# Johannes Nicolaus Wibisana

MSc Student · Systems Biologist

Minoh, Osaka, Japan

🛮 (+81) 50-3707-5757 | 🗷 johannes.nicolaus@gmail.com | 🌴 www.jnicolaus.com | 🖸 johannesnicolaus | 🛅 johannes-nicolaus

## **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 trancriptomics 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

Apr. 2020 - Current (Expected graduation: Mar. 2022)

M.Sc in Biological Sciences

- Awardee of the HISF (Honjo International Scholarship Foundation) scholarship.
- Research: NF-kB 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-kB 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

## Presentations \_\_\_\_\_

INTERNATIONAL

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

National University, S. Korea

College of Pharmacy, Seoul

Jan 2020

International Conference of Systems Biology (Poster presentation)

Okinawa, Japan

MULTI-DIMENSIONAL ANALYSIS OF NF-kB NUCLEAR DYNAMICS

NF-kB MEDIATED TRANSCRIPTIONAL REGULATION IN B CELL

Nov 2019

2019

DOMESTIC

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

Japan (held online)

NF-kB mediated transcriptional regulation in B cell

Sep. 2020

18th IPR Retreat (Oral presentation)

Osaka, Japan

Multi-dimensional analysis of NF-kB nuclear dynamics

Nov. 2019

# **Honors & Awards**

2020/09Poster presentation award, The 58th Annual Meeting of the Biophysical Society of JapanJapan2018/11Bronze award, BIOMOD 2018 Molecular Design CompetitionSan Francisco, U.S.A2017/11Bronze award, BIOMOD 2017 Molecular Design CompetitionSan Francisco, U.S.A

## **Research activities**

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

Osaka, Japan Sep. 2018 - Feb. 2019

Undergraduate - Master's student

• Project title: NF-kB mediated transcriptional regulation in B cell

- Performed quantitative imaging analysis of NF-кВ 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
- 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 2017 - 2018

ASSOCIATE PROJECT LEADER FOR BIOMOD 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**

SECRETARY GENERAL

Sep. 2020 - Current

• In charge of daily affairs in the organization

## **Indonesian Student Association in 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 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.

MARCH 21, 2021