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1. Preface

As the conference season is approaching fast, at least for those societies and members that hold their annual meetings in the end of the fiscal year, it is time again to submit the applications and abstracts. For me, and case of the JSPF 63-rd annual Tsukuba meeting, deadline for presenters is really close -> November 30, 2021! It seems that meetings like JSPF will be still performed online, which is comfortable in some ways but unfortunate in the other... I think personal contacts in science are essential, and I truly hope that on site meetings will resume soon. How does everyone else feel?

2. Call for the Joint research collaborative proposals in 2022

Applications for the fiscal year 2022 Joint research collaborative projects at the Institute of Plant Science and Resources (IPSR) are currently open at the institute's website. Similar to previous year, applications are accepted in three categories: A (Priority research), B (Young research), and C (General research). Details about each category, application procedures, and application forms (in Japanese) can be downloaded from the IPSR website:

<https://www.rib.okayama-u.ac.jp/collaboration/collaboration1.html>

Deadlines for applications (depending on category) will be:

A (Priority research) & B (Young research): 13-December, 2021

C (General research): 12-January, 2022

For additional information, or if you do not speak Japanese, please contact IPSR office directly by E-mail: kyodo1247@adm.okayama-u.ac.jp

3. Recently released publications

Das, S., Alam, M.M., Zhang, R., Hisano, S., Suzuki, N.

Proof of concept of the yadokari nature: a capsidless replicase-encoding but replication-dependent positive-sense single-stranded RNA virus hosted by an unrelated double-stranded RNA virus.

JOURNAL OF VIROLOGY 95 (17): e00467-21 (2021)

<https://doi.org/10.1128/JVI.00467-21>

Tani, A., Mitsui, R., Nakagawa, T.
Discovery of lanthanide-dependent methylotrophy and screening methods for lanthanide-dependent methylotrophs.
METHODS IN ENZYMOLOGY - Rare-Earth Element Biochemistry: Methanol Dehydrogenases and Lanthanide Biology 650: 1-18 (2021)
<https://doi.org/10.1016/bs.mie.2021.01.031>

Nagaki, K., Furuta, T., Yamaji, N., Kuniyoshi, D., Ishihara, M., Kishima, Y., Murata, M., Hoshino, A., Takatsuka, H.
Effectiveness of Create ML in microscopy image classifications: a simple and inexpensive deep learning pipeline for non-data scientists
CHROMOSOME RESEARCH (2021)
<https://doi.org/10.1007/s10577-021-09676-z>

Jing, Z.H., Wacera, W.F., Takami, T., Takanashi, H., Fukada, F., Kawano, Y., Kajiya-Kanegae, H., Iwata, H., Tsutsumi, N., Sakamoto, W.
NB-LRR-encoding genes conferring susceptibility to organophosphate pesticides in sorghum
SCIENTIFIC REPORTS 11: 19828 (2021)
<https://doi.org/10.1038/s41598-021-98908-7>

Sata, H., Shimizu, M., Iwasaki, T., Ikeda, H., Soejima, A., Kozhevnikov, A.E., Kozhevnikova, Z.V., Im, H.T., Jang, S.K., Azuma, T., Nagano, A.J., Fujii, N.
Phylogeography of the East Asian grassland plant, *Viola orientalis* (Violaceae), inferred from plastid and nuclear restriction site-associated DNA sequencing data
JOURNAL OF PLANT RESEARCH 134: 1181-1198 (2021)
<https://doi.org/10.1007/s10265-021-01339-8>

4. International Joint Research introductions * 80-th series *

This month, Prof. Michael Hippler will introduce RECTOR program and Dr. Felix Buchert will talk about his experience from the short visit in Japan enabled by this framework.

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# Professor Michael Hippler (University of Muenster) #  
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My name is Michael Hippler, and I am a Professor at the Institute of Plant Biology and Biotechnology at the University of Muenster (Germany). In 2019, I got appointed via the RECTOR program to join the Institute of Plant Science and Resources (ISPR) at the University of Okayama for 3 years. The aim of the RECTOR program is to establish strong collaborations between the laboratory of photo-environmental adaptation group at ISPR, the photosynthesis/structural biology research core at the Research Institute of Interdisciplinary Science at Okayama University and my laboratory.

Our goal is to provide mechanistic insights into the fundamental principles of photosynthesis using genetics, molecular biology, biochemistry, biophysics and structural biology. A focus of our research is to understand dynamic remodeling of the photosynthetic apparatus and its functional consequences. These remodeling activities are driven through light acclimation processes, nutrient availability and accessibility to oxygen, particularly important for

microalgae. Up to now more than 15 scientific manuscripts have been published in the framework of the RECTOR program.

In 2019, I was able to visit IPSR twice. I remember, the friendly atmosphere at the Institute and was very thankful for the incredible help from all members of the Sakamoto laboratory and in particular by Prof. Sakamoto, Drs Shin-Ichiro Ozawa and Yusuke Kato that allowed me to feel comfortable and at home at IPSR. Unfortunately, in 2020, I only could visit once due to the COVID pandemic situation. Since then, we had numerous zoom meetings to discuss the situation and science, but of course, this is not the same as visiting each other. Moreover, several student exchanges, that we had planned were not possible. Fortunately, Dr. Buchert from my laboratory visited IPSR in 2019 in the context of an International IPSR Joint Usage/Research Center Research Proposal.

I have to say, that I am really missing beautiful Japan, with its fantastic landscapes and its rich cultural heritage. I also have to say, that I am missing the racing bike tours that I regularly did with Prof. Yuichiro Takahashi, which permitted me to acknowledge the beauty of the Okayama back-country with its gorgeous hills, rivers and coast lines. I am sure, that also my racing bike is "missing" me as it waits in my office at IPSR. I am very much looking forward to visiting IPSR again.

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Dr. Felix Buchert #
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My name is Felix Buchert, and I am a postdoctoral researcher from WWU Münster, Germany, in the group of Prof. Michael Hippler. I remember as if it was yesterday when Michael told me about an appealing opportunity as part of the RECTOR Program: the 2019 Call for the International IPSR Joint Usage/Research Center Research Proposals. Luckily, Prof. Wataru Sakamoto at the IPSR had just published an interesting article (Takami et al. 2018 Nat Plants 4:1044-1055) which caught my attention, and the resulting proposal about a potential entanglement of cellular phosphate recruitment mechanisms and proton motive force regulation was successful. We proposed that, by degrading plastid DNA in WT, the increased phosphate in the plastid lowers the proton motive force which may influence the senescence process. Our idea was supported by a set of preliminary data that we collected during my stay at the institute.

For me, the opportunity of visiting IPSR meant getting first-hand experience on working with Arabidopsis as I was more familiar with algal photosynthesis. I was lucky again of receiving tremendous help by IPSR staff members Drs. Tsuneaki Takami and Yusuke Kato for certain techniques, which I am currently using here in Münster when generating ATP synthase mutants in Arabidopsis. When I look back at that November in 2019, I remember a very pleasant working environment in the lab of Prof. Sakamoto, exciting scientific discussions, a symposium held at Okayama campus, as well as an extraordinarily pleasant stay in Kurashiki with new places to discover.

5. Student recruitment - Online Graduate School Briefings

The Institute of Plant Science and Resources (IPSR) is one of the outstanding places for graduate students to engage in various aspects of plant research, in particular stress-related topics. The Institute will have two online briefing sessions via Zoom on the following dates:

17-December 2021 (Friday) 13:00~16:00
20-December 2021 (Monday) 13:00~16:00

Registration page (Japanese):
<https://www.rib.okayama-u.ac.jp/nucleus/Daigakuin/setsumeikai.html>
Information page (English):
https://www.rib.okayama-u.ac.jp/nucleus/Daigakuin_E/Top.html
[Q&A] (English - Japanese)
Daisuke Saisho, Institute of Plant Science and Resources,
Okayama University
TEL: (086)434-1245 E-mail: saisho@okayama-u.ac.jp

6. Posting request

In the PSSNet E-mail magazine and website, we aim to share various information about research in plant (stress) science. We cordially invite all PSSNet subscribers to contribute various information about their latest publications, meetings and seminars, staff, postdoc, and student recruitments, etc. Please send your information directly to [pssnet-admin@okayama-u.ac.jp] E-mail address. You can also distribute your information via mailing list of the PSSNet.

7. Postscript from the issue Editor

In most foreign reports, including those written above by Michael and Felix, people show their deep admire for Japanese culture and beautiful nature. For a foreigner, it really feels special being in Japan, and although not always understanding the "true" meanings of traditional Japanese arts, cultural experiences from Japan can be overwhelming. Many people will always remember eating sushi and sashimi, visiting shrines and temples, or taking part in tea ceremony, and some will never-ever forget the tiniest hotel rooms in the World offered to visitors at outraging prices. Well, I have already seen it all, but only recently, I was able to attend the kabuki performance for my first time. Watching moves and expressions of Ichikawa Ebizo was really something unforgettable. It is like this person's meaning is "kabuki", and his life became art of its own. I was wondering how it feels being born in the great dynasty of kabuki actors and take succession in the family tradition. In the current society, people value freedom and liberal choice in the first place. It sometimes feels to me like, in Japan, this conflict of old tradition and modern society makes some people wondering about their own life. What do you think?

[Plant Stress Science Network Mail Magazine]

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