Laboratory Name | College/School/Department | Professor | E-mail Address | Telephone No. | Research Area | Project Description | Admission Requirements | Capacity | Reimbursement
--- | --- | --- | --- | --- | --- | --- | --- | --- | ---
Laboratory of New-Structured Materials | School of Materials Science and Engineering | Prof. Dr. Jie-Jie Zhang | jiezj@zju.edu.cn | +86 571 87952105 | Metallurgical glass, metallic liquids, phase transition | This research project covers widely aspects of amorphous alloy synthesis, characterization to properties. Depending on the candidate’s background, he or she has to focus on one of metallic glasses and metallic liquids research fields, which could be experiments and/or simulations. | Materials Science and Engineering, Physics, Computer Sciences | no requirement | 2
Surface Engineering Lab | School of Materials Science and Engineering | Chengqing Gu | edgu@zju.edu.cn | +86 13451645656 | Coatings; corrosion protection; battery | Novel methods for improving the corrosion resistance of magnesium alloys based on the interaction with ionized liquids; 2. magnesium anode battery | Mechanical Engineering, Physics, Chemical Sciences | 1 | 2
Global climate change modeling group | School of Earth Sciences | Long Cao | longcao@zju.edu.cn | +86 13980317688 | Global climate change, Carbon cycle, Climate engineering, earth system modeling | Global climate change is one of the most challenging issues facing mankind in the world today. Climate engineering, also termed as geoengineering, has been proposed as a means to avoid dangerous anthropogenic climate change. In this project, we will use climate and Earth system models to explore the consequences of geoengineering on global climate and environment. | Environmental Science, Environmental Engineering | 3 | 3
atmospheric aerosol chemistry | School of Earth Sciences | Weijia Li | weijia@zju.edu.cn | +86 1003600005 | Individual particle, aerosol sampling, particle formation, photochemistry, optical properties, aerosol-cloud interaction | Atmospheric chemistry is important to understand aerosol compositions and formation of haze-fog in urban areas. If we understand aerosols, we can know their sources and further provide any strategy to reduce emissions from various sources. Also, we understand mixing state of aerosol particles from different sources, so we might get agood process following at mass transport. Based on the results, we can understand optical properties of aerosol particles, particularly, the black carbon in the air which enhance climate change. | Environmental Science | 3 | 3
Geographic information science | School of Earth Sciences | Feng Zhang | zffassoc@zju.edu.cn | +86 13588104219 | Spatio-temporal data modeling | Estimation; prediction and conductions of PM2.5 concentrations based on GIS. | Environmental Science | 1 | 1
Key Laboratory of Animal Virology | College of Animal Sciences | Jie Zhu | zhuji@zju.edu.cn | +86 571 88842909 | Molecular Virology, Virus Biology and Immunology | Isolation of animal viruses from clinical samples. Analysis of the biological and genetic characteristics of variant isolates. | Cellular Agriculture | 1 | 1
Key Laboratory of Ministry of Agriculture | College of Animal Sciences | Min Liao | liamin@zju.edu.cn | +86 571 88820995 | Molecular Virology and Immunology | Isolation and characterization of animal viruses from clinical samples. Analysis of the biological and genetic characteristics of variant isolates. | Cellular Agriculture | 1 | 1
Smart and Artificial Virology | Department of Veterinary Medicine | Yuxi Huang | yuxi@zju.edu.cn | +86 13783016152 | Virology, Preventive Veterinary Medicine | Involvement in potential cross-species transmissions of an emerging porcine coronavirus. | Veterinary Medicine | Major in life sciences | 1 | 1
Power Electronic Lab | Electrical Engineering | Xuebo Liu | xuebo@zju.edu.cn | +86 15268557283 | Power electronics, Power Electronic Device Laboratory (PEDL) | High-speed motors, High-speed high/low frequency,storage, rare earth motors, vibration and noise of motors. | Electrical Engineering | Prof. or PhD | 2 | 2
Smart Mechatronics | Department of Electrical Engineering | Zhongshuang Zhu | zhs@zju.edu.cn | +86 13875717607 | Power electronics, Power Electronic Device Laboratory (PEDL) | High-speed motors, High-speed high/low frequency,storage, rare earth motors, vibration and noise of motors. | Electrical Engineering | Prof. or PhD | 2 | 2
Power Electronic Device Laboratory (PDLS) | College of Electrical Engineering | Research Professor | zhuang_zh@zju.edu.cn | +86 13785715140 | Power semiconductor device and circuit | Power semiconductor device and circuit | Electrical Engineering | Students who are interested in power electronics | 1 | 1
Power Electronic Device Laboratory (PDLS) | College of Electrical Engineering | Research Professor | zhuang_zh@zju.edu.cn | +86 13785715140 | Power semiconductor device and circuit | Power semiconductor device and circuit | Electrical Engineering | Students who are interested in power electronics | 1 | 1
Power Electronic Lab | College of Electrical Engineering | Wei Li | weli@zju.edu.cn | +86 13806011001 | Power devices, converter topologies and advanced control methods for high-power conversion systems | Common mode voltage/voltage current in the critical issues of power systems. In recent research, the possibility of applying hybrid three level active power filter based converter to the PV system is investigated. Its characteristics of common mode voltage/current cannot be reduced which will be the core in this project. Novel modulation schemes to eliminate the common mode voltage/current are going to be developed. | Electrical Engineering | For MSc undergraduate / graduate students | 0 | 0
Smart Energy Systems Research Lab | College of Electrical Engineering | Qiuyuan Qian | qianq@zju.edu.cn | +86 13705224946 | Data-driven and machine-learning techniques in smart energy systems; Cyber-physical systems; Large-scale complex system | Data-driven and machine-learning techniques in smart energy systems; Cyber-physical systems; Large-scale complex system | Electrical Engineering | For MSc undergraduate / graduate students | 0 | 0
Power Electronic & Renewable Energy | Department of Electrical Engineering | Prof. Jia-Wei Guo | jwg@zju.edu.cn | +86 13737467056 | Renewable Energy Integration; Smart Distribution Network; Microgrids. | To get familiar with the control strategies for renewable energy generation equipment, such as PV, wind and turbine, etc. | Electrical Engineering | Good knowledge in programming and mathematics in preferable. Applicants must also be able to provide defense in scientific research. | 2 | 2
Renewable Energy Control Technology Laboratory | College of Electrical Engineering | Mike Xu | mxu@zju.edu.cn | +86 13737467056 | Renewable Energy Integration; Smart Distribution Network; Microgrids. | To get familiar with the control strategies for renewable energy generation equipment, such as PV, wind and turbine, etc. To get familiar with the operation control strategies of microgrid scale microgrid, and to attend the simulation study in In-Lab based platforms. | Electrical Engineering | Good knowledge in programming and mathematics in preferable. Applicants must also be able to provide defense in scientific research. | 2 | 2
Diagnosis Lab (Prof Shen’s Lab of Electrical Machines and Drives) | College of Electrical Engineering | Prof. Jianxin Shen | js@zju.edu.cn | +86 13516708808 | High-Speed Electric Machines, Low-Speed Electric Machines, Control of Permanent Magnet Machines and Drives, New Permanent Magnetic Machines, Superior Performance Induction Machines, Wireless Power Transmission, Electro-magnetic Transmission of Mechanical Power, Linear Machines and Applications, Energy Harvesting, Renewable and Sustainable Energies, HV & EHV, Electromagnetic Stabilization. | Design and analysis of synchronous reluctance machines as is to find appropriate control strategies. The machine to validate the appropriate control strategies to verify the machine performance. Commercial CFD software will be used. Test facility existing in the lab can be used and may need modification to suit the required test. | Electrical Engineering | A strong sense of responsibility, mission and knowledge. Great passion; interest; chemical or physical engineering and regenerative surfaces, nanobiomaterials, tissue formation are available too. Cell culture in vitro and assay of their molecular mechanisms are available. Methods of emulsion, casting, coating and 3D printing of different types of tissues and organs. Supramolecular species-responsive biomaterials for regeneration of different tissues and organs. | 2 | 2
Biomaterials for Tissue Repair and Regeneration | Department of Polymer Science and Engineering | Changyao Gao | cygao@zju.edu.cn | +86 13851818178 | Biomaterials, biomaterials surfaces, nanobiomaterials, tissue engineering and regeneration medicine, polymer synthesis and formulations. | Biomaterials, biomaterials surfaces, nanobiomaterials, tissue engineering and regeneration medicine, polymer synthesis and formulations. | Polymer Science and Engineering | The candidates (undergraduates, master students and Ph.D students) should have minimum training on lab skills and scientific studies. | 2 | 2
Nonpolymer Group | School of Public Affairs | Prof. Chao Gao | ggao16@163.com | +86 1003768859 | Microscopic Assembly of Graphite Materials | Graphite of graphite materials including fibers, films, non-woven fabrics, and anode/ cathode. All these graphite materials were found holding great potentials in various applications, such as lithium-ion batteries, ultracapacitors, energy storage, electromagnetic shielding and abrasion resistant materials. There are two directions that can be provided for you to the new lab environment. 1. Having great interests in graphite materials; 2. Having the experience of research work. | Materials Science and Engineering, Chemical, Polymer Science | 2 | 2

1/2 – 3/4
<table>
<thead>
<tr>
<th>Laboratory Name</th>
<th>College/School/Department</th>
<th>Professor</th>
<th>E-mail Address</th>
<th>Telephone No.</th>
<th>Research Area</th>
<th>Project Description</th>
<th>Admission Requirements</th>
<th>Capacity</th>
<th>WebLink</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biomedical Photonics Lab</td>
<td>College of Optical Science and Engineering</td>
<td>Cai Si</td>
<td><a href="mailto:lkn@zju.edu.cn">lkn@zju.edu.cn</a></td>
<td>+86 571 88841772</td>
<td>Biophotonics, Optical microscopy, Opto-electronics, Deep tissue imaging and focusing, Adaption Optics</td>
<td>Optical microscopy has revolutionized biological research during the past few decades. A lot of work has been done to improve its resolution and imaging depth. Our imaging depth can reach more than 100 microns to the scattering. Nowadays, brain science research is in the core of biological science, which requires even higher resolution imaging. Our lab is developing new methods to analyze neural circuits and control neural activity.</td>
<td>Responsible, with certain optical knowledge, good communication skills, hands-on ability</td>
<td>5</td>
<td><a href="http://epmg2010.zju.edu.cn/">http://epmg2010.zju.edu.cn/</a> lab/chnl.html</td>
</tr>
<tr>
<td>Laboratory Name</td>
<td>College/School/Department</td>
<td>Professor</td>
<td>E-mail Address</td>
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<td>Weblink</td>
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<tr>
<td>Functional polymer</td>
<td>Chemical &amp; Biological Engineering</td>
<td>Zhen Tao</td>
<td><a href="mailto:yxw@zju.edu.cn">yxw@zju.edu.cn</a></td>
<td>+86 571 8751832</td>
<td>polymeric materials, chemical engineering</td>
<td>With the frequent occurrence of crude oil leaking at sea, the extensive implementation of secondary oil recovery and the large-scale production of oily wastewater, oil-water separation technology has become one of the key measures to ease the environmental crisis and reduce energy waste. Aerogel membranes can be used as a filter medium to separate oily-water or oil-water effluent efficiently and continuously. In the existing research, either organic solvents or coagulant is used in the oilfield. The influence of the complex components, such as asphaltene and paraffins in the crude oil, has not been considered. This project will focus on the mixture of water and crude oil with high asphaltene content, and study the mechanism of how the emulsification of water droplets and oil droplets caused by the asphaltene property of asphaltenes, the precipitation of asphaltene paraffins and the presence of paraffins components on the oil-water separation using aerogel membranes. The functional improvement of crude oil will be synthesized to solve asphaltene and paraffins simultaneously, weaken the emulsification effect of asphaltenes, reduce the influence of asphaltenes precipitation, and decrease the size of paraffins crystals. At the same time, the porous structure of aerogel membrane, the underwater aliphatic and the hydrophobicity in oil will be manipulated. The combination between the aerogel membrane and the functionally improved paraffin will be optimized to construct a suitable process for high efficiency and continuous separation of asphaltene-paraffin crude oil-water mixture.</td>
<td>2nd and 4th undergraduate students or graduate students</td>
<td>1-2</td>
<td>none</td>
</tr>
<tr>
<td>Zuijun Wei’s Lab</td>
<td>Chemical &amp; Biological Engineering</td>
<td>Zuijun Wei</td>
<td><a href="mailto:zuijunwei@zju.edu.cn">zuijunwei@zju.edu.cn</a></td>
<td>+86 15888810768</td>
<td>Catalyst design and Green catalysis</td>
<td>In order to design a heterogeneous catalyst with high performance, we should try to understand the interaction among the active sites, support surface, and the structure of the substrates. This can be partly accomplished by DFT calculation, and partly by understanding the properties of the metals and supports to be used. While in catalytic procedures, we will characterize by modern physical techniques and evaluate its performance by some model reactions in the biomass transformation field.</td>
<td>1st and 2nd graduate students in chemical engineering</td>
<td>1</td>
<td><a href="http://www.person.zju.edu.cn/hw@zju.edu.cn">http://www.person.zju.edu.cn/hw@zju.edu.cn</a></td>
</tr>
<tr>
<td>Supramolecular Chemistry</td>
<td>Department of Chemistry</td>
<td>Feifei Huang</td>
<td><a href="mailto:fuang@zju.edu.cn">fuang@zju.edu.cn</a></td>
<td>+86 571 8751818</td>
<td>Supramolecular chemistry</td>
<td>Supramolecular materials, asphaltphene, self-assembled nanoporous adaptive crystals for adsorption and separation</td>
<td>The candidates have published at least two first-authored research papers and are good at written and spoken English.</td>
<td>2</td>
<td><a href="http://www.person.zju.edu.cn/huangfei/index.php">http://www.person.zju.edu.cn/huangfei/index.php</a></td>
</tr>
<tr>
<td>MOE Key laboratory of Environment Remediation and Ecological Health</td>
<td>College of Environmental &amp; Resource Science</td>
<td>Shaoguo Tian</td>
<td><a href="mailto:xiaodong@zju.edu.cn">xiaodong@zju.edu.cn</a></td>
<td>+86 15701112301</td>
<td>Photocatalysis and bioremediation</td>
<td>(1) Mechanism of metals transportation, immobilization and loading into inorganic. To reduce the content and bioavailability of heavy metals in rice grains to protect human health and well being. (2) Mechanisms of cellular and vacuolar sequestration of heavy metals in hyperaccumulator plants. To improve our understanding of plant heavy metal tolerance mechanisms in order to facilitate phytoextraction of heavy metals contaminated soils. (3) Localization and transport of microorganisms in crops. To optimize the ability of bacterial formulations to be used as a means to maximize productivity and environmental sustainability of agricultural species, and also for the bioavailability of micronutrients in crops. (4) Optimized fertilization and agricultural management of food plants.</td>
<td>1st or 2nd graduate students or graduate students</td>
<td>5</td>
<td>none</td>
</tr>
<tr>
<td>Lab of wastewater treatment science and technology</td>
<td>College of Environmental &amp; Resource Science</td>
<td>Weixing Zhao</td>
<td><a href="mailto:weixing@zju.edu.cn">weixing@zju.edu.cn</a></td>
<td>+86 571 8882730</td>
<td>Environmental Biostabilization</td>
<td>Wastewater treatment</td>
<td>Resource and energy recycle in wastewater treatment</td>
<td>Basic knowledge in microbiology and environmental chemistry</td>
<td>1</td>
</tr>
<tr>
<td>State Key Laboratory of Fluid Power and Mechatronic Systems</td>
<td>Mechanical Engineering</td>
<td>Huaiyong Yang</td>
<td><a href="mailto:yhuaiyong@zju.edu.cn">yhuaiyong@zju.edu.cn</a></td>
<td>+86 18049080101</td>
<td>Metal additive manufacturing</td>
<td>1. Design of high fatigue (wear) resistant materials using additive manufacturing.  2. Additive manufacturing based machine design</td>
<td>1. Background in mechanical engineering or material science is required. 2. Third or fourth year undergraduate students or graduate students</td>
<td>2</td>
<td>none</td>
</tr>
<tr>
<td>State Key Lab of CAD &amp;EC</td>
<td>College of Computer Science and Technology</td>
<td>Xiaowei Zhou</td>
<td><a href="mailto:xiaowei@zju.edu.cn">xiaowei@zju.edu.cn</a></td>
<td>+86 13717570588</td>
<td>Computer Vision</td>
<td>3D scene reconstruction and understanding</td>
<td>Abilities in math and programming</td>
<td>1</td>
<td><a href="http://cad.zju.edu.cn/home/hwu/">http://cad.zju.edu.cn/home/hwu/</a></td>
</tr>
<tr>
<td>Digital media Computing</td>
<td>College of Computer Science and Technology</td>
<td>Yin Zhang</td>
<td><a href="mailto:yinzh@zju.edu.cn">yinzh@zju.edu.cn</a></td>
<td>+86 13111467650</td>
<td>Information Retrieval/Dialogue System, Deep Reinforcement Learning</td>
<td>Developing information retrieval/Datalogue systems. Information retrieval systems are capable of answering complex information needs by collating relevant information from a large number of documents with automated information retrieval, consolidation, and organization.</td>
<td>Major: Computer Science</td>
<td>1</td>
<td><a href="http://www.person.zju.edu.cn/hw@zju.edu.cn">http://www.person.zju.edu.cn/hw@zju.edu.cn</a></td>
</tr>
<tr>
<td>Computer aided product design engineering and research</td>
<td>College of Computer Science and Technology</td>
<td>YAO Chong</td>
<td><a href="mailto:yaochong@zju.edu.cn">yaochong@zju.edu.cn</a></td>
<td>+86 15080296680</td>
<td>Human Computer Interaction, Design Thinking, Interaction Design, Industrial Design, Product Design, Service Robot</td>
<td>Integration Design: The project is focusing on the applications of technologies that could be used to help together. The purpose of the application is aiming at the market by designing the user experience and business strategy.</td>
<td>Good computer knowledge/familiar with machine learning/good coding habits</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Real Doctor AI Research Centre</td>
<td>College of Computer Science and Technology</td>
<td>Wu Jian</td>
<td><a href="mailto:wujian000@zju.edu.cn">wujian000@zju.edu.cn</a></td>
<td>+86 13819700013</td>
<td>Medical Imaging/ Medical AI/ Natural Language Processing</td>
<td>Medical image processing/research on medical AI</td>
<td>Digital Acquisition of Objects, to be submitted to ACM SIGGRAPH/SIGAI Asia, the top conference in computer graphics</td>
<td>Strong background in coding, some background in computer/graphics machine learning/ software engineering is a plus</td>
<td>1</td>
</tr>
<tr>
<td>State Key Lab of CAD &amp;EC</td>
<td>College of Computer Science and Technology</td>
<td>Hengyi Wu</td>
<td><a href="mailto:hengyi@zju.edu.cn">hengyi@zju.edu.cn</a></td>
<td>+86 571 8826560</td>
<td>Computer Graphics</td>
<td>Digital Acquisition of Objects, to be submitted to ACM SIGGRAPH/SIGAI Asia, the top conference in computer graphics</td>
<td>Strong background in coding, some background in computer/graphics machine learning/ software engineering is a plus</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Learning and Cognitive Science Laboratory</td>
<td>College of Education</td>
<td>Qiuren Xu</td>
<td><a href="mailto:yxqu@zju.edu.cn">yxqu@zju.edu.cn</a></td>
<td>+86 571 8827610</td>
<td>Individual Differences in Infants; Parenting and Attachment; Early Childhood Learning; Child Care and Social Policy; Sleep/Developmental Thinking</td>
<td>We mainly focus on mind development, especially of children age 0-18 from infants to adolescents. We are interested in learning mechanism and new learning environment influence.</td>
<td>Research interests: early childhood development, learning and teaching, sleep, parenting, intelligent tutoring systems(ITS), critical thinking training of thinking/related majors (psychology, education, neuroscience, computer science, social sciences), intelligence/learning experience in overseas (PhD/EEG experiments is preferred)</td>
<td>3</td>
<td><a href="http://personal.zju.edu.cn/hw@zju.edu.cn">http://personal.zju.edu.cn/hw@zju.edu.cn</a></td>
</tr>
</tbody>
</table>
Lab of Network Sensing and Control
College of Control Science and Engineering
Zheng Chen
zhengchen@zju.edu.cn
+86 571 87953762
Big Data
Skill-Sharing Devices (SSD) provide a convenient and environmentally friendly way of transportation and become popular worldwide. We have collected over 200 million usage records in Hangzhou SSD, which is one of the largest SSD. In this project, we will focus on using data-driven AI traffic optimization, user navigation, system infrastructure design and related problems.

Synchronized with Python Programming; Basic knowledge of Machine Learning/Data Mining.

2

Microfluidics and Soft Matter Lab
School of Energy Engineering
Dong Chen
dchen@zju.edu.cn
+86 13858113612
Microfluidics and Soft Matter
Our group mainly focuses on microfluidics and soft matter.

We welcome students who major in Physics, Chemical Engineering, Mechanical Engineering, Material Science or other related disciplines to join our group.

Communicate with others in English and with others as a team.

https://zjumicrofluidic.wixsite.com/chendonglab

Human Mobility and Automation Research Group
Inst. Vehicular Engineering, College of Energy Engineering
Daxue Li
ddl@zju.edu.cn
+86 15990014454
1. Autonomous Driving Vehicle for safety and efficiency, (ii) Human Automation Interaction (iii) Smart Electric Vehicles;

This is a multidisciplinary project on Autonomous Driving vehicle (ADV). We have two main topics for you to participate in: (i) Autonomous Driving algorithms, including but not limited to sensing, Planning and Decision, and Motion Control, based on optimization / machine learning; (ii) Our lab is equipped with a million USD worth facilities, ranging from Lidar, sensor simulation, to an autonomous electric vehicle. (i) DU and human interaction e.g. how human drivers operate or interact with ADV, how ADV can handle the massive motion sickness issues, how other road users interact with ADV. Our lab is equipped with human factors instruments, e.g. MRI/PsychoErgo EEG recorder, ETS eyetracker, etc.

Students with Engineering Psychology/Behavioral Science/Urban Planning background are welcome. Contact me for details.

2

NEPT [New Energy and Mechatronics Team]
Energy Engineering College
Bing Shuangling
shuangling@zju.edu.cn
+86 18806785055
The main research interests include (i) Vehicle diversified energy; (ii) Reaching parking and business utilization; (iii) New-energy vehicle energy management system and key components; (iv) Car networking and industrial IoT;

This project is used in an unmanned parking management system development. sensor NB IoT, 126 and 2.4G dual band radio frequency identification are combined to achieve the non-contact automatic recognition for the car's identity. To identify the vehicle parking bars accurately, it is important that the position of the front and back low-frequency waves are arranged properly.

1. Basic knowledge of electronics; ML and C code; 2. Be familiar with PCB layout or C programming; 3. Good communication skills;

1

Cultural Heritage and Digitalization Lab
School of Humanities
Wende Shi
wende@zju.edu.cn
+86 13481175778
The history of Chinese language; The evolution of motion expressions in Chinese;

I am currently working on two interrelated projects. The former is motion expressions in the history of the Chinese languages in a typological perspective. As we know, motion is one of the basic cognitive domains for human being. Its linguistic encoding strategies are diversified across languages. An interesting question that rise up is how a language interacts with its speaker's thinking while depicting a motion scene? What work we is to find out the distribution of motion expressions in the history of Chinese and its synchrony across modern Chinese dialects.

Basic linguistic training, Chinese Patent

1

Digital Museum, Cultural Heritage Digitalization
Cultural Heritage and Digitalization Lab
Xia ZHENG
zhengxia@zju.edu.cn
+86 13867175717
(1) Research on manufacturing process of the original objects;(2)Building the database (3)User Design on App.

Basic knowledge onArchaeology, knowledge should be interested in Chinese culture.

1

Ulitic Analysis Lab
School of Humanities
Heng CHEN
hengchenn@zju.edu.cn
+86 13648791116
Palaeolithic archaeology, use-wear analysis;

This project is designed for the students (including students overseas to understand Chinese palaeolithic archaeology and take part in case studies in UK and study on the basis of our lab ministry. We also provide opportunities to visit and do volunteer work in some Chinese archaeological sites.

MA/PhD students, have basic knowledge of archaeology

2

School of Humanities
Yuting LI
liyuting@zju.edu.cn
+86 13958120912
History of Song Dynasty, Chinese intellectual history, local history

Basic knowledge on Chinese history

1

School of Humanities
Yuting LI
liyuting@zju.edu.cn
+86 13958120912
History of Song Dynasty, Chinese intellectual history, local history

Basic knowledge on Chinese history

1

School of Humanities
Jiachen LI
jich@zju.edu.cn
+86 13723828012
Family history and Confucianism in imperial China

Basic knowledge on Chinese history

1

School of Humanities
Daowei LI
liu@zju.edu.cn
+86 137048613177
Formal semantics, comparative Chinese dialects in the formal framework; (2) Chinese is an article-less language, where (subject+verb+object) sentences are not found. We are interested in finding out what are the possible syntactic strategies of encoding definitons in this language and how the notion of definiteness can be understood properly;

Basic knowledge on Chinese history

1

School of Humanities
Cheng WANG
wangch@zju.edu.cn
+86 13801685055
Chinese Philology, Chinese intellectual history

Basic knowledge of Chinese and interested in Chinese culture

1

School of Humanities
Xia ZHENG
zhengxia@zju.edu.cn
+86 13867175717
Digital Museum, Cultural Heritage Digitalization
Cultural Heritage and Digitalization Lab
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Basic knowledge onArchaeology, knowledge should be interested in Chinese culture.

1

School of Humanities
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liyuting@zju.edu.cn
+86 13958120912
History of Song Dynasty, Chinese intellectual history, local history

Basic knowledge on Chinese history

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liu@zju.edu.cn
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Basic knowledge on Chinese history

1

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Cheng WANG
wangch@zju.edu.cn
+86 13801685055
Chinese Philology, Chinese intellectual history

Basic knowledge of Chinese and interested in Chinese culture

1

School of Humanities
Xia ZHENG
zhengxia@zju.edu.cn
+86 13867175717
Digital Museum, Cultural Heritage Digitalization
Cultural Heritage and Digitalization Lab
(1) Research on manufacturing process of the original objects;(2)Building the database (3)User Design on App.

Basic knowledge onArchaeology, knowledge should be interested in Chinese culture.

1

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liyuting@zju.edu.cn
+86 13958120912
History of Song Dynasty, Chinese intellectual history, local history

Basic knowledge on Chinese history

1

School of Humanities
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liu@zju.edu.cn
+86 137048613177
Formal semantics, comparative Chinese dialects in the formal framework; (2) Chinese is an article-less language, where (subject+verb+object) sentences are not found. We are interested in finding out what are the possible syntactic strategies of encoding definitons in this language and how the notion of definiteness can be understood properly;

Basic knowledge on Chinese history

1

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+86 13801685055
Chinese Philology, Chinese intellectual history

Basic knowledge of Chinese and interested in Chinese culture

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+86 13867175717
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Cultural Heritage and Digitalization Lab
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1

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liyuting@zju.edu.cn
+86 13958120912
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Basic knowledge on Chinese history

1

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Daowei LI
liu@zju.edu.cn
+86 137048613177
Formal semantics, comparative Chinese dialects in the formal framework; (2) Chinese is an article-less language, where (subject+verb+object) sentences are not found. We are interested in finding out what are the possible syntactic strategies of encoding definitons in this language and how the notion of definiteness can be understood properly;

Basic knowledge on Chinese history

1

School of Humanities
Cheng WANG
wangch@zju.edu.cn
+86 13801685055
Chinese Philology, Chinese intellectual history

Basic knowledge of Chinese and interested in Chinese culture

1

School of Humanities
Xia ZHENG
zhengxia@zju.edu.cn
+86 13867175717
Digital Museum, Cultural Heritage Digitalization
Cultural Heritage and Digitalization Lab
(1) Research on manufacturing process of the original objects;(2)Building the database (3)User Design on App.

Basic knowledge onArchaeology, knowledge should be interested in Chinese culture.

1

School of Humanities
Yuting LI
liyuting@zju.edu.cn
+86 13958120912
History of Song Dynasty, Chinese intellectual history, local history

Basic knowledge on Chinese history

1

School of Humanities
Daowei LI
liu@zju.edu.cn
+86 137048613177
Formal semantics, comparative Chinese dialects in the formal framework; (2) Chinese is an article-less language, where (subject+verb+object) sentences are not found. We are interested in finding out what are the possible syntactic strategies of encoding definitons in this language and how the notion of definiteness can be understood properly;

Basic knowledge on Chinese history

1

School of Humanities
Cheng WANG
wangch@zju.edu.cn
+86 13801685055
Chinese Philology, Chinese intellectual history

Basic knowledge of Chinese and interested in Chinese culture

1
Project Description

We welcome all candidates interested in the topics of the project. Background knowledge and training in physics, in particular in philosophy of mind and epistemology, are preferred.

Admission Requirements

1. Strong interests in doing research.
2. Like multidisciplinary research project.
3. Provide CV and names of three references.

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http://mpg.ej-jz.edu.cn/
<table>
<thead>
<tr>
<th>Laboratory Name</th>
<th>College/School/Department</th>
<th>Professor</th>
<th>E-mail Address</th>
<th>Telephone No.</th>
<th>Research Area</th>
<th>Project Discription</th>
<th>Admission Requirements</th>
<th>Capacity</th>
<th>Enrolment Link</th>
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<tr>
<td>Millimeter-Wave and Millimeter-Band Information Processing and Communications Group</td>
<td>College of Information Science and Electronics Engineering</td>
<td>Zhigui Shi</td>
<td><a href="mailto:zhg@zju.edu.cn">zhg@zju.edu.cn</a></td>
<td>+86 18871071502</td>
<td>Array signal processing, anti-jamming technology and devices</td>
<td>Spin arrays process the signals beyond the foliage region, where the trade-off between the performance and the complexity is well balanced. This project aims to explore the potential superpowers of the popular spin array configurations (such as co-prime arrays) for the direction of arrival estimation, beamforming and beamsteering. Developing solid theories and new algorithms based on the practical requirements. Also the field experiments will be conducted on an anti-jam system called MAS-X deployed in Zhejiang University, where a comprehensive understanding of the advantages and challenges for practical spin array signal processing will be made.</td>
<td>1. Good Background in Mathematics or Electrical Engineering 2. Familiar with MATLAB Programming 3. Good English Listening, Speaking and Writing Skills 4. Good Cooperation Ability</td>
<td>1</td>
<td><a href="http://person.zju.edu.cn/shizg">http://person.zju.edu.cn/shizg</a></td>
</tr>
<tr>
<td>State Key Laboratory of Silicon Materials</td>
<td>College of Information Science &amp; Electronic Engineering</td>
<td>Shenglong Xu</td>
<td><a href="mailto:sx@zju.edu.cn">sx@zju.edu.cn</a></td>
<td>+86 18857167674</td>
<td>two-dimensional materials and semiconductor devices</td>
<td>Ten have interest in using chemical and physical engineering approaches towards synthetic and fabrication of 2-dimensional (2D) layered materials with novel electronic and magnetic properties, and device utilizing these 2D materials.</td>
<td>1. Great enthusiasm for relevant research areas; 2. Bachelor and above</td>
<td>1</td>
<td><a href="http://person.zju.edu.cn/lxh">http://person.zju.edu.cn/lxh</a></td>
</tr>
<tr>
<td>Laboratory of Two-dimensional Materials and Applications</td>
<td>College of Information Science &amp; Electronic Engineering</td>
<td>Jian Zhang</td>
<td><a href="mailto:jzhang@zju.edu.cn">jzhang@zju.edu.cn</a></td>
<td>+86 13777264068</td>
<td>cyber-security</td>
<td>This project is going to explore the latest passive side-channel attacks (power, EM, time, etc.) and active side-channel attacks (faults) on new platforms such as Intel SGX, Cloud etc. Knowledge of embedded system, hardware security, cyber-security, implementation systems, side-channel attacks and countermeasures. Good programming skills.</td>
<td>1. University student 2. Bachelor and above</td>
<td>2</td>
<td><a href="http://www.isee.zju.edu.cn/safe/">http://www.isee.zju.edu.cn/safe/</a></td>
</tr>
<tr>
<td>Lab of Visual Image Processing and Artificial Intelligence</td>
<td>College of Information Science and Electronics Engineering</td>
<td>Haiyao Hu</td>
<td><a href="mailto:hzy@zju.edu.cn">hzy@zju.edu.cn</a></td>
<td>+86 18795310077</td>
<td>Computer Vision, Image Processing, Machine Learning</td>
<td>The main focus of our lab is to elucidate the molecular pathways and cellular interactions that mediate and regulate thymus development and T cell-mediated immune responses by using molecular biology and genetic approaches. We are particularly interested in the identification and characterization of novel immune-related molecules, and the development and treatment of cancer and autoimmune diseases.</td>
<td>1. Good background in immunology or cell biology, theoretical and practical knowledge in algorithm and data structure; 2. English speaking, ability to read research papers. Interested candidates are encouraged to submit a brief statement of research interest, curriculum vitae, and list of references to email to <a href="mailto:hzy@zju.edu.cn">hzy@zju.edu.cn</a>.</td>
<td>1-2</td>
<td><a href="http://person.zju.edu.cn/haoyao">http://person.zju.edu.cn/haoyao</a></td>
</tr>
<tr>
<td>Laboratory of Laboratory of Systems of Translational Medicine and Engineering</td>
<td>School of Medicine</td>
<td>Lu Lirong</td>
<td><a href="mailto:lilr@zju.edu.cn">lilr@zju.edu.cn</a></td>
<td>+86 571 88981177</td>
<td>Immune Regulation</td>
<td>The main focus of our lab is to elucidate the molecular pathways and cellular interactions that mediate and regulate thymus development and T cell-mediated immune responses by using molecular biology and genetic approaches. We are particularly interested in the identification and characterization of novel immune-related molecules, and the development and treatment of cancer and autoimmune diseases.</td>
<td>1. Good background in immunology or cell biology, theoretical and practical knowledge in algorithm and data structure; 2. English speaking, ability to read research papers. Interested candidates are encouraged to submit a brief statement of research interest, curriculum vitae, and list of references to email to <a href="mailto:lilr@zju.edu.cn">lilr@zju.edu.cn</a>.</td>
<td>1-2</td>
<td><a href="http://person.zju.edu.cn/haoyao">http://person.zju.edu.cn/haoyao</a></td>
</tr>
<tr>
<td>Laboratory of Laboratory of Systems of Translational Medicine and Engineering</td>
<td>School of Medicine</td>
<td>Pengyu Qian</td>
<td><a href="mailto:pxq@zju.edu.cn">pxq@zju.edu.cn</a></td>
<td>+86 16060100008</td>
<td>Epigenetic regulation in hematopoietic stem cells</td>
<td>To treat leukemia by altering the DNA methylation levels of specific differentially methylated regions (DMRs) using epigenetic editing technology</td>
<td>To apply, candidates should send CV, letter of recommendation and a brief statement of research interests.</td>
<td>3</td>
<td><a href="http://person.zju.edu.cn/pqian">http://person.zju.edu.cn/pqian</a></td>
</tr>
<tr>
<td>Laboratory of Laboratory of Systems of Translational Medicine and Engineering</td>
<td>School of Medicine</td>
<td>Xie-Ming Xiao</td>
<td><a href="mailto:zmz@zju.edu.cn">zmz@zju.edu.cn</a></td>
<td>+86 571 88813335</td>
<td>Molecular Pharmacology</td>
<td>Genome-wide identification of bioactive natural products from traditional Chinese medicine, understanding their biosynthetic pathway and exploration of their bioactivity.</td>
<td>1. A PhD candidate in Microbiology, Biochemistry or Chemistry 2. Familiar with biological or chemical reactions.</td>
<td>1</td>
<td><a href="http://person.zju.edu.cn/xmx">http://person.zju.edu.cn/xmx</a></td>
</tr>
<tr>
<td>Laboratory of Laboratory of Systems of Translational Medicine and Engineering</td>
<td>School of Medicine</td>
<td>Jing Wei Zhao</td>
<td><a href="mailto:jwz@zju.edu.cn">jwz@zju.edu.cn</a></td>
<td>+86 13858031958</td>
<td>Neuroscience</td>
<td>Identifying molecules that increase with brain aging</td>
<td>1. University student 2. Good undergraduate background in biology or related major</td>
<td>1</td>
<td><a href="http://www.isee.zju.edu.cn/irp.html">http://www.isee.zju.edu.cn/irp.html</a></td>
</tr>
<tr>
<td>Laboratory of Laboratory of Systems of Translational Medicine and Engineering</td>
<td>School of Medicine</td>
<td>Zhang Jin</td>
<td><a href="mailto:zhx@zju.edu.cn">zhx@zju.edu.cn</a></td>
<td>+86 15285854645</td>
<td>Molecular mechanisms of pluripotent maintenance of stem cells; The effect of gene regulation network and metabolic network on cell fate; Establishment of iPSC disease model; Mechanism and clinical transformation of stem cell differentiation inducement cells.</td>
<td>The main topic of our lab is to study how the molecular mechanisms of pluripotent maintenance of stem cells and the effect of gene regulation network and metabolic network on cell fate; Establishment of iPSC disease model; Mechanism and clinical transformation of stem cell differentiation inducement cells.</td>
<td>English native speaker; knowledge of biology or medical related major</td>
<td>1</td>
<td><a href="http://www.zju.edu.cn/10120084/tid=4&amp;uid=979">http://www.zju.edu.cn/10120084/tid=4&amp;uid=979</a></td>
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<tr>
<td>Laboratory of Laboratory of Systems of Translational Medicine and Engineering</td>
<td>School of Medicine</td>
<td>Zannan Zan</td>
<td><a href="mailto:zannan@zju.edu.cn">zannan@zju.edu.cn</a></td>
<td>+86 13634153038</td>
<td>Toxology and Pharmacology</td>
<td>Pharmacology study of scavengers, their pharmacological potential, development and its comprehensive studies; Development of novel strategies for the treatment of various AILs; There is no special admission requirement.</td>
<td>1</td>
<td><a href="http://person.zju.edu.cn/zannan">http://person.zju.edu.cn/zannan</a></td>
<td></td>
</tr>
<tr>
<td>Laboratory of Laboratory of Systems of Translational Medicine and Engineering</td>
<td>School of Medicine</td>
<td>Ben Wang</td>
<td><a href="mailto:baw@zju.edu.cn">baw@zju.edu.cn</a></td>
<td>+86 13868708805</td>
<td>Biostatistics and Bioinformatics</td>
<td>The Wang laboratory uses an interdisciplinary approach that integrates materials science, biology, chemistry and engineering to solve problems in human health. It is emphasized that using Nature’s design principles to develop bio-inspired materials and devices to properly transform the body into a more physiological perspective, we are focusing on understanding the molecular mechanisms involved in the interfaces of cell-cell, cell-materials, and develop the tools for cancer diagnostics and cell-based therapies. They are also fully committed to the professional development of individuals in the group and do everything they can to ensure successful career guidance.</td>
<td>1</td>
<td><a href="http://www.zju.edu.cn/10120084/tid=10120084">http://www.zju.edu.cn/10120084/tid=10120084</a></td>
<td></td>
</tr>
<tr>
<td>Laboratory of Laboratory of Systems of Translational Medicine and Engineering</td>
<td>School of Medicine</td>
<td>Weizhong Wei</td>
<td><a href="mailto:wzwei@zju.edu.cn">wzwei@zju.edu.cn</a></td>
<td>+86 18603030139</td>
<td>Neurodevelopment and Neurodegeneration</td>
<td>The main research interest of our lab is to identify novel molecular and cellular mechanisms underlying neurodevelopment and neurodegeneration. We are particularly interested in understanding how neurons develop and how brain disorders develop, and how these structures are properly maintained in aged animals. We hope that our research can help to cure human diseases, including Alzheimer’s disease and Parkinson’s disease.</td>
<td>1. Good background in biology or medical science; 2. Candidates should have strong background in biology or computer science. Candidates should be able to communicate in English or Chinese.</td>
<td>1</td>
<td><a href="http://www.zju.edu.cn/10120084/tid=572898">http://www.zju.edu.cn/10120084/tid=572898</a></td>
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<tr>
<td>Laboratory of Laboratory of Systems of Translational Medicine and Engineering</td>
<td>School of Medicine, Institute of Genetics</td>
<td>Jun Ma</td>
<td><a href="mailto:jm2@zju.edu.cn">jm2@zju.edu.cn</a></td>
<td>+86 571 88208393</td>
<td>Systems Developmental Biology</td>
<td>Cellular decisions in development and disease</td>
<td>1. Background in biology, physics or computer science</td>
<td>1</td>
<td><a href="http://www.zju.edu.cn/10120084/tid=10120084">http://www.zju.edu.cn/10120084/tid=10120084</a></td>
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<tr>
<td>Laboratory of Laboratory of Systems of Translational Medicine and Engineering</td>
<td>School of Medicine, Institute of Genetics</td>
<td>Feng He</td>
<td><a href="mailto:fh@zju.edu.cn">fh@zju.edu.cn</a></td>
<td>+86 571 88206940</td>
<td>Quantitative Biology and Modeling</td>
<td>Quantitative and modeling studies in various biological systems</td>
<td>1. Background in biology, physics or computer science</td>
<td>1</td>
<td><a href="http://www.zju.edu.cn/10120084/tid=10120084">http://www.zju.edu.cn/10120084/tid=10120084</a></td>
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</tbody>
</table>
**Laboratory Name** Institute of Genetics, Zhejiang University School of Medicine Associate Prof. Meiying Meng mengyang@zju.edu.cn +86-57188932771 Mitochondrial genetics and maternal inherited diseases including hearing loss, visual loss and hypertension, RNA metabolism, mitochondrial biogenesis

- Mitochondrial RNA mutations have been associated with genetically inherited diseases. My research is focused on elucidating the mechanisms of the functional diversity of human mitochondrial protein-RNA syntheses (proteins) and cognate mitochondrial mRNAs, especially on the RNA modifications in maternally inherited diseases, such as deafness, diabetes and hypertension. A cross-disciplinary approach combining biochemistry, biophysics, molecular genetics, cell biology and evolutionary analysis is used in my research. Our findings may provide new insights into the pathophysiology of maternally diseases, that was transacted by temporal modifications of mitochondrial mRNAs.

A successful candidate is highly motivated, has scientific curiosity and excellent communication skills in the English language. Research experience in RNA and/or protein structure and biochemistry is preferred, and human cell culture experience is a plus.

1 http://person.zju.edu.cn/y/c/zhengyang

**Laboratory Name** Institute of Genetics, Zhejiang University School of Medicine Prof. Guan Wei gweizj@zju.edu.cn +86-57188932506 Mitochondrial genetics and maternal inherited diseases including hearing loss, visual loss and hypertension, RNA metabolism, mitochondrial biogenesis

- Mitochondrial RNA mutations have been associated with genetically inherited diseases. My research is focused on elucidating the mechanisms of the functional diversity of human mitochondrial protein-RNA syntheses (proteins) and cognate mitochondrial mRNAs, especially on the RNA modifications in maternally inherited diseases, such as deafness, diabetes and hypertension. A cross-disciplinary approach combining biochemistry, biophysics, molecular genetics, cell biology and evolutionary analysis is used in my research. Our findings may provide new insights into the pathophysiology of maternally diseases, that was transacted by temporal modifications of mitochondrial mRNAs.

A successful candidate is highly motivated, has scientific curiosity and excellent communication skills in the English language. Research experience in RNA and/or protein structure and biochemistry is preferred, and human cell culture experience is a plus.

1 http://person.zju.edu.cn/y/c/zhengyang

**Laboratory Name** School of Medicine/Department of Anesthesiology and Crit Care Xiangning Fang xiangning_fang@zju.edu.cn +86-13867510109 The pathophysiology and treatment of sepsis, and the protection of perioperative organ dysfunction (focusing on lung & immune system).

- To investigate the beneficial effect of TRAB-3 that attributed to enhance bacterial clearance in sepsis, as well as the underlying mechanism of TRAB-3 in the development of sepsis in several animal models. To explore the antibacterial and anti-inflammation function of a novel human-defensin 5-α as a novel anti-infective candidate to sepsis. To elucidate the role of basal kidney chondrocyte injury in polyethylene sepsis-induced inflammation and further to illuminate the micro-immune interaction in regulating sepsis.

1. Be eager to participate in scientific research and have innovative spirit.
2. Be good at communication and cooperation.
3. Have a solid theoretical knowledge in biomedical area.
4. Have research experiences in immunology and molecular biology and have achieved basic research skills.
5. Provide a study plan for the two-month international communication before admission.

1 http://www.cmm.zju.edu.cn/zhangli 2 http://www.cps.zju.edu.cn/g_detail&id=31&web=english

**Laboratory Name** School of Medicine LIU Zhang li_zhang@zju.edu.cn +8613906888121 Vascular biology and diseases

- Molecular subtyping of hepatocellular carcinomas undergoing liver transplantation; \( \text{T} \) ) Identification of hepatocellular carcinomas based on proteomics. \( \text{T} \) ) Translational medicine-oriented innovative nanoparticle-drug delivery system based on patient-derived ascites (PDX) model for HCC.

1. Patient-derived ascites (PDX) model establishment;\n2. Translational treatment for hepatocellular carcinoma;\n3. Transplantation immunity

1. Have open personality and be hard work;\n2. Be the skillful in experimental technique of molecular biology and have laboratory experience;\n3. Article publication is preferred

2 http://www.cmm.zju.edu.cn/zhangli

**Laboratory Name** School of Medicine Xu Jiao xjiao@zju.edu.cn +8613581515177 Anomalies in childhood, especially on childhood obesity and diabetes, adolescent medicine and genetic metabolic disease.

- Funded by the national key research and development programme of CHN (2016YFC1305302), Students with interest in research work and vascular pathophysiology.

3 5

**Laboratory Name** School of Medicine Ju Ju Ju ju@zju.edu.cn +8613777457666 Pediatric endocrinology, especially on childhood obesity and diabetes, adolescent medicine and genetic metabolic diseases.

- Students should be skilful in experimental technique of molecular biology and have laboratory experience.

3 5

**Laboratory Name** Women’s Reproductive Health Laboratory of Qinghe Hospital Women’s Reproductive Health Laboratory of Qinghe Hospital Zhang Dan zhangdan@zju.edu.cn +8613735338888 Reproductive medicine

- Ovarian dysfunctions are one of the major reasons resulting in female infertility. The aim of this project is to investigate the molecular mechanisms involved in ovarian function regulation, and the pathophysiology of ovarian dysfunctions associated diseases such as premature ovarian insufficiency. The results of this research project would contribute to providing new insights into ovarian function regulation, and early diagnosis, intervention and treatment of ovarian dysfunctions.

1. Be eager to participate in scientific research and have innovative spirit.
2. Be good at communication and cooperation.
3. Have a solid theoretical knowledge in biomedical area.
4. Have research experiences in immunology and molecular biology and have achieved basic research skills.
5. Provide a study plan for the two-month international communication before admission.

1 http://www.cmm.zju.edu.cn/zhangli 2 http://www.cmm.zju.edu.cn/zhangli

**Laboratory Name** Department of Women’s Health, Women’s Hospital School of Medicine Zhejiang University Shanshan Lü shanshan@zju.edu.cn +8613517733806 Breast cancer education, Breast cancer data collection

- Students interested in M.D. work in health education, data processing working, understanding little Chinese.

1 http://www.cmm.zju.edu.cn/zhangli

**Laboratory Name** College of Pharmaceutical Sciences Hailong Huang hahuang@zju.edu.cn +8618007529605 Structure and function of G protein coupled receptors (GPCRs) for Drug Discovery

- Traditional Chinese medicine (TCM) usually consists of complex mixtures of phytochemicals, which can raise a challenge to their quality control. In our lab, we develop novel quality control strategies and methods to ensure the safety, efficacy and bath-to-bath consistency of TCM.

1. Understand the standard of GPCR and demonstrate research experience.

1. Be eager to participate in scientific research and have innovative spirit.

1 http://www.cps.zju.edu.cn/zh/index.php?option=com_content&view=article&id=290%

**Laboratory Name** College of Pharmaceutical Sciences Jianli Wang jlwang@zju.edu.cn +8613608350305 Quality control of traditional Chinese medicines

- Several mitochondrial tRNA mutations have been associated with maternally inherited diseases. My research is focused on elucidating the mechanisms of the functional diversity of human mitochondrial protein-RNA syntheses (proteins) and cognate mitochondrial mRNAs, especially on the RNA modifications in maternally inherited diseases, such as deafness, diabetes and hypertension. A cross-disciplinary approach combining biochemistry, biophysics, molecular genetics, cell biology and evolutionary analysis is used in my research. Our findings may provide new insights into the pathophysiology of maternally diseases, that was transacted by temporal modifications of mitochondrial mRNAs.

A successful candidate is highly motivated, has scientific curiosity and excellent communication skills in the English language. Research experience in RNA and/or protein structure and biochemistry is preferred, and human cell culture experience is a plus.


**Laboratory Name** College of Pharmaceutical Sciences Hao Zhang hzhang@zju.edu.cn +8613857330669 1. Molecular design and evaluation of noncovalent materials oral drug delivery system.
3. Drug controlled release.

- Construction of new noncovalent drug delivery systems to collectivity target tumors and their environment for effective brain cancer and immunotherapy. PhD candidate (first or second grade) desirous research experience, operation experience

1 http://www.cjs.zju.edu.cn/zh/index.php?option=com_content&view=article&id=290%

**Laboratory Name** College of Pharmaceutical Sciences Zhong Xue zhongxue@zju.edu.cn +8613608350305 Biomaterials, Controlled and targeted drug delivery, Cancer therapy, nanotechnology, Advanced formulation Design

- Transport mechanisms of lipid nanoparticles across intestinal epithelial cell monolayer. PhD candidate (first or second grade) desirous research experience, operation experience

1 http://www.cjs.zju.edu.cn/zh/index.php?option=com_content&view=article&id=290%

**Laboratory Name** College of Pharmaceutical Sciences Yuan Peng yuanyanpeng@zju.edu.cn +8613875036722 Drug Delivery, Protein Delivery, Gene Editing

- Drug delivery systems is the development of functional biomaterials for the delivery of gene editing tools. A candidate should have the background in pharmacy, chemistry, biology or polymer materials.

1 http://www.cjs.zju.edu.cn/zh/index.php?option=com_content&view=article&id=290%

**Laboratory Name** College of Pharmaceutical Sciences Shuang Yuan yuanhong70@zju.edu.cn +8618755906811 Research interest: development of innovative anti-cancer drugs and achieving molecular understanding of their action mechanisms.

- Drug delivery systems is the development of functional biomaterials for the delivery of gene editing tools. A candidate should have the background in pharmacy, chemistry, biology or polymer materials.

1. Be eager to participate in scientific research and have innovative spirit.

1 http://www.cjs.zju.edu.cn/zh/index.php?option=com_content&view=article&id=290%
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<tr>
<th>Laboratory Name</th>
<th>College/School/Department</th>
<th>Professor</th>
<th>E-mail Address</th>
<th>Telephone No.</th>
<th>Research Area</th>
<th>Project Description</th>
<th>Admission Requirements</th>
<th>Capacity</th>
<th>Weblink</th>
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</thead>
<tbody>
<tr>
<td>Institute of Intelligent Transportation Systems</td>
<td>College of Civil Engineering and Architecture</td>
<td>CHEN Xiqun</td>
<td><a href="mailto:chenxiqun@zju.edu.cn">chenxiqun@zju.edu.cn</a></td>
<td>+86571-88208600</td>
<td>Traffic and Transportation Management, Transportation Big Data Analytics, Traffic Flow Modeling and Simulation, Simulation-Based Optimization, Transportation System Analysis</td>
<td>This project focuses on the ridesourcing system optimization, modeling, and behavior analysis of the shared mobility on demand. The on-demand ride service platform, e.g., Uber, Lyft, Didi Chuxing, is an emerging technology with the boom of the mobile internet. Ridesourcing or transportation network companies (TNCs) refer to an emerging urban mobility service mode that private car owners drive their own vehicles to provide for-hire rides. The platform serves as a coordinator who matches requesting orders from passengers (demand) and vacant registered cars (supply). There exist a number of incentives to influence drivers and passengers' preference and behavior, and thus affect the demand and supply, to maximize profits of the platform or achieve the maximum social welfare. The following research efforts are ongoing in Prof. Xiqun Chen's team: (1) on-demand ride services platform and government regulation policy optimization via coordinating supply and demand; (2) urban road network-wide performance evaluation by exploring real-world emerging ridesourcing order data extracted from Didi's platform; (3) learn on-demand ridesplitting behavior; and (4) demand/supply/traffic forecasting. These research initiatives help decision makers better understand the emerging on-demand ride services.</td>
<td>Good background or great interests in operations research/computer programming/big data analytics</td>
<td>4</td>
<td><a href="http://person.zju.edu.cn/xiqun">http://person.zju.edu.cn/xiqun</a></td>
</tr>
</tbody>
</table>