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Systems Biology/Microbiology Faculty Search
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To Whom It May Concern:

Dr. Zhengchang Su has asked me to write a letter of recommendation in support of his application for a position in bioinformatics and computational biology in your department. I am very happy to do so.

Although Dr. Su worked for me for less than a year, I know him very well and think quite highly of his capabilities. Dr. Su first approached me about a possible postdoctoral position late in 2001, shortly after he finished his PhD in Physiology and Biophysics at the University of Alabama at Birmingham (UAB). He was supplementing his background by taking courses in computer science, and he wanted to get into macromolecular simulations. I hired him in spring, 2002.

At the time I made Dr. Su an offer, I was negotiating with Georgia Tech, who had offered me a professorship and an endowed chair in its School of Biology. I told Dr. Su that there was a very good chance that I would be leaving UAB within a few months, but he decided to accept the postdoctoral position I had offered him; at the time, we both hoped that he might move with me to Georgia Tech if and when I moved. By the time of my actual move, however, it had become impossible for Dr. Su to move to Atlanta, because of personal factors that he can explain to you.

In my laboratory Dr. Su assumed responsibility for developing rigorous methods for carrying out molecular dynamics (MD) simulations on models of high density lipoproteins (HDLs). My collaborators and I had published a series of papers extending a detailed model for HDLs that we had put forward in 1999 (Segrest et al., *J. Biol. Chem. 274*, 31755-58), and we were anxious to evaluate it using MD. Dr. Su attacked this problem with energy, and I was quickly impressed by his productivity, and by the care that he devoted to setting up, carrying out, and analyzing the simulations. He got some exciting and potentially very important results.

At the time I moved to Georgia Tech, Dr. Su took a position with his current mentor, Dr. Ying Xu, who was then at Oak Ridge National Laboratories. Dr. Su and I decided that he would finish up a series of simulations on which we had agreed, using computers that remained available to him at UAB, and

that he would then write up the results, which would be submitted for publication. (Dr. Su assured me that he had cleared this arrangement with Dr. Xu.) Dr. Su and I met on three or four occasions during the next year, and he showed me the results of the simulations, which he completed as planned. There was certainly one very strong paper there, and perhaps two or three, but there were long delays in getting a manuscript from him, and that work remains unpublished. I think that pressure from Dr. Xu and the move of his lab from Oak Ridge to the University of Georgia (UGa) contributed to the difficulties of finishing a paper.

Dr. Su has continued to be very cooperative in my group's efforts on HDL simulations. I hired a new postdoctoral associate on the project in the summer of 2003, Dr. Marcela Aliste, and Dr. Su was very helpful, sharing code, files and notes as she set up her own simulations and took over the project. I told Dr. Su that we would be moving the simulations up in terms of rigor, based on what we had learned from his work, and I urged him to complete a paper before results from Marcela's simulations came in, because her results might weaken conclusions drawn from his simulations. Unfortunately, the demands on his time at UGa delayed preparation of his manuscript, and when Marcela's first results came out, I no longer felt that Dr. Su's work was publishable. (He is being given co-authorship on a couple of our papers, because of the groundwork that he did in moving HDL simulations forward in my lab.)

Dr. Su has many strengths. His background is unusually broad, including a PhD in Cell Biology, extensive training in computational methods, and postdoctoral work on lipoproteins (with me) and on protein structure prediction (with Dr. Ying Xu). He is very bright and extremely hard working, and he brings a self-critical eye to the evaluation of his own work. He was always an active participant in my group meetings, and his pleasant and outgoing personality made him a popular resource for the others in my group. I am confident that he will make an excellent mentor for young scientists and an excellent teacher, given his personality and the quality of his spoken English. I have not yet had the opportunity to evaluate his writing skills.

It is not clear to me exactly what delayed the writing of Dr. Su's papers on the HDL simulations. In fairness, he carried a very heavy professional load after joining Dr. Xu's laboratory. For about a year his family was still in Birmingham, so he was commuting between Birmingham and Oak Ridge, TN, and then between Birmingham and Athens, GA, so I know this took a toll. Of course, many scientists face similar challenges in balancing the demands of career and family.

In summary, I give Dr. Zhengchang Su a strong recommendation, and I urge you to interview him. You will, of course, have a more reliable recommendation from Dr. Ying Xu, with whom Dr. Su has worked for almost three years now. If you would like to discuss any aspect of this recommendation with me, please do not hesitate to contact me by telephone or e-mail.

Sincerely

Stephen C. Harvey. PhD