

Curriculum vitae

Name: Sanhong Yu
Home Address: 363 Timberlane Drive
Orange, CT 06477

Education

Month/year	Degree	Institution	Location
08/2004-08/2009	Ph.D. in Immunology & Infectious Disease	Pennsylvania State University	State College, PA
09/2000-05/2003	Master of Medicine	Shanghai Medical College, Fudan University	Shanghai, China
09/1995-07/2000	Bachelor of Medicine, Bachelor of Surgery	Medical College, Southeast University	Nanjing, China

Work experience

Month/year	Organization	Title	Location
08/2023-	Yale School of Medicine, Department of Pathology	Assistant Professor	New Haven, CT
12/2003-07/2004	Jingmei Biotech Company	R&D Engineer	Beijing, China
06/2003-11/2003	Shanghai HealthDigit Company	R&D Engineer	Shanghai, China

Postdoctoral Training

Pathology Residency and Fellowship

Month/year	Program	Institution	Location
07/2022-06/2023	Cytopathology	Brigham and Women's Hospital, Harvard Medical School	Boston, MA
07/2021-06/2022	Surgical pathology	Brigham and Women's Hospital, Harvard Medical School	Boston, MA
07/2018-06/2021	Anatomic Pathology and Clinical Pathology	The Tufts Medical Center, Tufts University	Boston, MA
07/2017-06/2018	Anatomic Pathology and Clinical Pathology	The Mount Sinai Hospital, Icahn School of Medicine	New York, NY

Research fellowship/training

Month/year	Research Focus/ Supervisor	Institution	Location
04/2014-06/2017	PD-L1, PD-L2, and cancer Immunotherapy Dr. Gordon Freeman	Dana-Farber Cancer Institute and Harvard Medical School	Boston, MA
10/2011-03/2014	Immune cells and allergic Disease Dr. Dale Umetsu	Boston Children's Hospital and Harvard Medical School	Boston, MA
09/2010-09/2011	Immune cells and autoimmune hepatitis Dr. Harvey Cantor	Dana-Farber Cancer Institute and Harvard Medical School	Boston, MA
09/2009-08/2010	Vitamin D and immune cells Dr. Margherita Cantorna	Pennsylvania State University	State College, PA

Honors and Awards

1. Trainee Abstract Awards, American Association of Immunologists, 2010
2. Best Poster Award, the 5th International Symposium on CD1/NKT cells, Kamaura, Japan, 2009
3. Travel Award, the 5th International Symposium on CD1/NKT cells, Kamaura, Japan, 2009
4. Graduate Student Travel Award, Pennsylvania State University, 2009

5. Graduate Fellowship, Pennsylvania State University, 2004-2005

Patent

Freeman G, **Yu, S**. Agents that modulate RGMB-Neogenin-BMP signaling and methods of use thereof. 2016 (US patent No: US2015014595)

Teaching Experience

- 2023- Lecturing physician assistant students at the Department of Pathology, Yale School of Medicine
- 2021- 2023 As a teaching assistant, teaching small groups of medical students at the Department of Pathology, Brigham and Women's Hospital, Harvard Medical School, Boston, MA
- 2018- 2021 As a teaching assistant, teaching small groups of medical students at the Department of Pathology and Laboratory Medicine, Tufts University, Boston, MA
- 2006-2007 As an instructor, teaching 2 laboratory sections of medical students at the Department of Biology, Pennsylvania State University, University Park, PA

Professional Membership

1. United States and Canadian Academy of Pathology, 2019-present
2. American Society of Cytopathology, 2022-present
3. College of American Pathologists, 2019-present
4. American Society of Clinical Pathology, 2017-present
5. Chinese American Pathologists Association 2017-present

Peer-Reviewed Publications

1. **Yu S**, Wang M, Langdon J, et al. American College of Radiology–Developed Thyroid Imaging Reporting and Data System 3, 4, and 5 thyroid nodules are distinctive by cytology, genetic imprints, and histology. **Cancer Cytopathol.** 2025;e70050. doi:10.1002/cncy.70050
2. Krasinski CA, Verma A, **Yu S**, Ladenheim A. High-Risk HPV-Positive Sinonasal Adenocarcinoma: A Case Report and Review of Literature. **Head Neck Pathol.** 2025 Sep 22;19(1):114. doi: 10.1007/s12105-025-01845-4. PMID: 40983792; PMCID: PMC12454247.
3. **Yu S**, Dolezal D, Aslanian HR, Cai G. Fine Needle Aspiration Biopsy of Adrenal Gland Lesions: The Roles of Imaging Guidance, Rapid Onsite Evaluation, and Additional Tissue Sampling. **Cytopathology.** 2025. Jan; 227-235
4. **Yu S**, Vidal B, Peric M, Rosenbaum MW, Cates JMM, Gonzalez RS. Comparative histologic features among liver biopsies with biliary-pattern injury and confirmed clinical diagnoses. **Hum Pathol.** 2024 Mar 11; 146:8-14.
5. **Yu S**, Doyle LA, Hornick JL, Mito JK. The diagnostic utility of methylthioadenosine phosphorylase immunohistochemistry for pancreatic ductal adenocarcinoma in FNA and small biopsy specimens. **Cancer Cytopathol.** 2024 Feb; 132 (2): 87-95.
6. **Yu S**, Sholl LM, Siegmund S, Ulbright TM, Collins K, Colecchia M, Gonzalez-Peramato P, Michalová K, Gordetsky GB, Cornejo KM, Kao C-S, Wobker SE, Vargas SO, Maclean F, Idrees MT, Anderson WJ, Fletcher CDM, Acosta AM. Large cell calcifying Sertoli cell tumor: molecular and immunohistochemical assessment of a series comprising non-metastasizing and metastasizing neoplasms. **Histopathology** 2023 Mar 16. Doi: 10.1111/his. 14895.
7. **Yu S**, Hornick JL. “Malignant mesenchymoma” revisited: a clinicopathologic study of leiomyosarcomas with osteosarcomatous differentiation. **Am J Surg Pathol.** 2022 Oct 1;46(10):1430-1435.
8. **Yu S**, Hornick JL, Gonzalez RS. TTF-1, SATB2, and SSTR2A Can Help Differentiate Between Gastroenteropancreatic and Pulmonary Neuroendocrine Carcinomas. **Virchows Arch** 2021 Mar 17.
9. Pearson LK, Hamal R, **Yu S**, Miller KB, Mensah F. Chloroma of the Bladder: A Case Report of Leukemia Progression Presenting as Hematuria. **Case Rep Oncol.** 2021 Sep 21;14(3):1366-1372. doi: 10.1159/000518529. PMID: 34720943; PMCID: PMC8525298.
10. **Yu S**, Leung K, Kim HY, Umetsu SE, Xiao Y, Albacker L, Lee HJ, Umetsu DT, Freeman GJ, DeKruyff RH. Blockade of Repulsive guidance molecule b (RGMB) inhibits allergen-induced airways disease. **J Allergy Clin Immunol.** 2019 Jan 28; S0091-6749(19)30113-7.

11. Xiao Y*, **Yu S***, Zhu B, Bedoret D, Bu X, Francisco LM, Hua P, Duke-Cohan JS, Umetsu DT, Sharpe AH, DeKruyff RH, Freeman GJ. RGMb is a novel binding partner for PD-L2 and its engagement with PD-L2 promotes respiratory tolerance. *J Exp Med*. 2014, 5; 211(5): 943-59 (*equal contribution).
12. DeKruyff RH, **Yu S**, Kim HY, Umetsu DT. Innate immunity in the lung regulates the development of asthma. *Immunol Rev*. 2014 Jul; 260(1): 235-48.
13. **Yu S**, Kim HY, Chang YJ, DeKruyff RH, Umetsu DT. Innate lymphoid cells and asthma. *J Allergy Clin Immunol*. 2014 Apr; 133(4): 943-50.
14. Albacker LA, **Yu S**, Bedoret D, Lee WL, Umetsu SE, Monahan S, Freeman GJ, Umetsu DT, DeKruyff RH. TIM-4, expressed by medullary macrophages, regulates respiratory tolerance by mediating phagocytosis of antigen-specific T cells. *Mucosal Immunol*. 2013 May; 6(3):580-90.
15. **Yu S**, Zhao J, and Cantorna MT. Invariant NKT Cell defects in vitamin D receptor knockout mice prevents experimental lung inflammation. *J Immunol*. 2011 Nov 1; 187(9):4907-12.
16. Bruce D*, **Yu S***, Ooi, JH, and Cantorna, M.T. Converging pathways lead to overproduction of IL-17 in the absence of vitamin D signaling. *Int Immunol*. 2011 Aug; 23(8):519-28. (*equal contribution).
17. **Yu S**, and Cantorna MT. Epigenetic reduction in invariant NKT cells following in utero vitamin D deficiency in mice. *J Immunol*. 2011 Feb 1; 186(3):1384-90.
18. Qi Q, Xia M, Bai Y, **Yu S**, Cantorna M, August A. Interleukin-2-inducible T cell kinase (Itk) network edge dependence for the maturation of iNKT cell. *J Biol Chem*. 2011 Jan 7; 286 (1): 138-46.
19. Bruce D, Ooi JH, **Yu S**, Cantorna MT. Vitamin D and host resistance to infection? Putting the cart in front of the horse. *Exp Biol Med (Maywood)*. 2010 Aug; 235 (8): 921-7.
20. **Yu S**, Weaver V, Martin K, and Cantorna MT. The effects of whole mushrooms during inflammation. *BMC Immunol*. 2009 Feb 20; 10:12.
21. **Yu S**, Bruce D, Froicu M, Weaver V, and Cantorna MT. Failure of T cell homing reduced CD4/CD8alphaalpha intraepithelial lymphocytes, and inflammation in the gut of vitamin D receptor KO mice. *PNAS*. 2008 Dec 30; 105(52):20834-9.
22. **Yu S**, and Cantorna MT. The vitamin D receptor is required for iNKT cell development. *PNAS*. 2008 Apr 1; 105(13):5207-12.
23. Cantorna MT, **Yu S**, and Bruce D. The paradoxical effects of vitamin D on type 1 mediated immunity. *Mol Aspects Med*. 2008 Dec;29(6):369-75.
24. **Yu S**, Xia M, Xu W, Chu Y, Wang Y, Xiong S. All-trans retinoic acid biases immune response induced by DNA vaccine in a Th2 direction. *Vaccine*. 2005 Oct 25;23 (44): 5160-7.

Presentations & Posters

Invited National oral presentation

1. **Yu S**, Sholl LM, Siegmund S, Ulbright TM, Collins K, Colecchia M, Gonzalez-Peramato P, Michalová K, Gordetsky GB, Cornejo KM, Kao C-S, Wobker SE, Vargas SO, Maclean F, Idrees MT, Anderson WJ, Fletcher CDM, Acosta AM. Large cell calcifying Sertoli cell tumor: molecular correlates of aggressive behavior. *USCAP*, New Orleans, 2023.
2. **Yu S**, Doyle L, Hornick JL, Mito JK. Evaluation of MTAP Expression for the Diagnosis of Pancreatic Ductal Adenocarcinoma in Fine Needle Aspiration Cell Block and Core Needle Biopsy Specimens. *USCAP*, New Orleans, 2023.
3. **Yu S**. *Tufts Medical Center GI intercity conference*. Boston, 2019
4. **Yu S**, Jhang J, Choo Y, Arinsburg S,. Hitchhiker's Guide to Hemolysis. *NYBC webinar*, New York, 2017
5. **Yu S**, Leung KM, Kim HY, Xiao Y, Albacker LA, Lee HJ, Umetsu, DT, Freeman GJ, and DeKruyff R. Blockade of the Neogenin-RGMb-BMP signaling hub inhibits allergen-induced airway hyperreactivity. Immunology, *The American Association of Immunologists*, Seattle, 2016.
6. **Yu S**, and M.T. Cantorna. Altered response of CD4+T cells to TGF-beta and IL-6 in the absence of the vitamin D receptor. Immunology, 97 Annual Meeting, *The American Association of Immunologists*, Baltimore, 2010.
7. **Yu S**, and M.T. Cantorna. Commonly consumed mushrooms regulate cytokine production from macrophage. *Experimental Biology*, Washington D.C., 2007.

Posters

1. **Yu S**, Laird H, Zike V. When Should Radiologically Intermediate-Risk Thyroid Nodules Be Sampled? *USCAP*, San Antonio, 2026

2. **Yu S**, Wang M, Langdon J, Sinard J, Cai G, Prasad MJ, Adeniran A. Correlation of ACR-TI-RADS, Cytology, Histology, and Molecular studies. **USCAP**, Boston, 2025
3. **Yu S**, Guoping Cai. Glucose level assessment in pancreatic cyst fluid: correlation with cytological diagnosis, CEL level, and Kras mutation status. **USCAP**, Baltimore, 2024.
4. **Yu S**, Mertens F, Fletcher CDM, Papke DJ. Investigating FOS and FOSB alterations in proliferative fasciitis, proliferative myositis, and proliferative funiculitis. **USCAP**, New Orleans, 2023.
5. **Yu S**, Hornick JL. "Malignant mesenchymoma" revisited: a clinicopathologic study of leiomyosarcomas with osteosarcomatous differentiation. **USCAP**, Los Angeles, 2022.
6. **Yu S**, Hornick JL, Gonzalez RS. TTF-1, SATB2, and SSTR2A Can Help Differentiate Between Gastroenteropancreatic and Pulmonary Neuroendocrine Carcinomas. **USCAP**, Los Angeles, 2020.
7. **Yu S**, Liang Y, and Pilichowska M. Immunohistochemical analysis using a MUM1 (clone MRQ-43) antibody highlights parietal cells and assists the evaluation of parietal cell pathology. **CAP**, Orlando, 2019.
8. **Yu S**, and Cantorna MT. A requirement for early neonatal exposure to vitamin D for iNKT cells. **The 5th International Symposium on CD1/NKT cells**, Kamaura, Japan, 2009.
9. **Yu S**, and Cantorna MT. A requirement for early neonatal exposure to vitamin D for iNKT cells. Immunology, **96 Annul Meeting, The American Association of Immunologists**, Seattle, 2009.
10. **Yu S**, and Cantorna MT. Vitamin D receptor expression is required for normal development and function of iNKT cells. Immunology, **95th Annual Meeting, The American Association of Immunologists**, California, 2008.
11. **Yu S**, and Cantorna MT. 1,25 di-hydroxy D3 is important for NKT cell development. **The Pennsylvania State University 27th Summer Symposium in Molecular Biology**. Washington DC, 2008.
12. **Yu S**, and M.T. Cantorna. Commonly consumed mushrooms improved immunity. **The Graduate Symposium**. The Pennsylvania State University, 2007.
13. **Yu S**, and M.T. Cantorna. Regulation of CD1d expression by vitamin D results in fewer hyporesponsive iNKT cells in the vitamin D receptor knockout mouse. Immunology, **94 Annul Meeting, The American Association of Immunologists**, Florida, 2007.