

THE ROLE OF PHARMACEUTICALS IN PUBLIC HEALTH

ACCESS TO ESSENTIAL MEDICINES AS A KEY DETERMINANT TO UNIVERSAL HEALTH COVERAGE



September 15, 2016

9 a.m.–5:30 p.m.

#BUSPH40 #BUSPHSymposia



School of Public Health

FOUR DECADES FORWARD

CELEBRATING BU SPH'S 40TH ANNIVERSARY

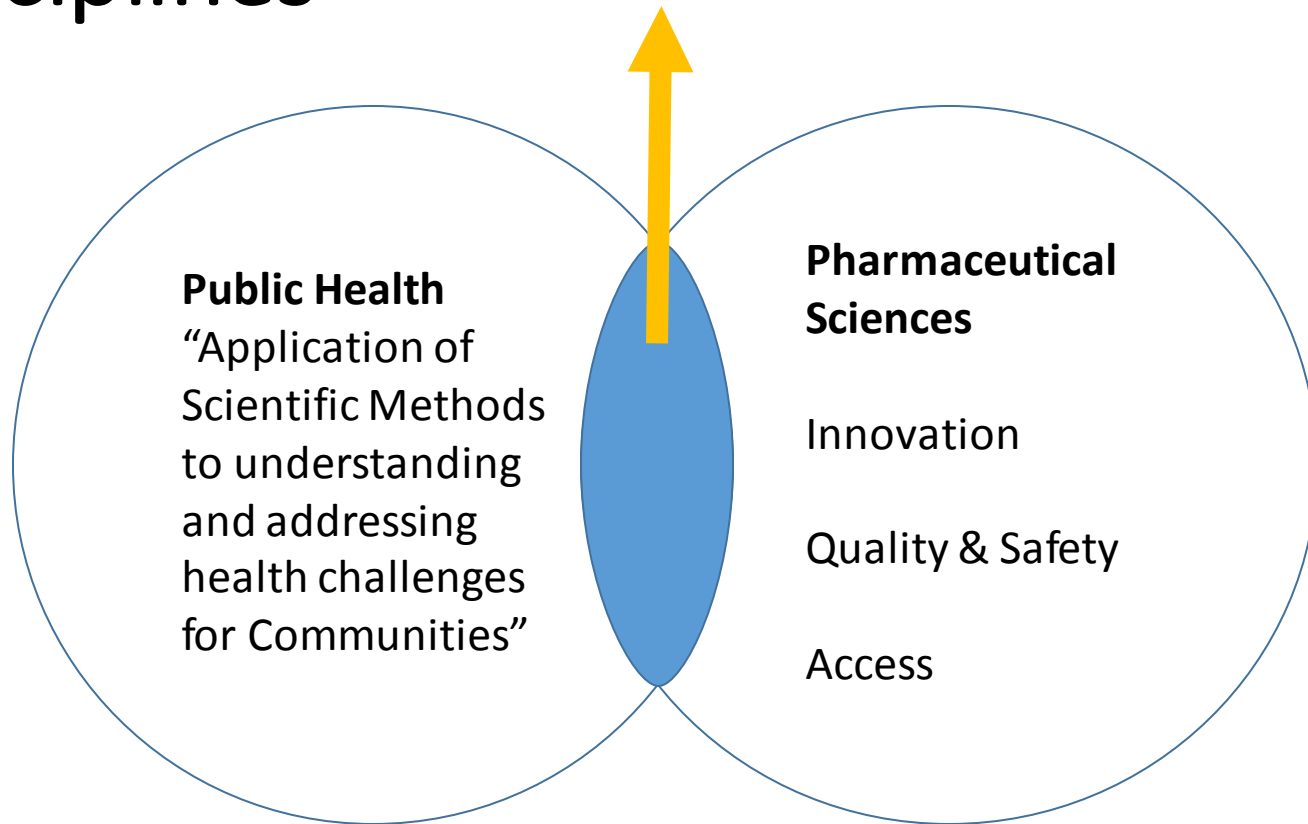
Overview of Pharmaceutical Public Health

Richard Laing,
with Erin Hasselberg

Boston University School of Public Health

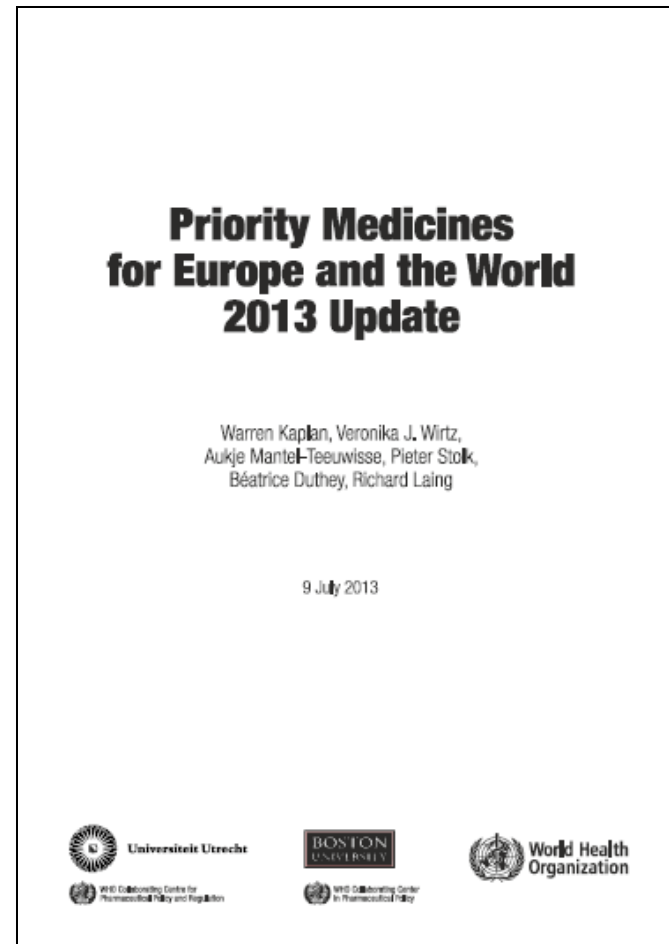
September 15th 2016

Progress often comes from between Disciplines



Innovation

- Public Health methods can be used to prioritize public and private investment in research to meet unmet health needs
- Examples are Priority Medicines for Europe and the World reports 2004 and 2013 for Netherlands and European Commission

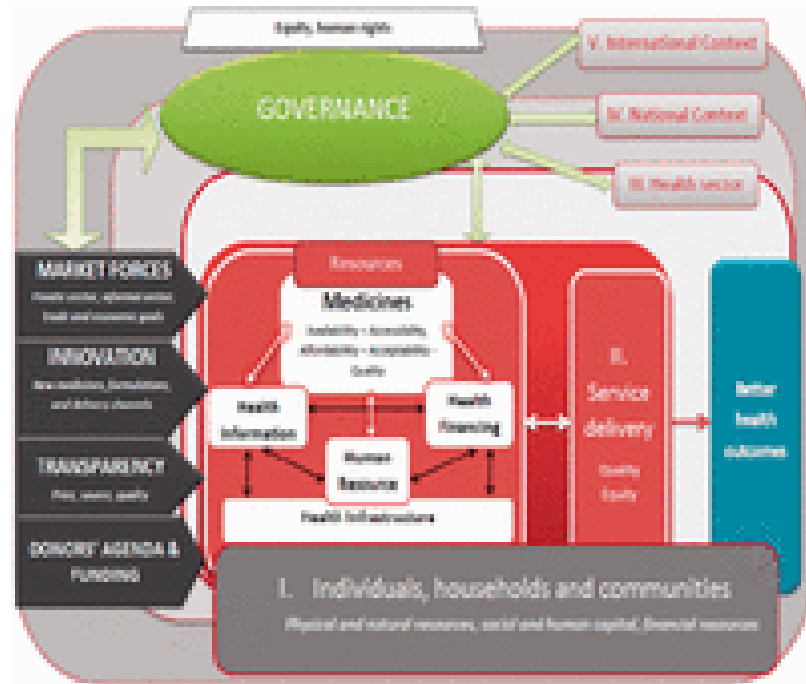


Quality & Safety

- Quality remains a concern in LMICs due to limited regulatory requirements. Important work done by EPN monitoring quality of products and WARN
- Pharmacoepidemiology and Pharmacovigilance are already well established applying Public Health Methods to the inherent risks of pharmaceuticals
- BU is already well established in this area with Slone Epidemiology Program and the Boston Collaborative Drug Surveillance Program

Access comprises many elements

- Selection
- Procurement
- Distribution
- Rational Use
- Financing and Pricing
- Intellectual Property Barriers
- Information Sharing



See [Bigdeli Framework](#)

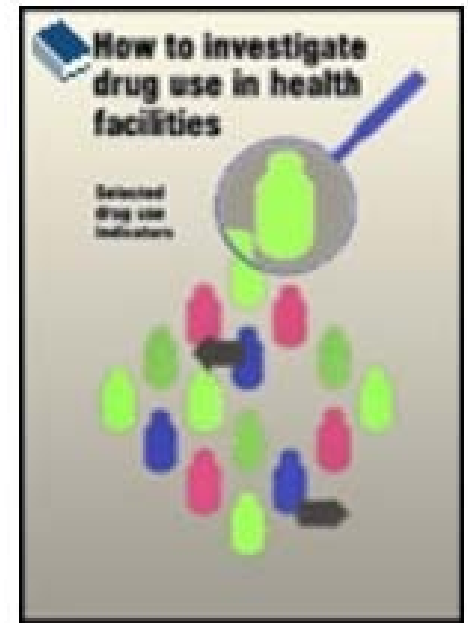
Review

25 years of the WHO essential medicines lists: progress and challenges [Lancet 2003; 361: 1723–29](#)

- WHO has taken lead with defining the Model List of Essential Medicines since 1977
- A number of studies have compared lists over time, between countries and for specific diseases
- Opportunities exist to apply the same messages to formularies in *High Income countries*

Rational Use

- INRUD network established methods for measuring and evaluating interventions.
- Clear evidence that medicine use can be improved
- Holloway & Henry showed that national policies impact on quality of medicine use



Financing & Pricing

- How medicines are financed critically affects availability but this is related to prices
- WHO/HAI methods allow for global comparisons
- When these methods are used in US interesting insights arise consistent with reporting by Consumers Union



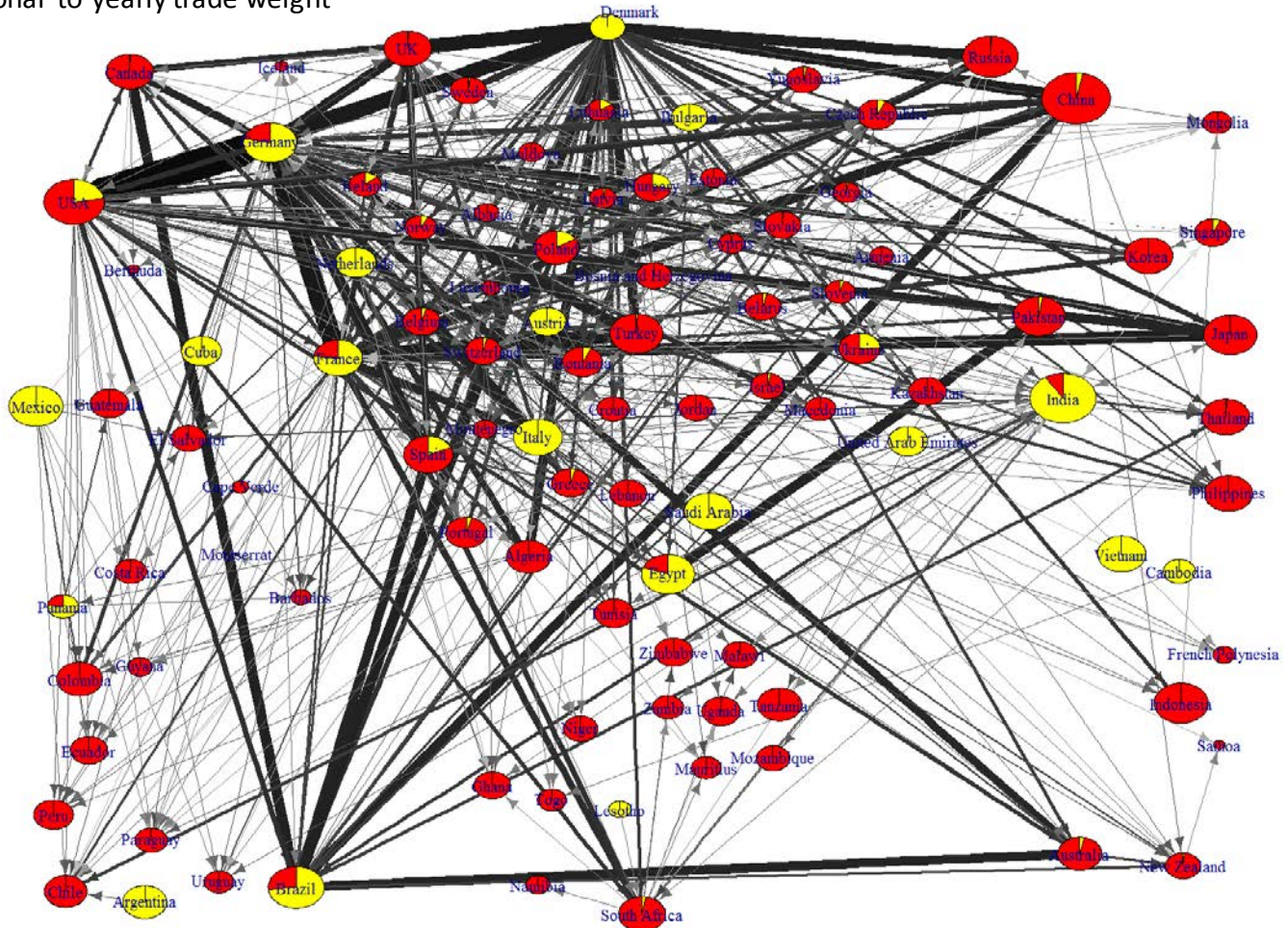
Information Sharing

- Transparency in pharmaceutical issues benefits many but often resisted
- Sharing of actual payment and quality information as practiced by the GFATM benefits countries and purchasers.
- Analyzing trade flows using trade data can inform understanding of issues such as local production

See Global Trade Map for insulin 2013
prepared by Warren Kaplan

Insulin Trade Network Map: 2013 by WEIGHT

Yellow: Exports Red: Imports
Thickness: proportional to yearly trade weight



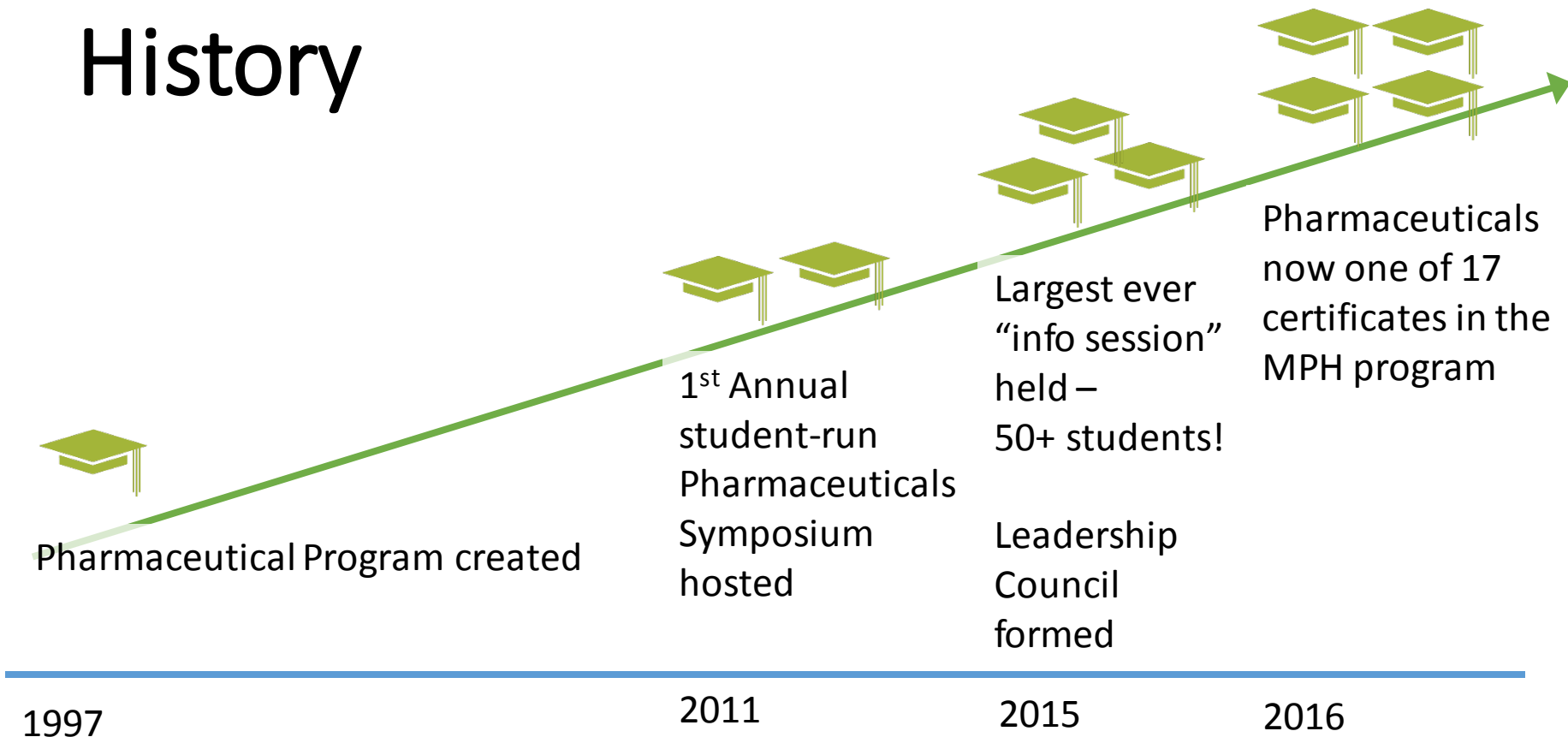
Intellectual Property Barriers and Trade Agreements

- While IP is seen as the basis for innovation, this does not always benefit LMIC's and neglected diseases
- Trade Agreements may create barriers to access far beyond what was imagined
- Pro-generic policies may benefit access but not if branded generics or bio-similars are priced up
- Complex issues for trade negotiators to address

Opportunities

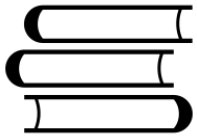
- BU is the only School of Public Health with a substantial Pharmaceutical Public Health program
- Schools of Pharmacy are generally reducing Social Pharmacy content within their programs
- Great opportunities exist for teaching, research and service for Schools of Public Health to contribute to this emerging area of study.

History



More than **150 graduates** to date!

Certificate Requirements



- 12 credits of coursework



- Skills-based practicum (240 hours)



- Seminar Speakers' Series
- Annual Symposium



- Networking & Social Events

Boston University School of Public Health
Pharmaceuticals Program





Boston University School of Public Health
Pharmaceuticals Program

PRESENTING THE 5TH ANNUAL BUSPH PHARMACEUTICAL PROGRAM SYMPOSIUM



THE POLITICS OF ACCESS

The Impact of U.S. Government Policies on
Pharmaceutical Markets and Public Health



External Advisory Board



AMGEN



Genentech
A Member of the Roche Group



Anylam[®]
PHARMACEUTICALS



Halloran



Spark[™]
THERAPEUTICS



EMD
SERONO



MERCK



VERTEX[™]



BILL & MELINDA
GATES *foundation*

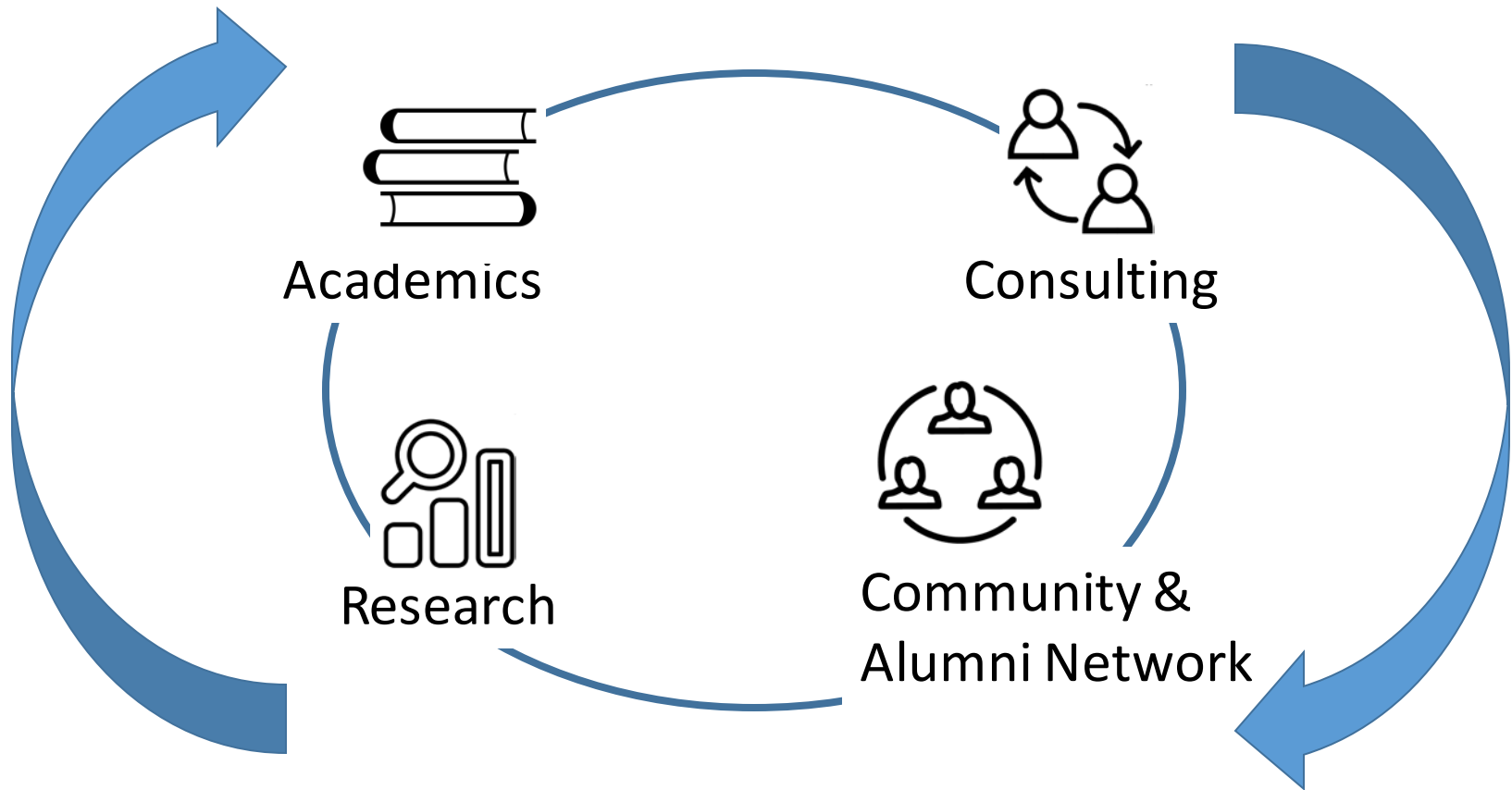


Propel
Careers

Alumni



Advancing Pharmaceutical Public Health



www.bu.edu/pharm

Comments and Questions

Thank you for your attention!

We welcome your comments and suggestions.

References

Selection

Cameron, A., Ewen, M., Ross-Degnan, D., Ball, D., & Laing, R. (2009). Medicine prices, availability, and affordability in 36 developing and middle-income countries: a secondary analysis. *The lancet*, 373(9659), 240-249

Bazargani, Y. T., de Boer, A., Schellens, J. H. M., Leufkens, H. G. M., & Mantel-Teeuwisse, A. K. (2014). Selection of oncology medicines in low-and middle-income countries. *Annals of oncology*, 25(1), 270-276.

Bazargani, Y. T., de Boer, A., Schellens, J. H. M., Leufkens, H. G. M., & Mantel-Teeuwisse, A. K. (2014). Selection of oncology medicines in low-and middle-income countries. *Annals of oncology*, 25(1), 270-276

Rational Use

World Health Organization. (1993). How to investigate drug use in health facilities: selected drug use indicators

Laing, R. O., Hogerzeil, H. V., & Ross-Degnan, D. (2001). Ten recommendations to improve use of medicines in developing countries. *Health policy and planning*, 16(1), 13-20.

Holloway, K. A., & Henry, D. (2014). WHO essential medicines policies and use in developing and transitional countries: an analysis of reported policy implementation and medicines use surveys. *PLoS Med*, 11(9)

References

Financing and Pricing

World Health Organization. (2008). Measuring medicine prices, availability, affordability and price components

Cameron, A., Ewen, M., Ross-Degnan, D., Ball, D., & Laing, R. (2009). Medicine prices, availability, and affordability in 36 developing and middle-income countries: a secondary analysis. *The Lancet*, 373(9659), 240-249

Sharma, A., Rorden, L., Ewen, M., & Laing, R. (2016). Evaluating availability and price of essential medicines in Boston area (Massachusetts, USA) using WHO/HAI methodology. *Journal of pharmaceutical policy and practice*, 9(1), 1.

Information Sharing

Waning, B., Kaplan, W., King, A. C., Lawrence, D. A., Leufkens, H. G., & Fox, M. P. (2009). Global strategies to reduce the price of antiretroviral medicines: evidence from transactional databases. *Bulletin of the World Health Organization*, 87(7), 520-528.

Kaplan W, Sharma A, Kolaczky E, Shappell H Insulin Trade Profile April 2016 Health Action International 2016:

Intellectual Property Barriers and Trade Agreements

Kaplan, W. A., & Beall, R. F. (2016). The global intellectual property ecosystem for insulin and its public health implications: an observational study. *Journal of Pharmaceutical Policy and Practice*, 10(1), 3.

THE ROLE OF PHARMACEUTICALS IN PUBLIC HEALTH

ACCESS TO ESSENTIAL MEDICINES AS A KEY DETERMINANT TO UNIVERSAL HEALTH COVERAGE



September 15, 2016

9 a.m.–5:30 p.m.

#BUSPH40 #BUSPHSymposia



School of Public Health

FOUR DECADES FORWARD

CELEBRATING BU SPH'S 40TH ANNIVERSARY