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"Memorial Issue for Prof. Nobuhiko Saitô"

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Preface

Memorial Issue for Professor Nobuhiko Saitô

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This special issue of Biophysics and Physicobiology is published as a memorial for Prof. Nobuhiko Saitô who died 2 May 2015. His obituary will appear first in this special issue written by Kei Yura [1], one of the last graduates of Saitô's laboratory in 1980s. We try to organize this special issue as a review of the work in biophysics by late Nobuhiko Saitô, especially protein folding study and current extension of his work by other researchers. For this reason, we invited people worked with him at Waseda University and people who significantly extended his work in protein folding with deep understanding of his idea.

After the obituary, Mitiko Go contributed her memory on the study of biopolymer [2]. She was one of the first students of him in 1960s when Nobuhiko Saitô moved from Kobayasi Institute of Physical Research to Waseda University. Yukio Kobayashi, one of the students in 1980s, contributed an extensive review of Nobuhiko Saitô's achievement on biopolymers [3]. After the three manuscripts focusing on the achievement of Nobuhiko Saitô, the contribution from Hiroshi Wako turned our perspective to the future and extension of the work done by him. Hiroshi Wako, who introduced "Wako-Saitô's island model" in late 1970s, reviewed and extended the model with the recent experimental data [4]. Masaki Sasai, who was not a student of Nobuhiko Saitô but an advocate of Wako-Saitô's island model, intensively discussed protein folding based on the island model [5]. When the island model was re-discovered by another group around 2000, Masaki Sasai proposed that the model should be called Wako-Saitô-Muñoz-Eaton (WSME) model. Motonori Ota learnt protein physics from Nobuhiko Saitô in 1990s while he worked for a company, and kept a long relationship with Nobuhiko Saitô from then. He contributed the work of protein folding simulation that was, we believe, originally inspired by a discussion with Nobuhiko Saitô. Finally, Shigeki Mitaku, a long-term colleague of Nobuhiko Saitô since 1970s, particularly on membrane proteins, submitted his understanding of "life" based on macromolecules. The idea may have materialized out of one of the discussions with Nobuhiko Saitô.

We hope that all the achievements by Prof. Nobuhiko Saitô and their extensions described in this special issue will remain in your heart and will be a "shoulder of giant" for the advancement of biophysics.

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