Curriculum Vitae

Personal Information：

Name: Yushu Hu Gender: Male

Nationality: China Birth Date: 16. Nov. 1994

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Educational and work Background:

Sep 2013 - Jun 2018: Bachelor of Clinical Medicine

Department of Clinical Medicine, Mudanjiang Medical University, China.

Sep 2018 - July 2021: Master's degree of Internal Medicine

Lab skills training in Biotherapy Center, The First Affiliated Hospital of Zhengzhou University, Zhengzhou University, China.

Apr 2022 to Oct 2022:

Fellowship of project "New immunotherapy approaches for the treatment of pancreatic cancer", Immunology Section of University Hospital and Department of Medicine, University of Verona, Italy.

Jan 2024 to Jul 2024:

Funded internship in Van den Eynde lab, Ludwig Institute for Cancer Research, University of Oxford, United Kingdom.

Apr 2022 to present:

Ph.D candidate in "Inflammation, Immunity and Cancer" course, Immunology Section of University Hospital and Department of Medicine, University of Verona, Italy.

Certificates：

People's Republic of China Medical Practitioner's Qualification Certificate

English language certification test – LEVEL B2

Certification of Charles River Training Course for mouse and rat.

Oxford FELASA certificate

Research Experiences:

- FLIP confers immunosuppression on monocytes by molecular network interacting with NF-kB pathway.
- Dormant tumors awaken by inflammatory.
- MVA-IL12 based combination therapy for melanoma.
- Hepatocellular carcinoma (HCC) derived exosomes reprogram macrophage through FTH1 mediated iron metabolism.
- Novel H-2D^{b}- restricted CD8 epitope derived from mouse MAGE-type antigen P1A mediates antitumor immunity in C57BL/6 mice.
- Chemotherapy enhances HMGA1 secretion through the mutant p53-CK2 axis in pancreatic ductal adenocarcinoma cells

Research interests:

- Myeloid cells in cancer progress.
- Immunotherapy for cancer.
- Exosomes and extracellular vesicles.
- Tumor associated macrophage.
- Tumor microenvironment and tumor metastasis.
- Iron metabolism and/or ferritin functions in Macrophages.
- Neoantigen discovery

Publications:

1. *James McAuliffe, Silvia Panetti, Emily Steffke, Amanda Wicki, Vinnycius Pereira-Almeida, Laurine Noblecourt,* ***Yushu Hu****, Shi Yu William Guo, Julie Lesenfants, Ramiro Andrei Ramirez-Valdez, Vineethkrishna Chandrasekar, Maryam Ahmad, Vincent Stroobant, Nathalie Vigneron, Benoit J Van den Eynde, Carol Sze Ki Leung*. Novel H-2D^{b}- restricted CD8 epitope derived from mouse MAGE-type antigen P1A mediates antitumor immunity in C57BL/6 mice. Journal for ImmunoTherapy of Cancer. 2024; **12**:e008998. doi: 10.1136/jitc-2024-008998
2. *Annalisa Adamo, Cristina Frusteri, Sara Pilotto, Simone Caligola, Lorenzo Belluomini, Ornella Poffe, Luca Giacobazzi, Silvia Dusi, Chiara Musiu,* ***Yushu Hu****, Tian Wang, Davide Rizzini, Antonio Vella, Stefania Canè, Giulia Sartori, Jessica Insolda, Marco Sposito, Ursula Cesta Incani, Carmine Carbone, Geny Piro, Francesca Pettinella, Fang Qi, Dali Wang, Silvia Sartoris, Francesco De Sanctis, Patrizia Scapini, Stefano Dusi,*

Marco Antonio Cassatella, Emilio Bria, Michele Milella, Vincenzo Bronte, Stefano Ugel. Immune checkpoint blockade therapy mitigates systemic inflammation and affects cellular FLIP-expressing monocytic myeloid-derived suppressor cells in non-progressor non-small cell lung cancer patients. Oncoimmunology. 2023;12(1):2253644. Published 2023 Sep 14. doi:10.1080/2162402X.2023.2253644

3. *Tian Wang,* ***Yushu Hu****, Silvia Dusi, Fang Qi, Silvia Sartoris, Stefano Ugel, Francesco De Sanctis* (2023) "Open Sesame" to the complexity of pattern recognition receptors of myeloid-derived suppressor cells in cancer. Front. Immunol. 14:1130060. doi: 10.3389/fimmu.2023.1130060
4. *Federica Danzi, Giovanna Butera, Damien Sutton, Matthew Perricone,* ***Yushu Hu****, Adriana Celesia, Marcello Manfredi, Jessica Brandi, Narges Pourmandi, Noah Nelson, Lin Lin, Michele Bevere, Raffaella Pacchiana, Antonio Pea, Roberto Salvia, Aldo Scarpa, Claudio Luchini, Daniela Cecconi, Stefano Ugel, Costas Lyssiotis, Alessandra Fiore, Massimo Donadelli*. Chemotherapy enhances HMGA1 secretion through the mutant p53-CK2 axis in pancreatic ductal adenocarcinoma cells. Cell Death Dis. 2025 Oct 27;16(1):766. doi: 10.1038/s41419-025-08082-1. PMID: 41145488; PMCID: PMC12559235.

Skills:

Language:

- English daily communication ability, qualified in reading and writing scientific research papers and works.

Laboratory Skills：

- ***Cellular experiments*****:** Cell culture and counting; cell proliferation assays (CCK-8, colony formation assay); macrophage polarization; MDSC induction; exosome isolation and tracing; multiparameter flow cytometry; intracellular staining; T cell suppression assay; patient tissue processing and immune cell sorting; human PBMC isolation; mouse primary tumor dissociation.
- ***Molecular Biology experiments*****:** RNA extraction and cDNA synthesis; quantitative PCR; protein extraction and Western blot; transfection and viral transduction (shRNA, siRNA); immunofluorescence (IF); ATAC-seq and ChIP-seq library preparation.

- ***Animal experiments*:** Breeding and genotyping of transgenic mice (including Cre-LoxP and tamoxifen-inducible models); mouse handling (intravenous, intraperitoneal, subcutaneous injections); tumor implantation models; irradiation-based chimera model establishment; abdominal tumor imaging and measurement using Vevo 2000 system.

Computational Skills

- Proficient in Microsoft Office (Word, Excel, PowerPoint)
- Experienced in GraphPad Prism for statistical analysis and data visualization
- Skilled in FlowJo for flow cytometry data analysis
- Proficient in RStudio for bioinformatics analyses, including RNA-seq, ChIP-seq, and ATAC-seq.

Honors and Awards:

2019 Outstanding graduate student (The first affiliated hospital of Zhengzhou University)

2020 China National Scholarship (The Ministry of Education of the People's Republic of China)

2020 Class A National Scholarship (Zhengzhou University)

2020 Merit Student (Zhengzhou University)

2021 Winner of the project "New immunotherapy approaches for the treatment of pancreatic cancer". (The University of Verona)

2022 Ph.D. student scholarship. (The University of Verona)