	P15	P32	IP30	IP13	P62	P29	IP8	*	P21	P43
	Lunch													
	III: 14:10-15:50	P14	P56	P41	P40	P64	IP31	IP14	P62	P29	IP9	*	P47	P39
	Coffee													
	IV: 16:10-17:50	P14	P56	P9	P40	P64	IP32	IP34	P62	P29	IP10	*	P47	P39
	V: 18:10-20:00	Welcome reception												
<b>Tuesday</b>														
22.08.	I: 9:00-10:40	P13	P8	P36	P57	P59	P6	P54	P49	P27	P44	P37	P34	P5
	Coffee													
	II: 11:00-12:40	P13	IP47	P36	IP45	IP40	IP35	IP12	P49	P25	IP1	P37	P34	P5
	Lunch													
	III: 14:10-15:50	P46	IP17	P36	IP6	IP41	IP11	IP22	P35	P25	IP27	P19	P60	P23
	Coffee													
	IV: 16:10-17:50	Plenary Lecture Prof. Mikael Hard												
	V: 18:10-20:10	Graduate Students Night (0.109), Meeting Editorial Board East Asian Science, Technology and Medicine (1.104)												
<b>Wednesday</b>														
23.08.		<b>Trip to Heidelberg</b> <b>Visit of pharmacy museum in groups</b> <b>Opportunity to visit Heidelberg University</b> <b>Plenary (Key note lecture), University of Heidelberg</b> <b>Reception</b>												
<b>Thursday</b>														
24.08.	I: 9:00-10:40	P65	P52	P18	P48	IP24	IP42	IP20	P20	P58	IP2	P38	P7	P67
	Coffee													
	II: 11:00-12:40	P65	P52	P16	P48	IP7	IP43	IP36	IP19	P58	IP28	P38	P7	P67
	Lunch													
	III: 14:10-15:50	P65	P52	P4	P48	IP37	IP44	IP26	IP18	P58	P63	P30	P68	P17
	Coffee													
	IV: 16:10-17:50	P65	P61	P31	P50	P45	P33	IP39	IP21	IP23	IP46	P26	P66	P17
	V: 18:10-20:10	Meeting International Society for the History of East Asian Science, Technology, and Medicine (0.109)												
<b>Friday</b>														
25.08.	I: 9:00-10:40	09:00-09:15: Marta Hanson: Remembering Nathan Sivin and Charlotte Furth, 09:15-10:40: Plenary Lecture Prof. Susan L.												
	Coffee													
	II: 11:00-12:40	11:00-12:25: General Assembly of ISHEASTM, 12:25: Prof. Hugh Slotten: 'Introducing the 27th International Congress of												
	Lunch													
	III: 14:10-15:50	P65	P28	P53	P10	IP4	IP15	IP38	P69		IP3		P51	
	Coffee													
	IV: 16:10-17:50	P55	P28	P53	P10	IP5	IP16	IP29	P69		IP25		P51	
	V: 18:10-20:10	Farewell Dinner												

## Welcome Messages



Professor Shi Yunli PhD  
President of ISHEASTM

Today, the first day of the conference is a day deserving of celebration for all of us. After an interruption of more than three years in normal academic activities caused by the global pandemic, we are finally able to convene here in person, just as we anticipated four years ago in Jeonju. This achievement has been made possible through a multitude of concrete efforts and contributions during a particularly challenging period. First and foremost, I wish to express my gratitude for the essential support provided by the Goethe University of Frankfurt am Main and the Deutsche Forschungsgemeinschaft. Secondly, I commend the dedication and excellent work of the Local Organizing Committee, led by Professor Iwo Amelung, with invaluable assistance and guidance from both the International Program Committee, chaired by Professor Michael Lackner, and the International Advisory Committee, led by Professor Catherine Jami. Lastly and most importantly, I am deeply appreciative of the academic enthusiasm

and determination exhibited by all participants, who have overcome numerous obstacles on their journey to this conference. Therefore, I extend my sincere thanks to all of these organizations and colleagues.

A year ago, when Professor Iwo Amelung informed me of the chosen theme for this conference, "Crises and Entanglements," I found it to be a highly pertinent decision. After a year's passage, this conviction has only grown stronger. The study of the history of science, technology, and medicine is not confined to an ivory tower, isolated from the real world. In an era in which science, technology, and medicine wield increasing influence over human life, and consequently give rise to complex crises and entanglements that are not easily resolved, it is an imperative for us to delve into historical precedents and accumulated wisdom. Doing so may in turn offer new approaches to the study of the history of science, technology, and medicine.

The global landscape has undergone significant changes since our last meeting in 2019, and further transformations are still underway. Yet amidst these shifts, one constant remains unwavering: the ceaseless academic enthusiasm and persistence of our fellow colleagues. This steadfast commitment is evident in the fact that over the next five days, more than 400 participants will present their papers in 150 sessions. Despite the loss of two eminent colleagues, Professor Nathan Sivin and Professor Charlotte Furth, in the past year, the presence of numerous young faces among the conference attendees is a testament to the flourishing state of our field and its abundance of qualified successors.

May each of us enjoy a fruitful, enriching, and pleasant stay in Frankfurt.

I wish this conference a resounding success.



Professor. Dr. Bernhard Brüne

Vice President Research, Early Career Researchers and Transfer

Dear participants of the 16th International Conference for the History of Science in East Asia,

On behalf of the executive board of Goethe University, I would like to welcome our esteemed guests in Frankfurt am Main. It is with great pleasure that we host this conference at our “Campus Westend”, which is home to the humanities and social sciences. Goethe University appreciates and supports the invaluable exchange and collaboration among scholars from around the world. The past years of pandemic-related restrictions have made it painfully clear how important personal interactions are – in general and in particular for academic cooperation. Therefore, I am very happy that you have chosen to attend this conference as an opportunity to revive and enhance academic relationships, while establishing new connections with colleagues from all across the globe. This is not just a contribution to the scientific

discourse but also a contribution to our international campus placed in one of the most cosmopolitan cities in Germany.

Goethe University, established in 1914, has always been committed to a comprehensive range of academic subjects and disciplines. Among other things, the university played a pioneering role in establishing East Asian Studies in Germany. As early as 1925, it set up a professorship for sinology, and the renowned translator and sinologist Richard Wilhelm was appointed to teach Chinese Studies here in Frankfurt. Today, East Asian Studies continue to be a vital field at our university. They are rooted in two of our interdisciplinary research profile areas: “Orders & Transformations”, which analyzes societal structures and their changes, and “Universality & Diversity” that examines the implications, opportunities and challenges of religious, cultural, and linguistic diversity. Within these profile areas, the Interdisciplinary Center for East Asia Studies (IZO) merges research on China, Japan, Korea, and Southeast Asia as one of the foremost scientific hubs for East Asia Research in Germany. The academic discipline of the history of science at our university has its origins in the 1940s and dates back to the distinguished scientist Willy Hartner, who also served as the university’s rector from 1959 to 1960. Hartner himself fostered a close connection between the history of science and East Asian Studies. He acquired some knowledge of the Chinese language, worked at the China Institute for some time, and maintained a lifelong interest in the history of East Asian science, technology, and medicine. By the way, he also shared a close friendship with Joseph Needham – a biochemist like me, but at the same time a dedicated explorer of the Chinese history of science.

Research in the History of East Asian science, technology, and medicine at

our university thus has a rich tradition, and I am pleased to see it continuing today. I am convinced that knowing and understanding the history of science is crucial for scientific progress, providing us with context knowledge, alternate viewpoints and coping strategies for setbacks. With that in mind, the conference theme of "Crises and Entanglements" is very well chosen, as it highlights the role of science and technology in contemporary challenges – as solvers of problems as well as their potential (co-)creators. I hope the upcoming days will give you the opportunity to illuminate and discuss these perspectives further and to get to know new ideas as well as new colleagues. With that said,

I wish you an inspiring, productive, and successful conference!



Professor Catherine Jami PhD

Chair International Advisory Committee

It is a very special pleasure to welcome all of you to this International Conference on the History of Science in East Asia, which is number 16 in the series. For those of you, the majority, who are too young to remember the peculiar history of this series of conferences, let me recount it briefly. It started in 1982, when Ulrich Libbrecht (1928-2017) organised the ‘First International Conference on the History of Science in China’ (ICHSC) in Leuven. To the best of my knowledge, only one person present at that conference is here in Frankfurt for the 16th ICHSEA. After Leuven, there followed another five International Conferences on the History of Science in China (Hong Kong, 1983; Beijing, 1984; Sydney, 1986; San Diego, 1988; Cambridge, 1990). It was during the Cambridge Conference, in 1990, that the International Society for the History of East Asian Science, Technology, and Medicine (ISHEASTM) was founded. This widening

of scope reflected the presence at successive meetings of more and more specialists of Korea and Japan, and the growing awareness among specialists of China that the regional scale would, among other things, help them challenge Eurocentrism, which prevailed at the time to a degree much greater than it does today. From then on, the conferences changed their name to 'International Conference on the history of Science in East Asia (ICHSEA); the series number was not reset, so as to indicate the continuity with earlier efforts. At first, the conferences took place at three years intervals. After ISHEASTM became a section of the Division of History of Science and Technology of the International Union of History and Philosophy of Science and Technology (IUHPST/DHST), which holds its congresses every four years, it became clear to ISHEASTM members that four years intervals would be more appropriate. Thus, nine ICHSEA have been held over the last thirty years (Kyoto, 1993; Seoul, 1996; Singapore, 1999; Shanghai, 2002; Munich, 2005; Baltimore, 2008; Hefei, 2011; Paris, 2015; Jeonju, 2019). The founding officers of ISHEASTM, Nathan Sivin (1931-2022), Ke Jun 柯俊 (1917-2017), Christopher Cullen and Georges Métaillé can be said to represent the post-Needham generation. Three of them contributed, in different ways, to the continuation of Needham's Science and Civilisation in China, while distancing themselves from Needham's historiography. This sums up nicely the tension that my own generation has experienced: while we built upon Needham's work, we set ourselves different aims. From a look at the programme of the present conference, it appears that historiography has moved on again. As is the case for Europe and other regions of the world, East Asia's science, technology and medicine are now studied mainly as part of the global dynamics of knowledge that have developed since the nineteenth century, in a

joint effort to better understand how the past has produced the present. But the most striking change in our field over the past 30 years is quantitative: there are now hundreds of us getting together every four years. In 2015, the 14th ICHSEA included 45 panels. This time, there are 63. This is an increase of more than 30%; it shows that our research community is well structured enough for colleagues of all generations to set up panels on topics as varied as maps, gender, the links between astral science, divination and medicine, the impact of place on knowledge production, to mention but a few. And the very rich sessions set up by the organisers with the wealth of individual papers accepted indicates that this conference also provides an opportunity for colleagues who are not already part of the networks in which the panels have been produced to become part of these networks. These high numbers are an indication of the fact that our field is thriving. On the other hand, they mean that our colleagues of the Local Organising Committee and of the International Programme Committee have had to work very hard in order to prepare the promising programme that we now have in our hands, and to ensure that as many colleagues as possible can be here in person. These preparations started and were in great part made at a time when no one could be certain that it would be possible for us to get together. In the name of all those present here, I would like to warmly thank the colleagues who have served on these committees for their perseverance under such uncertain circumstances. Since historians of East Asian science, technology, and medicine last met in Jeonju, in 2019, the world has become a different place. The Covid-19 pandemic has prevented us from meeting in person for more than two years. A side effect of the war in Ukraine is that flights between Europe, where we are today, and East Asia, our common subject of research, can no longer follow the most

direct route. This is, sadly, a fitting metaphor for the situation in which we find ourselves today: international communication, travel and exchanges are more difficult than they were four years ago, and this situation is likely to persist for some time. In this context, it is our duty, as well as our desire, to maintain and further develop such exchanges in our field of research. Holding the 16<sup>th</sup> ICHSEA in Frankfurt is a major contribution to this. In this respect, as well as in view of the quality of academic contributions, this conference is an important milestone in the history of our research field. Let us all enjoy this wonderful opportunity to meet and exchange ideas!



Professor Dr. Michael Lackner

Chair International Program Committee

It is my great pleasure to address a greeting to the 16th International Conference on the History of Science in East Asia (16th ICHSEA). I had the honor of chairing the program committee. This had the great advantage of allowing me to get an overview of all the panels and individual events. Indeed, the range of topics covered is enormous, and one has the impression that it is growing each time. With the host of this year's conference, Prof. Iwo Amelung, I have been doing research on scholarly exchange between China and the West for many years, on which two volumes have also been published by Brill. I am therefore pleased that the 2023 conference will address the topic of exchange in a variety of ways: Not only in terms of the panels “Knowledge Transfer between Europe and Ming-Qing China (Science and Technology)”, but also in panels such as “Astral Sciences in Context Jesuit, Mongol, and Ryukyu” or “Multilingualism and dictionaries”, furthermore also “Silk road technology exchange”, “Early modern



mapping of East Asia”, “Transnational Flows of scientific knowledge between Japan, Asia, Europe, and North America”, not to forget also the various panels on the role of Japan in scientific exchange. The history of the exchange is also problematized, among others in panels such as “Misunderstanding and innovation: Circulation of Scientific and Technological Knowledge between East and West before the early 20th Century”. For several years I also worked on the Jesuit mission in China, so I am particularly pleased with panels like the one on Ferdinand Verbiest as an astronomer and astrologer. From 2009 to 2023, I had the honor of leading an international consortium entitled "Fate, Freedom, and Prognostication. Coping with the Future in East Asia and Europe" at the University of Erlangen-Nuremberg, which hosted over 200 international scholars and resulted in numerous publications and videos. At our center, research into the relationship between divination and medicine has always played an important role, and I see that the topic of medicine and, more broadly, healing will also come up in numerous panels at this conference. In 2016, the theme "Coping with the Future" gave rise to the International Society for the Critical Study of Divination, which publishes the International Journal for Divination and Prognostication, published by Brill. All attendees of this conference who are interested in this topic are welcome to submit articles to the journal or even participate as guest editors. We also gladly accept applications for membership in the Society. Collaboration with Prof. Dagmar Schäfer of the Max Planck Institute for the History of Science in Berlin and much other research has shown that the divinatory techniques Marc Kalinowski has called the "sciences of traditional China" are indeed part of the history of science and thus of the history of knowledge, for the disciplines of the history of science have long left behind

the battle cry "superstition". Given the wide range of topics covered at this conference, it is unfortunately impossible to address them all. The conference does justice to all eras, pre-modern, modern as well as contemporary. It covers all areas of East Asia and does justice to the various tensions between science, politics and society. I would like to thank the host, the organizing team, and all the participants.

I wish you every success!



Professor Dr. Iwo Amelung

Head of Local Organising Committee

Dear participants of the 16th ICHSEA,  
On behalf of the organizing committee, I extend a warm welcome to all of you to Frankfurt am Main and express our heartfelt gratitude for joining us. My first encounter with this conference series dates back to 1999 in Singapore, and since then, I have attended nearly every gathering. The ICHSEA conferences hold a special place in my heart as they provide a unique opportunity to connect with distinguished colleagues and cherished friends, learn about crucial subjects, and foster a relaxed and friendly atmosphere that permeates each event. The last time the conference was hosted in Germany was in 2005, in Munich, under the guidance of Prof. Paul Unschuld. I am delighted that he will be gracing us with his presence once again, delivering the keynote lecture on Wednesday in Heidelberg. Organizing such a large conference is not easy, and this time, it proved even more challenging due to the lingering impact of the Covid-19 pandemic when our preparations began. As a result, we encountered a series of administrative hurdles such as extended deadlines etc., for

which I sincerely apologize. However, driven by the belief that nothing can replace face-to-face interactions, we persevered, knowing that Goethe-University provides an ideal setting to facilitate such exchanges and propel research on the history of science, technology, and medicine in East Asia. The theme of this year's conference, "Crises and Entanglements: Science, Technology, and Medicine in East Asia," mirrors the current global situation. It is important to recognize that, in some cases, science, technology, and medicine have contributed to the crises our world faces today. Yet, they also represent international endeavors built upon networks and entanglements that hold tremendous potential. Tracing the origins of these entanglements back into the past, we firmly believe they can help alleviate or even overcome the crises of our present age. I want to extend my heartfelt gratitude to the members of the organizing committee for their tireless efforts. I am especially grateful to Prof. Joachim Kurtz and his team, who organized the keynote and the reception at Heidelberg University. Additionally, I am deeply thankful to our partners worldwide, who served on various committees, making this conference possible. Of course, my sincerest appreciation goes to each one of you, dear participants. Your presence here in Frankfurt enriches this gathering, and I hope you will have a peaceful and fruitful experience throughout the conference.

Warm regards

## Conference Theme

### Crises and Entanglements Science, Technology and Medicine in East Asia

The multiple crises besetting the contemporary world call for decisive interventions by historical research, including studies on the history of East Asian science, technology, and medicine. "Whiggish" ideas about the history of science have long been discarded and phantasies about an "end of history" have been laid to rest. Instead, recent studies have highlighted the entangled nature of the histories of science, technology, and medicine; identified the diverse actors involved in their production and circulation; and explored the multiple scales in which epistemic practices need to be situated. While opening up exciting and fruitful vistas, even these new approaches have rarely tried to expand our field to include a framework that systematically acknowledges the existence and persistence of crises that seem to threaten humanity's survival.

Problems that may be addressed through such a framework begin with questioning to what extent science and technology have contributed to bringing about or intensifying such crises and extend to hopes and expectations that science, technology, and medicine may help to overcome them. No less important is the question of the role of entanglements in times of crises: how resilient is scientific and technological cooperation and how reliable are networks through which knowledge is generated and preserved?

If crises are conceptualized as being accompanied by major disruptions of social life, the question of how science, technology, and medicine operate under

such conditions becomes a crucial problem. In fact, geographical, temporal, disciplinary, and intellectual entanglements have often played important roles in mitigating or overcoming crises. In this effort, maintaining cooperation and contact among scientific communities, probing historical precedents, and "thinking and acting outside the box" have been of great importance. Even if these responses within scientific communities could not solve crises by themselves, they were often able to suggest or pave the ways out of them. This conference encourages contributions related to this theme and aims to identify new approaches in the history of science, technology and medicine in East Asia that do justice to the challenges of our age.

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Yuzhen GUAN (Shanghai Jiao Tong University, Shanghai)

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Aya HOMEI (University of Manchester)

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Alica Selker  
John Droß

## Keynote & Plenary Speakers



### **Modes of Thinking and the History of Chinese Science: The Case of Jesuit Logic in Seventeenth-Century China**

Professor. Pingyi Chu PhD (Institute of History and Philology, Academia Sinica)

The lack of logical reasoning was often cited as a reason for China's failure to develop modern science in the early 20th century. However, by the end of the century, some scholars had begun to argue for the superiority of Chinese ways of thinking, particularly its use of analogical reasoning. This puzzling phenomenon led me to wonder what role modes of thinking have played in the history of Chinese science.

This lecture addresses this question by examining the transmission of Aristotelian logic by the Jesuits in the 17th century. I will discuss the role that logic played in the missionaries' discursive strategy, as well as how they engaged in debates with Chinese literati using logical arguments. Although the logic that was

transmitted to China at the time was incomplete, it was still able to support the Christian worldview, which the Jesuits used to dissuade Confucianism, Buddhism, Daoism, and popular beliefs. Moreover, Aristotelian logic led some Chinese converts to change their worldview, believing in the European concept of "truth" (真理) and emphasizing the importance of investigation of things (格物). It is difficult to estimate how far this would lead to the development of science, however.

Investigating the cultural exchanges between Europe and China in the 17th century will allow us to see that both logical and analogical thinking are not inherent to any specific culture. When engaging in debates, people can easily learn and decipher the thinking patterns of the other side. Perhaps, the interest in the modes of thinking that have played a role in the development of science reflects more on our cultural biases than on the actual history of science.



Asia and Africa: e.g., the prevailing strength of traditional production techniques in India and the continued predominance of established transportation networks in Côte d'Ivoire.

### **Histories of Material Culture or Global History of Technology**

Professor Dr. Mikael Hård (Technical University of Darmstadt)

In recent years, global perspectives have come to play an increasingly important role in history writing. This observation also holds true for the history of science, technology, and medicine. Unfortunately, the global history of technology in the modern era is still often written within a globalization framework, where technology transfer, universal diffusion, and local appropriation are central concepts. I argue that one of the main reasons for the continuous strength of this paradigm is the common association of technology with high-tech gadgets, abstract knowledge, and advanced systems. If we, instead, were to define “technology” as “material culture,” we would be more prone to include low-tech solutions, manual skills, and everyday usage. To paraphrase Benjamin Elman, it would be easier to treat each period and culture On Their Own Terms and not as derivatives of other societies. In the speech, I support this line of argumentation by presenting a couple of case studies from



the content of the Ben cao gang mu, explain the ingenious structure of its data presentation, and touch on some of the problems of its philological translation. Finally, the Ben cao gang mu reveals the deep divide that exists between the diversity of historical Chinese medicine and the one-dimensionality of so-called TCM.

**“The Ben cao gang mu — A 16th Century Review of Two Millennia of Knowledge Dynamics: Li Shizhen’s Approach to Data Management”**

Professor Dr. Dr. Paul U. Unschuld  
(Institute of Chinese Life Sciences, Charité Berlin)

In 1593, the Ben cao gang mu was printed, the most comprehensive encyclopedia of natural knowledge and substance-based health care published on the Eurasian continent at that time. With its title it joined the long line of materia medica texts compiled in China since antiquity. The first complete and annotated English version available now opens a window not only to what Li Shizhen (1518–1593) considered the essence of knowledge accumulated over time about the therapeutic potential of plants, animals, and minerals as well as man-made substances. The Ben cao gang mu also offers innumerable opportunities of research on the history of knowledge dynamics and data management in botany, chemistry, and zoology. Also, the encyclopedia includes a wealth of data on related non-medical cultural facets, completing the picture of pre-modern Chinese civilisation. This talk will address



### **Human Rights, Biological Citizenship, and Reproductive Policy in Japan's Leprosy Sanitaria**

Professor. Susan L. Burns PhD (The University of Chicago)

In 1936, Mitsuda Kensuke, the Director of Nagashima Aiseien, Japan's first national sanitarium, published an article in the sanitarium's house journal, *Aisei*. Entitled "Twenty Years of Vasectomy," it offered an assessment of the use of vasectomy on leprosy patients, a procedure Mitsuda had pioneered two decades before. The tone of the piece is celebratory: the first patients to receive the procedure were, in Mitsuda's words, "now men of 40 or 50, in middle-age, and the fact that they are even now healthy and active shows that [vasectomy] is the secret key to allowing the world's leprosy patients of both sexes to live together and flourish together." This rosy picture of the use of sterilization in the sanitarium stands in sharp contrast to the assessment offered in recent scholarly work and public discourse on Japan's leprosy policy, in which no issue looms larger than the claim that male patients were routinely, coercively, and unnecessarily sterilized, while women who became pregnant were forced to undergo abortions, sometimes in the final months of their pregnancies. The Japanese historian Fujino Yutaka, whose work made Japan's leprosy prevention policy a political issue in the 1990s, likened the use of vasectomy in the sanitarium to the Nazi use of sterilization upon those deemed "unfit," and

he made it a powerful symbol of the Japanese fascist state, as he characterizes the prewar government. In this presentation, I will explore the reproductive policies deployed within the sanitarium. The critical reading of patient "testimony" brings into sharper focus the divergent position of patients in relation to the policies such as abortion and sterilization. While contemporary human rights discourse has framed these issues solely in terms of the prewar state's concern for eugenics and racial purity, some patients at the time understood sanitarium policies very differently. Concerns about their own health as well as their biological responsibility towards their families and possible offspring prompted them to view sterilization and abortion as acts of reproductive choice.



## Program

**August 21<sup>st</sup>**

**8:00 – 9:00**

REGISTRATION AT CAMPUS  
WESTEND CASINO

**I: 9:00 – 10:40**

OPENING CEREMONY AND PLENARY  
LECTURE CHU PINGYI

COFFEE BREAK

**II: 11:10 – 12:50**

### **P14: Knowledge Transfer between Europe and Ming-Qing China – Technology**

The decades surrounding the Ming-Qing transition in China were a time of remarkable advances in the mutual exchange of knowledge between China and Europe including its expanding overseas interest spheres. Much of the transfer processes in the fields of early modern science and technology were brought forward by a cooperation between Jesuit missionaries and their Chinese cooperation partners. In this panel we want to present and discuss newest research findings based on the in-depth study of Chinese and European texts shaping these often - but not always - translation-based processes and focus on the field of Technology.

#### Presenters:

Dr. Jin Cao  
Salzburg University, Salzburg

Qijin Han  
Department of Chinese Studies, Institute of  
Asian and Oriental Studies, University of  
Tübingen, Tübingen

Sabine Kink  
University of Tübingen, Department of  
Chinese Studies, Tübingen

Jonas Schmid  
Heidelberg University, Heidelberg

Professor. Dr. Angela Schottenhammer  
KU Leuven, Leuven

Professor Chengsheng Sun PhD.  
Chinese Academy of Sciences, Institute for  
the History of Natural Sciences, Beijing

Professor. Baichun Zhang PhD, Professor.  
Miao Tian PhD  
Institute for the History of Natural Sciences,  
Chinese Academy of Sciences, Beijing

Dr. Cheng Zheng  
Institute for the History of Natural Sciences,  
Chinese Academy of Sciences, Beijing

### **IP33: Issues in Public Health**

#### Chair:

Professor Meifang Zhang  
Institute for Cultural Heritage and History  
of Science & Technology, University of  
Science and Technology Beijing, Beijing

#### Presenters:

Jean Tzu-Yin Chou  
University of Glasgow, School of Social  
and Political Science, University of  
Glasgow, Glasgow

Mirela V David PhD  
University of Saskatchewan, Saskatoon

Yexin Liu  
The Institute for the History of Natural  
Sciences, Chinese Academy of Sciences,  
Beijing

### **P11: Military Crisis and Early Modern Entanglement**

This panel probes patterns of material and  
knowledge production in times of military  
crises. In particular, it emphasizes how

military conflicts in the early modern period shaped the ways in which East Asian actors (re)organized military knowledge and technology by drawing on various epistemic resources from home and abroad, including texts, images, and personal connections. By investigating the complex entanglements between these actors and resources under wartime pressure, we present new research that analyzes the particularities of military science and technology in early modern East Asia. Ranging from 11th-century gunpowder recipes to 19th-century steam engines, our papers argue that military crises accelerated the circulation and codification of knowledge while generating new tensions between different knowledge systems. Moreover, military crises encouraged not only the adoption of new technologies, but also a renaissance of preexisting texts, objects, and knowledge traditions.

Focusing on the 11th century, Sinvany examines the *Collected Essentials of Military Classics* (Wujing zongyao)—a military treatise which grew out of conflicts with the Xia, political reforms at the Song Court, and the craft knowledge of gunpowder makers. Shifting our attention to 17th-century Korea, Lee finds that the technology of war wagons became central to military discourse. As a response to the Ming-Qing wars, Koreans both revisited old wagons mounted with firearms and adopted new, foreign designs from China. Fong and Kang present connected cases from the period of the 19th-century Opium Wars. Fong investigates the gun casting activities of Gong Zhenlin (1796-1861), a county magistrate in Zhejiang, to trace the formation of a coastal literati network focused on the production of cannons and warships in response to the maritime crisis triggered by the First Opium War. Finally, Kang shows how the resulting new knowledge from China moved into Seoul's military shops, where artisans and technical

officers used scaled drawings and descriptions to successfully remake globally circulating modern technologies, such as naval mines and steam engines.

Chair:

Dr. Barend Noordam  
Autonomous University of Barcelona,  
Barcelona

Presenters:

Sau-yi Fong PhD  
Columbia University, New York

Hyeok Hweon Kang PhD  
Washington University in St. Louis, St.  
Louis

Jay Jung Lee  
Seoul National University, Seoul

Benjamin Avichai Katz Sinvany  
Columbia University, New York

**P15: Materialities of Animal Drugs in Comparative Perspectives between China and Europe**

In recent years, animal substances have become a popular topic in historical research, not only because they shed new light on the studies of the animal itself, but also of its relations to human beings, the natural and social worlds. This panel will explore certain animal drugs in both historical and comparative perspectives. By the examples of Cordyceps, donkey-hide gelatin and human placenta from China and Europe, the four papers will discuss their productions, preparations and applications, as well as the historical and cultural contexts in which they were situated.

To begin with, Siran Liang will provide an ethnographic survey of *Ophiocordyceps sinensis* as drug, gift and commodity in modern Tibet. Dongchong xiacao (lit. winter-worm and summer-grass), the Chinese name of this medicinal

caterpillar fungus, precisely indicates its ambiguous position in the taxonomy of natural knowledge. Based on her fieldworks in Tibet, Liang will discuss the commercial trades and medical enterprises of this product, and its role in the daily life of the ethnic groups.

The second paper by Shih-Hsun Liu will turn to a donkey-based medicine. By examining the texts of materia medica, Liu found that the raw materials of ejiao, a donkey-hide gelatin, had changed throughout the ages. Furthermore, the well water for making ejiao in a specific location was also highlighted in the later times. In addition to the transition of medicinal knowledge, these changes also mark an increasing emphasis on “authenticity” of drugs in the late imperial period.

The second half of this panel will be focused on human body parts as drugs in comparative cultural perspective. Hsiu-Fen Chen will introduce how the placenta was used as food, drug and alchemical elixir since mediaeval China. Likewise, Bettina Wahrig will present how medical substances made from the placenta were widely used in obstetrics and gynecology in Europe from the middle-ages. At a glance, the medicinal uses and burial rituals of the placenta look strikingly similar between these two continents in history. No less comparable was the symbolic power of the placenta endowed by alchemy and folk belief. However, their differences should not be overlooked, either, especially in the respect of preparing techniques and moral concerns they involve. By comparing the placenta in premodern China with its European counterpart, these two papers will hopefully bring better conversations between animal history, medicinal history, human body and material cultures.

Presenters:

Professor Hsiu-Fen Chen PhD.  
National Chengchi University, Taipei

Siran Liang  
Institute of Geosystems and Bioindication,  
Braunschweig

Shihhsun Liu PhD  
National Palace Museum, Taipei

Professor. D. Bettina R. Wahrig  
Department History of Science and  
Pharmacy, University of Technology,  
Braunschweig

**P32: History of Water Resources,  
History of Oceanography and  
Maritime Trade Studies**

The study of the history of water conservancy and oceanography is one of the important elements of the study of the history of science and technology. Water conservancy is the foundation of society development. Different historical periods have played different roles in the development process of human society. The management of estuaries is one of the most important elements of human control flood, which involves not only hydraulic engineering but also marine engineering and maritime trade. This panel is dedicated to exploring the development of hydrological science and marine technology since modern times, while focusing on the relationship between technological development and maritime trade. China has a long history of control flood, but in contrast, marine research started late. The rise of maritime trade led to a gradual rise in estuarine and marine studies. The close and intrinsic link between water conservancy, ocean and trade is the focus of this panel. Experts and scholars from different research fields are welcome to join together for interdisciplinary exchanges to explore the interaction between science & technology and world trade in a broader perspective.

Presenters:

Haijing Li PhD  
Zhejiang University of Water Resource and  
Electric Power, Hangzhou

Junbao Huang PhD  
Zhejiang Institute of Hydraulic & Estuary,  
Hangzhou

Zhihui Zhang PhD  
Institute for the History of Natural Sciences,  
Chinese Academy of Sciences, Beijing

### **IP30: Scientific exchanges in the modern period**

#### Chair:

Kanamaya Koji  
Kyushu University, Fukuoka

#### Presenters:

Yichen Tong PhD  
University of Chinese Academy of Sciences,  
Beijing

Ziyi Ye  
University of Chinese Academy of Sciences,  
Beijing

Professor Xingbo Luo PhD  
University of Chinese Academy of Sciences,  
Beijing

Lixuan Zheng  
Department of History of Science,  
Technology and Medicine at Peking  
University, Beijing

Professor Li Zhang PhD  
Department of History of Science,  
Technology and Medicine at Peking  
University, Beijing

Yoshimi Takuwa PhD  
Tokyo Institute of Technology, Tokyo

Shingo Hashimoto PhD  
Ferris University, Yokohama, Japan

### **IP13: Mathematical Traditions of East Asia (I)**

#### Chair:

Miao Tian PhD  
Institute for the History of Natural Sciences,  
Chinese Academy of Sciences, Beijing

#### Presenters:

Professor Zelin Xu PhD  
Institute of History, College of Humanities,  
Donghua University, Shanghai

Xintong Yang  
Department of the History of Science,  
Tsinghua University, Beijing

Professor Youjun Wang PhD  
Department of Philosophy, Shanghai  
Normal University, Shanghai

### **P62: Circulation of Scientific and Technological Knowledge between East and West before the early 20th century**

Since the late 20th century, the history of scientific and technological exchanges between China and the West remains one of the most popular topics among historians. Recently some authors examined the problems of transmission and translation of knowledge. The questions under consideration included: How the knowledge and skills of one civilization were transmitted to another? How a text written in one language was translated into another language that did not have equivalent technological and scientific terms? Did these translations contain certain mistakes caused by misunderstanding of scientific and/or technical terms? When answering these and related questions, one should take into account the complex nature of the scientific and technological knowledge itself that may have been transmitted not only through texts but also through

illustrations, objects, and, in particular, tools. One can also ask whether the misunderstanding was always a negative factor or in some cases it had a positive impact on the development and transmission of scientific and technological knowledge?

This panel gathers scholars interested in the circulation of scientific and technological knowledge between East and West and, in particular, in the cases when misunderstandings eventually led to unexpected negative results as well as to discoveries and innovations. The papers submitted to the panel focus on the cases of translation and misunderstanding in various domains including mathematics, astronomy, agriculture, metallurgy and pharmacopeia. Their authors try to understand how the scientific knowledge and technological expertise contained in written texts, as well as related images and tools, were translated, understood and appropriated, or, on the contrary, misunderstood and misused of the representatives of another culture; a special attention will be paid to the cases when the “mistranslation” or “misunderstanding” led to a creation of new ideas or invention of a new technological solutions

Chair:

Professor Chuan-hui Mau PhD  
Institute of History, Institute of History,  
NTHU, Hsinchu

Presenters:

Professor. Alain Arrault PhD  
Ecole française d'Extrême-Orient, Paris

Professor Eric Szczurek □  
Independent researcher, Paris

Professor Dimitri Bayuk PhD  
Observatory of Paris/SPHERE laboratory,  
Paris

Professor Dr. Hao Chang  
I-Shou University, Kaohsiung

Huichih Chuang PhD  
The Republic of China National Committee  
for Division of History of Science of the  
International Union of History and  
Philosophy of Science, Taipei

Yi-ting Lai  
Institute of History, National Tsing Hua  
University, Hsinchu

Tzu-Jung Lily Wang  
Institute of History, National Tsing Hua  
University, Hsinchu

Wei Ting Yang  
Institute of History, National Tsing Hua  
University, Hsinchu

Professor Alexei Volkov PhD  
National Tsing Hua University, Hsinchu

Shu-Wei Hsu  
Institute of Social Research and Cultural  
Studies, National Yang-Ming Chiao-Tung  
University, Hsinchu

Professor Jia-Ming Ying PhD  
National Tsing Hua University, Hsinchu

Discussant:

Hsien-ch'un Wang

## **P29: New Research on the Development of Ancient Materials in China**

Significant progress has been made in recent decades in the field of ancient material studies in China, revealing considerable evidence for understanding the crucial role of material science and technology in the making of ancient Chinese Civilization. One big challenge for the exploring of material science/technology in history is the lack of writing records. Even in the historical period, details about the know-hows and practices were rarely documented. In recent decades, the collaborations between

archaeologists and scientists have provided alternative approach to solving this problem. This approach takes the material remains as a source of information. The rich information hidden in the material remains is deciphered via scientific examination, and thereby contributes a new understanding of the development of material science and technology in ancient times. The proposed panel aims to highlight some aspects in the studies of ancient materials in China, with a focus on the application of a multidisciplinary approach for the study of ancient materials and its contribution to understanding general history of ancient societies. This panel will also offer an opportunity to promote more collaborations between historians, archaeologists and scientists. Contributors to this panel are mainly from universities, research institutes and museums in China, who will cover a broad range of topics in the field of material science and technology in ancient China. Topics of confirmed papers are listed here include metallurgy (iron and brass), porcelain, glass, silk and lacquer

Presenters:

Professor Kunlong Chen PhD  
University of Science of Technology  
Beijing, Beijing

Professor Jianfeng Cui PhD, Hongyan Xiao  
Peking University, Beijing  
Dong Wang, Professor Rui Wen PhD  
Northwest University, Xi'an

Professor Yang Zhou Master  
China Silk Museum, Hangzhou

Professor Shuya Wei PhD, Dr Yingchun Fu  
PhD  
University of Science and Technology  
Beijing, Beijing

Professor Junming Wu PhD, Yuexia Sang  
PhD, Rixin Shan, Professor Naizhang  
Zheng PhD, Chao Lei, Professor Jianming  
Zheng PhD

Jingdezhen Ceramic University, Jingdezhen,  
China and Fudan University, Shanghai

Professor Yong Lei PhD, Ming Guan PhD  
The Palace Museum, Beijing

Professor Ding Ma PhD, Yu Guo PhD  
Peking University, Beijing

Professor Xiangjun Wei PhD  
Shanghai Synchrotron Radiation Facility,  
Shanghai

**IP8: Epistemic Genre as Conceptual  
Tool in Chinese Medical History in  
Honour of the Memory of Charlotte  
Furth (1934 – 2022) (I)**

In the early 2000s, the historian of early-modern European medicine, Gianna Pomata, proposed using “epistemic genre” to differentiate genres authors used for new knowledge from literary and didactic ones. Pomata first applied epistemic genre as a conceptual tool for the narrative genres *historia*, *observationes*, *recipes*, *medical cases*, and the *commentary* in Europe and examined their connections to *empiricism*, *erudition*, *scientific observation*, *norm-making*, and *recording practice*. The distinction “epistemic genre” remains useful as a conceptual tool for asking new questions about the history of medicine in China.

This panel builds upon this foundation by expanding upon well-studied genre terms (*jing 經*, *yan 醫案*, *fang 方*, *keben 課本*) used to organize medical knowledge as bases for new historical insights and by evaluating less understood terms (i.e., *jue 訣*, *tuxing 圖形*) used to record medical experience. Three panelists examine unstudied terms used to organize medical knowledge. Hanson will discuss how the ancient term *jue* (訣) referring to techniques (“Tricks”) as well as genre

(“Tricks of the Trade”), was newly applied not just to oral rhymes (gejue 歌訣, koujue 口訣) but also bodily palm mnemonics (zhangjue 掌訣) in seventh-century ritual healing practices. Chen will compare ninth-century travel medical treatises by Islamic physicians, such as Qusta ibn Luqa and al-Razi, with related Chinese writings that also recorded travel medicine along the Silk Road. Du will examine how one late-Ming physician applied tuxing (Image-Form) for epistemic, didactic and predictive ends in his new synthesis of clinical experience titled Orthodoxy of External Medicine (Waike zhengzong 外科正宗, 1619).

Three panelists offer fresh perspectives on well-studied genres in medicine. Goldschmidt will explore the tensions between medical canons and clinical experience through twelfth-century medical case records. Prankweiser applies computational reconstruction methods to two databases of Chinese medical texts to recover the epistemic role of formulas as vehicles of knowledge transmission before the strict standardization of modern TCM. Gao picks up the theme of modern-day standardization through a detailed study of the Ming source text (Neijing zhiyao 內經知要) used for the basic-theory textbooks that created TCM (traditional Chinese medicine) in Maoist China.

Chair:

Professor. Volker Scheid PhD  
Max Planck Institute for the History of Science, Berlin

Presenters:

Professor Marta Hanson PhD  
Independent Scholar, Minneapolis, Affiliate MPIWG, Berlin

Wei Chen PhD

The Institute for the History of Natural Sciences, Chinese Academy of Sciences, Beijing

Professor Asaf Goldschmidt PhD  
Tel Aviv University, Tel Aviv

**P21: The Cross-Action between Astral Science, Medicine and Divination in East Asia**

In various ancient civilizations the correspondence between the whole world (macrocosm) and the human body which is regarded as a ‘little world’ (microcosm) provides a framework for the cross-action between the astral science and medicine. The astral science including the cyclic calendars of the tropic year, the lunar month and longer or less obvious periodicities, and the astrological methods are used for diagnosis, prognosis, interpretation and cure of diseases and for the selection and administration of medicine. The celestial and human knowledge were not only incorporated in the category named as the terminology of “divination (数术)” in a broad meaning in the Han dynasty of China, but interplayed with each other in a narrow method compared with the rational/scientific ways which we always named as ‘divination’ in almost the whole ancient times in China and other east Asian countries and areas. The interrelation between the parts of the universe enabled man to discern and to manipulate the effects of the celestial bodies and their symbolic delegations in different materials and forms. Besides the time of conception or birth, the appropriate time and locations for choosing the ingredients, administering and taking the medicines were concerned and conducted by man. Sometimes, a religious ritual or offerings to a stellar god constituted parts of the treatment.

The symposium contains papers focused on the stellar influence on earthly human and the correlation between different

realms of creation in east Asia at both learned and popular levels. We will extend the Eastern 'iatromathematics' which combines the astrology and medicine into astrology and divination in mainstream medical texts and doctors, diseases and treatments in astral and religious materials. We will explore the ingredients such as the different time-types, methods and degrees related with how the celestial bodies and circumstances, and the symbolic and spiritual substances influenced an individual over his or her health, longevity and fate.

This symposium will offer diverse images about the relationship between the human body and spirit with their outer and inner world, inspire more perspectives to look over the systematic rationality of the ancient Eastern Asian cultures, and open up the subject to further research.

Chair:

Professor Weixin Niu PhD  
University of Science and Technology of China, Hefei

Presenters:

Jeffrey Kotyk PhD  
University of Bologna, Ravenna

Professor Shenmi Song PhD  
Shanghai University of Chinese Traditional Medicine, Shanghai

Professor Man Gu PhD  
Institute of History of Medicine & Medical Literature, China Academy of Chinese Medical Sciences, Beijing

Professor Feng Du PhD  
Institution and Chinese language and Text Studies, Southwest University, Chongqing

**P43: Historicizing the “Miracle”: How to Explain the Development of Science, Technology, and Medicine in Modern Korea (with authors of “Science and Civilization in Korea” series)**

This panel is aiming to introduce some of recent academic achievements in the history of science and technology in modern Korea. Since the publication of Joseph Needham's monumental work, *Science and Civilisation in China*, historians of science have shown with various studies that non-Western civilizations also developed science in their own ways and made remarkable achievements. Still, there remains a question unresolved: how to appreciate the contribution of a nation or country within each civilization? In other words, how could the new historiography avoid being a simple endorsement of the regional hegemonies of big countries?

Presenters of this panel would suggest that Korea (specifically South Korea) might provide a clue to whose questions, by introducing their works, being parts of the “Science and Civilization in Korea (SCK)” series. The SCK project was launched in 2010, and resulted in a 30-volume series in 2022. The authors shared the common agenda of explaining how “Korean science, technology, and medicine” could survive, and even prosper at some point, with its own identity, throughout the long history. Specifically, modern (South) Korea shows a remarkable example of the rapid development of science, technology, and medicine. Rather than reiterating the cliché of “the economic miracle,” this panel would share insights from historical research, to enhance deeper understanding of the history of science in Korea, and eventually that of East Asia.



Presenters:

Professor Kyonghee Han PhD  
Yonsei University, Seoul

Professor Tae-Ho Kim PhD  
Jeonbuk National University, Jeonju

Professor Eunkyong Lee PhD  
Jeonbuk National University, Jeonju

LUNCH

**II: 14:10 – 15:50**

**P14: Knowledge Transfer between Europe and Ming-Qing China – Technology (continued)**

**P56: Resilience during Crises in East Asia**

The panel ‘Resilience during Crises in East Asia’ brings together researchers based in China and the UK, in discussing and addressing some novel research questions on histories and policies related to health in East Asia. While the focus of these five papers is on studying China and Japan, they contribute towards expanding the knowledge base in the East Asian region individually as stand-alone papers as well as the overall panel. The papers in this panel discuss drug abuse (Yun Huang), transformation of acupuncture (Liang Wan), TB epidemic (Arnab Chakraborty), medical exchanges (Yun Xia), and epidemiological data (Lu Chen) – this panel is interdisciplinary, cross-national, and brings together historians of health who are working on multifaceted areas. The speakers line up will be as explained (starting with Huang, and ending with Chen) here, to maintain the chronology of the papers. The panel will be chaired by Professor Yong-an Zhang, Dean of the College of Liberal Arts, Shanghai University.

As part of this panel, the papers will all try to address the key question, that is how the region of East Asia faced at times unique and for some other cases well-known public health crises that affected diverse countries. The papers also address how these countries eventually combated and overcame these crises on an individual and as a together as a region. The study to understand how the East Asian region combated these distinct crises, presents unique case studies. This panel, overall, aims to examine different contexts related to public health crises in the region and via this research, to communicate with researchers working in this region on various disciplines. Thus, broadly speaking this panel aims to disentangle the distinctive histories of entanglements and crises in the East Asian region.

Chair:

Professor Yong-an Zhang  
Shanghai University, Shanghai

Presenters:

Arnab Chakraborty PhD  
Shanghai University, Shanghai

Yun Huang PhD  
Shanghai University, Shanghai

Professor Yun Xia PhD  
Shanghai University, Shanghai

Liang Wan PhD  
University of Exeter, Exeter

Lu Chen PhD  
University of Exeter, Exeter

**P41: The Body in Crisis: Power, Resistance, and Human Engineering in East Asia**

The human body—a profoundly vulnerable but boundlessly mutable subject—lies at the heart of responses to the persistent threats to human survival in the modern-era posed by

escalating environmental change and inadequate human response. Interrogations into the capacity of human bodies to endure and alter in the face of crises have driven the production of scientific knowledge and medical technologies aimed at maintaining the body against threats to its integrity and optimizing bodies to adjust to altered environments and manufactured ideals. Meanwhile, this very transformative potential that the human body demonstrates for (re)creation and de(con)struction has paradoxically made it a central site for state engineering and counter-hegemonic resistance alike. Across East Asia, twentieth-century dislocations rendered bodies vulnerable to intervention while also creating subjects attuned to the resistant possibilities of transformation. In this way, Asian modernity is defined by bodies in flux. By charting the expansion of modern epistemes and technologies for bodily alteration and modification across East Asia, this international and trans-disciplinary panel addresses the historical roots of and ongoing tensions between imperialist and anti-imperialist techniques of bodily alteration and modification. Inga Kim Diederich addresses the politicization of bodily resources by examining blood collection as an instrument of military-authoritarian control and anti-authoritarian organizing during South Korea's 1980s democratization movement. Thomas Chan analyzes chemically altered bodies as sites of social anxiety by historicizing campaigns to eradicate drug use in post-Civil War China. Eunice Lee examines material embodiments and subject creation post-Hiroshima and Nagasaki in radiation dosimetry and the metaphorical digestion of irradiation. Crystal Uchino centers on the counter-memories of Japanese American hibakusha to interrogate burdens placed on transpacific migrant bodies seeking care as they come up against statist rememberings of the atomic bomb. Sujin Lee considers the

engineering of future bodies through reproductive regulation by appraising the expansion of forced abortions and sterilizations under Japan's post-war Eugenic Protection Law. By articulating physical alteration as a means of political action, social reform, and cultural consolidation through an innovative format of joint discussion and presentation, this panel proposes to problematize the body as a static object of knowledge production with stable boundaries and instead reconsider bodies as fluid and dynamic sites central to negotiating the regulatory regimes and resistant formations that have shaped Asian modernity.

Presenters:

Professor Inga K Diederich PhD  
Colby College, Waterville

Crystal K Uchino PhD  
Doshisha University, Kyoto

Sujin Lee PhD  
University of Victoria, Victoria

Thomas Chan PhD  
University of California, San Diego

Sang Eun Eunice Lee PhD  
Indiana University Bloomington

**P40: (Re)Conceptualizing the Body  
Multiple in East Asian Medicines**

Today the plurality of East Asian medicines across both diachronic and synchronic dimensions constitutes a shared foundation for future research in our field. Yet, conceptualising this plurality without being drawn back into the categories of a modernist discourse from which descriptions of that plurality aimed to chart a route of escape remains difficult. Conceptions of the body in East Asian medicines are but one important example. Although a number of such bodies have been described in the literature, the

fundamental opposition between traditional/East Asian bodies of process attached to cosmological thinking and modern/western bodies of structure established by way of anatomy seems difficult to shake off. As problematic, though hardly commented upon, is the attendant difficulty of thinking beyond the one/many dichotomy established by the same modernist discourse. If East Asian medicine did not merely conjure up one body, then what are the limits to such productive speculation? How and why do different bodies hang together in practice? How are contesting views reconciled with each other, or not?

Description of late Ming medicine as a labyrinth in which physicians got lost in the maze they constructed for themselves by creating many competing versions of the body is but one instance where these dilemmas become clearly visible. It was a moment during which the plurality of bodies exceeded easy alignment with either the classics, each other, or, indeed, historians' schemes of classification, and, as such, also a moment that invokes an often unconscious judgement between the 'healthy' correspondence between a cosmological body reflecting the organisation of the society from which it stemmed and the multiple bodies that had lost this coherence because traditional society itself was decaying.

In the panel we employ Annemarie Mol's conception of the body multiple, purposefully conceived to think beyond this one/many dichotomy, to find new ways about conceptualising plurality in East Asian medicines. Moving beyond the description of different bodies and the logics that animate them, we explore how these bodies were articulated with each other in the course of different practices, those of writing as much as those of treating patients. We are therefore interested not only in the drivers of innovation but also in

its limits in as much as any new understanding had to somehow made to work with what still existed.

#### Presenters:

SJ Zanolini  
Johns Hopkins University, Baltimore

Leslie de Vries PhD  
University of Kent, Canterbury

Nalini Kirk  
Charité Universitätsmedizin, Berlin

James Flowers PhD  
Kyung Hee University, Seoul

Professor. Yi-Li Wu PhD  
University of Michigan, Ann Arbor

Professor. Volker Scheid PhD  
Max Planck Institute for the History of Science, Berlin

#### **P64: Ferdinand Verbiest (南懷仁 Nan Huairen), impact of Western knowledge as a framework for observing, understanding and predicting the Chinese Heaven**

Ferdinand Verbiest (南懷仁 Nan Huairen, 1623-1688) was the most influential missionary to China in the early Qing Dynasty. As the de facto head of the Astronomical Bureau during the first half of the Kangxi reign and the emperor's science teacher since the end of the calendar case in 1669, he brought European knowledge of astronomy, mathematics, geography, and natural divination to the court and made a corresponding impact. Convergence, acceptance and repetition, Verbiest's work shows us a moving picture of the collision and mingling of Eastern and Western knowledge and culture in the Qing court. The year 2023 marks the 400th anniversary of Verbiest's birth. On this occasion, we will organize a symposium to exchange and

discuss the work of Verbiest in the Astronomical Bureau that is not well known, such as the geocentric armillary sphere, planisphere, eclipses tables and astronomical divination. It is hoped that this symposium will provide new ideas and perspectives for the study of Verbiest and the cultural exchange between the East and the West in the 17th century and that the subtle relationship between the two cultures during their meeting at that time will be experienced in more detail.

Chair:

Dr. Nicole Halsberge  
Verbiest Project, Catholic University of Leuven, Leuven

Presenters:

Nan Zhang PhD  
University of Science and Technology of China, Hefei

Professor Yunli Shi PhD  
University of Science and Technology of China, Hefei

Yejing Ge  
University of Science and Technology of China, Hefei

Professor Christopher Cullen PhD  
Needham Research Institute and Darwin College, Cambridge, United Kingdom. CCJ (CNRS), Paris

**IP31: Scientific exchanges and transnational images**

Chair:

Juyoung Lee  
Johns Hopkins University, Baltimore

Presenters:

Professor Li Zhang PhD  
Co-author Yu Lei

Department of History of Science, Technology and Medicine, Peking University, Beijing

Yinzhen Zhu  
University of Science and Technology of China, Hefei

Professor Weimin Xiong PhD  
University of Science and Technology Beijing, Beijing

Mr. Harald Gropp  
Universitaet Heidelberg, Heidelberg

**IP14: Mathematical Traditions of East Asia (II)**

Chair:

Andrea Bréard

Presenters:

Prof. Donald B. Wagner PhD  
Nordic Institute of Asian Studies, University of Copenhagen, Copenhagen  
Department of Archaeology, Sichuan University, Chengdu,

Yasufumi Takemasa  
The University of Tokyo, Tokyo

**P62: Circulation of Scientific and Technological Knowledge between East and West before the early 20th century (continued)**

**P29: New Research on the Development of Ancient Materials in China (continued)**

**IP9: Epistemic Genre as Conceptual Tool in Chinese Medical History in Honour of the Memory of Charlotte Furth (1934 – 2022) (II)**

In the early 2000s, the historian of early-modern European medicine, Gianna Pomata, proposed using “epistemic genre” to differentiate genres authors used for new

knowledge from literary and didactic ones. Pomata first applied epistemic genre as a conceptual tool for the narrative genres *historia*, *observationes*, *recipes*, *medical cases*, and the *commentary* in Europe and examined their connections to *empiricism*, *erudition*, *scientific observation*, *norm-making*, and *recording practice*. The distinction “epistemic genre” remains useful as a conceptual tool for asking new questions about the history of medicine in China.

This panel builds upon this foundation by expanding upon well-studied genre terms (*jing* 經, *yian* 醫案, *fang* 方, *keben* 課本) used to organize medical knowledge as bases for new historical insights and by evaluating less understood terms (i.e., *jue* 訣, *tuxing* 圖形) used to record medical experience. Three panelists examine unstudied terms used to organize medical knowledge. Hanson will discuss how the ancient term *jue* (訣) referring to techniques (“Tricks”) as well as genre (“Tricks of the Trade”), was newly applied not just to oral rhymes (*gejue* 歌訣, *koujue* 口訣) but also bodily palm mnemonics (*zhangjue* 掌訣) in seventh-century ritual healing practices. Chen will compare ninth-century travel medical treatises by Islamic physicians, such as Qusta ibn Luqa and al-Razi, with related Chinese writings that also recorded travel medicine along the Silk Road. Du will examine how one late-Ming physician applied *tuxing* (Image-Form) for epistemic, didactic and predictive ends in his new synthesis of clinical experience titled *Orthodoxy of External Medicine* (*Waike zhengzong* 外科正宗, 1619).

Three panelists offer fresh perspectives on well-studied genres in medicine. Goldschmidt will explore the tensions between medical canons and clinical experience through twelfth-century medical case records. Prankweiser applies

computational reconstruction methods to two databases of Chinese medical texts to recover the epistemic role of formulas as vehicles of knowledge transmission before the strict standardization of modern TCM. Gao picks up the theme of modern-day standardization through a detailed study of the Ming source text (*Neijing zhiyao* 內經知要) used for the basic-theory textbooks that created TCM (traditional Chinese medicine) in Maoist China.

Chair:

Jean Corbi

Presenters:

Joachim Prackwieser PhD  
Nanyang Technological University,  
Singapore

Shanshan Gao  
Department of Chinese and History, City  
University of Hong Kong, Hong Kong

Ruixuan Du PhD  
Max Planck Institute for the History of  
Science, Berlin

**P47: Transnational Flows of Scientific Knowledge Between Japan, Asia, Europe, and North America**

From the mid-19th century, Japan dispatched a mass of students and intellectuals to Europe and North America and made them learn Western science, technology, and medicine to achieve industrialization and modernization. While the Japanese Empire expanded its territories to the Asian continent from the end of the century, Japanese politicians and intellectuals became confident about the superiority of Japan to other “underdeveloped” Asian countries and justified the expansion of the Japanese Empire. From the early 20th century, Japanese universities and colleges admitted international students from Asia, and

Japanese instructors taught them Western science. After the end of World War II, the American corps started governing the Japanese territories and formulated a new science policy to disseminate American science, technology, and medicine—in the field of medicine, for example, Japanese doctors used to study German medicine, but they turned their attention to American medicine after 1945. The following decades witnessed the rapid growth of Japan's economy, and Japanese scientists and industrialists restarted their advancement to Asia. This time their destinations included Africa, the Middle East, and Latin America where many Japanese specialists worked under the name of international cooperation in developing countries.

Throughout the 20th century, Japan constantly maintained the transnational communication of scientific knowledge and information with Asia, Europe, and North America. In our panel, we will demonstrate diverse transnational flows in the fields of science, technology, and medicine, spanning from the interaction between Japanese and Indian mathematicians in the 1910s to the post-WWII expansion of Japanese sericulture to the Global South during the Cold War. Fujimoto will spotlight the overseas study of Asian women at Japanese medical schools, such as Tokyo Women's Medical School. Cioffo will illuminate the interaction between Japanese and Indian mathematics scholars at Tohoku Imperial University. Daimaru will trace the international careers of military doctors, who experienced the Russo-Japanese War and took up positions in colonial Taiwan and Korea. Meade will focus on the translation series of Western science books in the early 20th century and point out the political implications of the editors. Nakao will analyze the post-war cooperation in the autopsy program between Japanese scientists at Nagasaki University and American counterparts of

the Atomic Bomb Casualty Commission. Onaga will demonstrate the dissemination of Japanese sericulture to Southeast Asia, South Asia, and Africa during the rapid growth of Japanese overseas development assistance in the 1960–1970s.

Presenters:

Hiro Fujimoto PhD  
Kyoto University, Kyoto

Francesco P Cioffo  
University of Turin, Turin

Ken Daimaru PhD  
Université Paris Cité, Paris, France.  
CRCAO, Paris,

Ruselle Meade PhD  
Cardiff University, Cardiff

Professor Maika Nakao PhD  
Hiroshima University, Hiroshima

Lisa Onaga PhD  
Max Planck Institute for the History of  
Science, Berlin

**P39: Gender and Science, Technology and Medicine in Modern China**

The Feminist history of science and technology is a critical approach for historiography. It reveals complex interactions between science, technology and gender in history, addressing to politics of science and technology. Since 1990s, some scholars in gender study focused on imperial Chinese science and technology, they produced remarkable outcomes. The modern history of China anchors on institutionalizations of science and technology. In the era, science, technology and medicine deeply engages with gender on dimensions of concepts, institutions, material practices. In recent years, more and more Chinese researchers begin to analyze Chinese modern history of science, technology and medicine from the feminist perspective. The panel primarily is

comprised by researchers from Chinese universities and institutes, it offers a platform for communication in the field. The studies in the panel revolve around key phenomena of controlling women's body in Chinese history. These include histories of birth control, breast feeding campaigns, technologies for reproduction, "iron girls" in Chinese industrial revolution, and "weight loss" aesthetics in contemporary China, etc. Ideologies involved in those movements spanned from national campaigns for race-evolution to commodification of female bodies. The panel offers rich stories on the modern history and contemporary culture of gender in China. Consequently the panel explores the other side of history of science and technology, embedded in women's everyday life.

Presenters:

Xinyu Zhang PhD

Institute for Cultural Heritage and History of Science & Technology, University of Science and Technology Beijing, Beijing

Miao Wu PhD

Institute for the History of Natural Sciences, CAS, Beijing

Yaohua Wang PhD

Institute of Chinese Medical Literature and Culture, Shandong University of Traditional Chinese Medicine, Jinan

Professor Meifang Zhang PhD

Institute for Cultural Heritage and History of Science & Technology, University of Science and Technology Beijing, Beijing

Li-yuan Yue PhD

Institute of Cultural Heritage and History of Science & Technology, University of Science and Technology Beijing, Beijing

Xi Yang PhD

Institute for Cultural Heritage and History of Science & Technology, University of Science and Technology Beijing, Beijing

COFFEE BREAK

**IV: 16:10 – 17:50**

**P14: Knowledge Transfer between Europe and Ming-Qing China – Technology (continued)**

**P56: Resilience during Crises in East Asia (continued)**

**P9: The New Encounter of Science, East and West: Japan's Case of Relaunching Academic Exchange with the Soviet Union in the 1950s**

Academic exchange between the former Soviet Union and the Western Bloc countries can provide a suggestive case study for understanding scientists' efforts in finding opportunities for intellectual development even amid political difficulties. Overlooking academic exchange from the post-World War II period reveals that both the conditions of rapprochement and estrangement were repeated. The late 1930s was the winter period of the academic exchange. A tendency of scientific "chauvinism" dominated in the Soviet academicism, excluding the influence of Western sciences. During and immediately after the World War II, Soviet scientists restored, although temporarily, a normal academic exchange with their Western colleagues by using the channel with the Allies. However, strained relationship appeared soon in the foreground with the beginning of the Cold War. When Trofim Lysenko dominated Soviet biology in August 1948, scientific cooperation with the Soviet Union was at stake in the West. However, Lysenkoism began to be overcome from 1953 both by the self-purification effect of science and

international connection of scientists. Each time the partnership with the Soviet was entangled in a critical situation, scientists attempted to improve the situation.

This panel focuses on the issue of how Japanese scientific communities relaunched the academic relationship with the Soviet Union, which had been prevented by Japan's isolation during the war and by Soviet's hardline in the Cold War. By the beginning of the 1950s, Japan had been incorporated in the Western Bloc however, it continued to have a poor academic environment owing to the defeat in the war. As a part of academic reconstruction, Japanese scientists, including established ones, were eager to approach the Soviet academia to create an exchange scheme of scientific persona between two countries. Simultaneously, Japan aimed to increase its scientific presence in East Asia, utilizing the newly-formed partnership with the Soviet Union.

Based on the common issue mentioned above, in this panel the diplomatic efforts aimed at restarting the academic exchange will be traced, the requirements from Japanese/Soviet scientists occurring as the result of this effort will be explained, the assessments provided by Japanese scientists to the newly accepted scientific knowledge from the Soviet will be analyzed, and specific cases of mutual intellectual influence between two countries will be introduced.

Presenters:

Professor Hirofumi Saito PhD  
Kyushu Institute of Technology, Fukuoka

Koji Kanayama PhD  
Kyushu University, Fukuoka

Professor. Hiroshi Ichikawa PhD  
Hiroshima University, Higashi-Hiroshima City

**P40: (Re)Conceptualizing the Body Multiple in East Asian Medicines (continued)**

**P64: Ferdinand Verbiest (南懷仁 Nan Huairen), impact of Western knowledge as a framework for observing, understanding and predicting the Chinese Heaven (continued)**

**IP32: The emergence of modern scientific disciplines**

Chair:

Hirofumi Saito

Presenters:

Chao Liu PhD  
Inner Mongolia Normal University, Hohhot

Professor Zhiguo Chen PhD  
South China Agricultural University, Guangzhou

Shouchen Li  
University of Science and Technology of China, Hefei

**IP34: Calendrical sciences and Astronomy**

Chair:

Professor Fuling Nie PhD  
Inner Mongolia Normal University, Hohhot

Presenters:

Prof. Christopher Cullen PhD  
Needham Research Institute and Darwin College, Cambridge  
CCJ (CNRS), Paris

Professor Niankai Liu PhD  
Tsinghua University, Beijing

Professor Uganda Kwan PhD



Nanyang Technological University,  
Singapore

**P62: Circulation of Scientific and Technological Knowledge between East and West before the early 20th century (continued)**

**P29: New Research on the Development of Ancient Materials in China (continued)**

**IP10: Science, Medicine and Natural Philosophy in Late Imperial China**

Chair:

Professor Dr. Iwo Amelung  
Goethe-University Frankfurt am Main,  
Frankfurt

Presenters:

Hailin Zhu PhD  
Guangdong Medical University, Dongguan  
  
Xinyu Zheng  
Heidelberg Centre for Transcultural Studies,  
Heidelberg

**P47: Transnational Flows of Scientific Knowledge Between Japan, Asia, Europe, and North America (continued)**

**P39: Gender and Science, Technology and Medicine in Modern China (continued)**

**18:10 – 20:00**

WELCOME RECEPTION

**August 22<sup>nd</sup>**

**I: 9:00 – 10:40**

**P13: Knowledge Transfer between Europe and Ming-Qing China – Science**

The decades surrounding the Ming-Qing transition in China were a time of remarkable advances in the mutual exchange of knowledge between China and Europe including its expanding overseas interest spheres. Much of the transfer processes in the fields of early modern science and technology were brought forward by a cooperation between Jesuit missionaries and their Chinese cooperation partners. In this panel we want to present and discuss newest research findings based on the in-depth study of Chinese and European texts shaping these often - but not always - translation-based processes and focus on the field of science.

Chair:

Professor Baichun Zhang PhD  
Department of History of Science,  
Technology and Medicine at Peking  
University, Beijing

Presenters:

Dr. Alexander Jost  
Salzburg University, Salzburg

Professor Shang Zhicong PhD  
University of Chinese Academy of Sciences,  
Beijing

Professor Thierry Meynard PhD  
Sun Yat-sen University, Guangzhou

Professor Dr. Dominic Sachsenmaier PhD  
Göttingen University, Göttingen

Professor Wenbin Zheng □, Professor Yunli Shi PhD

University of Science and Technology of  
China, Hefei

Xu Gong PhD

University of Science and Technology of  
China, Hefei

Professor Qi Han PhD

Zhejiang University, Hangzhou

Anna K Strob

University of Tübingen, Tübingen

Xinyu Chen PhD

Beijing Administrative College, Beijing

### **P8: Postwar Networks of Knowledge, Material, and Marketplace within and beyond East Asia**

This panel reexamines East Asia's postwar science, technology, and medicine through the lens of business, commercialization, and material. The transnational history of science, technology, and medicine in postwar East Asia often centers around academic exchanges or technological cooperation for economic development. Scholars have focused on the geopolitics of those exchanges in connection to nation-building and Cold War diplomacy. Instead, presentations in this panel draw attention to networks of individuals or corporations to highlight the circulation of commodities and subtle expertise.

The presentations collectively showcase moments of exchanges, spanning several geographical regions around the globe, from East Asia to Southeast Asia, the Pacifics, North America, and Europe. Juyoung Lee traces the transnational network of contract engineers in planning Taiwan's and South Korea's fertilizer plants during the 1950s to show the tensions embedded in East Asia's infrastructures. Shinyi Hsieh explores the circulation of knowledge and animal specimen in postwar East and Southeast Asia by tracing the fieldwork of U.S. Naval Medical Research

Unit Two. Hyungsub Choi examines the relationship between the East-West Center in Hawai'i and the Korea Institute of Science and Technology in Seoul in making the "Korea Development Model." Tsai-Ying Lu illustrates how Taiwan's wind power industry strategy shifted over time by analyzing the (attempted) localization of Taiwan's wind turbine manufacturing in the 1960s. Dongwon Jo connects the expansion of the videogame market to the rise of the semiconductor industry in East Asia during the 1970s-80s, shedding light on the role of reverse-engineering in the unauthorized copy market. By doing so, this panel aims to complicate the discourse of transnational movement by asking how social, intellectual, human, and financial capital shaped and reshaped various networks of postwar East Asia.

#### Chair:

Aya Homei PhD

School of Arts, Languages and Cultures,  
University of Manchester, Manchester.  
Graduate School of Core Ethics and  
Frontier Sciences and Institute of Ars  
Vivendi, Ritsumeikan University, Kyoto

#### Presenters:

Juyoung Lee

Johns Hopkins University, Baltimore

Professor Hyungsub Choi PhD

Seoul National University of Science and  
Technology, Seoul

Tsaiying Lu

Maastricht University, Maastricht

Shinyi Hsieh

University of California, San Francisco,  
San Francisco

### **P36: Astronomical Observations and Records in Ancient East Asia**

There were a lot of astronomical observations and records in ancient East

Asia, which remained in different kinds of historical materials. Among these observations and records, different astronomical knowledge could be identified, such as star catalogues and maps, astronomical instruments, etc. Using these historical materials, many significant issues in the history of astronomy in ancient East Asia can be explored. Especially on the basis of some newly discovered materials or new research methods, some important questions, which were difficult to solve for previous scholars or ignored by them, now become possible to be answered. For example, a newly discovered incomplete star catalogue kept in an early Ming astrological book *Datong tongzhan* 大統通占 reveals a large-scale star observation at that time, which is not recorded in the official history or other historical materials. Moreover, through combining different observational materials together and discussing them in the original context, more interesting aspects behind the practice of astronomical observation have been explored in recent relevant works. Therefore, this panel will focus on this kind of new improvements in the astronomical observations and records in ancient East Asia.

Chair:

Professor Xiaochun Sun  
University of Chinese Academy of Sciences,  
Beijing

Presenters:

Boshun Yang PhD, Professor Longfei Chu  
PhD  
University of Science and Technology of  
China, Hefei

Professor Liping Ma PhD, Professor Ciyuan  
Liu PhD  
National Time Service Center, CAS, Xi'an

Professor. Hong-Jin Yang PhD

Professor Yong-Bok Lee PhD  
Korea Astronomy and Space Science  
Institute, Daejeon, and Soham Institute for  
History of Astronomy

Tengyue Xiong PhD  
University of Science and Technology of  
China, Hefei

Professor Guangchao Wang PhD  
University of Chinese Academy of Sciences,  
Beijing

Hyojun Lee PhD  
Professor Hong-Jin Yang PhD  
Yonsei University, Seoul and Korea  
Astronomy and Space Science Institute,  
Daejeon

Fan Yang PhD  
Beijing Planetarium, Beijing

Professor Sang-Hyeon Ahn PhD  
Korea Astronomy and Space Science  
Institute, Daejeon

**P57: Studies on the Knowledge  
System and Cultural Function of  
Chinese Abacus**

It is a long tradition of Chinese mathematics to use computing tools for computations. The most distinctive tools in ancient China are suanchou (counting rods) and suanpan (abacus) . Relying on these two tools, Chinese traditional mathematics has formed two computing systems: chousuan (calculation with suanchou) and zhusuan (calculation with suan pan), which not only occupied an important position in the history of Chinese mathematics, but also had great influence on mathematics of other East Asian countries, and even laid the foundation for the development of mathematics in some countries. The word zhusuan first appeared in Xu Yue's *Shu shu jiyi* (Records of Mathematical Procedures) in the third century AD, but its meaning was different from that of the later suanpan,

which referred to the use of beads for calculation. At least since the 10th century, suanpan and zhusuan have become an important part of Chinese mathematics. After several centuries of development, the suanpan completely replaced suanchou in Chinese mathematics in the 16th century and since then had been a major computing tool until it was replaced by electronic computing tools in the 1980s.

A knowledge system of zhusuan, including its calculation rules, methods, principles and operating procedures, were established. Suanpan had not only become the main computing tool of mathematicians and astronomers, but also was popularized to whole Chinese society. Almost every person with computing needs, such as officials, managers, businessmen, technicians, common people etc., mastered the technique of using suanpan. The zhusuan completely meets the computing needs of national and local administration, economic and commercial activities, engineering programs, weights and measures, music, astronomy, calendar and other fields, as well as the daily economic activities of individual family. "Zhusuan is considered by Chinese people as a cultural symbol of their identity as well as a practical tool." (UNESCO)

The present panel will research the culture and knowledge system of zhusuan, including its algorithms, pithy formulas, operation techniques, and the relationship between zhusuan and chousuan. The introduction, acceptance and algorithm improvement of zhusuan in Japan in the 17th century and the investigation and cognition of zhusuan by Russian scholars in the 19th century will be other topics of the panel. The establishment of the new zhusuan education system in China at the beginning of the 20th century, including the proposal of new educational concepts, the compilation of new textbooks and the

proposal of new teaching methods is also studied.

#### Presenters:

Professor Shirong Guo PhD  
Institute for the History of Science and Technology, Inner Mongolia Normal University, Hohhot

Professor Zelin Xu PhD  
Institute of History, College of Humanities, Donghua University, Shanghai

Professor, Dr. Lisheng Feng PhD

Lili Bao PhD  
Institute for the History of Science and Technology, Inner Mongolia Normal University, Hohhot, China and Institute for History of Science and Technology & Ancient Texts, Tsinghua University, Beijing

### **P59: The History of Disease Prevention and Control in Contemporary China**

This proposed panel presents novel research on health construction in the People's Republic of China. The authority had given health construction a significant place under the political goal of building a moderately prosperous society. Previous research focuses on the history of barefoot doctors, patriotic public health campaign, or integrated Chinese and Western medicine issues, attempting to explore the interactive relation between politics and medicine, answering why and how the People's Republic of China established the national health system. This traditional discourse provides a significant perspective on the research of the history of medicine in China, while the four papers in this panel make efforts to unentangle the intricate relations between technology and disease by examining the prevalence of four diseases in the People's Republic of China. We take sex/sexuality into our narratives, discussing

the application of Pap smear technology, and the prevalence of “treatment was driven by examination” among female workers. We also recognize the achievement in the prevention and control of infectious diseases in China. Digging into the historical research of the 1958 Measles Epidemic, the National Hepatitis B Immunization Program, and the Self-run Sanatorium, this panel explores the transition of ways of knowing and ways of working in disease prevention and treatment in China under the general historical, socio-cultural and political context.

Chair:

Professor Daqing Zhang PhD  
The School of Medical Humanities, Peking University, Beijing

Presenters:

Cong Wang  
School of Medical Humanities, Peking University, Beijing

Haiting Jiang PhD  
Peking University, Beijing

Yanan Jin  
School of Medical Humanities, Peking University, Beijing

Jiqi Zheng  
School of Medical Humanities, Peking University, Beijing

Discussants:

Jongsik Christian Yi PhD  
Pohang University of Science and Technology, Pohang

Wenpei Tang

**P6: Vernacular Healing: Productive Entanglements between Practical Knowledge and Chinese Medicine, ca.1500-1980 A Panel in Honor of the Memory of Nathan Sivin (1931-2022)**

Foremost historian of Chinese science, medicine, and religion, Nathan Sivin, asserted that the vernacular realm—as distinct from the folk or literati/official realms—is the largest but least studied, and most poorly understood sphere of Chinese medicine. This panel brings together scholars of different ranks from four countries and regions to explore the dynamism of this realm and its complex “entanglements”—one of the key themes of this conference—with elite medicine, scientific biomedicine, and hospital-based protocols. Participants focus on contrasting elite and commoner understandings of the life force, literati and lay uses of medicinal recipes, biomedical and colloquial meanings of disease, and the application of modern pharmacological methods to the study of Traditional East Asian medicine (TEAM). The presenters work across centuries on a range of texts—entertainment literature, mundane formularies, and daily-use compendia—and on diverse sites of medical practice and medical knowledge dissemination—from the home to the streetside bookstall to the laboratory. Together they question how vernacular texts guided laymen in medical practice and how vernacular medical practices could be reconciled with the scientific method.

Andrew Schonebaum contrasts the sympathetic logic used in late imperial popular texts on nourishing life with elite conceptions of the animating life force. Ying Zhang traces the new bodily and social autonomy that arose through the shift from the literati-generated to the home-based circulation of recipes in the Qing dynasty. Joan Judge examines the uneasy mapping of

the biomedical disease entity, cholera, onto the ancient disease concept, “sudden turmoil” in early-twentieth-century vernacular practices of naming, preventing, and treating illness. Sean Hsiang-lin Lei questions how and why an acclaimed representative of medical modernity in Taiwan used “experimental therapeutics” to assert the value of (TEAM).

The panel honors Nathan Sivin’s commitment to studying Chinese medicine within broader socio-intellectual traditions. It will have two discussants, Joachim Kurtz and Marta Hanson, who will address the papers from the perspectives of the history of knowledge and the history of medicine respectively. The session also adheres to Sivin’s project of examining the *longue durée* of Chinese history. It generates questions that extend from the relevance of ancient disease concepts to modern epidemic challenges, and from the enduring use of long-standing practice-based herbal cures to the awarding of the Nobel Prize in Medicine for the discovery of artemisinin in 2015.

Chair:

Professor Joachim Kurtz  
Universität Heidelberg, Heidelberg

Presenters:

Professor Sean Hsiang-lin Lei PhD  
Institute of Modern History, Academia  
Sinica, Taipei

Professor Ying Zhang PhD  
Hunan University, Yuelu Academy,  
Changsha

Discussant:

Professor Marta Hanson PhD  
Independent Scholar, Minneapolis, Affiliate  
MPIWG, Berlin

## **P54: Articulating Agricultural Knowledge in Premodern China and Korea**

Historians of science have tended to study premodern East Asian agricultural knowledge from the vantage point of contemporary agronomy. There are however two salient problems with this retrospective approach. (1) The study of agricultural issues is often circumscribed by the bounds of modern disciplines. Thus, the art of weather prognostication (*Agøy*) is often seen as a failed, indigenous attempt at meteorology, while connection between soil fertilization methods and medicinal theories (Huesemann) is marginalized due to our current divisions between agriculture and medicine. (2) One tends to internalize the axiology of our Science, privileging learned men and their observation and reasoning. It disregards the reality that, in traditional East Asia, institutionalized forms of knowledge evolved in diverse epistemic cultures that did not explicitly pursue knowledge per se, but nonetheless governed what counted as knowledge and had greater or lesser value. Thus, political polemics of the court (Xu), administrative reports of the bureaucracy (Lee), local gazetteers (*Agøy*), and farming manuals (Huesemann) all employed distinct methods to validate, classify, control and dismiss knowledge. They embodied systematics of knowledge in which diverse forms of farming knowledge were articulated.

This panel examines how agricultural knowledge in East Asia has evolved in a variety of forms and sociopolitical circumstances. It discusses how the “peasantly” practice of working the soil have been theorized and typologized into knowledge categories, which occasionally resemble our Scientific disciplines, but more often diverge dramatically in their boundaries, teleologies, and structure from Science as a way of

knowing. Through the prism of agricultural knowledge, the panel reflects on the knowledge cultures of the pre-modern East Asian world.

Presenters:

Dr. Joerg Henning Huesemann  
Leipzig University, Leipzig

Kyonghee Lee PhD  
Max Planck Institute for the History of  
Science, Berlin

Erling Agoey PhD  
Needham Research Institute, Cambridge

Chun Xu PhD  
Max Planck Institute for the History of  
Science, Berlin

**P49: History and Data:  
Mathematical Archaeology & Digital  
Humanities**

As a concentrated embodiment of the new round of knowledge production mode transformation, digital humanity emphasizes the combination of digital technology and humanistic research. After the development of more than ten years, digital humanities research in China has made rich achievements in many fields, especially in the field of library and information science and technology of information management.

In recent years, the study of digital humanities in history has attracted more and more attention of many scholars. The history of science is a branch of history. How to do digital humanities research on the history of science?

There are mainly two kinds of big data in the humanities field: one is to digitize the objects in the humanities field, and the other is to generate text, images, multimedia data, etc. through the use of digital technology. The historical data mainly belongs to the former, which is derived from ancient books. After the rise of

archaeology in the 20th century, the scope of historical materials expanded to the cultural relics and the relics, and even materials of artifacts.

The data of the digital humanities of history mainly depends on ancient books and images. On the basis of continuous expansion of the scope, historical data can be extended to the ruins and the relics. The core of mathematical archaeology is to extract the data in the archaeological report to restore or discover the structure of them through mathematical modeling. To some extent, all historical and archaeological studies based on data structure and mathematical modeling can generally be classified into the category of mathematical archaeology.

In the panel of "History and Data: Mathematical Archaeology & Digital Humanities ", we plan to invite several scholars to introduce their new research achievements on digital humanities and mathematical archaeology, including the astronomical structure of the ruins, the digital protection of rock art, and the visualization research of land survey maps. The purpose of this group is to try to attract scholars' attention to the hidden data in history, explore a new method based on data, use data analysis and mathematical models to study history, and form a new research model of the history of science.

Chair:

Professor Dagmar Schäfer  
Max Planck-Institute for the History of  
Science, Berlin

Presenters:

Qingbo Duan  
Yiwen Chen  
Institute for Advanced Study in History of  
Science, Northwest University

Qun Che PhD  
Shanghai Jiaotong University, Shanghai

Jie Yin  
Shuang Wu  
Kaiyue Zhang  
Tao Wang  
Nanjing University, Nanjing

Discussants:

Quan Tang  
Peng Hu  
Northwest University, Xi'an

**P27: A Look Beyond Scientific Metropolis: Keijō Imperial University as a Transnational Node**

The dichotomy of metropole and periphery is still present in the historiography of Japanese imperial universities and science despite the recent transnational turn in history of science. Even though imperial universities in colonial Taiwan or Korea have gained attention from East Asian historians, their focus has remained on those academic institutions' knowledge production for colonial purposes and their complicity or competition with the colonial governments. This panel collectively decentralizes the historiography by focusing on the role of Keijō Imperial University in transnational knowledge production during the imperial period and beyond. Bernhard Leitner examines how Keijō became the transnational node connecting Viennese and Japanese brain scientists and how such Keijō-centered circulation carved colonial legacies into neuroanatomy and psychiatry. Robert Winstanley-Chesters shows that 'metropole' geographer Tada Fumio at Tokyo Imperial University heavily relied on Keijō's research activities in Manchurian and Mengjiang to conduct fieldwork in those regions. Jiyoung Park charts the transnational demographic network across the Japanese empire and the United States by examining Keijō demographer Mizushima Haruo's research on the Korean

and Japanese-settler populations. Finally, John P. DiMoia attends to the 'postwar' role of Keijō Imperial University in developing a scientific discipline in South Korea and re-establishing the transnational scientific network between Japan and South Korea with a focus on the fields of public health and parasitology. Bringing together diverse transnational scientific projects mediated by Keijō Imperial University, this panel provides opportunities to shed light on the importance of it as a transnational node across borders between metropole and colony, East and West, and the prewar and postwar.

Chair:

Jaehwan Hyun PhD  
Pusan National University, Busan

Presenters:

Professor Jiyoung Park PhD  
Inje University College of Medicine, Busan

Professor John P DiMoia PhD  
Seoul National University, Seoul

Dr Robert Winstanley-Chesters PhD  
University of Edinburgh, Edinburgh,  
United Kingdom. University of Leeds,  
Leeds

Discussant:

Arnaud Nanta

**P44: Science and Civilization in Korea: Socio-Cultural Changes in State-Centered Technology in the Late Joseon**

For thousands of years, Korean civilization, which has a clear self-identification, has recently given the world a prominent economic, political, and cultural radiance. We saw that the foundation of Korean civilization was based on a well-organized social and political system, the foundation of the material economy, and the scientific



thinking style following intellectual accumulation. And the recent achievement was shown by the publication of the Science and Civilization in Korea series (SCK, 30 volumes, August 2022). Among them we focused on three topics to discuss with, like Joseon's defense technology, Joseon's foresight, and Joseon's knowledge systemization method. The characteristics were highlighted through changes and differences by period and comparisons with other cultures.

Firstly, in the “Development of Defense Technology and Social Change in the Late Joseon Period” Roh Young-koo contends that after Japanese Invasion of Korea in 1592, Japan's rifle technology and China's various artillery manufacturing techniques were introduced to Joseon. Meanwhile, fiscal reform was carried out to secure defense expenses, and the implementation of the ‘Daedong Act’ was representative. In short, this was due to a change in the defense system in the 17th century. Secondly, “The expansion of calendar circulation and the spread of fortune-telling culture in the late Joseon period” Kwonsoo PARK introduces that since the 18th century, the distribution of calendar increased explosively in Joseon Korea. The Joseon government made every effort adjusting the price of calendars with additional supply, and reorganizing the calendar production system of Bureau of Astronomy (觀象監). The expansion of calendar circulation and spread of fortune-telling culture in the late Joseon period are interestingly described in this part. Thirdly, in the “The Encyclopedia of Joseon and the Daily Technology of ‘Imwon Geongjeji (林園經濟志)- Records of Managing Rural Life’”. Jeon Jongwook summarizes ‘Imwon Geongjeji’ in the first half of the 19th century, it is very unique in that it pursued organic integration with 16 fields of knowledge as one living knowledge.

Moreover, this book integrates both enriching material life and cultivating one's great mind into one.

Through this, we examine the changes in the state-centered technology of national security, the penetration of knowledge in the lives of all classes of society, and the methods and patterns of knowledge systemization by era. In addition, it will be possible to grasp the dynamic changes in Korean civilization and interactions with the world that took place during the Joseon Dynasty.

Chair:

Professor Pingyi Chu PhD  
Institute of History and Philology,  
Academia Sinica, Taipei

Presenters:

Professor Jongwook Jeon PhD  
Jeonbuk National University, Jeonju

Youngkoo Roh PhD  
Professor Kwonsoo Park PhD  
Chungbuk National University, Cheongju

**P37: Exploring alternative frameworks for the historiography of astronomy in premodern Asia**

If the theme of crisis is somewhat alien to the history of astronomy in premodern China, it is probably because historiographers have tended to present that history as a succession of great men, discoveries, and reforms weaving unfazed through the rise and fall of dynasties. It might also be because that history was driven by an unending series of crises, or was at least presented that way to the throne to secure resources or support for some particular course of action. The last century has seen every element of these traditional narratives questioned, and rather than continue in that vein, the goal of this panel is to explore alternative frameworks

through which we might fruitfully recast the history of astronomy in East Asia. What other binding forces between men, ideas, and practices may have shaped that history beyond politics and Confucian ideology? How might both the process and contents of reforms have evolved as a result of changes in social, bureaucratic, material, or philosophical foundations? If individual men, works, and ideas indeed mark the principal inflection points in this history, might there be a more meaningful way to divide them up than by dynasties and reforms?

The first two papers examine the negotiation between different astronomical traditions in early and medieval China. While LÜ and SUN focus on the gradual unification of astrological traditions following the political unity of early imperial China, MORGAN, using digital humanities, challenges the conventional view of what defines the difference among distinct expert communities in the Period of Disunion. The following two papers bring to the fore the practice of astronomy as record keeping. GUO discusses cases where “records” of solar eclipses were in fact inserted retrospectively by later astronomers using backward calculation. YANG, on the other hand, emphasizes astronomy as a science of archive and the efforts of Yuan astronomers to keep astronomical records for future generations in time of crisis. The last two papers engage with the modern period, when practitioners of traditional astronomy in China and Japan coped with the challenge of European astronomy. CHANG explores the family strategies of Qing court astronomers in the face of the technical and administrative changes following the court’s adoption of European astronomy. HAYEK examines Buddhist monks, a group that is not conventionally considered authority of calendars, showing how commentaries on calendar annotations became an arena for

claiming authority over producing and studying calendars.

Presenters:

Qiao Yang PhD

Max Planck Institute for the History of Science, Berlin

Professor Chuanyi Lü PhD

Mengting Sun

Hubei Academy of Social Sciences, Wuhan, China and University of Chinese Academy of Science, Beijing

Daniel Morgan PhD

Centre national de la recherche scientifique, Paris

Jinsong Guo PhD

Peking University, Beijing

Matthias Hayek PhD

Centre national de la recherche scientifique, Paris

Ping-Ying Chang PhD

National Taiwan Normal University, Taipei

**P34: Environmental History and Climate Change in Asia: Examination of Historical Records on Weather, Climate Crisis and Analysis of Historical Entanglement**

This is a continuation from Session 1.

There are variety of historical record, that we try to apply them in order to reconstruct past environment. As methodology, we need to examine instrumentalization (quantification) of climatic data and the institutionalization of meteorological research.

First speaker of the second panel, Masumi Zaiki will give general picture of Climate reconstruction of climate in Japan. Instrumental observation started in Japan early 19th century, on that basis, Zaiki reconstructed climate of the past. She

established standard West Japan temperature series, to demonstrate climate change.

Robert-Jan Wille focuses on infrastructure of meteorology in 1896-1914. He analyses such technique of the mapping of the global upper atmosphere by weather balloon and kite. He situates such aerology research campaign within the framework of the European rivalry between Germany and French, also with the Dutch overseas scientific activities, hence, scientific infrastructure for meteorology is viewed in terms of scientific colonialism, that he claimed it as a part of “trans-imperial infrastructure”.

Kiichiro Maeda will present his recent discoveries of meteorological record, mostly quantified data by meteorological instruments, in late Edo to early Meiji Japan. Partly they are products of modernization project, along with infrastructure building of state. Quality description of weather records were also found in different diaries, he tries to convert them into comparative weather date for present standard. Some of those are evidences of the expansion to Japan as nation state, and notable proof of environmental changes.

Andreas Weber gives us the case study of scientific networking in the Dutch East Indies. He will show how colonial scientists and administrators organized research activities, with special focus on study of weather.

Atsushi Ota will point out one important aspect of social history that climate affected. He discusses varying amount of rainfall that might have caused flood, and may have effected epidemics.

Togo Tsukahara discusses a project of meteorological data analysis on ship log of the Dutch Navy. He discovered more than 10000 ship log kept at NA in the Hague, he and his colleague now work on them. Thanks to the advancement of digital technology, it can be dealt with as a big-data

on sea, it would be useful. Some historical voyage can also be traced, and ship log can tell us details of steam ships built by the Dutch and gifted to Japan in the end of Edo period.

#### Chair:

Professor Jun Matsumoto PhD  
Tokyo Metropolitan University, Hachioji  
JAMSTEC, Yokosuka

#### Presenters:

Robert-Jan B. Wille PhD  
Utrecht University, Utrecht

Andreas Weber PhD  
University of Twente, Enschede

Professor Togo Tsukahara PhD  
Kobe University, Kobe

Atsushi Ota PhD  
Keio University, Tokyo

Masumi Zaiki PhD  
Takehiko Mikami PhD  
Seikei University, Tokyo, Japan and Tokyo  
Metropolitan University, Tokyo

Kiichiro Maeda  
Ryuichiro Iwanishi  
Momoka Takada  
Yui Yamana  
Professor Hisayuki Kubota PhD  
University of Tsukuba, Tsukuba

Ikumi Akasaka PhD  
Kobe University, Kobe, Japan, Hokkaido  
University, Sapporo, Japan and Senshu,  
Kawasaki

#### Discussants:

Takuya Miyagawa PhD  
Hiroshima Shudo University, Hiroshima

Kerby C Alvarez PhD  
Department of History, University of the  
Philippines Diliman, Quezon City

## **P5: Rethinking the “hearts” in medical caring and treatments in East Asian societies**

The modern medicine in East Asia, specifically China, Japan, and Taiwan since the 20th century was critical to bridge the much-researched colonial and contemporary nursing and medical treatments and contemporary STS studies in the region. This panel highlights the intense cross-national experiences of nursing and medical models, research, and studies in dealing with “heart” issues. It also juxtaposes the counter-western centered viewpoints of biomedical sciences with the geopolitical competition in health access models in various East Asian societies. By rendering cases of treatments and caring by and to “hearts”, it also pays attention to continuities from the traditional practices and similarities across socio-cultural boundaries.

To the six panelists, Gu Xiaoyang discusses the transformation of insulin coma therapy (ICT) in the 1930s to 50s to contemporary psychopharmacology, highlighting many important clinical studies and the psychiatrists in China to promote it. Hsiu-Yun Wang unpacks the history of Dr. Kao Tien-Cheng’s application of radioactive iodine to thyroid diseases in Taiwan, 1950s-1960s, revealing the intertwining trajectories of isotopes in which the globalization of nuclear science was built on local foundations. Shu-Ching Chang explores how cardiac catheterization has become a standard diagnostic tool for coronary artery disease in Taiwan from the 1980s, emphasizing the perspectives of "apprenticeship learning", "tacit knowledge", and "learning knowledge" for promoting percutaneous coronary intervention (PCI) among cardiovascular specialists. Yumi Hiratai ingenuities in the comparison of U.S. nurse advisors’ idealism and the rural Japanese nurses’ mindset on public health

work in Japan during the early post-war period, examining various facets of Japanese nurses in playing rural health project from their learning in American counterparts but with indigenous caring “heart”. The last but not least, Su Jingjing and Jin Ya’nan discusses how the painless childbirth in China was developed from psycho-prophylactic method to the Lamaze method, showing how complication on the intertwined global and localization of medical technology and different cultures could influence the “heart” of pregnant women and their motherhood. In sum, all five papers will touch different definitions of cultural and biological “hearts” in patients and caregivers a long with the cultural- historical perspective to support their STS and scientific findings.

### Presenters:

Professor Shu-Ching Chang PhD  
Chang Gung University, Taoyuan, Chang Gung Hospital, Taoyuan

Professor Xiaoyang Gu PhD  
Capital Medical University, Beijing

Professor Michael Shiyung Liu PhD  
Shanghai Jiao Tong University, Shanghai

Professor Hsiu-Yun Wang PhD  
Department of Medical Humanities and Social Medicine, National Cheng Kung University, Tainan

Professor Jingjing Su Ph.D  
Yanan Jin  
Peking University, Beijing

Professor Yumi Hiratai PhD  
Toyo Eiwa University, Yokohama

COFFEE BREAK

**II: 11:00 – 12:40**

**P13: Knowledge Transfer between Europe and Ming-Qing China – Science (continued)**

**IP47: History and historiography of technology in China**

Chair:

Professor Degang Yi PhD  
Institute for the History of Science and Technology, Inner Mongolia Normal University, Hohhot

Presenters:

Xing Huang  
Institute for the History of Natural Sciences, CAS, Beijing

Xiaowu Guan  
Institute for the History of Natural Sciences, CAS,, Beijing

Huanhuan Lu  
Goethe-Universität Frankfurt am Main

**P36: Astronomical Observations and Records in Ancient East Asia (continued)**

**IP45: Applied science and technology in historical perspective**

Chair:

Mary A Brazelton PhD  
University of Cambridge, Cambridge

Presenters:

Sudubilige  
Institute for the history of science and technology, Inner Mongolia Normal University, Hohhot

Professor Yong Mei PhD  
Institute for the history of science and technology, Inner Mongolia Normal University, Hohhot

Jianan Huang

National Institute of Education and School of Social Sciences, Nanyang Technological University, Singapore

Dian Zeng PhD  
International Center for Philosophy, Beijing Normal University, Zhuhai

**IP40: Mathematics and Physics**

Chair:

Professor Chengsheng Sun PhD  
Chinese Academy of Sciences, Institute for the History of Natural Sciences, Beijing

Presenters:

Yang Yang PhD  
Institute for the History of Science and Technology, Taiyuan

Xiaoduo Zhai  
The Academy of Music Shanxi University, Taiyuan

Ce Gao PhD  
Institute for the History of Science and Technology, Taiyuan

Shijun Ren  
Institute for the History of Science and Technology, Taiyuan

Xudong Li PhD  
Institute for the History of Science and Technology, Inner Mongolia Normal University, Hohhot

Professor Peng Peng PhD  
Shanxi University, Taiyuan

Xinhua Zhang  
Surrey International Institute of Dongbei University of Finance and Economics, Dalian

Qing Wei  
Shanxi University, Taiyuan

### **IP35: Facettes of historiography of Science and Technology**

#### Chair:

Professor. Dr. Angela Schottenhammer  
KU Leuven, Leuven

#### Presenters:

Professor Dr. Christine Moll-Murata  
Ruhr-Universität Bochum, Bochum

Professor Florence C Hsia PhD  
University of Wisconsin–Madison,  
Madison

Dr. Martin Hofmann  
Heidelberg University, Heidelberg

### **IP12: Scientific exchanges in Modern East Asia**

#### Chair:

Professor John P DiMoia PhD  
Seoul National University, Seoul

#### Presenters:

Lei Wang PhD  
Bayreuth

Professor. Jian Yang PhD  
Tsinghua University, Beijing

Xiaoxue Zhang PhD  
Inner Mongolia Normal University, Hohhot

Professor Qin Dai PhD  
Inner Mongolia Normal University, Hohhot

### **P49: History and Data: Mathematical Archaeology & Digital Humanities (continued)**

### **P25: Praxis of Historiographic Intervention in Crises: Mis/fitting the Expectant Narratives of Modern Medicine in Trans–Asia**

With the onset of multiple crises that have beset the contemporary world, calls for

praxis of historiographic intervention that not only help to illumine the present, but also to help us to understand the complex past and to clarify the uncertain future has been on the rise. This panel brings together six presentations that explore the mis/fitting of the expectant narratives in the writing of modern history of medicine in Trans–Asia. Susan Burns in “Sex(ually–Transmitted Disease) and the City: Public Health Policy and Syphilis in Tokyo” shows how the pursuit of governmentality never quite succeeded in the control of syphilis in Tokyo’s ‘pleasure quarters.’ Akihito Suzuki in his “Making of the Mentally Ill Patients in Tokyo: Psychiatric Hospitals, the Families and the Police in the Metropolis c. 1920s – c. 1945,” shows the complexity and volatility lurking underneath the successful institutionalization of psychiatric illness in imperial metropole Tokyo. In “Oedipal Reversal: Race, Politics, and the Psychology of the Unconscious in the Sinophone Pacific 1944–1971,” Howard Chiang unfolds dual narratives of race psychology where the testing of the unconscious to grasp the ‘national character’ of the Nationalist soldiers helped to strengthen the anti–racism arguments of Brown vs. Board of Education. And yet, the very same test also further validated the theory of ‘Chinese obedience’ popularly used to explain the cult of Maoism during the Cultural Revolution.

In “The Goal of Public Health Nurses and Their Trajectory in the Liberated South Korea,” Park Yun–jae shows health in decolonizing Asia through the history of public health nursing, an occupation which did not exist in colonial Korea. As the term ‘public health’ (保健) suggests, through the implementation of public health nursing, international experts sought to signal a departure from the old colonial hygienic modernity (衛生) to the new era of decolonized ‘public

health.’ However, as it will be shown, the newly decolonized health as initially envisioned by international health experts was not achieved in Korea. And in “Free Ports as Hotbeds for the White Plague: Reluctant International aid in managing tuberculosis in Hong Kong and Singapore in the 1950s,” Harry Yi-jui Wu seeks to nuance the language and narratives of epidemics and disease control by showing how the success of tuberculosis vaccination campaign carried out by the World Health Organization (WHO) in early Cold War Hong Kong and Singapore depended less on the much touted ‘magic bullet’ approach and more on the unglamorous means of establishing and utilizing local health networks and paying attention to socio-economic factors that undergird health such as housing and welfare. Lastly, Jane Kim in “Chasing the Elusive Dream – Health Unit and Rural Health in Postwar Korea,” examines the WHO’s public health planning for postwar Korea. Following the outbreak of the Korean War, the WHO was entrusted with developing a long-range plan for the reconstruction and rehabilitation of Korean public health system and to do so, they sought to implement the Health Unit program, a rural primary health provision program first pioneered in colonial Sri Lanka. Yet, despite the ambition of the WHO experts to provide health services to most of Korean population as possible, the postwar realities of South Korea made it difficult for such idealism to succeed.

Presenters:

Professor Susan L. Burns PhD  
University of Chicago, Chicago

Professor Akihito Suzuki PhD  
University of Tokyo, Tokyo

Professor Howard Chiang PhD  
University of California, Davis, Davis

Professor Yun Jae Park PhD  
Kyunghee University, Seoul

Professor Harry Y.J. Wu PhD  
National Cheng Kung University, Tainan

Jane S. Kim PhD  
Jeonbuk National University, Jeonju

**IP1: Issues of East Asian Astronomy**

Chair:

Professor Christopher Cullen PhD  
Needham Research Institute and Darwin College, Cambridge, United Kingdom. CCJ (CNRS), Paris

Presenters:

Wen Zhang  
DongHua University, Shanghai

Professor Zelin Xu PhD  
DongHua University, Shanghai

Sang Hyuk Kim PhD  
Korea Astronomy and Space Science Institute, Daejeon

Byeong-hee Mihn PhD  
Korea Astronomy and Space Science Institute, Daejeon

Professor Yong Sam Lee PhD  
Chungbuk National University, Cheongju

Yong-Hyun Yun PhD  
National Science Museum, Daejeon

Ho Chul Ki  
Ghil Institute of Cultural Heritage, Daejeon

Young-Sook Ahn PhD  
Daegu Catholic University, Gyeongsan

**P37: Exploring alternative frameworks for the historiography of astronomy in premodern Asia (continued)**

**P34: Environmental History and Climate Change in Asia: Examination of Historical Records on Weather, Climate Crisis and Analysis of Historical Entanglement (continued)**

**P5: Rethinking the “hearts” in medical caring and treatments in East Asian societies (continued)**

**III: 14:10 – 15:50**

**P46: Science and the Late Qing Polycrisis: Perspectives from the Interior and Non-elite 1866-1930**

From the mid-nineteenth century, the Qing empire faced a polycrisis. Multiple entangled systems—fiscal, military, cultural, environmental—began to degrade or collapse simultaneously. This process, which continued across the imperial-republican transition, was not a passive deterioration, however. Diverse actors and networks—from provincial subjects, national elites, and local farmers—took up new ways of utilizing different forms of systematic knowledge, which we may call science, as the challenge deepened. Past scholars focused on the adoption of technoscience in the period through military arsenals, translation movements, and new institutions of higher learning. In contrast, we explore the utilization of science outside of these small, elite, and largely coastal centers.

Indeed, this panel will contend that epistemological and ontological changes were much broader geographically and socially from the late nineteenth century onward. In many parts of the empire, geographical, agricultural, naturalistic, and mathematical knowledge increased in sophistication, volume, and political

significance along with of the scale of the crisis. This reflected the global transition between early modern (imperial, agricultural) and modern (national, industrial) forms of social, economic, and political organization.

Our first paper will examine the use of mathematical, astronomical, and cartographical skills in the process of Chinese exploration—demonstrating how a skillset that had already penetrated to non-elites in the Chinese interior became utilized in the crisis of inter-imperial rivalry sometimes called the Great Game. Our second paper argues that the intellectual legacy of this time, in the form of geographical texts, helped bind border regions to the Han heartland across the imperial-republican transition. The growth of systematized knowledge in the late imperial period was thus central to the building of a territorially integral modern state. The third paper demonstrates that scientific knowledge in the borderlands was not limited to amateur Chinese but flourished also among naturalists of foreign descent. Tracing the work of a China-born British missionary, the research shows that the political situation in North China also circumscribed the practice of science in the region. Our final paper examines the quest to ameliorate famines in late imperial China through agricultural science and botany. It illuminates the rural and non-human dimensions of scientific change, demonstrating the geographical and social breadth of the agronomical movement and arguing that knowledge production in the period was sophisticated and analytical—not a merely philological or empirical enterprise.

Presenters:

Professor John Alekna PhD  
Peking University, Beijing

Xue Zhang PhD



Reed College, Portland

Peter Lavelle PhD  
University of Connecticut, Storrs Mansfield

### **IP17: Science in the public**

#### Chair:

Professor Tae-Ho Kim PhD  
Jeonbuk National University, Jeonju

#### Presenters:

Ying Wang PhD  
Roskilde University, Roskilde

Hyang Suk Shin PhD.  
National Science Museum, Daejeon

Yishu Mao  
Max Planck Institute for the History of  
Science, Berlin  
University of Zürich, Zürich

Dr. Anna L. Ahlers  
Max Planck Institute for the History of  
Science, Berlin

### **P36: Astronomical Observations and Records in Ancient East Asia (continued)**

### **IP6: Medicine in traditional China**

#### Chair:

Eléonore Caro PhD  
EHESS, Paris, France. CCJ joint lab, Paris

#### Presenters:

Yuchen Feng  
SoH, Nanyang Technological University,  
Singapore

Chunhao Luo M.A.  
University of Pennsylvania, Philadelphia

Yuqi Jin  
Beijing University of Chinese Medicine,  
Beijing

### **IP41: Medicine in Modern East Asia**

#### Chair:

Yuriko Tanaka PhD  
Kobe University, Kobe

#### Presenters:

Dr. Thies Staack  
Universität Hamburg, Hamburg

Miyoung Shin PhD  
Korean Research Institution of Science,  
Technology and Civilization, Jeonbuk  
National University, Jeonju

Narae Seo  
Andong National University

### **IP11: Military and the application of science in modern East Asia**

#### Chair:

Sau-yi Fong PhD  
Columbia University, New York

#### Presenters:

Professor Chaisung Lim PhD  
Rikkyo University, Tokyo

Dr. Clemens Buettner  
Goethe University, Frankfurt

Suting Bai PhD  
School of Marxism, Shanxi University,  
Taiyuan

### **IP22: Multilingualism, dictionaries and the sciences**

#### Chair:

Professor Dr. Joachim Kurtz  
University of Heidelberg, Heidelberg

#### Presenters:

Dr. Mariana Muenning  
Heidelberg University, Heidelberg

Dr. Martina Siebert

Staatsbibliothek zu Berlin – Preußischer  
Kulturbesitz, Berlin  
Independent researcher, Berlin, Germany

Mingyue Han  
Peking University, Beijing  
Max Plank Institute for the History of  
Science, Berlin

### **P35: Astral Sciences in Contexts of Cultural Encounters**

Histories of science have long told us that astronomy and calendar making were dependent on cultural background. As Otto Neugebauer discussed in his *The Exact Sciences in Antiquity* (1952) exact sciences required observation skills and high-culture of mathematical treatment. It has been depended also on different cosmologies and social institutions that supported respective intellectual communities. Sometimes those are supported by religious belief, other time by state-of-art technique, embedded in layers of different combinations of knowledge and trained skills in context. Joseph Needham clarified this also in the cases of Chinese Astronomy in his series of *Science and Civilization in China*.

In this session, we examine variety of cases of encounters of astral sciences and calendar making. The first presenter Ryuji Hiraoka discusses an aspect of interaction between European and Japanese views on universe. He takes an example of 16 th and 17 th Century Jesuit activities and its Japanese adaptation. He works on newly discovered manuscript, a Japanese translation of Jesuit cosmology textbook, “Sufera no nukigaki” (Selection on the sphere). According to Hiraoka, this manuscript is composed sometime after 1593, even before Matteo Ricci’s scientific translation, and Galileo’s trial. Yoichi Isahaya will show us his discovery and analysis of Islamic reading of the Chinese calendar, based on “Quṭb al-Dīn al-Shīrāzī (1236–1311) Note on a Topkapı

Fragment (Ahmet III 3455)”. In that, according to him, the West-Eurasian geometrical cosmology partly enabled the geometrical explanation of Chinese astronomy, that based on numerical cosmology.

While Hiraoka and Isahaya work on wider geological and longer time-scale exchange of astral sciences, Miyagawa focuses on Okinawan lunisolar calendar in transition. So called modern rule by Japan’s Meiji Government, Gregorian calendar is introduced in Okinawa. But daily life and practice were kept there by the use of those survived lunisolar calendar. In this case study, Miyagawa will show us simplified view of modernization does not always work, and old cosmology survived. Gao Xudong gives us another aspect of encounter between Western astronomy and indigenous astronomy. Existing astronomy were then named as “Oriental” astronomy by Shinjo Shinzo, a Japanese astronomer from Kyoto University, who was active in Japan’s colonial institution. In his presentation, such familiar actors as Zhu Kezhen, George Sarton and Joseph Needham appears around this encounter of astronomical interaction, that has been taken place in 1920s.

#### Presenters:

Xudong Gao  
School of Environment and Society, Tokyo  
Institute of Technology, Tokyo, Japan.  
School of Social Sciences, Tsinghua  
University, Beijing

Ryuji Hiraoka PhD  
Institute for Research in Humanities, Kyoto  
University, Kyoto

Yoichi Isahaya PhD  
The Slavic-Eurasian Research Center,  
Hokkaido University, Sapporo

Takuya Miyagawa PhD  
Hiroshima Shudo University, Hiroshima

Discussant:

Professor Jongtae Lim PhD  
Seoul National University, Seoul

**P25: Praxis of Historiographic Intervention in Crises: Mis/fitting the Expectant Narratives of Modern Medicine in Trans-Asia (continued)**

**IP27: Animals and Veterinary Science**

Chair:

Dr. Martina Siebert  
Staatsbibliothek zu Berlin – Preußischer Kulturbesitz, Berlin  
Independent researcher, Berlin, Germany

Presenters:

Kiraz Perinçek Karavit PhD  
Bogaziçi University Asian Studies Center,  
Istanbul

Zhihua Lei PhD  
Guizhou Normal University, Guiyang

Jiahe Peng  
The Institute for the History of Natural Sciences, Chinese Academy of Sciences,  
Beijing

Wei Chen PhD  
The Institute for the History of Natural Sciences, Chinese Academy of Sciences,  
Beijing

**P19: Translating East Asian Sources: Historical Studies and Research**

In recent years, historians of science who do not work on premodern East Asia have shown increasing interest in accessing primary sources produced there. This presents historians of East Asian science, technology and medicine with an opportunity to foster the integration of our field into the general history of science, and

thereby to unfold its full global significance. To achieve this, we have to translate at least some of the sources on which we work.

For those of us who may want to address readers unused to dealing with Chinese characters, the necessity to translate sources, be it short quotations or whole texts, poses a number of interesting questions that we should discuss. The aim of such discussions is by no means an agreement on certain norms, but rather a better understanding of the choices available to us when we translate, and of the consequences of these choices.

In the practice of translation, the target language plays no less significant a role than the source language. It is therefore important to look not only at translations into English, which many of us practice despite being non-native speakers of this language, but also into the various languages in which we teach.

Translation from classical Chinese into European languages started as visible, significant practice in the seventeenth century. Examining the translation of technical texts from a historical perspective is crucial to help us better understand where we stand today, when digital humanities tools can support—but by no means replace—this essential part of our professional activity.

This panel aims at shedding light on the issues mentioned above, and more broadly at bringing out the questions related to translation in our field that we can most fruitfully share, as well as the tools that are available to us or that we could set up collectively. To fully unfold the debate, we need to include in it colleagues who habitually write their research in East Asian languages. Together we can better understand what is lost—and found—in translation.

Presenters:

Dror Weil PhD

University of Cambridge, Cambridge

Professor Catherine Jami PhD  
CNRS, Paris

Bill M. Mak PhD  
Needham Research Institute, Cambridge.  
The ISF Academy, Hong Kong.

Professor. Dr. Dr. Andrea Bréard  
Friedrich-Alexander-Universität Erlangen  
Nürnberg, Erlangen.

Discussant:

Eléonore Caro PhD  
EHESS, Paris, France. CCJ joint lab, Paris

**P60: Ontological Approaches to East Asian Medicines**

Ontologies of East Asian medicines have not been explicitly discussed as such, with few exceptions (e.g. Farquhar 2020). Notwithstanding, the “ontological turn in anthropology” has great traction, given its renewed critique of modern Western constructions of nature as one nature separate from, yet simultaneously embedded in, the concept of culture. This panel takes as starting point the innovative theoretical orientation on plural ontologies by Descola (2013) and on multinaturalism by Viveiros de Castro (2014), beyond the work by Annemarie Mol and John Law widely celebrated in medical anthropology. Working with notions of relationality where things are already related to each other, anthropological ontological approaches resonate with social science research into entanglement (Barad 2007), which views things as emerging in an intra-active, rather than interactive manner. They thereby raise new questions for research into East Asian medicines and related practices.

Presenters:

Professor Taewoo Kim PhD  
Kyung Hee University, Seoul

Hyunkoo Kim PhD  
Kyung Hee University, Seoul

Professor Mikkel Bunkenborg PhD  
University of Copenhagen, Copenhagen

Professor Elisabeth Hsu PhD  
Oxford

Dr. Doreen Mueller  
Leiden University, Leiden

**P23: Science and Civilization in Korea: The Statecraft of Science and Technology in Korea**

Pre-modern Korea had long maintained a certain level of science and technology throughout its relationship with India and the West as well as China and Japan, and South Korea has achieved compressed development in science and technology in a short period of time. The Science and Civilization in Korea (SCK) series examines the history of science from ancient Korea to the present. This panel addresses the history of statecraft of science and technology in Korea and will explore three major themes of the SCK English series: “science” of traditional bureaucratic governance, astronomy and calendrical technology and the South Korean ministry of science and technology. Shin Dongwon will use the example of Gyeonggukdaejeon (經國大典, The Great Legal Code, 1477) to illustrate how the Korean state modified and adapted the Six Departments (六部) system of Six Canons to suit the needs of the Korean governance. While the principle of governmental organization originated in China, Shin will attempt to show how the Korean state employed science governance in the creation of governmental offices, management of bureaucratic personnel and the facilitation of missions. In examining the early Joseon's (朝鮮) adoption of Ming (明) calendrical astronomy, Jun Yong Hoon

will demonstrate how the Joseon astronomers created a different understanding of temporality by calculating the time of sunrise and sunset (日出時刻) and the length of day and night (晝夜刻) based on Seoul's latitude rather than adhering to the Ming calendrical days (口日, i.e., year, month, and day). Although sharing common calendrical system, in showing early Joseon's departure from Ming calendric configuration, the purpose of Jeon's presentation is to offer a more nuanced and pluralized reading of the Tribute-investiture (朝貢冊封) relationship between Joseon and Ming China. Finally, Moon Manyong will explore the relations between science, technology and bureaucratic state through the figure of Choi Hyung Sup, a chemical metallurgist whose work as the second Minister of Science and Technology came to epitomize the singular characteristics of compressed development of modern Korean science and technology. Through his analysis of Choi's published work, *Development Strategies for Science and Technology in Developing Countries* (1981-82), Moon will attempt to situate Choi Hyung Sup's book as 'scientific bureaucrat' whose ability to translate science into state policies enabled one of the most successful mergers of science and technology with bureaucracy.

Chair:

Professor Christopher Cullen PhD  
Needham Research Institute and Darwin  
College, Cambridge, United Kingdom. CCJ  
(CNRS), Paris

Presenters:

Professor Manyong Moon PhD  
Jeonbuk National University, Jeonju

Professor Yong Hoon Jun PhD  
The Academy of Korean Studies,  
Seongnam

Professor Dongwon Shin PhD  
Jeonbuk National University, Jeonju

COFFEE BREAK

**IV: 16:10 – 17:50**

PLENARY LECTURE PROF. DR.  
MIKAEL HARD

**18:00 – 20:00**

GRADUATE STUDENTS NIGHT (0.109)

MEETING EDITORIAL BOARD EAST  
ASIAN SCIENCE, TECHNOLOGY, AND  
MEDICINE (0.104)

## August 23<sup>rd</sup>

### Excursion to Heidelberg



Conference participants are invited to join us on Wednesday, August 23, for an excursion to the University of Heidelberg, Germany's oldest university, founded in 1386. Buses will leave Frankfurt at 9 am (Meeting Point IG Farben Building Main Entrance) and should arrive at Neckarmünzplatz near Heidelberg's Old Bridge around 10:30 am.

### Academic program



Upon arrival in Heidelberg, we will walk to the university's Old Auditorium (Alte Aula), the site of this year's Keynote Lecture. At 11:15, Professor Dr. Dr. Paul U. Unschuld, Institute of Chinese Life Sciences, Charité Berlin, will speak on the topic "The Ben cao gang mu — A 16th Century Review of Two Millennia of Knowledge Dynamics: Li

Shizhen's Approach to Data Management." (See attached Abstract.) If the number of participants exceeds the capacity of Alte Aula, we will offer additional live screening of the lecture at the Senate Hall or at the Centre for Asian and Transcultural Studies. The lecture is followed at 12:30 by a reception including a light lunch in the Old University's Belle Étage and the adjacent Eugen-Biser-Saal for participants choosing the sightseeing options A and B; for the participants of option C, the light lunch will be offered on the ship.

### Sightseeing Options

In the afternoon, participants can either explore the city of Heidelberg on their own – or sign up for one of three sightseeing options organized by Heidelberg University students. All three programs start at 1:30 pm from University Square and will end around 4:30, thus leaving participants enough time at their own disposal.

Buses returning to Frankfurt will leave at 6:00 and 8:30 pm from Neckarmünzplatz. For those who wish to stay until 8:30, we have made a reservation for dinner at Vetter's Brewery, Steingasse 9 (set menu including one drink for 22 Euro, max. 40 persons.)

To help us prepare, please sign up for your preferred sightseeing option, if any, by Monday, August 21, 5 pm, and also indicate whether you wish to stay on for dinner in Heidelberg.

### Option A: Vita Activa



This option is for those who are more adventurous and interested in exploring Heidelberg's sights entirely on foot. Stops include Stairs to Heidelberg Castle (303 steps); Castle Gardens (optional: German Pharmacy Museum; Great Barrell); Old Bridge; Serpentine Path; Philosophers' Walk

#### **Option B: Bus Tour and Castle Stroll**



This option includes a bus tour around the city visiting both sides of the river Neckar, including the new university campus, and ends with a visit to Heidelberg Castle & the Castle Gardens (optional stops: German Pharmacy Museum; Great Barrell, etc.)

Maximum number of participants: 180

#### **Option C: River Cruise and Castle Walk**



This option includes a cruise on the Neckar River and a ride with the Funicular to Heidelberg Castle & the Castle Gardens (optional stops: German Pharmacy Museum; Great Barrell, etc.)

Maximum number of participants: 120

## **August 24<sup>th</sup>**

**I. 9:00 – 10:40**

### **P65: Metallurgical Technologies in Ancient China**

The study of Chinese metallurgical technology is the focal point of the research of the history of technology in China, which has now gone through 100 years. This panel is organized to present some of the representative results of Chinese metallurgical research in recent years. The group mainly consists of two sections, one is the scientific study of Chinese bronzes and decorative technique, and the other is minerals and casting of Chinese bronzes. The panel includes regional studies, such as the Great Bay area of South China and the Ba cultural area, as well as classic Chinese bronze research directions, such as the study of bronze material tracing and casting techniques, and studies on bronze types, such as bronze mirrors and bronze swords. In addition, the panel also included new research findings, such as the restoration of bronze casting remains, the art of bronze decoration and the study of phonetics. In general, the panel wanted to present and share with scholars some of its achievements in metallurgical technology.

#### Presenters:

Yufeng Xi  
Guojing Zeng  
School of History, Anhui University, Hefei  
and Needham Research Institute,  
Cambridge

Beichen Chen PhD  
School of History, Capital Normal  
University, Beijing

Siran Liu PhD  
Guisen Zou PhD

Institute for Cultural Heritage and History of Science & Technology, Beijing and Guangxi University for Nationalities, Nanning

Peng Peng PhD  
The Chinese University of Hong Kong, Hong Kong

Yu Liu PhD  
Institute of Archaeology, Chinese Academy of Social Science, Beijing

Professor Chao Franklin Huang PhD  
Academy of Cultural Heritage and Creativity, Jinan University, Guangzhou

Professor Rongyu Su  
Institute for History of Natural Science, CAS, Beijing

Takafumi Niwa  
Nara National Research Institute for Cultural Properties, Nara

Professor Jianli Chen PhD  
School of Archaeology and Museology, Beijing

Pujun Jin PhD  
School of Materials Science and Engineering, Shaanxi Normal University, Xi'an

## **P52: Crises and Inventions: Medicine and Healthcare in late imperial and modern China in global context**

This panel aims to shed light on the processes at work in the formation and transmission of medical knowledge and healthcare expertise in premodern and modern China especially in the context of crises and challenges. Bringing together researchers working on the history of medicine and technology, it especially aims to study how the encounter with the unknown transformed knowledge and technics. Through a series of specific and contextualized case studies, it examines

how the introduction of an idea, a technic, an image or an object, coming from outside (other regions/countries, other professional or cultural milieus) participated in the renewal, reconfiguration or reformulation of knowledge and practices. In that sense, the panel will focus on different ways in which a "global" or "connected" history took form, and will provide, at the same time, a particular illustration of how innovations were realized.

To address these issues, the panel will bring together historians and philosophers who will provide different methodological insights. Moreover, since scientific and technical knowledge often go hand in hand, the panel aims to examine how stabilized cultural orders are totally or partially renewed not only when new (foreign or indigenous) ideas make irruption and challenge them but also when new (foreign or indigenous) tools, objects or images are introduced into the world of scholars and technicians. Finally, the different cases the panel will deal with not only illustrate a history of circulation of knowledge and technics between China, East Asia and the European world; in order to approach the way in which the introduction of an idea, a technic, an object from one cultural space to another impacted the contents and organization of knowledge, the panel will examine these phenomena on a smaller scale, notably focusing on exchanges between China and Japan, China and Korea, China and India. This panel will strive to answer a number of questions: How a crisis can challenge the established knowledge and practices? To what extent does the introduction of a new idea or object changes practices and knowledge? Does this introduction bring scholars to reevaluate, dismiss, rediscover their own knowledge and practices? To what types of hybridization does it lead? How does the integration of a new, foreign or indigenous, idea or object in medicine and health care is



presented by scholars to convince their contemporaries to adopt a new scientific or technical framework?

Presenters:

Florence Bretelle-Establet PhD  
SPHERE, CNRS & Université Paris Cité,  
Paris

Jean Corbi  
AgregationSciences Po, Paris

Sung-hung Hsieh  
National Tsing Hua university, Hsinchu

Océane Lachaud  
INALCO, Paris

Wenbo Liang  
SPHERE, CNRS & Université Paris Cité,  
Paris

Professor Chuan-hui Mau PhD  
National Tsing Hua University, Hsinchu

Mathias Vigouroux PhD  
Nishogakusha University, Tokyo

Professor Kuosheng Wu PhD  
National Tsing Hua University, Hsinchu

Discussant:

Professor Yi-Li Wu PhD  
University of Michigan, Ann Arbor

**P18: Decision-making amid Crisis: Transnational Re-conceptions of Reason and Science in Mid-Century East Asia**

Crises call for wise decisions. Yet, what is a wise decision? Over the twentieth century, a diverse range of international psychologists, engineers, economists, and organizational theorists tackled this question across a wide range of social contexts. What united them was a consistent effort to apply “scientific” methods in an attempt to rationalize everything from decision-making to industrial production. In this effort, they

produced new psychological research, aptitude tests, organizational flow charts, business case studies, and other new forms of knowledge. In turn, they widely circulated this knowledge through publications, translations, conferences, academic exchanges, and even paid consultations and applications. In so doing, these diverse professionals helped to make and re-make global conceptions of modernity, science, and reason. This contingent and entangled process was particularly important in East Asia as the intersecting crises of national development, foreign imperialism, the Second World War, and the Cold War all accelerated mass investment into scientific methods and thinking as the supposed solution. This panel explores the diverse transnational networks that re-shaped conceptions of rational decision-making in an East Asia wracked by crisis. It illuminates key intersections between disparate disciplines such as psychology, management, and engineering and re-examines the fraught historical process that pushed particular imaginaries of wisdom and reason to dominate this region’s embrace of science and technology.

Presenters:

Professor Youjung Shin PhD  
Jeonbuk National University, Jeonju

Professor J. Megan Greene PhD  
Jeonbuk National University, Jeonju,  
Republic of Korea, Lingnan University,  
Hong Kong

Peter E Hamilton PhD  
Lingnan University, Tuen Mun, Hong Kong

**P48: Depicting Premodern Chinese Medicine: Body, Healing and Their Contexts in the Ancient Images**

This panel tries to form a linkage on how to understand the body and the art of healing

in different culture through medical images. As the saying goes, “a picture is worth a thousand words”. Medicine related images could be a particular access towards the forming of Chinese medical knowledge.

Images of the body are like snapshots of medicine, arts, and cosmology in a specific era. In this panel, four articles give argument on reading and understanding of the body image. Two of them draw light on the image of viscera in Chinese medical collection. Dr. Lan Li and Dr. GU Xiaoyang, separately contributes their outstanding works “representing the Spleen: genre, metaphor, and useful anatomies” and “the Sweet Pancreas: an intellectual and pictorial history in the translation of medical literature” with a focus on this topic.

Observing the body through the eyes of an anatomist, we may see the images of viscera. But with the eyes of an acupuncturist, we may find the body covered with channels and points. Thus it leads us into a world of acumoxa images. Dr. ZHANG Xinyue and Prof. ZHANG Shujian discuss the spine depicted in Taoism and medical literature in the article “Curved spine: the shape of spine in Taoist body diagrams and its influence on medical body diagrams”. Jinglou (经络) is an exclusive concept in Chinese medicine. But how to picture and understand these channels was always a tough job through time. The article of Dr. WEI Ran, “rethinking the anatomical structure and function of Chong Channel (冲脉) based on ancient documents and images”, gives discussion relevant to this topic through a special case.

Generally, the stories of medicine have confluences with social history. So do medical images. How could medieval healing art, Moxibustion, be presented in Edo Japan? This interesting issue will be unfolded by the article contributed by Dr. JIANG Shan and LIU Huan, “moxa therapy

described in the Ukiyo-e in 19th century”. The last article of this panel is about the pictures of Five Plague Immortals, written by Prof, YI Bao, Prof. SHI Honglei and YI Kewei. By contrast of the Five Plague Immortals and the five-element, the formation core and cultural characteristics of the five shuilu plague immortals are deeply deconstructed.

#### Presenters:

Prof. Shujian Zhang PhD  
Xinyue Zhang PhD  
Shandong University of Traditional Chinese Medicine, Jinan

Professor Shi Honglei  
Institute for history of science and technology, Shanxi University, Taiyuan

Shan Jiang PhD  
Huan Liu  
Peking Union Medical College, Beijing

Ran Wei  
Beijing University of Chinese Medicine, Beijing

Professor Xiaoyang Gu PhD  
Capital Medical University, Beijing

Lan Li PhD  
Institute of the History of Medicine The Johns Hopkins University, Baltimore

### **IP24: Medical Practices in modern East Asia**

#### Chair:

Professor Ying Zhang PhD  
Hunan University, Yuelu Academy, Changsha

#### Presenters:

Huiwen Qiu  
Xiamen University, Xiamen

Mingxuan Zheng  
Peking University, Beijing

Professor Wen-Hua Kuo PhD  
National Yang Ming Chiao Tung University,  
Taipei City

#### **IP42: Science Policy and Institutions**

##### Chairs:

Professor Banghong Fu PhD  
Department of the History of Science and  
Scientific Archaeology University of  
Science and Technology of China, Hefei

##### Presenters:

Xiaofan Lu  
Anhui, Hefei

Jiakai Jeremy Chua PhD  
University of Southern California, Los  
Angeles

Zhaoyang Liu  
Department of Science, Technology and  
Medical History, Peking University, Beijing

#### **IP20: Surveying Techniques and cartography**

##### Chair:

Zhifan Liu  
National Maritime Museum (Het  
Scheepvaartmuseum), Amsterdam

##### Presenters:

Shen Wang PhD  
Zhejiang Institute of Hydraulics and Estuary,  
Hangzhou

Professor Qianjin Wang PhD  
School of Humanities, University of  
Chinese Academy of Sciences, Beijing

Wei-Ting Yang  
National Tsing-Hua University, Hsin-chu,  
Chinese Taipei

Professor Alexei K. Volkov PhD  
National Tsing-Hua University, Hsin-chu,  
Chinese Taipei

#### **P20: Nature as Resources, Medicine and Landscape: Global Knowledge Exchange in Modern East Asia**

The late nineteenth and early twentieth centuries saw a massive increase in the exchange of knowledge between East Asia and the rest of the world. How did the new scientific, technical and environmental knowledge, derived from the West, interplay with indigenous knowledge in non-Western areas and transform it into a new narrative as part of global knowledge exchange? This question is particularly critical in the case of East Asia, especially in the context of the discussion on modernity in a transformation that straddles pre-modern and modern society. This panel seeks to explore how different intellectuals, such as overseas students, educators, translators, missionaries, mineralogists, mathematicians, medical practitioners, popular science writers, and landscape architects from various areas were involved in global knowledge building on nature and the environment. It begins with Shih-Yu Juan's investigation of the translation and dissemination of knowledge of western mineralogy from America to China in the late nineteenth century. She emphasizes the role of both American and Chinese translators and how they reproduced such knowledge in the Chinese context and broadened Chinese mineral knowledge with chemical analysis. Mary Augusta Brazelton then explores scientific education at the Sino-French Institute of Lyon in the early twentieth century. She examines the experience and motivation of Chinese students who undertook training in pharmaceutical and biochemical methods and hydrotherapy under French educators. Fei HUANG (Panel Organiser) studies both academic and popular science writing about mineral hot springs in modern China. She shows the modern knowledge of spa treatment and geothermal resources in

China has been largely transferred from Europe (especially German-speaking areas) or second-hand via Japan, within the traditional frameworks and public fantasies in each context. Kuang-Chi Hung discusses the core concepts of environmental preservation or conservation in early twentieth-century American, German and French, and Japanese environmental history. He specifically demonstrates how a Japanese landscape architect reproduced these core concepts by receiving inspiration from his trip to Taiwan. Sean Hsiang-lin LEI serves as Panel Chair and Discussant. Through four interconnected case studies in modern American, French, German, Japanese, Chinese, and Taiwanese societies, this panel allows us to rethink processes of circulation, dissemination, translation, and reproduction of the knowledge of natural resources, natural medicine, and landscape environments in contexts of global exchange.

Chair:

Professor Sean Hsiang-lin Lei PhD  
Institute of Modern History, Academia Sinica, Taipei

Presenters:

Professor Fei Huang PhD  
University of Tübingen, Tübingen

Mary A Brazelton PhD  
University of Cambridge, Cambridge

Shih-Yu Juan  
Brown University, Providence

Kuang-Chi Hung PhD  
National Taiwan University, Taipei

**P58: Silk Road Technology Exchange**

The Silk Road refers to the commercial trade route that originated in ancient China and connected Asia, Africa and Europe. The Silk Road was a major artery between East and West in ancient times and was a road of

scientific and technological dissemination and intersection. The Silk Road technology exchange with science and technology as an important carrier, in different periods, in different forms, by different groups of people, affecting the material and cultural life of the regions along the route.

Ancient Chinese medicine, agricultural technology, papermaking technology, printing technology, compass, gunpowder, ceramics, etc., Buddhism in India, Indian sugar technology, South Asia, medicine, astronomy, architecture and mathematics and other science and technology, widely spread along the Silk Road. The Silk Road in a larger space to achieve a deeper exchange of technology, frequent intermingling and dialogue, the region along the technology and cultural exchanges played a great role in promoting the evolution of ancient Chinese science and technology. It makes the ancient Chinese culture richer and more diversified in expression, with remarkable inclusive characteristics.

This topic aims to sort out the profound correlation between cultural exchanges and the rise and fall of civilizations behind the spread of technology along the Silk Road from the aspects of archaeology and history of technology, to propose a system of cultural exchanges along the Silk Road, and to explore in depth the world significance of technological exchanges along the Silk Road. Based on the exotic technological and cultural elements contained in various types of ancient Chinese artifacts, we interpret the tolerance and compatibility of ancient China and explore the important role played by foreign technological elements in the evolution and development of Chinese society.

Presenters:

Professor Mei Yong PhD  
Ke Shi

Institute for the History of Science and Technology ,Inner Mongolia Normal University, Hohhot

Professor Suo Bao PhD  
Institute for the History of Science and Technology ,Inner Mongolia Normal University, Hohhot

Sudubilige  
Institute for the History of Science and Technology, Inner Mongolia Normal University, Hohhot

Na Saren Bao  
Institute for the History of Science and Technology, Inner Mongolia Normal University, Hohhot

Professor Degang Yi PhD  
Institute for the History of Science and Technology, Inner Mongolia Normal University, Hohhot

Zhongyuan Zhang  
Institute for the History of Science and Technology, Inner Mongolia Normal University, Hohhot

Jie Jia Ping  
Institute for the History of Science and Technology, Inner Mongolia Normal University, Hohhot

## **IP2: Modern uses of East Asian astronomical data**

### Chair:

Xudong Gao  
Beijing Tsinghua University, Beijing

### Presenters:

Kyounguk Nam  
Gwacheon National Science Museum,  
Gwacheon

Daeyoung Park  
Gwacheon National Science Museum,  
Daejeon

Sang Hyuk Kim PhD  
Korea Astronomy and Space Science Institute, Daejeon

Byeon-hee Mihn PhD  
Korea Astronomy and Space Science Institute, Daejeon

Hong-soon Choi  
Chungbuk National University, Cheongju

Geoyoung-han Yoo BSc  
Chungbuk National University, Cheongju

Yuxin Tian  
Institute for History of Science and Technology, Inner Mongolia Normal University, Hohhot

Sang-Hyeon Ahn PhD  
Korea Astronomy and Space Science Institute, Daejeon

## **P38: Digging the Earth: Mining and Geological Knowledge in East Asia from the Late Seventeenth Century to the Early Twentieth Century**

This panel discusses mining and geological knowledge in East Asia from the late seventeenth century to the early twentieth century. Before the twentieth century, geological knowledge in East Asia was closely associated with mining activities, to which East Asian states held an ambivalent attitude. Mining increased taxes, but the aggregation of many poor but strong labors often led to social upheaval. The panel reviews this tension in Ming and Chosŏn dynasties via new mining and managerial methods proposed by the missionaries and Confucian scholars.

The social and economic problems caused by mining in the late Ming had finally been resolved after the Ming-Qing transition, though the debate on mining policy never ceased. In the Qianlong period, copper mining was largely loosened. Metal crafts, particularly manufacturing Buddha

statues, had largely been transformed, which could be detected by micro analysis of filler materials used in brazing. The new technology might have been the result of fusing foreign technique and local craft. Here, again, we see the importance of mutual interactions of foreign and local knowledge and attest the need to locate East Asian traditions of knowledge in a broader global context.

The foreign influences grew stronger during the late nineteenth century. Protestant missionaries brought new geological knowledge which provided not only new practical applications but also new methods of geological investigations. Scientificity became new concerns for those who could access to the new knowledge. Geology had become an independent discipline in East Asia countries amid nationalism and longing for science. The transformation of geology thus constitutes an interesting area of investigation to understand how Western science was transmitted into East Asia where local agents with local knowledge attempted to appropriate for their own sake and on their own terms.

Presenters:

Professor Pingyi Chu PhD  
Institute of History and Philology,  
Academia Sinica, Taipei

Professor Jongtae Lim PhD  
Seoul National University, Seoul

Hui-min Lai PhD  
Institute of Modern History, Academia  
Sinica, Taipei

Professor Te-cheng Su PhD  
National Taiwan University, Taipei

Professor Lijuan Yang PhD  
History of Natural Sciences, Chinese  
Academy of Sciences, Beijing

Professor Chih-wen Kuo PhD

Chia-yi University, Chia-yi

Professor Shigeo Kato PhD  
Faculty of Human Sciences, Waseda  
University, Tokyo

**P7: Mapping South and Southeast Asia in Seventeenth and Eighteenth Century East Asia**

This panel will examine how Chinese, Japanese, and Koreans mapped the geography of South and Southeast Asia during the seventeenth and eighteenth century. The maps and geographic works produced in that time speak of close economic, religious (in particular Buddhist), and cultural ties in the region. From the sixteenth century onwards, Europeans such as Iberian traders and Jesuits who came to East Asia brought with them their own understanding of the geography of South and Southeast Asia. In the mid-eighteenth century, Qing China conquered much territory in Central Asia, from where routes connected to South Asia. In consequence, a diverse range of maps of these regions made in East Asia exist. How European knowledge of India shaped the production of geography in China, Korea, and Japan will be the topic of Hyunhee Park's talk. The Buddhist connection is taken up by Max Moerman who will discuss the Japanese cartography of Buddhist India. Mario Cams will examine the mid-eighteenth century depiction of the northern part of the subcontinent produced at the Qing court. The last two papers will focus on the maritime environment: Elke Papelitzky will consider a series of Japanese manuscripts mapping the maritime space of Southeast Asia with special consideration given to the shape of the coastlines and Richard Pegg will introduce an unusual maritime chart that combines terrestrial and celestial ideas of space. In sum, these presentations will showcase the diversity of mapping South- and Southeast Asia in East

Asia, ranging from continental, to maritime, and Buddhist maps in the seventeenth and eighteenth-century.

Presenters:

Dr Elke Papelitzky  
KU Leuven, Leuven

Mario Cams PhD  
University of Oslo, Oslo

Professor Hyunhee Park PhD  
John Jay College and the CUNY Graduate Center, New York

Richard A Pegg PhD  
MacLean Collection, Lake Forest

Professor D. Max Moerman PhD  
Barnard College, Columbia University, New York

**P67: The Historical Background in China and Southeast Asia of Resource Extraction and the Contemporary Environmental Crises of Deforestation and Biodiversity Loss**

The long and entwined histories of China and the countries of Southeast Asia include many factors which have contributed over time to the current environmental crises in both. These crises are as many and as varied as their causes, however the papers on this panel will examine several different types of resource use and resource extraction that have contributed in particular to deforestation and biodiversity loss. Recent scientific research has demonstrated conclusively that these two problems are intimately entwined, with loss of forest cover and monocropping leading to not only loss of cover for the earth, with resulting destabilization of silt and flooding, but also to loss of faunal and floral diversity. Loss of biodiversity in turn leads to further loss of forests cover through changes in pollination, seed dispersal, and further degradation of soil through loss of micro-

organisms. The papers on this panel will present patterns of resource extraction and use as varied as charcoal production for industrial and transportation purposes in colonial era Vietnam, agrarian expansion leading to exploitation of waterways in Qing Dynasty China, extraction of timber for shipbuilding in China from the Tang Dynasty to approximately 1900, loss of fauna due to medicalization of animal tissue in Chinese Traditional Medicine and traditional systems of medicine in Southeast Asia and to the resulting lucrative trade in animal parts and products, to loss of forest cover caused largely by recent near clearcutting of a resource, trees that produce aloeswood, which had been sustainably harvested for millennia by indigenous peoples. The research to be presented by the scholars on this panel will bring important information to scholars, to policy makers, and, perhaps eventually, and to residents of China and Southeast Asia-the key group in whose hands responsible use of contemporary resources rests.

Presenters:

Professor C Michele Thompson PhD  
Southern Connecticut State University, New Haven

Professor David A. Bello PhD  
W&L University, Lexington

Professor David Biggs PhD  
UC Riverside, Riverside

Dr. Nanny Kim  
Heidelberg University, Heidelberg

Professor Gregory Clancey PhD  
National University of Singapore, Singapore

COFFEE BREAK

**II: 11:00 – 12:40**

**P65: Metallurgical Technologies in Ancient China (continued)**

**P52: Crises and Inventions: Medicine and Healthcare in late imperial and modern China in global context (continued)**

**P16: Crisis and the entanglement of science, domestic politics, and transnational relations in East Asia, 1950s-70s**

This panel collectively asks what crisis could do to the entanglement of science with domestic politics and/or transnational relations amidst shifting geopolitics, by examining various areas of scientific activities reconfigured in response to crises in East Asia in the 1950s-70s. The panel considers crisis not only as a geopolitical phenomenon that bring disruptions in everyday lives, but also an imagined fear among political and scientific elites for the imminent chaos in socio-political orders domestically and internationally. By comparing cases from China, Taiwan, Japan, and South Korea, as well as cases that show connections in between and beyond, the panel explores regional variations as well as patterns in the reconfiguring of science-politics entanglement. By carefully analysing an interplay between science and national/international relations after or in response to crises occurred in the period of modern history regarded conventionally as the 'Cold War era' and in both sides of the Iron Curtain in the region, we aim to 1) re-evaluate the role of the Cold War in the constellation of science vis-à-vis geopolitical crises in East Asia, 2) reappraise the country-specific periodisation related to science and international relations, and 3) present a more nuanced understanding of what crisis meant for the operation of science and

scientists in East Asia in the middle of the twentieth century. The examination of this period in East Asian history is particularly significant because a) this period laid a foundation for the geopolitical constellation in East Asia that has had a lasting impact on the organisation of science and politics, even today, thus an examination of this period leads to a better understanding of the science-politics nexus today, and b) the burgeoning discourse on the role of science and technology in the sovereignty of East Asian countries today is premised on the selective, and rather celebratory, memorialization of scientific achievements of this period, which, if not corroborated, could obscure important hints about how science could do in the moments of crisis.

Presenters:

Aya Homei PhD

School of Arts, Languages and Cultures, University of Manchester, Manchester. Graduate School of Core Ethics and Frontier Sciences and Institute of Ars Vivendi, Ritsumeikan University, Kyoto

Jaehwan Hyun PhD

Pusan National University, Busan

Discussant:

Hiromi Mizuno

**P48: Depicting Premodern Chinese Medicine: Body, Healing and Their Contexts in the Ancient Images (continued)**

**IP7: Assessing Body and genes in modern East Asia**

Chair:

Professor Inga Kim Diederich PhD  
Colby College, Waterville

Presenters:

Professor Liping Bu PhD



Alma College, Alma,

Professor Yu-Yueh Tsai PhD  
Academia Sinica

Ziyue Zhang  
Peking university, Peking

### **IP43: Science between philosophy, propaganda and politics**

#### Chair:

Professor Howard Chiang PhD  
University of California, Davis, Davis

#### Presenters:

Windson J. Lin  
University of Groningen, Groningen

Shuo Zhang  
University of Science and Technology of  
China, Hefei

Professor Weimin Xiong PhD  
University of Science and Technology  
Beijing, Beijing

Shan Diao  
Department of East Asian Studies,  
Göttingen

### **IP36: Printing and Visibility**

#### Chair:

Professor Qi Han PhD  
Zhejiang University, Hangzhou

#### Presenters:

Tiande Yang  
Independent researcher

Xi Ma PhD  
Hunan University, Changsha

Hwaseon Kim PhD  
Jeonbuk National University, Jeonju

### **IP19: Botany and sericulture in China**

#### Chair:

Professor Chuan-Hui Mau PhD  
National Tsing Hua University, Hsinchu

#### Presenters:

Wurchaih  
Institute for the History of Science and  
Technology, Inner Mongolia Normal  
University, Hohhot, Inner Mongolia

Professor Khasbagan PhD  
College of Life Science and Technology,  
Inner Mongolia Normal University, Hohhot,  
Inner Mongolia

Professor Luling Wei PhD  
South China Agricultural University,  
Guangzhou

Professor Genjin Ni  
South China Agricultural University,  
Guangzhou

### **P58: Silk Road Technology Exchange (continued)**

### **IP28: Agriculture and plants**

#### Chair:

Dr. Joerg Henning Huesemann  
Leipzig University, Leipzig

#### Presenters:

Huichuan Fan PhD  
University of Science and Technology of  
China, Hefei

Dr. Hui Li  
Nanjing Agricultural University, Nanjing

Yuanming Song PhD  
University of Science and Technology  
Beijing, Beijing

**P38: Digging the Earth: Mining and Geological Knowledge in East Asia from the Late Seventeenth Century to the Early Twentieth Century (continued)**

**P69: Conflict and Complexity of Scientific and Cultural Communication between Modern China and the West in the Ming and Qing Dynasties (continued)**

LUNCH

**III: 14:10 – 15:50**

**P65: Metallurgical Technologies in Ancient China (continued)**

**P52: Crises and Inventions: Medicine and Healthcare in late imperial and modern China in global context (continued)**

**P4: Cross-cultural astral texts and images in Central and East Asia**

This panel presents the image database "Visualization and Material Cultures of the Heavens in Eurasia and North Africa 4000 BCE – 1700 CE" created by the VoHworking group at MPIWG, Berlin. The discussion of the research goals and the DH challenges encountered by the working group, will frame the case studies on the visual representation of the lunar mansions in China and Japan, and on the role of the astral sciences in the Uyghur Kingdom of Qocho. The panel will thus provide new insights into cross-cultural exchanges of knowledge between Central and East Asia, demonstrating the potential of the image database (and of similar digital research tools) for identifying new source material that reflects such mutual influences.

Chair:

Dr. Stamatina Mastorakou  
MPIWG, Berlin

Sonja Brentjes

Presenters:

Jeffrey T. Kotyk PhD  
University of Bologna, Ravenna

Rana Brentjes  
Max Planck Institute for the History of Science, Berlin

Adrian C. Pirtea PhD  
MPIWG, Berlin,

Discussant:

Professor Matthieu Ossenrivjer

Dr. Andreas Winkler

**P48: Depicting Premodern Chinese Medicine: Body, Healing and Their Contexts in the Ancient Images (continued)**

**IP37: The Localisation of Modern Medicine**

Chair:

Professor Zhen Cheng  
Center for History of Medicine, Peking University, Beijing

Presenters:

Qinghua Wei  
Peking University, Beijing

Weijiang Zheng  
Guangzhou Medical University,  
Guangzhou

**IP44: Constructing technological and scientific monuments**

Chair:

Ito Kenji

Presenters:

Yi-Fan Hu  
Institut de recherches asiatiques, Aix-  
Marseille Université, Aix-en-Provence

Yiqing Lin  
Lingnan University, Hong Kong

## **IP26: Traditional Technologies of China**

### Chair:

Professor Rongyu Su  
Institute for History of Natural Science,  
CAS, Beijing

### Presenters:

Puwen Song PhD  
Shandong University, Jinan

Professor Guoquan Lu PhD  
Shandong University, Jinan

Yujing Lu PhD  
Department of History of Science and  
Scientific Archaeology, University of  
Science and Technology of China, Hefei

Professor Biao Chen PhD  
Department of History of Science and  
Scientific Archaeology, University of  
Science and Technology of China, Hefei

Professor Yanwei Ding PhD  
Hefei National Laboratory for Physical  
Sciences at the Microscale, University of  
Science and Technology of China, Hefei

Prof. Weidong Li PhD  
Shanghai Institute of ceramics, Chinese  
Academy of Sciences, Shanghai

## **IP18: Medicine between tradition and modernity**

### Chair:

Professor Yi-Li Wu PhD  
University of Michigan, Ann Arbor

### Presenters:

Professor Qi Chen PhD

Peking University, Beijing

Xiang Ji  
Peking University, Beijing

Michael Stanley-Baker PhD  
Nanyang Technological University,  
Singapore

## **P58: Silk Road Technology Exchange (continued)**

## **P63: Women and Medicine**

Prof. Yongyuan Huang is emerging scholar of medical history who had obtained his ph.D in Korea University, whose thesis was about Korean Traditional Medicine in colonial Korea (1910-1945). Now he is professor in Sun Yat-sen University, China. He has already published several articles in A&HCI journal, Korean Journal of Medical History. Recently he is interested in women's doctors and published his article "The Women's Doctors in Colonial Korea (1910-1945) in Chinese. Now he is developing his area to History of Chinese Medicine.

Prof. Noriko Sato obtained her PhD in social anthropology at Durham University in the UK. She is a former RAI (Royal Anthropological Institute) Fellow in Urgent Anthropology and currently working for Pukyong National University in South Korea. Her primary field of study is history and memory in Japan and the Middle East.

Senior researcher Ji-myung Kim obtained her PhD in Digital History at the Academy of Korean Studies. She has been the president of an interpreting and translation company for a long time. She is participated in the project of making digital history about the independent movement of Daegu city in English. Recently she has translated into English The diary of treatment for Empress Myeongseong (1851-1895), recorded by the royal

physician in the late 19th century, with Jung-wook Hong.

Senior researcher Jung-wook Hong obtained her PhD in Linguistics at Macquarie University, Australia. Now she is senior researcher at Royal Asiatic Society Korea. Recently she has translated into English The diary of treatment for Empress Myeongseong (1851-1895), recorded by the royal physician in the late 19th century, with Ji-myung Kim.

Hyunsook Lee obtained her PhD in Medical History at Ewha Womans University. She has worked in the Institution for Medical History of Yonsei University since 2007. Recently she was participated in several projects of Oral History, sponsored by National Institute of Korean History such as midwives, gynecologists, activist medical doctors, and women doctors. Currently she is interested in women's medical history.

Presenters:

Professor Noriko Sato PhD  
Pukyong University, Pusan

Professor Yongyuan Huang PhD  
Sun Yat-sen University, Guangzhou

Ji-myung Kim PhD  
The Academy of Korean Studies,  
Seongnam Royal Asiatic Society Korea,  
Seoul

Professor Hyunsook Lee PhD  
Yonsei University, Seoul  
Institute for Ecological and Environmental  
History, Seoul

Jung-wook Hong PhD  
Korea University, Seoul

**P30: The Asian-Euro mutual learning and interpenetration of the civilization of science and technology in the early modern period**

With the Age of Discovery since the fifteenth century, the two major civilizations of the East and the West encountered directly, resulting in a huge cultural collision and combination on an unprecedented scale. Based on several case studies, this panel intends to explore some characteristics of mutual learning and interpenetration of scientific and technological knowledge civilizations in East Asia and Western Europe from the 16th to the 19th centuries. The fields of science and technology involved include printing, mathematics, astronomy and horticulture. As early as the 17th and 18th centuries, Europeans had made detailed comparisons between Chinese woodblock printing and European movable type printing. As one of the most famous British missionaries to China, Alexander Wylie was able to well combine the knowledge traditions of the Chinese and English worlds, which embodied in his Chinese Translation of Euclid's Elements (1858), and his "List of Fixed Stars" (ca. late 1870s), a work on the Sino-Western names correspondence of the fixed stars. The translations of the European language versions of the Alberuni's India and the Mirror of Flowers (Hua Jing, 花镜) show the diversity of the investigation of the exotic and unique knowledge by European orientalist in the 19th century. These case studies, on which this panel focus, will surely further deepened the understanding of the historical process of the Asian-Euro mutual learning and interpenetration of the science and technology civilization in the early modern period.

Presenters:

Hui Xie PhD

Beijing Foreign Studies University, Beijing

Jingbo Cao PhD

University of Science and Technology of  
China, Hefei

Zhihui Chen PhD

Inner Mongolia Normal University, Hohhot

Yue Pan PhD

University of Science and Technology of  
China, Hefei

Yan Wu PhD

Inner Mongolia Normal University, Hohhot

**P68: Indigenous Resources and Medicines of the Borderlands in Russia and China: Preserved Knowledge, Cross-Regional Science, and Exploited Nature**

This panel brings historians and anthropologists of science in Russia and China together and puts their findings on ethnopharmaceutical entanglements into cross-regional and transnational comparative perspectives. We show how scientists in both countries, since the Maoist/Soviet periods, until the present, have attempted to explore indigenous knowledge and natural resources in specific areas, to feed emergent and transforming pharmaceutical markets. They faced the challenge of accessing both ethnic and physical ‘borderlands’ in periphery regions of Russian or Chinese political territories, including those on the geographical edges of the state and those situated deep within one nation. Examples of pharmaceuticals (Artemisia, Qinling medicines, Liquorice Root and Saiga Horn) show how indigenous knowledge was preserved, while natural resources were recontextualised and exploited. Crises of biological destruction and healthcare turmoil were addressed through new markets, activism and science, which enabled the exchange of strategies and experiences. The science of chemical

extraction represents a fundamental transformation, accompanying shifting standards of recognition as indigenous, with the resulting deprecation of certain remedies. How could indigenous people, plants, animals and materials in the different borderlands in Russia and China adapt or endure? The panel can mutually enhance our comparative understanding of Russian-Chinese influences in preservation strategies and transnational science.

We could win a discussant to sharpen the comparative angle and address the increasing presence of indigenous peoples in the field of Russian-Chinese cross-border science diplomacy and pharma-industry.

Chair:

Dr. Nina Kruglikova

Manchester University, Manchester

Presenters:

Dr. Lena Springer

King's College London, London

Liz P.Y. Chee PhD

Hong Zheng

National University of Singapore,  
Singapore

Tatiana Chudakova PhD

Tufts University, Tufts

Yubin Shen PhD

Sun Yan-tsen University, Guangzhou

**P17: Early modern mapping of East Asia- multicultural and multidisciplinary perspectives**

The panel will examine maps of East Asia between 1300 to 1800 drawn by Japanese, Korean, Chinese and European mapmakers, focusing on the circulation of cartographic knowledge both within East Asia and from East Asia to Europe.

The aim is to move beyond the study of a few well known cartographic high points studied as unique and original creations (the Kangnido world map, Ricci and Martini, the Kangxi Atlas) and to focus on the production of cartographic knowledge as a collaborative enterprise. During the early modern period in the East Asian region Chinese maps, in manuscript and prints, were adapted by Korean and Japanese mapmakers and from the late 16th century onwards Western printed and manuscript maps of the region became part of the conversation, being both based on East Asian sources and influencing them.

The process of copying, translating and circulating maps from one language and culture into the other will be approached from the angle of intercultural communication, material history, historical linguistics, book history, history of collections, provenance studies.

The panelists come from Europe, China and Japan and embody different backgrounds and scholarly traditions; their contributions will provide snapshots of different depth and detail aiming at drawing the contours of a composite image of East Asian cartographic science in the early modern period.

Presenters:

Marco Caboara PhD  
HKUST Hong Kong University of Science and Technology, Hong Kong

Professor Radu Leca PhD  
Academy of Visual Arts, Hong Kong Baptist University, Hong Kong

Arianna Magnani PhD  
University "Kore" of Enna, Enna

COFFEE BREAK

**IV: 16:10 – 17:50**

**P65: Metallurgical Technologies in Ancient China (continued)**

**P61: How people understood and practiced mathematics? The Diversity and Unity of Mathematics from 13th to 17th centuries China**

In the scholarly community, thirteenth century was viewed the peak of Chinese mathematics, and in the seventeenth century Western mathematics was introduced by Jesuits into China, and triggered a new development of mathematics. This panel is going to discuss this period from a new perspective—how people understood and practiced mathematics in various times, and how this understanding and practicing evolved through the time? The aim of the panel is to reveal the philosophical aspects of Chinese mathematics and their evolution, which was seldom discussed in the past.

Zhou Xiaohan is devoted to demonstrating that, taking examples from Yang Hui's Mathematical Methods (Yang Hui suanfa, 1274, 1275 C.E.) and Introduction to Mathematical Study (Suanxue qimeng, 1299 C.E.), the issue of generality of mathematical algorithm is partly considered and consciously delivered to their audiences by the author of works. Zhu Yiwen will discuss the various mathematical practices in the 16th century, and show their different relations to Confucianism at that time. Chen Siyu will focus on a 17th century scholar Mei Weiding, who learned Western mathematics, however tried to understand and practice all other mathematical knowledge with the algorithms described in the last two chapters of The Nine Chapters on Mathematical Procedures (Jiuzhang suanshu) .

Presenters:

Célestin Xiaohan Zhou PhD  
The Institute for the History of Natural Sciences, Chinese Academy of Sciences, Beijing

Siyu Chen  
Department of philosophy, Sun Yat-sen University, Guangzhou

**P31: "Magic and Medicine in Early Imperial China"**

1. Magical Medicine in Early Chinese Excavated Manuscripts (3rd – 2nd centuries BCE)

Archaeological discoveries of the last decades in China have revealed a great number of medical texts preserved in tombs and non-funerary archaeological sites. Studies of these manuscripts show that early medical practice was neither uniform nor theorized as we would expect from the transmitted classics. This presentation explores the designation of “magical medicine” and will interrogate that as an analytical category in early Chinese medicine.

2. Manuscripts & Matters of the Heart in Early China

Drawing from manuscripts dating from the 3rd – 1st centuries BCE, this presentation focuses on the early legacy of the treatment of illnesses of the “heart” (xin). Different approaches are taken to alleviate ailments, such as “heart pain”: decoctions, invocations, physical choreographies, among others. Attention is drawn to the slow emergence of named ailments as well as the effects of what in the classics might be deemed “perverse qi” from the surrounding environment. Attention is also drawn to the persistence over the centuries of certain recipes and approaches.

3. Objects for Healing - an Archaeological Approach to Medical Devices in Han Dynasty Tombs

Beginning with two lacquerware basins specified in the inscriptions as for decoctions discovered at the tomb of Marquis of Haihun, at the outskirts of Nanchang, Jiangxi province, this presentation looks at the types of medical related material buried in Han dynastic tombs and theorizes their function and meaning from an archaeological perspective. While the focus will be on lacquerware objects— such as dishes, eared cups, human acupuncture models, etc.—the question of whether acupuncture needles and other medical devices are also included in tombs will be touched on.

4. The Heart as the First in the Order of the Five Organs in Early Medical Classics

An inscription incised down the spine of a lacquer figurine excavated from the Han tomb of Laoguanshan at Tianhui township in Chengdu, Sichuan, reads "Heart, Lung, Liver, Stomach and Kidney," referring to the back-shu meridian points of the five organs. The series follows the mutual-restraint order of the five phases: Fire, Metal, Wood, Earth and Water, seen also in the Laoguanshan bamboo medical manuscripts. This order atypically begins the correlated seasonal rotation with Summer instead of Spring--an order that appears occasionally in the received medical classics. This paper explores the idea of a shift from an early emphasis on the heart to the liver or the brain.

Presenters:

Eléonore Caro PhD  
EHESP, Paris, France. CCJ joint lab, Paris

Prof Man Gu PhD  
Institute of History of Medicine & Medical Literature, China Academy of Chinese Medical Sciences, Beijing

Dr. Margareta M. Prüch  
Institute of East Asian Art History, CATS, Heidelberg

Professor Constance A. Cook PhD  
Lehigh University, Bethlehem

Discussant:

Professor Asaf Goldschmidt PhD  
Tel Aviv University, Tel Aviv

**P50: History of Metrology: A Special Perspective to Understand the World**

At this section, we would like to have a good opportunity of presentation and discussion on how we understand the world from the perspective of History of Metrology. Since metrology played an important role in the progress of social and science and there are few people who study the history of metrology, it is necessary to provide an occasion for scholars in the field to exchange their ideas. That is why we apply for the session.

Metrology has wide meaning in our session. It includes historical research matters, such as metrological standard, length standard, volume and weight measurement, astronomical observation and apparatus, land surveying technology, electrical measurement, relationship between science and metrology, and the international activities relating metrology, etc. We also encourage researchers to discuss social context relating measurement and man.

I have already asked people to write paper for the session. Some titles have been determined, such as “The Historical Development of Angle Metrology in Ancient China”, “On the Compilation of Origins of Temperament and Calendar: A Perspective from History of Metrology”, “What is the Shape of Earth? A View on the Metrological Traceability in Cuneiform Sources”, “A Comparative Study of Traditional Chinese and Japanese Medicine Dosage in the Context of Metrological Culture: Based on Classical Chinese and

Japanese Medical Literature” etc. Our session is open to all people who is interested in the topic. We welcome scholars to present papers related to history of metrology in the symposium.

We organized similar sessions three times in the series of International Congress of History of Science and Technology held by the international union of history and philosophy of science. We believe that the session “History of Metrology: A Special Perspective to Understand the World” in ICHSEA 2023 will be as fruitful as those before.

Presenters:

Professor Yuyu Dong PhD  
Department of History, Shanghai Jiaotong University, Shanghai

Professor Rina Sa PhD

Professor Zengjian Guan PhD  
Shanghai Jiaotong University, Shanghai

Professor Yuzhen Guan PhD  
Shanghai Jiaotong University, Shanghai

Discussants:

Professor Weixin Niu PhD  
University of Science and Technology of China, Hefei

Professor Yunli Shi PhD  
University of Science and Technology of China, Hefei

**P45: Many Faces of Health in Modern China**

The field of the history of medicine in modern China has revolved around the binary China-West relations. The arrival of biomedicine and the modern notion of hygiene on Chinese soil and the modernization, or scientization, of Chinese medicine since the mid and late nineteenth century have been studied in the context of such dichotomy. This panel suggests



expanding the scholarly purview and diversifying the meanings of medicine and health and the ways in which they were justified in modern China. Francis Newman (Harvard) emphasizes that what we call “Western medicine” was not necessarily the same as “biomedicine” in late Qing China and examines how meteorology played a crucial role in introducing modern medicine in colonial treaty ports. Meng Zhang (Peking) departs from the centrality of the China-West binary in the historical process of the modernization of Chinese medicine and sheds light on how early twentieth-century Chinese reformers regarded the Japanese colonial reform of traditional Korean medicine as an exemplary model for themselves. Jinghong Zhang (UCSC) and Jongsik Christian Yi (POSTECH) analyze how Maoism was intertwined with dentistry and veterinary medicine respectively. Zhang argues that the ruralization and mass-based reorientation of stomatology in the 1960s and 1970s tended to focus on meeting the urgent need of peasants and therefore contradicted the socialist promise of dialectical holism between the oral and overall health. Yi traces how a series of patterns in fighting contagious animal diseases was established over the course of agricultural collectivization and concludes that the grassroots efforts to keep livestock healthy and alive were integral in the state’s pursuit of a collectivist political economy and the survival of local communes.

Chair:

Dr. Ruth Rogaski  
Vanderbilt University, Nashville

Presenters:

Jongsik Christian Yi PhD  
Pohang University of Science and  
Technology, Pohang

Meng Zhang PhD  
Peking University, Beijing

Francis Newman  
Harvard University, Cambridge, MA

**P33: Environmental History and Climate Change in Asia: Examination of Historical Records on Weather, Climate Crisis and Analysis of Historical Entanglement (Session 1)**

The theme of our conference is “Crises and Entanglements Science, Technology and Medicine in East Asia”. What then can history of science do for these crisis? The crises and entanglement we take in this panel is environment and climate change. The ways we dis-entangle this crisis is to focus on historical analysis, to identify the origins and situation of global climate changes. Usually indicator is increasing CO2, but we look into diversities of records that shows history of weather observations in different part of the world, in various manner. By doing so, we trace changing climate in history. Systematic research on historical change would supply us of knowledge that could partly contribute to overcome the persistence of crises that seem to threaten humanity's survival.

In our society, Jesuit’s academic activities is a favorite and appreciated topic, especially it mathematical sciences and astronomy. Yet, it was not all that they did in the East. Kerby Alvarez discusses meteorological works by Jesuit in Philippines, at the Manila Observatory 1865-1945. Based on rich resources, he discusses scientific activities of global and local communities, so far less focused fields of meteorology, seismology, astronomy and terrestrial magnetism.

Akasaka will shows us of concrete picture of 19th Century historical climate, that she analysed seasonal change in rainfall and surface wind at Manila. Making use of various historical data, with new technique of expertise analysis, she discusses changing pattern of onset and offset of rainy

seasons in longer term and annual variations, also shows us of differing direction of wind that blow over Philippine archipelago.

Recently, historians and meteorologists started to work together, and discovered varieties of historical records on weather. Most notable ones are ship log that recorded a number of instrumental data on sea around the world. Kubota now works on those ship log of different origin, that has sailed around Japan water. Time of discovery sailing, also around “Opening of Japan”, he will show several important observation and discuss meteorological implications of them.

Jun Matsumoto gives us broader picture of historical climate reconstruction in Asian monsoon region. Most of meteorological observation in the region started in the 19th century, some are colonial, and Matsumoto explored absence of record around WW II, widely in the national/institutional archives. This session continues to session 2.

Chairs:

Professor Togo Tsukahara PhD  
Kobe University, Kobe

Professor Atsushi Ota PhD  
Keio University, Tokyo

Presenters:

Kerby C Alvarez PhD  
Department of History, University of the Philippines Diliman, Quezon City

Professor Jun Matsumoto PhD  
Tokyo Metropolitan University, Hachioji  
JAMSTEC, Yokosuka

Tomoshige Inoue PhD  
Japan Agency for Marine-Earth Science and Technology, Yokosuka

Professor Hisayuki Kubota PhD  
University of Tsukuba, Tsukuba

Professor Masumi Zaiki PhD  
Hokkaido University, Sapporo

Professor Ikumi Akasaka PhD  
Seikei University, Toyo

Nobuhiko Endo PhD  
Senshu University, Kawasaki  
Japan Agency for Marine-Earth Science and Technology, Yokohama

Discussants:

Robert-Jan Wille PhD  
Utrecht University, Utrecht

Hieu Phung

**IP39: Popularisation of Science**

Chair:

Ruselle Meade PhD  
Cardiff University, Cardiff

Presenters:

Ting Chen  
Zhejiang University of Technology,  
Hangzhou

Sarena Bao  
Inner Mongolia University, Huhhot

Noa Nahmias  
Independent Scholar, Toronto

**IP21: Dealing with psychic problems and emotions in traditional China**

Chair:

Professor Yumi Hiratai PhD  
Toyo Eiwa University, Yokohama

Presenters:

Professor Ying Zhang PhD  
The Ohio State University, Columbus

Minh Khai Mai-Thi PhD  
Department of Culture Studies and Oriental Languages, University of Oslo, Oslo

Dr. Ulrike Middendorf

University of Heidelberg, Heidelberg

**IP23: Natural environment and ecology**

Chair:

Professor Fei Huang PhD  
University of Tübingen, Tübingen

Presenters:

Qin Yao  
University of Science and Technology of China, Hefei City

Qifang Wu  
Northeast Normal University, Changchun

Dingding Hong PhD  
School for Marxism Studies, Shanxi University, Tai Yuan

**IP46: Appropriating science and technology in Post-WW II East Asia**

Chair:

Lisa Onaga PhD  
Max Planck Institute for the History of Science, Berlin

Presenters:

Tao Wang  
The Institute for the History of Natural Sciences, Chinese Academy of Sciences, Beijing

Jinyan Liu  
The Institute for the History of Natural Sciences, Chinese Academy of Sciences, Beijing

Fang Wang  
The Institute for the History of Natural Sciences, Chinese Academy of Sciences, Beijing

**P26: Medicines outside the Box: Transformed and Transformative Materials in Medieval and Early Modern Japanese and Chinese Medicine**

This panel uses five case studies to explore the ways in which materiality and accessibility of drug materials both transformed and were transformed by diverse materia medica traditions and local healing practices in East Asian history. Materiality as examined in the case studies includes texture, color, and olfactory qualities that can be both natural and artificial. Accessibility depends not only on geography and ecology but also on trade networks and other forms of material exchange. We argue for a renewed attention to the roles that materiality and bodily experience played in the production and transmission of medical knowledge. As materials moved from one time and place to another, new names and uses were created. The significance of these medicines became multi-layered as they encountered new methods of preparation, entered complex regional and local markets, and became agents associated with religious and political institutions, engendering new identities and values.

Andrew Macomber examines the transformative techno-ritual that produced agarwood, which was considered superior to the natural kind, in medieval Japan. Ruth Yun-Ju Chen, through the case of agarwood in Song medicine, explores the epistemics built upon person experience that tamed the exotic and wove textual authority. Wee Siang Margaret Ng focuses on the changing uses of frankincense as a valuable import from the Red Sea region to China, a powerful medicinal substance that changed the landscape of Song medicine, especially medicine for women. Hsiao-wen Cheng investigates the kinds of zhu that were used in pre-Song recipes by comparing the

descriptions of its texture and processing methods, before tracing the many entangled forces—the state, the professional healers, the amateur-scholars, and the market—that reinvented zhu during the Song. Joshua Schlachet analyzes the socio-medical biography and materiality of daikon in the food system of Edo Japan as a testing ground for the fault lines between food and medicine.

Together, the five case studies from medieval to early modern Japan and China seek to complicate and historicize such dyads as the natural and the artificial, the ritual and the technological, the empirical and the textual, the divine and the marketable, the culinary and the medicinal.

Presenters:

Professor Hsiao-wen Cheng PhD  
University of Pennsylvania, Philadelphia

Margaret Wee-Siang Ng PhD  
University of Pennsylvania, Philadelphia

Joshua Schlachet PhD  
University of Arizona, Tucson

Discussant:

Michael Stanley-Baker PhD  
Nanyang Technological University,  
Singapore

**P66: The Impact of Place on the Production in Early Modern East Asia (1000-1900)**

Technological knowledge seems universal in the sense that it can be applied to different conditions, but as the five papers of this panel show, local place and local knowledge play a significant role in the process of knowledge production. This panel especially focuses on how locality made an impact on the configuration and orientation of technological knowledge in early modern East Asia (1000-1900). “New Perspectives on the Production of Metallurgy Knowledge”

shows how the prefecture of Raozhou was crucial to the formation of metallurgy knowledge during the Song dynasty (960-1279); “Maps of Jingdezhen: Three Faces of the City in the Qing Dynasty” uses three Qing (1644-1911) maps to examine how Jingdezhen, as a renowned porcelain production site, caught cartographic attentions through administrative, technical and scholarly lenses; “Compromised Empiricism: Visual Culture of Materia Medica in Song China” examines the role of locality in the state attempt of centralizing and standardizing materia medica knowledge; “Brick Kilns in the Three Ming Capitals: Firing Technology, Supply Networks, and Transmission” argues that although bricks and tiles were in equal demand in the building of the three Ming (1368-1644) capitals, their firing technology and kiln structures varied from one place to another. “Renegotiating Notions of Place and Prosperity in Urban Knowledge of Whales and Whaling in Early Modern Japan” shows how the “universal” knowledge about whales in eighteenth-century Japan, mainly produced by scholars in the capital area, was drawn from the local whaling communities in southern Japan.

Presenters:

Professor Keli Gao PhD  
University of Science and Technology  
Beijing, Beijing

Prof. Yijun Huang PhD  
Minzu University of China, Beijing

Fan Lin PhD  
Leiden University, Leiden

Lianyu Jin PhD  
Nanjing City Wall Museum, Nanjing

Doreen Mueller PhD  
Leiden University, Leiden

**P17: Early modern mapping of East Asia- multicultural and multidisciplinary perspectives (continued)**

**18:00 – 20:00**

MEETING INTERNATIONAL SOCIETY FOR THE HISTORY OF EAST ASIAN SCIENCE, TECHNOLOGY, AND MEDICINE (0.109)

**August 25<sup>th</sup>**

**I: 9:00 –10:40**

PLENARY LECTURE OF PROF: BURNS

COFFEE BREAK

**II: 11:00 – 12:40**

GENERAL ASSEMBLY OF ISHEASTM

LUNCH

**III: 14:10 – 15:50**

**P65: Metallurgical Technologies in Ancient China (continued)**

**P28: Medicine, Hygiene, and Nursing in Modern China**

In ancient China, Traditional Chinese Medicine has long been the predominant medical practice amongst Chinese people. However, since the First Opium War in 1840, a large amount of knowledge and technology of modern Medicine has been introduced to China, which exerted a profound impact on the Traditional Chinese Medicine. In the process of incorporating modern medicine, hygiene and nursing, Chinese local healers have made plenty of adjustments and have gradually established China's own system of modern medicine. Looking back into the history of medicine in contemporary China, we need to take into consideration not only the development of modern Chinese society but also the setting of the whole world, as well as examine the attitudes of colonial society towards western medicine in the view of localization. Although the medical knowledge from overseas gradually permeated to the Chinese society, people didn't just accept those passively and reactively. Instead, the folk doctors, midwives, nurses and other medical service providers have played special roles during the period of

incorporating and disseminating modern medical knowledge.

Nursing is an important part of health care, and it accompanies the whole human life cycle. There are six papers in this panel. Based on first-hand historical materials, these six papers focus on various themes such as nursing, health education, lifestyle behaviour, amongst the others. This panel explores the efforts made by Chinese people to overcome disease, promote hygiene and improve human health in China during the process of seeking liberation against colonialization. We hope this panel could show the complex but promising development of modern medicine in China from a special perspective.

Presenters:

Professor Cheng Zhen PhD  
Center for History of Medicine, Peking University, Beijing

Yuntian Hu  
Department of Medical History and Medical Philosophy, School of Health Humanities, Beijing

Zijing Wu  
Department of Medical History and Medical Philosophy, School of Health Humanities, Peking University, Beijing

Taozhu Cheng  
Professor Jing Guo PhD  
Department of Health Policy and Management, School of Public Health, Peking University, Beijing

Professor Ying Huang  
Department of History of Medicine, College of Traditional Chinese Medicine, Fujian University of Traditional Chinese Medicine, Fuzhou

Professor Xiaoyun Zhao PhD

Department of Basic Nursing and Humanities, School of Nursing, Hangzhou Medical College, Hangzhou

Disi Gao PhD  
Department of Medical Ethics and Medical Law, Beijing

**P53: Crises, Resilience, Local Practices: the Field Allocation System and the Reinvention of Cosmology in Late Imperial China (17th-20th century)**

The Field Allocation (fenye 分野) system, which establishes the correspondence between celestial regions and territorial units for the purpose of prognostication, was a key component of traditional China's correlative cosmology. Based on canonical authorities of the pre-imperial era, it was also marred with inconsistencies from the onset, as practitioners had to square the relative immutability of the Heaven with the ever-changing spatiality of the known world on Earth. Criticized by scholars since the Song dynasty, the fenye system and the Sino-centric cosmology undergirding it underwent even deeper crisis since the 17th century, following the expansion of the Qing imperial territory on one hand, and the introduction of Western geographical science with its notion of spherical Earth on the other. However, the story of the fenye system defies the Whiggish narrative of inexorable progress towards scientific modernity. While the use of longitude and latitude gradually spread, fenye remained an authoritative way to frame space and to situate localities well into the 20th century, with many local practitioners incorporating new cosmological and geographical knowledge into the traditional system. The "Fenye in Local Gazetteers" working group at the Max Planck Institute for History of Science (Berlin), tending to the huge corpus of fenye sections in local gazetteers

(difangzhi 地方志) and other lower-level literati sources such as the popular encyclopedias, traces this complex process characterized by the entanglement, negotiation, and creative hybridization between apparently incommensurable knowledge traditions and cosmologies. By studying the fenyue system from below through socially situated local cases, we seek to explore the following questions: to what extent can authoritative knowledge traditions survive crises by accommodating alien ideas, and when do they give way to new paradigms? How does the plurality of a knowledge tradition explain both its instability and its resilience? How can historians shed new lights on the evolution of a knowledge tradition by putting it in its local context, and how can variegated local stories add up to explicate large-scale epochal changes? We explore these questions using a variety of textual, visual, and cartographical sources. We also explore the potentiality of digital humanities tools that allow historians to shift between the macro and micro scale of analysis, and to reveal patterns of a large amount of data without losing the fine-grained details of local situations.

Chair:

Professor Catherine Jami PhD  
CNRS, Paris

Presenters:

Huiyi Wu PhD  
Centre National de la Recherche Scientifique (CNRS), Paris

Jiajing Zhang PhD  
University of Chinese Academy of Sciences,  
Beijing

Shih-Pei Chen PhD  
Max Planck Institute for the History of  
Science, Berlin

Tan Dan

Renmin University of China, Beijing

Dr. Vera Dorofeeva-Lichtmann  
CNRS, Paris, France

**P10: Resourceful material practice:  
機智, technoscience of living and  
playing with material**

Being resourceful has not been an attitude characterizing technoscientific experts of the modern era, overshadowed by the paramount emphasis on productive efficiency or 'resourcism', which sees everything in nature as resource serving the needs from humans. This panel illuminates resourceful hands-on practice that has been crucial in technoscientific practice throughout the time reconnecting what cannot be separated in our pursuit of technoscience for living on this planet, mind/body, theory/practice, human things/non-human things. By those reconstructions through resourceful practices, we in turn seeks to diffuse so recent dichotomies of the modern/traditional, industrial/craft, expertise/skill too, in line with recent forays on these dichotomies in history of science and technology, environmental humanities, and cognitive sciences. Efficiency of the scientific management largely measured itself in terms of the quantity and the speed of production, generating the unsustainable overproduction and overconsumption of unequal progress and multiple 'crises' of our time. We seek to find different criteria to measure technoscientific achievement and meanings by focusing on resourceful practice, 機智 (kiji in Korean, jizhi in Chinese, kichi in Japanese) in East Asian terms, that is always mindful of what the ever-changing material that we rely on has to say.

We present six cases of technoscientific practices that resourcefully carved, recycled, measured, repurposed,

formulated, and kept securing materials, tools, times, fuels, skills, and social relations. Yulian Wu illuminates how the emperor, court officials, and carvers came up with various strategies in carving raw and previously carved jade stones in jade carving in Qing dynasty. Fumihiko Kobayashi presents about the recycling business in Tokugawa Japan with a case of wastepaper business. Hansun Hsiung discusses Dutch Learning scholars' endeavors to measure and minimize time to learn things in Tokugawa Japan. Kaijun Chen looks into how technicians tried to repurpose wood- or heavy-oil fueled kilns into coal fueled ones in state-owned ceramic factories in Jingdezhen in China during the 1950-70s at the shortage of wood and heavy-oil. Sangwoon Yoo examines how operators and technicians in the semiconductor factory in Korea formulated their problems and solutions through their recording practices. Jung Lee sees both material and social creativities involved in securing the same material for papermaking in disassociating creativity from newness.

These cases seek to illustrate the ingenuity as well as joy of hands-on practice mindful of materials to move beyond technoscience that neglects the importance of things in our lives and bodily practices in technoscience.

Chair:

Hyeok Hweon Kang PhD  
Washington University in St. Louis, St. Louis

Presenters:

Fumihiko Kobayashi PhD  
Independent Scholar, North Bergen, NJ

Dr Hansun Hsiung PhD  
Durham University, Durham

Professor Jung Lee PhD  
Brown University, Providence

Dr. Kaijun Chen PhD  
Brown University, Providence

Professor Sangwoon Yoo PhD  
Hanbat National University, Daejeon

Professor Yulian Wu PhD  
Michigan State University, East Lansing

**IP4: Ethnomedicine and its transnational practices**

Chair:

Siran Liang  
Institute of Geosystems and Bioindication, Braunschweig

Presenters:

Qin Si PhD  
Institute for the History of Science and Technology, Inner Mongolia Normal University, Hohhot

Professor Khasbagan PhD  
College of Life Science and Technology, Inner Mongolia Normal University, Hohhot

Tsung Jen Hung PhD  
University of Sydney, Sydney

Patricia Mundelius  
University of Edinburg, Edinburg

**IP15: Historiography of Chinese Science**

Chair:

Sabine Kink  
University of Tübingen, Department of Chinese Studies, Tübingen

Presenters:

Xiao Liu PhD  
Tsinghua University, Beijing

Fanqi Xu PhD  
University of Massachusetts Amherst, Amherst

Changfei Wen



Inner Mongolia Normal University, Hohhot

### **IP38: Technologies in Circulation**

#### Chair:

Dr. Alexander Jost  
Salzburg University, Salzburg

#### Presenters:

Dr.-Ing., Prof Constantin Canavas  
Hamburg University of Applied Sciences,  
Hamburg

Professor Jia Zhan  
Jingdezhen Ceramic University, Jingdezhen

Haochun Tang  
Jingdezhen Ceramic University, Jingdezhen

Ce Gao PhD  
Institute for the History of Science and  
Technology, Taiyuan

Yang Yang PhD  
Institute for the History of Science and  
Technology, Taiyuan

### **P69: Conflict and Complexity of Scientific and Cultural Communication between Modern China and the West in the Ming and Qing Dynasties**

After two times of "Eastward Transmission of Western Sciences", systematic western science had gradually been introduced into China. Under the social background of China, how to absorb, understand and apply the introduced western knowledge in the context of Chinese traditional knowledge system and knowledge background is a very important issue in research on Sino-Western communication, as well as a key issue in the process of western science taking root in China. On Their Own Terms: Science in China (1550-1990), a research from American sinologist Benjamin A. Elman, focused on how the Chinese government and scholars absorbed Western science

introduced by Jesuit missionaries and Protestant missionaries. He believed that in previous studies, the creativity of non western societies in the process of science communication was ignored, and Chinese people were emphasized to learn western science and technology through their own ways. Referring to such a research perspective, this symposium intends to explore the ideological conflict of scientific and cultural communication between modern China and the west, as well as explore how Chinese people integrated the introduced knowledge and practiced it in their own way.

#### Chair:

Professor Dr. Iwo Amelung  
Goethe-University, Frankfurt am Main

#### Presenters:

Professor Zhaojun Ding PhD  
University of Science and Technology of  
China, Hefei

Professor Fuling Nie PhD  
Inner Mongolia Normal University, Hohhot

Shimin Yang  
Inner Mongolia Normal University,  
Hohhot

### **IP3: Medicine, war and revolution**

#### Chair:

Aya Homei PhD  
School of Arts, Languages and Cultures,  
University of Manchester, Manchester.  
Graduate School of Core Ethics and  
Frontier Sciences and Institute of Ars  
Vivendi, Ritsumeikan University, Kyoto

#### Presenters:

Po-Hsun Chen  
Centre for the History of Science,  
Technology and Medicine, the University of  
Manchester, Manchester

Changyu Chen

University of Science and Technology of China, Hefei

Professor Weimin Xiong PhD

University of Science and Technology Beijing

### **P51: Chinese Scientific Research Institutions and International Exchanges during the Wartime**

In the first half of the 20th century, Chinese society was in extreme turmoil. Political chaos, economic weakness, poor people and weak countries, constant wars, and the country and nation were swaying in the midst of a raging storm. In this difficult situation, China has always maintained exchanges and collisions with the world in the field of science and culture. Since the widespread dissemination of scientific concepts in China in the early 20th century, more and more comprehensive and professional journals related to science have emerged in China to introduce modern science and promote localized research. Science World 科学世界 in 1903, Science 科学 in 1915, Scientific Thought 科学思想 in 1928, Science Record 科学记录 in 1942 and many other magazines were published successively. Science Society of China in 1915, and the China Academy of Arts in 1919 etc. were established. National research institutes such as Academia Sinica, Peking Research Institute, and some government-funded industrial and university research institutes also sprung up. Modern Chinese academics have taken shape during the decades of turmoil. On the one hand, they have taken root in the country, and on the other hand, they have created a new situation of integration and coexistence with the world.

During this war-torn era, how did China's science and technology overcome difficulties in its diversified exchanges with the world, realize institutionalization and

professionalization, and lay the foundation for the development of contemporary China's science and technology? How do China's scientific research institutions implement scientific research, conduct mobilization work, organize foreign exchanges, and respond to social needs at different stages. How do these institutions and organizations pursue the balance between purely theoretical science and application-oriented technology in response to the crisis of various wars, and how the scientific community competes with political forces. Focusing on the questions raised above, this group tries to discuss the work of the Academia Sinica, the National Institute of Engineering, the National Southwest Associated University, the League of Nations and some scientific societies at that time, and tries to make a comprehensive analysis of the relevant scientific research, educational institutions and organizations in China during the war. Tracing the history of their work, and trying to learn from the past: What role should scientific and technological workers play in the face of major social crises? How science and technology can help a society under high pressure to establish confidence to overcome difficulties? what social responsibility science and technology workers should undertake?

#### Presenters:

Maohua Wang

University of Science and Technology of China, Hefei

Professor Banghong Fu PhD

Department of the History of Science and Scientific Archaeology University of Science and Technology of China, Hefei

Professor Degang Yi PhD

College of Humanities DongHua University, Shanghai

Professor Anyi Wang PhD

Jizhang Liu

Department of the History of Science and Scientific Archaeology University of Science and Technology of China, Hefei

COFFEE BREAK

**IV: 16:10 - 17:50**

**P55: Colonial Medicine as a Site of Proxy War: New Perspective on Japan's Imperial Medicine**

In this session, we would like to discuss new perspective on colonial/Imperial medicine of Japan, its crisis and internal/external conflict in various context of East Asian stage.

For this goal in mind, we take a term “proxy war” for the theme of our session. Practice sites of Japan's colonial medicine were its colonies and quasi-colony, also occupied area of Co-Prosperity sphere. But it was not always on-site battle they faced. Those actors and practitioners of Japan's colonial medicine had remote-work in mind. We see them as proxy actors, and try to see the colonial setting of Japan's Imperial area as historical theater.

Shin Chan-Geon will analyze practices of neuro-physiology in the Japan's Imperial University of Seoul (Keijo Teikoku Daigaku) between 1923-1932. According to Shin, there was a proxy war between academic sects of Kyoto Imperial University and Keio University. The difference in academic theory of nerve transmission of information was resonated and magnified to the rivalry between the groups of professors. Shin points out that it was not at all simple Kyoto versus Keio; there were another battle between “Homeland-Keio” versus “Colonial-Keijo”.

Dominik Merdes takes a case study of paracitology in southern China and focuses on medical missionary J. L. Maxwell jr.(1876-1951) and Japan's colonial Doctor in Taiwan, Koan Nakagawa

(1874-1959). He characterizes parasitology in Southern China as “scattered”, before when Japan's colonial medicine in Taiwan emerged. He discusses penetration of experimental knowledge and its institutional infrastructure.

Yuriko Tanaka will discuss about Shibasaburo Kitasato (1853-1931), a representative of German New Science in Japan. Under the direct influence of Robert Koch, Kitasato also disseminated images of Japan's national progress and competitiveness. Focusing on his scientific itinerary in 1889-1894, highlighted in Hongkong 1894 at the so-claimed discovery of plague pathogen, Tanaka points out double aspects of him.

Sumire Saito discusses concept of race and medical institutionalization in colonial Korea, especially around ex-members related to Keijo (Seoul) Imperial University. The first key person to explore was Harujiro Kobayashi (1884-1969), a paracitologist and ex-Professor there. Kobayashi established “The Japan Society of Medical Entmology and Zoology”. That is an organization with continuous colonial characteristics, connecting ex-members of 731 and Kitasato's Institute of Epidemics. The theory of race and categorization of people were encountered at the agency of Kobayashi, Japan's colonial medicine legacy has thus survived after 1945.

Presenters:

Yuriko Tanaka PhD  
Kobe University, Kobe

Dr. Dominik Merdes  
Technical University Braunschweig,  
Braunschweig

Sumire Saito  
Seoul University, Seoul

Chang-Geon Shin  
Tokyo University of Science, Tokyo

Discussants:

Wenhua Kuo

Takuya Miyagawa PhD  
Hiroshima Shudo University, Hiroshima

**P28: Medicine, Hygiene, and Nursing in Modern China (continued)**

**P53: Crises, Resilience, Local Practices: the Field Allocation System and the Reinvention of Cosmology in Late Imperial China (17th-20th century) (continued)**

**P10: Resourceful material practice: 機智, technoscience of living and playing with material (continued)**

**IP5: Gynaecology, Obstetrics and Female Health**

Chair:

Professor Noriko Sato PhD  
Pukyong University, Pusan

Presenters:

Anna Lisa Beck  
Université libre de Bruxelles, Brussels

Heesoo Cho  
Seoul National University, Seoul

Wenhao Chen  
Peking University, Beijing

**IP16: The history of epidemics and infectious disease**

Chair:

Professor Marta Hanson PhD  
Independent Scholar, Minneapolis, Affiliate  
MPIWG, Berlin

Presenters:

Yiqian Lan  
Peking University, Beijing

Kyoryen Hwang  
Seoul National University, Seoul

Qiman Liu  
Peking University, Beijing

**IP29: Engineering and Technology in Modern China**

Chair:

Professor Dr. Baichun Zhang PhD  
Chinese Academy of Sciences, Institute for  
the History of Natural Sciences, Beijing

Presenters:

Mo Wang  
Institute of East Asian Studies, Leipzig  
University, Leipzig

Liao Yuanzhi  
Peking University, Beijing

Dr Hailian Chen  
Leipzig University, Leipzig,

**P7: Mapping South and Southeast Asia in Seventeenth and Eighteenth Century East Asia (continued)**

**IP25: Pharmacology and Drugs in Republican and Wartime China**

Chair:

Jongsik Christian Yi PhD  
Pohang University of Science and  
Technology, Pohang

Presenters:

Rui Fan PhD  
Nanjing Medical University, Nanjing

Wuyutong Yao PhD  
Cambridge University, Cambridge

Xiaoqing Han  
EHESS, Paris

**P51: Chinese Scientific Research  
Institutions and International  
Exchanges during the Wartime  
(continued)**

**18:00 – 21:00**

FAREWELL DINNER

**Emergency contacts and  
phone numbers**

**Emergency contacts:**

Iwo Amelung: 0162 1841501

Selina Kötter: 0157 72079944

Xenia Wasserstein: 0160 7402490

**Emergency numbers:**

Police: 110

Fire department and ambulance: 112

**Medical assistance:**

Bürgerhospital Frankfurt

Nibelungenallee 37, 60318 Frankfurt am  
Main

## Goethe University Frankfurt and Sinology Department



Goethe University was a unique institution at the time of its founding in 1914. It was conceived with the idea that a university could find solutions to contemporary problems. For the city of Frankfurt and its residents, it was only natural to support and financially contribute to the establishment of a university. Prominent figures such as the mayor, Franz Adickes, industrialist Wilhelm Merton, and citizens, particularly of Jewish heritage, donated significant funds for a higher education institution.

As a result, Frankfurt saw the emergence of a university funded entirely by private means, making it the first foundation university in Germany.

Frankfurt, along with Berlin, was considered one of the most well-endowed universities in Germany in terms of finances. Teaching and education were modernly organized, with the founders emphasizing the inclusion of not only traditional disciplines but also new and practical subjects. The natural sciences were organized into their own faculty and not, as was still common elsewhere, part of the Faculty of Philosophy. Alongside the faculties of Medicine and Law, Frankfurt established the first faculty of Economics and Social Sciences in Germany. Additionally, numerous institutes were established as part of the university,

including an Institute for Social Research, an Academy of Labor, an Institute of Cultural Morphology (Frobenius Institute), and an Alsace-Lorraine Institute.

Prior to the National Socialist regime, the university had a distinguished faculty that included Nobel laureates such as Paul Ehrlich (Medicine), Max von Laue, Max Born, and Otto Stern (Physics). Other notable scholars and professors among the teaching staff were Martin Buber, Paul Tillich, Adolph Löwe, Franz Oppenheimer, Karl Mannheim, Kurt Goldstein, Karl Herxheimer, and Max Dehn, among others. The list could easily go on.

However, shortly after Hitler's rise to power, the National Socialists expelled all Jewish and politically undesirable scholars and students from the universities. The University of Frankfurt was particularly hard hit by these coercive measures. By the spring of 1933, 100 Jewish scholars lost their teaching privileges, and one-third of all professors were forced to leave the faculty. An additional 16 lecturers were dismissed from their positions for political reasons. Many students were forcibly expelled from the university and had to abandon their studies. The once cosmopolitan and liberal University of Frankfurt had been transformed into a "conformist" institution under Nazi control.

After World War II and the reconstruction of the destroyed buildings, Goethe University (as it had been called since 1932) found its place again in the German university landscape. It transitioned from a foundation university to a state-funded institution, with foundations playing a subordinate role, and the university became reliant on public funding. Nevertheless, it managed to fill vacant professorships with renowned individuals. The physicists and economists continued the great scientific tradition from before 1933, attracting students to the city. The

high level of academic excellence that was once again achieved in Frankfurt is evident in the number of Nobel laureates who studied or taught here in the second half of the 20th century. Physicists Hans Bethe, Gerd Binnig, and Horst Störmer, medical researchers Günter Blobel and Christiane Nüsslein-Volhard, chemists Paul Karrer and Hartmut Michel, and economist Reinhard Selten all have connections to the University.

Furthermore, the Nobel Prize-winning author Günter Grass served as a guest lecturer for poetics in 1990. Additionally, two professors from the University received the Balzan Prize, often referred to as the "Nobel Prize for the humanities." These esteemed individuals were historian Lothar Gall and legal historian Michael Stolleis. The University of Frankfurt had regained its standing as a prestigious academic institution with a rich tradition of excellence in various fields of study.

When the University started in 1914 about 600 students were matriculated. Today it boasts more than 40.000 students and thus is one of the largest universities in Germany. It has four campuses – the Campus Westend on which the conference takes part being the result of one of the largest investments in university infrastructure in recent years.

As early as 1922, Richard Wilhelm had been awarded an honorary doctorate degree by Frankfurt University. In 1924, he became honorary professor at the university and at the same time was entrusted with teaching Chinese studies. Richard Wilhelm aimed at founding a "Chinese Cultural Institute," in which he would be able to put into practice his ideas on cultural exchange. And indeed, within one year, Wilhelm was able to find Countess Bertha von Francken-Sirestorff, member of a wealthy industrialist family, as donator, not only supporting the founding of the China



Institute but also of Wilhelm's teaching assignment at the university. Wilhelm subsequently was able to win over more than a hundred personalities from society for supporting the China Institute. This enabled the institute and Frankfurt sinology to unfold its influential and widely acknowledged activities. Soon the China Institute began publishing a Chinese-German almanac and later on the journal *Sinica*, which was to become one of the most important German sinological journals. Once the China Institute had been successfully established, Wilhelm asked Frankfurt University to officially acknowledge the Institute as "Seminar for Chinese Studies at Frankfurt University," which the university's leadership did after Wilhelm had assured that Seminar and Institute would support themselves financially by their own means. Already during this early stage, Frankfurt sinology had an impact beyond its more limited realm. Wilhelm, for example, was one of the advisors of Karl August Wittfogel's dissertation, which in 1931 was published in extended form as *Wirtschaft und*

Gesellschaft Chinas (Economy and Society of China) and which created an international stir. Willy Hartner, who later on would become an extraordinary important historian of science, also developed a close relationship to Frankfurt University's Chinese studies and published – partially in collaboration with Richard Wilhelm – on traditional Chinese astronomy.



Beginning with the world economic crisis of the late 1920s, the financial situation of the China Institute became ever more complicated and Sinology was only able to survive by accepting grants from the state. The death of Richard Wilhelm in 1930, however, resulted in an immediate threat of the closing of the institute. A magnanimous grant of the Chinese Guomindang government made it possible to preserve the professorship and the institute, so that Frankfurt sinology continued to exist.



Erwin Rousselle (1890-1949) became Richard Wilhelm's successor. Since 1925, he had been professor for German philosophy at Peking University and thus had also been successor of Wilhelm in Peking. Rousselle managed to establish himself as successor to Richard Wilhelm and continued the work of cultural exchange very much in the tradition of his predecessor. He founded the highly valued collection of Chinese arts of the Institute and mainly did research on the history of Chinese religions and philosophy. Similar to Wilhelm, he also dealt with practical topics such as Chinese maritime affairs and fisheries.

The economic recovery of the middle of the 1930s and the financial support of the city of Frankfurt, which at that time financed the university, meant a brief time of flowering for the China Institute, which, however, was overshadowed by the politics of the National Socialist regime. This becomes clear, for example, from the compilation of a Festschrift for the Hamburg sinologist Alfred Forke on the occasion of his 70th birthday in 1937, which was to be published as a special edition of the renowned *Sinica*. Contributions of "non-aryans," communists or other authors not palatable to the Nazi-regime were excluded from the outset, among them those of renown scholars such as Gutav Haloun, Hellmut Wilhelm and Étienne (then still Stefan) Balázs. In 1940, Rousselle himself was targeted by the National Socialists. Possibly because of his views of comparative religions related to his work on popular Daoism, he was removed from his post as professor of Chinese studies. He, however, retained the directorship of the China Institute until 1942. At the beginning of the year 1943, Rousselle finally was denied the right to speak at the university.

His successor became the Belgian-born palaeographer, archaeologist and



sinologist Carl Hentze (1883-1975), who considered the cross-cultural work of the China-Institute as “humbug,” rejected it and planned to focus on strictly academic research. He mainly worked on early Chinese bronzes from the Shang dynasty. In the course of an air-raid in 1944, the building of the China Institute at the Untermainkai was completely destroyed. Its extensive library and the art collection were lost. This meant that the China Institute and Frankfurt sinology had effectively ceased to exist.

After the end of the war, the directorship of the Institute as well as the professorship were scheduled to be newly filled. This resulted in a quarrel between Hentze and Rousselle, who both asserted their claims. Due to the circumstances of his ascension to the professorship during the war, Hentze was regarded as politically burdened because he allegedly was forced upon the university after an intervention of the then Gauleiter. Moreover, for reasons of age, he was out of consideration. Since Rousselle died in 1949, Adolf Jensen was appointed interim director of the China Institute. Jensen had been director of the Frobenius Institute, director of the ethnological museum and professor for cultural anthropology at Frankfurt University since 1946. In 1962, he handed the interim directorship to Otto Karow (1913-1992), japanologist and professor for East Asian philologies, who filled this position until 1972. Neither Jensen nor Karow were really qualified to continue the work of the China Institute so that this institution continued to exist in all but in name.

After the Johann-Wolfgang Goethe University had been transferred into the ownership of the state of Hessen, the professorship for Chinese studies was re-established in 1973. Newly appointed as professor was Chang Tsung-tung (1931-2000) from Taiwan, an economist and

sinologist, who mainly did research on palaeography and classical Chinese philosophy. The China Institute was re-established under his leadership and organized as an association financed by its members and private donations. In this way, the professorship and the China Institute became separate entities in terms of finance and organization. The revived Institute had the explicit goal to re-connect to its tradition of cultural exchange and communication of the times of Richard Wilhelm and Erwin Rousselle. This meant that the Institute started its work with series of lectures, exhibitions of Chinese art and concerts of traditional Chinese music.

The retirement of Chang Tsung-tung in 1999 initiated a phase of re-orientation of Frankfurt sinology. After a brief vacancy and a substitution of the professorship, Dorothea Wippermann was appointed professor for Chinese studies in 2001. Chinese studies re-focused on a more contemporary orientation. Interdisciplinary cooperation in teaching and research was strengthened and cooperation with Chinese universities and research institutions were initiated. At the same time, a stronger integration into the infrastructure, culture and economy of the city of Frankfurt began. Richard Wilhelm had already aimed at connecting China studies and the civic society of Frankfurt, and this was now attempted on a new basis with modern concepts. This was also the reason for the re-vitalization of the China Institute in 2006.

As early as 2002, the department had installed a junior professorship, to which Natascha Gentz was appointed. The establishment of the Interdisciplinary Center for East Asian Studies (IZO) in 2004 with its manifold activities in teaching and research, to which Frankfurt sinology contributed to a considerable degree, placed intra-university cooperation on a new basis. When Natascha Gentz was appointed professor at Edinburgh University, she was

succeeded by Elisabeth Kaske. In 2007, Iwo Amelung was appointed professor of culture and history of China. He mainly works on cultures of knowledge, history of science and general history of the late Qing and the Republican era.

After Elisabeth Kaske being appointed professor at Carnegie-Mellon University in Pittsburgh, Yang Zhiyi, a Princeton educated literary scholar, was appointed for the junior-professorship. This position has been tenured. Chinese studies in Frankfurt also profits from the professorship of Area Studies East Asia with a special focus on China, which has been established in the Department of Political Science and to which Heike Holbig has been appointed.

## Forke Collection

Collection Alfred Forke (\*1867 †1944)

Alfred Forke worked as interpreter for the German embassy in Peking and later became Professor at the Seminar für Orientalische Sprachen (Department for Oriental Languages) Berlin and University of Hamburg. After his studies at Genf and Berlin, he received his doctoral degree in law at Rostock in 1890. During his studies in Berlin, he started learning Chinese at Seminar für Orientalische Sprachen. 1890 he moved to Peking working as interpreter for the German embassy. 1903 he returned to Germany to succeed as professor after the death of his former teacher Karl Arendt in Berlin. 1923 he took over the professorship for Chinese studies at Hamburg until his retirement 1935. His publication cover a wide area of studies, e.g. law, ethnology, language studies, as well as translations of poetry from Han to Song dynasty. The focus of his research has been philosophy. In this area he published for example his wide know “The world Conception of the

Chinese” (1925), as well as his translation of Wang Ch’ungs Lun-heng.

There are only few information on the provenance of his collection. It seems likely that the main part of his collection has been assembled during his stay in China. Records of the China-Institut at University Frankfurt show that the collection was obtained first by the municipality Frankfurt and later the China-Institut of the University Frankfurt. Forkes collection covers a vast variety of subjects in Chinese such as historical works, philosophical writings, poetry collections, novels and many more. We would like to give you a small impression on Alfred Forkes extraordinary collection during this conference in a separate exhibition at the library.

### Exhibition opening time:

22.08. 11:00 – 13:00; 15:00 – 17:00

24.08. 11:00 – 13:00; 15:00 – 17:00

### Exhibition Location:

SKW Building Library 1. Floor  
(The way will be signposted)

## Information about Frankfurt



Frankfurt, the vibrant financial hub of Germany, is a city that seamlessly blends modernity with rich history. Situated along the Main River, this cosmopolitan metropolis offers a plethora of cultural experiences, making it a popular destination

for travelers from all around the world. As the financial heart of Europe, Frankfurt boasts a striking skyline adorned with towering skyscrapers, earning it the nickname "Mainhattan." Beyond its financial prowess, the city is also renowned for its famous museums and captivating sightseeing spots that cater to the interests of every visitor.



The city's museum landscape features some of the most renowned institutions in the world. Among the must-visit museums is the Städel Museum, which houses an extensive collection of European art spanning from the Middle Ages to the present. Art enthusiasts can revel in the masterpieces of iconic artists like Rembrandt, Monet, and Picasso. With its diverse range of exhibits, the Städel Museum offers a journey through the evolution of European art.

Another gem in Frankfurt's cultural crown is the Frankfurt Goethe House, a place of great historical significance. This beautifully preserved 18th-century house is where the famous German writer Johann Wolfgang von Goethe was born and raised. Visitors can step back in time and explore the life and works of this literary genius, immersing themselves in the atmosphere of the Age of Enlightenment.



For a taste of the city's medieval past, Römerberg is a must-see destination. This charming square boasts picturesque half-timbered houses and has been the heart of Frankfurt's old town for centuries. Visitors can marvel at the iconic Römer, the city's historic town hall, and soak in the lively ambiance of the cafes.

The Main Tower, one of Frankfurt's tallest buildings, offers an awe-inspiring panoramic view of the city and the surrounding landscape. Its observation deck allows visitors to witness the juxtaposition of ancient and modern architecture, as well as the picturesque Main River winding through the cityscape.

For those seeking relaxation amid nature, Palmengarten is an oasis of tranquility. This botanical garden showcases an extensive array of plants from around the world, creating a serene escape within the bustling city.

Lastly, the Frankfurt Cathedral (Frankfurter Dom) stands as an impressive example of Gothic architecture. Its towering spire and stunning interiors make it a prominent landmark and a site of historical and religious significance.

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