



Division of Infectious Diseases

SCHOOL OF MEDICINE

UNIVERSITY OF COLORADO ANSCHUTZ MEDICAL CAMPUS



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Welcoming New Faculty

We are excited to announce four new faculty members joining the division this summer, Drs. Nipun Atri (Rush Medical School), Brian Grundy (University of Virginia), Nina Millman (Vanderbilt), and Neena Thomas-Gosain (University of Tennessee). Please join us in welcoming them to the Division and CU Anschutz! Stay tuned for more exciting news on additional incoming faculty.



Dr. David Beckham has been appointed to lead the ID Division at the University of Texas Southwestern. He will begin his new role on July 3. The Division congratulates David on this great opportunity and recognition, and wishes him great success in his new role as Division Chief. We thank him for all his contributions to the Division!



Dr. Jose Castillo-Mancilla is joining the Research and Development team at ViiV Healthcare as a Senior Director/Clinical Development Lead. In his new position, he will continue to focus on clinical research to improve the lives of persons with HIV through research and discovery of new therapeutic strategies. We wish him great success in this exciting

new opportunity and recognition and thank him for all his contributions to the Division!

Some Recent Publications



Karen Wendel

Innovative approaches such as online, at-home programs may address important barriers to sexually transmitted infection (STI) and HIV screening. Karen Wendel and colleagues reported in *Clinical Infectious Diseases* results from an online, at-home program (Test Yourself Colorado) offering HIV and triple-site (urogenital, rectal, and pharyngeal) gonorrhea and chlamydia testing in Colorado. A total of 1,790 clients used the tool. The outcome data showed that a home testing portal is a scalable tool that reaches clients at risk of STIs and HIV and navigates those with positive STI tests to treatment. [Full article.](#)



Hermione Hurley

The COVID-19 pandemic has forced healthcare systems to adapt to new methods of care delivery to avoid risk of disease transmission. Homelessness has increased in Denver in the past five years, as it has in other urban centers in the U.S. Hermione Hurley and colleagues examined the impact of telehealth on appointment retention among individuals at Denver Health with substance use disorder (SUD) by housing status. Between March 1 and September 30, 2020, there were 18,206 encounters among 1,626 clients with SUD. For telehealth encounters, the probability of an appointment no-show was significantly higher for persons experiencing homelessness compared to stably housed (37% versus 25%, $p < 0.001$). They concluded that housing status influences the effectiveness of telehealth as a modality of healthcare delivery for individuals with SUD. [Full article.](#)



Mamuka Kvaratskhelia

Allosteric integrase inhibitors (ALLINIs) are an emerging class of drugs that are orthogonal to current HIV-1 antiretrovirals. They function as highly specific “molecular glues” that trigger aggregation of HIV-1 integrase molecules. In this paper in *mBio*, the Kvaratskhelia lab collaborated with the Peter Cherepanov lab and others to obtain high-resolution crystal structures that reveal the crucial interactions made by two potent ALLINIs with HIV-1 integrase. The results explain the mechanism of drug action

and have promise to inform further development of ALLINIs toward clinical use. [Full article](#).



James Morrison

Tetherin is a major antiviral restriction factor that defends against the spread of enveloped viruses by blocking their release from cells. HIV-1 evolved a specific antagonist -- the Vpu accessory protein -- to counteract (degrade) Tetherin whereas some SIV's use their Nef proteins to do so. James Morrison in the Poeschla lab published a paper in *mBio* in February in which he identifies the fourth known retroviral Tetherin antagonist and also the first lentiviral accessory protein in decades. The signal peptide for the Envelope (Env) protein of the pandemic feline counterpart of HIV-1 (AIDS-causing FIV), is the longest signal peptide of any known eukaryotic, prokaryotic or viral protein, but whether it had a function besides promoting endoplasmic reticulum translocation and synthesis of Env was long mysterious. The paper shows that this signal peptide functions autonomously as FIV's anti-Tetherin in addition to its classical signal peptide role. [Full article](#).

Grants Received



Sarah Mann

Sarah Mann was selected to receive a one-year Colorado Clinical and Translational Sciences Institute (CCTSI) Pilot Grant Award for her project "Characterization of Monkeypox Antibody Response after JYNNEOS Vaccination Among Persons with HIV." The program funds "early-stage, preparatory or feasibility studies to overcome roadblocks in the translational process" ([Read more](#)). Congratulations, Sarah!

Other Division News

Eric Poeschla

Eric Poeschla has been appointed to a panel of the [World Health Organization \(WHO\) prioritization process](#) for pathogens of epidemic and pandemic threat (Health Emergencies: Priority Preparedness Pathogens List). His service will be with the WHO expert group on Retroviruses. Each panel covering a viral family is responsible for undertaking an expert scientific review and then shortlisting those viruses that meet two criteria: (i) are of epidemic or pandemic concern and (ii) have too few or no medical countermeasures available. The

standardized tool methodology for decision making is designed to amplify the advantages of expert consultation while limiting its disadvantages (group think, dominating views, etc.).

Congratulations, Eric!

Call for Submissions

We want to hear your news! Please email submissions for our next newsletter to eleanor.shields@cuanschutz.edu.

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