

Declaration of Dr. Tara Vijayan

I declare, under penalty of perjury and pursuant to 28 U.S.C. § 1746, as follows:

I. Background and Qualifications

1. I am Dr. Tara Vijayan, an Associate Professor of Medicine in the Division of Infectious Diseases at the UCLA David Geffen School of Medicine. My research focuses on general infectious diseases, HIV medicine, global and underserved health, health equity, medical education, and antimicrobial stewardship. I am currently the Medical Director of Antimicrobial Stewardship for UCLA Health and Medical Director for COVID-19 Preparedness for the Division of Infectious Diseases. I am currently overseeing the treatment of patients with COVID-19 at UCLA hospitals. I am board-certified in Internal Medicine and Infectious Disease, and I completed a three-year fellowship in Infectious Disease at UCSF Medical Center. A current copy of my CV is attached as **Exhibit A**.
2. To prepare this Declaration, I reviewed at least the following documents:
 - a. The Report of J. Clark Kelso, Receiver Regarding a Mandatory COVID-19 Vaccination Policy for California Department of Corrections and Rehabilitation Personnel in Contact with Incarcerated Persons and Incarcerated Persons with Outside Contact.
 - b. The Declaration of Tammatha Foss dated August 4, 2021, filed in support of the above report.
 - c. The Declaration of Dr. Joseph Bick dated August 4, 2021, filed in support of the above report.
 - d. The studies and reports cited in this Declaration.

II. COVID-19 Background

3. COVID-19 (caused by the SARS-CoV-2 virus) is a serious disease with over 197 million confirmed diagnoses as of July 31, 2021, including nearly 35 million in the United States.¹ As of July 31, 2021, according to the U.S. Centers for Disease Control and Prevention, at least 610,873 people in the United States have died due

¹ John Hopkins University, Coronavirus Resource Center, COVID-19 Dashboard by the Center for Systems Science and Engineering (CSSE) at Johns Hopkins University, <https://coronavirus.jhu.edu/map.html> (last visited July 31, 2021).

to complications from COVID-19.² In recent weeks, the number of people infected in California has grown at an extremely rapid rate.

4. The effects of COVID-19 can be very severe, and can include severe respiratory illness, major organ damage, blood clots (in the lungs as well as strokes), multisystem inflammatory syndrome, and death. Patients who recover from COVID-19 often suffer lasting and serious complications, including long term effects on the central and peripheral nervous systems resulting in dizziness, dysautonomia, headaches and strokes.³
5. The effects of COVID-19 are particularly significant for people over the age of 50, and those of any age with underlying health problems such as—but not limited to—cancer, obesity, weakened immune systems, serious heart conditions, chronic kidney disease, COPD, and diabetes.⁴
6. In the United States, African Americans, Latino/a Americans, and Native Americans suffer complications and death at much higher and disproportionate rates to their population. In California alone, the Latino/a population makes up 46.4% of the COVID-19 deaths, despite accounting for 38.9% of the state’s population, and Latino/a individuals account for 72.5% of the deaths in California between the ages of 35-49 despite only accounting for 41.5% of the state’s population in that age group.⁵

III. Transmission of SARS-CoV2

² Centers for Disease Control and Prevention, CDC COVID Data Tracker, United States COVID-19 Cases and Deaths by State, https://covid.cdc.gov/covid-datatracker/#cases_casesper100klast7days (last visited July 31, 2021).

³ Bjørn Blomberg, et al., *Long COVID in a prospective cohort of home-isolated patients*, *Nature Med.* (June 23, 2021), <https://www.nature.com/articles/s41591-021-01433-3>; Ani Nalbandian, et al., *Post-acute COVID-19 syndrome*, 27 *Nature Med.* 601 (March 22, 2021), <https://doi.org/10.1038/s41591-021-01283-z>.

⁴ Center for Disease Control and Prevention, Evidence used to update the list of underlying medical conditions that increase a person’s risk of severe illness from COVID-19 (updated May 13, 2021), <https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/evidence-table.html>.

⁵ California Department of Public Health, COVID-19 Race and Ethnicity Data (July 28, 2021), <https://www.cdph.ca.gov/Programs/CID/DCDC/Pages/COVID-19/Race-Ethnicity.aspx>. This is in part due to upstream socioeconomic factors such as poverty, living in multigenerational households and working essential jobs. Tara Vijayan, MD, MPH, et al., *Beyond the 405 and the 5: Geographic variations and factors associated with SARS-CoV-2 positivity rates in Los Angeles County*, *Clinical Infectious Diseases* (Nov. 3, 2020), <https://doi.org/10.1093/cid/ciaa1692>.

7. A factor that has accelerated the transmission of the virus across the world is the number of people who are positive for the virus but are asymptomatic or pre-symptomatic, and not aware that they are carrying and shedding the virus. Surveillance studies indicate that, without vaccination, 81% of people infected with SARS-CoV2 will have mild or no disease, 14% will be sick enough to require hospitalization, and 5% will require ICU levels of care.⁶ The fact that so many people may have the virus but are unaware that they have it makes it very difficult to effectively quarantine infected individuals. This is precisely why, prior to the widespread availability of vaccines, public health experts emphasized the need for shelter-in-place orders, strict limits on assembling people in indoor spaces, and social distancing.
8. SARS-CoV2 is easily transmitted from person to person. Although the predominant mode of transmission of SARS-CoV-2 is via respiratory droplets, infection can occur via multiple modes of transmission. To the extent that a person is exposed to multiple modalities of transmission, their risk of infection increases. The risk of severe disease also increases with exposure to a higher viral inoculum.⁷ A person who is in a prison or jail—especially one that is at or above full design capacity—is, by the nature of the living arrangements and density of people, exposed to these multiple modalities of transmission and high viral inoculum.
9. With respect to **respiratory transmission**, the COVID-19 virus spreads largely through respiratory droplets containing virus; however, aerosolization can occur in certain conditions and with certain aerosol generating procedures.⁸ Droplets are generated when an infected person coughs, sneezes, or even speaks loudly, through droplets of saliva or nasal discharge. The quantity of respiratory emissions can vary by volume of speech and other factors.⁹ Under usual circumstances, droplets can be spread within approximately six feet of a person.¹⁰

⁶ Zunyou Wu & Jennifer M. McGoogan, *Characteristics of and Important Lessons From the Coronavirus Disease 2019 (COVID-19) Outbreak in China Summary of a Report of 72314 Cases From the Chinese Center for Disease Control and Prevention*, 323 JAMA 1239, <https://jamanetwork.com/journals/jama/fullarticle/2762130>. See also Centers for Disease Control and Prevention, *Coronavirus Disease 2019 Case Surveillance – United States, January 22-May 30, 2020* (June 19, 2020), https://www.cdc.gov/mmwr/volumes/69/wr/mm6924e2.htm?s_cid=mm6924e2_w.

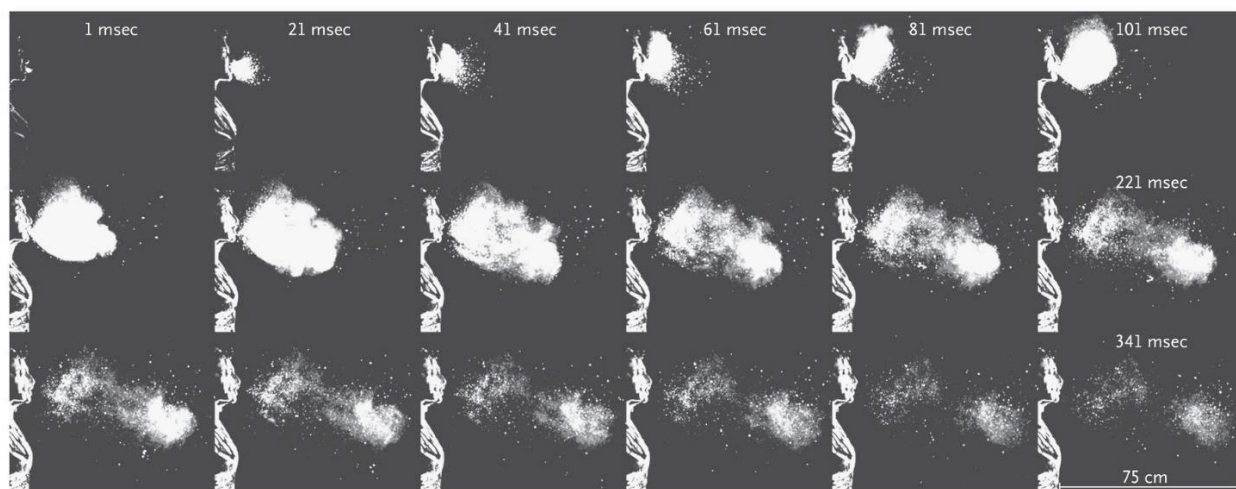
⁷ Monica Gandhi, MD, MPH & George W. Rutherford, MD, *Facial Masking for Covid-19 - Potential for "Variolation" as We Await a Vaccine*, 383 New Eng. J Med. e101(1) (Oct. 29, 2020), <https://www.nejm.org/doi/pdf/10.1056/NEJMp2026913?articleTools=true>.

⁸ Center for Disease Control and Prevention, *Scientific Brief: SARS-CoV-2 and Potential Airborne Transmission* (May 7, 2021), <https://www.cdc.gov/coronavirus/2019-ncov/more/scientific-brief-sars-cov-2.html>.

⁹ Sima Asadi, et al., *Aerosol emission and superemission during human speech increase with voice loudness*, SCI. REP. (Feb. 20, 2019), <https://doi.org/10.1038/s41598-019-38808-z>.

¹⁰ Center for Disease Control and Prevention, *Scientific Brief: SARS-CoV-2 and Potential*

However, under specific conditions, including in enclosed spaces using air conditioning, droplets can travel farther than 6 feet.¹¹ The below image from the New England Journal of Medicine illustrates a human sneeze in increments of 20 milliseconds, and how a sneeze can eject droplets of fluid and infectious organisms. As noted by the scientist who created this image, “The ejection lasts up to 150 msec (top row) and then transitions into a freely evolving turbulent puff cloud (middle and bottom rows). The largest droplets rapidly settle within 1 to 2 m away from the person. The smaller and evaporating droplets are trapped in the turbulent puff cloud, remain suspended, and, over the course of seconds to a few minutes, can travel the dimensions of a room and land up to 6 to 8 m away.”¹²



10. Transmission increases in closed spaces, particularly those with poor ventilation.¹³ One helpful analogy for how some particles can linger is to compare them to how cigarette smoke can linger and permeate an area, especially an enclosed space.¹⁴ The longer the person with COVID-19 is in an enclosed space, the more the droplets containing virus in the space will build up and the

Airborne Transmission (May 7, 2021), <https://www.cdc.gov/coronavirus/2019-ncov/more/scientific-brief-sars-cov-2.html>.

¹¹ Jianyun Lu & Zhicong Yang, *COVID-19 Outbreak Associated with Air Conditioning in Restaurant, Guangzhou, China, 2020*, 26 *Emerging Infectious Diseases* 2790, 2790–93 (Nov. 26, 2020), <https://doi.org/10.3201/eid2611.203774>.

¹² Lydia Bourouiba, Ph.D., *Images in Clinical Medicine: A Sneeze*, 375 *New Eng. J Med.* e15 (Aug. 25, 2016), <https://www.nejm.org/doi/full/10.1056/nejmicm1501197>.

¹³ Maogui Hu, et al., *The risk of COVID-19 transmission in train passengers: an epidemiological and modelling study*, 72 *Clinical Infectious Diseases* 604 (Feb. 15, 2021), <https://doi.org/10.1093/cid/ciaa1057>.

¹⁴ Byron Erath, et al., *What a Smoky Bar Can Teach Us About the ‘6-Foot Rule’ During the COVID 19 Pandemic*, *Discover Magazine* (Sept. 10, 2020), <https://www.discovermagazine.com/health/what-a-smoky-bar-can-teach-us-about-the-6-foot-ruleduring-the-covid-19>.

more probable transmission becomes. The CDC reports that people can be infected even when they have not had close contact with an infected person, especially where there are: (1) “[e]nclosed spaces with inadequate ventilation or air handling within which the concentration of exhaled respiratory fluids . . . can build-up in the air space,” (2) “[i]ncreased exhalation of respiratory fluids if the infectious person is engaged in physical exertion or raises their voice,” and (3) “[p]rolonged exposure to these conditions, typically more than 15 minutes.”¹⁵

11. The strict public health limits on indoor assembly, for example, allowing indoor restaurant dining at only 25% of capacity or closing gyms where multiple people are exercising and exhaling in enclosed spaces, were to reduce the probability of respiratory transmission. For much of the pandemic, authorities did not allow people in the community to assemble and crowd indoors at bars and restaurants as a public health strategy, because we know that indoor transmission is much more highly likely than outdoor transmission. This shows how dangerous it is to have people indoors in close quarters for long periods of time, as they are in prisons and jails. Both droplets and aerosol particles are disseminated even farther under certain conditions such as when air conditioners, air mixing fans, or heating systems recirculate air.¹⁶
12. The Delta variant, now the most common variant in California,¹⁷ is 2-3 times more transmissible than the original wild-type SARS-CoV2.¹⁸ The risk of respiratory transmission in congregate environments, like prisons, is correspondingly much greater. Moreover, natural immunity from infection with

¹⁵ Centers for Disease Control and Prevention, SARS-CoV-2 Transmission (May 7, 2021), <https://www.cdc.gov/coronavirus/2019-ncov/more/scientific-brief-sars-cov-2.html>.

¹⁶ Francis W. Moses, et al., *COVID-19 outbreak associated with air conditioning in restaurant, Guangzhou, China, 2020*, *Emerging Infectious Diseases* (Sept. 2020), <https://doi.org/10.3201/eid2609.201749>;

M. Saiful Islam, et al., *Current knowledge of COVID-19 and infection prevention and control strategies in healthcare settings: A global analysis*, 41 *Infection Control & Hospital Epidemiology* 1196, 1196–1206 (Oct. 2020), <https://doi.org/10.1017/ice.2020.237>.

¹⁷ California Department of Public Health, Tracking Variants (July 29, 2021), <https://www.cdph.ca.gov/Programs/CID/DCDC/Pages/COVID-19/COVID-Variants.aspx>.

¹⁸ Scientific Pandemic Influenza Group on Modeling, Operational Sub-Group, *SPI-M-O: Consensus Statement on COVID-19* (June 2, 2021), https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/993321/S1267_SPI-M-O_Consensus_Statement.pdf; Strategic Advisory Group of Experts on Immunization, Eighty-ninth SAGE meeting on COVID-19, 13 May 2021, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/988403/S1236_Eighty-ninth_SAGE.pdf; Catherine M. Brown, et al., *Outbreak of SARS-CoV-2 Infections, Including COVID-19 Vaccine Breakthrough Infections, Associated with Large Public Gatherings – Barnstable County, Massachusetts, July 2021* (July 30, 2021), https://www.cdc.gov/mmwr/volumes/70/wr/mm7031e2.htm?s_cid=mm7031e2_w.

an earlier strain of COVID-19 may be ineffective at preventing infection with the Delta variant.¹⁹

IV. Housing Practices in CDCR Institutions

13. I have reviewed the Declaration of Tammatha Foss, Director, Corrections Services, California Correctional Health Care Services, concerning living conditions inside CDCR institutions and the Declaration of Joseph Bick, Director, Health Care Services, California Correctional Health Care Services.
14. I understand that there is insufficient space to avoid close contacts in the places in which incarcerated persons sleep and spend their day.²⁰ So many people together indoors in a shared living space makes spread of COVID-19 very likely.
15. I understand that most incarcerated persons in CDCR custody sleep in dormitories that are too crowded for social distancing, with one to two hundred bunk beds in a single room and groups of eight beds together within six feet of each other.²¹ These arrangements drastically increase the risk of potential transmission, because of the close proximity of the people, the fact that they are not wearing masks, and the length of the exposure. Even if the beds were at least six feet apart and there were only single beds instead of bunk beds, this arrangement would be inherently dangerous for anyone sleeping there because the air in any given room is shared with each individual in that room and the length of exposure is so long.²²
16. I understand that corrections officers come into close daily contact with incarcerated persons in the course of their work and travel throughout the institution.²³ Because corrections officers and other staff go daily between the institutions in which they work and the communities in which they live, where they may be subject to community transmission of SARS-CoV2, there is a high risk of staff members unknowingly introducing SARS-CoV2 to an institution.

V. Vaccination

17. Because SARS-CoV2 spreads so easily within CDCR institutions due to aspects of their design and operation that cannot practically be changed, the most effective means of preventing large-scale outbreaks at CDCR institutions is

¹⁹ Delphine Planas, et al., *Reduced sensitivity of SARS-CoV-2 variant Delta to antibody neutralization*, Nature (July 8, 2021), <https://doi.org/10.1038/s41586-021-03777-9>.

²⁰ Foss Decl. ¶¶ 5, 7, 9.

²¹ Foss Decl. ¶ 5.

²² M. Saiful Islam, et al., *Current knowledge of COVID-19 and infection prevention and control strategies in healthcare settings: A global analysis*, 41 Infection Control & Hospital Epidemiology 1196, 1196–1206 (Oct. 2020), <https://doi.org/10.1017/ice.2020.237>.

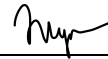
²³ Foss Decl. ¶¶ 3, 4.

preventing contagious individuals from entering an institution and introducing the virus to the institution. Although it is possible for “breakthrough infections” of vaccinated individuals to occur, and for vaccinated people who become infected to infect others with SARS-CoV2, individuals who are vaccinated are substantially less likely to get COVID-19, and therefore to transmit it to others.²⁴ Furthermore, the vaccine appears to be very effective against the Delta variant and other variants.²⁵ For that reason, it is particularly important that staff members, who, as noted above, go daily between their communities and CDCR institutions, are vaccinated against SARS-CoV2.

18. Available vaccines greatly reduce the risk of becoming infected with and transmitting SARS-CoV2, including the Delta variant.²⁶ As a result, a very high vaccination rate, particularly among those with contact with the outside community who may introduce SARS-CoV2 into a CDCR institution, is the most effective means of preventing outbreaks in CDCR institutions, as in other jails and prisons.
19. All three available vaccines, Pfizer, Moderna, and Johnson & Johnson have been rigorously tested and are safe to use and effective against the transmission of SARS-CoV2.²⁷

I declare that the foregoing is true and correct.

Executed on this 4th day of August, 2021, at Los Angeles, California.



Tara Vijayan, M.D.

²⁴ Moriah Bergwerk, et al., *Covid-19 Breakthrough Infections in Vaccinated Health Care Workers*, New Eng. J Med. (July 28, 2021), <https://www.nejm.org/doi/full/10.1056/NEJMoa2109072>.

²⁵ Jamie Lopez Bernal, et al., *Effectiveness of COVID-19 vaccines against the B.1.617.2 (Delta) Variant*, New Eng. J Med. (July 21, 2021), <https://www.nejm.org/doi/full/10.1056/NEJMoa2108891>.

²⁶ Jamie Lopez Bernal, et al., *supra* note 28; Aziz Sheikh, et al., *SARS-CoV-2 Delta VOC in Scotland: demographics, risk of hospital admission, and vaccine effectiveness*, Lancet (June 14, 2021), [https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(21\)01358-1/fulltext](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(21)01358-1/fulltext); Sharifa Nasreen, et al., *Effectiveness of COVID-19 vaccines against variants of concern, Canada* (July 3, 2021), <https://www.medrxiv.org/content/10.1101/2021.06.28.21259420v1>; Dov Lieber, *Pfizer Vaccine Less Effective Against Delta Infections but Prevents Severe Illness, Israeli Data Show*, Wall Street Journal (July 6, 2021), <https://www.wsj.com/articles/pfizers-covid-19-vaccine-is-less-effective-against-delta-variant-israeli-data-show-11625572796>.

²⁷ Centers for Disease Control and Prevention, *Safety of COVID-19 Vaccines* (July 26, 2021), <https://www.cdc.gov/coronavirus/2019-ncov/vaccines/safety/safety-of-vaccines.html>.

EXHIBIT A

Tara Vijayan, MD, MPHtvijayan@mednet.ucla.edu

updated: Aug 4, 2021

EDUCATION:

1997-2001	University of California, Berkeley	B.A.	Literature, Mol Biology
2002-2007	Albert Einstein College of Medicine	M.D.	Medicine
2007-2008	University of California, San Francisco	Intern	Internal Medicine
2008-2010	University of California, San Francisco	Resident	Internal Medicine
2008-2010	UCSF Global Health Pathway	Resident	Clinical Scholar
2010-2013	University of California, San Francisco	Fellow	Infectious Diseases
2011-2012	University of California, Berkeley	M.P.H	Epidemiology
2011-2013	University of California, San Francisco	Research Fellow	
	Mentors: Elvin Geng, Jeff Martin, Diane Havlir		
2015-2017	University of California, Los Angeles	Medical Education Fellowship	

CURRENT POSITIONS:

Associate Clinical Professor, Division of Infectious Diseases, DGSOM, UCLA
Block 6 Co-Chair, David Geffen School of Medicine, University of California, Los Angeles
Chair of the Antibiotic Subcommittee, Pharmaceuticals and Therapeutics, UCLA Health
Medical Director, Adult Antimicrobial Stewardship Program, UCLA Health
Associate Director, Scientific Foundations of Medicine
Faculty Director, Medical Education Concentration, UCLA Multicampus ID Fellowship
Faculty Director, Health Equity Pathway, UCLA Internal Medicine Residency
Core Faculty, UCLA Multicampus Fellowship, David Geffen School of Medicine
Member of Admissions Committee, DGSOM, 2019- present
Lead, EDI Committee, UCLA Multicampus Fellowship

LICENSES AND CERTIFICATION:

2008	Medical Licensure, California (A107177)
2010	Board Certified, American Board of Internal Medicine, 8/2010
2012	Board Certified, Infectious Diseases, 10/2012
2013	Credentialed as an HIV Specialist through the American Academy of HIV Medicine
2019	Buprenorphine prescriber (X-Waiver)

HONORS AND AWARDS:

2001-2002	Americorps Fellowship, St. Anthony Free Medical Clinic, San Francisco, CA
2003	Pediatric Academic Society/Society for Pediatric Research Fellowship, UCSF
2005-2006	Doris Duke Clinical Research Fellowship, Yale University School of Medicine
2005-2006	Farr Scholar, Yale University School of Medicine
2006	Global Health Fellowship, Albert Einstein College of Medicine
2006	Alpha Omega Alpha, Albert Einstein College of Medicine
2007	Glasgow-Rubin Achievement Citation, American Medical Women's Association
2011	Infectious Disease Society of America travel award: excellence in abstract submission
2012	Infectious Disease Society of America travel award: excellence in abstract submission
2017	Invited by American Board of Internal Medicine to take part in Standard Setting Process for Infectious Disease Boards
2019	Golden Apple Award, given by DGSOM Class of 2021

- 2020 Los Angeles Magazine, Top Doctor
- 2020 Golden Apple Award, given by DGSOM Class of 2020
- 2021 Los Angeles Magazine, Top Doctor
- 2021 Golden Apple Award, given by DGSOM Class of 2023
- 2021 IDSA Featured Educator

KEYWORDS/AREAS OF INTEREST:

Infectious diseases in underserved populations, HIV medicine, clinical infectious diseases, implementation science, medical education, antimicrobial stewardship

PROFESSIONAL ACTIVITIES

CLINICAL ACTIVITIES:

- 2009-2010 Moonlighting as a Medical Hospitalist at UCSF Mount Zion and Cancer Research Institute for 1 shift per 3 months
- 2010-2011 Infectious Diseases Consult Service at UCSF, SFGH, San Francisco VA (SFVAMC)
Transplant ID Consult Service at UCSF for 2 months
Infectious Diseases Clinic for one half-day per week (SFVAMC)
Needlestick hotline coverage at SFGH for 2 months
- 2011- present Moonlighting one weekend per month for East Bay AIDS Center (privileges at Alta Bates Medical Center and Summit Medical Center)
- 2011-2012 Moonlighting as internist at Contra Costa Regional Medical Center
- 2012 Transplant ID Consult Service at UCSF for two weeks at a time
- 2011-2013 Moonlighting Staff Physician, East Bay AIDS Center
- 2011-2013 Infectious Diseases Clinic for one half-day every other week (UCSF)
HIV Clinic for one half-day every other week (UCSF Positive Health Practice)
- 2012-2014 Moonlighting as Infectious Disease Consultant Contra Costa Regional Medical Center
- 2013-2014 San Francisco VA medical center, Department of Internal Medicine
- July 2013- Dec 2014 San Francisco VA medical center, Attending Physician on ID service
- May 2013-Jan 2015 Attending physician, East Bay AIDS Center, Oakland, CA
- May 2013-Jan 2015 Assistant Professor of Medicine, WOS, Division of Infectious Diseases, UCSF
- February 2015-June 2021 Assistant Professor of Medicine, Step II-IV, Division of Infectious Diseases, UCLA
- July 2021 Associate Professor of Medicine, Division of Infectious Diseases, UCLA

INTERNATIONAL WORK AND ACTIVITIES:

- 2000 Research in medical anthropology, University of Cape Town, RSA (6 months)
- 2006 Global Health Fellowship, St. John’s Medical Center, Bangalore, India (1.5 months)
- 2009 Physician, Family AIDS Care and Education (FACES) Clinic, Rongo, Kenya (1 month)
- 2010 Physician, Project Medishare, Port-au-Prince, Haiti (1 week)
- 2012 Research, International Epidemiologic Database to Evaluate AIDS, Uganda and Kenya

MENTORSHIP:

Research Mentorship

Academic Year	Student/Fellow	Role
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2016-present	Luis Tulloch (2016-18) Roma Patel (2016-18) Josh Jeharajah (2017-2019) Jean Gibb (2017-2019) Amy Dora (2018-2020) Kusha Davar (2019-present) Daisuke Furukawa (2020-present) Azra Bhimani (2021-present)	Director of Medical Education Concentration: led infectious fellows through projects, submitted abstracts
2018	Shilpa Vashista	Mentor for Medical Education Pathway in Internal Medicine Residency
2020-present	Vinay Srinivasan Brian Chu	Research mentor for 2 nd and 3 rd year medical students

Other Teaching

2008-2010 Teaching on medicine service to interns and medical students, UCSF
 2008-present Precept medical, pre-medical and nursing students in student-run homeless clinic, UCSF
 2011-2013 Teaching on the infectious diseases consult service to residents and students, UCSF
 2015-present Teaching on the infectious disease consult service to fellows, residents and students, UCLA
 2015- present Precepting in Clinic to 2nd and 3rd year medical students, internal medicine and med-peds residents and infectious disease fellows
 2020: Faculty Facilitator, Healers Art Course

INVITED PRESENTATIONS:

2009 CME for clinical staff at the Family AIDS Center and Education clinic in Rongo, Kenya:
 Depression
 Hepatitis B-HIV co-infection

2010 Noon conference, San Francisco General Hospital: Hepatitis B-HIV co-infection

2010 Noon conference, San Francisco VA Medical Center: Cases in Infectious Diseases

2010-2011 Infectious Diseases Grand Rounds, UCSF:
 Landouzy's septicemia (disseminated TB) in an HIV-infected patient
 VZV-related progressive outer retinal necrosis in a gentleman with sarcoidosis
 Disseminated Salmonella infections
 Amebic liver abscesses in men who have sex with men
 Reactivated Hepatitis B infection in a woman with breast cancer
 Japanese Encephalitis Virus
 Cryptococcal Immune Reconstitution Inflammatory Syndrome (IRIS)
 Infectious and non-infectious causes of leukemoid reactions

2012 Infectious Diseases Grand Rounds Journal Club, UCSF, February 2013:
 Newer regimens for the treatment of latent tuberculosis infection

2012 UCSF-UC Berkeley Joint Infectious Diseases Retreat:
 Timing and determinants of antiretroviral initiation in patients with HIV-associated TB

2012 UCSF primary care resident ambulatory core curriculum: HIV management
 UCSF primary care resident ambulatory core curriculum: Latent TB infection

2013 UCSF PRIME curriculum: Antiretroviral therapy initiation

- Guest speaker for Ambulatory Case Conference, UCSF: TB peritonitis, February 2013
 Infectious Diseases Grand Rounds, Journal Club, UCSF, Feb 2013:
 Fecal Microbiota Transplantation
- 2014 UCSF PRIME curriculum: Cases in Ambulatory HIV Care
- 2014 East Bay AIDS Education and Training Center Conference: Seminar on Current Topics
 in Infectious Diseases
- 2015 Infectious Diseases in the Homeless Population, lecture for medical students, UCLA
 Clinical manifestations of HIV, Epidemiology M228 Biology of HIV, UCLA
 Skin and Soft Tissue Infections, Residents in Department of Medicine, UCLA
 Sexually Transmitted Disease, Block 6, David Geffen School of Medicine
 Infectious Disease Grand Rounds: Innovations in Medical Education
- 2016 Diabetic Foot Infections, Infectious Disease Fellows, UCLA
 Skin and Soft Tissue Infections, SM Noon Conference
 Sexually Transmitted Disease in Pregnancy, Maternal Fetal Medicine Fellows, UCLA
- 2017 Respiratory Viral Pathogens, Infectious Disease Fellows
 Diabetic Foot Infections, SM Noon Conference
 Skin and Soft Tissue Infections, SM Noon Conference
 Mycobacterial Diseases and Endemic Mycoses, Thoracic Surgery Conference
 Infectious Diseases in the Geriatric Patient, UCLA Board Review Course for Geriatric
 Medicine, Sept, 2017*
 Funny, you don't look like you are from Los Angeles! Implicit Biases: It is the Elephant
 in the Room. Annual Doctoring and PBL Tutors Conference. November 2017
- 2018 Mock Medical School Lecture for Transfer Students at UCLA (undergraduate):
 "Dysuria," January 2018
 ID Grand Rounds- Joint Conference on Managing Patients with CF, April 2018
 Iris Cantor Women's Health Conference: Skin and Soft Tissue Infections, March 2018
 How to Complete an Evaluation, Brief Talk for Infectious Disease Faculty, June 2018
 Infectious Diseases in Older Persons, UCLA Geriatrics Board Review CME Sept 2018*
 Implicit Bias seminar for UCLA IM Residents, Ambulatory Curriculum Sept-Oct 2018
- 2019 Grand Rounds St. Vincent's Medical Center: Choosing Antibiotics Wisely Feb 28, 2019*
 4th UCLA Health Advanced Practice Provider Conference: Choose Antibiotics Wisely
 March 30, 2019*
 Dysuria, Mock Medical School Lecture for Undergraduates at UCLA, Jan 2019
 Respiratory Viral Infections, UCLA Multicampus Fellowship, Feb 2019
 Infectious Diseases in Older Persons, UCLA Geriatrics Board Review CME Sept 2019*
 Chairperson, pre-conference seminar on infectious diseases, UCLA Geriatrics Board
 Review, CME Sept 2019*
 Noon Conference, Skin and Soft Tissue Infections, SM Hospital and RRMC
 "Walking on Eggshells: How to Have Difficult Conversations with your Learner." Given
 as part of Doctor IV seminar as well as Doctoring retreat, December 2019
- 2020 "Health Equity Story Slam" Department of Medicine Grand Rounds, January 2020
 "What's New in Infectious Diseases." Surgery Grand Rounds March 4, 2020*
 "Clinical Management of COVID-19" DGSOM, May 1, 2020, DGSOM
 COVID-19 Update, DOM grand rounds. "Re-writing Treatment Guidance." May 6,
 2020*
 Roundtable on COVID-19 for DOM with Otto Yang, Omai Garner, May 7, 2020
 Oral abstract "Walking on Eggshells" AAMC Group on Diversity and Inclusion
 Conference , Miami, FL May 1-4, 2020

Urology Grand Rounds: Clinical and Surgical Management of the Patient with Covid-19. May 13, 2020.*
 Choosing Antibiotics Wisely, Ob-Gyn Residents, Aug 28, 2020
 “The UCLA Experience with Covid-19: Diagnosis, Treatment and Community Service.”
 DOM Grand Rounds with Omai Garner, PhD. Sept 2, 2020*
 ID-Health Equity Journal Club, Sept 17, 2020, UCLA Multicampus Fellowship
 Overview of Respiratory Viruses, Sept 29, 2020, UCLA Multicampus Fellowship
 Novel Coronavirus: From the inpatient setting to outpatient management. UCLA IM residents, Sept- October 2020
 Non-tuberculous Mycobacteria, Thoracic Surgery Residents November 6, 2020
 Latent TB Infection, Noon Conference, UCLA IM Residents November 12, 2020
 UCLA-University of Kwazulu Natal Covid-19 Case Conference, November 30, 2020
 Walking on Eggshells, Doctoring 4, DGSOM December 3, 2020
 Updates in the Management of Covid-19, with Drs. Christopher Tymchuk and Adrian Mayo December 17, 2020

2021 Department of Medicine Retreat Story Slam, March 2, 2021
 Urology Grand Rounds: Updates in Covid-19, April 21, 2021*
 Pulmonary Non-tuberculous Mycobacteria, June 14, 2021
 Choosing Antibiotics Wisely, Lakewood Medical Center, July 23, 2021*
 Geriatrics Board Review, UCLA: Infections in Older Persons September 24, 2021* (pre-recorded)
 Geriatrics Board Review, UCLA: Taking care of patients with Covid-19: A Living Document September 24, 2021 (pre-recorded)*

*CME talks

LEADERSHIP ROLES:

2020- present Faculty Director, Health Equity Pathway, UCLA IM Residency
 2019- present Medical Director, Antimicrobial Stewardship Program
 2018- 2021. Co-Chair of MS4 elective MD 999.08 Teaching Fellowship
 2016- present Block 6 Co-Chair
 2016-present Faculty Director of Medical Education Concentration
 2020-present. Associate Director of Scientific Foundations of Medicine
 2020-present. Lead, Fellowship EDI committee
 2011-2012 Chief fellow, Division of Infectious Diseases, UCSF
 2002-2006 Founder and editor of Ad Libitum, Literary and Art Magazine of Albert Einstein College of Medicine

PROFESSIONAL ORGANIZATIONS AND TASK FORCES:

2010-present Member, Infectious Diseases Society of America
 2016-2017 Cultural Competency Task Force, UCLA
 June 2017 Participated in American Board of Internal Medicine Standard Setting Process
 2017-present Medical Education Committee, UCLA Multicampus ID Fellowship
 2019-2021 Teaching and Learning Resources Work Group of the IDSA Medical Education Community of Practice
 2019-2020 Curriculum Redesign Task Force, Phase III Program Evaluation & Assessment Committee
 2020 LCME accreditation task force
 2020- present. Department of Medicine Equity, Diversion and Inclusion Advisory Board

CME COURSES ATTENDED:

2008 Medical Management of HIV/AIDS, UCSF
2010 International Congress of Infectious Diseases, Miami, FL
2011 Infectious Diseases Society of America national meeting, Boston, MA
2012 Clinical Tuberculosis Intensive, Curry National Tuberculosis Program, San Francisco
2012 Infectious Diseases Society of America national meeting, San Diego, CA
2015 Infectious Disease Society of America National Meeting, San Diego, CA
2017 Infectious Disease Society of America National Meeting, San Diego, CA
2018 Developing Faculty Competencies in Assessment: An Interactive Workshop for UCLA Clinical Educators, February 2018
UCSF Developing Medical Educators of the 21st Century Conference March 2018
Infectious Disease Society of America National Meeting (ID Week), SF, CA, Oct 2018
2019 2019 NBME Invitational Conference for Educators (May 15 - 16, 2019) at the Indianapolis Marriott Downtown hotel in Indianapolis, Indiana.
Infectious Disease Society of America National Meeting (ID Week) Washington DC October 2019

RESEARCH AND CREATIVE ACTIVITIES

RESEARCH AWARDS AND GRANTS:

Past

Doris Duke Clinical Research Fellowship, Yale University School of Medicine 6/1/05-5/31/06

Ruth L. Kirschstein National Research Service Award (PD: Chambers) 7/1/11-5/1/13
Institutional Research Training Grant
T32 AI007641-06A2
NIH/PHS
Role: Trainee

PRESS RELEASES/PODCASTS

Febrile Podcast: Episode #9 Arts and Grafts April 19, 2021 <https://febrilepodcast.com/episode-9-arts-grafts/>

Interviewed by Madeline Brand, Press Play, KCRW, <https://www.kcrw.com/people/dr-tara-vijayan> Feb 26, 2021

Cited in Washington Post, December 31, 2021
<https://www.washingtonpost.com/health/2020/12/31/covid-monoclonal-antibodies-unused/>

Cited in Self Magazine December 13, 2019 on Z packs <https://www.self.com/story/z-pack-antibiotics-uses>

Interviewed for BYU XM Radio on influenza. October 9, 2018
<https://www.byuradio.org/episode/888427d8-9384-48d2-abfd-7c4d70a0a0f4?playhead=1436&autoplay=true>

Cited in NYT article on Influenza: January 12, 2018, <https://www.nytimes.com/2018/01/12/well/live/flu-h3n2-virus-care-remedy.html>

Cited in Today Show article on “The Man Flu” December 17, 2017, <https://www.today.com/health/man-flu-real-t119791>

REVIEWER

Annals of Internal Medicine, October 2018
AIDS Care, BMC Infectious Diseases (2012-2016)
Annals of Internal Medicine, May 2020, July 2020
JAMA Open Network, July 2020
OFID, March 2021

PUBLICATION/BIBLIOGRAPHY

RESEARCH PAPERS

A. RESEARCH PAPERS (PEER REVIEWED)

1. **Vijayan, T**, Benin, AL, Wagner, K, Romano, S, Andiman, WA. “Transitioning Adolescents with Perinatally-Acquired HIV to Adult Medicine.” *AIDS Care*, Volume 21, Issue 10 October 2009, 1222-1229.
2. **Vijayan, T**, Chiller, T, Klausner, J. Sensitivity and specificity of a new cryptococcal antigen lateral flow assay in serum and cerebrospinal fluid.” *MLO Med Lab Obs.* 2013 Mar;45(3):16, 18, 20.
3. **Vijayan, T**, Klausner, J. “Integrating clinical services for HIV, tuberculosis and cryptococcal disease in the developing world: a step forward with two novel diagnostic tests” *Journal of International Association of Providers of AIDS Care*, 2013 Sep-Oct;12(5):301-5.
4. **Vijayan, T**, Zheng, P, Nguyen, C, Peters, M. “Assessing Burden and Depth of HBV Infection Among Asian Pacific Islander Families in San Francisco.” *Journal of Immigrant and Minority Health*, e-published ahead of print August 3, 2013.
5. **Vijayan, T**, Semitala, F, Matsiko, N, Elyanu P, Namusobya J, Havlir DV, Kanya M, Geng EH. “Changes in the timing of antiretroviral therapy initiation in HIV-infected patients with tuberculosis in Uganda: a study of the diffusion of evidence into practice in the global response to HIV/AIDS.” *Clin Infect Dis.* 2013 Sep 24
6. Kuan, EC, Yoon AJ, **Vijayan T**, Humpries RM, Suh, HD. Canine *Staphylococcus pseudintermedius* sinonasal infection in human hosts. *Int Forum Allergy Rhinol.* 2016 Feb 16.
7. **Vijayan T**, Klausner JD. Hepatitis C: challenges and opportunities in the laboratory diagnosis of infection. *MLO Med Lab Obs.* 2016 Mar; 48(3): 16, 18.
8. Roy M, Muyindike W, **Vijayan T**, Kanyesigye M, Bwana M, Wenger M, Martin J, Geng E. Use of symptom screening and sputum microscopy testing for active tuberculosis case detection among HIV-infected patients in real-world clinical practice in Uganda. *J Acquir Immune Defic Syndr.* 2016 May 6.
9. Censullo, A and **Vijayan, T**. Choosing Nuclear Medicine Imaging Studies Wisely in Diagnosing Infectious Diseases. *Open Forum Infectious Diseases* 3 Feb 2017.
10. Wilson, M, Sample H Zorn KC, Arevalo S, Yu G, Neuhaus J, Federman S, Stryke D, Briggs B, Langelier C, Berger A, Douglas V, Josephson SA, Chow FC, Fulton BD, DeRisi JL, Gelfand JM, Naccache SN, Bender J, Dien Bard J, Murkey J, Carlson M, Vespa PM, **Vijayan T**, Allyn PR, Campeau S, Humphries RM, Klausner JD, Ganzon CD, Memar F, Ocampo NA, Zimmermann LL, Cohen SH, Polage CR, DeBiasi RL, Haller B, Dallas R, Maron G, Hayden R, Messacar K, Dominguez SR, Miller S, Chiu CY. *Clinical Metagenomic Next-Generation*

Sequencing for Diagnosis of Infectious Meningitis and Encephalitis. *New England Journal of Medicine*, June 13, 2019.

11. **Vijayan, T.** “Browner: Creating Narratives of Race.” *New England Journal of Medicine*. August 1, 2019.
12. Tulloch, L, Patel, R, Martin, E, Curello, J, Relan, A, **Vijayan, T.** Using modified team-based learning to teach antimicrobial stewardship to medical students: One institution’s approach. *Medical Science Educator*. published online August 28, 2019.
13. Takada S, Ober AJ, Currier, JS, Goldstein NJ, Horwich TB, Mittman BS, Shu SB, Tseng CH, **Vijayan T,** Wali S, Cunningham WE, Ladapo JA. Reducing cardiovascular risk among people living with HIV: Rationale and design of the Increasing Statin Prescribing in HIV Behavioral Economic Research (INSPIRE) randomized controlling trial. *Prog Cardiovasc Dis* 2020 Feb 19.
14. Adamson, P, Goodman-Meza, D, **Vijayan, T,** Yang, Shangxin, Garner, Omai. Diagnostic Yield of Repeat Testing for SARS-CoV-2: Experience from a Large Health System in Los Angeles. *International Journal of Infectious Diseases*. Accepted, pending publication.
15. **Vijayan T,** Cortés-Penfield N, Harris C. Tuskegee as a History Lesson, Tuskegee as Metaphor: Addressing Discrimination as a Social Determinant of Health in the Classroom. *Open Forum Infect Dis*. 2020 Sep 28;7(10):ofaa458. doi: 10.1093/ofid/ofaa458. PMID: 33134422; PMCID: PMC7588099.
16. **Vijayan T,** Shin M, Adamson PC, Harris C, Seeman T, Norris KC, Goodman-Meza D. Beyond the 405 and the 5: Geographic variations and factors associated with SARS-CoV-2 positivity rates in Los Angeles County. *Clin Infect Dis*. 2020 Nov 3:ciaa1692. doi: 10.1093/cid/ciaa1692. Epub ahead of print. PMID: 33141164.

B. RESEARCH/PERSPECTIVE PAPERS - PEER REVIEWED (in press)

C. RESEARCH PAPERS - PEER REVIEWED (SUBMITTED):

Winnett, A, Srinivasan, V, Davis, M, **Vijayan, T,** Uslan, D, Garner, O, de St Maurice, A. “The Path of More Resistance: A Comparison of NHSN and CLSI Criteria in Developing Institutional Antibiograms.” Submitted to CID

Davar, K, Wilson, M, Miller, S, Chiu, CY, **Vijayan, T.** “A Rare Bird: Diagnosis of Psittacosis Meningitis by Clinical Metagenomic Next-Generation Sequencing.” Submitted to OFID.

Furukawa, D, Douglas, N, Hsu, J, Davis, M, Pham, M, Kanatani, M, **Vijayan, T.** Antibiotic prophylaxis in beta-lactam allergic patients undergoing Cesarean and vaginal delivery: An opportunity for stewardship.” Submitted to ICHE.

RESEARCH PAPERS (NON-PEER REVIEWED)

D. RESEARCH PAPERS - NON-PEER REVIEWED

1. **Vijayan, T,** Pelfrey, J, Klausner, J. Cryptococcal Lateral Flow Assay, YRG newsletter.

- E. RESEARCH PAPERS - NON-PEER REVIEWED (IN PRESS)
None
- F. RESEARCH PAPERS - NON-PEER REVIEWED (SUBMITTED)
None

CHAPTERS

CHAPTERS (IN PRESS)

1. **Vijayan, T**, Gonzales, R. Acute Sinusitis. In: Chiovaro J, Durand K, Lai C., eds. UCSF Outpatient Medicine Pocket Preceptor. University of California San Francisco. November 2009.
2. **Vijayan, T**, Winston, L. Sexually Transmitted Diseases. In: Chiovaro J, Durand K, Lai C., eds. UCSF Outpatient Medicine Pocket Preceptor. University of California San Francisco. November 2009.
3. **Vijayan, T**, Fox, L. Dermatology. In: Chiovaro J, Durand K, Lai C., eds. UCSF Outpatient Medicine Pocket Preceptor. University of California San Francisco. November 2009.
4. **Vijayan, T**. Plague. DynaMed, 2014
5. **Vijayan, T**. Viral Hemorrhagic Fever. DynaMed, 2014.

ONLINE EDITORIALS

Vijayan, T. "A Typical Day in This Physician's Household." KevinMD.com. Feb 6, 2018

Vijayan, T, Qadir, N, Wang, T. "Trusting evidence over anecdote: Clinical decision making in the era of covid-19. BMJ Opinion. July 23, 2020

Vijayan, T. "In the quiet of the holiday season, the City of Angels burns."
<https://blogs.bmj.com/bmj/2021/01/05/tara-vijayan-in-the-quiet-of-the-holiday-season-the-city-of-angels-burns/> BMJ Opinion, January 5, 2021

ABSTRACTS

1. **Vijayan, T**, Pai-Dhungat, M, Tebb, K, Fink, J, Orphila, M, Stewart, P, Shafer, MA. "Is Ethnicity Associated with Factors Leading to Childhood Obesity?" Presented as a poster at the Pediatric Academic Society/Society for Pediatric Research Meeting in San Francisco, May 2004
2. **Vijayan, T**, Benin, AL, Wagner, K, Romano, S, Andiman, WA. " 'We Never Thought This Would Happen': Transitioning Adolescents with Perinatally-Acquired HIV to Adult Medicine." Presented as a poster for Yale Student Research Day and Doris Duke Clinical Research Meeting, May 2006.
3. **Vijayan, T**, Zheng, P, Nguyen, C, Peters, M. "Assessing Burden and Depth of HBV Infection Among Asian Pacific Islander Families in San Francisco." Presented as a poster at the 14th International Congress of Infectious Diseases, Miami, FL, March 9-12, 2010.

4. **Vijayan, T**, Zheng, P, Nguyen, C, Peters, M. “Limited knowledge and screening among family members of Hepatitis B infected Asian Pacific Islanders.” Presented at American Association of Liver Diseases meeting Boston, MA Oct 29-Nov 2, 2010
5. **Vijayan, T**, Metcalfe, JZ, Grinsdale, J, Ho, C, Kawamura, M, Hopewell, P, Nahid, P. “The Sum and the Whole of Whole-Blood Interferon Gamma Release Assays: Understanding Patient Factors That Influence Quantitative IGRA Values.” Presented at the Infectious Diseases Society of America conference in Boston, MA, October 20-23, 2011.
6. **Vijayan, T**, Bauman S, Chiller, T, Klausner, J. “Test performance of a novel lateral-flow assay to detect cryptococcal disease.” ID Week, San Diego, October 18, 2012.
7. Patel, R, Relan, A, and **Vijayan, T**. “Flipping Expectations: Are Active Learning Strategies Sufficient or Necessary To Teach Principles of Antimicrobial Stewardship in Medical School?.” ID Week, San Diego, October 2017
8. Allyn, P, Schaenman, J, Schwartz, B, **Vijayan, T**. “West Coast Transplant ID Conference: A Model for Building Community In ID Disciplines?” ID Week 2018, San Francisco.
9. Davar, K, **Vijayan, T**. The PEST Approach to Choosing Antimicrobial Therapy. ID Week October, 2020
10. Davar, K, **Vijayan, T**. “Psitticosis meningitis.” Challenging Cases. ID Week, October 2020
11. Dora, A, Graber, C, **Vijayan, T**. “Works well enough? Program Directors’ Perceptions of the Effectiveness and Transparency of Competency-Based Evaluations in Assessing Infectious Diseases Fellow Performance.” ID Week, October 2020
12. Vasishta, S, Graber, C, **Vijayan, T**. Next-Generation Sequencing in Clinical Practice: A Survey of Infectious Disease Providers. ID week, October 2020

Community Engagement

Sabbath Town Hall on Covid Vaccines December 27, 2020, January 3, 2020, January 10, 2020 (Facebook Live Event) sponsored by CoVPN, Charles Drew University, New Vision Church of Jesus Christ

Inglewood Active Community Town Hall Event sponsored by the American Heart Association, April 21, 2021

Covid Vaccine Townhall: Expansion of Covid-19 Vaccine Ages 12 and Up. Ask the Doctor. May 14, 2-21 Facebook Live

Carnegie Science Center Covid-19 Vaccine Panel Series, Vaccine Science & Safety, May 20, 2021

Additional consulting work:

Prison Law Firm, ACLU, Federal Defenders of San Diego.