OMB No. 0925-0001 and 0925-0002 (Rev. 12/2020 Approved Through 02/28/2023)

BIOGRAPHICAL SKETCH

Provide the following information for the Senior/key personnel and other significant contributors.

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NAME: Qihong Wang

eRA COMMONS USER NAME (credential, e.g., agency login): qwang26

POSITION TITLE: Research Associate

EDUCATION/TRAINING *(Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable. Add/delete rows as necessary.)*

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| --- | --- | --- | --- |
| INSTITUTION AND LOCATION | DEGREE  *(if applicable)* | Completion Date  MM/YYYY | FIELD OF STUDY |
| Medical Center of Fudan University (Former | M.D. | 06/1993 | Medicine |
| Shanghai Medical University) Shanghai, P.R.China |  |  |  |
| 200031 |  |  |  |
| Children’s Hospital of Fudan University, Shanghai, | M.Sc. | 06/1999 | Pediatric Science |
| P.R.China 200031 |  |  |  |
| Johns Hopkins Medical Institution, Johns Hopkins | Postdoctoral | 04/2011 | Laboratory Research |
| University, Baltimore MD 21205, USA |  |

## Personal Statement

I have a very strong background on animal survival surgery and related procedures together with strictly training in basic medical science research especially on the cardiac and pediatric science.

Over 10 year’s medical laboratory research experience. Expertise at developing in vivo animal models in mice, rats, rabbit and sheep such as cardiac arrest, hemorrhagic shock and resuscitation, organ transplantation in rats, rabbit. After joining the Center for Blood Oxygen Transport and Hemostasis (CBOTH), Department of Pediatrics at University of Maryland School of Medicine, I have been working as a director of small animal surgery and physiology core and successfully set up a highly battle field relevant polytrauma, hemorrhagic shock and resuscitation rabbit model. Additionally, I have solid basic medical science education background and training at Hopkins. Up-to-date the knowledge of physiology, immunology, genetic and molecular biology. My background and experience allow me to be well at new project, protocol design, and optimization the procedures to arrive the best quality of results.

## Positions and Honors Positions

2019.11-present Research Associate, Director of Small Animal Surgery and Physiology (SASP)Core

Center for Blood Oxygen Transport and Hemostasis (CBOTH)

Department of Pediatrics, University of Maryland School of Medicine

Baltimore MD, USA

2015-2019 Research Associate, Department of Biomedical Engineering, SOM, Johns Hopkins University, Baltimore MD, USA

2012-2014 Research Associate, Department of Surgery, Division of Pediatric Surgery, SOM, Johns Hopkins University, Baltimore MD, USA

1998-2005 Attending Surgeon, Department of Surgery, Children’s Hospital of Fudan University, Shanghai, P.R.China

1993-1997 Resident/Teaching Assistant, Department of Surgery, Children’s Hospital of Fudan

University, Shanghai, P.R.China

## Honors

2000-2001 Research Fellowship, Department of Surgery, Prince of Wales Hospital, Chinese University of Hong Kong, Hong Kong

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1. **Contribution to Science**
   1. My early publication was focused on the pediatric research science. Most of these publications were published on the top journals in China. There were also some publications on the international journals such as Journal of Pediatric Surgery et al.
2. **Qihong Wang**, Xianmin xiao, Yiming Zhou, Hao Li. Changes in Serum Amylase Isoenzymes in Congenital Biliary Dilatation. Chinese Journal of Pediatric Surgery. 2000; 4: 11-13.
3. **Qihong Wang**, Shan Zheng, Xianmin Xiao, Yiming Zhou. Analysis on the Postoperative Short-term Effect and Some Factors Affecting the Prognosis in 57 Cases with Biliary Atresia. Journal of Clinical Pediatrics. 2002; 12: 716-718.
4. Xianmin Xiao, Hao Li, Zhibao Lu, **Qihong Wang**, Shan Zheng. Potential Diagnostic Value of Pancreatic Isoamylases for Pancreaticobiliary Maljunction with Mild Biliary Dilatation in Patients and A Porcine Model. Journal of Pediatric Surgery. 2004; 39(10): 1490-1494 <http://www.ncbi.nlm.nih.gov/pubmed/15486892>
5. Kai Li, Shan Zheng, Xianmin Xiao, **Qihong Wang**, Yiming Zhou, Lian Chen. The Structural Characteristics and Expression of Neuropeptides in the Esophagus of Patients with Congenital Esophageal Atresia and Tracheoesophageal Fistula. Journal of Pediatric Surgery. 2007; 42(8): 1433-38 <http://www.ncbi.nlm.nih.gov/pubmed/17706510>
   1. After joining Hopkins as a postdoc research fellow in 2006, I focused on the different research animal design and setup. I successfully setup the cardiac arrest and resuscitation rat model, sepsis mouse model, heart transplantation rat model, acute liver failure and stem cell transplantation mice model and extracorporeal fetal support sheep model. The selected publications as following:
6. Marcella Ferlito, **Qihong Wang**, William B Fulton, Paul Colombani, Luigi Marchionni, Karen Fox-Talbot, Nazareno Paolocci, Charles Steenbergen. Hydrogen sulfide increases survival during sepsis: Protective effect of CHOP inhibition. J Immunol. 2014 February 15; 192(4): 1806-1814. [Doi: 10.4049/jimmunol.1300835](https://www.jimmunol.org/content/early/2014/01/07/jimmunol.1300835)
7. Hiren Modi, **Qihong Wang**, Sahithi GD, David Sherman, Elliot Greenwald, Alena Savonenko, Romergryko Geocadin, Nitish Thakor. Intranasal post-cardiac arrest treatment with Orexin-A facilitates arousal from coma and ameliorates neuroinflammation. [PLoS One.](https://www.ncbi.nlm.nih.gov/pubmed/28957432) 2017 Sep 28;12(9)<https://www.ncbi.nlm.nih.gov/pubmed/28957432>
8. Janaka Senarathna, Hang Yu, Callie Deng, Alice Zou, John Issa, Darian Hadjiabadi, Stacy Gil, **Qihong Wang**, Betty Tyler, Nitish Thakor, Arvind Pathak. A Miniature Multi-contrast Microscope for Functional Imaging in Freely Behaving Animals. Nature Communications. [Nature Communicationsvolume 10, Article number: 99 (2019)](https://www.nature.com/articles/s41467-018-07926-z)
9. **Qihong Wang,** Peng Miao, Hiren Modi, Sahithi Garikapati, Raymond C. Koehler, Nitish Thakor. The effect of therapeutic hypothermia on brain homeostasis in a cardiac arrest rat model. Journal of Cerebral Blood Flow & Metabolism 2019 Oct;39(10):1961-1973. <https://www.ncbi.nlm.nih.gov/pubmed/29739265>
   1. Since Nov, 2019 I started to work as director of of Small Animal Surgery and Physiology (SASP) Core at Center for Blood Oxygen Transport and Hemostasis (CBOTH), Department of Pediatrics, University of Maryland School of Medicine. I successfully setup animal surgical and physiological core facility source at center, support 8-10 CBOTH PIs and serve as a consultant in protocol design as well as support each stage of experimental preparation and data analysis.
      1. Zhiliang Wei, **Qihong Wang** (co-first author), Hiren Modi, Sung-Min Cho, Romergryko Geocadin, Nitish Thakor, Hanzhang Lu. Acute-stage MRI cerebral oxygen consumption biomarkers predict 24-hour neurological outcome in a rat cardiac arrest model. NMR in Biomedcine 2020 June <https://onlinelibrary.wiley.com/doi/abs/10.1002/nbm.4377>