



Japan Atomic Energy Research Institute

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Biocomplexity Faculty Search Committee
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Letter of recommendation for Florence Tama

I am happy to write a letter of recommendation for Dr. Florence Tama, who is applying for a position in your department.

Florence Tama first stayed in my group from July 1998 to December 1998 with a fellowship, called MENSUR for international mobility, from the French ministry of research. This fellowship required that she did half of her PhD work in a foreign laboratory. She chose my laboratory, which was at that time at Faculty of Science, Kyoto University, to do her PhD work. Later she continued to stay in my laboratory at Kyoto University from July 1999 to May 2000 under a fellowship from Ministry of Education, Japan.

Before joining my laboratory she was studying with Dr. Sanejouand in France normal mode analysis of protein with structurally coarse-grained models. So, I let her work on the problem of why drastically simplified structural models still reproduce essential features of low frequency normal modes of protein models of the detailed atomic resolution. She attacked this problem with a rather remarkable intensity. However, to my surprise, this problem turned out to be a rather complicated difficult problem. While struggling with this odd problem of deeply theoretical nature, time was approaching that she has to submit a thesis work. Therefore she decided also to work on a more ordinary work of applying the idea of the normal mode analysis to analyze experimentally obtained results. The problem she has chosen was the volume fluctuation of protein conformation as measured by sound velocity. For this purpose she has carried out a 1 nano sec MD simulation of lysozyme in water, and performed an analysis of volume fluctuation along the MD trajectory as well as the principal component analysis of the trajectory, an analysis which is a natural extension of the normal mode analysis. From these analyses she found that the volume fluctuation was quite large and identified the most

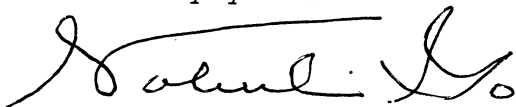
important types of conformation fluctuation responsible for the large volume fluctuation. This paper was published in Eur. Biophys. J.

The assignment of the first problem to her was my mistake. When I assigned it to her, I could not foresee the extent of the difficulty of the problem. After she has decided to work on the second problem, her work was very quick and the result was obtained in a rather short time. At that point I was very much impressed by her ability. This impression of mine was reinforced by her productivity after she began to work with Dr. Charles Brooks at the Scripps Research Institute.

At the time when she first joined my group, she said that it was her first trip abroad. I was very much concerned with a possible culture shock she may suffer. But soon after she arrived, she became integrated with the group people and began to work very actively. I think that this shows that she is mentally very strong and flexible, an important capacity to be a good scientist.

As a summary, I valued her as an excellent scientist. I think that this evaluation has been proven by the quality and quantity of the work she has achieved after she joined the group of Dr. Brooks. I would strongly recommend her to be a member of your institute.

Sincerely yours

A handwritten signature in cursive script, appearing to read 'Nobuhiro Go', written in dark ink.

Nobuhiro Go