Form 3

Report for Joint/usage program for Endocrine/Metabolism

（ Research Program Fiscal Year (FY) 2016 ）

Date: 2017/4/28

To:

Director of Institute for Molecular and Cellular Regulation

1. Program No.

   Research title: Degradation of a RhoGAP by the proteasome.

   Objective of the research:

   We will define a molecular mechanism by which a RhoGAP Sac7 is degraded by proteasome and will address its physiological impact in yeast cells.

2. Period

   2016/4/1-2017/3/31

3. Project organization

Name of Applicant: Erin Jonasson

Position: Post-doc

Institution/department: University of Notre Dome

Name of Co-applicant:

Position:

Institution/department:

Name of Researcher in IMCR: Satoshi Yoshida

Position: Associate Professor

4. Research plans:

   Dr Jonasson and Yoshida will perform experiments in early 2016 and have collaborative paper published by the end of the year.

5. Research results:

   We have attempted to dissect signaling mechanisms by which Sac7 is degraded and revealed the involvement of a MAP kinase cascade in this process. Currently we are trying to publish following paper.

   -Jonasson EJ, Iwai M, Yoshida S

   “Proteasomal degradation of a Rho1 GAP Sac7 maximize the signal amplification of Pkc1-Mpk1 pathway by a positive feedback mechanism.”

6. Publications and/or Presentations made through this collaboration

-International Conference

Yoshida S

Mechanisms that specify Rho1 signaling outputs

14th International Congress on Yeast, Awaji 2016/ 9/ 11～15

(Please summarize the report in 2 pages)