

07 Nov 2018

Re: Recommendation for Shicheng Guo, Ph.D.
Application for CIBM Postdoctoral Traineeship

Dear CIBM Trainee Advisory Committee:

I am writing this letter in very strong support of Dr. Shicheng Guo's CIBM postdoctoral traineeship application. For the past 12 months, Dr. Guo has worked in my laboratory within the Center for Precision Medicine Research at the Marshfield Clinic Research Institute. During that time, he has taken the lead on several studies, including an investigation of regulatory regions in correlation with rheumatoid arthritis GWAS SNPs and an exome-wide scan of iron metabolism disorder which revealed a novel mechanism of iron metabolism regulation. He has generated two manuscripts describing these results. I have only the highest regard for the scientific rigor, breadth of knowledge, insights, industriousness and collaborative approach that Dr. Guo employs in his research.

Although Dr. Guo has recently received his Ph.D. from the School of Life Sciences at Fudan University in 2015, he has led a remarkable scientific career highlighted by numerous significant contributions to epigenomics, cancer genetics, and rheumatoid arthritis genetics. Indeed, Dr. Guo has authored 49 publications including first or senior author publications in high impact journals: *Nature Genetics*, *Clinical Epigenetics*, *Arthritis & Rheumatism*, *Cancer Medicine*, and *Frontiers in Genetics*. Further, Dr. Guo is the inventor on two patents and has received a number of scientific awards and scholarships. In addition to his impressive scientific achievements, I have found Dr. Guo to be a delightful, highly affable person to interact with. He is simply a wonderful, hard-working colleague who is always willing to help and contribute insights.

A CIBM postdoctoral traineeship will enable Dr. Guo to continue his biomedical sciences training and broaden his expertise into computational techniques applied to epigenetic and genomic data. As the biological sciences become increasingly data-rich, the training within the CIBM program will enable Dr. Guo to expand his repertoire of analysis skills. The study that Dr. Guo envisions uses large-scale clinical informatics and high-throughput molecular data to investigate how the interaction between epigenetics and genetic polymorphisms may underlie disease susceptibility within the Personalized Medicine Research Project. Training in machine learning, informatics and programming will not only facilitate greater powers of scientific interrogation for this important study, but will give Dr. Guo the skills to conduct leading science going forward in his career.

I am fully committed to advising and collaborating with Dr. Guo. We currently meet on a daily basis and have discussions on experimental design, analysis approaches, molecular genetics, and disease phenotypes. Additionally, Dr. Guo and I have met with Dr. Mark Craven who will provide mentorship in the areas of machine learning, informatics and computer science. In short, Dr. Guo is a highly promising, extraordinarily productive and innovative young scientist who will benefit tremendously from the interdisciplinary training provided by the CIBM program.

Sincerely.

Steven J. Schrodi, Ph.D.

Steve O Sobrook

Associate Research Scientist, Center for Human Genetics

Marshfield Clinic Research Institute

Faculty Trainer, CIBM