

## **Unit Name**

Cell Proliferation and Gene Editing Unit

## **Research Personnel**

Rajkumar Singh, Staff Scientist

Md Hazrat Belal, Postdoctoral Scholar

Feng Ying Esther Ng, Postdoctoral Scholar

Carmen Sparr, Research Unit Technician

Orie Arakawa, Research Unit Technician

Hamzah Muhammad, PhD Student

Junho Lee, PhD Student

Anna Pavlovska, PhD Student

## **Scholarly Contributions and Creative Productions (by Faculty)**

### **Journal Article**

1. Sparr, C.; Meitinger, F.  
Prolonged Mitosis: A Key Indicator for Detecting Stressed and Damaged Cells. *Current opinion in cell biology* 2025, 92, 102449.
2. Ng, E. F. Y.; Meitinger, F.  
Genetic Engineering and Screening Using Base Editing and Inducible Gene Knockout. *Methods in molecular biology (Clifton, N.J.)* 2025, 2872, 167–187.
3. Belal, H.; Ying Ng, E. F. F.; Meitinger, F.  
53BP1-Mediated Activation of the Tumor Suppressor p53. *Current opinion in cell biology* 2024, 91, 102424.
4. Meitinger, F.; Belal, H.; Davis, R. L.; Martinez, M. B.; Shiao, A. K.; Oegema, K.; Desai, A.  
Control of Cell Proliferation by Memories of Mitosis. *Science (New York, N.Y.)* 2024, 383, 1441–1448.

### **Presentation at Conference**

1. Meitinger, F. X.  
Cancer-Associated Missense Mutations in USP28 Impair Mitotic Stress Response. 83rd Annual Meeting of the Japan Cancer Association 2024.
2. Meitinger, F. X.; Belal, H.; Ng, E. F.  
Mitotic Stress-Specific Activation of the Tumor Suppressor p53. The 47th Annual Meeting of the Molecular Biology Society of Japan 2024.
3. Meitinger, F. X.; Belal, H.; Ng, E. F.  
Mitotic Stress-Specific Activation of the Tumor Suppressor p53. Dynamic Kinetochore - EMBO Workshop 2024.

### **Scholarly Contributions (by Unit Members)**

Name of Unit Member	Type	Title	Outlet	Publisher
Esther Ng Feng Ying	Poster Presentation at Conference	Base Editor Screens Uncover Functional Domains in Mitotic Stopwatch Genes	OIST x Suntory Joint Conference	
Esther Ng Feng Ying	Poster Presentation at Conference	Base Editor Screens Uncover Functional Domains in Mitotic Stopwatch Genes	OIST-NanoLSI Joint Symposium	
Midori Ohta	Presentation at Conference	Tissue-specific architecture and function of $\gamma$ -tubulin complexes	STG Forum	
Midori Ohta	Presentation at Conference	Mechanisms of centrosome assembly and activation ensuring mitotic fidelity	OIST-Keio Showcase talk Series 7	
Midori Ohta	Presentation at Conference	Heterogeneity and function of $\gamma$ -tubulin complexes to nucleate microtubules	Cell division, arrest and beyond	
Midori Ohta	Seminars	Mechanism of $\gamma$ -tubulin complex docking on mitotic centrosomes	Developmental Dynamics Seminar	Tohoku University

### **Honors, Awards & Fellowships**

2024 Faculty Excellence in Mentoring Award, Faculty Excellence in Mentoring Award, 2024, OIST

### **Outreach Activities (For Unit Members Only)**

2024-10-09 Muhammad Hamzah, Yokohama Science Frontier School Visit, Yokohama Science Frontier School

2024-08-22 Muhammad Hamzah, Musashi Gakuen RED Program visit, Musashi Gakuen

2024-07-30 Midori Ohta, Lecture for Keio Summer Camp students, OIST/Keio University