Effects of Using International Medical Graduates & Professionals in the US: An International Perspective

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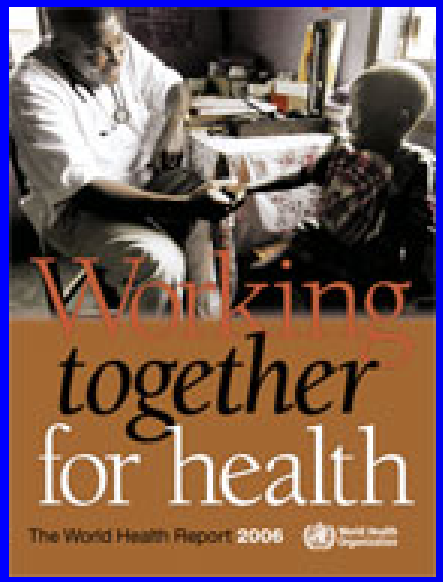
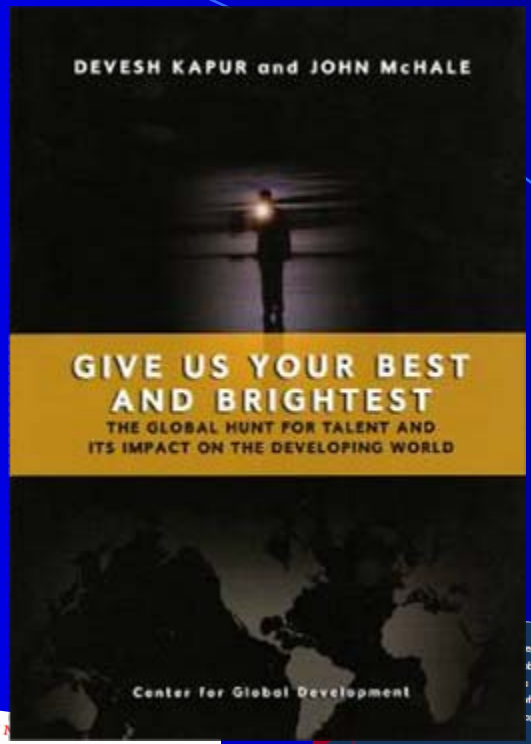
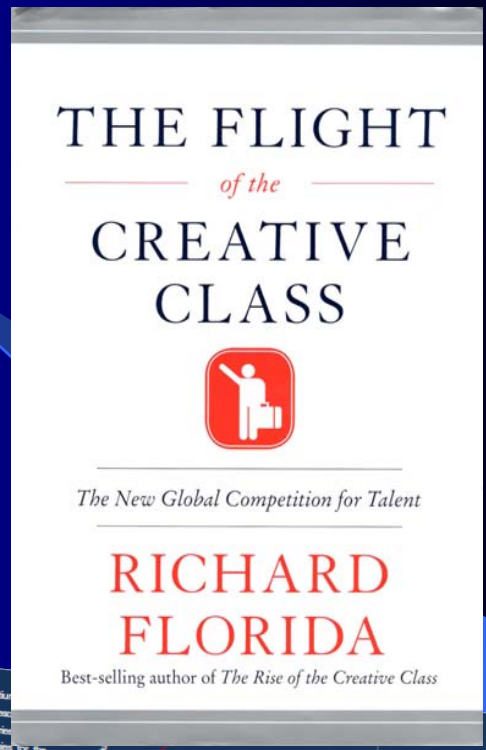
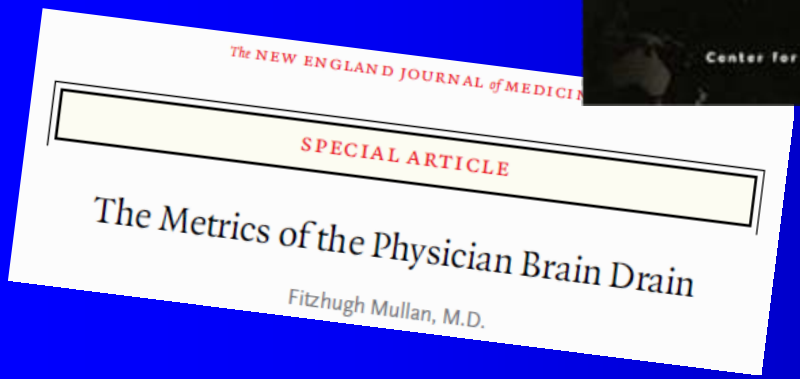
XIVth Annual Princeton Conference
May 24, 2007

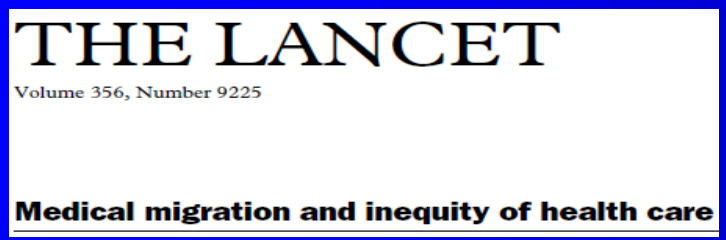
The Problem

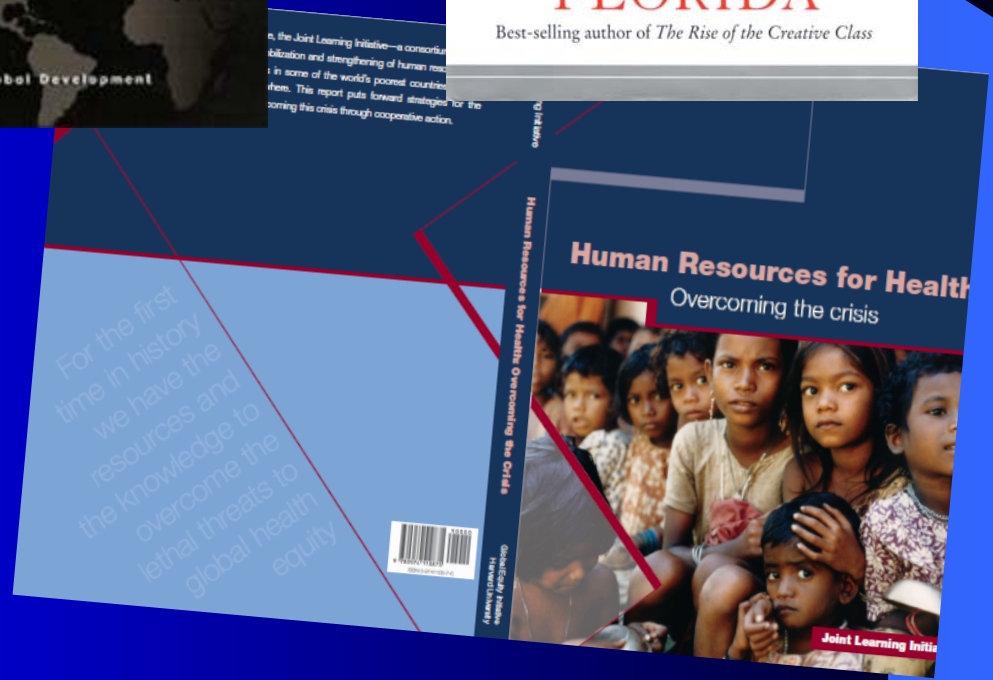

Working together for health
The World Health Report 2006


DEVESH KAPUR and JOHN McHALE
GIVE US YOUR BEST AND BRIGHTEST
THE GLOBAL HUNT FOR TALENT AND ITS IMPACT ON THE DEVELOPING WORLD
Center for Global Development


THE FLIGHT of the CREATIVE CLASS
The New Global Competition for Talent
RICHARD FLORIDA
Best-selling author of The Rise of the Creative Class


The NEW ENGLAND JOURNAL of MEDICIN
SPECIAL ARTICLE
The Metrics of the Physician Brain Drain
Fitzhugh Mullan, M.D.


THE LANCET
Volume 356, Number 9225
Medical migration and inequity of health care

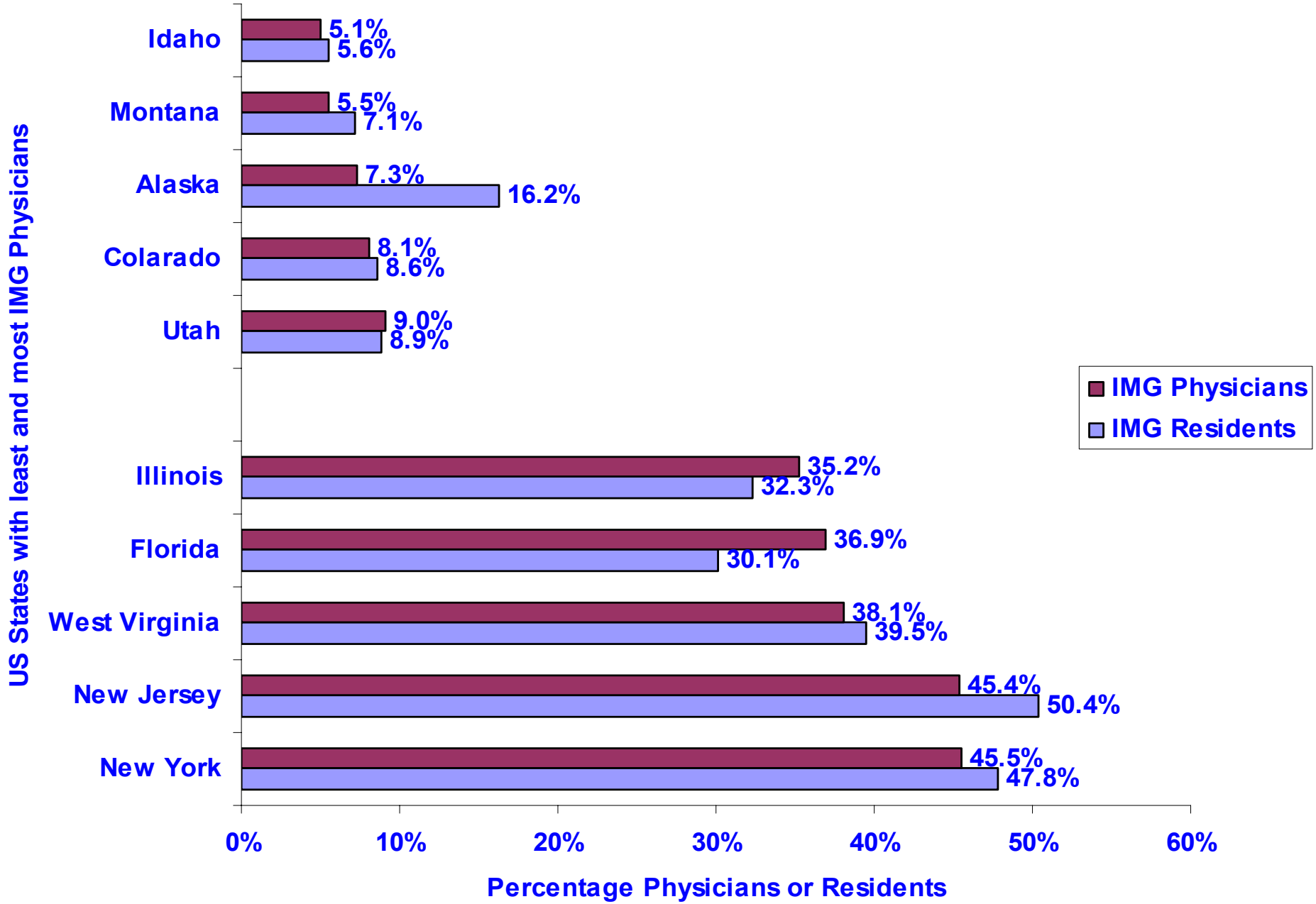

For the first time in history we have the resources and the knowledge to overcome the lethal threats to global health equity
Human Resources for Health
Overcoming the crisis

- Global shortage of health-workers: 2.4 million needed in some 57 countries (WHO 2006)
- The West draws a quarter or more of its workforce needs from developing countries
- These developing countries never had enough to start with
- The US like the rest of the West can ‘afford’ their shortages, but the developing countries cannot
- Largely intuitive but unquantified or unquantifiable effects on developing countries

The 'Demand' for IMGs in the US

- What would the US do without the international medical graduates (IMGs)? A nation so dependent… that IMGs make up more than a quarter of its physician workforce.
- This proportion is even higher in many states; in some 15 states IMGs make up 25% or more of their workforce.
- US imports more than twice the number of physicians working in Africa

IMGs Across US States



Data: NY CHWS, New York, 2006

IMGs Within States: New York State

- NY city: IMGs 40% of active patient care physicians
  - Bronx 44%
  - Kings 59%
  - Queens 59%
- Central NY: 22% (Cortland: 0%)
- Long Island 33%
- Hudson Valley: 35%
- Mohawk Valley: 41% (Herkimer: 59%)

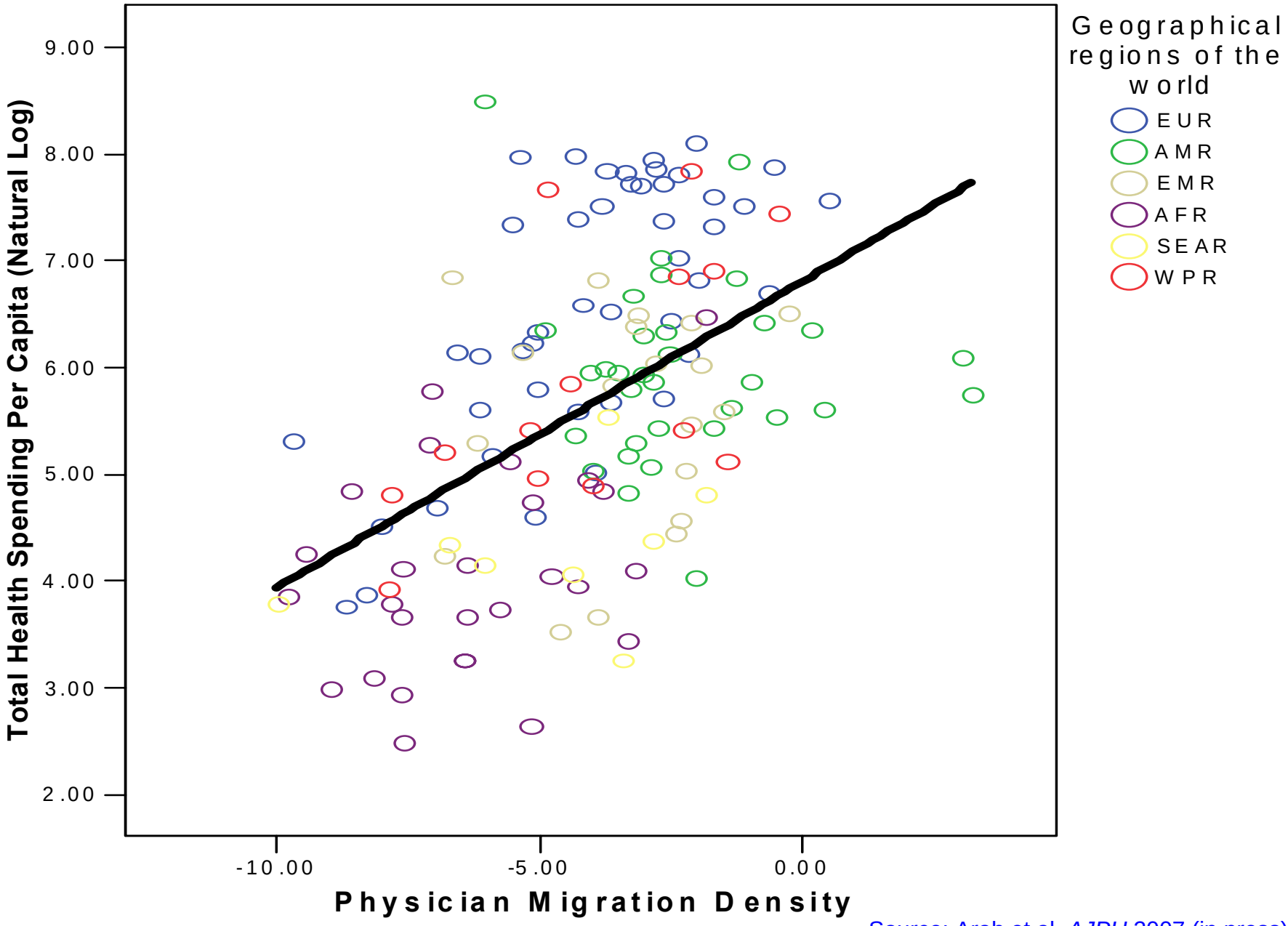
Data: NY CHWS, New York, 2005 Survey

IMGs in Specialties: NY State

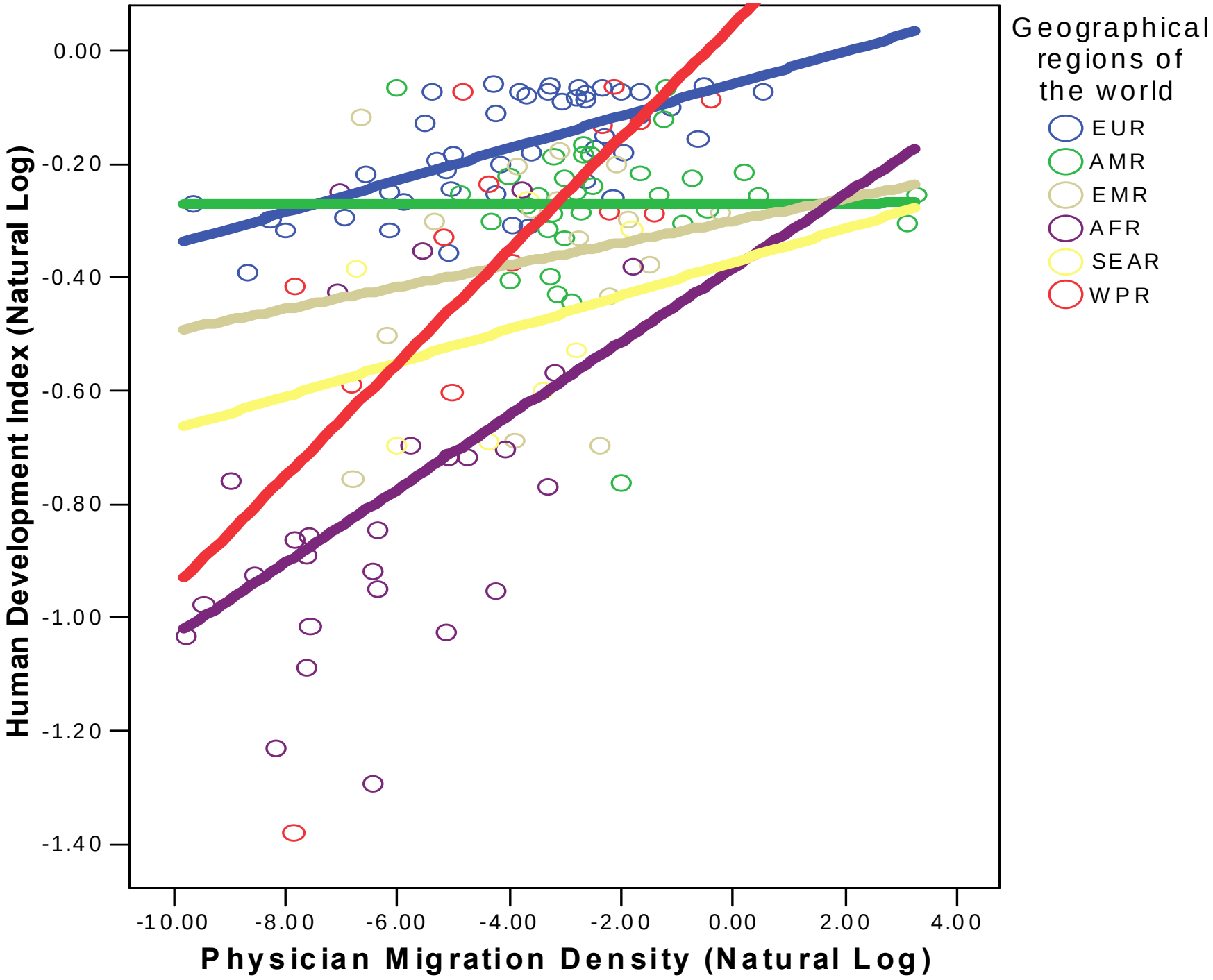
Specialties	% IMGs
Physical Medicine/Rehab	52
Pathology	52
Anesthesiology	49
General Internal Medicine	48
Critical Care	48
General Pediatrics	46
Geriatrics	41
Nephrology	41
General Surgery	39

- These health-workers come from Europe, the Americas, South East Asia, East Mediterranean, and Africa
- Proportionate migration of physicians and nurses alike from same countries
- Although flow is from poor to rich, among poor source countries, those with higher capacities are also losing relatively more: poor → rich → richer → richest domino or carousel effect
- Different metrics: absolute numbers, emigration fraction, migration density, increase in population-to-health-worker ratio

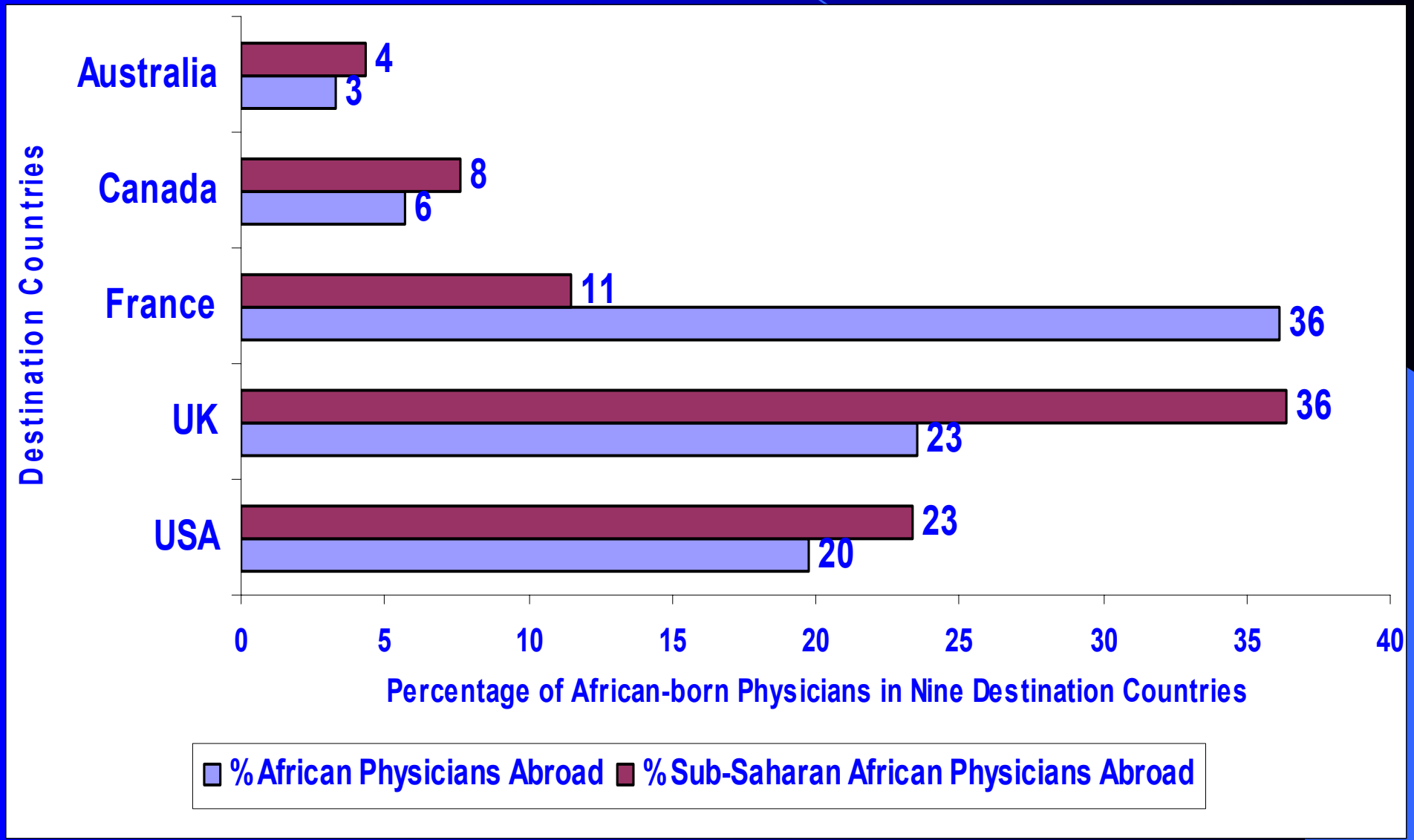
Leaky bucket? Get a bigger leaky bucket!



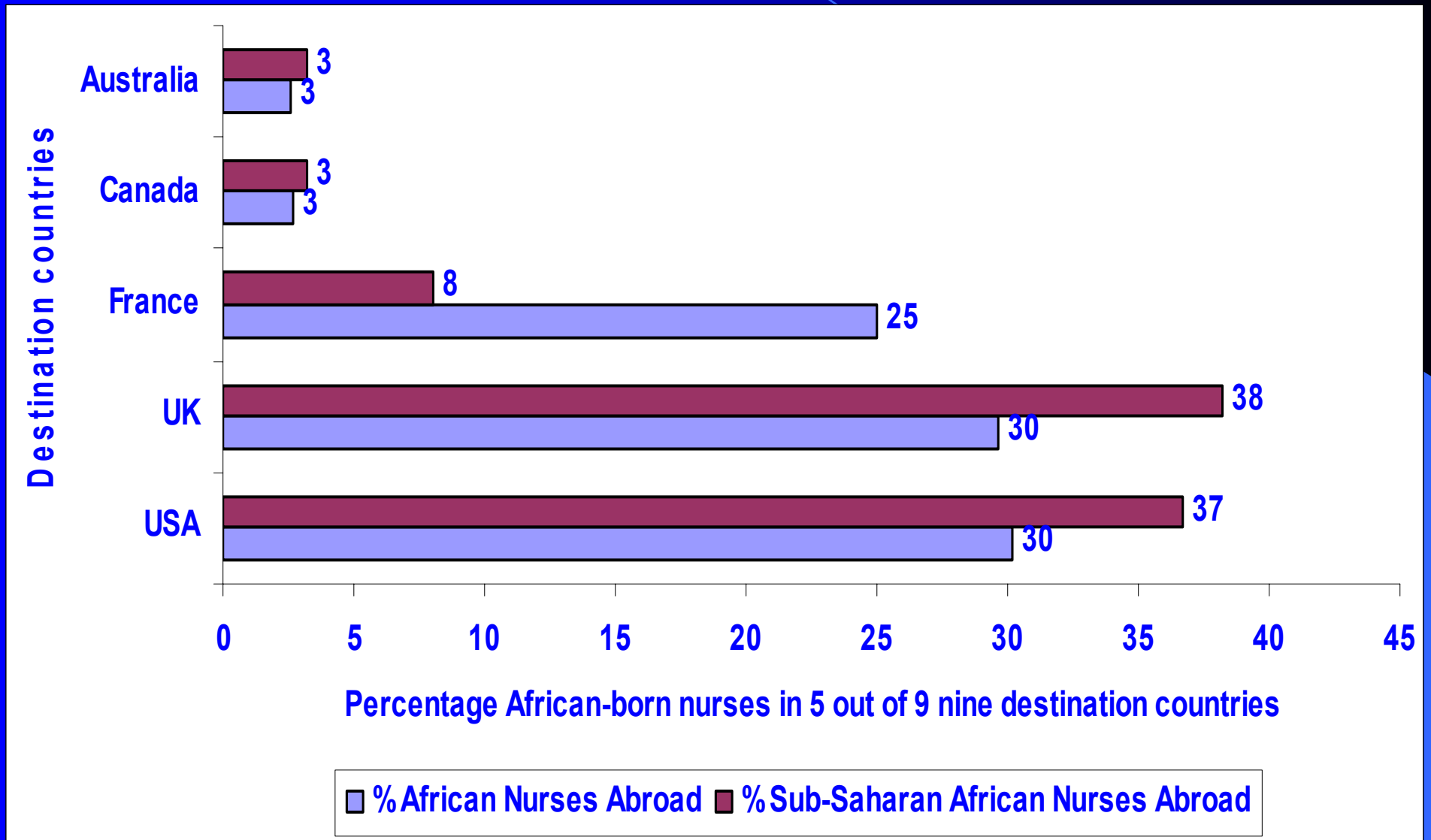
Source: Arah et al. *AJPH* 2007 (in press)


Human Development Index (Natural Log)
0.00
-0.20
-0.40
-0.60
-0.80
-1.00
-1.20
-1.40
-10.00
-8.00
-6.00
-4.00
-2.00
0.00
2.00
4.00
Physician Migration Density (Natural Log)
Geographical regions of the world
EUR
AMR
EMR
AFR
SEAR
WPR

- 19% of African-born physicians work in UK, US, Canada, Australia, France, Portugal, Belgium, and Spain combined
- 5% of IMGs in the US from Sub-Saharan Africa



• US and UK are primary destinations for African nurses, mostly coming from Sub-Saharan Africa



Training Costs of Doctors Lost to the US

Country	$66,000 per doctor: 25 years and 5% interest	25 years and 15% interest rate
Ghana ($59 billion)	$190 million	$1.9 billion
Nigeria ($188 billion)	$560 million	$5.5 billion
South Africa ($576 billion)	$436 million	$4.2 billion
Egypt ($328 billion)	$856 million	$8.3 billion
AFRICAN continent	$2.9 billion	$27.9 billion

Migration Reversal: Maternal Health Gains

- Simple econometric model (invoking causal assumptions) where

δ[LN(maternal mortality)]/δ[LN(physician density)] = negative coefficient (e.g. -0.371)

and everything else (incredibly) held constant

- Percentage decrease in maternal mortality in
  - Algeria 26
  - Angola 13
  - Botswana 56
  - Ghana 20
  - Nigeria 52
  - Sudan 53
  - S. Africa 44

Negative Effects on Source Countries

- Lack of care providers and increased burden of care for those left behind who also leave
- Loss of trainers and teachers
- Loss of skill mix in health care and society
- Increased costs of providing care and bigger leaky buckets
- Economic impact and loss of investment
- Health policy fatigue
- Impact on overall human development
- Unappreciated threat to countries in transition
- Disruption of families and personal ties

Searching for Solutions

- Unilateral national policies futile: global problem, fuelled by globalization, calls for paradigm shift in health-workforce policies
- Migration reversal within healthcare alone problematic
- Urgent dialog among all stakeholders
- Curbing or cessation of active recruitment: allow for ethical passive/personal movement
- Global committee to investigate the real social and health system causes of migration (push factors) and Western reliance on IMGs (pull factors)
- Focus on push factors

- International health-workforce investments training, sustainability, retention and performance
- Coupling to social progress
  - Increased wages and working conditions without overall social, governance and safety progress will fail
- Investment in detailed workforce data
  - Still no detailed analysis of causes, consequences and solution prospects of migration: combining individual versus societal factors as well as source versus destination countries factors
- International medical and nursing schools pairing, exchange and mentorship programs to instil professional satisfaction and perhaps demystify the western lure early on in training

- **Dually beneficial, ethical interventions to manage migration from a global perspective:**
  - **The West becoming more self-reliant**
  - **Focused residency support for developing countries**
  - **Tailored residencies and global health fellowships funded by governments, NGOs and philanthropists in exchange for home service**
  - **Dedicated funding for those residents with plans to return, with global health research potentials**
  - **Training of medical educators, residency directors and IMGs interested in academic careers**
  - **Framework for quality control, dual licensure and dual appointments of US trained IMGs; built into residency plans from outset**

"The solutions to the problem[s] raised by these international [health-worker] movements are not to be found within the movements themselves but in necessary changes within the framework or specific national (health care) systems and, of course, the social, political and class structures in which they exist."

- Oscar Gish

(*Soc Sci Med* 1979)

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