

CURRICULUM VITAE

Chih-Hsiang Yu

游智翔

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Employment:

Postdoctoral researcher

Mar. 2022 – now

Academia Sinica, Taiwan

Institute of Statistical Science

Postdoctoral researcher

Jul. 2021 – Dec. 2021

Academia Sinica, Taiwan

Institute of Statistical Science

Postdoctoral researcher

Jul. 2020 – Jul. 2021

College of Medicine, National Taiwan University, Taiwan

Department of Clinical Laboratory Sciences and Medical Biotechnology

Education:

Ph.D. degree

Sep. 2015 - Jun. 2020

College of Medicine, National Taiwan University, Taiwan

Graduate Institute of Clinical Laboratory Sciences and Medical Biotechnology

Supervisor: Professor Shu-Wha Lin Ph.D.

Co-supervisor: Adjunct Assistant Professor Yung-Li Yang, Ph.D., M.D.

Master degree

Sep. 2010 - Jun. 2012

College of Medicine, National Taiwan University, Taiwan

Graduate Institute of Clinical Laboratory Sciences and Medical Biotechnology

Supervisor: Professor Shu-Wha Lin Ph.D.

Bachelor degree

Sep. 2006 - Jun. 2010

College of Medicine, National Taiwan University, Taiwan

Department of Clinical Laboratory Sciences and Medical Biotechnology

Research interest:

- **Molecular diagnosis**
- **Pediatric hematology and oncology**

Teaching experience:

Teaching assistant in clinical hematology

Sep. 2010 - Jun. 2012

- College of Medicine, National Taiwan University, Taiwan

Department of Clinical Laboratory Sciences and Medical Biotechnology

Teaching assistant in molecular biology

Sep. 2017 - Now

- College of Medicine, National Taiwan University, Taiwan

Graduate Institute of Clinical Laboratory Sciences and Medical Biotechnology

- National Taiwan University Hospital, Taiwan
- Department of Laboratory Medicine

License:

- Medical Technologist- Taiwan

Oct. 2010

Certificates:

- Certificate of 2016 Genomic Epidemiology Workshop (Genomic Research Center, Academia Sinica)
- Certificate of completion of the training for iSeq100 (Illumina, Inc)

Publications:

1. **Yu CH***, Wu G*, Chang CC*, Jou ST, Lu MY, Lin KH, Chen SH, Wu KH, Huang FL, Cheng CN, Chang HH, Dale H, Wang JL, Yen HJ, Li MJ, Chou SW, Hung CT, Lin ZS, Lin CY, Chen HY, Ni YL, Hsu YC, Lin DT, Lin SW, Yang JJ, Pui CH, Yu SL, Yang YL. Sequential approach to improve the molecular classification of childhood acute lymphoblastic leukemia. *The Journal of Molecular Diagnostics. J Mol Diagn.* 2022 Aug 10;S1525-1578(22)00220-3. PMID: 35963521 (*Co-first author)
2. Li MJ, **Yu CH**, Chou SW, Su YH, Liao KW, Chang HH, Yang YL. *TCF3-HLF*-positive acute lymphoblastic leukemia resembling Burkitt leukemia: cell morphologic and immunophenotypic findings. *JCO Precis Oncol.* 2022 Aug;6:e2200236. PMID: 36001860
3. Huang HY*, **Yu CH***, Yang YL*, Ya-Hsuan Chang 5, Jou ST, Lin KH, Lu MY, Chang HH, Chou SW, Ni YL, Lin DT, Chen HY, Steven Peng SF, Kuo MF, Yang SH. Integration of immunohistochemistry, RNA sequencing, and multiplex ligation-dependent probe amplification for molecular classification of pediatric medulloblastoma. *Pediatr Blood Cancer.* 2022 Feb 4;e29569. PMID: 35119194 (*Co-first author)
4. Hsu YC*, **Yu CH***, Chen YM, Roberts KG, Ni YL, Lin KH, Jou ST, Lu MY, Chen SH, Wu KH, Chang HH, Lin DT, Lin SW, Lin ZS, Chiu WT, Chang CC, Ho BC, Mullighan CG, Yu SL, Yang YL. Philadelphia chromosome-negative B-cell acute lymphoblastic leukaemia with kinase fusions in Taiwan. *Sci Rep.* 2021 Mar 11;11(1):5802. PMID: 33707599 (*Co-first author)
5. Chang YH*, **Yu CH***, Jou ST, Lin CT, Lin KH, Lu MY, Wu KH, Chang HH, Lin DT, Lin SW, Chen HY, Yang YL. Targeted sequencing to identify genetic alterations and prognostic markers in pediatric T-cell acute lymphoblastic leukemia. *Sci Rep.* 2021 Jan 12;11(1):769. PMID: 33436855 (*Co-first author)
6. **Yu CH**, Chang YH, Wang DS, Jou ST, Lin CY, Lin KH, Lu MY, Raghav L, Chang HH, Wu KH, Chou SW, Ni YL, Lin DT, Lin SW, Chen HY, Yang YL. Determination of NUDT15 variants by targeted sequencing can identify compound heterozygosity in pediatric acute lymphoblastic leukemia patients. *Sci Rep.* 2020 Sep 1;10(1):14400. PMID: 32873882
7. Yu SL, Zhang H, Ho BC, **Yu CH**, Chang CC, Hsu YC, Ni YL, Lin KH, Jou ST, Lu MY, Chen SH, Wu KH, Wang SC, Chang HH, Pui CH, Yang JJ, Zhang J, Lin DT, Lin SW, Ma X, Yang YL. FPGS Relapse-Specific Mutations in Relapsed Childhood Acute Lymphoblastic Leukemia. *Sci Rep.* 2020 Jul 21;10(1):12074. PMID: 32694622
8. **Yu CH***, Lin TK*, Jou ST, Lin CY, Lin KH, Lu MY, Chen SH, Cheng CN, Wu KH, Wang SC, Chang HH, Li MJ, Ni YL, Su YN, Lin DT, Chen HY, Christine J. Harrison, Hung CC, Lin SW, Yang YL. MLPA

- and DNA Index Improve the Molecular Diagnosis of Childhood B-cell Acute Lymphoblastic Leukemia. *Sci Rep.* 2020 Jul 13;10(1):11501. PMID: 32661308 (*Co-first author)
9. Wang DS*, Yu CH*, Lin CY, Chang YH, Lin KH, Lin DT, Jou ST, Lu MY, Chang HH, Lin SW, Chen HY, Yang YL. Childhood Acute Lymphoblastic Leukemia Mercaptopurine Intolerance is Associated with *NUDT15* variants. *Pediatr Res.* 2021 Jan;89(1):217-222. PMID: 32221476 (*Co-first author)
 10. Yu CH, Chang WT, Lin TK, Lin CY, Lin KH, Jou ST, Lu MY, Chen SH, Wu KH, Wang SC, Chang HH, Su YN, Hung CC, Lin DT, Chen HY, Yang YL. *TP53* Alterations in Relapsed Childhood Acute Lymphoblastic Leukemia. *Cancer Sci.* 2020 Jan;111(1):229-238. PMID: 31729120
 11. Moriyama T, Yang YL, Nishii R, Ariffin H, Liu C, Lin TN, Yang W, Lin DT, Yu CH, Kham S, Pui CH, Evans WE, Jeha S, Relling MV, Yeoh AE, Yang JJ. Novel Variants in *NUDT15* and Thiopurine Intolerance in Children with Acute Lymphoblastic Leukemia from Diverse Ancestry. *Blood.* 2017 Sep 7;130(10):1209-1212. PMID: 28659275
 12. Lin CY, Chen CY, Yu CH, Yu IS, Lin SR, Wu JT, Lin YH, Kuo PL, Wu JC, Lin SW. Human X-linked Intellectual Disability Factor *CUL4B* Is Required for Post-Meiotic Sperm Development and Male Fertility. *Sci Rep.* 2016 Feb 2;6:20227. PMID: 26832838

Academic presentation:

- 2017 59th American Society of Hematology Annual Meeting, Atlanta, USA (Dec. 9-12, 2017) “Adjusting Dosage of Mercaptopurine by *NUDT15* Polymorphisms in Childhood Acute Lymphoblastic Leukemia” (Poster)
“Genetic Profiling in Childhood T-Cell Acute Lymphoblastic Leukemia by Targeted Sequencing” (Poster)
- 2019 Korean Society of Hematology International Conference & 60th Annual Meeting, Seoul, Korea (Mar. 14-16, 2019) “Detecting Diplotype of *NUDT15* Variants and 6-Mercaptopurine Sensitivity by Target Sequence cDNA of *NUDT15*” (Poster)
- 2019 Joint Annual Congress of HST and TSBMT, Taipei, Taiwan (Apr 13-14, 2019) “A Complex Homozygous *NUDT15* Polymorphism in Taiwan” (Poster)
- 2019 61th American Society of Hematology Annual Meeting, Orlando, USA (Dec. 7-10, 2019) “Diplotype Analysis of *NUDT15* Variants By Targeted Sequencing in Pediatric Acute Lymphoblastic Leukemia” (Poster)

Proficiency of laboratory techniques:

- Molecular cloning
- PCR/qPCR
- Multiplex ligation-dependent probe amplification (MLPA)
- RNA-seq data analysis
- NGS related equipment: Qsep1/StepOnePlus/iSeq100
- Flowcytometry/DNA index analysis
- Molecular biology software: SnapGene, Chromosome Analysis Suite (ChAS)
- Bioinformatics cloud-based tools: St. Jude Cloud, DNAnexus, IGV, iDEP
- Statistical software: Prism, SAS
- WB/ELISA/IHC/IFA

- Antibody purification
- Cell culture
- Laboratory mouse techniques/Patient-derived xenograft model

Project applying experience:

MOST The Industrial Technology Foresight Research Program Grants

MOST Research Project Grants

National Taiwan University Hospital Research Program Grants

Others:

- Invited oral presentation “Title: How to Identify Genetic Alterations in Acute Lymphoblastic Leukemia” (Workshop: Genetic Testing of Acute Lymphoblastic Leukemia using Next Generation Sequencing, held by The Hematology Society of Taiwan)