A brief history of Sierra Leone

- Former British colony that gained independence in early 1960s
- Economy relied on mining of natural resources such as iron ore and diamonds
- Conflict over these natural resources and from neighboring Liberia caused civil war from 1991-2002
My life before the outbreak

Sierra Leone Ministry of Health and Sanitation employee as a Kenema Government Hospital Lassa Fever Laboratory technician and scientist.
My history with viral hemorrhagic fevers

KGH – Old Viral Hemorrhagic Fever Ward

KGH Viral Hemorrhagic Fever Outreach Team
How the outbreak began in Sierra Leone

- Traditional healer crosses into Guinea to care for sick person in late March 2014
- Healer (F) comes back to Sierra Leone and infects family and close contacts in early April 2014
- Burial practices expose more people
- Sierra Leonean outbreak begins April 2014
Early response efforts

- National government provided little support to affected areas early on
- Major international health partners that were not focused on infectious diseases began pulling out due to risks to expatriate staff
- Mayor of Kenema City, other stakeholders, and the Kenema District Health Management Team formed an Ebola task force to provide aid to families and support healthcare efforts within the district
- My lab detected the first case, and along with the few remaining international partners were diagnosing and caring for patients
Many healthcare workers at KGH became infected and died
Dr. Umar Khan becomes infected with Ebola and succumbs July 29, 2014
Healthcare workers in Kenema begin to get assistance from major international NGOs
Viral sequencing confirms transmission chain from human to human
Cases decline in Kenema
Even with international assistance and a decline of cases in Kenema, Ebola spread across the country

The good:
- Ebola treatment units erected
- Government intervention of Ebola checkpoints and curfews
- Community education

The bad:
- No focus on any other healthcare
- Citizens believe government spread virus
- People with Ebola fled
Sierra Leone still had work to do, and I was committed to doing it despite my family’s objections.
My time as an Ebola patient
Sierra Leone after Ebola

The outbreak was officially declared over in November 2015

The rebuilding

• The country and economy have not fully recovered
• Health systems are still in disarray
• Many healthcare workers have died

The lingering stigma

• People think they can still get Ebola from survivors
• They have a hard time working and socializing because of hearing loss and other sequelae
Sierra Leone Emergency Preparedness

- The news of licensure of a vaccine brings new hope to Sierra Leone
- Other therapies in clinical trial phases could change the way future outbreaks are managed
- Greater efforts by the government to improve management and healthcare infrastructure
The lessons I’ve learned

I have confidence in myself – I felt like I would survive because I had to in order to help my community.

The government needs strong political will, such as demonstrated by my country during the height of the outbreak.