Welcome to attend Zhejiang University 2024 SDG Global Summer School

Dear friends,

Greetings from Children's Hospital Zhejiang University School of Medicine(ZCH)!

We are very pleased to inform you that applications for Zhejiang University 2024 SDG Global Summer School **has opened**. We would appreciate it if you could share the following information with your students:

Zhejiang University 2024 SDG Global Summer School will take place from July to August on campus. Zhejiang University welcomes students from around the world to the Global Summer School for academic learning and cultural experience opportunities. This program will allow undergraduate and graduate students to take credit-bearing courses themed on SDGs under the mentorship of prestigious professors from Zhejiang University and partner universities and institutions.

Our Children's Hospital will hold the academic module on the theme of **Adolescent Medicine: Good Health and Well-being**. The class will open at July 22 to August 4, 2024.

This summer school course focuses on adolescent medicine, emphasizing the importance of promoting good health and well-being during this critical phase of development. Led by experts from Children's Hospital Zhejiang University School of Medicine and McGill University. Students will gain insights into the unique physical and mental challenges faced by adolescents. The program aims to equip participants with the knowledge and tools to navigate the health needs of adolescents, promoting positive growth and development.

The course will provide an in-depth understanding of the most critical issues for a sustainable future through interdisciplinary training, thought-provoking case studies, engaging group work, and hands-on experience. Opportunities for cultural immersion may also be provided through various non-curricular activities such as Chinese culture events, tours around ZJU and Hangzhou, etc.

Fees: The tuition fee for the 2024 SDG Summer School is 6000 RMB. For students from Zhejiang University's partner universities with university-wide or college-level cooperation agreement, we provide a complete waiver of tuition fees.

Online Application:

It is important to remind your students of submitting their online applications before March 25, 2024, 11:59 p.m. (GMT+8). Please visit

https://sdg-gss.zju.edu.cn/AdolescentMedicinewGoodHealthandWellwbeing/main.psp_____for application details and more.

*Please note that applicants are required to apply through the Global Summer School website.

Please see attached the **Adolescent Medicine: Good Health and Well-being Syllabus** for detailed information for the program. Should you have any questions, please feel free to contact me at zhagnling27@zju.edu.cn.

We look forward to receiving applications from your students and welcoming them this summer @ZJU!

Best wishes for 2024!

2024 SDG Global Summer School Syllabus

Theme: Adolescent Medicine: Good Health and Well-being

DATE	TIME	FORM	COURSE	INSTRUCTOR
Day 1 July 22	13:30-16:00 3 hours	Lecture	1. Orientation	Prof. Shu Qiang Prof. Fu Junfen
				Prof. Mao Jianhua
			2. Puberty and minipuberty How much do you know?	Prof. Fu Junfen
Day 2 July 23	10:00-11:30	Cultural	Ice breaking games	Wu Wei
	2 hours	activities		Yuan Jinna
	13:30-16:50 4 hours	Workshop	 Hospital tour Close to scientific research 	Tao Ting
		Practice and internship		Chen Ye
Day 3 July 24	10:00-11:40 2 hours	Lecture	Youth comes from the heart	Prof. Shu Qiang
	13:30-16:50 4 hours	Workshop	Genetic and rare disease for growth and development	Tang Chao
				Hu Lidan
				Wu Wei
Day 4	10:00-11:40 2 hours	Lecture	Breathe life, grow healthily	Prof. Du Lizhong
July 25	13:30-16:50 4 hours	Workshop		Zhang Li
		Cultural	Child-life program practice	Wang Jinling
		activities		
	10:00-11:40 2 hours	Lecture	Developmental kidney and	Prof. Mao Jianhua
Day 5			developmental diseases	
	10.00 1 5 -0	Practice and	Cultural experience:	Art of 1
July 26	13:30-16:50	internship	Exploring the origin of life	Xie Shanshan
	4 hours	Cultural	and pursuing the path of	Peng Wanxin
		activities	growth	
Day 6		Weekend	Self-study	
July 27				

Day 7 July 28		Weekend	Self-study	
Day 8 July 29	10:00-11:40 2 hours	Lecture	The sweetness of youth	Prof. Constantin Polychronakos
	13:30-16:50 4 hours	Workshop	The important liquid for growth and development	Liu Lan Zhao Liang
Day 9 July 30	10:00-11:40 2 hours	Lecture	Find inspiration for scientific research from growth and development	Prof. Constantin Polychronakos
	13:30-16:50 4 hours	Workshop	1.Quality of life in adolescents	Bai Guannan
			2.Genetative AI	Liu Zhigang
Day 10	10:00-11:40 2 hours	Lecture	Good sleep and good health	Prof. Ma Daqing
July 31	13:30-16:50	Workshop	1.Xenotransplant	Xie Yicheng
	4 hours		2.Cloing	Li Fengcheng
	10:00-11:40	Lecture	The enemy of youth: Obesity	Ni Yan
	2 hours			Zhao Lin
Day11		Practice and	Cultural experience:	
Aug 1	13:30-16:00	internship	Exploring the Role of	Zhang Li
	3 hours	Cultural	Traditional Chinese Medicine	Wang Jinling
		activities	in Adolescent Medicine	
	10:00-11:30	Cultural activities	closing ceremony	Prof. Shu Qiang
D 10				Prof. Fu Junfen
Day 12				Prof. Mao Jianhua
Aug 2	13:30-16:50	Workshop	Student Symposium	Prof. Fu Junfen
				Prof. Mao Jianhua
Day 13		Weekend	Solf atudy	
Aug 3		w eekend	Self-study	
Day 14 Aug 4		Weekend	Self-study	

DAY1: July 22, 2024, Monday

DAY1 PM 13:30-16:00

LECTURE:

1. Orientation

INSTRUCTOR: Professor. Shu Qiang, Prof. Fu Junfen, Prof. Mao Jianhua

(See the following for detailed introduction)

2. Puberty and minipuberty... How much do you know?

INSTRUCTOR: Professor. Fu Junfen



Prof. Fu Junfen, president of Children's Hospital, Zhejiang University School of Medicine, president-elect of the Asia Pacific Pediatric Endocrine Society (APPES), leads national & international pediatric research. Author of 307 papers, incl. 130 SCI-indexed. Key figure in developing national & international guidelines for pediatric care. Recipient of multiple scientific awards.

DAY2: July 23, 2024, Tuesday

DAY2 AM 10:00-11:30

CULTURAL ACTIVITIES: Ice breaking games

INSTRUCTOR: Wu Wei, Yuan Jinna



Dr. Wu Wei is a leading pediatric endocrinologist and deputy director of the Endocrinology Department of ZCH. She specializes in treating calcium-phosphorus metabolism disorders, obesity, diabetes, sexual development disorders, short stature, thyroid and adrenal gland diseases. Dr. Wu holds a Ph.D. and has published 20+ papers, including 10+ SCI articles.



Dr. Yuan Jinna, an endocrine specialist and associate chief physician of ZCH with a master's degree. She excels in treating short stature, precocious puberty, obesity, thyroid disorders, diabetes, sexual development abnormalities, and adrenal diseases. She has published several papers and participated in provincial-level research projects.

DAY2 PM 13:30-16:50 WORKSHOP & PRACTICE AND INTERNSHIP:

- 1. Hospital tour
- 2. Close to scientific research

INSTRUCTOR: Tao Ting, Chen Ye



Dr. Ting Tao is a Principal Investigator at the Children's Hospital, Zhejiang University School of Medicine. His research focuses on genetic, pathogenesis, and modeling of pediatric tumors, precision medicine in pediatric tumors, and neural crest development.



Dr. Chen Ye is a Principal Investigator and Doctoral supervisor in the Children's Hospital of Zhejiang University School of Medicine. Her research focuses on the biology, genetics, and experimental therapeutics of pediatric cancer. She has published 12 papers in top-tier journals, including six first-author or corresponding-author papers in Science Advances, Nature Communications, Proceedings of the National Academy of Sciences of the United States of America, and Oncogene.

DAY3: July 24, 2024, Wednesday

DAY3 AM 10:00-11:30

LECTURE: Youth comes from the heart



INSTRUCTOR: Professor. Shu Qiang

Prof. Shu Qiang, MD, PhD, is Chairman of Children's Hospital, Zhejiang University School of Medicine. He's a pediatric expert with 35 years' experience, renowned for his work on congenital heart disease, organ protection & birth defects prevention. Author of 200+ SCI papers, he holds 10 invention patents & won numerous awards.

DAY3 PM 13:30-16:50

WORKSHOP: Genetic and rare disease for growth and development

INSTRUCTOR: Wu Wei, Tang Chao, Hu Lidan



Dr. Wu Wei is a leading pediatric endocrinologist and deputy director of the Endocrinology Department of ZCH. She specializes in treating calcium-phosphorus metabolism disorders, obesity, diabetes, sexual development disorders, short stature, thyroid and adrenal gland diseases. Dr. Wu holds a Ph.D. and has published 20+ papers, including 10+ SCI articles.



Dr. Hu Lidan is an Associate Researcher at the Children's Hospital, Zhejiang University School of Medicine, specializing in genetic disease mechanisms and drug discovery. She holds multiple academic positions and has published notable research in high-impact journals.

DAY4: July 25, 2024, Thursday

DAY4 AM 10:00-11:30

LECTURE: Breathe life, grow healthily



INSTRUCTOR: Prof. Du Lizhong

Prof. Du Lizhong, PhD supervisor, chief physician of Children's Hospital, Zhejiang University School of Medicine, a leading neonatologist in China and a PhD supervisor, specializes in treating critical neonatal illnesses. He's published extensively, won numerous awards, and held key academic positions both domestically and internationally.

DAY4 PM 13:30-16:50

WORKSHOP & CULTURAL ACTIVITIES: Child-life program practice

INSTRUCTOR: Zhang Li, Wang Jinling



Dr. Zhang Li, an associate chief physician in Endocrinology at Children's Hospital, Zhejiang University School of Medicine, specializes in treating pediatric endocrine diseases. She has conducted extensive research in growth, cognition, nutrition, thyroid function, diabetes, and obesity, publishing numerous high-quality papers.



Dr. Wang Jinling, an associate chief physician in Endocrinology, is skilled in diagnosing and treating pediatric growth disorders, obesity, diabetes, adrenal & thyroid diseases, and inherited metabolic disorders. She studied at top US children's hospitals.

DAY5: July 26, 2024, Friday

DAY5 AM 10:00-11:30

LECTURE: Developmental kidney and developmental diseases

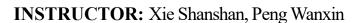
INSTRUCTOR: Prof. Mao Jianhua



Prof. Dr. Mao Jianhua, a chief physician and vise president of Children's Hospital, Zhejiang University School of Medicine, specializes in diagnosing and treating common and rare kidney diseases in children. He has extensive clinical experience and has published over 160 papers. He's also held key academic positions both domestically and internationally.

DAY5 PM 13:30-16:50
PRACTICE AND INTERNSHIP & CULTURAL ACTIVITIES:

Cultural experience: Exploring the origin of life and pursuing the path of growth





Dr. Xie Shanshan is a specially-appointed researcher at Children's Hospital, Zhejiang University School of Medicine. She focuses on the functional and molecular mechanisms of cilia, as well as the physiological and pathological functions of RNA modifications. Her work has been published in leading journals.



Dr. Peng Wanxin, a specially-appointed researcher and master's supervisor at Children's Hospital, Zhejiang University School of Medicine, specializes in pediatric and adult oncology, developing new targeted therapies, and studying tumor-related long non-coding RNAs. Her research has been widely published and highly cited.

DAY6: July 27, 2024, Saturday

Weekend: Self-study

DAY7: July 28, 2024, Sunday

Weekend: Self-study

DAY8: July 29, 2024, Monday

DAY8 AM 10:00-11:30

LECTURE: The sweetness of youth

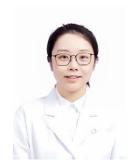


INSTRUCTOR: Professor. Constantin Polychronakos

Professor Constantin Polychronakos, a lifelong professor of genetics and pediatrics at McGill University, directs the Endocrine Genetics Lab at McGill University Health Centre. He's a Fellow of the Royal Society of Canada and the Canadian Academy of Health Sciences, and a visiting/honorary professor at Zhejiang University and its Children's Hospital, Zhejiang University School of Medicine.

DAY8 PM 13:30-16:50

WORKSHOP: The important liquid for growth and development



INSTRUCTOR: Liu Lan, Zhao Liang

Dr. Liu Lan, Associate Professor, Children's Hospital, Zhejiang University School of Medicine, National Clinical Research Center for Child Health and Disease.



Dr. Zhao Liang received his PhD degree in physiology from the Zhejiang University, and was trained as a postdoctor at the Institute of Vegetative Physiology, Charite–Universitätsmedizin Berlin. His main research interests include acute and chronic kidney injury, the pathogenesis of diabetic nephropathy, and the role and mechanism of microvascular function in disease.. **DAY9:** July 30, 2024, Tuesday

DAY9 AM 10:00-11:30

LECTURE: Find inspiration for scientific research from growth and development

INSTRUCTOR: Professor. Constantin Polychronakos



Professor Constantin Polychronakos, a lifelong professor of genetics and pediatrics at McGill University, directs the Endocrine Genetics Lab at McGill University Health Centre. He's a Fellow of the Royal Society of Canada and the Canadian Academy of Health Sciences, and a visiting/honorary professor at Zhejiang University and its Children's Hospital, Zhejiang University School of Medicine.

DAY9 PM 13:30-16:50 WORKSHOP:

1. Quality of life in adolescents

INSTRUCTOR: Bai Guannan



Dr. Bai Guannan was trained in Erasmus University Rotterdam, the Netherlands. She is a clinical epidemiologist and data scientist. Her research focuses on quality of life and mental health in pediatric population. She has published 40 SCI papers with the total citation > 550, and the H index is 8.

2. Genetative AI

INSTRUCTOR: Liu Zhigang



Dr. Liu Zhigang, a ZJU100 Young Professor in Inflammatory Bowel Disease (IBD), focuses on microbial interactions and IBD pathogenesis. He contributed significantly to IBD research during the COVID-19 pandemic, influencing UK vaccination strategies. Dr. Liu has published extensively and is an active member in gastroenterological societies.

DAY10: July 31, 2024, Wednesday

DAY10 AM 10:00-11:30

LECTURE: Good sleep and good health





Professor. Ma Daqing, a leading anesthesiologist and researcher, has published over 350 articles, held four international patents, and made groundbreaking discoveries in perioperative medicine, brain/kidney protection, and cancer recurrence. His work has global impact and is recognized with multiple prestigious awards.

DAY10 PM 13:30-16:50

WORKSHOP: 1. Xenotransplant: Sleep and sleep disorders in Adolescents

INSTRUCTOR: Xie Yicheng



Yicheng Xie received his PhD degree in neuroscience from the University of British Columbia. His research interests center on understanding the immunoinflammatory and neuron-circuit mechanisms behind neurological diseases, including epilepsy, stroke, and neurodevelopmental diseases, as well as discovering or developing therapeutics based on the novel molecular targets.

2. Cloning: Enhancing Health and Well-being through Personalized Therapies

INSTRUCTOR: Li Fengcheng



Dr. Li Fengcheng, associate professor, received his Ph.D. from the Colledge of Pharmaceutical Sciences, Zhejiang University. His research combines AI and network analysis in bioinformatics to integrate large-scale omics data, discover potential drug targets and clinical biomarkers, and develop innovative bioinformatics algorithms to create computational tools and public databases.

DAY11: August 1, 2024, Thursday

DAY11 AM 10:00-11:30

LECTURE: The enemy of youth: Obesity

INSTRUCTOR: Prof. Ni Yan



Dr. Ni Yan, a professor at Zhejiang University's Children's Hospital, specializes in pharmaceutics, analytical chemistry, and bioinformatics. She has 15+ years' experience in mass spectrometry-based metabolomics and its applications, previously serving as an assistant professor at the University of Hawaii Cancer Center.

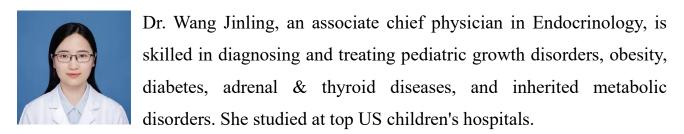
DAY11 PM 13:30-16:00
PRACTICE AND INTERNSHIP & CULTURAL ACTIVITIES:

Cultural experience: Exploring the Role of Traditional Chinese Medicine in Adolescent Medicine

INSTRUCTOR: Zhang Li, Wang Jinling



Dr. Zhang Li, an associate chief physician in Endocrinology at Children's Hospital, Zhejiang University School of Medicine, specializes in treating pediatric endocrine diseases. She has conducted extensive research in growth, cognition, nutrition, thyroid function, diabetes, and obesity, publishing numerous high-quality papers.



DAY12: August 2, 2024, Friday

DAY12 AM 10:00-11:30

CULTURAL ACTIVITIES: Closing ceremony

INSTRUCTOR: Professor Shu Qiang, Professor Fu Junfen, Professor Mao Jianhua

DAY12 PM 13:30-16:50

WORKSHOP: Student Symposium

INSTRUCTOR: Professor Fu Junfen, Professor Mao Jianhua

DAY13: August 3, 2024, Saturday

Weekend: Self-study

DAY14: August 4, 2024, Sunday

Weekend: Self-study