

Education and Training in Global Health



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Discussion outline



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- Growing interest and opportunities in GH
 - Undergrads
 - Medical students
 - Residents
 - Fellows
- Obstacles to training
- Reasons for additional GH opportunities

GH among undergrads

- Undergrads enrolled in GH programs:
 - 1,286 (2006) to 2,687 (2009)
- Average 3 GH student organizations per university



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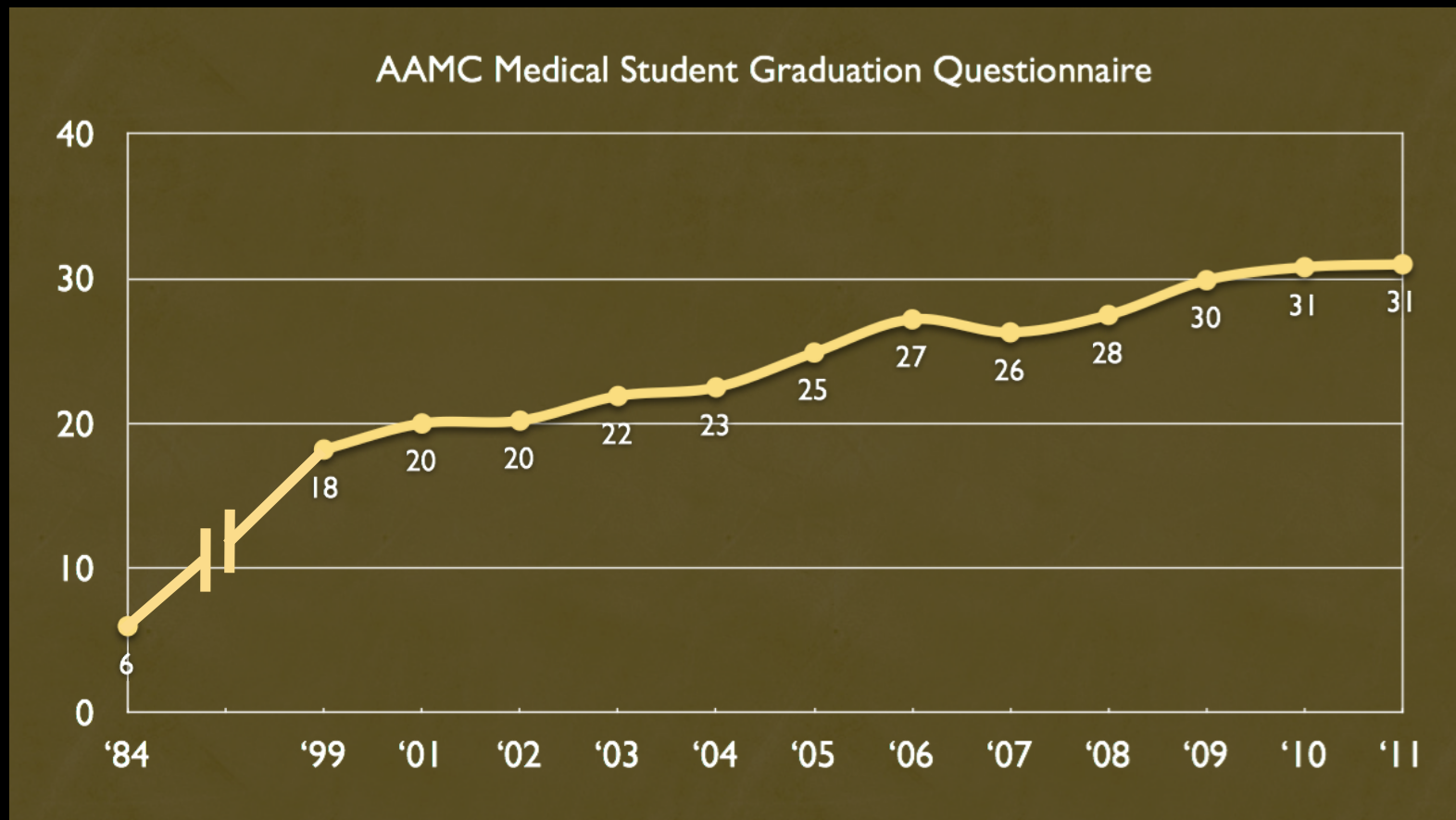
GH among medical students

- Med students GH participation increased from 6% to 31% (1984-2011).....
- Although, 40% report GH instruction still inadequate (2011)



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Growing med student GH participation



GH among residents

- Variable across institutions and disciplines
- 2/3 of Yale residents (IM, pediatrics, primary care) participated in GH elective (2006)
- Nationwide pediatric residency surveys:
 - 1996: 25% offered GH electives (additional 42% interested in developing GH electives)
 - 2007: 52% offered GH electives....

What does GH look like in residency?

- 2007 cross-sectional survey of all 201 pediatric programs
- 52% of programs had residents participating in GH elective within last 12 months
- Average, 7.4% (1.7-12.3%) of each program's residents participated in GH elective last year
- When do residents participate?

PGY-1	0 (IQR 0-0)
PGY-2	1 (0-2)
PGY-3	1 (0-4)
All years	3 (1-7)

Training opportunities for residents

- Prevalence of GH training opportunities, n/N (%):

Global health electives	55/106 (52)
Formal training curriculum	50/106 (47)
Global health lectures	43/106 (41)
Global health case reports	40/106 (38)
Global health readings or independent study	25/106 (24)
Global health journal club	9/106 (8)
Formal global health track	6/100 (6)

- GH topics covered by curricula
 - Majority covered HIV/AIDS, TB, cultural awareness
 - Fewer covered public health topics

Potential barriers for residents

- Limited call-free elective time:

<u>Median number of weeks</u>	
PGY1	1 week (IQR 0-4)
PGY2	4 weeks (1-6)
PGY3	4 weeks (2-8)

- Limited funding
 - 42% of programs offered some funding
 - Only 14% of programs provided full funding for majority of residents
- Other interests and responsibilities

Observance of GH elective guidelines

1. Prerequisite clinical training

- Prerequisite lectures (36%)

2. Adequate pre-travel orientation and preparation

- Vaccinations and medical consultations (78%)
- Pre-travel briefing (55%)
- Medical evacuation insurance (50%)
- Cultural orientation (36%)
- Language training (15%)

3. Preceptorship by host and U.S. faculty

- Faculty mentorship (82%)

4. Formal post-travel evaluation and feedback

- Resident debriefing sessions (77%)

GH fellowship training

- Also growing demand for post-residency GH training
- Largely began with IEM fellowships 15-20 years ago
- Expanding into other disciplines



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GH Fellowship survey

- 2010 survey of U.S. GH fellowships across medical disciplines
- To quantify and describe current GH fellowship training opportunities
- Results: 79 GH fellowship programs

31 emergency medicine
15 family medicine
12 internal medicine
12 pediatrics
4 interdisciplinary
3 surgery
2 women's health

Global Health Fellowship Database

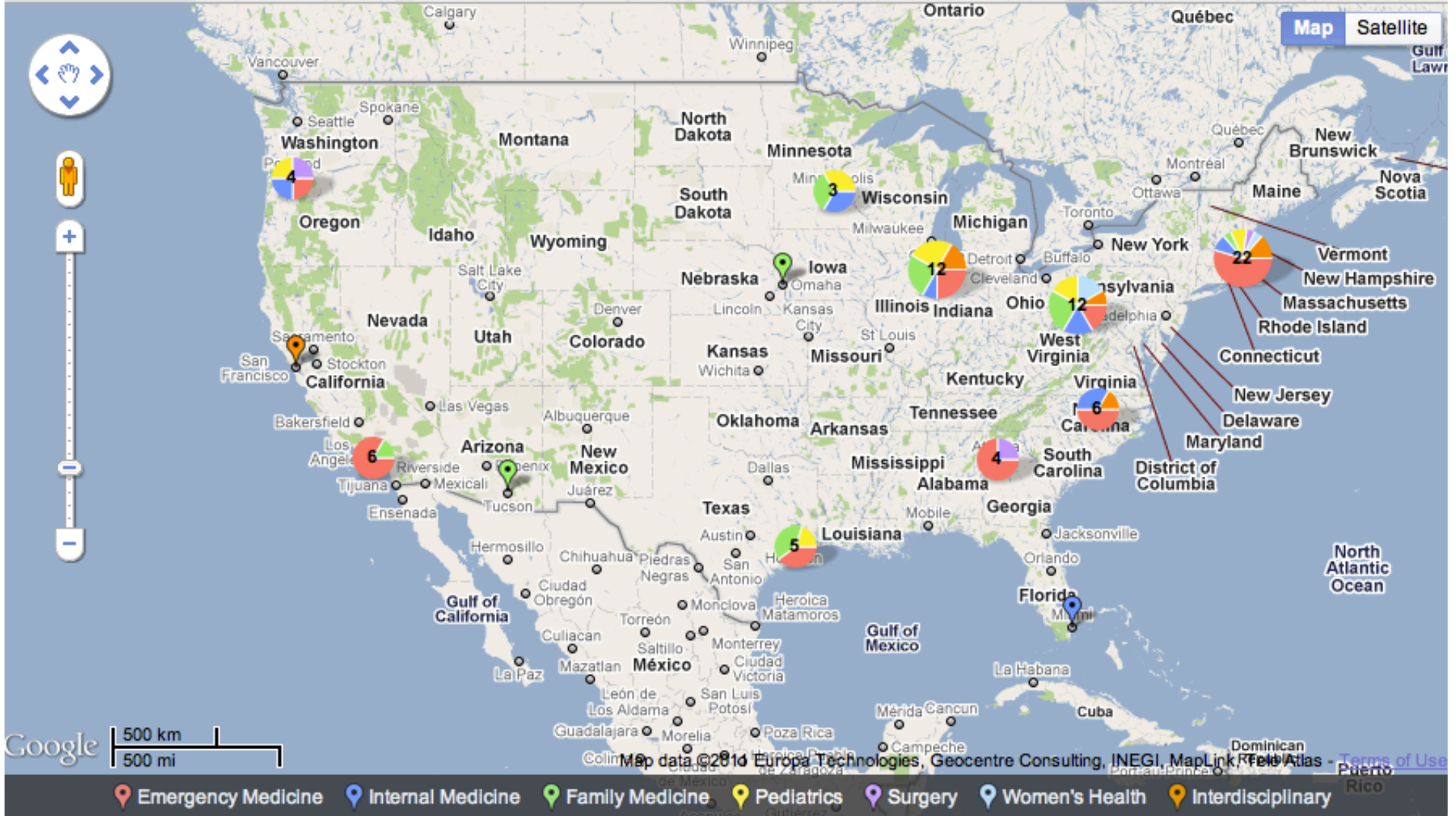


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What do GH fellowships look like?

- Application selection: Leading criteria were interview (84%) and career goals (62%)
- Length most commonly 19-24 months
- 75% provided advanced degree or diploma
- 53% integrated into residency training
- 43% had not yet graduated fellows

Other post-residency GH training

- CDC's Epidemiologic Intelligence Service (EIS)
- Field missions with MSF or other NGOs/IOs
- Baylor Global Health Corps
- Research fellowships (e.g. RWJ, Wellcome Trust)
- Splitting an academic or other position

Summary of obstacles during training

- Insufficient educational opportunities
- Limited funding and elective time
- Getting valuable experience without perhaps already having experience
- Balancing family, significant others, other interests
- Unclear training pathways and career models

Need to do more for trainees

- Greater...
 - ... funding and elective time
 - ... pre-travel preparation (w/competencies)
 - ... in-country mentorship and supervision
 - ... career mentorship
 - ... bi-directional collaboration

Argument for more GH

- GH addresses unmet needs of others:
 - Providing direct benefit to communities served
 - Building sustainable local human capacity
 - Social responsibility



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Benefits to those participating in GH

- Exposure to wider spectrum of disease
- Greater physical examination skills
- Decreased reliance on lab tests and imaging
- Awareness of costs and resource allocation
- Greater cultural sensitivity
- Ability to adapt to different health systems

Long-term benefits to participating in GH

- Health professionals who have participated in GH are more likely to...
 - ...work in underserved and multicultural communities domestically
 - ...perform community service domestically
 - ...work again overseas

Conclusion

- GH opportunities are improving at all levels of training
- Barriers still remain
- Significant benefits can make it a very worthwhile endeavor