

SIgN affiliated publications by Florent GINHOUX

2021

Wu N, Sun H, Zhao X, Zhang Y, Tan J, Qi Y, Wang Q, Ng M, Liu Z, He L, Niu X, Chen L, Liu Z, Li HB, Zeng YA, Roulis M, Liu D, Cheng J, Zhou B, Ng LG, Zou D, Ye Y, Flavell RA, Ginhoux F, Su B. MAP3K2-regulated intestinal stromal cells define a distinct stem cell niche. *Nature*. 2021 Mar 3. [Epub ahead of print]

Kandasamy K, Tan LG, B Johana N, Tan YW, Foo W, Yeo JSL, Ravikumar V, Ginhoux F, Choolani M, Chan JKY, Mattar CNZ. Maternal microchimerism and cell-mediated immune-modulation enhance engraftment following semi-allogenic intrauterine transplantation. *FASEB J*. 2021 Mar;35(3):e21413.

Nakamizo S, Honda T, Sato T, Mamun MA, Chow Z, Duan K, Lum J, Tan KJ, Tomari K, Sato R, Kitoh A, Tay ASL, Common JEA, Ng LG, Setou M, Ginhoux F, Kabashima K. High-fat diet induces follicular hyperkeratinization and predisposes to develop neutrophilic folliculitis in mice. *J Allergy Clin Immunol*. 2021 Mar 10:S0091-6749(21)00363-8.

Kvedaraite E, Hertwig L, Sinha I, Ponzetta A, Hed Myrberg I, Lourda M, Dzidic M, Akber M, Klingström J, Folkesson E, Muvva JR, Chen P, Gredmark-Russ S, Brighenti S, Norrby-Teglund A, Eriksson LI, Rooyackers O, Aleman S, Strålin K, Ljunggren HG, Ginhoux F, Björkström NK, Henter JI, Svensson M; Karolinska KI/K COVID-19 Study Group. Major alterations in the mononuclear phagocyte landscape associated with COVID-19 severity. *Proc Natl Acad Sci U S A*. 2021 Feb 9;118(6):e2018587118.

Patel AA, Ginhoux F, Yona S. Monocytes, Macrophages, Dendritic Cells and Neutrophils: an update on lifespan kinetics in health and disease. *Immunology*. 2021 Feb 8. [Epub ahead of print]

Nguyen PHD, Ma S, Phua CZJ, Kaya NA, Lai HLH, Lim CJ, Lim JQ, Wasser M, Lai L, Tam WL, Lim TKH, Wan WK, Loh T, Leow WQ, Pang YH, Chan CY, Lee SY, Cheow PC, Toh HC, Ginhoux F, Iyer S, Kow AWC, Young Dan Y, Chung A, Goh BKP, Albani S, Chow PKH, Zhai W, Chew V. Intratumoural immune heterogeneity as a hallmark of tumour evolution and progression in hepatocellular carcinoma. *Nat Commun*. 2021 Jan 11;12(1):227.

Ginhoux F, Mildner A, Gautier EL, Schlitzer A, Jakubzick C, Varol C, Bain C, Guermonprez P. Editorial: Monocyte Heterogeneity and Function. *Front Immunol*. 2021 Jan 7;11:626725.

Wang M, Yang Y, Cansever D, Wang Y, Kantores C, Messiaen S, Moison D, Livera G, Chakarov S, Weinberger T, Stremmel C, Fijak M, Klein B, Pleuger C, Lian Z, Ma W, Liu Q, Klee K, Händler K, Ulas T, Schlitzer A, Schultze JL, Becher B, Greter M, Liu Z, Ginhoux F, Epelman S, Schulz C, Meinhardt A, Bhushan S. Two populations of self-maintaining monocyte-independent macrophages exist in adult epididymis and testis. *Proc Natl Acad Sci U S A*. 2021 Jan 5;118(1):e2013686117.

Thomas JR, Appios A, Zhao X, Dutkiewicz R, Donde M, Lee CYC, Naidu P, Lee C, Cerveira J, Liu B, Ginhoux F, Burton G, Hamilton RS, Moffett A, Sharkey A, McGovern N. Phenotypic and functional characterization of first-trimester human placental macrophages, Hofbauer cells. *J Exp Med*. 2021 Jan 4;218(1):e20200891.

Baharom F, Ramirez-Valdez RA, Tobin KKS, Yamane H, Dutertre CA, Khalilnezhad A, Reynoso GV, Coble VL, Lynn GM, Mulè MP, Martins AJ, Finnigan JP, Zhang XM, Hamerman JA, Bhardwaj N, Tsang JS, Hickman HD, Ginhoux F, Ishizuka AS, Seder RA. Intravenous nanoparticle vaccination generates stem-like TCF1+ neoantigen-specific CD8+ T cells. *Nat Immunol*. 2021 Jan;22(1):41-52.



2020

Gessain G, Blériot C, Ginhoux F. Non-genetic Heterogeneity of Macrophages in Diseases-A Medical Perspective. *Front Cell Dev Biol*. 2020 Dec 14;8:613116.

Blériot C, Liu Z, Ginhoux F. Water quality check: macrophages setting the standards. *Cell Res*. 2020 Nov 2. [Epub ahead of print]

Dutertre CA, Ginhoux F. Identification of circulating inflammatory dendritic cells by a multi-omic approach. *Med Sci (Paris)*. 2020 Nov;36(11):976-979. [article in French]

Msallam R, Balla J, Rathore APS, Kared H, Malleret B, Saron WAA, Liu Z, Hang JW, Dutertre CA, Larbi A, Chan JKY, St John AL, Ginhoux F. Fetal mast cells mediate postnatal allergic responses dependent on maternal IgE. *Science*. 2020 Oct 29:eaba0864.

Le Naour J, Liu P, Zhao L, Adjemian S, Sztupinski Z, Taieb J, Mulot C, Silvin A, Dutertre CA, Ginhoux F, Sauvat A, Cerrato G, Castoldi F, Martins I, Stoll G, Paillet J, Mangane K, Richter C, Kepp O, Maiuri MC, Pietrocola F, Vandenabeele P, André F, Delalogue S, Szallasi Z, Laurent-Puig P, Zucman-Rossi J, Zitvogel L, Pol JG, Vacchelli E, Kroemer G. A TLR3 ligand reestablishes chemotherapeutic responses in the context of FPR1 deficiency. *Cancer Discov*. 2020 Oct 12:CD-20-0465.

Tay ASL, Li C, Nandi T, Chng KR, Andiappan AK, Mettu VS, de Cevins C, Ravikrishnan A, Dutertre CA, Wong XFCC, Qi Ng AH, Matta SA, Ginhoux F, Röttschke O, Chew FT, Tang MBY, Yew YW, Nagarajan N, Common JEA. Atopic dermatitis microbiomes stratify into ecological dermatotypes enabling microbial virulence and disease severity. *J Allergy Clin Immunol*. 2020 Oct 8:S0091-6749(20)31399-3.

Pasqualini C, Kozaki T, Bruschi M, Nguyen THH, Minard-Colin V, Castel D, Grill J, Ginhoux F. Modeling the Interaction between the Microenvironment and Tumor Cells in Brain Tumors. *Neuron*. 2020 Oct 7:S0896-6273(20)30718-2.

Sharma A, Seow JJW, Dutertre CA, Pai R, Blériot C, Mishra A, Wong RMM, Singh GSN, Sudhagar S, Khalilnezhad S, Erdal S, Teo HM, Khalilnezhad A, Chakarov S, Lim TKH, Fui ACY, Chieh AKW, Chung CP, Bonney GK, Goh BK, Chan JKY, Chow PKH, Ginhoux F, DasGupta R. Onco-fetal Reprogramming of Endothelial Cells Drives Immunosuppressive Macrophages in Hepatocellular Carcinoma. *Cell*. 2020 Sep 24:S0092-8674(20)31082-5.

Silvin A, Chapuis N, Dunsmore G, Goubet AG, Dubuisson A, Derosa L, Almire C, Hénon C, Kosmider O, Droin N, Rameau P, Catelain C, Alfaro A, Dussiau C, Friedrich C, Sourdeau E, Marin N, Szwebel TA, Cantin D, Mouthon L, Borderie D, Deloger M, Bredel D, Mouraud S, Drubay D, Andrieu M, Lhonneur AS, Saada V, Stoclin A, Willekens C, Pommeret F, Griscelli F, Ng LG, Zhang Z, Bost P, Amit I, Barlesi F, Marabelle A, Pène F, Gachot B, André F, Zitvogel L, Ginhoux F, Fontenay M, Solary E. Elevated Calprotectin and Abnormal Myeloid Cell Subsets Discriminate Severe from Mild COVID-19. *Cell*. 2020 Sep 17;182(6):1401-1418.e18.

Anderson DA 3rd, Dutertre CA, Ginhoux F, Murphy KM. Genetic models of human and mouse dendritic cell development and function. *Nat Rev Immunol*. 2020 Sep 9. [Epub ahead of print]

Melenotte C, Silvin A, Goubet AG, Lahmar I, Dubuisson A, Zumla A, Raoult D, Merad M, Gachot B, Hénon C, Solary E, Fontenay M, André F, Maeurer M, Ippolito G, Piacentini M, Wang FS, Ginhoux F, Marabelle A, Kroemer G, Derosa L, Zitvogel L. Immune responses during COVID-19 infection. *Oncoimmunology*. 2020 Aug 25;9(1):1807836.

Tan EEK, Hopkins R, Lim CK, Jamuar S, Ong C, Thoon KC, Koh MJ, Shin EM, Lian DWQ, Weerasooriya M, Lee CZ, Soetedjo AAP, Lim CS, Au VB, Chua WME, Lee HY, Jones LA, James SJ, Kaliaperumal N, Kwok J, Tan ES, Thomas B, Ho L, Wu L, Fairhurst AM, Ginhoux F, Teo AK, Zhang Y, Ong KH, Yu W, Venkatesh B, Tergaonkar V, Reversade B, Chin KC, Tan AM, Liew WK, Connolly JE. Dominant-negative NFKBIA mutation promotes IL-1 β production causing hepatic disease with severe immunodeficiency. *J Clin Invest*. 2020 Aug 4:98882.

Santegoets SJ, Duurland CL, Jordanova EJ, van Ham VJ, Ehsan I, Loof NM, Narang V, Dutertre CA, Ginhoux F, van Egmond SL, J P Welters M, van der Burg SH. CD163+ cytokine-producing cDC2 stimulate intratumoral type 1 T cell responses in HPV16-induced oropharyngeal cancer. *J Immunother Cancer*. 2020 Aug;8(2):e001053.

Lou F, Sun Y, Xu Z, Niu L, Wang Z, Deng S, Liu Z, Zhou H, Bai J, Yin Q, Cai X, Sun L, Wang H, Li Q, Wu Z, Chen X, Gu J, Shi YL, Tao W, Ginhoux F, Wang H. Excessive Polyamine Generation in Keratinocytes Promotes Self-RNA Sensing by Dendritic Cells in Psoriasis. *Immunity*. 2020 Jul 14;53(1):204-216.e10.

Kurts C, Ginhoux F, Panzer U. Kidney dendritic cells: fundamental biology and functional roles in health and disease. *Nat Rev Nephrol*. 2020 Jul;16(7):391-407.

Kwok I, Becht E, Xia Y, Ng M, Teh YC, Tan L, Evrard M, Li JLY, Tran HTN, Tan Y, Liu D, Mishra A, Liong KH, Leong K, Zhang Y, Olsson A, Mantri CK, Shyamsunder P, Liu Z, Piot C, Dutertre CA, Cheng H, Bari S, Ang N, Biswas SK, Koeffler HP, Tey HL, Larbi A, Su IH, Lee B, St John A, Chan JKY, Hwang WYK, Chen J, Salomonis N, Chong SZ, Grimes HL, Liu B, Hidalgo A, Newell EW, Cheng T, Ginhoux F, Ng LG. Combinatorial Single-Cell Analyses of Granulocyte-Monocyte Progenitor Heterogeneity Reveals an Early Uni-potent Neutrophil Progenitor. *Immunity*. 2020 Jun 22:S1074-7613(20)30235-1.

Blériot C, Chakarov S, Ginhoux F. Determinants of Resident Tissue Macrophage Identity and Function. *Immunity*. 2020 Jun 16;52(6):957-970.

Liu Z, Gu Y, Shin A, Zhang S, Ginhoux F. Analysis of Myeloid Cells in Mouse Tissues with Flow Cytometry. *STAR Protoc*. 2020 Jun 3;1(1):100029.

Bian Z, Gong Y, Huang T, Lee CZW, Bian L, Bai Z, Shi H, Zeng Y, Liu C, He J, Zhou J, Li X, Li Z, Ni Y, Ma C, Cui L, Zhang R, Chan JKY, Ng LG, Lan Y, Ginhoux F, Liu B. Deciphering human macrophage development at single-cell resolution. *Nature*. 2020 Jun;582(7813):571-576.

Yeo JG, Wasser M, Kumar P, Pan L, Poh SL, Ally F, Arkachaisri T, Lim AJM, Leong JY, Lai L, Yeo KT, Lee ESC, Chua CJH, Larbi A, Nyunt MSZ, Ng TP, Chiesa S, Gattorno M, Martini A, Paleja BS, Dutertre CA, Chen J, Nay Yaung K, Tang SP, Ng SK, Yung CF, Tan AYJ, Lee SY, Ginhoux F, Albani S. The Extended Polydimensional Immunome Characterization (EPIC) web-based reference and discovery tool for cytometry data. *Nat Biotechnol*. 2020 Jun;38(6):679-684.

Dress RJ, Liu Z, Ginhoux F. Towards the better understanding of myelopoiesis using single-cell technologies. *Mol Immunol*. 2020 May 6;122:186-192.

Dawson CA, Pal B, Vaillant F, Gandolfo LC, Liu Z, Bleriot C, Ginhoux F, Smyth GK, Lindeman GJ, Mueller SN, Rios AC, Visvader JE. Tissue-resident ductal macrophages survey the mammary epithelium and facilitate tissue remodelling. *Nat Cell Biol*. 2020 May;22(5):546-558.

Ydens E, Amann L, Asselbergh B, Scott CL, Martens L, Sichien D, Mossad O, Blank T, De Prijck S, Low D, Masuda T, Saeys Y, Timmerman V, Stumm R, Ginhoux F, Prinz M, Janssens S, Guillems M. Profiling peripheral nerve macrophages reveals two macrophage subsets with distinct localization, transcriptome and response to injury. *Nat Neurosci*. 2020 May;23(5):676-689.

Utz SG, See P, Mildenerberger W, Thion MS, Silvin A, Lutz M, Ingelfinger F, Rayan NA, Lelios I, Buttgerit A, Asano K, Prabhakar S, Garel S, Becher B, Ginhoux F, Greter M. Early Fate Defines Microglia and Non-parenchymal Brain Macrophage Development. *Cell*. 2020 Apr 30;181(3):557-573.e18.

Anselmi G, Vaivode K, Dutertre CA, Bourdely P, Missolo-Koussou Y, Newell E, Hickman O, Wood K, Saxena A, Helft J, Ginhoux F, Guermonprez P. Engineered niches support the development of human dendritic cells in humanized mice. *Nat Commun*. 2020 Apr 28;11(1):2054.

Tieppo P, Papadopoulou M, Gatti D, McGovern N, Chan JKY, Gosselin F, Goetgeluk G, Weening K, Ma L, Dauby N, Cogan A, Donner C, Ginhoux F, Vandekerckhove B, Vermijlen D. The human fetal thymus generates invariant effector $\gamma\delta$ T cells. *J Exp Med*. 2020 Mar 2;217(3).

Kared H, Tan SW, Lau MC, Chevrier M, Tan C, How W, Wong G, Strickland M, Malleret B, Amoah A, Pilipow K, Zanon V, Govern NM, Lum J, Chen JM, Lee B, Florian MC, Geiger H, Ginhoux F, Ruiz-Mateos E, Fulop T, Rajasuriar R, Kamarulzaman A, Ng TP, Lugli E, Larbi A. Immunological history governs human stem cell memory CD4 heterogeneity via the Wnt signaling pathway. *Nat Commun*. 2020 Feb 10;11(1):821.

Lim KPH, Milne P, Poidinger M, Duan K, Lin H, McGovern N, Abhyankar H, Zinn D, Burke TM, Eckstein OS, Chakraborty R, Sengal A, Scull B, Newell E, Merad M, McClain KL, Man TK, Ginhoux F, Collin M, Allen CE. Circulating CD1c⁺ myeloid dendritic cells are potential precursors to LCH lesion CD1a⁺CD207⁺ cells. *Blood Adv*. 2020 Jan 14;4(1):87-99.

Ishihara K, Shimizu R, Takata K, Kawashita E, Amano K, Shimohata A, Low D, Nabe T, Sago H, Alexander WS, Ginhoux F, Yamakawa K, Akiba S. Perturbation of the immune cells and prenatal neurogenesis by the triplication of the Erg gene in mouse models of Down syndrome. *Brain Pathol*. 2020 Jan;30(1):75-91.

Allen CE, Beverley PCL, Collin M, Diamond EL, Egeler RM, Ginhoux F, Glass C, Minkov M, Rollins BJ, van Halteren A. The coming of age of Langerhans cell histiocytosis. *Nat Immunol*. 2020 Jan;21(1):1-7.

Blériot C, Li S, Kairi MFBM, Newell E, Ginhoux F. Kupffer Cell Characterization by Mass Cytometry. *Methods Mol Biol*. 2020;2164:87-99.



2019

Geirsdottir L, David E, Keren-Shaul H, Weiner A, Bohlen SC, Neuber J, Balic A, Giladi A, Sheban F, Dutertre CA, Pfeifle C, Peri F, Raffo-Romero A, Vizioli J, Matiasek K, Scheiwe C, Meckel S, Mätz-Rensing K, van der Meer F, Thormodsson FR, Stadelmann C, Zilkha N, Kimchi T, Ginhoux F, Ulitsky I, Erny D, Amit I, Prinz M. Cross-Species Single-Cell Analysis Reveals Divergence of the Primate Microglia Program. *Cell*. 2019 Dec 12;179(7):1609-1622.e16.

Tenno M, Wong AYW, Ikegaya M, Miyauchi E, Seo W, See P, Kato T, Taida T, Oishi-Ohno M, Ohno H, Yoshida H, Ginhoux F, Taniuchi I. Essential functions of Runx/Cbfb in gut conventional dendritic cells for priming Ror γ + T cells. *Life Sci Alliance*. 2019 Dec 9;3(1).

Tan-Garcia A, Lai F, Sheng Yeong JP, Irac SE, Ng PY, Msallam R, Tatt Lim JC, Wai LE, Tham CYL, Choo SP, Lim T, Young DY, D'Ambrosio R, Degasperis E, Perbellini R, Newell E, Le Bert N, Ginhoux F, Bertolotti A, Chen Q, Dutertre CA. Liver fibrosis and CD206+ macrophage accumulation are suppressed by anti-GM-CSF therapy. *JHEP Rep*. 2019 Dec 6;2(1):100062

Blériot C, Ginhoux F. Understanding the Heterogeneity of Resident Liver Macrophages. *Front Immunol*. 2019 Nov 19;10:2694.

Lum FM, Narang V, Hue S, Chen J, McGovern N, Rajarethinam R, Tan JJ, Amrun SN, Chan YH, Lee CY, Chua TK, Yee WX, Yeo NK, Tan TC, Liu X, Haldenby S, Leo YS, Ginhoux F, Chan JK, Hiscox J, Chong CY, Ng LF. Immunological observations and transcriptomic analysis of trimester-specific full-term placentas from three Zika virus-infected women. *Clin Transl Immunology*. 2019 Nov 5;8(11):e01082.

Ruffin N, Gea-Mallorquí E, Brouiller F, Jouve M, Silvin A, See P, Dutertre CA, Ginhoux F, Benaroch P. Constitutive Siglec-1 expression confers susceptibility to HIV-1 infection of human dendritic cell precursors. *Proc Natl Acad Sci U S A*. 2019 Oct 22;116(43):21685-21693.

Kana V, Desland FA, Casanova-Acebes M, Ayata P, Badimon A, Nabel E, Yamamuro K, Sneeboer M, Tan IL, Flanigan ME, Rose SA, Chang C, Leader A, Le Bourhis H, Sweet ES, Tung N, Wroblewska A, Lavin Y, See P, Baccarini A, Ginhoux F, Chitu V, Stanley ER, Russo SJ, Yue Z, Brown BD, Joyner AL, De Witte LD, Morishita H, Schaefer A, Merad M. CSF-1 controls cerebellar microglia and is required for motor function and social interaction. *J Exp Med*. 2019 Oct 7;216(10):2265-2281.

Bénéchet AP, De Simone G, Di Lucia P, Cilenti F, Barbiera G, Le Bert N, Fumagalli V, Lusito E, Moalli F, Bianchessi V, Andreatta F, Zordan P, Bono E, Giustini L, Bonilla WV, Blieriot C, Kunasegaran K, Gonzalez-Aseguinolaza G, Pinschewer DD, Kennedy PTF, Naldini L, Kuka M, Ginhoux F, Cantore A, Bertolotti A, Ostuni R, Guidotti LG, Iannacone M. Dynamics and genomic landscape of CD8+ T cells undergoing hepatic priming. *Nature*. 2019 Oct;574(7777):200-205.

Cossarizza A, Chang HD, Radbruch A, Acs A, Adam D, Adam-Klages S, Agace WW, Aghaepour N, Akdis M, Allez M, Almeida LN, Alvisi G, Anderson G, Andr  I, Annunziato F, Anselmo A, Bacher P, Baldari CT, Bari S, Barnaba V, Barros-Martins J, Battistini L, Bauer W, Baumgart S, Baumgarth N, Baumjohann D,

Baying B, Bebawy M, Becher B, Beisker W, Benes V, Beyaert R, Blanco A, Boardman DA, Bogdan C, Borger JG, Borsellino G, Boulais PE, Bradford JA, Brenner D, Brinkman RR, Brooks AES, Busch DH, Büscher M, Bushnell TP, Calzetti F, Cameron G, Cammarata I, Cao X, Cardell SL, Casola S, Cassatella MA, Cavani A, Celada A, Chatenoud L, Chattopadhyay PK, Chow S, Christakou E, Čičin-Šain L, Clerici M, Colombo FS, Cook L, Cooke A, Cooper AM, Corbett AJ, Cosma A, Cosmi L, Coulie PG, Cumano A, Cvetkovic L, Dang VD, Dang-Heine C, Davey MS, Davies D, De Biasi S, Del Zotto G, Dela Cruz GV, Delacher M, Della Bella S, Dellabona P, Deniz G, Dessing M, Di Santo JP, Diefenbach A, Dieli F, Dolf A, Dörner T, Dress RJ, Dudziak D, Dustin M, Dutertre CA, Ebner F, Eckle SBG, Edinger M, Eede P, Ehrhardt GRA, Eich M, Engel P, Engelhardt B, Erdei A, Esser C, Everts B, Evrard M, Falk CS, Fehniger TA, Felipe-Benavent M, Ferry H, Feuerer M, Filby A, Filkor K, Fillatreau S, Follo M, Förster I, Foster J, Foulds GA, Frehse B, Frenette PS, Frischbutter S, Fritzsche W, Galbraith DW, Gangaev A, Garbi N, Gaudilliere B, Gazzinelli RT, Geginat J, Gerner W, Gherardin NA, Ghoreschi K, Gibellini L, Ginhoux F, Goda K, Godfrey DI, Goettlinger C, González-Navajas JM, Goodyear CS, Gori A, Grogan JL, Grummitt D, Grützkau A, Haftmann C, Hahn J, Hammad H, Hämmerling G, Hansmann L, Hansson G, Harpur CM, Hartmann S, Hauser A, Hauser AE, Haviland DL, Hedley D, Hernández DC, Herrera G, Herrmann M, Hess C, Höfer T, Hoffmann P, Hogquist K, Holland T, Höllt T, Holmdahl R, Hombrink P, Houston JP, Hoyer BF, Huang B, Huang FP, Huber JE, Huehn J, Hundemer M, Hunter CA, Hwang WYK, Iannone A, Ingelfinger F, Ivison SM, Jäck HM, Jani PK, Jávega B, Jonjic S, Kaiser T, Kalina T, Kamradt T, Kaufmann SHE, Keller B, Ketelaars SLC, Khalilnezhad A, Khan S, Kisielow J, Klenerman P, Knopf J, Koay HF, Kobow K, Kolls JK, Kong WT, Kopf M, Korn T, Kriegsmann K, Kristyanto H, Kroneis T, Krueger A, Kühne J, Kukat C, Kunkel D, Kunze-Schumacher H, Kurosaki T, Kurts C, Kvistborg P, Kwok I, Landry J, Lantz O, Lanuti P, LaRosa F, Lehuen A, LeibundGut-Landmann S, Leipold MD, Leung LYT, Levings MK, Lino AC, Liotta F, Litwin V, Liu Y, Ljunggren HG, Lohoff M, Lombardi G, Lopez L, López-Botet M, Lovett-Racke AE, Lubberts E, Luche H, Ludewig B, Lugli E, Lunemann S, Maecker HT, Maggi L, Maguire O, Mair F, Mair KH, Mantovani A, Manz RA, Marshall AJ, Martínez-Romero A, Martrus G, Marventano I, Maslinski W, Matarese G, Mattioli AV, Maueröder C, Mazzoni A, McCluskey J, McGrath M, McGuire HM, McInnes IB, Mei HE, Melchers F, Melzer S, Mielenz D, Miller SD, Mills KHG, Minderman H, Mjösberg J, Moore J, Moran B, Moretta L, Mosmann TR, Müller S, Multhoff G, Muñoz LE, Münz C, Nakayama T, Nasi M, Neumann K, Ng LG, Niedobitek A, Nourshargh S, Núñez G, O'Connor JE, Ochel A, Oja A, Ordonez D, Orfao A, Orlowski-Oliver E, Ouyang W, Oxenius A, Palankar R, Panse I, Pattanapanyasat K, Paulsen M, Pavlinic D, Penter L, Peterson P, Peth C, Petriz J, Piancone F, Pickl WF, Piconese S, Pinti M, Pockley AG, Podolska MJ, Poon Z, Pracht K, Prinz I, Pucillo CEM, Quataert SA, Quatrini L, Quinn KM, Radbruch H, Radstake TRDJ, Rahmig S, Rahn HP, Rajwa B, Ravichandran G, Raz Y, Rebhahn JA, Recktenwald D, Reimer D, Reis E Sousa C, Remmerswaal EBM, Richter L, Rico LG, Riddell A, Rieger AM, Robinson JP, Romagnani C, Rubartelli A, Ruland J, Saalmüller A, Saeys Y, Saito T, Sakaguchi S, Sala-de-Oyanguren F, Samstag Y, Sanderson S, Sandrock I, Santoni A, Sanz RB, Saresella M, Sautes-Fridman C, Sawitzki B, Schadt L, Scheffold A, Scherer HU, Schiemann M, Schildberg FA, Schimisky E, Schlitzer A, Schlosser J, Schmid S, Schmitt S, Schober K, Schraivogel D, Schuh W, Schüler T, Schulte R, Schulz AR, Schulz SR, Scottá C, Scott-Algara D, Sester DP, Shankey TV, Silva-Santos B, Simon AK, Sitnik KM, Sozzani S, Speiser DE, Spidlen J, Stahlberg A, Stall AM, Stanley N, Stark R, Stehle C, Steinmetz T, Stockinger H, Takahama Y, Takeda K, Tan L, Tárnok A, Tiegs G, Toldi G, Tornack J, Traggiai E, Trebak M, Tree TIM, Trotter J, Trowsdale J, Tsumakidou M, Ulrich H, Urbanczyk S, van de Veen W, van den Broek M, van der Pol E, Van Gassen S, Van Isterdael G, van Lier RAW, Veldhoen M, Vento-Asturias S, Vieira P, Voehringer D, Volk HD, von Borstel A, von Volkman K, Waisman A, Walker RV, Wallace PK, Wang SA, Wang XM, Ward MD, Ward-Hartstonge KA, Warnatz K, Warnes G, Warth S, Waskow C, Watson JV, Watzl C, Wegener L, Weisenburger T, Wiedemann A, Wienands J, Wilharm A, Wilkinson RJ, Willimsky G, Wing JB, Winkelmann R, Winkler TH, Wirz OF, Wong A, Wurst P, Yang JHM, Yang J, Yazdanbakhsh M, Yu L, Yue A, Zhang H, Zhao Y, Ziegler SM, Zielinski C, Zimmermann J, Zychlinsky A. Guidelines for the use of flow cytometry and cell sorting in immunological studies (second edition). *Eur J Immunol.* 2019 Oct;49(10):1457-1973.

Dutertre CA, Becht E, Irac SE, Khalilnezhad A, Narang V, Khalilnezhad S, Ng PY, van den Hoogen LL, Leong JY, Lee B, Chevrier M, Zhang XM, Yong PJA, Koh G, Lum J, Howland SW, Mok E, Chen J, Larbi A, Tan HKK, Lim TKH, Karagianni P, Tzioufas AG, Malleret B, Brody J, Albani S, van Roon J, Radstake T, Newell EW, Ginhoux F. Single-Cell Analysis of Human Mononuclear Phagocytes Reveals Subset-Defining Markers and Identifies Circulating Inflammatory Dendritic Cells. *Immunity*. 2019 Sep 17;51(3):573-589.e8.

Papadopoulou M, Tieppo P, McGovern N, Gosselin F, Chan JKY, Goetgeluk G, Dauby N, Cogan A, Donner C, Ginhoux F, Vandekerckhove B, Vermijlen D. TCR Sequencing Reveals the Distinct Development of Fetal and Adult Human V γ 9V δ 2 T Cells. *J Immunol*. 2019 Sep 15;203(6):1468-1479.

Liu Z, Gu Y, Chakarov S, Bleriot C, Kwok I, Chen X, Shin A, Huang W, Dress RJ, Dutertre CA, Schlitzer A, Chen J, Ng LG, Wang H, Liu Z, Su B, Ginhoux F. Fate Mapping via Ms4a3-Expression History Traces Monocyte-Derived Cells. *Cell*. 2019 Sep 5;178(6):1509-1525.e19.

Schyns J, Bai Q, Ruscitti C, Radermecker C, De Schepper S, Chakarov S, Farnir F, Pirottin D, Ginhoux F, Boeckxstaens G, Bureau F, Marichal T. Non-classical tissue monocytes and two functionally distinct populations of interstitial macrophages populate the mouse lung. *Nat Commun*. 2019 Sep 3;10(1):3964.

Kitic M, See P, Bruttger J, Ginhoux F, Waisman A. Novel Microglia Depletion Systems: A Genetic Approach Utilizing Conditional Diphtheria Toxin Receptor Expression and a Pharmacological Model Based on the Blocking of Macrophage Colony-Stimulating Factor 1 Receptor. *Methods Mol Biol*. 2019;2034:217-230.

Thion MS, Mosser CA, Férézou I, Grisel P, Baptista S, Low D, Ginhoux F, Garel S, Audinat E. Biphasic Impact of Prenatal Inflammation and Macrophage Depletion on the Wiring of Neocortical Inhibitory Circuits. *Cell Rep*. 2019 Jul 30;28(5):1119-1126.e4.

Jaitin DA, Adlung L, Thaïss CA, Weiner A, Li B, Descamps H, Lundgren P, Bleriot C, Liu Z, Deczkowska A, Keren-Shaul H, David E, Zmora N, Eldar SM, Lubezky N, Shibolet O, Hill DA, Lazar MA, Colonna M, Ginhoux F, Shapiro H, Elinav E, Amit I. Lipid-Associated Macrophages Control Metabolic Homeostasis in a Trem2-Dependent Manner. *Cell*. 2019 Jul 25;178(3):686-698.e14.

Fujita K, Chakarov S, Kobayashi T, Sakamoto K, Voisin B, Duan K, Nakagawa T, Horiuchi K, Amagai M, Ginhoux F, Nagao K. Cell-autonomous FLT3L shedding via ADAM10 mediates conventional dendritic cell development in mouse spleen. *Proc Natl Acad Sci U S A*. 2019 Jul 16;116(29):14714-14723.

Dress RJ, Dutertre CA, Giladi A, Schlitzer A, Low I, Shadan NB, Tay A, Lum J, Kairi MFBM, Hwang YY, Becht E, Cheng Y, Chevrier M, Larbi A, Newell EW, Amit I, Chen J, Ginhoux F. Plasmacytoid dendritic cells develop from Ly6D⁺ lymphoid progenitors distinct from the myeloid lineage. *Nat Immunol*. 2019 Jul;20(7):852-864.

Radulescu CI, Garcia-Miralles M, Sidik H, Bardile CF, Yusof NABM, Lee HU, Ho EXP, Chu CW, Layton E, Low D, De Sessions PF, Pettersson S, Ginhoux F, Pouladi MA. Manipulation of microbiota reveals altered callosal myelination and white matter plasticity in a model of Huntington disease. *Neurobiol Dis*. 2019 Jul;127:65-75.

Kim B, Fukuda M, Lee JY, Su D, Sanu S, Silvin A, Khoo ATT, Kwon T, Liu X, Chi W, Liu XG, Choi S, Wan DSY, Park SJ, Kim JS, Ginhoux F, Je HS and Chang YT. Visualizing Microglia with a Fluorescence Turn-On Ugt1a7c Substrate. *Angew Chem Int Ed Engl*. 2019 Jun 11;58(24):7972-7976.

Ahn M, Anderson DE, Zhang Q, Tan CW, Lim BL, Luko K, Wen M, Chia WN, Mani S, Wang LC, Ng JHJ, Sobota RM, Dutertre CA, Ginhoux F, Shi ZL, Irving AT, Wang LF. Dampened NLRP3-mediated inflammation in bats and implications for a special viral reservoir host. *Nat Microbiol*. 2019 May;4(5):789-799.

Blériot C, Ng LG, Ginhoux F. "Cloaking" on Time: A Cover-Up Act by Resident Tissue Macrophages. *Cell*. 2019 Apr 18;177(3):514-516.

Janela B, Patel AA, Lau MC, Goh CC, Msallam R, Kong WT, Fehlings M, Hubert S, Lum J, Simoni Y, Malleret B, Zolezzi F, Chen J, Poidinger M, Satpathy AT, Briseno C, Wohn C, Malissen B, Murphy KM, Maini AA, Vanhoutte L, Williams M, Vial E, Hennequin L, Newell E, Ng LG, Musette P, Yona S, Hacini-Rachinel F, Ginhoux F. A Subset of Type I Conventional Dendritic Cells Controls Cutaneous Bacterial Infections through VEGF α -Mediated Recruitment of Neutrophils. *Immunity*. 2019 Apr 16;50(4):1069-1083.e8.

O'Koren EG, Yu C, Klingeborn M, Wong AYW, Prigge CL, Mathew R, Kalnitsky J, Msallam RA, Silvin A, Kay JN, Bowes Rickman C, Arshavsky VY, Ginhoux F, Merad M, Saban DR. Microglial Function Is Distinct in Different Anatomical Locations during Retinal Homeostasis and Degeneration. *Immunity*. 2019 Mar 19;50(3):723-737.e7.

Bensussan A, Janela B, Thonnart N, Bagot M, Musette P, Ginhoux F, Marie-Cardine A. Identification of CD39 as a Marker for the Circulating Malignant T-Cell Clone of Sézary Syndrome Patients. *J Invest Dermatol*. 2019 Mar;139(3):725-728.

Chakarov S, Lim HY, Tan L, Lim SY, See P, Lum J, Zhang XM, Foo S, Nakamizo S, Duan K, Kong WT, Gentek R, Balachander A, Carbajo D, Bleriot C, Malleret B, Tam JKC, Baig S, Shabeer M, Toh SES, Schlitzer A, Larbi A, Marichal T, Malissen B, Chen J, Poidinger M, Kabashima K, Bajenoff M, Ng LG, Angeli V, Ginhoux F. Two distinct interstitial macrophage populations coexist across tissues in specific subtissular niches. *Science*. 2019 Mar 15;363(6432).
[Abstract](#), [Reprint](#), [Full text](#)

Ooi J, Langley SR, Xu X, Utami KH, Sim B, Huang Y, Harmston NP, Tay YL, Ziaei A, Zeng R, Low D, Aminkeng F, Sobota RM, Ginhoux F, Petretto E, Pouladi MA. Unbiased Profiling of Isogenic Huntington Disease hPSC-Derived CNS and Peripheral Cells Reveals Strong Cell-Type Specificity of CAG Length Effects. *Cell Rep*. 2019 Feb 26;26(9):2494-2508.e7.

Hammond TR, Dufort C, Dissing-Olesen L, Giera S, Young A, Wysoker A, Walker AJ, Gergits F, Segel M, Nemesh J, Marsh SE, Saunders A, Macosko E, Ginhoux F, Chen J, Franklin RJM, Piao X, McCarroll SA, Stevens B. Single-Cell RNA Sequencing of Microglia throughout the Mouse Lifespan and in the Injured Brain Reveals Complex Cell-State Changes. *Immunity*. 2019 Jan 15;50(1):253-271.e6.

Silvin A, Ginhoux F. Fat-fated microglial dysfunction. *EMBO J*. 2019 Jan 15;38(2):e101176.

Dick SA, Macklin JA, Nejat S, Momen A, Clemente-Casares X, Althagafi MG, Chen J, Kantores C, Hosseinzadeh S, Aronoff L, Wong A, Zaman R, Barbu I, Besla R, Lavine KJ, Razani B, Ginhoux F, Husain M, Cybulsky MI, Robbins CS, Epelman S. Self-renewing resident cardiac macrophages limit adverse remodeling following myocardial infarction. *Nat Immunol*. 2019 Jan;20(1):29-39.

Kabashima K, Honda T, Ginhoux F, Egawa G. The immunological anatomy of the skin. *Nat Rev Immunol*. 2019 Jan;19(1):19-30.



2018

Loh JT, Lim TJF, Ikumi K, Matoba T, Janela B, Gunawan M, Toyama T, Bunjamin M, Ng LG, Poidinger M, Morita A, Ginhoux F, Yamazaki S, Lam KP, Su IH. Ezh2 Controls Skin Tolerance through Distinct Mechanisms in Different Subsets of Skin Dendritic Cells. *iScience*. 2018 Dec 21;10:23-39

Becht E, McInnes L, Healy J, Dutertre CA, Kwok IWH, Ng LG, Ginhoux F, Newell EW. Dimensionality reduction for visualizing single-cell data using UMAP. *Nat Biotechnol*. 2018 Dec 3. [Epub ahead of print]

Gentek R, Ghigo C, Hoeffel G, Jorquera A, Msallam R, Wienert S, Klauschen F, Ginhoux F, Bajénoff M. Epidermal $\gamma\delta$ T cells originate from yolk sac hematopoiesis and clonally self-renew in the adult. *J Exp Med*. 2018 Dec 3;215(12):2994-3005.

Braza MS, van Leent MMT, Lameijer M, Sanchez-Gaytan BL, Arts RJW, Perez-Medina C, Conde P, Garcia MR, Gonzalez-Perez M, Brahmachary M, Fay F, Kluza E, Kossatz S, Dress RJ, Salem F, Rialdi A, Reiner T, Boros P, Strijkers GJ, Calcagno CC, Ginhoux F, Marazzi I, Lutgens E, Nicolaes GAF, Weber C, Swirski FK, Nahrendorf M, Fisher EA, Duivenvoorden R, Fayad ZA, Netea MG, Mulder WJM, Ochando J. Inhibiting Inflammation with Myeloid Cell-Specific Nanobiologics Promotes Organ Transplant Acceptance. *Immunity*. 2018 Nov 20;49(5):819-828.e6.

Angelim MKSC, Maia LMSS, Mouffle C, Ginhoux F, Low D, Amancio-Dos-Santos A, Makhoul J, Le Corrond H, Mangin JM, Legendre P. Embryonic macrophages and microglia ablation alter the development of dorsal root ganglion sensory neurons in mouse embryos. *Glia*. 2018 Nov;66(11):2470-2486.

Lee CZW, Kozaki T, Ginhoux F. Studying tissue macrophages in vitro: are iPSC-derived cells the answer? *Nat Rev Immunol*. 2018 Nov;18(11):726.

See P, Lum J, Chen J, Ginhoux F. A Single-Cell Sequencing Guide for Immunologists. *Front Immunol*. 2018 Oct 23;9:2425.

Thion MS, Ginhoux F, Garel S. Microglia and early brain development: An intimate journey. *Science*. 2018 Oct 12;362 (6411), 185-189.

Silvin A, Ginhoux F. Microglia heterogeneity along a spatio-temporal axis: More questions than answers. *Glia*. 2018 Oct;66(10):2045-2057.

Blériot C, Ginhoux F. Macrophage depletion in cancer therapy: A double-edged sword. *Cell Immunol*. 2018 Sep;331:178-179.

Lim HY, Lim SY, Tan CK, Thiam CH, Goh CC, Carbajo D, Chew SHS, See P, Chakarov S, Wang XN, Lim LH, Johnson LA, Lum J, Fong CY, Bongso A, Biswas A, Goh C, Evrard M, Yeo KP, Basu R, Wang JK, Tan Y, Jain R, Tikoo S, Choong C, Weninger W, Poidinger M, Stanley RE, Collin M, Tan NS, Ng LG, Jackson DG,

Ginhoux F, Angeli V. Hyaluronan Receptor LYVE-1-Expressing Macrophages Maintain Arterial Tone through Hyaluronan-Mediated Regulation of Smooth Muscle Cell Collagen. *Immunity*. 2018 Aug 21;49(2):326-341.e7.

Ginhoux F, Williams M. Editorial for Cellular Immunology special issue on "Tissue Macrophages". *Cell Immunol*. 2018 Aug;330:1-4.

Low D, Ginhoux F. Recent advances in the understanding of microglial development and homeostasis. *Cell Immunol*. 2018 Aug;330:68-78.

Hoeffel G, Ginhoux F. Fetal monocytes and the origins of tissue-resident macrophages. *Cell Immunol*. 2018 Aug;330:5-15.

Giladi A, Paul F, Herzog Y, Lubling Y, Weiner A, Yofe I, Jaitin D, Cabezas-Wallscheid N, Dress R, Ginhoux F, Trumpp A, Tanay A, Amit I. Single-cell characterization of haematopoietic progenitors and their trajectories in homeostasis and perturbed haematopoiesis. *Nat Cell Biol*. 2018 Jul;20(7):836-846.

Ginhoux F, Garel S. The mysterious origins of microglia. *Nat Neurosci*. 2018 Jul;21(7):897-899.

Gentek R, Ghigo C, Hoeffel G, Bulle MJ, Msallam R, Gautier G, Launay P, Chen J, Ginhoux F, Bajénoff M. Hemogenic Endothelial Fate Mapping Reveals Dual Developmental Origin of Mast Cells. *Immunity*. 2018 Jun 19;48(6):1160-1171.e5.

Collin M, Ginhoux F. Human dendritic cells. *Semin Cell Dev Biol*. 2018 May 1. [Epub ahead of print]

Dress RJ, Wong AY, Ginhoux F. Homeostatic control of dendritic cell numbers and differentiation. *Immunol Cell Biol*. 2018 May;96(5):463-476.

Braza MS, Conde P, Garcia M, Cortegano I, Brahmachary M, Pothula V, Fay F, Boros P, Werner SA, Ginhoux F, Mulder WJM, Ochando J. Neutrophil derived CSF1 induces macrophage polarization and promotes transplantation tolerance. *Am J Transplant*. 2018 May;18(5):1247-1255.

Cooper JP, Ginhoux F, Jessberger S, Overholtzer M. Life Science Alliance, from the Academic Editors. *Life Sci Alliance*. 2018 Mar 20;1(1):e201800044.

Mencarelli A, Khameneh HJ, Fric J, Vacca M, El Daker S, Janela B, Tang JP, Nabti S, Balachander A, Lim TS, Ginhoux F, Ricciardi-Castagnoli P, Mortellaro A. Calcineurin-mediated IL-2 production by CD11b^{high}MHCII⁺ myeloid cells is crucial for intestinal immune homeostasis. *Nat Commun*. 2018 Mar 16;9(1):1102.

Seet LF, Toh LZ, Chu S, Finger SN, Ginhoux F, Hong W, Wong TT. Bevacizumab Promotes T-Cell-Mediated Collagen Deposition in the Mouse Model of Conjunctival Scarring. *Invest Ophthalmol Vis Sci*. 2018 Mar 1;59(3):1682-1692.

Evrard M, Kwok IWH, Chong SZ, Teng KWW, Becht E, Chen J, Sieow JL, Penny HL, Ching GC, Devi S, Adrover JM, Li JLY, Liong KH, Tan L, Poon Z, Foo S, Chua JW, Su IH, Balabanian K, Bachelier F, Biswas SK, Larbi A, Hwang WYK, Madan V, Koeffler HP, Wong SC, Newell EW, Hidalgo A, Ginhoux F, Ng LG. Developmental Analysis of Bone Marrow Neutrophils Reveals Populations Specialized in Expansion, Trafficking, and Effector Functions. *Immunity*. 2018 Feb 20;48(2):364-379.e8.

Chen J, Rénia L, Ginhoux F. Constructing cell lineages from single-cell transcriptomes. *Mol Aspects Med.* 2018 Feb;59:95-113.

Fehlings M, Chakarov S, Simoni Y, Shivshankar B, Ginhoux F, Newell EW. Multiplex peptide-MHC tetramer staining using mass cytometry for deep analysis of the influenza-specific T-cell response in mice. *J Immunol Methods.* 2018 Feb;453:30-36.

Thion MS, Low D, Silvin A, Chen J, Grisel P, Schulte-Schrepping J, Blecher R, Ulas T, Squarzoni P, Hoeffel G, Croupier F, Siopi E, David FS, Scholz C, Shihui F, Lum J, Amoyo AA, Larbi A, Poidinger M, Buttgerit A, Lledo PM, Greter M, Chan JKY, Amit I, Beyer M, Schultze JL, Schlitzer A, Pettersson S, Ginhoux F, Garel S. Microbiome Influences Prenatal and Adult Microglia in a Sex-Specific Manner. *Cell.* 2018 Jan 25;172(3):500-516.e16.



2017

Sander J, Schmidt SV, Cirovic B, McGovern N, Papantonopoulou O, Hardt AL, Aschenbrenner AC, Kreer C, Quast T, Xu AM, Schmidleithner LM, Theis H, Thi Huong LD, Sumatoh HRB, Lauterbach MAR, Schulte-Schrepping J, Günther P, Xue J, Baßler K, Ulas T, Klee K, Katzmarski N, Herresthal S, Krebs W, Martin B, Latz E, Händler K, Kraut M, Kolanus W, Beyer M, Falk CS, Wiegmann B, Burgdorf S, Melosh NA, Newell EW, Ginhoux F, Schlitzer A, Schultze JL. Cellular Differentiation of Human Monocytes Is Regulated by Time-Dependent Interleukin-4 Signaling and the Transcriptional Regulator NCOR2. *Immunity.* 2017 Dec 19;47(6):1051-1066.e12.

Chong KKL, Tay WH, Janela B, Yong AMH, Liew TH, Madden L, Keogh D, Barkham TMS, Ginhoux F, Becker DL, Kline KA. Enterococcus faecalis modulates immune activation and slows healing during wound infection. *J Infect Dis.* 2017 Dec 19;216(12):1644-1654.

Saili KS, Zurlinden TJ, Schwab AJ, Silvin A, Baker NC, Hunter ES 3rd, Ginhoux F, Knudsen TB. Blood-brain barrier development: Systems modeling and predictive toxicology. *Birth Defects Res.* 2017 Dec 1;109(20):1680-1710.

Ginhoux F. New beginnings. *Nat Rev Immunol.* 2017 Dec;17(12):732.

Tien BYQ, Goh HMS, Chong KKL, Bhaduri-Tagore S, Holec S, Dress R, Ginhoux F, Ingersoll MA, Williams RBH, Kline KA. Enterococcus faecalis promotes innate immune suppression and polymicrobial catheter-associated urinary tract infection. *Infect Immun.* 2017 Nov 17;85(12).

Nakamizo S, Honda T, Adachi A, Nagatake T, Kunisawa J, Kitoh A, Otsuka A, Dainichi T, Nomura T, Ginhoux F, Ikuta K, Egawa G, Kabashima K. High fat diet exacerbates murine psoriatic dermatitis by increasing the number of IL-17-producing $\gamma\delta$ T cells. *Sci Rep.* 2017 Oct 26;7(1):14076.

Tenno M, Shiroguchi K, Muroi S, Kawakami E, Koseki K, Kryukov K, Imanishi T, Ginhoux F, Taniuchi I. Cbfb2 deficiency preserves Langerhans cell precursors by lack of selective TGF β receptor signaling. *J Exp Med.* 2017 Oct 2;214(10):2933-2946.

Ginhoux F, Bleriot C, Lecuit M. Dying for a Cause: Regulated Necrosis of Tissue-Resident Macrophages upon Infection. *Trends Immunol.* 2017 Oct;38(10):693-695.

Tan-Garcia A, Wai LE, Zheng D, Ceccarello E, Jo J, Banu N, Khakpoor A, Chia A, Y L Tham C, Tan AT, Hong M, Keng CT, Rivino L, Tan KC, Hoe Lee K, Lim SG, Newell EW, Pavelka N, Chen J, Ginhoux F, Chen Q, Bertolotti A, Dutertre CA. Intrahepatic CD206+ macrophages contribute to inflammation in advanced viral-related liver disease. *J Hepatol.* 2017 Sep;67(3):490-500.

Sierro F, Evrard M, Rizzetto S, Melino M, Mitchell AJ, Florido M, Beattie L, Walters SB, Tay SS, Lu B, Holz LE, Roediger B, Wong YC, Warren A, Ritchie W, McGuffog C, Weninger W, Le Couteur DG, Ginhoux F, Britton WJ, Heath WR, Saunders BM, McCaughan GW, Luciani F, MacDonald KPA, Ng LG, Bowen DG, Bertolino P. A Liver Capsular Network of Monocyte-Derived Macrophages Restricts Hepatic Dissemination of Intrahepatic Bacteria by Neutrophil Recruitment. *Immunity.* 2017 Aug 15;47(2):374-388.e6.

Takata K, Kozaki T, Lee CZW, Thion MS, Otsuka M, Lim S, Utami KH, Fidan K, Park DS, Malleret B, Chakarov S, See P, Low D, Low G, Garcia-Miralles M, Zeng R, Zhang J, Goh CC, Gul A, Hubert S, Lee B, Chen J, Low I, Shadan NB, Lum J, Wei TS, Mok E, Kawanishi S, Kitamura Y, Larbi A, Poidinger M, Renia L, Ng LG, Wolf Y, Jung S, Önder T, Newell E, Huber T, Ashihara E, Garel S, Pouladi MA, Ginhoux F. Induced-Pluripotent-Stem-Cell-Derived Primitive Macrophages Provide a Platform for Modeling Tissue-Resident Macrophage Differentiation and Function. *Immunity.* 2017 Jul 18;47(1):183-198.e6.

McGovern N, Shin A, Low G, Low D, Duan K, Yao LJ, Msallam R, Low I, Shadan NB, Sumatoh HR, Soon E, Lum J, Mok E, Hubert S, See P, Kunxiang EH, Lee YH, Janela B, Choolani M, Mattar CNZ, Fan Y, Lim TKH, Hong DK, Tan KK, Tam JKC, Schuster C, Elbe-Bürger A, Wang XN, Bigley V, Collin M, Haniffa M, Schlitzer A, Poidinger M, Albani S, Larbi L, Newell EW, Chan JKY, Ginhoux F. Human fetal dendritic cells promote prenatal T-cell immune suppression through arginase-2. *Nature.* 2017 Jun 29;546(7660):662-666.

See P, Dutertre CA, Chen J, Günther P, McGovern N, Irac SE, Gunawan M, Beyer M, Händler K, Duan K, Sumatoh HRB, Ruffin N, Jouve M, Gea-Mallorquí E, Hennekam RCM, Lim T, Yip CC, Wen M, Malleret B, Low I, Shadan NB, Fen CFS, Tay A, Lum J, Zolezzi F, Larbi A, Poidinger M, Chan JKY, Chen Q, Renia L, Haniffa M, Benaroch P, Schlitzer A, Schultze JL, Newell EW, Ginhoux F. Mapping the human DC lineage through the integration of high-dimensional techniques. *Science.* 2017 Jun 9;356(6342).

Zhu H, Lou F, Yin Q, Gao Y, Sun Y, Bai J, Xu Z, Liu Z, Cai W, Ke F, Zhang L, Zhou H, Wang H, Wang G, Chen X, Zhang H, Wang Z, Ginhoux F, Lu C, Su B, Wang H. RIG-I antiviral signaling drives interleukin-23 production and psoriasis-like skin disease. *EMBO Mol Med.* 2017 May;9(5):589-604.

Kam YW, Lee CY, Teo TH, Howland SW, Amrun SN, Lum FM, See P, Kng NQ, Huber RG, Xu MH, Tan HL, Choo A, Maurer-Stroh S, Ginhoux F, Fink K, Wang CI, Ng LFP, Rénia L. Cross-reactive dengue human monoclonal antibody prevents severe pathologies and death from Zika virus infections. *JCI Insight.* 2017 Apr 20;2(8).

Lum FM, Low DK, Fan Y, Tan JJ, Lee B, Chan JK, Rénia L, Ginhoux F, Ng LF. Zika Virus Infects Human Fetal Brain Microglia and Induces Inflammation. *Clin Infect Dis.* 2017 Apr 1;64(7):914-920.

Sabatel C, Radermecker C, Fievez L, Paulissen G, Chakarov S, Fernandes C, Olivier S, Toussaint M, Pirottin D, Xiao X, Quatresooz P, Sirard JC, Cataldo D, Gillet L, Bouabe H, Desmet CJ, Ginhoux F, Marichal T, Bureau F. Exposure to Bacterial CpG DNA Protects from Airway Allergic Inflammation by Expanding Regulatory Lung Interstitial Macrophages. *Immunity.* 2017 Mar 21;46(3):457-473.

Xu X, Tay Y, Sim B, Yoon SI, Huang Y, Ooi J, Utami KH, Ziaei A, Ng B, Radulescu C, Low D, Ng AY, Loh M, Venkatesh B, Ginhoux F, Augustine GJ, Pouladi MA. Reversal of Phenotypic Abnormalities by CRISPR/Cas9-Mediated Gene Correction in Huntington Disease Patient-Derived Induced Pluripotent Stem Cells. *Stem Cell Reports*. 2017 Mar 14;8(3):619-633.

Simoni Y, Fehlings M, Kløverpris HN, McGovern N, Koo SL, Loh CY, Lim S, Kurioka A, Fergusson JR, Tang CL, Kam MH, Dennis K, Lim TK, Fui AC, Hoong CW, Chan JK, Curotto de Lafaille M, Narayanan S, Baig S, Shabeer M, Toh SE, Tan HK, Anicete R, Tan EH, Takano A, Klenerman P, Leslie A, Tan DS, Tan IB, Ginhoux F, Newell EW. Human Innate Lymphoid Cell Subsets Possess Tissue-Type Based Heterogeneity in Phenotype and Frequency. *Immunity*. 2017 Jan 17;46(1):148-161.



2016

Heidkamp GF, Sander J, Lehmann CHK, Heger L, Eissing N, Baranska A, Lühr JJ, Hoffmann A, Reimer KC, Lux A, Söder S, Hartmann A, Zenk J, Ulas T, McGovern N, Alexiou C, Spriewald B, Mackensen A, Schuler G, Schauf B, Forster A, Repp R, Fasching PA, Purbojo A, Cesnjevar R, Ullrich E, Ginhoux F, Schlitzer A, Nimmerjahn F, Schultze JL, Dudziak D. Human lymphoid organ dendritic cell identity is predominantly dictated by ontogeny, not tissue microenvironment. *Sci Immunol*. 2016 Dec 16;1(6).

Cerny D, Thi Le DH, The TD, Zuest R, Kg S, Velumani S, Khor CC, Mori L, Simmons CP, Poidinger M, Zolezzi F, Ginhoux F, Haniffa M, Wills B, Fink K. Complete human CD1a deficiency on Langerhans cells due to a rare point mutation in the coding sequence. *J Allergy Clin Immunol*. 2016 Dec;138(6):1709-1712.e11.

Zhou P, Chionh YT, Irac SE, Ahn M, Jia Ng JH, Fossum E, Bogen B, Ginhoux F, Irving AT, Dutertre CA, Wang LF. Unlocking bat immunology: establishment of Pteropus alecto bone marrow-derived dendritic cells and macrophages. *Sci Rep*. 2016 Dec 9;6:38597.

Martínez Gómez JM, Periasamy P, Dutertre CA, Irving AT, Ng JH, Crameri G, Baker ML, Ginhoux F, Wang LF, Alonso S. Phenotypic and functional characterization of the major lymphocyte populations in the fruit-eating bat Pteropus alecto. *Sci Rep*. 2016 Nov 24;6:37796.

Chong SZ, Evrard M, Devi S, Chen J, Lim JY, See P, Zhang Y, Adrover JM, Lee B, Tan L, Li JL, Liong KH, Phua C, Balachander A, Boey A, Liebl D, Tan SM, Chan JK, Balabanian K, Harris JE, Bianchini M, Weber C, Duchene J, Lum J, Poidinger M, Chen Q, Rénia L, Wang CI, Larbi A, Randolph GJ, Weninger W, Looney MR, Krummel MF, Biswas SK, Ginhoux F, Hidalgo A, Bachelier F, Ng LG. CXCR4 identifies transitional bone marrow premonocytes that replenish the mature monocyte pool for peripheral responses. *J Exp Med*. 2016 Oct 17;213(11):2293-2314.

Egeler RM, Katewa S, Leenen PJ, Beverley P, Collin M, Ginhoux F, Arceci RJ, Rollins BJ. Langerhans cell histiocytosis is a neoplasm and consequently its recurrence is a relapse: In memory of Bob Arceci. *Pediatr Blood Cancer*. 2016 Oct;63(10):1704-12.

Guilliams M, Dutertre CA, Scott CL, McGovern N, Sichien D, Chakarov S, Van Gassen S, Chen J, Poidinger M, De Prijck S, Tavernier SJ, Low I, Irac SE, Mattar CN, Sumatoh HR, Low GH, Chung TJ, Chan DK, Tan KK, Hon TL, Fossum E, Bogen B, Choolani M, Chan JK, Larbi A, Luche H, Henri S, Saeys Y, Newell EW, Lambrecht BN, Malissen B, Ginhoux F. Unsupervised High-Dimensional Analysis Aligns Dendritic Cells across Tissues and Species. *Immunity*. 2016 Sep 20;45(3):669-84.

Chauhan S, Diril MK, Lee JH, Bisteau X, Manoharan V, Adhikari D, Ratnacaram CK, Janela B, Noffke J, Ginhoux F, Coppola V, Liu K, Tessarollo L, Kaldis P. Cdk2 catalytic activity is essential for meiotic cell division in vivo. *Biochem J*. 2016 Sep 15;473(18):2783-98.

Andreasson KI, Bachstetter AD, Colonna M, Ginhoux F, Holmes C, Lamb B, Landreth G, Lee DC, Low D, Lynch MA, Monsonogo A, O'Banion MK, Pekny M, Puschmann T, Russek-Blum N, Sandusky LA, Selenica MB, Takata K, Teeling J, Town T, Van Eldik LJ. Targeting innate immunity for neurodegenerative disorders of the central nervous system. *J Neurochem*. 2016 Sep;138(5):653-93.

Wong MT, Ong DE, Lim FS, Teng KW, McGovern N, Narayanan S, Ho WQ, Cerny D, Tan HK, Anicete R, Tan BK, Lim TK, Chan CY, Cheow PC, Lee SY, Takano A, Tan EH, Tam JK, Tan EY, Chan JK, Fink K, Bertoletti A, Ginhoux F, Curotto de Lafaille MA, Newell EW. A High-Dimensional Atlas of Human T Cell Diversity Reveals Tissue-Specific Trafficking and Cytokine Signatures. *Immunity*. 2016 Aug 16;45(2):442-56.

Chng KR, Tay AS, Li C, Ng AH, Wang J, Suri BK, Mata SA, McGovern N, Janela B, Wong XF, Sio YY, Au BV, Wilm A, De Sessions PF, Lim TC, Tang MB, Ginhoux F, Connolly JE, Lane EB, Chew FT, Common JE, Nagarajan N. Whole metagenome profiling reveals skin microbiome-dependent susceptibility to atopic dermatitis flare. *Nat Microbiol*. 2016 Jul 11;1(9):16106.

Chen J, Schlitzer A, Chakarov S, Ginhoux F, Poidinger M. Mpath maps multi-branching single-cell trajectories revealing progenitor cell progression during development. *Nat Commun*. 2016 Jun 30;7:11988.

Penny HL, Sieow JL, Adriani G, Yeap WH, See Chi Ee P, San Luis B, Lee B, Lee T, Mak SY, Ho YS, Lam KP, Ong CK, Huang RY, Ginhoux F, Rotzschke O, Kamm RD, Wong SC. Warburg metabolism in tumor-conditioned macrophages promotes metastasis in human pancreatic ductal adenocarcinoma. *Oncoimmunology*. 2016 Jun 21;5(8):e1191731.

Ginhoux F, Guilliams M, Naik SH. Editorial: Dendritic Cell and Macrophage Nomenclature and Classification. *Front Immunol*. 2016 May 2;7:168.

Carpentier S, Vu Manh TP, Chelbi R, Henri S, Malissen B, Haniffa M, Ginhoux F, Dalod M. Comparative genomics analysis of mononuclear phagocyte subsets confirms homology between lymphoid tissue-resident and dermal XCR1+ DCs in mouse and human and distinguishes them from Langerhans cells. *J Immunol Methods*. 2016 May;432:35-49.

McGovern N, Schlitzer A, Janela B, Ginhoux F. Protocols for the Identification and Isolation of Antigen-Presenting Cells in Human and Mouse Tissues. *Methods Mol Biol*. 2016;1423:169-80.

Lau J, Goh CC, Devi S, Keeble J, See P, Ginhoux F, Ng LG. Intravital multiphoton imaging of mouse tibialis anterior muscle. *IntraVital*. 2016 Apr 8; 5:2, e1156272

Salmon H, Idoyaga J, Rahman A, Leboeuf M, Remark R, Jordan S, Casanova-Acebes M, Khudoynazarova M, Agudo J, Tung N, Chakarov S, Rivera C, Hogstad B, Bosenberg M, Hashimoto D, Gnjjatic S, Bhardwaj N, Palucka AK, Brown BD, Brody J, Ginhoux F, Merad M. Expansion and Activation of CD103(+)

Dendritic Cell Progenitors at the Tumor Site Enhances Tumor Responses to Therapeutic PD-L1 and BRAF Inhibition. *Immunity*. 2016 Apr 19;44(4):924-38.

Ochando J, Kwan WH, Ginhoux F, Hutchinson JA, Hashimoto D, Collin M. The mononuclear phagocyte system in organ transplantation. *Am J Transplant*. 2016 Apr;16(4):1053-69.

Ohta T, Sugiyama M, Hemmi H, Yamazaki C, Okura S, Sasaki I, Fukuda Y, Orimo T, Ishii KJ, Hoshino K, Ginhoux F, Kaisho T. Crucial roles of XCR1-expressing dendritic cells and the XCR1-XCL1 chemokine axis in intestinal immune homeostasis. *Sci Rep*. 2016 Mar 23;6:23505.

Ginhoux F, Guilliams M. Tissue-Resident Macrophage Ontogeny and Homeostasis. *Immunity*. 2016 Mar 15;44(3):439-49.

2015

Ginhoux F, Schultze JL, Murray PJ, Ochando J, Biswas SK. New insights into the multidimensional concept of macrophage ontogeny, activation and function. *Nat Immunol*. 2015 Dec 17;17(1):34-40.

Paul F, Arkin Y, Giladi A, Jaitin DA, Kenigsberg E, Keren-Shaul H, Winter D, Lara-Astiaso D, Gury M, Weiner A, David E, Cohen N, Lauridsen FK, Haas S, Schlitzer A, Mildner A, Ginhoux F, Jung S, Trumpp A, Porse BT, Tanay A, Amit I. Transcriptional Heterogeneity and Lineage Commitment in Myeloid Progenitors. *Cell*. 2015 Dec 17;163(7):1663-77.

Vétizou M, Pitt JM, Daillère R, Lepage P, Waldschmitt N, Flament C, Rusakiewicz S, Routy B, Roberti MP, Duong CP, Poirier-Colame V, Roux A, Becharef S, Formenti S, Golden E, Cording S, Eberl G, Schlitzer A, Ginhoux F, Mani S, Yamazaki T, Jacquelot N, Enot DP, Bérard M, Nigou J, Opolon P, Eggermont A, Woerther PL, Chachaty E, Chaput N, Robert C, Mateus C, Kroemer G, Raoult D, Boneca IG, Carbonnel F, Chamaillard M, Zitvogel L. Anticancer immunotherapy by CTLA-4 blockade relies on the gut microbiota. *Science*. 2015 Nov 27;350(6264):1079-84.

Waisman A, Ginhoux F, Greter M, Bruttger J. Homeostasis of Microglia in the Adult Brain: Review of Novel Microglia Depletion Systems. *Trends Immunol*. 2015 Oct;36(10):625-36.

Hoeffel G, Ginhoux F. Ontogeny of Tissue-Resident Macrophages. *Front Immunol*. 2015 Sep 22;6:486.

Almeida FF, Tenno M, Brzostek J, Li JL, Allies G, Hoeffel G, See P, Ng LG, Fehling HJ, Gascoigne NR, Taniuchi I, Ginhoux F. Identification of a novel lymphoid population in the murine epidermis. *Sci Rep*. 2015 Jul 30;5:12554.

Schlitzer A, Sivakamasundari V, Chen J, Sumatoh HR, Schreuder J, Lum J, Malleret B, Zhang SQ, Larbi A, Zolezzi F, Renia L, Poidinger M, Naik S, Newell EW, Robson P, Ginhoux F. Identification of cDC1- and cDC2-committed DC progenitors reveals early lineage priming at the common DC progenitor stage in the bone marrow. *Nat Immunol*. 2015 Jul;16(7):718-28.

Ginhoux F and Prinz M. Origin of Microglia: Currents Concepts and Past Controversies. *Cold Spring Harb Perspect Biol*. 2015 Jul 1;7(8).

Heymann F, Peusquens J, Ludwig-Portugall I, Kohlhepp M, Ergen C, Niemiets P, Martin C, van Rooijen N, Ochando JC, Randolph GJ, Luedde T, Ginhoux F, Kurts C, Trautwein C, Tacke F. Liver inflammation abrogates immunological tolerance induced by Kupffer cells. *Hepatology*. 2015 Jul;62(1):279-91.

Li L, Ng DS, Mah W, Almeida FF, Rahmat SA, Rao VK, Leow SC, Laudisi F, Peh MT, Goh AM, Lim JS, Wright GD, Mortellaro A, Taneja R, Ginhoux F, Lee CG, Moore PK, Lane DP. A unique role for p53 in the regulation of M2 macrophage polarization. *Cell Death Differ*. 2015 Jul;22(7):1081-93.

Conde P, Rodriguez M, van der Touw W, Jimenez A, Burns M, Miller J, Brahmachary M, Chen HM, Boros P, Rausell-Palamos F, Yun TJ, Riquelme P, Rastrojo A, Aguado B, Stein-Streilein J, Tanaka M, Zhou L, Zhang J, Lowary TL, Ginhoux F, Park CG, Cheong C, Brody J, Turley SJ, Lira SA, Bronte V, Gordon S, Heeger PS, Merad M, Hutchinson J, Chen SH, Ochando J. DC-SIGN+ Macrophages Control the Induction of Transplantation Tolerance. *Immunity*. 2015 Jun 16;42(6):1143-58.

Takata K, Ginhoux F. Poised for action: USP18 restrains microglial activation in the white matter. *EMBO J*. 2015 Jun 12;34(12):1603-5.

Schlitzer A, McGovern N, Ginhoux F. Dendritic cells and monocyte-derived cells: Two complementary and integrated functional systems. *Semin Cell Dev Biol*. 2015 May;41:9-22.

Gunawan M, Venkatesan N, Loh JT, Wong JF, Berger H, Neo WH, Li LY, Win MK, Yau YH, Guo T, See PC, Yamazaki S, Chin KC, Gingras AR, Shochat SG, Ng LG, Sze SK, Ginhoux F, Su IH. The methyltransferase Ezh2 controls cell adhesion and migration through direct methylation of the extranuclear regulatory protein talin. *Nat Immunol*. 2015 May;16(5):505-16.

Hoeffel G, Chen J, Lavin Y, Low D, Almeida FF, See P, Beaudin AE, Lum J, Low I, Forsberg EC, Poidinger M, Zolezzi F, Larbi A, Ng LG, Chan JK, Greter M, Becher B, Samokhvalov IM, Merad M, Ginhoux F. C-myb(+) erythro-myeloid progenitor-derived fetal monocytes give rise to adult tissue-resident macrophages. *Immunity*. 2015 Apr 21;42(4):665-78.

Goh CC, Li JL, Devi S, Bakocevic N, See P, Larbi A, Weninger W, Ginhoux F, Angeli V, Ng LG. Real-time Imaging of Dendritic Cell Responses To Sterile Tissue Injury. *J Invest Dermatol*. 2015 Apr;135(4):1181-4.

Evrard M, Chong SZ, Devi S, Chew WK, Lee B, Poidinger M, Ginhoux F, Tan SM, Ng LG. Visualization of bone marrow monocyte mobilization using Cx3cr1gfp/+Flt3L-/- reporter mouse by multiphoton intravital microscopy. *J Leukoc Biol*. 2015 Mar;97(3):611-9.

Malleret B, Li A, Zhang R, Tan KS, Suwanarusk R, Claser C, Cho JS, Koh EG, Chu CS, Pukrittayakamee S, Ng ML, Ginhoux F, Ng LG, Lim CT, Nosten F, Snounou G8, Rénia L, Russell B. Plasmodium vivax: restricted tropism and rapid remodelling of CD71 positive reticulocytes. *Blood*. 2015 Feb 19;125(8):1314-24.

McGovern N, Chan JK, Ginhoux F. Dendritic cells in humans-from fetus to adult. *Int Immunol*. 2015 Feb;27(2):65-72.

2014

Hoeffel G, Squarzone P, Garel S and Ginhoux F. Microglial ontogeny and functions in shaping brain circuits: implication for CNS developmental diseases. Book chapter "Macrophages: Biology and Role in the Pathology of Diseases (SPRINGER)" 2014

Cerny D, Haniffa M, Shin A, Bigliardi P, Tan BK, Lee B, Poidinger M, Tan EY, Ginhoux F, Fink K. Selective Susceptibility of Human Skin Antigen Presenting Cells to Productive Dengue Virus Infection. *PLoS Pathog*. 2014 Dec 4;10(12):e1004548.

Becher B, Schlitzer A, Chen J, Mair F, Sumatoh HR, Teng KW, Low D, Ruedl C, Riccardi-Castagnoli P, Poidinger M, Greter M, Ginhoux F, Newell EW. High-dimensional analysis of the murine myeloid cell system. *Nat Immunol*. 2014 Dec;15(12):1181-9.

Ginhoux F. Fate PPAR-titoning: PPAR- γ 'instructs' alveolar macrophage development. *Nat Immunol*. 2014 Oct 20;15(11):1005-7.

Alexander KA, Flynn R, Lineburg KE, Kuns RD, Teal BE, Olver SD, Lor M, Raffelt NC, Koyama M, Leveque L, Le Texier L, Melino M, Markey KA, Varelias A, Engwerda C, Serody JS, Janela B, Ginhoux F, Clouston AD, Blazar BR, Hill GR, MacDonald KP. CSF-1-dependant donor-derived macrophages mediate chronic graft-versus-host disease. *J Clin Invest*. 2014 Oct 1;124(10):4266-80.

Dutertre CA, Wang LF, Ginhoux F. Aligning bona fide dendritic cell populations across species. *Cell Immunol*. 2014 September - October;291(1-2):3-10.

McGovern N, Schlitzer A, Gunawan M, Jardine L, Shin A, Poyner E, Green K, Dickinson R, Wang XN, Low D, Best K, Covins S, Milne P, Pagan S, Aljefri K, Windebank M, Saavedra DM, Larbi A, Wasan PS, Duan KB, Poidinger M, Bigley V, Ginhoux F, Collin M, Haniffa M. Human Dermal CD14+ Cells Are a Transient Population of Monocyte-Derived Macrophages. *Immunity*. 2014 Sep 18;41(3):465-77.

Squarzoni P, Oller G, Hoeffel G, Pont-Lezica L, Rostaing P, Low D, Bessis A, Ginhoux F, Garel S. Microglia Modulate Wiring of the Embryonic Forebrain. *Cell Rep*. 2014 Sep 11;8(5):1271-9.

Guilliams M, Ginhoux F, Jakubzick C, Naik SH, Onai N, Schraml BU, Segura E, Tussiwand R, Yona S. Dendritic cells, monocytes and macrophages: a unified nomenclature based on ontogeny. *Nat Rev Immunol*. 2014 Aug;14(8):571-8.

Zhou Q, Ho AW, Schlitzer A, Tang Y, Wong KH, Wong FH, Chua YL, Angeli V, Mortellaro A, Ginhoux F, Kemeny DM. GM-CSF-Licensed CD11b+ Lung Dendritic Cells Orchestrate Th2 Immunity to *Blomia tropicalis*. *J Immunol*. 2014 Jul 15;193(2):496-509

Bakocevic N, Claser C, Yoshikawa S, Jones LA, Chew S, Goh CC, Malleret B, Larbi A, Ginhoux F, de Lafaille MC, Karasuyama H, Renia L, Ng LG. CD41 is a reliable identification and activation marker for murine basophils in the steady-state and during helminth and malarial infections. *Eur J Immunol*. 2014 Jun;44(6):1823-34.

Ginhoux F, Jung S. Monocytes and macrophages: developmental pathways and tissue homeostasis. *Nat Rev Immunol*. 2014 May 23;14(6):392-404.

Ginhoux F, Schlitzer A. CD11b(+) DCs rediscovered: implications for vaccination. *Expert Rev Vaccines*. 2014 Apr;13(4):445-7.

Wang XN, McGovern N, Gunawan M, Richardson C, Windebank M, Siah TW, Lim HY, Fink K, Li JL, Ng LG, Ginhoux F, Angeli V, Collin M, Haniffa M. A three-dimensional atlas of human dermal leukocytes, lymphatics, and blood vessels. *J Invest Dermatol*. 2014 Apr;134(4):965-74.

Schlitzer A, Ginhoux F. Organization of the mouse and human DC network. *Curr Opin Immunol*. 2014 Feb;26C:90-99.

Leong C, Lee SC, Ock J, Li X, See P, Park SJ, Ginhoux F, Yun SW, Chang YT. Microglia specific fluorescent probes for live cell imaging. *Chem Commun (Camb)*. 2014 Feb 4;50(9):1089-91.

2013

Viaud S, Saccheri F, Mignot G, Yamazaki T, Daillère R, Hannani D, Enot DP, Pfirschke C, Engblom C, Pittet MJ, Schlitzer A, Ginhoux F, Apetoh L, Chachaty E, Woerther PL, Eberl G, Bérard M, Ecobichon C, Clermont D, Bizet C, Gaboriau-Routhiau V, Cerf-Bensussan N, Opolon P, Yessaad N, Vivier E, Ryffel B, Elson CO, Doré J, Kroemer G, Lepage P, Boneca IG, Ghiringhelli F, Zitvogel L. The intestinal microbiota modulates the anticancer immune effects of cyclophosphamide. *Science*. 2013 Nov 22;342(6161):971-6.

Devi S, Wang Y, Chew WK, Lima R, A-González N, Mattar CN, Chong SZ, Schlitzer A, Bakocevic N, Chew S, Keeble JL, Goh CC, Li JL, Evrard M, Malleret B, Larbi A, Renia L, Haniffa M, Tan SM, Chan JK, Balabanian K, Nagasawa T, Bachelier F, Hidalgo A, Ginhoux F, Kubes P, Ng LG. Neutrophil mobilization via plerixafor-mediated CXCR4 inhibition arises from lung demargination and blockade of neutrophil homing to the bone marrow. *J Exp Med*. 2013 Oct 21;210(11):2321-36.

Haniffa M, Collin M, Ginhoux F. Ontogeny and functional specialization of dendritic cells in human and mouse. *Adv Immunol*. 2013;120:1-49.

Jakubzick C, Gautier EL, Gibbings SL, Sojka DK, Schlitzer A, Johnson TE, Ivanov S, Duan Q, Bala S, Condon T, van Rooijen N, Grainger JR, Belkaid Y, Ma'ayan A, Riches DW, Yokoyama WM, Ginhoux F, Henson PM, Randolph GJ. Minimal Differentiation of Classical Monocytes as They Survey Steady-State Tissues and Transport Antigen to Lymph Nodes. *Immunity*. 2013 Sep 19;39(3):599-610.

Schlitzer A, Ginhoux F. DNGR-ing the dendritic cell lineage. *EMBO Rep*. Sep 30 2013; 14(10):850-851.

Gehring AJ, Haniffa M, Kennedy PT, Ho ZZ, Boni C, Shin A, Banu N, Chia A, Lim SG, Ferrari C, Ginhoux F, Bertolotti A. Mobilizing monocytes to cross-present circulating viral antigen in chronic infection. *J Clin Invest*. 2013 Sep 3;123(9):3766-76.

Howland SW, Poh CM, Gun SY, Claser C, Malleret B, Shastri N, Ginhoux F, Grotenbreg GM, Rénia L. Brain microvessel cross-presentation is a hallmark of experimental cerebral malaria. *EMBO Mol Med*. 2013 Jul;5(7):984-99.

Guermontprez P, Helft J, Claser C, Deroubaix S, Karanje H, Gazumyan A, Darasse-Jèze G, Telerman SB, Breton G, Schreiber HA, Frias-Staheli N, Billerbeck E, Dorner M, Rice CM, Ploss A, Klein F, Swiecki M, Colonna M, Kamphorst AO, Meredith M, Niec R, Takacs C, Mikhail F, Hari A, Bosque D, Eisenreich T, Merad M, Shi Y, Ginhoux F, Rénia L, Urban BC, Nussenzweig MC. Inflammatory Flt3l is essential to mobilize dendritic cells and for T cell responses during Plasmodium infection. *Nat Med*. 2013 Jun;19(6):730-8.

Schlitzer A, McGovern N, Teo P, Zelante T, Atarashi K, Low D, Ho AW, See P, Shin A, Wasan PS, Hoeffel G, Malleret B, Heiseke A, Chew S, Jardine L, Purvis HA, Hilkens CM, John Tam J, Poidinger M, Stanley RE, Krug AB, Renia L, Sivasankar B, Ng LG, Collin M, Ricciardi-Castagnoli P, Honda K, Haniffa M, Ginhoux F. IRF4 transcription factor-dependent CD11b⁺ dendritic cells in human and mouse control mucosal IL-17 cytokine responses. *Immunity*. 2013 May 23;38(5):970-983.

Ginhoux F, Lim S, Hoeffel G, Low D, Huber T. Origin and differentiation of microglia. *Front Cell Neurosci*. 2013 Apr 17;7:45.

Hashimoto D, Chow A, Noiza C, Teo P, Beasley MB, Leboeuf M, Becker CD, See P, Price J, Lucas D, Greter M, Mortha A, Boyer SW, Forsberg EC, Tanaka M, van Rooijen N, García-Sastre A, Stanley ER,

Ginhoux F, Frenette PS, Merad M. Tissue-Resident Macrophages Self-Maintain Locally throughout Adult Life with Minimal Contribution from Circulating Monocytes. *Immunity*. 2013 Apr 18;38(4):792-804.

Haniffa M, Collin M, Ginhoux F. Identification of human tissue cross-presenting dendritic cells: A new target for cancer vaccines. *Oncoimmunology*. 2013 Mar 1;2(3):e23140.

Kandasamy M, Ying PC, Ho AW, Sumatoh HR, Schlitzer A, Hughes TR, Kemeny DM, Morgan BP, Ginhoux F, Sivasankar B. Complement mediated signaling on pulmonary CD103+ dendritic cells is critical for their migratory function in response to influenza infection. *PLoS Pathog*. 2013 Jan; 9(1):e1003115.

2012

Greter M, Lelios I, Pelczar P, Hoeffel G, Price J, Leboeuf M, Kündig TM, Frei K, Ginhoux F, Merad M, Becher B. Stroma-Derived Interleukin-34 Controls the Development and Maintenance of Langerhans Cells and the Maintenance of Microglia. *Immunity*. 2012 Dec 14;37():1-11.

de Gruijl TD, Ginhoux F, Bousso P, Bieber T, Piguet V, von Stebut E, Dudziak D, Chakraverty R. Fondation rene touraine pour la dermatologie. *Exp Dermatol*. 2012 Oct;21(10):802-14.

Mauduit M, See P, Peng K, Rénia L, Ginhoux F. Dendritic cells and the malaria pre-erythrocytic stage. *Immunol Res*. 2012 Sep;53(1-3):115-26.

Haniffa M, Shin A, Bigley V, McGovern N, Teo P, See P, Wasan PS, Wang XN, Malinarich F, Malleret B, Larbi A, Tan P, Zhao H, Poidinger M, Pagan S, Cookson S, Dickinson R, Dimmick I, Jarrett RF, Renia L, Tam J, Song C, Connolly J, Chan JK, Gehring A, Bertolotti A, Collin M, Ginhoux F. Human Tissues Contain CD141(hi) Cross-Presenting Dendritic Cells with Functional Homology to Mouse CD103(+) Nonlymphoid Dendritic Cells. *Immunity*. 2012 Jul 27;37(1):60-73.

Hoeffel G, Wang Y, Greter M, See P, Teo P, Malleret B, Leboeuf M, Low D, Oller G, Almeida F, Choy SH, Grisotto M, Renia L, Conway SJ, Stanley ER, Chan JK, Ng LG, Samokhvalov IM, Merad M, Ginhoux F. Adult Langerhans cells derive predominantly from embryonic fetal liver monocytes with a minor contribution of yolk sac-derived macrophages. *J Exp Med*. 2012 Jun 4;209(6):1167-81.

Schlitzer A, Heiseke AF, Einwächter H, Reindl W, Schiemann M, Manta CP, See P, Niess JH, Suter T, Ginhoux F, Krug AB. Tissue-specific differentiation of a circulating CCR9- pDC-like common dendritic cell precursor. *Blood*. 2012 Jun 21;119(25):6063-71.

Yin N, Xu J, Ginhoux F, Randolph GJ, Merad M, Ding Y, Bromberg JS. Functional Specialization of Islet Dendritic Cell Subsets. *J Immunol*. 2012 May 15;188(10):4921-30.

Jiao J, Sastre D, Isabel Fiel M, Lee UE, Ghiassi-Nejad Z, Ginhoux F, Vivier E, Friedman SL, Merad M, Aloman C. Dendritic cell regulation of carbon tetrachloride-induced murine liver fibrosis regression. *Hepatology*. 2012 Jan;55(1):244-55.

Ginhoux F, Ng LG, Merad M. Understanding the Murine Cutaneous Dendritic Cell Network to Improve Intradermal Vaccination Strategies. *Curr Top Microbiol Immunol*. 2012; 351:1-24.

2011

Ginhoux F, Merad M. [Microglia arise from extra-embryonic yolk sac primitive progenitors]. [Article in French] *Med Sci (Paris)*. 2011 Aug-Sep;27(8-9):719-24.

Luche H, Ardouin L, Teo P, See P, Henri S, Merad M, Ginhoux F, Malissen B. The earliest intrathymic precursors of CD8 α (+) thymic dendritic cells correspond to myeloid-type double-negative 1c cells. *Eur J Immunol*. 2011 Aug;41(8):2165-75.

Hambleton S, Salem S, Bustamante J, Bigley V, Boisson-Dupuis S, Azevedo J, Fortin A, Haniffa M, Ceron-Gutierrez L, Bacon CM, Menon G, Trouillet C, McDonald D, Carey P, Ginhoux F, Alsina L, Zumwalt TJ, Kong XF, Kumararatne D, Butler K, Hubeau M, Feinberg J, Al-Muhsen S, Cant A, Abel L, Chaussabel D, Doffinger R, Talesnik E, Grumach A, Duarte A, Abarca K, Moraes-Vasconcelos D, Burk D, Berghuis A, Geissmann F, Collin M, Casanova JL, Gros P. IRF8 Mutations and Human Dendritic-Cell Immunodeficiency. *N Engl J Med*. 2011 Jul 14;365(2):127-38.

Hashimoto D, Chow A, Greter M, Saenger Y, Kwan WH, Leboeuf M, Ginhoux F, Ochando JC, Kunisaki Y, van Rooijen N, Liu C, Teshima T, Heeger PS, Stanley ER, Frenette PS, Merad M. Pretransplant CSF-1 therapy expands recipient macrophages and ameliorates GVHD after allogeneic hematopoietic cell transplantation. *J Exp Med*. 2011 May 9;208(5):1069-82.

Claser C, Malleret B, Gun SY, Wong AY, Chang ZW, Teo P, See PC, Howland SW, Ginhoux F, Renia L. CD8 T Cells and IFN-gamma Mediate the Time-Dependent Accumulation of Infected Red Blood Cells in Deep Organs during Experimental Cerebral Malaria. *PLoS One*. 2011; 6(4):e18720.

2010

Ginhoux F, Greter M, Leboeuf M, Nandi S, See P, Gokhan S, Mehler MF, Conway SJ, Ng LG, Stanley RE, Samokhvalov IM, Merad M. Fate mapping analysis reveals that adult microglia derive from primitive macrophages. *Science*. Nov 5 2010; 330(6005):841-845.

Garcia MR, Ledgerwood L, Yang Y, Xu J, Lal G, Burrell B, Ma G, Hashimoto D, Li Y, Boros P, Grisotto M, Rooijen NV, Matesanz R, Tacke F, Ginhoux F, Ding Y, Chen SH, Randolph G, Merad M, Bromberg JS, Ochando JC. Monocytic suppressive cells mediate cardiovascular transplantation tolerance in mice. *J Clin Invest*. 2010 Jul 1;120(7):2486-96.

Ginhoux F, Merad M. Ontogeny and homeostasis of Langerhans cells. *Immunol Cell Biol*. 2010 May;88(4):387-92.

Helft J, Ginhoux F, Bogunovic M, Merad M. Origin and functional heterogeneity of non-lymphoid tissue dendritic cells in mice. *Immunol Rev*. 2010 Mar;234(1):55-75.

2009

Ginhoux F, Liu K, Helft J, Bogunovic M, Greter M, Hashimoto D, Price P, Yin N, Bromberg J, Lira S.A, Stanley E.R, Nussenzweig M, Merad M. The Origin and Development of Non-Lymphoid Tissue CD103+DCs. *J Exp Med*. 2009. Dec 21;206(13):3115-30.

Bogunovic M, Ginhoux F, Helft J, Limin C, Hashimoto D, Greter M, Jacubzick C, Ingersoll M, Leboeuf M, Stanley E.R, Lira S, Randolph G, Merad M. Origin of the Lamina Propria Dendritic Cell Network. *Immunity*. 2009. Sep 18;31(3):513-25.

Karlmark KR, Weiskirchen R, Zimmermann HW, Gassler N, Ginhoux F, Weber C, Merad M, Luedde T, Trautwein C and Tacke F. Hepatic recruitment of the inflammatory Gr1+ monocyte subset upon liver injury promotes hepatic fibrosis. *Hepatology*. 2009. Jul;50(1):261-74.

Gautier EL, Huby T, Saint-Charles F, Ouzilleau B, Pirault J, Deswaerte V, Ginhoux F, Miller ER, Witztum JL, Chapman MJ and Lesnik P. Conventional dendritic cells at the crossroads between immunity and cholesterol homeostasis in atherosclerosis. *Circulation*. 2009. May 5;119(17):2367-75

Nagao K, Ginhoux F, Leitner WW, Motegi S, Bennett CL, Clausen BE, Merad M, Udey MC. Murine epidermal Langerhans cells and langerin-expressing dermal dendritic cells are unrelated and exhibit distinct functions. *Proc Natl Acad Sci U S A*. 2009. Mar 3;106(9):3312-7.

Haniffa M, Ginhoux F, Wang XN, Bigley V, Abel M, Dimmick I, Bullock S, Grisotto M, Booth T, Taub P, Hilkens C, Merad M, Collin M. Differential rates of replacement of human dermal dendritic cells and macrophages during hematopoietic stem cell transplantation. *J Exp Med*. 2009. Feb 16;206(2):371-85.

2008

Merad M, Ginhoux F, Collin M. Origin, homeostasis and function of Langerhans cells and other langerin-expressing dendritic cells. *Nat Rev Immunol*. 2008. Dec;8(12):935-47.

Waskow C, Liu K, Darrasse-Jèze G, Guermontprez P, Ginhoux F, Merad M, Shengelia T, Yao K, Nussenzweig M. The receptor tyrosine kinase Flt3 is required for dendritic cell development in peripheral lymphoid tissues. *Nat Immunol*. 2008. Jun;9(6):676-83. 11.

Jakubzick C, Tacke F, Ginhoux F, Wagers AJ, van Rooijen N, Mack M, Merad M, Randolph GJ. Blood Monocyte Subsets Differentially Give Rise to CD103+ and CD103- Pulmonary Dendritic Cell Populations. *J Immunol*. 2008. Mar 1;180(5):3019-27.

Ledgerwood LG, Lal G, Zhang N, Garin A, Esses SJ, Ginhoux F, Merad M, Peche H, Lira SA, Ding Y, Yang Y, He X, Schuchman EH, Allende ML, Ochando JC and Bromberg JS. The sphingosine 1-phosphate receptor 1 causes tissue retention by inhibiting the entry of peripheral tissue T lymphocytes into afferent lymphatics. *Nat Immunol*. 2008. Jan;9(1):42-53.

2007

Ginhoux F, Collin MP, Bogunovic M, Abel M, Leboeuf M, Helft J, Ochando J, Kissenpfennig A, Malissen B, Grisotto M, Snoeck H, Randolph G and Merad M. Blood-Derived Dermal Langerin+ Dendritic Cells Survey the Skin in the Steady State. *J Exp Med*. 2007. Dec 24;204(13):3133-46.

Merad M and Ginhoux F. Dendritic cells genealogy: a new stem or just another branch? *Nat Immunol*. 2007. Nov;8(11):1199-201.

2006

Bogunovic M, Ginhoux F, Frenette P, Wagers A, Loubeau M and Merad M. Identification of a population of radio-resistant dermal dendritic cells in Mice and Man. *J Exp Med*. 2006. Nov 27;203(12):2627-38.

Ginhoux F, Tacke F, Angeli V, Bogunovic M, Loubeau M, Dai X, Stanley E, Randolph G, Merad. Langerhans Cells Arise from Monocytes in Vivo. *Nat Immunol*. 2006. Mar; 7(3):265-73.

Tacke F, Ginhoux F, Jakubzick C, Van Rooijen N, Merad M, Randolph G. Immature monocytes acquire antigens from other cells in the bone marrow and present them to T cells after maturing in the periphery. *J Exp Med*. 2006. Mar 20; 203(3):583-97.

Angeli V, Ginhoux F, Llodra J, Frenette P, Skobe M, Merad M, and Randolph G. Lymph node B cells enhance dendritic cell migration by promoting lymphangiogenesis. *Immunity*. 2006. Feb; 24(2):203-15.

2005

Rohrlich PS, Fazilleau N, Ginhoux F, Firat H, Michel F, Cochet M, Laham N, Roth MP, Pascolo S, Nato F, Coppin H, Charneau P, Danos O, Acuto O, Ehrlich R, Kanellopoulos J, Lemonnier FA. Direct recognition by alphabeta cytolytic T cells of Hfe, a MHC class Ib molecule without antigen presenting function. *Proc Natl Acad Sci U S A*. 2005. Sep 6; 102(36): 12855-60.

Pascolo S, Ginhoux F, Laham N, Walter S, Schoor O, Probst J, Rohrlich P, Obermayr F, Fisch P, Danos O, Ehrlich R, Lemonnier FA, Rammensee HG. The non-classical HLA class I molecule HFE does not influence the NK-like activity contained in fresh human PBMCs and does not interact with NK cells. *Int Immunol*. 2005. Feb; 17(2): 117-22.

2004

Ginhoux F, Turbant S, Gross DA, Poupiot J, Marais T, Lone Y, Lemonnier FA, Firat H, Perez N, Danos O, Davoust J. HLA-A*0201-restricted cytolytic responses to the rtTA transactivator dominant and cryptic epitopes compromise transgene expression induced by the tetracycline ON system. *Mol Ther*. 2004. Aug; 10(2): 279-89.

2003

Ginhoux F, Doucet C, Leboeuf M, Lemonnier F, Danos O, Davoust J, Firat H. Identification of an HLA-A*0201 restricted epitopic peptide from human dystrophin: application in Duchenne Muscular Dystrophy gene therapy. *Mol Ther*. 2003. Aug; 8(2): 274-83.

Fruci D, Lauvau G, Saveanu L, Amicosante M, Butler RH, Polack A, Ginhoux F, Lemonnier F., Firat H, van Ender PM. Quantifying recruitment of cytosolic peptides for HLA class I presentation: impact of TAP transport. *J Immunol*. 2003. Mar; 170(6): 2977-84.

2002

Firat H, Zennou V, Garcia-Pons F, Ginhoux F, Cochet M, Danos O, Lemonnier FA, Langlade-Demoyen P, Charneau P. Use of a lentiviral flap vector for induction of CTL immunity against melanoma. Perspectives for immunotherapy. *J Gene Med*. 2002. Jan-Feb; 4(1): 38-45.