Sino-German Double-degree Master Training Program of Regenerative Medicine-Molecular and Developmental Stem Cell Biology
Jinan University- Ruhr University of Bochum
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Jinan University- Ruhr University of Bochum

For a list of teachers in JNU:

Prof. Dr. Dongqing Cai, eMail: tdongbme@jnu.edu.cn
Prof. Dr. Xufeng Qi, eMail: qixufeng@jnu.edu.cn
Prof. Dr. Zhenyu Ju, eMail: zhenyuju@163.com
Prof. Dr. Xuesong Yang, eMail: yang_xuesong@126.com
Prof. Dr. Yangqiu Li, eMail: jnyangqiuli@163.com
Prof. Dr. Zhijie Li, eMail: zhijielee@yahoo.com
Prof. Dr. Jiansu Chen, eMail: chenjiansu2000@163.com
Prof. Dr. Shanshan Feng, eMail: fengss2000@126.com
Prof. Dr. Junqi Huang, eMail: huangjunqi@jnu.edu.cn
Introduction of Master Supervisors in JNU

This double-degree master training program is managed by the Master and Doctoral Education Station in Regenerative Medicine of JNU. The program is supported by Key laboratory for Regenerative Medicine (Ministry of Education), International Base of Collaboration for Science and Technology (Ministry of Science and Technology & Guangdong Province), Department of Developmental and Regenerative Biology.
Cai Dongqing’s Laboratory
Ph.D. and M.D.; Professor
Director:
Key lab of Regenerative medicine, ministry of education;
Department of Developmental & Regenerative Biology

SCIENTIFIC INTERESTS

Now, more and more evidences suggest that using single cell replicative senescence model can not answer the whole profile of molecular mechanism regarding to why and how the tissue and organ aging is happened, and why and how the regenerative capacity is declined seen in elder individuals. As both tissue and organ are multicellular, therefore, my lab establishes the key hypothesis: “Microenvironment of tissue and organ (consisted with intracellular and extracellular phenotypes of major cell types, microvesicles [MVs] of major cell types and resident stem cell niche) is critical for tissue and organ aging and the dysfunction of regeneration seen in elder individuals. If we are able to demonstrate the aging changes and phenotypes of microenvironment included in major cell types of tissue or organ, we may able to reveal and explain the molecular and cellular mechanism of the tissue and organ, as well as for the molecular and cellular mechanism of dysfunction of regeneration seen in elder individuals as well. Based on the identified aging phenotypes, we will have big chance to tailor a novel therapeutic strategy to delay tissue and organ aging, and improve poor healing and regeneration in aged individuals”.

Accordingly, my lab mainly focus on the following scientific questions for the tissue and organ aging, and the functional regeneration of tissue and organ especially for regeneration of post-mitotic tissues and organs (we focus on cardiac vascular system):

1) What are the critical aging changes in microenvironment included in major cell types (cardiac microvascular endothelial cells, endogenous cardiac stem cells, cardiac telocytes, cardiac fibroblasts, myocytes) of heart?

2) Heart aging is result of senescence of all cells included or only one or some types of cells play the key effects in it?
3) What are the critical phenotypes to incur aging of heart?

What are the key aging phenotypes to incur the poor healing and regeneration in aged heart?

4) Cardiac vascular specific targeting angiogenesis and adult stem cell therapy for myocardial infarction.

5) Interference strategy for aging phenotypes of heart to delay heart aging and improve poor healing and regeneration in aged myocardial infarction.

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PART OF REPRESENTATIVE PAPERS:


2. Xia JB, Mao CZ, Chen ZY, Liu GH, Wu HY, Zhou DC, Park KS, Zhao H, Kim SK, Cai...
DQ* (蔡冬青; 通信作者), Qi XF*. (2016) The CXCL10/CXCR3 axis promotes cardiac microvascular endothelial cell migration via the p38/FAK pathway in a proliferation-independent manner. Exp Mol Pathol. 1;100(2):257-265. doi: 10.1016/j.yexmp.2016.01.010.


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25. Zhao Baoyin, Li Dan, Zhang liang, Li Lei, Zhong Jiayong, Zhang Zipeng, Chen yilin, Xiaotao Shen, Qi Xufeng, Dongqing Cai (蔡冬青，通信作者) Dynamic Recording ECG for Ischemic Rat Heart using Implantable Wireless Telemetry. iCBBE 2011


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Referee
1. Physiological Genomics
2. Life Science
3. American Journal of Physiology-Cell Physiology
4. Archives of Biochemistry and Biophysics
5. Cancer Letters
6. Experimental Hematology
7. Journal of Cellular and Molecular Medicine
8. Experimental Biology and Medicine
9. Apoptosis
Sino-German Double-degree Master Training Program of Regenerative Medicine-Molecular and Developmental Stem Cell Biology
Jinan University- Ruhr University of Bochum
Xufeng Qi (Professor, PhD)

College of Life Science & Technology, Jinan University; Key laboratory for Regenerative Medicine, Ministry of Education (JNU).

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Tel: +86-20-85222687

Research interest:
Heart aging and regeneration, specifically about FOXO transcriptional factor signaling pathway, genetically modified animal model of mouse and Xenopus tropicalis frog, and gene editing technology such as CRISPR-Cas9 system.

Educational experiences:
2007-2010 Ph.D., Dept. of Environmental Medical Biology, Yonsei University Wonju College of Medicine, Korea.
2003-2006 M.S., College of Plant Science and Technology, Huazhong Agricultural University, China.
1999-2003 B.S., College of Plant Protection, Shandong Agricultural University, China.

Professional experiences:
2015-now Professor, principal investigator in Key Laboratory of Regenerative Medicine (JNU-CUHK), Ministry of Education, and Dept. of Developmental & Regenerative Biology, College of Life Science & Technology, Jinan University, China.
2011-2015 Associate Professor, principal investigator in Key Laboratory of Regenerative Medicine (JNU-CUHK), Ministry of Education, and Dept. of Developmental & Regenerative Biology, College of Life Science & Technology, Jinan University, China.
2010-2011 Lecturer, Key Laboratory of Regenerative Medicine (JNU-CUHK), Ministry of Education, College of Life Science & Technology, Jinan University, China.

Major publication (*corresponding authors):


Sino-German Double-degree Master Training Program of Regenerative Medicine-Molecular and Developmental Stem Cell Biology  
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Team members:
PhD candidate: Jingbo Xia.
Master candidate: Guanghui Liu; Chengzhou Mao; Haiyan Wu; Dengcheng Zhou.
Undergraduate student: Zhiqian Liang.
Zhenyu Ju (Professor, MD, PhD)

Director of the Institute of Aging and Regenerative medicine; College of Life Science & Technology, Jinan University; Key laboratory for Regenerative Medicine, Ministry of Education (JNU).

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Tel: +86-20-85222687

Research interest:
My Lab is interested in the molecular basis underlying the aging process of adult stem cells. Particularly, we are interested in the regulatory machinery of hematopoietic stem cells homeostatic maintenance and stress responses, as well as the mechanisms of organ aging and tissue degenerative changes.

Educational & Professional experiences:
2016.03-present Director, Jinan University, China
2011.03-2016.02 Professor, Hangzhou Normal University, China
2007.08-2013.06 Professor, Institute of Medical Laboratory Animals, Chinese Academy of Medical Science, Laboratory director, Sino-German of Aging and Regenerative Medicine
2004.05-2007.06 PhD, Hanover Medical School, Germany
2003.08-2004.04 Visiting Scholar, Max Delbrück Molecular Medicine Center, Berlin, Germany
2001.09-2003.07 Internship researcher, Chinese Academy of Medical Sciences Fu Wai Institute of Cardiovascular Diseases, China
1998.09-2001.06 M.Sc, China Medical School University, China
1997.09-1998.08 Intern, Shengliyoujian Hospital, Dongying, Shandong Province, China

Selected publications:


Sino-German Double-degree Master Training Program of Regenerative Medicine-Molecular and Developmental Stem Cell Biology
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Team members:
Xuesong Yang (Professor, MD, PhD)

Director of Department of Clinical Medicine, Division of Histology and Embryology, Medical School; Key laboratory for Regenerative Medicine, Ministry of Education (JNU)

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Homepage:
http://jd.jnu.edu.cn/yxsy/yxs2014/detail.asp?id=24021

Research interest:
Cancer cell metastasis; Cell migration modulated by early expressed genes in embryo gastrulation; vasculogenesis and angiogenesis during embryonic development and tumorigenesis; Heart tube formation; Neural tube closure and neural crest generation.

Educational experiences:
1991-1997 Tokyo Medical & Dental University, Japan, PhD (Physiology), focused on cell membrane physiology and neurosciences.
1984-1987 Harbin Medical University, China, MSc (Physiology), reproductive physiology.
1979-1984 Harbin Medical University, China, BSc (Clinical Medicine)

Professional experiences:
2007-now Professor (Dean for Department of Clinical Medicine) in Jinan University Medical college; Principal investigator in Key Laboratory (CUHK-Jinan University Joint Laboratories) for Regenerative Medicine of the Ministry of Education (Jinan University). China
1999-2007 Staff Scientist worked on developmental biology in University of Dundee, Wellcome Trust Centre. UK (focused on “FGF, VEGF and PDGF signaling modulating mesoderm cell migration during chick embryo gastrulation”)
1997-1999 Postdoctoral Research Associate worked on pancreas exocrinology in University of Manchester School of Life Science. UK
1987-1991 Assistant professor in Department of Physiology, Medical School, Harbin medical University. China

Teaching experiences:
2007-now Teaching Histology & Embryology to medical students (in English), Teaching Cell Biology and Reproductive Biology to biological students and graduates (in English) as a professor in Jinan University, China
Sino-German Double-degree Master Training Program of Regenerative
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1999-2007 Involving in teaching Cell & Developmental Biology (in English) as a staff
scientist in University of Dundee School of Life Science, UK

&Dental University, Japan

1987-1991 Teaching Physiology (in Chinese) as an assistant professor in Harbin Medical
University, China

Selected publications:

[1] Xiaoyu Wang, Shuai Li, Guang Wang, Zhenglai Ma, Zhonglong Zhang, Manli Chuai, Liu
Cao, Xuesong Yang. High glucose environment inhibits cranial neural crest survival by

Chuai, Kenneth Ka Ho Lee, Xuesong Yang. Dexamethasone exposure accelerates endochondral

[3] Shasha Han#, Guang Wang#, Ya Jin#, Zheng-lai Ma, Wei-jing Jia, Xia Wu, Xiao-yu Wang,
Mei-yao He, Xin Cheng, Wei-jing Li, Xuesong Yang*, Guo-sheng Liu*. Investigating the

[4] Shuai Li, Guang Wang, Linrui Gao, Wenhui Lu, Xiaoyu Wang, Manli Chuai, Kenneth Ka
Ho Lee, Liu Cao, Xuesong Yang. Autophagy is involved in ethanol-induced cardiabifida during

Cheng, Manli Chuai, Kenneth Ka Ho Lee, Daxiang Lu, Xuesong Yang. Angiogenesis is
repressed by ethanol exposure during chick embryonic development. Journal of Applied
Toxicology. 2015. doi: 10.1002/jat.3201.

[6] Zhenglai Ma, Guang Wang, Wenhui Lu, Xin Cheng, Manli Chuai, Kenneth Ka Ho Lee,
Xuesong Yang. Investigating the effect of excess caffeine exposure on placental angiogenesis

[7] Quliang Gu#, Chaojie Wang#, Guang Wang, Zhe Han, Yan Li, Xiaoyu Wang, Jiangchao Li,
Cuiling Qi, Tao Xu, Xuesong Yang*, Lijing Wang*. Glipizide suppresses embryonic
vasculogenesis and angiogenesis through targeting natriuretic peptide receptor A. Experimental

[8] Guang Wang, Yan Li, Xiaoyu Wang, Manli Chuai, John Yeuk-Hon Chan, Jian Lei, Andrea
Münsterberg, Kenneth Ka Ho Lee, Xuesong Yang. Mis-expression of BRE gene in the
developing chick neural tube affects neurulation and somitogenesis. Molecular Biology of the
Sino-German Double-degree Master Training Program of Regenerative Medicine-Molecular and Developmental Stem Cell Biology
Jinan University- Ruhr University of Bochum


(*: co-corresponding author, #: co-first author)

Team members:
Yangqiu Li (Professor, MD)

Director of Institute of Hematology of Medical College, Jinan University; Key laboratory for Regenerative Medicine, Ministry of Education (JNU).

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Tel: +86-20-85226877

Research interest:
Aging and immunity, specific anti-leukemia cellular immune: proliferative history and amplification of T cell repertoire, and molecular characterization of gene alterations and targeted therapy in T cell malignancies.

Educational experiences:
1994-1997 Humboldt University, Berlin, Germany, MD, focused on hematological malignancy.
1986-1989 Medical College, Jinan University, China, MS, Hematology.
1980-1986 Medical College, Jinan University, China, BS.

Professional experiences:
2002-now Professor in Jinan University Medical college; Principal investigator in Key Laboratory for Regenerative Medicine of the Ministry of Education (Jinan University); Chief of Department of Hematology, First Affiliated Hospital, Jinan University.
1996-2002 Associate Professor in the Institute of Hematology, Medical College, Jinan University.
1991-1996 Docent in the Institute of Hematology, Medical College, Jinan University.
1989-1991 Assistant in the Institute of Hematology, Medical College, Jinan University.

Scientific achievements:
She is a vice President of Society of Chinese Experimental Hematology, an honorary President of Society of Hematological Malignancies of Guangdong Provincial Anticancer Association, Vice President of Guangdong Provincial Society of Immunology, Vice President of Society of Hematology of Guangdong Medical Association, board member of Society of Chinese Hematological Immunology. Her research was supported by eight NSFC grants and more than 40 grants from different foundations. She has over 200 publications on these topics both domestically and internationally.

Team members:
Professor: Bo Li, MD, PhD, major scientific interests: immunological pathogenesis of autoimmune hematological disease.

Associated Professors: Xiuli Wu, MD, PhD, major scientific interests: specific anti-leukemia cellular immunity; Shaohua Chen, MD, major scientific interests: T cell immunity and leukemia; Xianfeng Zha, PhD, major scientific interests: T cell immunity and leukemia; Lijian Yang, professional technician for hematopoietic cell culture.

Postdoc: Chengwu Zeng, PhD, major scientific interests: non-coding RNA and molecular mechanism of leukemia pathogenesis.

PhD candidate: Ling Xu, MD; Zhenyi Jin, MD; Ziwei Liao, MD; Junyan Hu, MD.

Master candidate: Lingling Zhou; Shuai Lu; Yikang Zhang, MD; Jiaxiong Tan, MD; Lixin Guo, MD; Xinyu Wang, MD; Yankai Xiao.
Zhijie Li (Professor, MD)

Director of Ophthalmological research institute, Medical School; 
Key laboratory for Regenerative Medicine, Ministry of Education (JNU); Assistant Professor, Baylor College of Medicine, Houston, TX, USA

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Research interest:
Ocular surface immunology, corneal regeneration and repair.

Educational experiences:
1991-1994 Jinan University, China, Ph.D.
1988-1991 Master of Clinical Medicine, Weifang Medical College, China.
1985-1988 Henan Medical College, China, BS.

Professional experiences:
2009-Present Assistant Professor, Baylor College of Medicine, Houston, TX, USA.
2008-2009 Instructor, Baylor College of Medicine, Houston, TX, USA.
2001-2008 Postdoctor, Baylor College of Medicine, Houston, TX, USA.
1999-Present Professor, Ophthalmology and Immunology, Jinan University, China.
1997-1999 Associated Professor, Ophthalmology and Immunology, Jinan University, China.
1996-1997 Assistant Professor, Ophthalmology and Immunology, Jinan University, China.
1995-1996 Postdoctor, China Academy of Medical Science, Beijing, China.

Editorial Board Membership:
Recent Advances in Ophthalmology (2000-Present); Ophthalmic Research (2002-2010); Chinese Journal of Experimental Ophthalmology (2010-Present); Ophthalmology Times

Current Research Grant Awards:
1. PI: Title: *Leukocyte Migration in Wounded Cornea*. Source: NIH/NEI (Share with Dr. Alan R. Burns, Optometry School of University of Houston) 1R01 EY017120-05/NCE.
2. Co-PI: Title:*Ocular Surface Injury: Inflammatory Cascade and Healing of Corneal Wounds*. Source: NIH/NEI. (PI: C. Wayne Smith, M.D., Baylor College of Medicine) 1 R01 EY1823-05/NCE.
3. Co-PI. R01 HL116524. Rumbaut (PI) 02/01/13 – 01/31/18. Platelets and Their Microparticles in the Inflamed Microcirculation. NIH/NHLBI. The major goals of this project are to understand the role of platelets and platelet-derived microparticles in the microcirculation during inflammation induced by wound healing.
4. PI. Title: Corneal wound healing promotion mediated by platelets. Source: Natural Science Foundation of China (No:30672287).
5. PI. Title: Corneal wound healing promotion mediated by gamma delta T cells. Source: Natural Science Foundation of China (No:30672287).
6. PI. Title: Merkel-like cells on the ocular surface. Source: Natural Science Foundation of China (No: 81070703).

Awards:
1. The 1st Award of the Advancement of Scientific and Technology. 1998, issued by the State Council of China, for the research project “Immune Mechanisms of Corneal Graft Rejection”.
2. The 2nd Award of the Advancement of Science and Technology. 2000, issued by the Science and Technology Committee of Henan Province, for the research project “Regulation of Ocular Immune Privilege”.
3. The 3rd Award of the Advancement of Science and Technology. 1991, issued by the Science and Technology Committee of Henan Province, for the research project “Cat corneal endothelial wound healing after corneal alkali burn”.
5. The Second Award of the Excellent Scientific Books. 2003, issued by North China Ten Province Excellent Scientific Books Comment Committee, for Book “Color Atlas of Anterior Segment Eye Diseases”.

Professional Associations:
1. Association for Research in Vision and Ophthalmology (ARVO)
2. Tear Film & Ocular Surface Society
3. American Association for immunologists (AAI)
4. American Association for the Advancement of Science (AAAS)

Selected Original Articles:


Journal Invitation Reviews and Editorials:

Books and Book Chapters:

Invited Lectures:
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6. **Zhijie Li.** Immunology of Corneal Transplantation. October 1-5, 1997, Chengdu, China.
7. **Zhijie Li.** Research Advance about Moore’s corneal ulcer. October 1-5, 1997, Chengdu, China.

**Teaching Courses:**
1. Immunology II, Lectures on Cellular Immunology and Immune Tolerance, 1994-1996, Taught for Medical Students at Jinan University.
2. Ophthalmology, Ocular inflammation and immunology, 1996-2001, Taught for Medical Students at Jinan University

**Current and post team members:**
Research assistant: Dong Dong.
Technician: Yunxia Xue.
Postdoc: Qiong Liu, Baylor College of Medicine.
Medical student: Byeseda SE.
Ph.D student: Jun Liu; Zhigang Xu; Yifei Zhang; Gunghua Peng.
MS student: Fang Song; Hanqing Wang; Chengju Xiao; Cuipei Lin; Peng Liu; Cun Wang; Ting Fu; Ning Meng; Mingshun Li.
Undergraduate student: Jiajun Zhong.
Jiansu Chen (Professor, MD)

Director of Ophthalmological research institute, Medical School; Key laboratory for Regenerative Medicine, Ministry of Education (JNU).

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Homepage:
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Research interest:
Ophthalmology Regeneration and Stem Cells

Selected publications:

Guo X, Lian R, Guo Y, Liu Q, Ji Q, Chen J. bFGF and Activin A function to promote survival and proliferation of single iPS cells in conditioned half-exchange mTeSR1 medium. Human Cell. 2015. 28: 122-32.


Grants:

2015/07-2018/06 PI, Special funds for major science and technology projects of Guangdong province (2015B010125007): The key technologies of 3D corneal printing and research on related bioprinting equipment. ¥ 5000,000.

2014/01-2017/12 PI, National natural scientific fund of China (81371689): Cells derived from bioreactor reprogramming and their effects on the lesions of corneal endothelium and retinal pigment epithelium. ¥ 700,000.

2013/10-2015/10 PI, National natural scientific fund of Guangdong province (S2013010013391): The research on non-DNA direct reprogramming for corneal endothelia cells. ¥ 50,000.

2009/01-2012/12 PI, National natural scientific fund of China (30973244): Generation of induced pluripotent stem cells and its differentiation to corneal endothelial cells. ¥ 310,000.
Shanshan Feng (Associate Professor, PhD)

College of Life Science & Technology, Jinan University; Key laboratory for Regenerative Medicine, Ministry of Education (JNU).

Email: fengss2000@126.com
Tel: +86-20-85222687

Research interest:
Ciliogenesis, Exocytosis, Aging and Regeneration

Educational experiences:
2001-2007 Ph.D., School of Life Sciences, University of Science and Technology of China (USTC), Major: Molecular and Cell Biology (Tumor molecular biology and Cell apoptosis).
1997-2001 B.S. major in Biology Science and B. E. (dual degree) major in Computer Science and Technology, School of Life Sciences, University of Science and Technology of China.

Professional experiences:
2015-now Associate Professor, principal investigator in Key Laboratory of Regenerative Medicine (JNU-CUHK), Ministry of Education, and Dept. of Developmental & Regenerative Biology, College of Life Science & Technology, Jinan University, China.
2013-2014 Research Associate in Dr. Wei Guo's Laboratory (Biology Department, University of Pennsylvania)
2008-2013 Postdoc in Dr. Wei Guo's Laboratory (Biology Department, University of Pennsylvania)

Recent Publications:


Junqi Huang (Associate Professor, PhD)

College of Life Science & Technology, Jinan University; Key laboratory for Regenerative Medicine, Ministry of Education (JNU).

Email: huangjunqi@jnu.edu.cn
Tel: +86-20-85222687

Research interest:
Our research aims to understand the concepts and mechanisms of cell division and cell regeneration (especially cardiomyocytes). We use creative thinking as well as advanced research techniques (eg. Microscopes, Image Analysis) to explore and investigate our scientific hypotheses.

Education:
University: National University of Singapore, Singapore
Degree: PhD, August 2009 - March 2014

University: Sun Yat-sen University, Guangzhou, China
Degree: Bachelor, September 2005 - June 2009

Research Experience:
University: Jinan University, Guangzhou, China
Position: Associate Professor, March 2017 - Now

University: Warwick Medical School, University of Warwick, UK
Position: Research Fellow, April 2014 - January 2017

Institute: Mechanobiology Institute, National University of Singapore, Singapore
Position: Research Assistant, August 2013 - March 2014

Institute: Temasek Life Sciences Laboratory, National University of Singapore, Singapore
Where PhD work was done, August 2009 - August 2013
Publication:


