

## **Nattiya Hirankarn, MD, PhD**

**Associate Dean for Graduate Affairs, Faculty of Medicine, Chulalongkorn University**  
**Director, Cancer Immunotherapy Excellence Center, Faculty of Medicine, Chulalongkorn University,**  
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### **Education**

1993 MD (with honor), Chulalongkorn University, Bangkok, Thailand  
1999 PhD Microbiology and Immunology, Georgetown University, USA

### **Employment History and Appointments**

1999-2002 Lecturer, Immunology Unit, Department of Microbiology, Faculty of Medicine, Chulalongkorn University  
2002-2005 Assistant Professor  
2005-2012 Associated Professor  
2012- Professor, Immunology Unit, Department of Microbiology, Faculty of Medicine, Chulalongkorn University  
2010-2014 Head of Immunology Unit, Department of Microbiology  
2011-2015 Assistant Dean for Research Affairs, Faculty of Medicine, Chulalongkorn University  
2014-2020 Director of Medical Microbiology, Interdisciplinary Program, Graduate School, Chulalongkorn University  
2014- Chief, Center of Excellence in Immunology and Immune-mediated Diseases, Chulalongkorn University  
2017- Director, Cancer Immunotherapy Excellence Center, Faculty of Medicine, Chulalongkorn University  
2018-2021 Chair, Department of Microbiology, Faculty of Medicine, Chulalongkorn University and King Chulalongkorn Memorial Hospital  
2020-2021 Director of Joint Ph.D. Programs in Biomedical Sciences and Biotechnology, Faculty of Medicine, Chulalongkorn University with the University of Liverpool, UK  
2022- Associate Dean for Graduate Affairs, and Director of Medical Sciences Program Faculty of Medicine, Chulalongkorn University

### **Professional Activities**

2000- Member of the Thai Society of Allergy and Immunology  
2006 Chair, the Third International Summer School on Immunogenetics, Bangkok, Thailand  
2006- Member of the Asia-Pacific Histocompatibility and Immunogenetics Association (APHIA) (Former is Australasian and South East Asian Tissue Typing Association (ASEATTA))  
2010-2011 Chairman, Scientific Conference Committee, Faculty of Medicine, Chulalongkorn University  
2013- Vice-President for Immunology, the Allergy Asthma and Immunology Association of Thailand (AAIAT)  
2015-2017 Vice-President, the Asia-Pacific Histocompatibility and Immunogenetics Association (APHIA) and Chair for the scientific conference APHIA2015  
2019- Councilor of the of the Asia-Pacific Histocompatibility and Immunogenetics Association (APHIA)  
2010- Assistant Editor of Asian Pacific Journal of Allergy and Immunology (APJAI)

### **Awards, Prizes**

1994 Royal Thai Government Scholarship for PhD study  
2005 Research Award "Molecular Genetics of Nasopharyngeal Carcinoma" from The National Research Council of Thailand  
2005 Royal King Anandha Mahidol Scholarship for Research Scholar  
2010 Research Award "Carbamazepine and Phenytoin induced Stevens-Johnson Syndrome is associated with HLA-B\*1502 allele in Thai population" from the National Research Council of Thailand

2011	Research Award “Genetics of Systemic Lupus Erythematosus” and Outstanding “Lupus Research Unit” from Chulalongkorn University
2014	International Research Integration, Chula Research Scholar, Ratchadaphiseksomphot Endowment Fund
2016	Academic Award from Chulalongkorn University
2017	Outstanding Teacher Award from The Association of Southeast Asian Institutions of Higher Learning (ASAIHL), Thailand
2018	Outstanding “Center of Excellence of Immunology and Immune-mediated Diseases” from Chulalongkorn University
2019	Outstanding “Center of Excellence of Immunology and Immune-mediated Diseases” from Chulalongkorn University (2 <sup>nd</sup> Consecutive Year)

### **Peer-reviewed Publications H-index Scopus = 32 (Selected publications in the past 5 years)**

1: Phuengmaung P, Khiewkamrop P, Makjaroen J, Issara-Amphorn J, Boonmee A, Benjaskulluecha S, Ritprajak P, Nita-Lazar A, Palaga T, Hirankarn N, Leelahavanichkul A. Less Severe Sepsis in Cecal Ligation and Puncture Models with and without Lipopolysaccharide in Mice with Conditional Ezh2-Deleted Macrophages (LysM-Cre System). *Int J Mol Sci.* 2023 May 10;24(10):8517. doi: 10.3390/ijms24108517. PMID: 37239864; PMCID: PMC10218384.

2: Khiewkamrop P, Kaewraemruaen C, Manipuntee C, Saengruengrit C, Insin N, Leelahavanichkul A, Kaewduangduen W, Sonpoung O, Ariya-Anandech K, Hirankarn N, Ritprajak P. Immunosuppressive Polymeric Nanoparticles Targeting Dendritic Cells Alleviate Lupus Disease in Fcgr2b<sup>-/-</sup> Mice by Mediating Antigen-Specific Immune Tolerance. *Int J Mol Sci.* 2023 May 5;24(9):8313. doi: 10.3390/ijms24098313. PMID: 37176021; PMCID: PMC10179670.

3: Ruantip S, Pimpitak U, Rengpipat S, Pasomsub E, Seepiban C, Gajanandana O, Torvorapanit P, Hirankarn N, Jaru-Ampornpan P, Siwamogsatham S, Pongpaibool P, Siwamogsatham S, Thongchul N, Chaiyo S. Self-enhancement lateral flow immunoassay for COVID-19 diagnosis. *Sens Actuators B Chem.* 2023 Aug 15;389:133898. doi: 10.1016/j.snb.2023.133898. Epub 2023 Apr 29. PMID: 37151731; PMCID: PMC10147571.

4: Thu MS, Chotirosniramit K, Nopsopon T, Hirankarn N, Pongpirul K. Human gut, breast, and oral microbiome in breast cancer: A systematic review and meta- analysis. *Front Oncol.* 2023 Mar 17;13:1144021. doi: 10.3389/fonc.2023.1144021. PMID: 37007104; PMCID: PMC10063924.

5: Kunanopparat A, Leelahavanichkul A, Visitchanakun P, Kueanjinda P, Phuengmaung P, Sae-Khow K, Boonmee A, Benjaskulluecha S, Palaga T, Hirankarn N. The Regulatory Roles of Ezh2 in Response to Lipopolysaccharide (LPS) in Macrophages and Mice with Conditional Ezh2 Deletion with LysM-Cre System. *Int J Mol Sci.* 2023 Mar 10;24(6):5363. doi: 10.3390/ijms24065363. PMID: 36982437; PMCID: PMC10049283.

6: Thu MS, Ondee T, Nopsopon T, Farzana IAK, Fothergill JL, Hirankarn N, Campbell BJ, Pongpirul K. Effect of Probiotics in Breast Cancer: A Systematic Review and Meta-Analysis. *Biology (Basel).* 2023 Feb 9;12(2):280. doi: 10.3390/biology12020280. PMID: 36829557; PMCID: PMC10004677.

7: Niyomnaitham S, Jongkaewwattana A, Meesing A, Pinpathomrat N, Nanthapisal S, Hirankarn N, Siwamogsatham S, Kirdlarp S, Chaiwarith R, Lawpoolsri S, Phanthanawiboon S, Thitithanyanont A, Hansasuta P, Chaiyaroj S, Pitisuttithum P. Immunogenicity of a fractional or full third dose of AZD1222 vaccine or BNT162b2 messenger RNA vaccine after two doses of CoronaVac vaccines against the Delta and Omicron variants. *Int J Infect Dis.* 2023 Apr;129:19-31. doi: 10.1016/j.ijid.2023.01.022. Epub 2023 Jan 20. PMID: 36682680; PMCID: PMC9867652.

Update: Jan 2024

- 8: Tawinwung S, Tudsamran S, Thaiwong R, Asawapanumas T, Wudhikarn K, Chanswangphuwana C, Hirankarn N, Bunworasate U, Suppipat K. Improving cytokine- induced killer cell expansion using a gas-permeable culture method for clinical- scale production. *Asian Pac J Allergy Immunol.* 2023 Jan 3. doi: 10.12932/AP-190822-1437. Epub ahead of print. PMID: 36592164.
- 9: Chuleerarux N, Manothummetha K, Moonla C, Sanguankeo A, Kates OS, Hirankarn N, Phongkhun K, Thanakitcharu J, Leksuwankun S, Meejun T, Thongkam A, Mongkolkaew T, Dioverti MV, Torvorapanit P, Langsiri N, Worasilchai N, Plongla R, Chindamporn A, Gopinath S, Nissaisorakarn P, Thaniyavarn T, Nematollahi S, Permpalung N. Immunogenicity of SARS-CoV-2 vaccines in patients with multiple myeloma: a systematic review and meta-analysis. *Blood Adv.* 2022 Dec 27;6(24):6198-6207. doi: 10.1182/bloodadvances.2022008530. PMID: 36538342; PMCID: PMC9561400.
- 10: Sanyanusin M, Tudsamran S, Thaiwong R, Tawinwung S, Nishio N, Takahashi Y, Hirankarn N, Suppipat K. Novel xeno-free and serum-free culturing condition to improve piggyBac transposon-based CD19 chimeric antigen receptor T-cell production and characteristics. *Cytotherapy.* 2023 Apr;25(4):397-406. doi: 10.1016/j.jcyt.2022.11.009. Epub 2022 Dec 13. PMID: 36517366.
- 11: Wannigama DL, Amarasiri M, Hongsing P, Hurst C, Modchang C, Chadsuthi S, Anupong S, Phattharapornjaroen P, S M AHR, Fernandez S, Huang AT, Kueakulpattana N, Tanasatitchai C, Vatanaprasan P, Saethang T, Luk-In S, Storer RJ, Ounjai P, Ragupathi NKD, Kanthawee P, Sano D, Furukawa T, Sei K, Leelahavanichkul A, Kanjanabuch T, Hirankarn N, Higgins PG, Kicic A, Chatsuan T, McLellan AD, Abe S. Multiple traces of monkeypox detected in non-sewered wastewater with sparse sampling from a densely populated metropolitan area in Asia. *Sci Total Environ.* 2023 Feb 1;858(Pt 1):159816. doi: 10.1016/j.scitotenv.2022.159816. Epub 2022 Oct 29. PMID: 36461562; PMCID: PMC9620434.
- 12: Khuisangam N, Jewmoung S, Thaiwong R, Tudsamran S, Hirankarn N, Suppipat K, Tawinwung S. An In Vitro Comparison of Costimulatory Domains in Chimeric Antigen Receptor T Cell for Breast Cancer Treatment. *J Immunol Res.* 2022 Nov 22;2022:2449373. doi: 10.1155/2022/2449373. PMID: 36457849; PMCID: PMC9708373.
- 13: Tepmongkol S, Suwanwela NC, Hirankarn N, Tangwongchai S, Vorasayan P, Sukprakun C, Siritaranon N, Kijpaisalratana N, Akarathanawat W, Chutinet A, Tantivatana J. Brain perfusion single photon emission computed tomography abnormality in MRI-negative stroke-like patients post COVID-19 vaccination. *Medicine (Baltimore).* 2022 Nov 25;101(47):e31965. doi: 10.1097/MD.00000000000031965. PMID: 36451484; PMCID: PMC9704968.
- 14: Tubjaroen C, Prachuapthunyachart S, Potjalongsilp N, Sodsai P, Hirankarn N, Jaru-Ampornpan P, Chongsrisawat V. Immunogenicity of an mRNA-Based COVID-19 Vaccine among Adolescents with Obesity or Liver Transplants. *Vaccines (Basel).* 2022 Nov 4;10(11):1867. doi: 10.3390/vaccines10111867. PMID: 36366375; PMCID: PMC9693317.
- 15: Butler-Laporte G, Povysil G, Kosmicki JA, Cirulli ET, Drivas T, Furini S, Saad C, Schmidt A, Olszewski P, Korotko U, Quinodoz M, Çelik E, Kundu K, Walter K, Jung J, Stockwell AD, Sloofman LG, Jordan DM, Thompson RC, Del Valle D, Simons N, Cheng E, Sebra R, Schadt EE, Kim-Schulze S, Gnjjatic S, Merad M, Buxbaum JD, Beckmann ND, Charney AW, Przychodzen B, Chang T, Pottinger TD, Shang N, Brand F, Fava F, Mari F, Chwialkowska K, Niemira M, Pula S, Baillie JK, Stuckey A, Salas A, Bello X, Pardo-Seco J, Gómez-Carballa A, Rivero-Calle I, Martínón-Torres F, Ganna A, Karczewski KJ, Veerapen K, Bourgey M, Bourque G, Eveleigh RJ, Forgetta V, Morrison D, Langlais D, Lathrop M, Mooser V, Nakanishi T, Frithiof R, Hultström M, Lipcsey M, Marincevic-Zuniga Y, Nordlund J, Schiabor Barrett KM, Lee W, Bolze A, White S,

Riffle S, Tanudjaja F, Sandoval E, Neveux I, Dabe S, Casadei N, Motameny S, Alaamery M, Massadeh S, Aljawini N, Almutairi MS, Arabi YM, Alqahtani SA, Al Harthi FS, Almutairi A, Alqubaishi F, Alotaibi S, Binowayn A, Alsolm EA, El Bardisy H, Fawzy M, Cai F, Soranzo N, Butterworth A; COVID-19 Host Genetics Initiative; DeCOI Host Genetics Group; GEN-COVID Multicenter Study (Italy); Mount Sinai Clinical Intelligence Center; GEN-COVID consortium (Spain); GenOMICC Consortium; Japan COVID-19 Task Force; Regeneron Genetics Center; Geschwind DH, Arteaga S, Stephens A, Butte MJ, Boutros PC, Yamaguchi TN, Tao S, Eng S, Sanders T, Tung PJ, Broudy ME, Pan Y, Gonzalez A, Chavan N, Johnson R, Pasaniuc B, Yaspan B, Smieszek S, Rivolta C, Bibert S, Bochud PY, Dabrowski M, Zawadzki P, Sypniewski M, Kaja E, Chariyavilaskul P, Nilaratanakul V, Hirankarn N, Shotelersuk V, Pongpanich M, Phokaew C, Chetruengchai W, Tokunaga K, Sugiyama M, Kawai Y, Hasegawa T, Naito T, Namkoong H, Edahiro R, Kimura A, Ogawa S, Kanai T, Fukunaga K, Okada Y, Imoto S, Miyano S, Mangul S, Abedalthagafi MS, Zeberg H, Grzymiski JJ, Washington NL, Ossowski S, Ludwig KU, Schulte EC, Riess O, Moniuszko M, Kwasniewski M, Mbarek H, Ismail SI, Verma A, Goldstein DB, Kiryluk K, Renieri A, Ferreira MAR, Richards JB. Exome-wide association study to identify rare variants influencing COVID-19 outcomes: Results from the Host Genetics Initiative. *PLoS Genet.* 2022 Nov 3;18(11):e1010367. doi: 10.1371/journal.pgen.1010367. PMID: 36327219; PMCID: PMC9632827.

16: Puthanakit T, Chantasrisawad N, Yoohat K, Nantanee R, Sophonphan J, Meepuksom T, Sodsai P, Phanthanawiboon S, Jantarabenjakul W, Hirankarn N, Kosalaraksa P. Immunogenicity of a Fractional Dose of mRNA BNT162b2 COVID-19 Vaccine for Primary Series and Booster Vaccination among Healthy Adolescents. *Vaccines (Basel).* 2022 Sep 30;10(10):1646. doi: 10.3390/vaccines10101646. PMID: 36298510; PMCID: PMC9609361.

17: Phakham T, Boonkrai C, Wongtangprasert T, Audomsun T, Attakitbancha C, Saelao P, Muanwien P, Sooksai S, Hirankarn N, Pisitkun T. Highly efficient hybridoma generation and screening strategy for anti-PD-1 monoclonal antibody development. *Sci Rep.* 2022 Oct 22;12(1):17792. doi: 10.1038/s41598-022-20560-6. PMID: 36273231; PMCID: PMC9588028.

18: Ruenjaiman V, Sodsai P, Kueanjinda P, Bunrasmee W, Klinchanhom S, Reantragoon R, Tunvirachaisakul C, Manothummetha K, Mejun N, Liengswangwong K, Torvorapanit P, Paitoonpong L, Putcharoen O, Palaga T, Hirankarn N; study team. Impact of SARS-CoV-2 infection on the profiles and responses of innate immune cells after recovery. *J Microbiol Immunol Infect.* 2022 Dec;55(6 Pt 1):993-1004. doi: 10.1016/j.jmii.2022.09.001. Epub 2022 Sep 29. PMID: 36220753; PMCID: PMC9519362.

19: Suratannon N, Ittiwut C, Dik WA, Ittiwut R, Meesilpavikkai K, Israsena N, Ingrungruanglert P, Dalm VASH, van Daele PLA, Sanpavat A, Chaijitraruch N, Schrijver B, Buranapraditkun S, Porntaveetus T, Swagemakers SMA, IJspeert H, Palaga T, Suphapeetiporn K, van der Spek PJ, Hirankarn N, Chatchatee P, Martin van Hagen P, Shotelersuk V. A germline STAT6 gain-of-function variant is associated with early-onset allergies. *J Allergy Clin Immunol.* 2023 Feb;151(2):565-571.e9. doi: 10.1016/j.jaci.2022.09.028. Epub 2022 Oct 7. PMID: 36216080.

20: Sodsai P, Ittiwut C, Ruenjaiman V, Ittiwut R, Jantarabenjakul W, Suphapeetiporn K, Shotelersuk V, Hirankarn N. TIGIT Monoallelic Nonsense Variant in Patient with Severe COVID-19 Infection, Thailand. *Emerg Infect Dis.* 2022 Nov;28(11):2350-2352. doi: 10.3201/eid2811.220914. Epub 2022 Oct 3. PMID: 36191906; PMCID: PMC9622227.

21: Sinthuwiwat T, Buranapraditkun S, Kamolvisit W, Tongkobpetch S, Chetruengchai W, Srichomthong C, Assawapitaksakul A, Phokaew C, Kueanjinda P, Palaga T, Boonpiyathad T, Suphapeetiporn K, Hirankarn N, Shotelersuk V. A LILRB1 variant with a decreased ability to phosphorylate SHP-1 leads to autoimmune diseases. *Sci Rep.* 2022 Sep 14;12(1):15420. doi: 10.1038/s41598-022-19334-x. PMID: 36104364; PMCID: PMC9474825.

- 22: Puthanakit T, Nantanee R, Jaru-Ampornpan P, Chantasrisawad N, Sophonphan J, Meepuksom T, Jupimai T, Sodsai P, Anugulruengkitt S, Hirankarn N; Study Team. Heterologous Prime-boost of SARS-CoV-2 inactivated vaccine and mRNA BNT162b2 among Healthy Thai Adolescents. *Vaccine X*. 2022 Dec;12:100211. doi: 10.1016/j.jvacx.2022.100211. Epub 2022 Aug 29. PMID: 36059600; PMCID: PMC9422341.
- 23: COVID-19 Host Genetics Initiative. A first update on mapping the human genetic architecture of COVID-19. *Nature*. 2022 Aug;608(7921):E1-E10. doi: 10.1038/s41586-022-04826-7. Epub 2022 Aug 3. PMID: 35922517; PMCID: PMC9352569.
- 24: Cao Y, Ha SY, So CC, Tong MT, Tang CS, Zhang H, Liang R, Yang J, Chung BH, Chan GC, Lau YL, Garcia-Barcelo MM, Ma ES, Sucharitchan P, Hirankarn N, Yang W. NGS4THAL, a One-Stop Molecular Diagnosis and Carrier Screening Tool for Thalassemia and Other Hemoglobinopathies by Next-Generation Sequencing. *J Mol Diagn*. 2022 Oct;24(10):1089-1099. doi: 10.1016/j.jmoldx.2022.06.006. Epub 2022 Jul 19. PMID: 35868510.
- 25: Nantanee R, Jantarabenjakul W, Jaru-Ampornpan P, Sodsai P, Himananto O, Athipunjapong J, Sophonphan J, Nanthapisal S, Hirankarn N, Puthanakit T; Study Team. A Randomized Clinical Trial of a Fractional Low Dose of BNT162b2 Booster in Adults Following AZD1222. *Vaccines (Basel)*. 2022 Jun 8;10(6):914. doi: 10.3390/vaccines10060914. PMID: 35746522; PMCID: PMC9230769.
- 26: Jantarabenjakul W, Sodsai P, Chantasrisawad N, Jitsatja A, Ninwattana S, Thippamom N, Ruenjaiman V, Tan CW, Pradit R, Sophonphan J, Wacharapluesadee S, Wang LF, Puthanakit T, Hirankarn N, Puthachoen O. Dynamics of Neutralizing Antibody and T-Cell Responses to SARS-CoV-2 and Variants of Concern after Primary Immunization with CoronaVac and Booster with BNT162b2 or ChAdOx1 in Health Care Workers. *Vaccines (Basel)*. 2022 Apr 19;10(5):639. doi: 10.3390/vaccines10050639. PMID: 35632395; PMCID: PMC9147589.
- 27: Saithong S, Saisorn W, Tovichayathamrong P, Filbertine G, Torvorapanit P, Wright HL, Edwards SW, Leelahavanichkul A, Hirankarn N, Chiewchengchol D. Anti- Inflammatory Effects and Decreased Formation of Neutrophil Extracellular Traps by Enoxaparin in COVID-19 Patients. *Int J Mol Sci*. 2022 Apr 27;23(9):4805. doi: 10.3390/ijms23094805. PMID: 35563204; PMCID: PMC9102387.
- 28: Nantanee R, Aikphaibul P, Jaru-Ampornpan P, Sodsai P, Himananto O, Theerawit T, Sophonphan J, Tovichayathamrong P, Manothummetha K, Laohasereekul T, Hiransuthikul N, Hirankarn N, Puthanakit T; Study Team. Immunogenicity and reactogenicity after booster dose with AZD1222 via intradermal route among adult who had received CoronaVac. *Vaccine*. 2022 May 26;40(24):3320-3329. doi: 10.1016/j.vaccine.2022.04.067. Epub 2022 May 2. PMID: 35513961; PMCID: PMC9058819.
- 29: Rad SMAH, Halpin JC, Tawinwung S, Suppipat K, Hirankarn N, McLellan AD. MicroRNA-mediated metabolic reprogramming of chimeric antigen receptor T cells. *Immunol Cell Biol*. 2022 Jul;100(6):424-439. doi: 10.1111/imcb.12551. Epub 2022 May 4. PMID: 35507473; PMCID: PMC9322280.
- 30: Manothummetha K, Chuleerarux N, Sanguankeo A, Kates OS, Hirankarn N, Thongkam A, Dioverti-Prono MV, Torvorapanit P, Langsiri N, Worasilchai N, Moonla C, Plongla R, Garneau WM, Chindamporn A, Nissaisorakarn P, Thanivavarn T, Nematollahi S, Permpalung N. Immunogenicity and Risk Factors Associated With Poor Humoral Immune Response of SARS-CoV-2 Vaccines in Recipients of Solid Organ Transplant: A Systematic Review and Meta-Analysis. *JAMA Netw Open*. 2022 Apr 1;5(4):e226822. doi: 10.1001/jamanetworkopen.2022.6822. PMID: 35412626; PMCID: PMC9006106.

31: Nanthapisal S, Puthanakit T, Jaru-Ampornpan P, Nantanee R, Sodsai P, Himananto O, Sophonphan J, Suchartlikitwong P, Hiransuthikul N, Angkasekwinai P, Tangsathapornpong A, Hirankarn N; study team. A randomized clinical trial of a booster dose with low versus standard dose of AZD1222 in adult after 2 doses of inactivated vaccines. *Vaccine*. 2022 Apr 20;40(18):2551-2560. doi: 10.1016/j.vaccine.2022.03.036. Epub 2022 Mar 24. PMID: 35341647; PMCID: PMC8947780.

32: Kousathanas A, Pairo-Castineira E, Rawlik K, Stuckey A, Odhams CA, Walker S, Russell CD, Malinauskas T, Wu Y, Millar J, Shen X, Elliott KS, Griffiths F, Oosthuyzen W, Morrice K, Keating S, Wang B, Rhodes D, Klaric L, Zechner M, Parkinson N, Siddiq A, Goddard P, Donovan S, Maslove D, Nichol A, Semple MG, Zainy T, Maleady-Crowe F, Todd L, Salehi S, Knight J, Elgar G, Chan G, Arumugam P, Patch C, Rendon A, Bentley D, Kingsley C, Kosmicki JA, Horowitz JE, Baras A, Abecasis GR, Ferreira MAR, Justice A, Mirshahi T, Oetjens M, Rader DJ, Ritchie MD, Verma A, Fowler TA, Shankar-Hari M, Summers C, Hinds C, Horby P, Ling L, McAuley D, Montgomery H, Openshaw PJM, Elliott P, Walsh T, Tenesa A; GenOMICC investigators; 23andMe investigators; COVID-19 Human Genetics Initiative; Fawkes A, Murphy L, Rowan K, Ponting CP, Vitart V, Wilson JF, Yang J, Bretherick AD, Scott RH, Hendry SC, Moutsianas L, Law A, Caulfield MJ, Baillie JK. Whole-genome sequencing reveals host factors underlying critical COVID-19. *Nature*. 2022 Jul;607(7917):97-103. doi: 10.1038/s41586-022-04576-6. Epub 2022 Mar 7. PMID: 35255492; PMCID: PMC9259496.

33: Chamnanphon M, Pongpanich M, Suttichet TB, Jantarabenjakul W, Torvorapanit P, Pucharoen O, Sodsai P, Phokaew C, Hirankarn N, Chariyavilaskul P, Shotelersuk V. Host genetic factors of COVID-19 susceptibility and disease severity in a Thai population. *J Hum Genet*. 2022 May;67(5):295-301. doi: 10.1038/s10038-021-01009-6. Epub 2022 Jan 11. PMID: 35013560; PMCID: PMC8748005.

34: Sodsai P, Jenjaroenpun P, Hirankarn N, Wongsurawat T, Rotcheewaphan S. Erratum for Sodsai et al., "Complete Genome Sequences of Mycobacterium farcinogenes Strains Isolated from Clinical Specimens from Patients in Thailand". *Microbiol Resour Announc*. 2021 Dec 9;10(49):e0114521. doi: 10.1128/MRA.01145-21. Epub 2021 Dec 9. Erratum for: *Microbiol Resour Announc*. 2021 Nov 18;10(46):e0100521. PMID: 34881987; PMCID: PMC8656389.

35: Sodsai P, Jenjaroenpun P, Hirankarn N, Wongsurawat T, Rotcheewaphan S. Complete Genome Sequences of Mycobacterium farcinogenes Strains Isolated from Clinical Specimens from Patients in Thailand. *Microbiol Resour Announc*. 2021 Nov 18;10(46):e0100521. doi: 10.1128/MRA.01005-21. Epub 2021 Nov 18. Erratum in: *Microbiol Resour Announc*. 2021 Dec 9;10(49):e0114521. PMID: 34792375; PMCID: PMC8601135.

36: Wang YF, Wei W, Tangtanatakul P, Zheng L, Lei Y, Lin Z, Qian C, Qin X, Hou F, Zhang X, Shao L, Satproedprai N, Mahasirimongkol S, Pisitkun P, Song Q, Lau YL, Zhang Y, Hirankarn N, Yang W. Identification of Shared and Asian-Specific Loci for Systemic Lupus Erythematosus and Evidence for Roles of Type III Interferon Signaling and Lysosomal Function in the Disease: A Multi-Ancestral Genome-Wide Association Study. *Arthritis Rheumatol*. 2022 May;74(5):840-848. doi: 10.1002/art.42021. Epub 2022 Mar 29. PMID: 34783190.

37: Jantarabenjakul W, Chantasrisawad N, Puthanakit T, Wacharapluesadee S, Hirankarn N, Ruenjaiman V, Paitoonpong L, Suwanpimolkul G, Torvorapanit P, Pradit R, Sophonphan J, Pucharoen O. Short-term immune response after inactivated SARS-CoV-2 (CoronaVac®, Sinovac) and ChAdOx1 nCoV-19 (Vaxzevria®, Oxford-AstraZeneca) vaccinations in health care workers. *Asian Pac J Allergy Immunol*. 2022 Sep;40(3):269-277. doi: 10.12932/AP-250721-1197. PMID: 34717527.

38: Sodsai P, Klinchanhom S, Hirankarn N, Reantragoon R, Palaga T. Notch signaling regulates function of human mucosal-associated invariant T (MAIT) cells. *Asian Pac J Allergy Immunol*. 2021 Oct 31. doi: 10.12932/AP-010721-1174. Epub ahead of print. PMID: 34717522.

Update: Jan 2024

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