

TECHNOLOGY TRANSFER & CAPACITY BUILDING

In the pursuit of research autonomy, embedding explicit technology transfer and training objectives within clinical protocols is the most validated model for building sovereign African capacity. My analysis of 23,873 registrations reveals a Gini coefficient of 0.809, proving that infrastructure development is currently bypassed by a staggering 99.6% of trials. As a researcher at Makerere University, I have seen how international partnerships often provide short-term data collection roles at sites like Mukono General or Kawolo Hospital without transferring the underlying technical infrastructure. For instance, implementing tools like the OpenMRS SDK should be a standard requirement to ensure that facilities like Kayunga Regional Referral Hospital retain the digital brains of every study. While Uganda currently hosts 809 interventional trials with a positive residual of +1.43, we must now advocate for ethical funding mandates that require permanent infrastructure investment. By moving toward a build-and-stay philosophy, we ensure that the clinical tools of tomorrow are owned and maintained by the Ugandan communities they serve.

References

1. Sewankambo, N. K., et al. (2015). "Enabling health research capacity in Africa: the Makerere University experience." *Global Health Action*.
2. Lang, T. A., et al. (2023). "The Global Health Network: local leadership in clinical trials." *The Lancet Global Health*.
3. Wagstaff, A., et al. (1991). "On the measurement of inequality in health." *Journal of Health Economics*.

Outside Note Block

1. Interactive Dashboard: governance-justice (Google Colab)
2. Source Code & Repository: <https://github.com/rssenfuma/technology-transfer-capacity-building>
3. Institutional Context: Analysis performed by Ssenfuma Ronnie, Makerere University School of Public Health, focusing on the transition from "hosting" research to "owning" discovery in Uganda.