

# Johannes Nicolaus Wibisana

MSc STUDENT · SYSTEMS BIOLOGIST

Minoh, Osaka, Japan

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## Summary

I am currently a 2nd year MSc student in the Graduate School of Science, Osaka University researching about the NF-κB signal transduction system in B cell through fluorescence imaging, single-cell transcriptomics and functional omics analysis (scATAC-seq, scRNA-seq). I am familiar with R, ImageJ macro and bash programming language for image processing and analysis of multi-omics data. Furthermore, I also have experience with basic molecular biology experiments such as mammalian and avian cell culture, RNA-FISH, molecular cloning and qPCR. I am keen on learning new skills and techniques that I can apply to my current and future research. Finally, I am an adaptable and flexible person that can quickly grasp new concepts to efficiently complete given targets.

## Education

### Osaka University (Graduate School of Science)

Osaka, Japan

M.Sc IN BIOLOGICAL SCIENCES

Apr. 2020 - Current (Expected

graduation: Mar. 2022)

- Awardee of the [HISF \(Honjo International Scholarship Foundation\)](#) scholarship.
- Research: NF-κB transcriptional regulation in B-cell, Laboratory of Cell Systems (PI: Mariko Okada)
- Others: In charge of laboratory website, and bioinformatics training of several visiting researchers (mainly RNA-seq)

### Osaka University (Chemistry-Biology Combined Major Program)

Osaka, Japan

B.Sc IN BIOLOGICAL SCIENCES

Oct. 2010 - Mar. 2020 (3.5 years)

- Awardee of the MEXT (Ministry of Education, Culture, Sports, Science and Technology) scholarship.
- Research: NF-κB transcriptional regulation in B-cell, Laboratory of Cell Systems (PI: Mariko Okada)
- Selected for [AEARU 2018 Summer Camp](#) in Hefei, China

## Publications

### JOURNAL ARTICLES

#### Prediction of transcriptional regulation in immune cells through single-cell analysis

*Journal of Clinical and Experimental Medicine* 276 (10), 983-988

JN WIBISANA, K IIDA, M OKADA

2021

### CONFERENCE PROCEEDINGS

#### Development of micro structure for force measurement with intracellular FRET

*ROBOMECH Journal*, 2A1-M05

K UESUGI, Y MORI, JN WIBISANA, T KITAGUCHI, S TABATA, K MORISHIMA

2019

## Presentations

### INTERNATIONAL

#### Japan-Korea Bilateral Symposium between IPR and SNU on Advanced Analysis of Protein Function and Structure (Oral presentation)

*College of Pharmacy, Seoul National University, S. Korea*

NF-κB MEDIATED TRANSCRIPTIONAL REGULATION IN B CELL

Jan. 2020

#### International Conference of Systems Biology (Poster presentation)

*Okinawa, Japan*

MULTI-DIMENSIONAL ANALYSIS OF NF-κB NUCLEAR DYNAMICS

Nov. 2019

### DOMESTIC

#### The 58th Annual Meeting of the Biophysical Society of Japan (Poster presentation)

*Japan (held online)*

NF-κB MEDIATED TRANSCRIPTIONAL REGULATION IN B CELL

Sep. 2020

#### 18th IPR Retreat (Oral presentation)

*Osaka, Japan*

MULTI-DIMENSIONAL ANALYSIS OF NF-κB NUCLEAR DYNAMICS

Nov. 2019

## Honors & Awards

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2020/09 **Poster presentation award**, The 58th Annual Meeting of the Biophysical Society of Japan

*Japan*

2018/11 **Bronze award**, BIOMOD 2018 Molecular Design Competition

*San Francisco, U.S.A*

2017/11 **Bronze award**, BIOMOD 2017 Molecular Design Competition

*San Francisco, U.S.A*

## Research activities

### Laboratory for Cell Systems (PI: Mariko Okada), Osaka University

Osaka, Japan

UNDERGRADUATE - MASTER'S STUDENT

Sep. 2018 - Feb. 2019

- Project title: NF- $\kappa$ B mediated transcriptional regulation in B cell
- Performed quantitative imaging analysis of NF- $\kappa$ B nuclear translocation using confocal microscope and ImageJ
- Performed single-cell RNA-seq and single-cell ATAC-seq analysis to find the relationship between cis-regulatory elements and gene expression pattern
- Performed single-molecule RNA-FISH and qPCR for the confirmation of RNA-seq results
- Performed cloning for both transient and permanent expression of fluorescent-tagged protein of interest
- In charge of side projects concerning RNA-seq analysis and training of visiting researchers on RNA-seq analysis

### Laboratory of Cellular Life Science (PI: Naotada Ishihara), Osaka University

Osaka, Japan

RESEARCH INTERN

Sep. 2018 - Feb. 2019

- Project title: Quantification of Mitochondrial Morphology
- Performed quantitative analysis of mitochondrial morphology using ImageJ
- Performed basic experiments such as mammalian cell culture and confocal imaging

### Bio Medical Wet Robotics Laboratory (PI: Morishima Keisuke), Osaka University

Osaka, Japan

ASSOCIATE PROJECT LEADER FOR BIOMOD 2017-2018

2017 - 2018

- Performed basic DNA origami experiments
- Performed 3D modeling and computer simulated DNA origami design

### Laboratory of Science and Innovation for Pain, Osaka University

Osaka, Japan

RESEARCH ASSISTANT

Apr. 2018 - Feb. 2019

- Performed basic experiments such as mouse genotyping, RNA extraction, and ELISA
- In charge of laboratory cleanliness

### Department of Biotechnology, Pelita Harapan University

Tangerang, Indonesia

RESEARCH ASSISTANT

May 2016 - Sep. 2016

- Project title: Antibiotic susceptibility evaluation of *Bacillus amyloliquefaciens* isolated from local pig gastrointestinal tract as potentially probiotic candidate
- Performed basic microbiology techniques for antibiotic resistance assay

## Organizational activities

### Indonesian Student Association in Japan

Japan

SECRETARY GENERAL

Sep. 2020 - Current

- In charge of daily affairs in the organization

### Indonesian Student Association in Japan

Japan

SECRETARY GENERAL

Sep. 2019 - Sep. 2020

- In charge of daily affairs in the organization
- In charge of annual symposium by the Indonesian Student Association in Japan (ASSIGN 2020)

### Indonesian Student Association in Japan - Osaka-Nara

Osaka, Japan

PRESIDENT

Sep. 2019 - Sep. 2020

- In charge of all events held by the organization
- In charge of annual symposium by the Indonesian Student Association in Japan (ASSIGN 2019)
- Correspondence with the Consulate General of the Republic of Indonesia in Osaka and Osaka University representatives

## Other skills

### Website design and development

HTML, CSS, Jekyll. Built and designed [laboratory website](#) using HTML and CSS (Bootstrap) and [personal website](#) (partially) using Jekyll

### 3D printing and modeling

Can perform basic 3D modeling using Fusion360 or Maya. Familiar with basic 3D printing techniques.