



Structural Biology Research Center

Institute of Materials Structure Science
High Energy Accelerator Research Organization, KEK

SBRC International Cryo-EM Seminar Series, No.6

Prof. Gabriel Lander, PhD

Department of Integrative Structural and Computational Biology (ISCB),
The Scripps Research Institute.



Dr. Gabriel Lander is a pioneer of 200 kV cryo-EM equipped with a direct electron detector for the single particle analysis of proteins. Recently, his research group has been achieving remarkable results especially in determining the structure of small proteins (<200kDa), which were previously thought to be too challenging for cryo-EM methods. Last year, his group reported a 2.13 Å resolution structure of ~150 kDa rabbit muscle aldolase, and several complexes that were smaller than 100 kDa to better than 3 Å. Importantly, the resolution of 1.75 Å was obtained for the reconstruction of ~505 kDa mouse apoferritin structure, proving that sub-2Å resolution structures can be obtained with 200kV. In this lecture, Dr. Lander will talk about the current work of his group on the mitochondrial protease systems as well as these latest results of 200kV cryo-EM.

Profile

B.S. (Biochemistry; Computer Science (minor)), Binghamton University, 2002

Ph.D. (Biophysics), Scripps Research, 2009

2009-2013 Postdoctoral Fellow with Dr. Eva Nogales, University of California, Berkeley

2013-2017 Assistant Professor, ISCB, Scripps Research

2017-2019 Associate Professor, ISCB, Scripps Research

2019- Professor, ISCB, Scripps Research

Date: Monday, February 10, 2020

16:00 pm - 17:30 pm

Location: Ni-Go-Kan Bldg. 1F, Meeting room Large

(HIGH ENERGY ACCELERATOR RESEARCH ORGANIZATION KEK)

Please join us for this upcoming SBRC International Cryo-EM Seminar Series at KEK!

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