ENTRE 579 – BUSINESS MODELS AND OPPORTUNITIES IN GLOBAL HEALTH

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Office Hours: Monday/Wednesday 2:30-3:20
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Class meetings: Monday/Wednesday 3:30-5:20  Paccar Hall 292

Reading: All readings are linked from the Canvas class syllabus or class pages. In some cases you may have to link to them through the UW library system.

Seattle is fast becoming one of the largest centers for global health in the world. This class will explore business models and opportunities in global health. The focus of the class will be on Global Health Delivery.

The class will begin by framing the questions within the context of the social, environmental and genetic determinants of health as reflected in the 2010 report on the Global Burden of Disease. We will then explore many of the models used to tackle the issues in global health, using public-private partnership, corporate, and entrepreneurial cases. The class will examine and debate the efficacy of efforts in combating the biggest killers: Non-Communicable Diseases (NCDs) and the big three in the infectious disease space: AIDS, malaria and TB. We will also look at the economics of eradication efforts, study the funding architecture for global health, and look at issues around neglected diseases and pricing models for the developing world.

Objectives

● To give students a real understanding of how business strategies and tactics can make a huge difference in tackling problems in Global Health.
● To document and evaluate the dynamic business models for global health organizations, large and small, for-profit and non-profit

Grading

Class participation –case and reading discussion 20%
Case/Reading analysis submissions: 30%

You are required to submit written answers to questions on cases or readings 6 times during the quarter for a total 30% of your grade. These questions will be on the canvas prep session for each class. Submissions should be individual, but I encourage you discuss these in groups. No submission should be more than two pages. Bullet points are fine. No dense text.

Group project:
Midterm presentation 10%
Final presentation 20%
Group Peer review 10%
One to two-page reflection paper on your key learning from the class. 10%
Class Project

Teams should be formed to tackle an issue of your own choosing, or any one of the ideas below. Come chat with me about details:

1. What is the role of private capital in health care globally? In the UK, almost 90% of healthcare spending is public money (OECD 2009). If you look at India 80%+ of healthcare spending is consumer-directed. Compare and contrast the two systems, in terms of effectiveness. What are the factors that drive these differing markets? E.g. what decides when and where hospitals, clinics or other parts of the health system get built under either system? What are your recommendations for developing countries?

2. How does drug pricing work across different parts of the world and why? What is the optimum pricing strategy to achieve maximum access to either vaccines or drugs worldwide? What is the business case that optimizes the balance between an innovator’s right to profit from major discovery and the human right to health?

3. What is the role of consumers in taking control of their own health and how do you catalyze that behavior? Pick one advance in medical science that will accelerate this and explain the business model behind it. (Glucose monitoring? Fitbit? Point-of-care diagnostics?).

4. Is disease eradication a worthwhile goal? The benefit-cost ratio of global smallpox eradication was over 450:1. Produce a business case for or against eliminating polio, guinea worm or a disease of your choice. What factors would you consider is deciding on control versus eradication?

5. Create a business pitch for any healthcare innovation of your choice.
# Class Schedule and Assignments

## Section I: Setting the Context

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<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Required Reading</th>
<th>Guest</th>
<th>Assignment</th>
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<tbody>
<tr>
<td>4/6</td>
<td>Business Models continued. What are the major problems to be tackled in Global Health?</td>
<td>The Lancet: Global Health 2035</td>
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<td>4/8</td>
<td>The Global Health Value Chain and the funding Architecture for Global Health</td>
<td>IHME: Financing Global Health 2012</td>
<td>Can you identify the role of public vs private funding? Which has the most leverage?</td>
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## Section II: Tackling huge problems: The role of public and private entities

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<tr>
<td>4/20</td>
<td>NCDs and the implications for the future of Global Health</td>
<td>NCDs: Global Status Report, Executive Summary, WHO, April 2011</td>
<td>Jackie Sherris, Former VP product development and public health impact, PATH</td>
<td>Prepare: Case study questions on case.</td>
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<tr>
<td>4/27</td>
<td>Disease eradication</td>
<td>Case study: Reducing</td>
<td>Prepare: Case study</td>
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<td>4/29</td>
<td>Midterm Project Presentations and Discussion</td>
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<td>Guinea Worm in Asia and Sub-Saharan Africa</td>
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<td>questions on case.</td>
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<td><strong>Section III: Delivering Effective Global Health Technologies and Products</strong></td>
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<td>5/6</td>
<td>Product Development Partnerships (PDPs)</td>
<td>Neglected Disease R&amp;D: A five-year Review Anacor: Neglected Disease R&amp;D within a for-Profit Model</td>
<td>Eric Easom, Vice President, Anacor</td>
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<td>5/25</td>
<td>Memorial Day</td>
<td>No class</td>
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<td>6/1</td>
<td>Final Presentations</td>
<td>Ali Arjomand, Ph.D., Director of Research and Strategy, Global Good. Zachary Rozga, VentureScale John Beale, Village Reach See project guidelines for final presentation requirements.</td>
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<td>6/3</td>
<td>Final Presentations</td>
<td>Ali Arjomand, Ph.D., Director of Research and Strategy, Global Good. Zachary Rozga, VentureScale John Beale, Village Reach Reflection paper due on the last day of the quarter.</td>
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Case/Question submissions

You are required to submit written answers to questions on cases or readings **6 times** during the quarter for a total 30% of your grade. Submissions should be individual, but I encourage you discuss these in groups.

3/30

1. What examples in the article, or from your experience, illustrate the importance of management in solving Global Health Problems?
2. This article was published in 2008. Have the statistics on malaria or maternal mortality changed? Check out the IHME visualizations on progress against the Millennium Development Goals (Links to an external site.) for up-to-date progress.
3. Why was eradicating smallpox considered a success? You can check out the Center for Global Development's case study on smallpox (Links to an external site.) if you want more background.
4. What issues are raised in the article about the effectiveness of aid that has been given to Africa? Do you have an opinion?
5. So what questions do you want to look at this quarter in relation to the role of management and innovation in Global Health?

4/1 Business Models

Read the Burn Design Labs Executive Summary and Prepare a "Due Diligence" List. This is a list of questions that you will ask Peter Scott to get to understand the business model and decide on whether you will invest money in his organization or not. If this is totally new to you, check out the Alliance of Angels Due Diligence Checklist

Typically you should consider:

1. The problem. Is this a problem that needs solving? Is that well explained?
2. Quality of the entrepreneur and the team. Think about how you would get this information. What questions would you ask?
3. Social impact: How many people at the bottom of the socio-economic pyramid will benefit from the company's product or service? Generally serving the disadvantaged does not have to be the only part of the business model but it must be significant.
4. Financial Sustainability: Does the company have a clear, realistic, growth-oriented business model that will lead to sufficient operating revenues to cover expenses at some stage? (Typically 5-7 years is more realistic for social investors -or patient capital). Think how much the organization looking for, how far will it get with that amount of money. Do the finances make sense?
5. Is there a "demonstration effect" here? If successful, will this enterprise provide an example of a better way to do things that will be adopted?

OR Questions on the readings:

1. What is a business model?
2. What is one of the most important questions that must be answered?
3. What does revenue tell us about a business model? About a funding model?
4. Do you agree with the premise that for-profit and nonprofits are fundamentally different?
5. Pick your favorite nonprofit and describe its funding model.
4/6 The Lancet: Global Health 2035

1. The report claims that reductions in mortality rates account for 11% of recent economic growth in low and middle income countries. How is this calculated?
2. What *in your opinion* are the most impressive advances in global health according to this report? Why?
3. What do they mean by convergence?
4. What are the pros and cons to using the Value of additional Life Years (VLYs) as a measure of the effectiveness of improved health?


1. Should spending on global health be maximized in countries with the highest burden of disease?
2. How is money allocated to address global health issues?
3. How *should* money be allocated?
4. Find an example of one interesting innovative funding source. What makes it so?

4/13 TB

1. What is the role of community health care workers?
2. What can we learn about this in the US? How can we apply this method to our public health system?

4/20 NCDs

1. The World Health Assembly (WHA), the decision-making body of the WHO, set the following NCD goals in May 2013. How would you suggest they tackle these?
   a. 10% relative reduction in prevalence of insufficient physical activity.
   b. 30% relative reduction in mean population intake of salt/sodium
   c. 25% relative reduction in the prevalence of raised blood pressure or contain the prevalence of raised blood pressure according to national circumstances.
2. How do you change behavior to halt the rise in diabetes and obesity.

4/22

1. Which contributing success factors does “Global to Local” hope to replicate?
2. Do you think there is a sustainable business model here? Why or why not?
3. What questions would you need to answer to determine that?
4. What will be the biggest impediments to making Global to Local successful?

4/27 Disease Eradication

1. Explain the context in which this case is set. Does it matter?
2. Is this disease a good target or eradication? Why?
3. What were the key strategic moves involved in doing so?
4. Do you think there is a business model behind guinea worm eradication? Why?