

Howard Hughes Medical Institute
Research Laboratories

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Letter of Reference for ChinLin Guo

I am writing to enthusiastically support the application of ChinLin Guo for a faculty position. I have known ChinLin for ~2 years, since he has been a postdoctoral fellow in Andrew Murray's lab. I had many opportunities to interact with ChinLin because I spent three months on sabbatical at Harvard at the end of 2003. I have also seen ChinLin at the annual meetings of the Helen Hay Whitney Foundation, where I serve on the advisory board. ChinLin is an excellent catch for an institution interested in strengthening their efforts in quantitative biology.

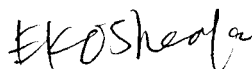
ChinLin has been working on a project in Andrew Murray's lab to study polarity and symmetry-breaking in budding yeast. He has teamed up with another postdoctoral fellow to set up an experimental system that allows them to collect data on polarity in single cells in real time. The use of microfluidic chambers to create gradients of pheromone and the development of fluorescent reporters of the polarity network has permitted unprecedented insights into the complexity and dynamics of this process. ChinLin has synthesized these experimental observations into a simple, but elegant, computational model for self-organization and polarity formation that involves competition for limiting factors coupled to positive feedback.

ChinLin is unusually broadly trained, with formal training in engineering, physics, and medicine. This positions him extremely well to identify important biological problems and to apply rigorous analytical approaches. His experience in the Murray lab has been an excellent addition to his formal training, as it has given him a much better sense for experimental biology and has allowed him to develop intuition for which biological problems to work on. His biological intuition, knowledge of experimental science, and deep quantitative training set him apart from other young scientists in this field.

Finally, I cannot close without commenting on ChinLin's personal qualities. He exudes enthusiasm for science and is always eager to engage others in conversation about his work or other scientific topics. He is a delight to interact with, patiently explaining his models and ideas to me – it is clear that he wants others to understand his ideas and provide feedback. I suspect that he will be an excellent teacher because of his patience, pleasant attitude, and infectious enthusiasm.

In summary, I highly recommend ChinLin Guo for a faculty position. He will be an outstanding addition to any department interested in quantitative biology.

Sincerely,



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