



Curriculum Vitae

Personal information **Gibran Horemheb Rubio Quintanares**

Work experience

- **April 2022-today** Scientist and regulator advisor at Paul-Ehrlich-Institute, virus safety unit, virology department

Working together with a multidisciplinary group in a project named BLOODVIR, to establishing whole pipeline from sample preparation to bioinformatics analysis for detection of adventitious viruses in plasma products by the use of NGS for viral metagenomics.

- **October 2022-today** Principal Investigator in EuCARE consortium

The consortium aim is to collect, analyze and define the best strategies to prevent and manage pandemics, by analyzing clinical and schools cohorts of SARS-CoV-2 infection and COVID-19 disease.

- **October 2022-today** External advisor of Instituto Mexicano del Seguro Social, mexican state health system, in the establishment of a traslational medicine program and office. (Unpaid)

- **2019-2022** Invited researcher at Virology Institute of University Clinics of Cologne.

Working with respiratory viruses especially SARS-CoV-2. Analysis of respiratory mono-infections and coinfections, respiratory virus seasonality, SARS-CoV-2 diagnostic, participation in SARS-CoV-2 school surveillance projects (B-FAST and SCHOCO), design and validation of the "Lolli-method" and KIKO (Kitas Testung Koeln) for SARS-CoV-2 detection in daycare facilities (KITAS). Also, based on the "Lolli-method", I have established the "Lolli Strategy" in Mexico, adapted to the country conditions of schools and laboratories, adding new processing strategies to reduce costs and increase laboratories capabilities.

- **Nov 2018- Today** Co-Director and Co-Founder of SPARK Mexico a Translational Research Program member of the SPARK Global network, developed in Stanford and now implemented in 22 countries. The main objective of the program is to give advice and support to scientist to translate their research into society benefits. (Unpaid)
- **Nov 2017- 2019** Founder and chief of Translational Medicine and Innovation Unit (UMTI), at Infectious Diseases Department of National Institute of Medical Sciences and Nutrition Salvador Zubiran. I conformed a small team 4 persons included a technician, one master student, one bachelor student and a chemist to continue with the HIV-HPgV coinfection work and start an Organ on Chip development area and a research line in the Therapeutic use of bacteriophages.
- **Sep 2017- 2018** National Translational Medicine Research and Innovation Consortium. Co-coordinator. Consortium establishment, events planning, researcher's capacitation in Pitch and business development, I also co-designed a business incubator model for biomedical projects.
- **Aug 2016- Nov 2017** Researcher, Diseases Department of National Institute of Medical Sciences and Nutrition Salvador Zubiran. Viral coinfections specialist. I worked with HIV-HPgV coinfection where I performed RNA-seq to gene expression analysis, Zika and Dengue coinfection where together with the molecular biology team, design a peptide assay with the aim to found specific epitopes to distinguish between zika and dengue in serological assays, and validate a commercial lateral flow assay to detect HIV and TB.

Education and training

- **Jan 2022** Training in VirCapSeq-VERT system in Columbia University, NY
- **Sep 2019-2022** Invited researcher at Virology Institute of University Clinics of Cologne.
- **Jan 2020** Member of the National Researchers System of Mexico, level candidate.
- **Dec 2018** Professional Certification in Translational Medicine (PCTM), Academy of Translational Medicine Professionals (ATMP).
- **Nov 2018** PhD degree, Biomedical Science Doctorate, National Autonomous University of Mexico (UNAM). Graduation modality, Thesis defense "Virologic and Immunologic characterization of HPgV and HIV coinfection". Graduated with honors (Summa Cum Laude).
- **Aug 2017** Technology Transfer in Life Science Summer School. Technische Universität Dresden, (Germany).
- **Dec 2013** Research stay, HPgV infection in Hu-mice. Host, Dr. Barbara Schnierle and Dr. Sarah Buechner at HIV vaccines and AIDS division, Paul Ehrlich Institute (Germany). With the aim to establish HPgV

infection in a humanized mice model.

- **Nov 2013** Research visit at Pasteur Institute (France). I made this travel as a prize for being the 1st place at the HKU-Pasteur Virology course to explore collaboration possibilities.
- **July 2013** 10th HKU-Pasteur virology course (Hong Kong). 1st prize as best student.
- **March 2012** Research stay, to acquire knowledge on HPgV infection, coinfection and in-vitro assays. Host Dr. Jack Stapleton at Infectious Disease Laboratory, Internal Medicine, Microbiology and Immunology Department of Veterans Hospital Iowa City (USA).
- **Aug 2011** Medical Doctor Degree (Medical doctor, surgeon and midwife), University of Guadalajara. Graduation modality, defense of publication: "Inhibition of HIV-1 by GBVC" ECI Peru 2011. Vol. 8, num. 1.
- **Jun 2010- Jul 2011** Research social service in medicine, "Prevalence Determination of GBV-C infection in blood donors at the central-occidental Mexico's Region" at Experimental Medicine Unit, General Hospital of Mexico and Infectious diseases department, National Institute of Medical Science and Nutrition Salvador Zubiran in collaboration with University of Guadalajara Immunology Department, Old and New Civil Hospital.
- **Jun 2009- Jul 2010** Research and medical practical year. General Hospital of Mexico and Experimental Medicine Unit. Beginning of my HIV and HPgV viral interference research project.

Sep 2007- Dec 2007 Academic stay as medical student at Eppendorf Klinikum, University of Hamburg. And presentation of the idea of HIV-HPgV interference as research topic to Dr. Rolf Kaiser at Virology institute of University Clinics, Cologne.

Additional information

Publications

- **Oct 2023** - Hedberg, P., Varisco, B., Bai, F. et al. **EuCARE-hospitalised study protocol: a cohort study of patients hospitalised with COVID-19 in the EuCARE project.** BMC Infect Dis 23, 690 (2023). <https://doi.org/10.1186/s12879-023-08658-2>
- **Feb 2023** - Raimondi, S., Gandini, S., Rubio Quintanares, G.H. et al. Correction: **European Cohorts of patients and schools to Advance Response to Epidemics (EuCARE): a cluster randomised interventional and observational study protocol to investigate the relationship between schools and SARS-CoV-2 infection.** BMC Infect Dis 23, 96 (2023). <https://doi.org/10.1186/s12879-023-08065-7>
- **Jun 2022** - Kretschmer, A.C., Junker, L., Dewald, F. et al. **Implementing the Lolli-Method and pooled RT-qPCR testing for SARS-CoV-2 surveillance in schools: a pilot project.** Infection 51, 459–464 (2023). <https://doi.org/10.1007/s15010-022-01865-0>
- **Jun 2022** Dewald, F., Suárez, I., Johnen, R. et al. **Effective high-throughput RT-qPCR screening for SARS-CoV-2 infections in children.** Nat Commun 13, 3640 (2022). <https://doi.org/10.1038/s41467-022-30664-2>
- **Jun 2022** - Horemheb-Rubio, G., Eggeling, R., Schmeißer, N. et al. **Respiratory viruses dynamics and interactions: ten years of surveillance in central Europe.** BMC Public Health 22, 1167 (2022). <https://doi.org/10.1186/s12889-022-13555-5>
- **Dec 2021** - Wunsch M, Aschemeier D, Heger E, Ehrentraut D, Krüger J, Hufbauer M, et al. **Safe and effective pool testing for SARS-CoV-2 detection.** J Clin Virol. 2021;145:105018.
- **Aug 2021** - Morales-Contreras JA, Ruiz-Quifonez JA, Roblero-Hernández A, Horemheb-Rubio G, Mendez SS. **"A single BNT162b2 dose protects against SARS-CoV-2: A case report of a family cluster of COVID-19"**. Rev BIOMÉDICA. 2021;32:172–6.
- **Jul 2021** - Joachim A, Dewald F, Suárez I, Zemlin M, Lang I, Stutz R, et al. **"Pooled RT-qPCR testing for SARS-CoV-2 surveillance in schools - a cluster randomised trial"**. EClinicalMedicine. 2021;39:101082.
- **Jul 2021** - Dewald F, Horemheb-Rubio Quintanares G, Steger G, Suárez I, Joachim A, et al. **"Lolli-Methode als Grundlage einer SARS-CoV-2-Surveillance in Kitas und Schulen"** Epid Bull 2021;32:3 -10 | DOI 10.25646/8823
- **Jun 2021**- Kitanovski, S., Horemheb-Rubio, G., Adams, O. et al. **Rhinovirus prevalence as indicator for efficacy of measures against SARS-CoV-2.** BMC Public Health 21, 1178 (2021).
- **April 2020**- Publication, Che-Hong C, Ferreira JB, Joshi AU, Stevens MC, Li SJ, Hsu JHM, Maclean R, Dresch-Ferreira N, Ramos-Cervantes P, Davalos-Martinez, Ledesma-Barrientos DF, Horemheb-Rubio G, Daria Mochly-Rosen D. Novel, and prevalent non-East Asian ALDH2 variants; implications for global susceptibility to aldehydes' toxicity. EBiomedicine, 55, 5 2020.
- **Nov 2018**- Publication (PhD thesis), Gibran Horemheb Rubio Quintanares - **Caracterización Viroológica e Inmunológica de la Coinfección por Pegivirus Humano y Virus de la Inmunodeficiencia Humana.** UNAM, 2018.
- **Sep 2017**- Publication, **High HPgV replication is associated with improved surrogate markers of HIV progression.** Horemheb-Rubio G, Ramos-Cervantes P, Arroyo-Figueroa H, Ávila-Ríos S, García-Morales C, et al. (2017) PLOS ONE 12(9): e0184494. <http://sci->

- **Jan 2011**- Publication, **HIV-1 inhibition by GBV-C**, Gibran Horemheb-Rubio, Cruz Vargas-De-León, Guillermo Gómez-Alcaraz, Ernesto J Ramirez Lizardo, David Kershenovich Stalnikowitz, ECIPeru, Vol.8, Pag.30-38

Projects

EuCare - COVID-19 patient and school cohort for early pandemic response.

BLOODVIR - NGS establishment for adventitious virus detection (viral safety) on blood and medicinal products.

Lolli Methode / Lolli Strategy - Development of new method and strategy for COVID-19 test in schools.

HPgV-HIV coinfection - determination of the relationship between this viruses.

Viromarkers - Find viral biomarkers in human blood, and creation of PEI reference standards for NA test.

Traslada IMSS - Advisory on the establishment of a translational medicine program in the mexican public health system.

SPARK Mexico - Co-director of the program to support translational medicine in the Mexican National Health Institutes

Memberships

- **Jan 2022 - today** Member of national researchers system of Mexico "level one"
- **March 2021 – today** Member of the Innovative Scientific committee against COVID-19
- **Jan 2020 - Dec 2022** Member of national researchers system of Mexico "candidate level".
- **Jan 2020 - today** Member of the National Researchers System of Mexico.
- **Feb 2019** Prize "José Antonio Martín Mora" to the best Postgraduate Thesis 2018 "Caracterización Viroológica e Inmunológica de la Coinfección por Pegivirus Humano y Virus de la Inmunodeficiencia Humana", National Institute of Medical Sciences and Nutrition Salvador Zubiran.
- **Aug 2014** Outstanding Youth laureate, science and technology field. Tlaquepaque (hometown) government awards.
- **July 2013** Best student laureate at 10th HKU-Pasteur virology course (Hong Kong).

Other Relevant Information