

## January 2019

**CMV Primes Functional Alternative Signaling in Adaptive  $\Delta$ g NK Cells but Is Subverted by Lentivirus Infection in Rhesus Macaques.** Shah SV, Manickam C, Ram DR, Kroll K, Itell H, Permar SR, Barouch DH, Klatt NR, Reeves RK. Cell Rep. 2018 Dec 4;25(10):2766-2774.e3.

Presenter: Danijela Maric, PhD

**NONO Detects the Nuclear HIV Capsid to Promote cGAS-Mediated Innate Immune Activation.** Lahaye X1, Gentili M1, Silvin A1, Conrad C1, Picard L2, Jouve M1, Zueva E1, Maurin M1, Nadalin F1, Knott GJ3, Zhao B4, Du F4, Rio M5, Amiel J5, Fox AH6, Li P4, Etienne L7, Bond CS3, Colleaux L5, Manel N8. Cell. 2018 Oct 4;175(2):488-501.e22.

Presenter: Joao Mamede, PhD

## February 2019

**Immune Checkpoint Blockade Restores HIV-Specific CD4 T Cell Help for NK Cells.** Porichis F, Hart MG, Massa A, Everett HL, Morou A, Richard J, Brassard N, Veillette M, Hassan M, Ly NL, Routy JP, Freeman GJ, Dubé M, Finzi A, Kaufmann DE. J Immunol. 2018 Aug 1;201(3):971-981.

Presenter: Roslyn Taylor, PhD

## March 2019

**Vaccine-Induced Protection from Homologous Tier 2 SHIV Challenge in Nonhuman Primates Depends on Serum-Neutralizing Antibody Titers.** Pauthner MG, Nkolola JP, Havenar-Daughton C, Murrell B, Reiss SM, Bastidas R, Prévost J, Nedellec R, von Bredow B, Abbink P, Cottrell CA, Kulp DW, Tokatlian T, Nogal B, Bianchi M, Li H, Lee JH, Butera ST, Evans DT, Hangartner L, Finzi A, Wilson IA, Wyatt RT, Irvine DJ, Schief WR, Ward AB, Sanders RW, Crotty S, Shaw GM, Barouch DH, Burton DR. Immunity. 2019 Jan 15;50(1):241-252.e6.

Presenter: Patrick Madden

**Prevention of SIVmac251 reservoir seeding in rhesus monkeys by early antiretroviral therapy.** Whitney JB, Lim SY, Osuna CE, Kublin JL, Chen E, Yoon G, Liu PT, Abbink P, Borducci EN, Hill A, Lewis MG, Geleziunas R, Robb ML, Michael NL, Barouch DH. Nat Commun. 2018 Dec 21;9(1):5429.

Presenter: Shoaib Arif, PhD

## April 2019

**Estrogen receptor-1 is a key regulator of HIV-1 latency that imparts gender-specific restrictions on the latent reservoir.** Das B1, Dobrowolski C1, Luttge B1, Valadkhan S1, Chomont N2,3, Johnston R4, Bacchetti P5, Hoh R6, Gandhi M6, Deeks SG6, Scully E7, Karn J8. Proc Natl Acad Sci U S A. 2018 Aug 14;115(33):E7795-E7804.

Presenter: Meegan Anderson

**Increased Cervical CD4+CCR5+ T Cells Among Kenyan Sex Working Women Using Depot Medroxyprogesterone Acetate.** Lajoie J, Tjernlund A, Omollo K, Edfeldt G, Röhl M, Boily-Larouche G, Cheruiyot J, Kimani M, Kimani J, Oyugi J, Broliden K, Fowke KR. AIDS Res Hum Retroviruses. 2019 Mar;35(3):236-246.

Presenter: Yanille Scott, PhD

## May 2019

**Relationship between the Cervical Microbiome, HIV Status, and Precancerous Lesions.** Klein C, Gonzalez D, Samwel K, Kahesa C, Mwaiselage J, Aluthge N, Fernando S, West JT, Wood C, Angeletti PC. MBio. 2019 Feb 19;10(1). pii: e02785-18.

Presenter: Michael McRaven

**Social evolution of innate immunity evasion in a virus.** Domingo-Calap P, Segredo-Otero E, Durán-Moreno M, Sanjuán R. Nat Microbiol. 2019 Jun;4(6):1006-1013.

Presenter: Flora Englemann

## June 2019

**P2X antagonists inhibit HIV-1 productive infection and inflammatory 1 cytokines IL-10 and IL-1 $\beta$  in a human.** Soare AY, Durham ND, Gopal R, Tweel B, Hoffman KW, Brown JA, O'Brien M, Bhardwaj N, Lim JK, Chen BK, Swartz TH. J Virol. 2018 Dec 10;93(1).

Presenter: Divya Thakkar

**HIV-1 remission following CCR5 $\Delta$ 32/ $\Delta$ 32 haematopoietic stem-cell transplantation.** Gupta RK, Abdul-Jawad S, McCoy LE, Mok HP, Peppas D, Salgado M, Martinez-Picado J, Nijhuis M, Wensing AMJ, Lee H, Grant P, Nastouli E, Lambert J, Pace M, Salasc F, Monit C, Innes AJ, Muir L, Waters L, Frater J, Lever AM, Edwards SG, Gabriel IH, Olavarria E. Nature. 2019 Apr;568(7751):244-248.

Presenter: Rasika Dhond

## July 2019

**Defining early SIV replication and dissemination dynamics following vaginal transmission.** Deleage C, Immonen TT, Fennessey CM, Reynaldi A, Reid C, Newman L, Lipkey L, Schlub TE, Camus C, O'Brien S, Smedley J, Conway JM, Del Prete GQ, Davenport MP, Lifson JD, Estes JD, Keele BF. *Sci Adv.* 2019 May 29;5(5):eaav7116.

Presenter: Jeffrey Schneider, PhD

**Sequential LASER ART and CRISPR Treatments Eliminate HIV-1 in a Subset of Infected Humanized Mice.** Dash PK, Kaminski R, Bella R, Su H, Mathews S, Ahooyi TM, Chen C, Mancuso P, Sariyer R, Ferrante P, Donadoni M, Robinson JA, Sillman B, Lin Z, Hilaire JR, Banoub M, Elango M, Gautam N, Mosley RL, Poluektova LY, McMillan J, Bade AN, Gorantla S, Sariyer IK, Burdo TH, Young WB, Amini S, Gordon J, Jacobson JM, Edagwa B, Khalili K, Gendelman HE. *Nat Commun.* 2019 Jul 2;10(1):2753.

Presenter: Judd Hultquist, PhD

## August 2019

**The Intestine Harbors Functionally Distinct Homeostatic Tissue-Resident and Inflammatory Th17 Cells.** Omenetti S, Bussi C, Metidji A, Iseppon A, Lee S, Tolaini M, Li Y, Kelly G, Chakravarty P, Shoaie S, Gutierrez MG, Stockinger B. *Immunity.* 2019 Jul 16;51(1):77-89.e6.

Presenter: Harry Taylor, PhD

**Prevention of SHIV transmission by topical IFN- $\beta$  treatment.** Ronald S. Veazey, Heather A. Pilch Cooper, Thomas J. Hope, Galit Alter, Ann M. Carias, Magdalena Sips, Xiaolei Wang, Benigno Rodriguez, Scott F. Sieg, Adrian Reich, Peter Wilkinson, Mark J. Cameron, and Michael M. Lederman. *Mucosal Immunol.* 2016 Nov; 9(6): 1528–1536.

Presenter: Tom Hope, PhD

**Associating HIV-1 envelope glycoprotein structures with states on the virus observed by smFRET.** Lu M, Ma X, Castillo-Menendez LR, Gorman J, Alsaifi N, Ermel U, Terry DS, Chambers M, Peng D, Zhang B, Zhou T, Reichard N, Wang K, Grover JR, Carman BP, Gardner MR, Nikić-Spiegel I, Sugawara A, Arthos J, Lemke EA, Smith AB 3rd, Farzan M, Abrams C, Munro JB, McDermott AB, Finzi A, Kwong PD, Blanchard SC, Sodroski JG, Mothes W. *Nature.* 2019 Apr;568(7752):415-419.

Presenter: Koree Ahn

**Cortical column and whole-brain imaging with molecular contrast and nanoscale resolution.** Gao R, Asano SM, Upadhyayula S, Pisarev I, Milkie DE, Liu TL, Singh V, Graves A, Huynh GH, Zhao Y, Bogovic J, Colonell J, Ott CM, Zugates C, Tappan S, Rodriguez A, Mosaliganti KR, Sheu SH, Pasolli HA, Pang S, Xu CS, Megason SG, Hess H, Lippincott-Schwartz J, Hantman A, Rubin GM, **Kirchhausen T**, Saalfeld S, Aso Y, Boyden ES, Betzig E. Science. 2019 Jan 18;363(6424).

Presenter: Gianguido Cianci, PhD

## September 2019

**Lack of therapeutic efficacy of an antibody to  $\alpha 4\beta 7$  in SIVmac251-infected rhesus macaques.** Abbink P, Mercado NB, Nkolola JP, Peterson RL, Tuyishime H, McMahan K, Moseley ET, Borducchi EN, Chandrashekar A, Bondzie EA, Agarwal A, Belli AJ, Reimann KA, Keele BF, Geleziunas R, Lewis MG, Barouch DH. Science. 2019 Sep 6;365(6457):1029-1033.

Presenter: Ann Carias, PhD

## October 2019

**Increased Metabolic Activity on 18F-Fluorodeoxyglucose Positron Emission Tomography-Computed Tomography in Human Immunodeficiency Virus-Associated Immune Reconstitution Inflammatory Syndrome.** Hammoud DA, Boulougoura A, Papadakis GZ, Wang J, Dodd LE, Rupert A, Higgins J, Roby G, Metzger D, Laidlaw E, Mican JM, Pau A, Lage S, Wong CS, Lisco A, Manion M, Sheikh V, Millo C, Sereti I. Clin Infect Dis. 2019 Jan 7;68(2):229-238.

Presenter: Nina Calanton

**Resident memory T cells are a cellular reservoir for HIV in the cervical mucosa.** Jon Cantero-Pérez, Judith Grau-Expósito, Carla Serra-Peinado, Daniela A. Rosero, Laura Luque-Ballesteros, Antonio Astorga-Gamaza, Josep Castellví, Tamara Sanhueza, Gustavo Tapia, Belen Lloveras, Marco A. Fernández, Julia G. Prado, Josep M. Solé-Sedeno, Antoni Tarrats, Carla Lecumberri, Laura Mañalich-Barrachina, Cristina Centeno-Mediavilla, Vicenç Falcó, Maria J. Buzon & Meritxell Genescà. Nature Communications volume 10, Article number: 4739 (2019).

Presenter: Sixia Xiao

**November 2019**

**The replication-competent HIV-1 latent reservoir is primarily established near the time of therapy initiation.** Melissa-Rose Abrahams, Sarah B. Joseph, Nigel Garrett, Lynn Tyers, Matthew Moeser, Nancie Archin, Olivia D. Council, David Matten, Shuntai Zhou, Deelan Doolabh, Colin Anthony, Nilu Goonetilleke, Salim Abdool Karim, David M. Margolis, Sergei Kosakovsky Pond, Carolyn Williamson, and Ronald Swanstrom. Science Translational Medicine. 09 Oct 2019; Vol. 11, Issue 513, eaaw5589.

Presenter: Rich D'Aquila, MD