**Revisiting Epstein-Barr Virus as an Under-studied Causative Agent for Nasopharyngeal Carcinoma: An** integrated Movement Against Unprecedented **Respiratory-associated Pandemic** 

💑 One under-considered yet a key player in Carcinogenesis 💸

EBV is one causative bioagent to carcinogenesis and infects almost 95% population

HOST-PATHOGEN is POORLY DEFINED

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Early career research scientist

At present running cancer immunology and immunotherapy projects (two consecutive years)





Since pandemic is highly associated with respiratory-associated diseases that the host fail to overcome

Nasopharyngeal carcinoma cohort

## **Strategic Plan**

## Open to Advance the Development

	To investigate host-pathogen interaction in EBV-positive NCP and EBV-positive healthy donors with family links to the included patients.
Aim	To investigate if there is a defect in immunity which causes the counteraction against the viral antigen is impaired: antigen processing machinery may be an excellent start
	To see/measure correlation of EBV infection in anticancer drug resistance or responsiveness as this might add more volume to health burden (economic burden)
Primary Technique	Bulk sequencing on cohort of EBV-positive Nasopharyngeal Carcinoma (will be provided by the Department of Medical Hematology-Oncology, Dr. Ciptomangunkusumo Hospital
	Epitope sequencing
Additional technique	HPLC/MS, CryoEM
	DEG feature (comparison of the patients, non-cancer donor with family link, HD)
Outcome	Peptide specific (spanning LAMP)-T as well as B cell
	Novel prototipe of anti-EBV vaccine

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