DATE: Day 18 Month 05 Year 2018

SUMMARY of

2017 RESEARCH RESULTS REPORT

For International Collaborative Research with IPR, Osaka University

Research Title		Structural and functional studies on protein-protein complexes and
		oncogenic factors involved in continuous active transcription and
		Helicobacter pylori-dependent carcinogenesis
Applicant	Name	Hyoun Sook Kim
	Affiliation	National Cancer Center, Korea
	Present Title	Dr.
Research Collaborator (Host PI)		Atsushi Nakagawa (Professor) and Eiki Yamashita (Associate Professor)

Summary

In cancer, protein-protein interactions (PPIs) have important regulatory roles. It is crucial to identify PPIs and validate the physiological relevance of PPIs to cancer, leading to develop PPIs inhibitors including small molecules. The overexpression and activation of Cdk11, which seems to affect both cell cycle and transcription, is crucial in the growth and proliferation of cancer cells suggesting that Cdk11 can be a novel potential therapeutic target. And we also have studied on some proteins which are related to pathogenesis or Ferroptosis and so on. As another major target for new drug discovery, we have studied the project for human-pathogenic bacterial proteins that affect human cell adhesion and tumor development. In this beam time, we have collected all data over ~3.0 Å.

From those data, we could solve the novel crystal structure and get the several ligand-bound structures. One research paper is under revision and writing manuscripts for two targets are in preparation.

^{*}Deadline: May 18, 2018

^{*}Please submit it to E-mail: tanpakuken-kyoten@office.osaka-u.ac.jp.

^{*}We accept only PDF file. Please file it after converting WORD to PDF.

^{*}Please describe this summary within 1 sheet. Please DON'T add some sheets.

^{*}This summary will be published on the web.