

December 2020

Simian Immunodeficiency Virus-Infected Memory CD4 + T Cells Infiltrate to the Site of Infected Macrophages in the Neuroparenchyma of a Chronic Macaque Model of Neurological Complications of AIDS.

Cheri A Lee, Erin Beasley, Karthikeyan Sundar, Margery Smelkinson, Carol Vinton, Claire Deleage, Kenta Matsuda, Fan Wu, Jake D Estes, Bernard A P Lafont , Jason M Brenchley, Vanessa M Hirsch. mBio. 2020 Apr 21;11(2):e00602-20.

Presenter: Danijela Maric

Aerosol Delivery of Synthetic mRNA to Vaginal Mucosa Leads to Durable Expression of Broadly Neutralizing Antibodies against HIV.

Kevin E Lindsay, Daryll Vanover, Merrilee Thoresen , Heath King, Peng Xiao, Peres Badial, Mariluz Araínga, Seong Bin Park, Pooja M Tiwari, Hannah E Peck, Emmeline L Blanchard, Jean M Feugang, Alicia K Olivier, Chiara Zurla, Francois Villinger, Amelia R Woolums, Philip J Santangelo. Mol Ther. 2020 Mar 4;28(3):805-819.

Presenter: Mark Becker

November 2020

Increased vaccine tolerability and protection via NF- κ B modulation.

B A Moser, R C Steinhardt, Y Escalante-Buendia, D A Boltz, K M Barker, B J Cassaidy, M G Rosenberger, S Yoo, B G McGonnigal, A P Esser-Kahn. Sci Adv. 2020 Sep 9;6(37):eaaz8700.

Presenter: Sixia Xiao

Passive Transfer of Vaccine-Elicited Antibodies Protects against SIV in Rhesus Macaques.

Galit Alter, Wen-Han Yu, Abishek Chandrashekar, Erica N Borducchi, Khader Ghneim , Ashish Sharma, Rebecca Nedellec, Katherine R McKenney, Caitlyn Linde, Thomas Broge, Todd J Suscovich, Tom Linnekin, Peter Abbink, Noe B Mercado, Joseph P Nkolola, Katherine McMahan, Esther A Bondzie, Venous Hamza, Lauren Peter, Nicole Kordana, Shant Mahrokhian, Michael S Seaman, Wenjun Li, Mark G Lewis, Douglas A Lauffenburger, Lars Hangartner, Rafick-Pierre Sekaly, Dan H Barouch. Cell. 2020 Oct 1;183(1):185-196.e14.

Presenter: Thomas Hope

October 2020

Reconstitution and visualization of HIV-1 capsid-dependent replication and integration in vitro.

Devin E Christensen, Barbie K Ganser-Pornillos, Jarrod S Johnson, Owen Pornillos, Wesley I Sundquist. Science. 2020 Oct 9;370(6513):eabc8420.

Presenter: Edward Allen

Durable protection against repeated penile exposures to simian-human immunodeficiency virus by broadly neutralizing antibodies.

David A Garber, Debra R Adams, Patricia Guenther, James Mitchell,

Kristen Kelley, Till Schoofs, Anna Gazumyan, Martha Nason, Michael S Seaman, Janet McNicholl, Michel C Nussenzweig, Walid Heneine. *Nat Commun.* 2020 Jun 24;11(1):3195.

Presenter: Ann Carias

September 2020

HIV infection and persistence in pulmonary mucosal double negative T-cells *in vivo*. Oussama Meziane, Syim Salahuddin, Tram N Q Pham, Omar Farnos, Amélie Pagliuzza, Ron Olivenstein, Elaine Thomson, Yulia Alexandrova, Marianna Orlova, Erwin Schurr, Petronela Ancuta, Élie Haddad, Nicolas Chomont, Eric A Cohen, Mohammad-Ali Jenabian, Cecilia T Costiniuk. *J Virol.* 2020 Sep 23;JVI.01788-20. doi: 10.1128/JVI.01788-20.

Presenter: Gianguido Cianci

Neurotoxicity of HIV-1 Tat is attributed to its penetrating property. Xiaoli Tang, Huafei Lu, Bharat Ramratnam. *Sci Rep.* 2020 Aug 19;10(1):14002.

Presenter: Jared Schooley

August 2020

Distinct viral reservoirs in individuals with spontaneous control of HIV-1. Chenyang Jiang, Xiaodong Lian, Ce Gao, Xiaoming Sun, Kevin B Einkauf, Joshua M Chevalier, Samantha M Y Chen, Stephane Hua, Ben Rhee, Kaylee Chang, Jane E Blackmer, Matthew Osborn, Michael J Peluso, Rebecca Hoh, Ma Somsouk, Jeffrey Milush, Lynn N Bertagnolli, Sarah E Sweet, Joseph A Varriale, Peter D Burbelo, Tae-Wook Chun, Gregory M Laird, Erik Serrao, Alan N Engelman, Mary Carrington, Robert F Siliciano, Janet M Siliciano, Steven G Deeks, Bruce D Walker, Mathias Lichterfeld, Xu G Yu. *Nature.* 2020 Aug 26. doi: 10.1038/s41586-020-2651-8.

Presenter: Eun-Young Kim

Fingolimod inhibits multiple stages of the HIV-1 life cycle. Rachel S Resop, Rémi Fromentin, Daniel Newman, Hawley Rigsby, Larisa Dubrovsky, Michael Bukrinsky, Nicolas Chomont, Alberto Bosque. *PLoS Pathog. Cell.* 2020 Aug 13; 16(8):e1008679

Presenter: Yanique Thomas

Targeting Processive Transcription Elongation via SEC Disruption for MYC-Induced Cancer Therapy. Kaiwei Liang, Edwin R Smith, Yuki Aoi, Kristen L Stoltz, Hiroaki Katagi, Ashley R Woodfin, Emily J Rendleman, Stacy A Marshall, David C Murray, Lu Wang, Patrick A Ozark, Rama K Mishra, Rintaro Hashizume, Gary E Schiltz, Ali Shilatifard. *Cell.* 2018 Oct 18; 175(3):766-779.e17.

Presenter: Judd Hultquist

Matrix Metalloproteinases Expressed in Response to Bacterial Vaginosis Disrupt the Endocervical Epithelium, Increasing Transmigration of HIV. Michelle D Cherne, Amy L Cole, Lisa Newberry, Mary Schmidt-Owens, Michael Deichen, Alexander M Cole. Infect Immun. 2020 Mar 23; 88(4):e00041-20.

Presenter: Katarina Kotnik Halavaty

Quantifying the contribution of Fc-mediated effector functions to the antiviral activity of anti-HIV-1 IgG1 antibodies in vivo. Pengfei Wang, Mili R. Gajjar, a Jian Yu, Neal N. Padte, Agegnehu Gettie, James L. Blanchard, Kasi Russell-Lodrigue, Laura E. Liao, Alan S. Perelson, Yaoxing Huang, and David D. Hoa. Proc Natl Acad Sci U S A. 2020 Jul 28; 117(30): 18002–18009.

Presenter: Patrick Madden

July 2020

A minor population of macrophage-tropic HIV-1 variants is identified in recrudescing viremia following analytic treatment interruption. Viviane M Andrade, Carla Mavian, Dunja Babic, Thaissa Cordeiro, Mark Sharkey, Labelle Barrios, Christian Brander, Javier Martinez-Picado, Judith Dalmau, Anuska Llano, Jonathan Z Li, Jeffrey Jacobson, Christy L Lavine, Michael S Seaman, Marco Salemi, Mario Stevenson. Proc Natl Acad Sci U S A. 2020 May 5;117(18):9981-9990.

Presenter: Isabelle Clerc.

Number of HIV-1 founder variants is determined by the recency of the source partner infection. Julián Villabona-Arenas, Matthew Hall, Katrina A Lythgoe, Stephen G Gaffney, Roland R Regoes 5, Stéphane Hué, Katherine E Atkins. Science. 2020 Jul 3; 369(6499):103-108.

Presenter: Ramon Lorenzo Redondo

June 2020

Cross-talk Between Microglia and Neurons Regulates HIV Latency. David Alvarez-Carbonell, Fengchun Ye, Nirmala Ramanath, Yoelvis Garcia-Mesa, Pamela E Knapp, Kurt F Hauser, Jonathan Karn. PLoS Pathog. 2020 June 1; 2019 Dec 30;15(12):e1008249.

Presenter: Meegan Anderson

Nuclear Pore Blockade Reveals That HIV-1 Completes Reverse Transcription and Uncoating in the Nucleus. Adarsh Dharan, Niklas Bachmann, Sarah Talley, Virginia Zwickelmaier, Edward M Campbell. Nat Microbiol. 2020 Jun 1. doi: 10.1038/s41564-020-0735-8.

Presenter: Michael McRaven

March 2020

Retroviruses Drive the Rapid Evolution of Mammalian APOBEC3 Genes. Jumpei Ito, Robert J Gifford, Kei Sato. Proc Natl Acad Sci U S A. 2020 Jan 7;117(1):610-618.

Presenter: Chisu Song

February 2020

Elite Control of HIV Is Associated With Distinct Functional and Transcriptional Signatures in Lymphoid Tissue CD8 + T Cells. Son Nguyen, Claire Deleage, Samuel Darko, Amy Ransier, Duc P Truong, Divyansh Agarwal, Alberto Sada Japp, Vincent H Wu, Leticia Kuri-Cervantes, Mohamed Abdel-Mohsen, Perla M Del Rio Estrada, Yuria Ablanedo-Terrazas, Emma Gostick, James A Hoxie, Nancy R Zhang, Ali Naji, Gustavo Reyes-Terán, Jacob D Estes, David A Price, Daniel C Douek, Steven G Deeks, Marcus Buggert, Michael R Betts. Sci Transl Med. 2019 Dec 18;11(523):eaax4077.

Presenter: Gael Scholtes

January 2020

Quantitative Monitoring of the Cytoplasmic Release of NCp7 Proteins From Individual HIV-1 Viral Cores During the Early Steps of Infection. Sarwat Zgheib, Iryna Lysova, Eleonore Réal, Oleksii Dukhno, Romain Vauchelles, Manuel Pires, Halina Anton, Yves Mély. Sci Rep. 2019 Jan 30;9(1):945.

Presenter: Tahmina Sultana