



1. Contact Host. Mid June
2. Decided to apply to MSCA. Mid July
3. Go to MSCA portal site. **Read an application guideline** and **download an application template**.
 - Very particular about what you need to write about.
4. Get past successful applications and if possible unsuccessful applications as well.
 - Ask host institute if they hosted MSCA-IF before.
 - Contact current or alumni of the fellow.
5. Write a personalized application.
 - Do not forget to put buzz-words.
 - Be bureaucratic.
 - Don't be shy.
 - Write with the host.
6. Ask colleagues to read your application.
7. Submit before the deadline.

Excellence (Research proposal)

Quality and appropriateness of the training and of the two way transfer of knowledge between the researcher and the host.

Provide my own skills and tools: genetics, anatomy, developmental biology

- Bring transgenic animals made by myself.
- Study function of the retinal circuit based on my previous findings.

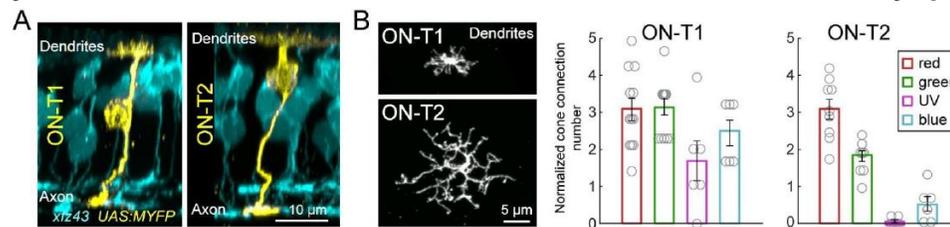
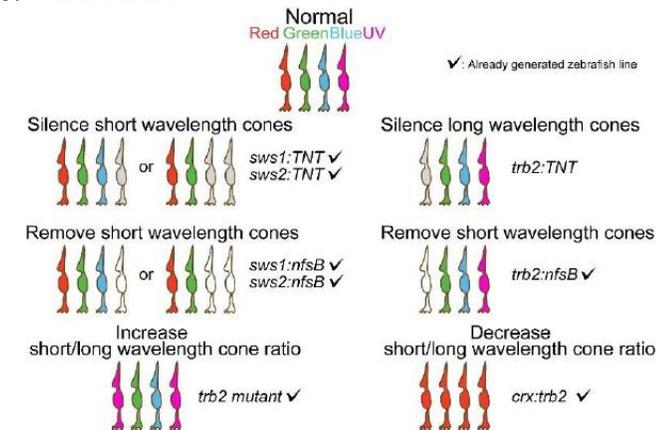


Figure 2. Morphology and wiring patterns of ON-T1 and ON-T2 bipolar cells at 20 dpf. (A) Maximum-intensity projections of confocal image stacks of individual ON-T1 and ON-T2 bipolar cells (yellow) together with population of those (cyan). Individual cells were visualized using YFP expression in *xtz43* transgenic fish. (B) *En face* views of dendritic arbors (left panels). Quantification of the mean number of cone of each type that were connected. The connection numbers were normalized by the density of each cone type (bar graphs). Each open circle represents a single cell.



New technique in the host lab: physiology, engineering, computer science

- Building specialized microscopes.
- Two-photon functional imaging.
- Big data analysis.

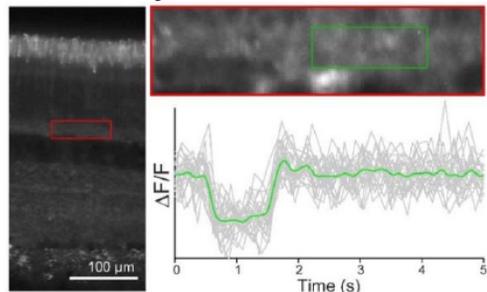


Figure 4. An example of iGluSnFR recording in mouse outer retina.

(Left) Side view of retina. iGluSnFR was expressed ubiquitously by virus injection. (Red box) High-magnification of the outer retinal synaptic layer. (Trace) Averaged (green line) fluorescent changes in the green box during stimulus. The stimulus of 1 s light-step was provided at 0.5 s. Gray lines are individual traces. (Courtesy of K Franke, T Euler).

My background

- Received Ph.D. in Japan
- First Post-doc in US (8 years)

Research area: Neuroscience, study development of retinal circuit in zebrafish.

Benefits of MSCA: No limit in years after Ph.D.
Support international mobility
Good financial support



Applied to MSCA-IF

My strength: Have experience in my research field

Obtain new skills that are complementary to my experience.

Put me in a unique position to be a competitive PI.

- Second Post-doc in UK (applied to MSCA-IF)

Research area: Neuroscience, study function of retinal circuit in zebrafish.

Impact

My strength as a result of MSCA

Obtain complementary skills – competitive PI.

Experience in different countries – enhance international collaboration,
experience in mentoring researchers with different backgrounds.

Dissemination

Publication, open source, public engagement – do research about what exact activities already exist.

Can you participate?

Do you want to start up something new activities?

How to publish your results?

Implementation

- Justify my capacity based on my track record.
- How to monitor progress with the PI.
- Capacity of the participating organizations.