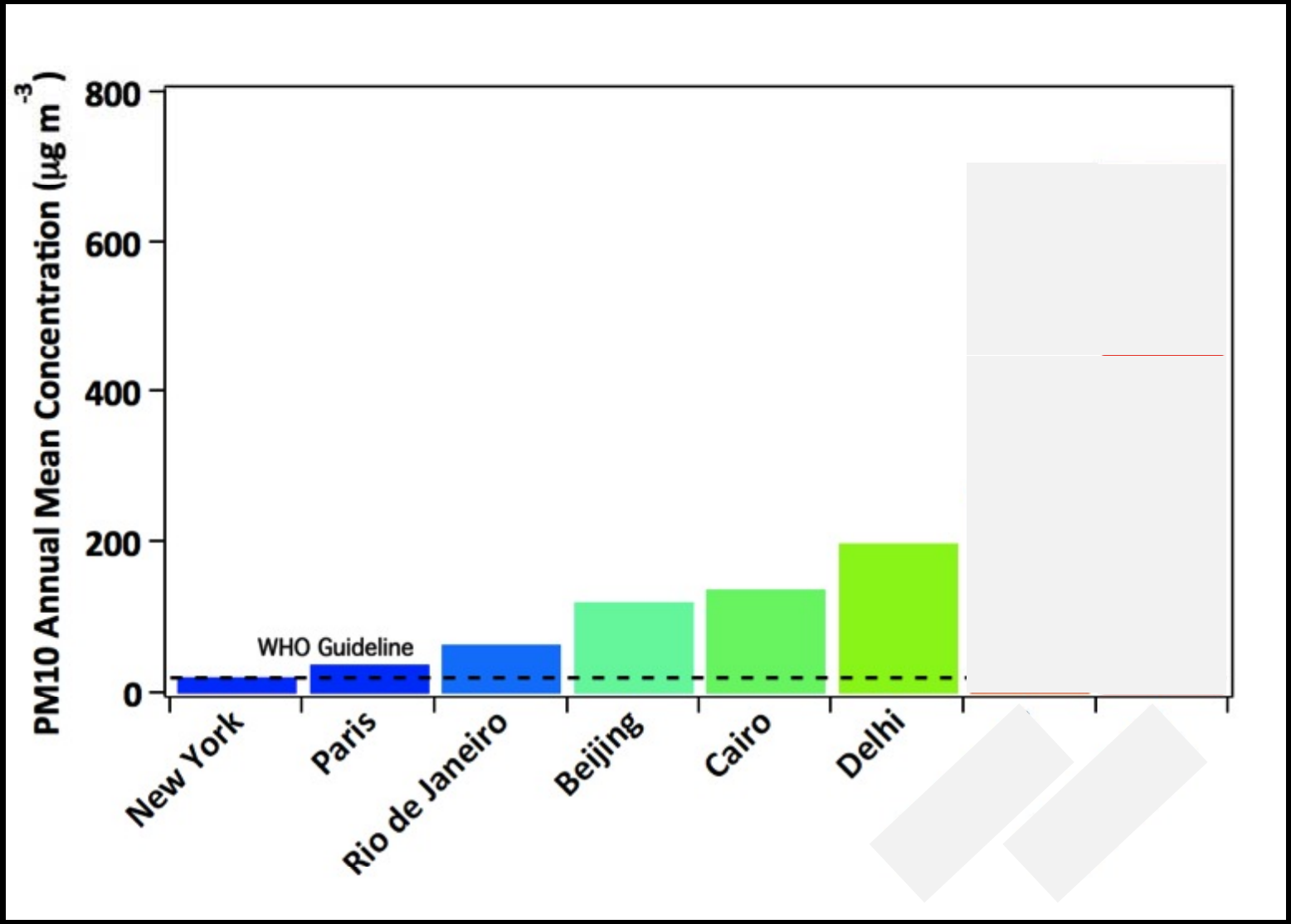
PEER Participants' Conference – Bangkok, Thailand

Utilizing Your PEER Partnership

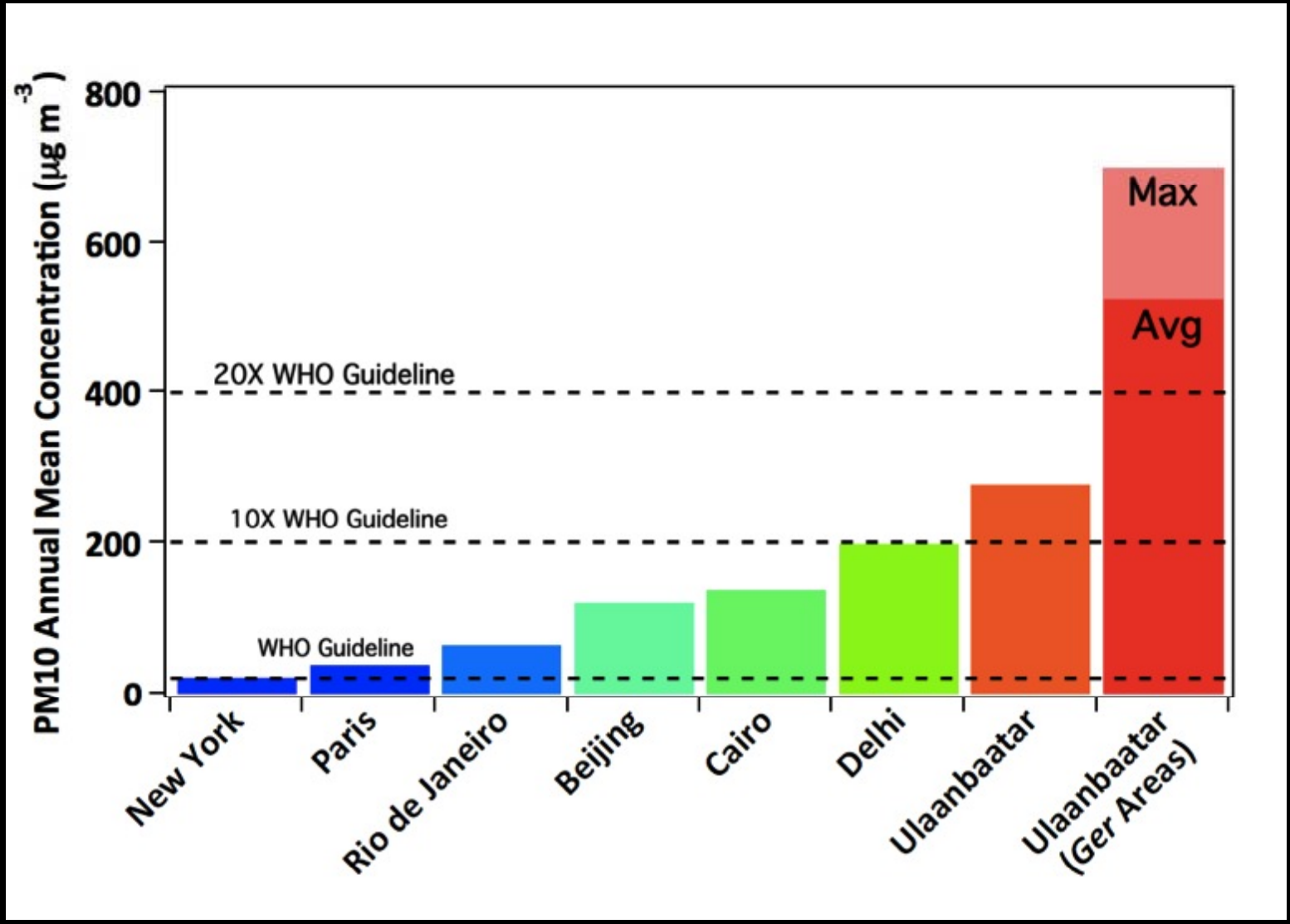
Christa Hasenkopf, PhD – University of Colorado
NSF Partner to Prof. S. Lodoysamba – Mongolia
USAID | Office of Science and Technology

Air pollution in Mongolia's capital city



From 2011 WHO Outdoor Air Pollution Database and Dec 2011 WB report: Air Quality Analysis of Ulaanbaatar

Air pollution in Mongolia's capital city



From 2011 WHO Outdoor Air Pollution Database and Dec 2011 WB report: Air Quality Analysis of Ulaanbaatar

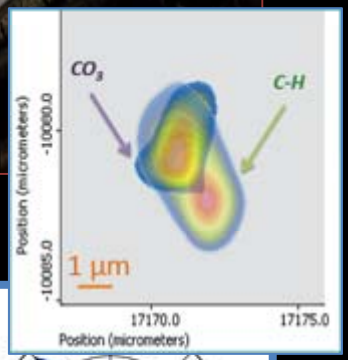
Our Research Questions:

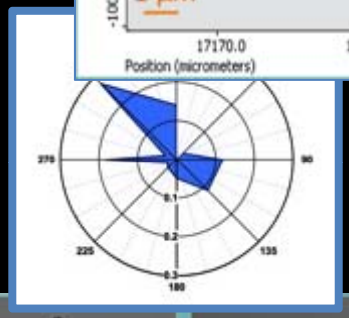
What is the pollution made of?

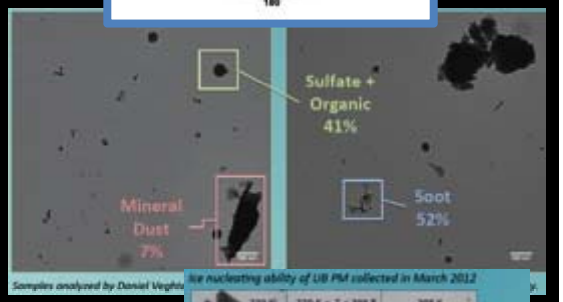
Where does the pollution come from?

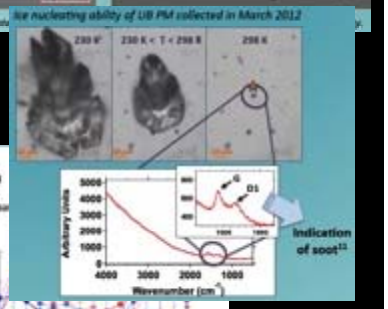
How does concentration of pollution change with time?

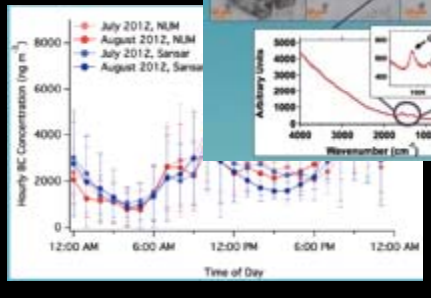
How does UB PM affect regional climate?











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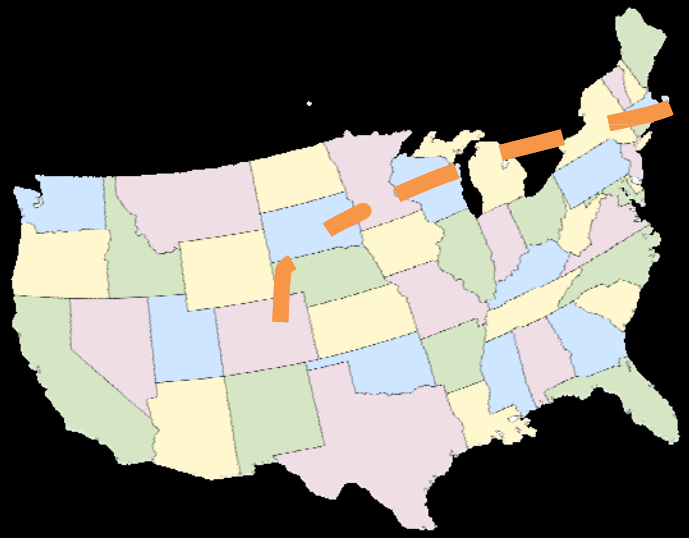
NSF

Partnerships for Enhanced Engagement in Research (PEER)

NSF

NATIONAL UNIVERSITY 1942 MONGOLIA

Our PEER Partnership timeline



Timeline:

2010
Fulbright
Scouting trip

2011-2012
Fulbright

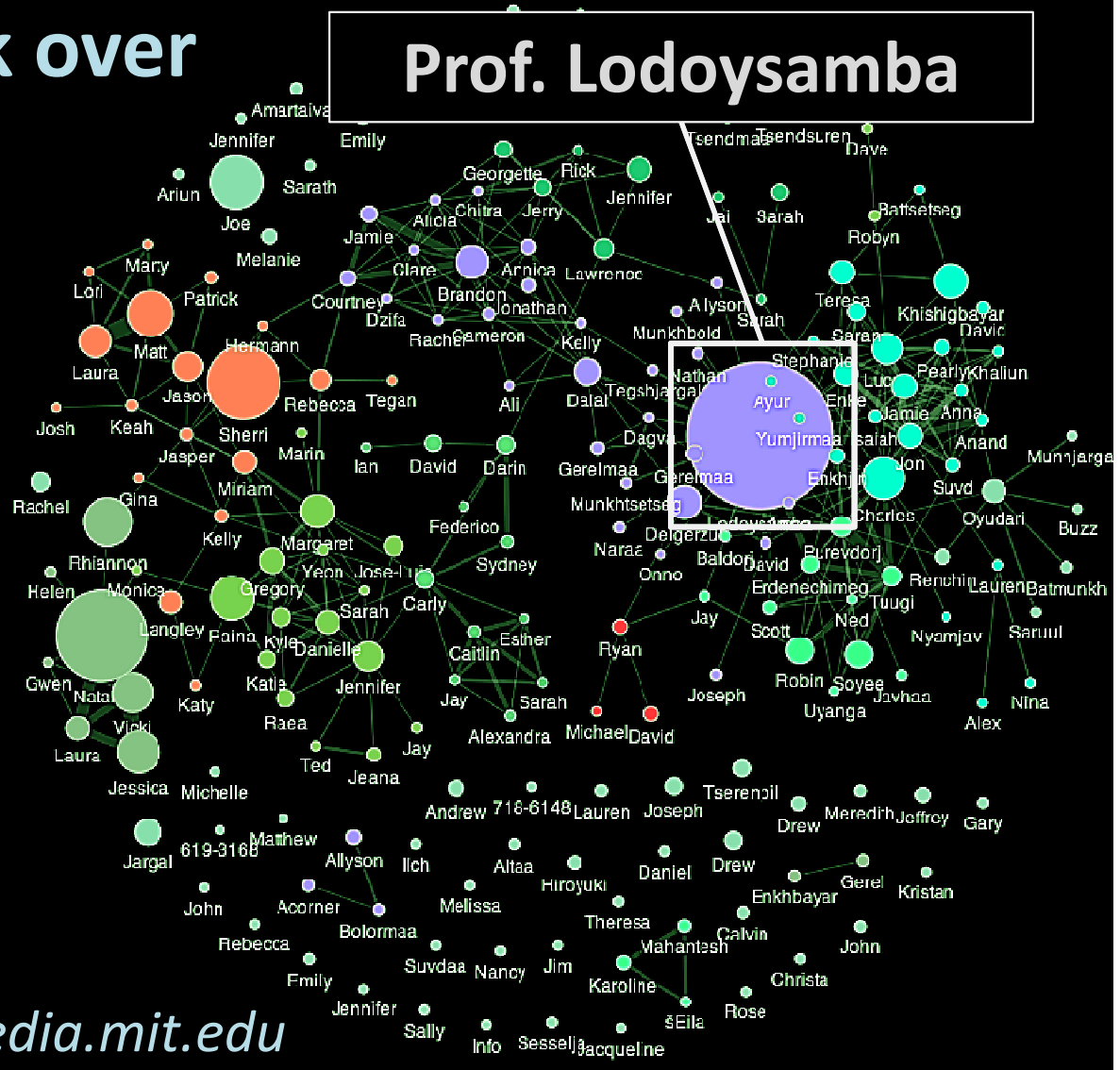
2012-2013
NSF PI
+ PEER

Collaboration with Prof. Lodoysamba

How we communicate:

My email network over the last 6 months:

- In person
- Last 6 months, in US, LOTS of emails, Skype



immersion.media.mit.edu

Two key items we learned from our partnership:

(1) Reach out to each other

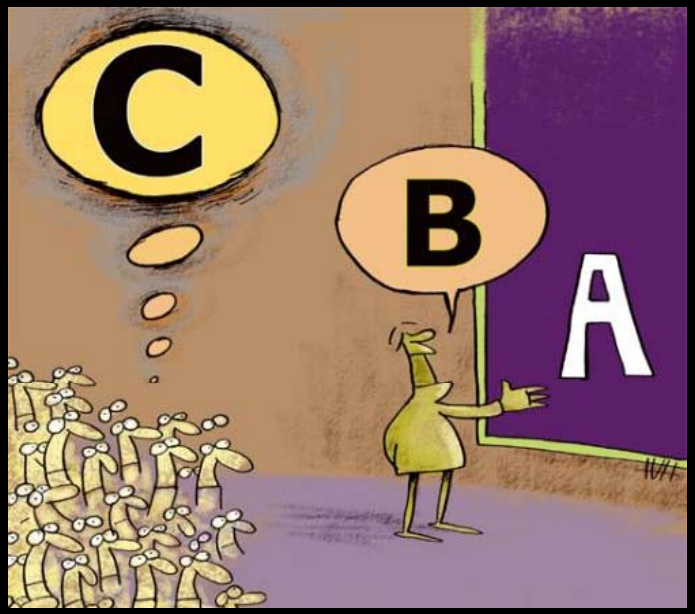
….not just about your overlapping science – but the "Big Picture" of science in one another's countries

Reach Out To Each Other

Big Picture Questions:

- **Funding?** Typical funding sources? How much? How variable is funding year-to-year? What are "hot" science topics? Historical context?
- **In Practice?** How is science done? What are the norms? At the University? At research institutions? At ministries? Publishing? Data sharing expectations?
- **Education? How does the university system work?** What are typical expectations for a graduate student to obtain a PhD? What do people do/where do they go upon obtaining their degree?

Why understanding the "Big Picture" matters:



Source: thegoodnessgrows.com/

Gives contexts to your interactions with each other.

Prevents misunderstandings (and makes them easier to handle when they do)

Subsequent knowledge transfer outside of your partnership

Ex: Students increase their understanding of how science works in another country → More likely to go to that country do research.

How to have "Big Picture" conversations:

- **Initiate these discussions during part of an existing conversation (email, Skype, during visits, etc.)**

- **Initiate them as a separate, scheduled conversations.**

- **Get your research group involved.**
  Ex: One-on-one Student "Skype" exchanges

Two key items we learned from our partnership:

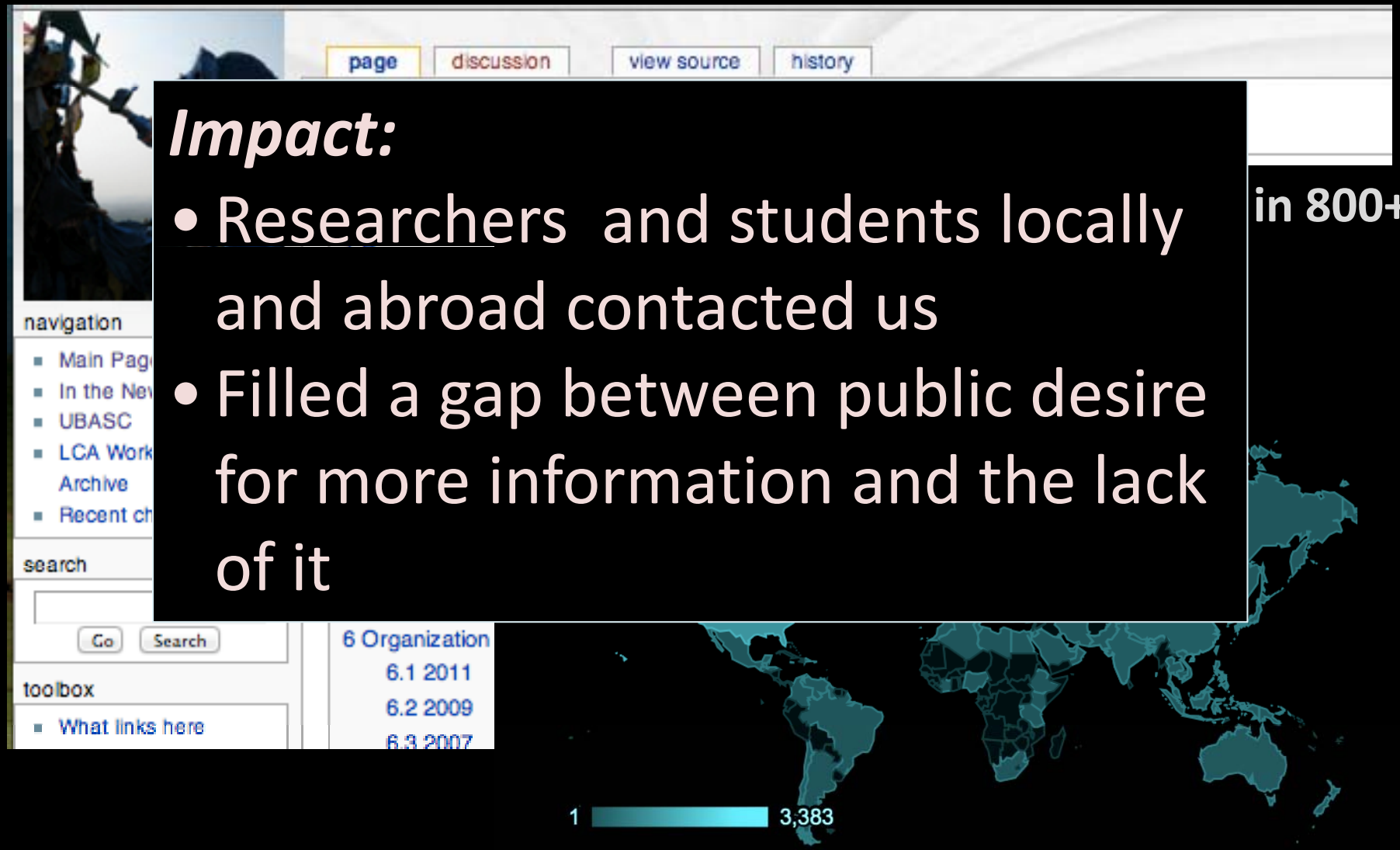
(1) Reach out to each other

(2) Reach out together

….as PEER PIs + Partners, we are generating scientific data on development issues that give us a *unique* voice within our communities. Our voices are stronger together.

Reach Out Together

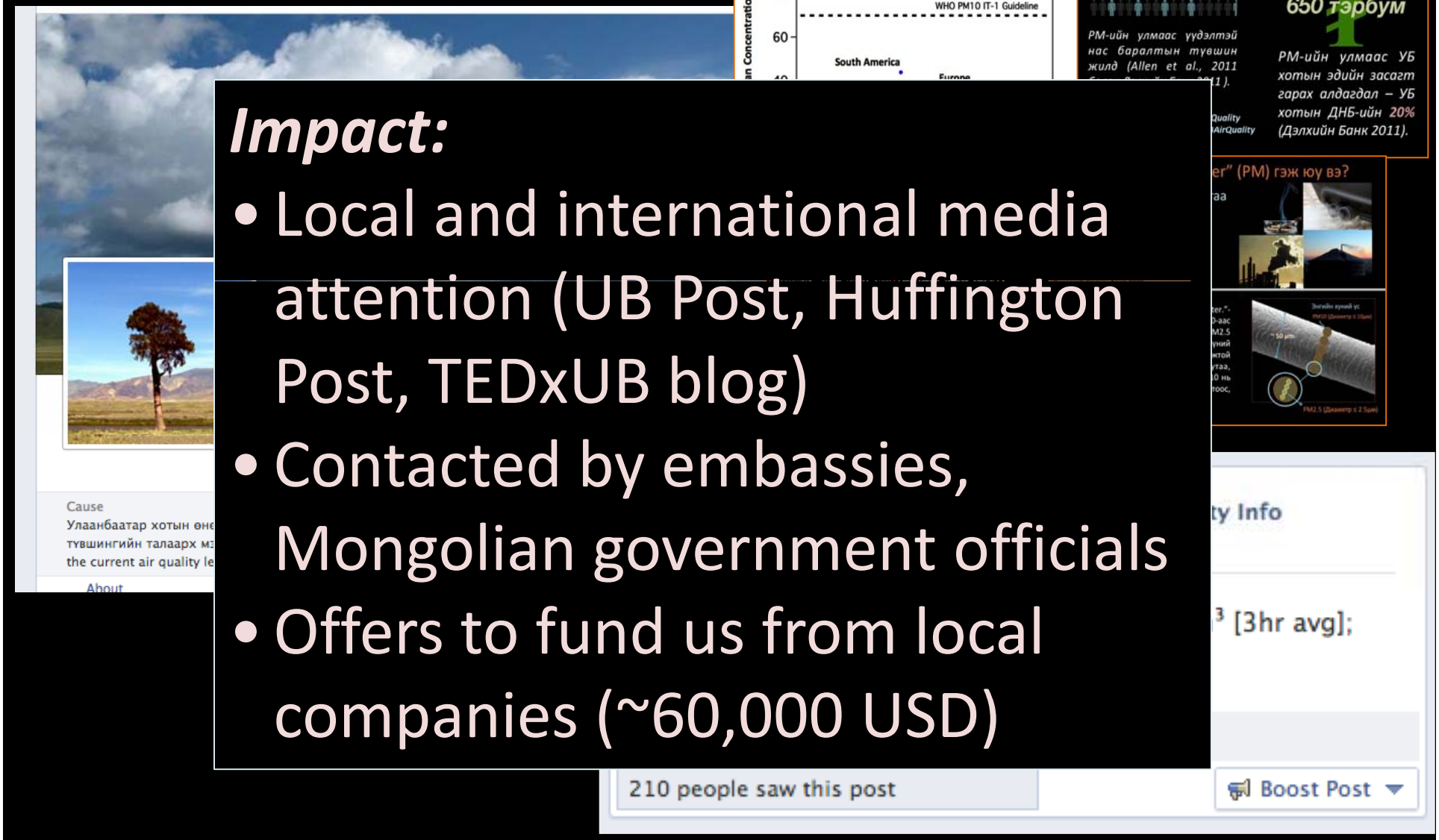
UBAirPollution.org



Impact:

- Researchers and students locally and abroad contacted us
- Filled a gap between public desire for more information and the lack of it

Reach Out Together



Impact:

- Local and international media attention (UB Post, Huffington Post, TEDxUB blog)
- Contacted by embassies, Mongolian government officials
- Offers to fund us from local companies (~60,000 USD)

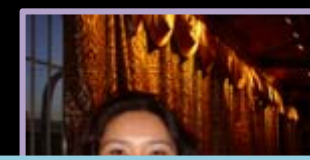
Two key items we learned from our partnership:

(1) Reach out to each other

(2) Reach out together

PEER UB Air Pollution Team:

Ms. Gerelmaa Gunchin

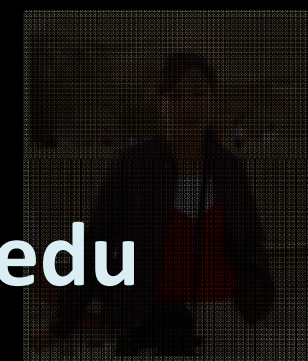


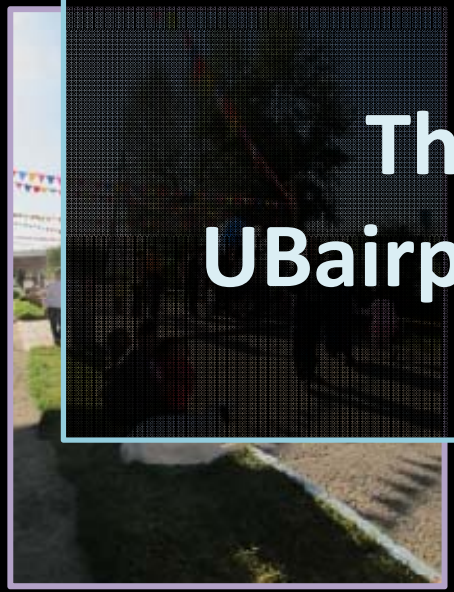
Ms. Delgerzul Lodoisamba

Prof. Lodoysamba

Dr. Dagva Shagjjamba

Kindergarten #69 Staff





Enkhiin Sanaa

Ms. Bulgansaikhan Baldorj

Family Hospital Staff

Thank-you!

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This presentation is available at:
UBairpollution.org/Presentations/PEERParterships.ppt