

# Advanced Role of Research Managers; leading global collaboration for encouraging Early Career Researchers (ECRs)

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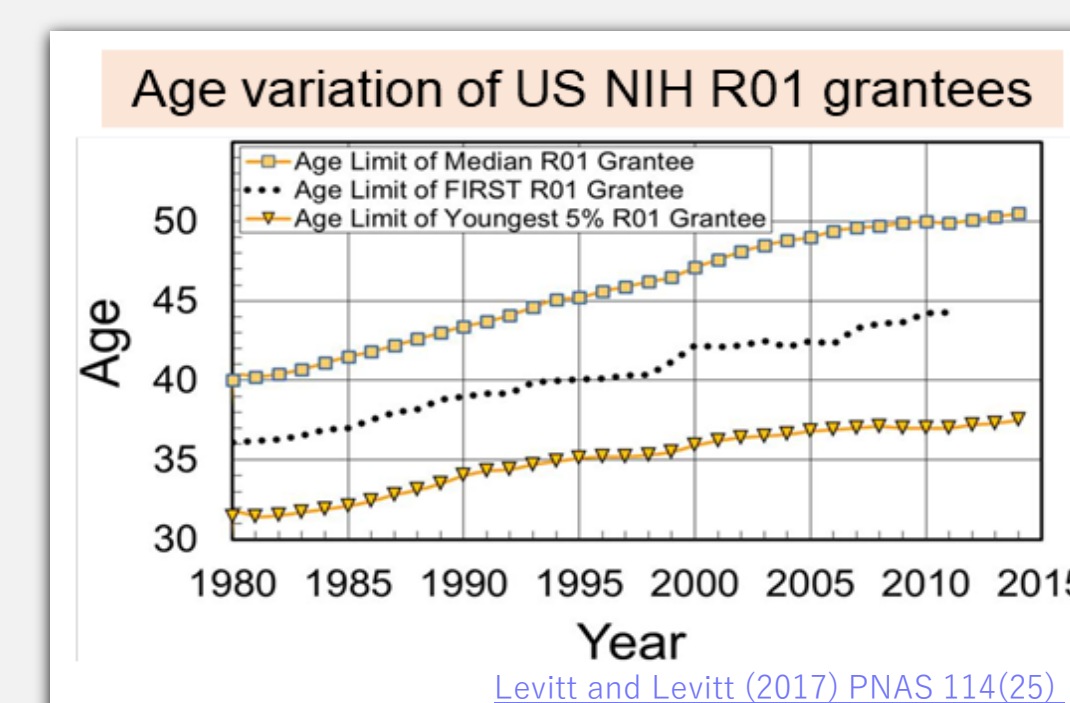
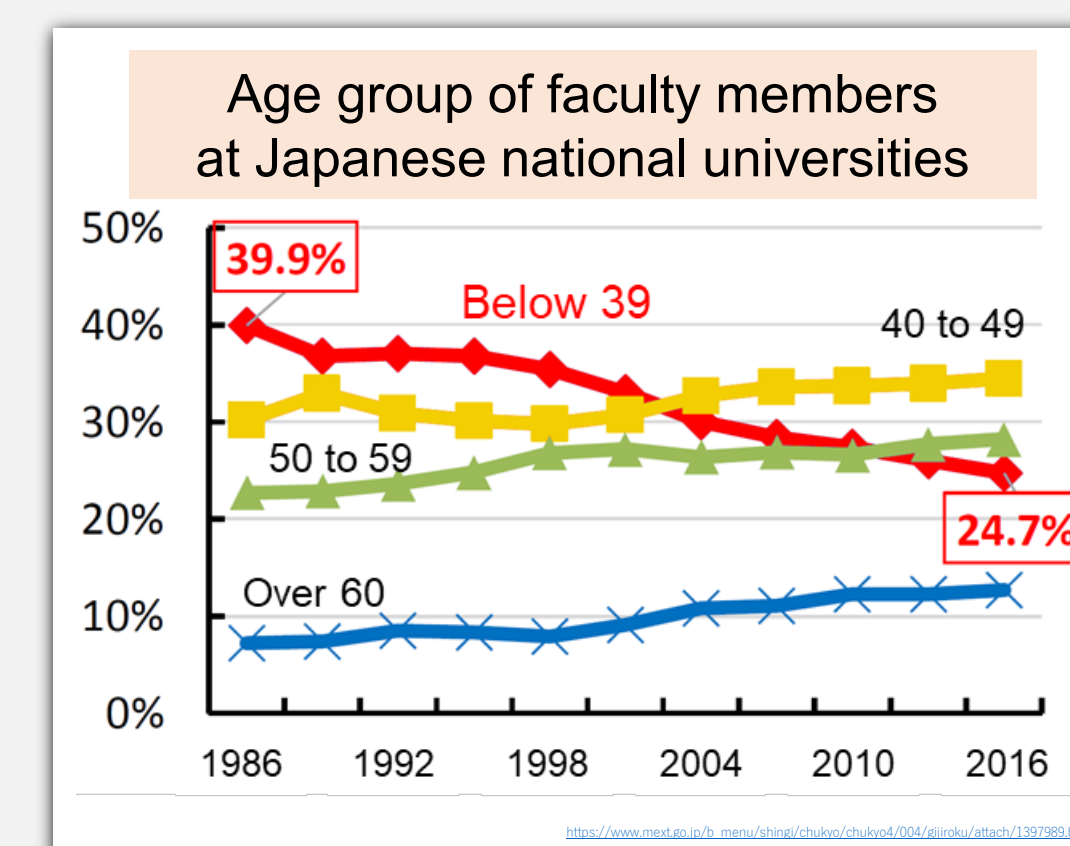
## Background

Japan and the United States both have funding programs promoting research partnerships between the U.S. and Japan, such as :

Japan - The Japan Society for the Promotion of Science ([JSPS](#)) and Japan Science and Technology Agency ([JST](#))

U.S. - National Institutes of Health ([NIH](#)) and National Science Foundation ([NSF](#)).

- Reforming national universities in Japan over two decades has involved gradual decreasing of Management Expenses Grant from Ministry of Education (MEXT) while increasing of the competitive research grants for both institutional and individual levels, resulting in drastic decreases in ratio of young faculty members among all and proportion for junior faculty members in tenured posts.
- Higher competitive environment in academic eco-system for institution as well as individual researcher, particularly for ECRs, strongly required them to produce high impact papers and accomplishments within short funding period, typically 1 to 3 years.
- In the US, a significant challenge in supporting ECRs lies with our academic cultural expectations for achieving promotion and tenure while the average age for receiving NIH's basic research award has increased over time. According to the [ACE 2017 survey](#), 72 percent of all responding U.S. institutions indicated an acceleration of internationalization at their institution but only 24 percent of the responding doctoral granting institutions considered international engagement as a factor in promotion and tenure decisions.
- The majority of research focused institutions do not necessarily promote global engagement by ECRs through its own qualitative merit in their promotion and tenure review.



## Japan case study : KURA, Kyoto University

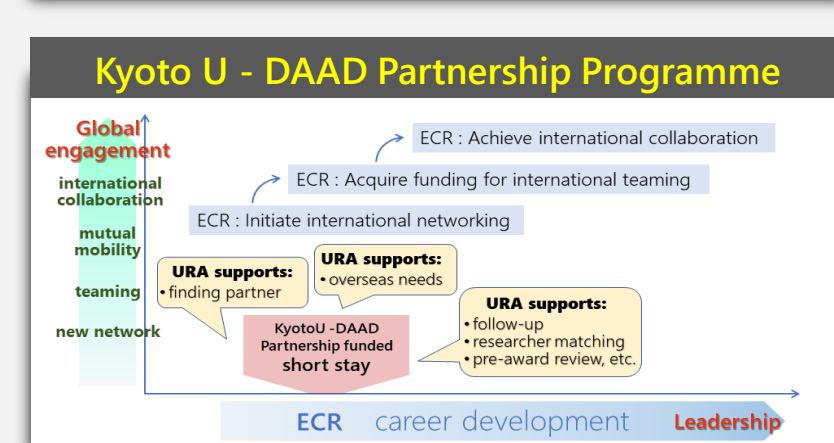
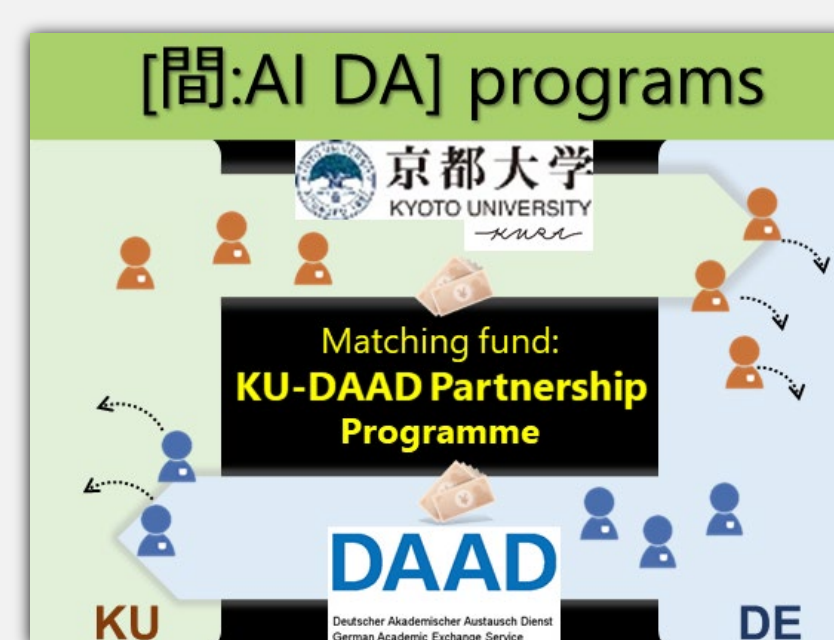
Concerned at decreasing visibility of Japanese research-oriented universities in the world due to the lack of internationalization of research and education, the Japanese government initiated competitive grants to promote the internationalization of research, including JSPS and JST grants.

These grants promote international collaborative research with the goal of increasing international joint papers and producing high-impact journal papers. Both are common goals pursued by ECRs and institutions for different purposes, rather than a mere measure of their various achievements.

### Good Practices and Lesson learned

Kyoto University Research Administration office ([KURA](#)) has developed [\[問: AI DA\]](#) Programs for encouraging ambitious ECRs, including:

- [\[Kyoto U – DAAD Partnership Programme\]](#) (since 2018) Matching fund program to accelerate mobility of ECRs between Kyoto University and German research institutions via DAAD, thereby URAs support ECRs' career development and enhance their global engagement.
- [\[Online Roundtable\]](#) (2021) "Academic challenges and opportunities for ECRs approaching SDGs" - Roundtable discussion between ECRs of KU and Sir Philip Campbell, Editor-in-Chief of Springer Nature, was jointly hosted.



Collaboration with various external organizations is the key to continued support for ECRs on/off campus.

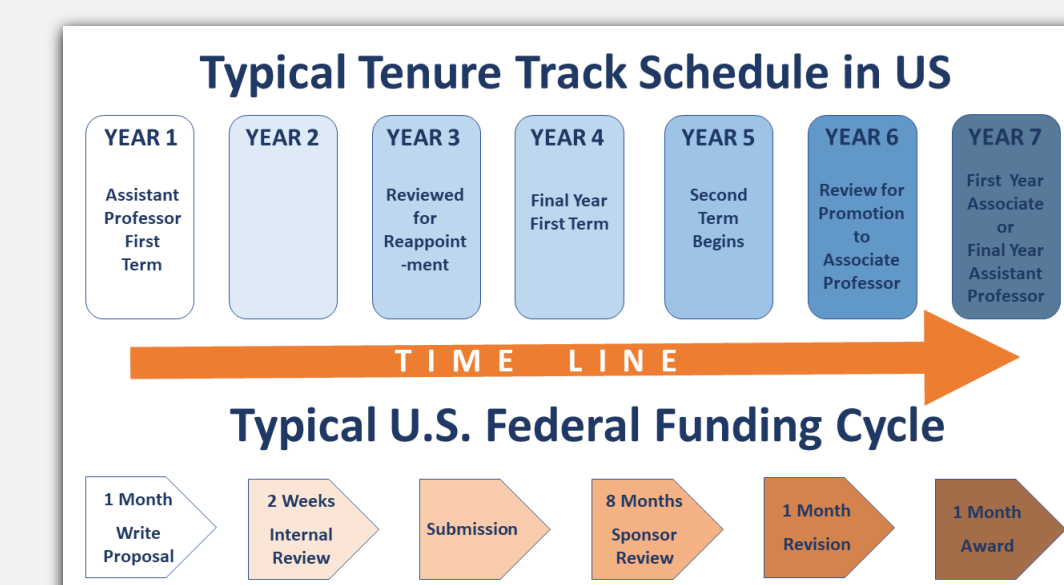
## U.S. case study : University of Illinois & Harvard University

To confirm our institutional practices regarding ECRs and global engagement, our case study involved a sample of the NSF CAREER grants awarded to the University of Illinois at Urbana-Champaign ([UIUC](#)). This prestigious early career development program is nationally competitive and provides about \$500,000 US dollars to ECRs in the fields of engineering, computational sciences, etc. and is specifically to support ECRs "who have the potential to serve as academic role models in research and education" while encouraging the inclusion of global dimensions in their projects.

### Observed Institutional Practices

In the last six years, UIUC received over 100 NSF funded [CAREER awards](#). Of the randomly sampled grants, 40 percent included foreign travel costs for attending global conferences but none of the sampled grants included a global component in the form of research exchanges or collaborations.

This case study amplifies the challenges ECRs encounter when comparing the tenure track schedule against the typical U.S. government grant cycle. An ECR may not receive funding until year two or three of their tenure schedule.



Internal Institutional funding, such as travel funds, may be needed to support an ECR's global research collaborations until sustainable government funding is acquired.

## Common challenges and opportunities

While global funding opportunities for ECRs exist, the adoption of comparable tenure schedules may subject an ECR's ambition to contribute to the internationalization of research to their institutional expectations for promotion and tenure. However, research management offices can play a significant role in supporting an ECR's global scientific collaboration through the following actions:

- Advocate for development of university research managers in global engagement.
- Develop international matching-grant programs in collaboration with foreign funding agencies.
- Develop processes to assist ECRs in reducing the risk of entering a global collaboration.
- Build an institutional database of agreements and contacts specific to a country or region.
- Train ECRs and their supporting staff on managing and administering global agreements.

The opportunities to advance the role of research managers in supporting our ECR's global collaborations will grow along with the continued internationalization of research that is being driven by the growth in significant societal problems that require a global response to resolve.

## Recommendation for future cooperation in research management between Japan, USA and elsewhere

While we observe similar challenges impacting the global engagement of ECRs, research managers need to continue our global collaboration on finding solutions for the common purpose of ensuring our ambitious younger faculty full of new perspectives can secure research funding to contribute to resolving our global problems.