

From GloCal Health Fellowship to K43 Award: Key Insights and Lessons

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Kampala, Uganda

Goal of talk



- a. Share **experiences** from the GloCal Health Fellowship program
- b. Demonstrate how the program **shaped my successful K43 grant** application

GloCal Fellowship Program



My promise!

- A research project with 3 key specific aims
- Clear short and long-term career development goals

2022-2023: GloCal Fellowship Goals

Having learned that the control of diseases requires implementation of effective programs, policies, and intervention which is still a challenge in a resource-limited setting, I am applying for this fellowship to enable me to achieve three immediate goals: 1) to advance my skills in impact evaluation methodologies so that I am equipped in conducting a rigorous impact evaluation of health policies and programs at both national and global levels. I believe that rigorous evidence is a key driver for promoting global health; 2) to acquire good skills in designing and conducting implementation sciences and qualitative research in TB/HIV; and, 3) to generate pilot data that will enable me to apply for larger grants that will facilitate my career growth to independence. In the next 1-5 years, I would like to apply impact evaluation techniques to evaluating health programs and policies at national and international levels. Besides mentorship from GloCal Faculty, Fellows, and networks, and I hope to foster a lasting relationship for research collaboration. I am confident that the GloCal fellowship will catalyze this process and ensure I become a leader and an independent researcher in the evaluation of health policies and programs.

Glocal project: Proposed the EFFectiveness of Intensive Adherence Counseling (EFFINAC) study to:

Impact of IAC of IAC on VL suppression and all-cause mortality (**Specific Aim 1**)

RESEARCH ARTICLE

Impact of intensive adherence counseling on viral load suppression and mortality among people living with HIV in Kampala, Uganda: A regression discontinuity design

Jonathan Izudi^{1,2,3*}, Barbara Castelnuovo¹, Rachel King⁴, Adithya Cattamanchi^{5,6}

Risk factors for VL persisting at $\geq 1,000$ copies/ml at 12 months after completing IAC (**Specific Aim 2**)

Risk factors for unsuppressed viral load after intensive adherence counseling among HIV infected persons in Kampala, Uganda: a nested case–control study

Jonathan Izudi^{1,2*}, Barbara Castelnuovo¹, Rachel King³ and Adithya Cattamanchi⁴

Facilitators and barriers to VL suppression after IAC completion (**Specific Aim 3**)

Barriers and facilitators to viral load suppression among people living with HIV following intensive adherence counseling in Kampala, Uganda: A qualitative study

Jonathan Izudi^{a,b,*}, Adithya Cattamanchi^c, Barbara Castelnuovo^a, Rachel King^d

^a Infectious Diseases Institute, College of Health Sciences, Makerere University, Uganda

^b University of California Global Health Institute (UCGHI), University of California San Francisco, San Francisco, CA, USA

^c Division of Pulmonary Diseases and Critical Care Medicine, University of California Irvine, Irvine, CA, USA

^d Institute for Global Health Sciences, Department of Epidemiology and Biostatistics, University of California, San Francisco, CA, USA



From GloCal Health Fellowship to K43 Award

K43 Grant—What it is

- A **career development award** offered by the National Institutes of Health (**NIH**) under the Fogarty International Center (**FIC**)
- Supports early-stage investigators (**ESI**) from LMICs in developing **independent research careers**
- Also known as the **Emerging Global Leader Award**
- Provides **protected time** for research and mentoring in global health

Key considerations for a K43 Grant

Eligibility—
applicants must
be citizens or
residents of an
LMIC

**Protected
time—**at least
75% should be
devoted to
research and
training

**Global health
relevance—**
research must
address issues
affecting LMICs
(++)

Sustainability—the
proposal should
demonstrate how the
work will lead to
long-term
independent
research **(++)**

Mentorship—
strong mentoring
and career
development
support are
critical **(++)**

**(++) The GloCal
Fellowship laid the
foundation**

My K43 Grant

Title—Integrating tuberculosis treatment into community pharmacies to improve TB/HIV outcomes in Uganda

Objective—To develop and pilot an implementation strategy focused on integrating TB treatment into community pharmacies among people with TB/HIV in Kampala, Uganda

Goal—To become a **global leader** and an **independent researcher** dedicated to improving care for people with TB/HIV

SUMMARY STATEMENT

PROGRAM CONTACT:
Christine Jessup
301-496-9676
christine.jessup@nih.gov

(Privileged Communication)

Release Date: 03/12/2024

Revised Date:

Application Number: 1K43TW012839-01

Principal Investigator

IZUDI, JONATHAN

Applicant Organization: INFECTIOUS DISEASES INSTITUTE

Review Group: ZRG1 ICP-P (55)
Center for Scientific Review Special Emphasis Panel
PAR Panel: International and Cooperative Projects for Global Emerging Leaders
Award
AIDS - EXP. REV.

Meeting Date: 02/26/2024
Council: MAY 2024
Requested Start: 07/01/2024

Opportunity Number: PAR-21-251
PCC: KFOREIGN
Dual PCC: AJGH
Dual IC(s): CA, AG, DC, ES, HL, MH

Project Title: Integrating tuberculosis treatment into community pharmacies to improve TB/HIV outcomes in Uganda.

SRG Action: Impact Score:13

Next Steps: Visit https://grants.nih.gov/grants/next_steps.htm

GloCal Fellowship offered me protected time to write my K43 grant

- I had 6 weeks of fully protected time at UCSF under the GloCal Fellowship program. I am grateful to the program!
- Received early reviews and feedback

Aim 3: Support in completing a K43 grant application

- I am interested in submitting a K43 grant this year. Currently, I am working on the aims page for two potential K43 grants which are being evaluated by my mentors. Once we agree on a suitable project, I will embark on the full development of the grant. While at UCSF, I will revise, review, and edit the proposal and subsequently submit it. I hope to receive strong support from Prof. Adithya Cattamanchi and the UCSF Faculty.

Table 1: Timelines and activity details

Description of activities and timelines	October			November	
	2	3	4	1	2
1. Networking and mentorship					
1.1 In-person meetings with GloCal Faculty.					
2. Mentorship in qualitative and TB/HIV implementation research					
2.2 Attend presentations on TB/HIV implementation research.					
2.3 Make a presentation on 1-2 new research concepts					
2.4 Mentorship by Prof. Adithya Cattamanchi in TB implementation research.					
2.5 Continued mentorship by Rachel King in qualitative research.					
3. K43 grant application					
3.1 Revise, edit, and complete a K43 grant proposal.					
3.2 Submit a K43 grant.					

Potential Impact: The proposed activities are in line with my GloCal fellowship short and long-term goals and potential K43 grant application. Upon successful completion, it will build on my career trajectory toward becoming a successful and independent global health researcher.

GloCal Fellowship enhanced my candidature for a K43 grant award

Public health and research training. My doctoral research was motivated by glaring gaps in TB care while working as a Continuous Quality Improvement Officer. I researched sputum smear monitoring and treatment success rates among people with TB in rural eastern Uganda, producing **10 first-author publications** (9 pre-graduation, 1 post-graduation) in 3 years⁴⁻¹³. Realizing observational data can be analyzed to inform practice and the effectiveness of TB and HIV interventions (programs, guidelines, and policies), I pursued an NIH D43-funded impact evaluation fellowship at the University of California Berkeley in 2021. Here, among people previously treated for TB, I evaluated the effect of a six vs. eight-month TB regimen in improving sputum smear conversion and TB treatment success¹⁴, investigated rifampicin resistance prevalence and trends¹⁵, and determined the factors associated with suboptimal TB treatment success¹⁶. I also completed postdoctoral training in HIV and co-infections at the Makerere University Infectious Diseases Institute (D43TW009771) where I evaluated the effect of the COVID-19 pandemic restrictions on HIV treatment outcomes among adolescents and adults¹⁷ including strategies adapted to ensure continuity of HIV care¹⁸. Recently, I completed a GloCal postdoctoral fellowship at the University of California San Francisco (D43TW009343). For this postdoctoral fellowship, I evaluated the effect of intensive adherence counseling on viral load suppression and mortality¹⁹, investigated the risk factors for detectable viral load²⁰, and explored the barriers and facilitators to viral load suppression after intensive adherence counseling²¹. Through my doctoral and postdoctoral training, I acquired skills in research project management and advanced quantitative analysis methods. I have also demonstrated a strong track record of productivity including **57 total publications** (32 first-authored, 12 second-authored, and 10 senior-authored) resulting in at least 680 citations, 16 h-index, and 20 h-10 index on Google Scholar) and **25 invited oral presentations** (emerging 6 times as the best presenter).

Developed a **TRIPPLE THREAT** factor through GloCal Health Fellowship

1



Become a subject matter expert (grounded yourself in a few areas of interest)

2



Develop strong methodologic and analytic competence

3



Develop strong scientific writing and communication skillset

How? Completed short specific courses and had time to focus on teaching and research

Goal: Bolster your skillset, competence, and competitive edge

Pursue relevant and important courses during your GloCal Health Fellowship Program

UNIVERSITY OF CALIFORNIA, SAN FRANCISCO

BERKELEY · DAVIS · IRVINE · LOS ANGELES · RIVERSIDE · SAN DIEGO · SAN FRANCISCO



SANTA BARBARA · SANTA CRUZ

Training
In
Clinical
Research

Department of Epidemiology and Biostatistics
550 16th St, Floor 2
San Francisco, CA 94143
https://tcr.ucsf.edu/misc/course_descriptions.html

October 5, 2021

To Whom It May Concern:

This letter is to certify that Jonathan Izudi completed the following courses in the Training in Clinical Research Program at the University of California, San Francisco.

Courses

Grade

* Designing Clinical Research (EPI 202, Summer 2020-2021,
2 Units) Course Director: Mark Pletcher, MD, MPH

A

DCR is a phenomenal, and life and career-changing course!



Helen Byakwaga, MB.Ch.B, Ph.D.

DCR Course Facilitator, Uganda

Senior Clinical Research Scientist
IDI Makerere University, Uganda

Got introduced to the right mentors, connectors, and motivators



Adithya Cattamanchi, MD.
(UCSF)



Noah Kiwanuka,
Ph.D.(Makerere
University)



Sandra McCoy, Ph.D.
(UC Berkeley)



Christine Sekaggya-Wiltshire, Ph.D.
(Makerere University)



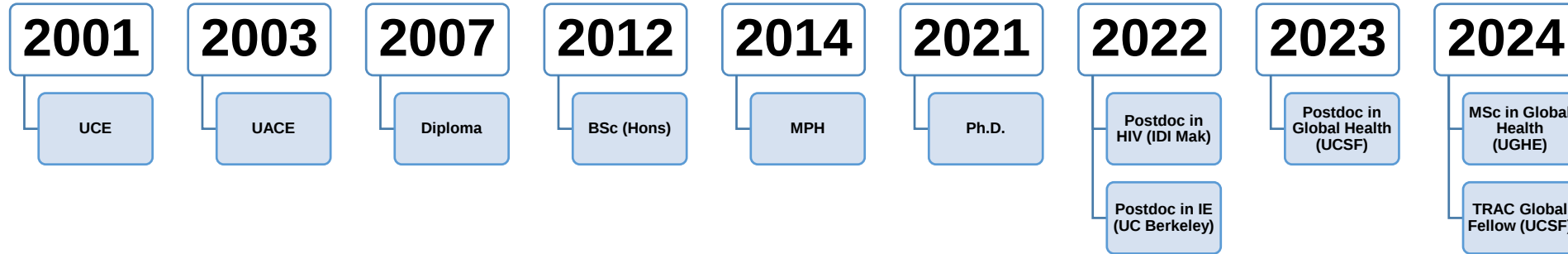
Rachel King, Ph.D.
(UCSF)



Nora West, Ph.D.
(UCSF)

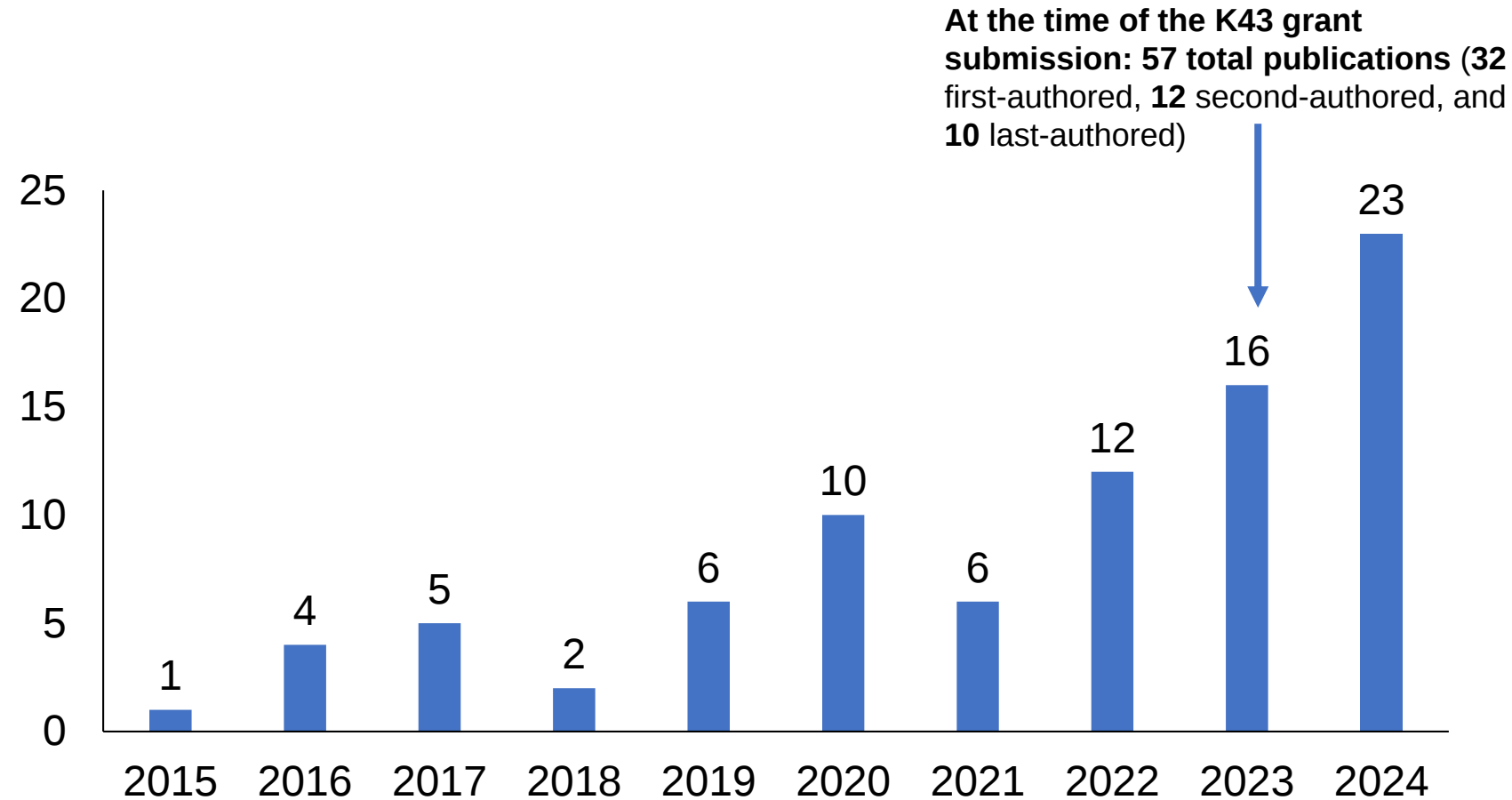
....Collaborate widely, with like-minded and significant people

GloCal Fellowship enhanced training and education profile



Rationale: My K43 was built upon prior training in **public health, global health, and epidemiology**, including work and research experience in TB and HIV

Improve scientific / publication profile



Lastly, clear and realistic goals count!

Having learned that the control of diseases requires implementation of effective programs, policies, and intervention which is still a challenge in a resource-limited setting, I am applying for this fellowship to enable me to achieve three immediate goals: 1) to advance my skills in impact evaluation methodologies so that I am equipped in conducting a rigorous impact evaluation of health policies and programs at both national and global levels. I believe that rigorous evidence is a key driver for promoting global health; 2) to acquire good skills in designing and conducting implementation sciences and qualitative research in TB/HIV; and, 3) to generate pilot data that will enable me to apply for larger grants that will facilitate my career growth to independence. In the next 1-5 years, I would like to apply impact evaluation techniques to evaluating health programs and policies at national and international levels. Besides mentorship from GloCal Faculty, Fellows, and networks, and I hope to foster a lasting relationship for research collaboration. I am confident that the GloCal fellowship will catalyze this process and ensure I become a leader and an independent researcher in the evaluation of health policies and programs.

1-3 Short-term goals



Long-term goal

Thank you for listening

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Acknowledgment

- **Mentors**—Drs. Cattamanchi, Bajunirwe, Sekgaggya-Wiltshire, McCoy, Kiwanuka, Mujungira
- **Peer mentor and Friend**—Dr. Okoboi Stephen
- **Institutions**—IDI Makerere University, Mbarara University, UCSF, and UC Berkeley
- **CFAR**—University of Washington, USA for grant writing series