



## Hector Fabio Bonilla

Clinical Associate Professor, Medicine - Infectious Diseases

 NIH Biosketch available Online

 Curriculum Vitae available Online

### CLINICAL OFFICE (PRIMARY)

- **Post COVID-19 Syndrome (PACS) Clinic**

3351 El Camino Real Ste 225

Atherton, CA 94027

**Tel** (650) 736-5200

**Fax** (650) 497-0754

### Bio

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#### BIO

As a young physician at Louisiana State University, Dr. Bonilla focused on the Clinical Management of HIV/AIDS and HCV, two neglected and stigmatized diseases for which effective therapies were in their infancy. While learning the clinical aspects of the two diseases, Dr. Bonilla saw a need to create and organize a support community to promote understanding and management of the conditions. Subsequently, he went to Summa Health System in Akron, Ohio, and he continued his work where he specialized in HIV/HCV as well as in Infectious Diseases Clinical Practice. In addition to teaching medical residents and students, Dr. Bonilla participated in numerous clinical trials and developed clinical research projects. Furthermore, he led the Infection Renal Transplant Program, HIV and HCV clinics, and he participated in several cooperative studies with Case Western Reserve University. Dr. Bonilla's interest in academia led him to the University Of Pittsburgh Medical Center where he was an Assistant Professor, Clinician, and Medical Educator in the Department of Medicine in the Division of Infectious Diseases. Due to his interest in cytokines and immunological responses, Dr. Bonilla became a researcher at ImmunoScience Inc., a biotechnology company in California that works to develop a therapeutic HIV vaccine. Dr. Bonilla's experience of treating HIV/HCV combined with his interest in inflammatory response is the driving force behind his desire to understand ME/CFS. Dr. Bonilla is a strong patient advocate, and he believes in integrated care—care in which physicians communicate and coordinate efforts to deliver the best medical outcome for patients. His ME/CFS patients are his inspiration, and he is committed to continuing research to seek answers to their health challenges.

#### CLINICAL FOCUS

- Infectious Disease
- ME/CFS and Post COVID-19 conditions
- Diagnosis and therapeutics
- Clinical Research

#### PATIENT CARE

As a young physician at Louisiana State University, Dr. Bonilla focused on the Clinical Management of HIV/AIDS and HCV, two neglected and stigmatized diseases for which effective therapies were in their infancy. While learning the clinical aspects of the two diseases, Dr. Bonilla saw a need to create and organize a support community to promote understanding and management of the conditions. Subsequently, he went to Summa Health System in Akron, Ohio, and he continued his work where he specialized in HIV/HCV as well as in Infectious Diseases Clinical Practice. In addition to teaching medical residents and students, Dr. Bonilla participated in numerous clinical trials and developed clinical research projects. Furthermore, he led the Infection Renal Transplant Program, HIV and HCV clinics, and he participated

in several cooperative studies with Case Western Reserve University. Dr. Bonilla's interest in academia led him to the University Of Pittsburgh Medical Center where he was an Assistant Professor, Clinician, and Medical Educator in the Department of Medicine in the Division of Infectious Diseases. Due to his interest in cytokines and immunological responses, Dr. Bonilla became a researcher at ImmunoScience Inc., a biotechnology company in California that works to develop a therapeutic HIV vaccine. Dr. Bonilla's experience of treating HIV/HCV combined with his interest in inflammatory response is the driving force behind his desire to understand ME/CFS. Dr. Bonilla is a strong patient advocate, and he believes in integrated care—care in which physicians communicate and coordinate efforts to deliver the best medical outcome for patients. His ME/CFS patients are his inspiration, and he is committed to continuing research to seek answers to their health challenges.

## ACADEMIC APPOINTMENTS

- Clinical Associate Professor, Medicine - Infectious Diseases

## ADMINISTRATIVE APPOINTMENTS

- Director, ME/CFS Clinic Co-Director, Stanford Post-Acute COVID-19 Syndrome Clinic, Stanford Health Care, (2018- present)

## BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- Member, Infectious Diseases Society of America (IDSA) (1995 - present)

## PROFESSIONAL EDUCATION

- Board Certification: Infectious Disease, American Board of Internal Medicine (1996)
- Fellowship: University of Michigan Infectious Diseases Fellowship (1996) MI
- Board Certification: Internal Medicine, American Board of Internal Medicine (1994)
- Residency: Sinai Grace Hospital Internal Medicine Residency (1994) MI
- Medical Education: Universidad Del Valle (1983) Colombia
- MD, Universidad del Valle School of Medicine, Cali, Colombia , MD (1983)
- Chief Medical Resident, Universidad del Valle , Internal Medicine (1988)
- Visiting Physician, Henry Ford Hospital , Nephrology Department (1990)
- Clinical Research, Sinai Hospital of Detroit , Clinical Research (1991)
- Internship, Sinai Hospital of Detroit , Internal Medicine (1992)
- Residency, Sinai Hospital of Detroit , Internal Medicine Residency (1994)
- ID Fellow, University Of Michigan , Infectious Diseases (1996)

## Publications

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### PUBLICATIONS

- **Evaluation of acebilustat, a selective inhibitor of leukotriene B4 biosynthesis, for treatment of outpatients with mild-moderate COVID-19 disease: A randomized, double-blind, placebo- controlled Phase 2 trial.** *Clinical infectious diseases : an official publication of the Infectious Diseases Society of America* Levitt, J. E., Hedlin, H., Duong, S., Lu, D., Lee, J., Bunning, B., Elkarra, N., Pinsky, B. A., Heffernan, E., Springman, E., Moss, R. B., Bonilla, H. F., Parsonnet, et al  
2023
- **Therapeutic trials for long COVID-19: A call to action from the interventions taskforce of the RECOVER initiative.** *Frontiers in immunology* Bonilla, H., Peluso, M. J., Rodgers, K., Aberg, J. A., Patterson, T. F., Tamburro, R., Baizer, L., Goldman, J. D., Roupheal, N., Deitchman, A., Fine, J., Fontelo, P., Kim, et al  
2023; 14: 1129459
- **Myalgic Encephalomyelitis/Chronic Fatigue Syndrome is common in post-acute sequelae of SARS-CoV-2 infection (PASC): Results from a post-COVID-19 multidisciplinary clinic.** *Frontiers in neurology* Bonilla, H., Quach, T. C., Tiwari, A., Bonilla, A. E., Miglis, M., Yang, P. C., Eggert, L. E., Sharifi, H., Horomanski, A., Subramanian, A., Smirnoff, L., Simpson, N., Halawi, et al

2023; 14: 1090747

- **Development of a Definition of Postacute Sequelae of SARS-CoV-2 Infection.** *JAMA*  
Thaweethai, T., Jolley, S. E., Karlson, E. W., Levitan, E. B., Levy, B., McComsey, G. A., McCorkell, L., Nadkarni, G. N., Parthasarathy, S., Singh, U., Walker, T. A., Selvaggi, C. A., Shinnick, et al  
2023
- **Establishing a consensus on ME/CFS exclusionary illnesses** *FATIGUE-BIOMEDICINE HEALTH AND BEHAVIOR*  
Jason, L. A., Ravichandran, S., Katz, B. Z., Natelson, B. H., Bonilla, H.  
2022
- **Early immune markers of clinical, virological, and immunological outcomes in patients with COVID-19: a multi-omics study.** *eLife*  
Hu, Z., van der Ploeg, K., Chakraborty, S., Arunachalam, P. S., Mori, D. A., Jacobson, K. B., Bonilla, H., Parsonnet, J., Andrews, J. R., Holubar, M., Subramanian, A., Khosla, C., Maldonado, et al  
2022; 11
- **TNF-alpha+ CD4+ T cells dominate the SARS-CoV-2 specific T cell response in COVID-19 outpatients and are associated with durable antibodies.** *Cell reports. Medicine*  
van der Ploeg, K., Kiroosingh, A. S., Mori, D. A., Chakraborty, S., Hu, Z., Sievers, B. L., Jacobson, K. B., Bonilla, H., Parsonnet, J., Andrews, J. R., Press, K. D., Ty, M. C., Ruiz-Betancourt, et al  
2022: 100640
- **Favipiravir for treatment of outpatients with asymptomatic or uncomplicated COVID-19: a double-blind randomized, placebo-controlled, phase 2 trial.** *Clinical infectious diseases : an official publication of the Infectious Diseases Society of America*  
Holubar, M., Subramanian, A., Purington, N., Hedlin, H., Bunning, B., Walter, K. S., Bonilla, H., Boumis, A., Chen, M., Clinton, K., Dewhurst, L., Epstein, C., Jagannathan, et al  
2022
- **Gastrointestinal symptoms and fecal shedding of SARS-CoV-2 RNA suggest prolonged gastrointestinal infection.** *Med (New York, N.Y.)*  
Natarajan, A., Zlitni, S., Brooks, E. F., Vance, S. E., Dahlen, A., Hedlin, H., Park, R. M., Han, A., Schmidtke, D. T., Verma, R., Jacobson, K. B., Parsonnet, J., Bonilla, et al  
2022
- **Comparative Analysis of Extracellular Vesicles in Patients with Severe and Mild Myalgic Encephalomyelitis/Chronic Fatigue Syndrome.** *Frontiers in immunology*  
Bonilla, H., Hampton, D., Marques de Menezes, E. G., Deng, X., Montoya, J. G., Anderson, J., Norris, P. J.  
2022; 13: 841910
- **Characterization of autonomic symptom burden in long COVID: A global survey of 2,314 adults.** *Frontiers in neurology*  
Larsen, N. W., Stiles, L. E., Shaik, R., Schneider, L., Muppidi, S., Tsui, C. T., Geng, L. N., Bonilla, H., Miglis, M. G.  
2022; 13: 1012668
- **Long Term Accuracy of SARS-CoV-2 Interferon-# Release Assay and its Application in Household Investigation.** *Clinical infectious diseases : an official publication of the Infectious Diseases Society of America*  
Murugesan, K., Jagannathan, P., Altamirano, J., Maldonado, Y. A., Bonilla, H. F., Jacobson, K. B., Parsonnet, J., Andrews, J. R., Shi, R. Z., Boyd, S., Pinsky, B. A., Singh, U., Banaei, et al  
2022
- **Survivors of SARS-CoV-2 Infection Show Neuropsychiatric Sequelae Measured by Surveys, Neurocognitive Testing, and Magnetic Resonance Imaging: Preliminary Results**  
Hack, L., Brawer, J., Zhang, X., Wintermark, M., Jiang, B., Stetz, P., Yesavage, J., Grant, P., Bonilla, H., Subramanian, A., Williams, L.  
SPRINGERNATURE.2021: 205-206
- **Myalgic Encephalomyelitis/Chronic Fatigue Syndrome: Essentials of Diagnosis and Management.** *Mayo Clinic proceedings*  
Bateman, L., Bested, A. C., Bonilla, H. F., Chheda, B. V., Chu, L., Curtin, J. M., Dempsey, T. T., Dimmock, M. E., Dowell, T. G., Felsenstein, D., Kaufman, D. L., Klimas, N. G., Komaroff, et al  
2021
- **SARS-CoV-2 Antiviral Therapy.** *Clinical microbiology reviews*  
Tao, K., Tzou, P. L., Nouhin, J., Bonilla, H., Jagannathan, P., Shafer, R. W.  
2021: e0010921

- **Patients with uncomplicated COVID-19 have long-term persistent symptoms and functional impairment similar to patients with severe COVID-19: a cautionary tale during a global pandemic.** *Clinical infectious diseases : an official publication of the Infectious Diseases Society of America*  
Jacobson, K. B., Rao, M., Bonilla, H., Subramanian, A., Hack, I., Madrigal, M., Singh, U., Jagannathan, P., Grant, P.  
2021
- **Off label use of Aripiprazole shows promise as a treatment for Myalgic Encephalomyelitis/Chronic Fatigue Syndrome (ME/CFS): a retrospective study of 101 patients treated with a low dose of Aripiprazole.** *Journal of translational medicine*  
Crosby, L. D., Kalanidhi, S., Bonilla, A., Subramanian, A., Ballon, J. S., Bonilla, H.  
2021; 19 (1): 50
- **Peginterferon Lambda-1a for treatment of outpatients with uncomplicated COVID-19: a randomized placebo-controlled trial.** *Nature communications*  
Jagannathan, P. n., Andrews, J. R., Bonilla, H. n., Hedlin, H. n., Jacobson, K. B., Balasubramanian, V. n., Purington, N. n., Kamble, S. n., de Vries, C. R., Quintero, O. n., Feng, K. n., Ley, C. n., Winslow, et al  
2021; 12 (1): 1967
- **SARS-CoV-2 subgenomic RNA kinetics in longitudinal clinical samples** *Open Forum Infectious Diseases*  
Verma, R., Kim, E., Martinez, G., Jagannathan, ., Rustagi, A., Parsonnet, J., Bonilla, H., Khosla, C., Holubar, M., Subramanian, A., Singh, ., Maldonado, Y., Blish, et al  
2021
- **Inflammatory but not respiratory symptoms are associated with ongoing upper airway viral shedding in outpatients with uncomplicated COVID-19.** *Diagnostic microbiology and infectious disease*  
Jacobson, K. B., Purington, N., Parsonnet, J., Andrews, J., Balasubramanian, V., Bonilla, H., Edwards, K., Desai, M., Singh, U., Hedlin, H., Jagannathan, P.  
2021; 102 (3): 115612
- **Interferon-gamma release assay for accurate detection of SARS-CoV-2 T cell response.** *Clinical infectious diseases : an official publication of the Infectious Diseases Society of America*  
Murugesan, K. n., Jagannathan, P. n., Pham, T. D., Pandey, S. n., Bonilla, H. F., Jacobson, K. n., Parsonnet, J. n., Andrews, J. R., Weiskopf, D. n., Sette, A. n., Pinsky, B. A., Singh, U. n., Banaei, et al  
2020
- **Beta-Glucanemia after Coronary Artery Bypass Graft Surgery: A Case Report** *JOURNAL OF FUNGI*  
Styczynski, A., Bonilla, H., Treynor, E., Shashank, J., Zhang, Y., Finkelman, M.  
2018; 4 (4)
- **Beta-Glucanemia after Coronary Artery Bypass Graft Surgery: A Case Report.** *Journal of fungi (Basel, Switzerland)*  
Styczynski, A., Bonilla, H., Treynor, E., Shashank, J., Zhang, Y., Finkelman, M.  
2018; 4 (4)
- **Defining the incidence and risk factors of colistin-induced acute kidney injury by KDIGO criteria** *PLOS ONE*  
Shields, R. K., Anand, R., Clarke, L. G., Paronish, J. A., Weirich, M., Perone, H., Kieserman, J., Freedy, H., Andrzejewski, C., Bonilla, H.  
2017; 12 (3): e0173286
- **Atorvastatin and Fluvastatin Are Associated With Dose-Dependent Reductions in Cirrhosis and Hepatocellular Carcinoma, Among Patients With Hepatitis C Virus: Results From ERCHIVES** *HEPATOLOGY*  
Simon, T. G., Bonilla, H., Yan, P., Chung, R. T., Butt, A. A.  
2016; 64 (1): 47–57
- **Does Staphylococcus aureus Bacteriuria Predict Clinical Outcomes in Patients With Bacteremia? Analysis of 274 Patients With Staphylococcus aureus Blood Stream Infection** *INFECTIOUS DISEASES IN CLINICAL PRACTICE*  
Manandhar, S., Pai, G., Gidwani, H., Nazim, S., Buehrle, D., Shutt, K. A., Bonilla, H.  
2016; 24 (3): 151–54
- **Effect of addition of statins to antiviral therapy in hepatitis C virus-infected persons: Results from ERCHIVES** *HEPATOLOGY*  
Butt, A. A., Yan, P., Bonilla, H., Abou-Samra, A., Shaikh, O. S., Simon, T. G., Chung, R. T., Rogal, S. S., ERCHIVES Elect Retrieved Cohort  
2015; 62 (2): 365–74
- **Patience Is a Virtue: An Argument for Delayed Surgical Intervention in Fulminant Clostridium difficile Colitis** *AMERICAN SURGEON*  
Clanton, J., Fawley, R., Haller, N., Daley, T., Porter, J., Paranjape, C., Bonilla, H.  
2014; 80 (6): 614–19

- **Dissemination of a pSCFS3-Like cfr-Carrying Plasmid in Staphylococcus aureus and Staphylococcus epidermidis Clinical Isolates Recovered from Hospitals in Ohio** *ANTIMICROBIAL AGENTS AND CHEMOTHERAPY*  
Mendes, R. E., Deshpande, L. M., Bonilla, H. F., Schwarz, S., Huband, M. D., Jones, R. N., Quinn, J. P.  
2013; 57 (7): 2923-2928
- **Can a vancomycin assay be utilised to predict plasma telavancin concentrations?** *INTERNATIONAL JOURNAL OF ANTIMICROBIAL AGENTS*  
Evans, D. J., Windisch, R. M., Freedy, H. R., Bonilla, H. F.  
2013; 41 (5): 495-497
- **Epidemiology and clinical outcomes of patients with Fusobacterium bacteraemia** *EPIDEMIOLOGY AND INFECTION*  
Goldberg, E. A., Venkat-Ramani, T., Hewit, M., Bonilla, H. F.  
2013; 141 (2): 325-29
- **In Vitro Activities of LTX-109, a Synthetic Antimicrobial Peptide, against Methicillin-Resistant, Vancomycin-Intermediate, Vancomycin-Resistant, Daptomycin-Nonsusceptible, and Linezolid-Nonsusceptible Staphylococcus aureus** *ANTIMICROBIAL AGENTS AND CHEMOTHERAPY*  
Saravolatz, L. D., Pawlak, J., Johnson, L., Bonilla, H., Saravolatz, L. D., Fakhri, M. G., Fugelli, A., Olsen, W.  
2012; 56 (8): 4478-82