

田育彰 教授

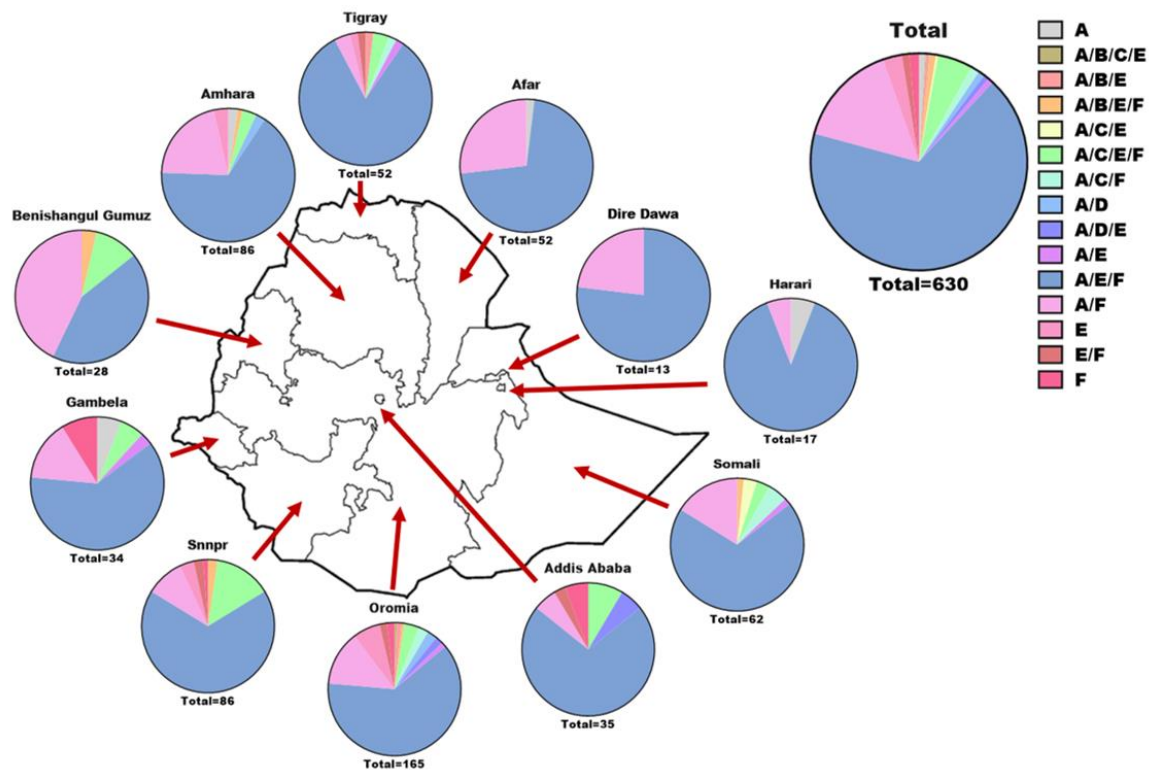
健康科學院/醫學影像暨放射科學系

B 型肝炎病毒 (HBV) 在衣索比亞的盛行率很高。B 型肝炎病毒的遺傳多樣性以混合基因型感染為特徵，可能對疾病的治療反應有重大影響。衣索比亞正努力防治 B 型肝炎病毒、C 型肝炎病毒 (HCV) 和人類免疫缺陷病毒 1 (HIV-1) 混合感染帶來的重大公共衛生問題。研究結果顯示衣索比亞複雜的混合感染流行情況，特別強調病毒的持續傳播、混合 HBV 基因型 A/E/F 的顯著表現動態病毒相互作用和持續的傳播途徑。這些發現強調針對性的干預措施和加強患者護理的必要性，因為合併感染具有顯著的臨床複雜性。這項研究為衣索比亞 HBV、HCV 和 HIV-1 混合感染的分子流行病學提供了重要見解。所獲得的知識可以有助於臨床管理策略和製訂減輕國家病毒感染負擔的公共衛生預防措施。

研究論文：Weldemariam AG, Lin SI, Li WY, Wolday D, Yang MH, Alemu YA, Sarusi D, Maayan S, Chen YA, Chuang KP, Tyan YC, Dai CY; Medical Research group of Ethiopia. Molecular epidemiology of hepatitis B, hepatitis C, and HIV-1 co-infections in Ethiopia: Implications for disease burden and intervention strategies. Acta Trop. 2024 Sep;257:107318.



doi: 10.1016/j.actatropica.2024.107318. Epub 2024 Jul 11. PMID: 39002738.



(衣索比亞各地區 B 肝病毒基因型分佈圖)

【具體成果】

Tzu-Chuan Ho, Chin-Chuan Chang, Hung-Pin Chan, Tze-Wen Chung, Chih-Wen Shu, Kuo-Pin Chuang, Tsai-Hui Duh, Ming-Hui Yang, **Yu-Chang Tyan*** (2022, Apr). Hydrogels: Properties and Applications in Biomedicine. *Molecules* 2022, 27, 2902. (WOS 高被引論文, ESI Chemistry 學術領域前 1%)。

【研究團隊】

團隊成員：

何慈娟博士後研究員、黃琬玲助理

研究聯繫 Email: yctyan@kmu.edu.tw



Hepatitis B virus (HBV) exhibits high prevalence rates within Ethiopia. The genetic diversity of HBV, marked by mixed genotype infections, may hold significant implications for the trajectory of disease and responses to treatment. Ethiopia grapples with a substantial public health challenge posed by co-infections involving HBV, hepatitis C virus (HCV), and human immunodeficiency virus 1 (HIV-1), particularly among vulnerable populations. The investigation revealed the intricate prevalence of co-infections in Ethiopia, notably underlining the continued transmission of viruses. The prominent occurrence of mixed HBV genotypes A/E/F suggests dynamic viral interactions and ongoing transmission pathways. These findings accentuate the necessity for targeted interventions and enhanced patient care, as co-infections carry significant clinical complexities. This study furnishes crucial insights into the molecular epidemiology of HBV, HCV, and HIV-1 coinfections in Ethiopia. The acquired knowledge can contribute to the advancement of strategies for clinical management and the formulation of public health interventions aimed at ameliorating the burden of viral infections within the nation.

