NOTE:
THIS SYLLABUS AND SESSION AGENDA IS PROVIDED AS A GUIDE FOR COURSE SELECTION. THE 2013 SESSION AGENDA IS IN PREPARATION. THE 2012 SESSION AGENDA IS INCLUDED AS AN INDICATION OF TOPICS AND SPEAKERS.

CLASSES START ON MONDAY, JANUARY 14. ALL CLASSES ARE ON MONDAYS (WITH THE EXCEPTION OF MLK DAY) FROM 4:30 TO 6:00 PM THROUGH THE FULL SEMESTER

This is a 0.5 cu course

Instructor: Steve Sammut
Senior Fellow and Lecturer, Wharton Health Care Systems and Entrepreneurship
Office hours: Sign-up sheet posted on webcafe or by special appointment
Location: Vance Hall – Room # 422
Classes: Mondays throughout the semester: 4:30 to 5:50 PM
E-mail: smsammut@wharton.upenn.edu
By snail mail or over-night courier: please sign to authorize “drop-off: 300 East Lancaster Avenue, Suite 1002
Wynnewood, PA 19096

Course Units: 0.5 cu
Prerequisites: General knowledge of Health Care Systems or life sciences and an interest in global health
Eligible Students: Students in graduate or professional programs University-wide. Instructor welcomes undergraduate and graduate students from all Schools of the University who are passionate about the challenges of global health
Course materials: Text book (*Global Health: Diseases, Programs, Systems and Policies*, 3rd edition by Merson, Black and Mills)
*Scientific American Lives: New Answers for Global Health* (will be distributed for free in first class)
Course pack
Web Café Postings
Learning Objectives:

The purpose of this course is to describe entrepreneurial and business approaches that the private sector can implement in addressing the issues of global health, especially in developing countries. In particular:

1. The course does not attempt to duplicate a conventional international public health course, but builds upon what is conventionally known and taught in such courses from a managerial perspective. The course will address a range of means of managing medical services and related businesses—public and private—in underserved areas for underserved populations in emerging markets and developing countries, and where appropriate, in underdeveloped parts of developed countries.

2. The descriptive focus will be on how these services currently are managed or otherwise handled, especially with regard to care for or control of key disease such as malaria, HIV/AIDS, tuberculosis, parasitic diseases, or other indigenous diseases that have broad debilitating and destabilizing social and economic effects.

3. It is the case that best practices and equitable, effective access to care are largely non-existent. Students and participating faculty will collaborate in the discovery and creation of service models. Field-testing of these models will depend on available grant resources or collaborations developed with USAID, World Bank, the World Health Organization, or other NGOs or foundations, such as the Bill & Melinda Gates Foundation, The Welcome Trust, The Rockefeller Foundation, Doctors of the World, and others. The class will develop a system of benchmarks and other measures to determine effectiveness.

4. Examination of the criteria used by international development agencies for the allocation of resources to different regions and the possible conversion of these distributions into the capitalization, funding or advance purchase contracts for entrepreneurial enterprises.

5. Origination and launch of structured programs and effective organizations: the determinants and role of public and private entrepreneurship, public-private partnerships and other approaches to addressing the issues.

6. Creation and development of specific entrepreneurial solutions to such needs as drug manufacture and availability, the management and tracking of drug distribution, health finance and insurance, cost-effective services, health systems optimization and the like.

The above topics will be explored through a series of specific themes that will be addressed in separate sessions, often by a guest speaker. The themes are:
- **Private Sector Role in GH**  
  (*The intersection of GH needs and private sector initiatives)*  
- **Private Public Partnerships**  
- **Health Care Financing in the Developing World**  
  - Global Fund / PEPFAR  
  - Int'l Agencies/Foundations (USAID/Gates)  
  - Insurance Programs  
  - Domestic Governments  
- **Medical Tourism**  
- **Globalization and Health Care:**  
  (*Assess cross-border risks/opportunities in securing health)*  
  - Trade Policies  
  - IP issues: Licensing of products to the developing world  
  - Bioprospecting  
- **Economics of Essential Medicines**  
  (*Define essential meds - e.g., childhood vaccines, HIV/TB/Malaria meds)*  
  - Pricing  
  - Distribution  
  - Wastage  
- **Access Barriers Beyond Price**  
  - Distribution: Channels, cold chains, wastage  
  - Provider education/supply  
  - Follow-up to care and long-term coverage  
- **Innovation in Global Health**  
  - Private Sector Initiatives to address Unmet Medical Needs  
  - Funding Innovation  
  - AMC's  
  - VC's / PE's  
  - Innovative Capabilities of Developing Countries  
- **Health Technologies for Developing Countries**  
  (*Consumables, Medical Devices, Diagnostics)*  

**Course Requirements:**

Grading will be based on:  
Class discussion and course blog postings: 20%  
Individual Take-Away submission: 10%  
Course Project (individual or team): 70%

**Class Discussion Criteria:**

Active contribution and enrichment of class discussion, e.g. by drawing upon and sharing your professional, field and clinical experiences and relating these to the subjects at hand. The webcafe will include a special blog for contributions – postings will factor into the class contribution grade.
**Individual Take-Away Submission:**
This is a brief written analysis of a key class theme as it is covered by a given speaker and corresponding readings. It must be completed individually. You will discuss and assess a topic (e.g., Private Public Partnerships) by drawing on points from at least 1 speaker and at least 2 readings.

Process: Sign up on Webcafe for the theme you would like to cover. There are the following 8 themes and each theme can be chosen by a maximum of 5 students:
1. Private Public Partnerships
2. Health Care Financing in the Developing World
3. Medical Tourism
4. Globalization and Health Care
5. Economics of Essential Medicines
6. Access Barriers Beyond Price
7. Innovation in Global Health
8. Health Technologies for Developing Countries

Length: 1-2 pages
Content: Must cite specific points from at least 1 speaker and at least 2 readings.
Due date: To be announced

**Course Project: Guidelines and Submission Schedule**
Students—alone or in teams—will be free to propose their own relevant projects to the instructor. These projects should in a major way address private sector solutions to global health. *Generally, the instructor is happy to accept a deliverable built around a Wharton Health International Volunteer Project. Students expecting to participate in a winter break or spring break project should consult with the instructor prior to the start of the field project. Teams should have no more than 4 people per team. The final paper is to be a maximum of 20 double-spaced pages, excluding exhibits.*

*The following deadlines are to help the students manage their time throughout the semester and must be met accordingly.*

**By Session 3:** E-mail to the professor your project proposal and names of team members (if any). This should simply be one paragraph describing the project.

**Between sessions** 3 and 5 the instructor will meet with teams to discuss the projects, determine scope and define the deliverables

**By Session 5:** Upload a two page detailed, annotated outline with bibliography to the appropriate webcafe folder.

**By Saturday, April 2, 11:59 PM:** Upload a succinct PowerPoint summary of the project that you will present on the final day of class, Monday, April 25th. The standard length and allowed time for each presentation will be announced to the class by mid-semester once the final number of projects is determined (though will probably be about 5 to 10 minutes per presentation).
Final Project Due-Date: Wednesday, April 25, 2011 by 5:00 PM.
Post your final project to the Final Project Folder on WebCafe.

Reading Materials

Text book (Global Health: Diseases, Programs, Systems and Policies, 3rd edition by Merson, Black and Mills)
Scientific American Lives: New Answers for Global Health (will be distributed for free in first class)
Course pack
Web Café Postings

The instructor has selected case studies, articles, book chapters and monographs that address the issues in the course provided in the Course Pack.

One or more readings are designated as preparation for each session. The instructor will announce the appropriate reading module as the speaker schedule is solidified. The number of readings is long for each module and the amount of reading voluminous. Students ARE NOT expected to read all articles for each session.

Remember that you must select readings for the “Individual Take-Away Submission” reports (10% of grade) as described above.

The Reading Modules are designed to tie-in with the themes. The modules are:

1. The Scope of the Problem
2. The Context of Global Health and Private Sector Involvement
3. Public Private Partnerships
4. Health as a Human Right, Ethics and Health Equity
5. Health Care Finance in the Developing World
6. Globalization and Health Policy
7. Essential Medicines Availability
8. Innovative Capability of Developing Countries
9. Funding Innovation for Global health Needs
10. Trade Policies, Intellectual Property and Bioprospecting
11. Programs and Interventions

Instructor Biography:

Mr. Sammut is Senior Fellow, Wharton Health Care Systems and Entrepreneurship, and Venture Partner, Burrill & Company, a San Francisco based life science venture capital fund and merchant bank. At Burrill & Company, Mr. Sammut focuses on Asian and Middle Easter venture activity, with a special focus on global health venturing.

At the Wharton School, and periodically in the University of Pennsylvania School of Applied Science and Engineering, School of Law and School of Medicine), he teaches venture capital management, corporate development, mergers and acquisitions, biotechnology entrepreneurship, intellectual property strategy, and private
equity in emerging markets, and a special seminar on private sector participation in international health. He works actively with a student-alumni organization called the Wharton Health International Volunteer Program that provides pro bono consulting services to public health services and clinics in the developing world.

Mr. Sammut is also Founder and Chair of the International Institute for Biotechnology Entrepreneurship, a non-profit organization offering intensive training programs throughout the world for managers of biotechnology companies. He actively conducts research under a grant from the Bill & Melinda Gates Foundation, in collaboration with the McGlaughin-Rotman Center for Global Health at the University of Toronto on the capability of emerging market countries in the biotechnology and pharmaceutical industries. He is also on the faculty of the World Intellectual Property Organization/UN executive education program.

Mr. Sammut has been involved in the creation or funding of nearly 40 biotechnology, Internet, and information technology companies globally. He is on numerous Boards of Directors and Advisory Boards including Doctors of the World USA, Mitsubishi Corporation Life Sciences Business Group, the Royal Bank of Canada Technology Venture Fund, the Cornell University Research Foundation, Combinent BioMedical Systems, Dynamics Pharmaceuticals, Gentis, Biowizard.com, the International Finance Corporation Bioethics Advisory Board (World Bank), the Center for Medicine in the Public Interest, Red Diamond Capital (a mid-market buyout fund), the Asia-Alpha Venture Fund, and several other organizations. He is also on the editorial board of the European Venture Capital Association Publications, The Private Equity Review, the Journal of Commercial Biotechnology and the Biotechnology Business and Law Journal.

Mr. Sammut previously held the positions of Vice President of Development of Teleflex Incorporated where he created and managed acquisitions and alliances, and at S.R. One, Ltd., GlaxoSmithKline’s venture capital fund. He was also Managing Director of Access Partners, a venture fund focused on formation of companies around university technologies and capitalized by corporate strategic investors.

Earlier in his career, he was Managing Director of the Center for Technology Transfer at the University of Pennsylvania, where he spun out over one dozen companies over a two-year period. He held a similar position at Jefferson Medical College. He is also co-founder and former CEO of the Philadelphia Organ Transplant Program, the largest transplant organ bank in the United States. He holds degrees in biology and humanities from Villanova University, attended Hahnemann Medical College for two years and holds an MBA from the Wharton School of the University of Pennsylvania.
| 1  | Jan 23 | **Course Introduction and Lecture:**  
**“Fundamental Challenges of Global Health” Part 1**  
**Session Objectives:**  
1. Acquire a definition of global health  
2. Identify the principle issues in global health  
3. Understand the fundamentals of how health is measured in populations  
4. Understand the global transnational factors affecting health  
5. Reach an understanding of the problems of health equity  
6. Define demographic and epidemiologic transitions  
7. Gain an appreciation for the challenges of measuring health and disease  
8. Identify the barriers to measuring disability  
9. Be familiar with key terms such as: burden of disease, disability adjusted life year, and Risk factors  
10. Understand the concept of the health gradient and how it is measured  
11. Understand the relationship between social determinants and health  
12. Discuss the challenges of improving health for all populations  
13. Be familiar with the most common measures of social differences | **Required Reading from Course Pack:**  
Reading 1. Global Health Definition from the Lancet  
Reading 10: Health and Human Rights, Mann et al  
Reading 14. An Introduction to Global Health Policy, Lee et al  
Optional Reading:  
MERSON, BLACK AND MILLS: Chapter 1 Measures of Health and Disease in Populations  
Chapter 3 The Social Determinants of Health |
| 2  | Jan 30 | **“Fundamental Challenges of Global Health” Part 2**  
**Session Objectives:**  
1. Identify the key elements and typologies of health systems  
2. Review the concepts of efficiency and equity in the context of health system performance | **Required readings from course pack:**  
11. Rich-Poor Differences in Health Care Financing  
12. Financing for Global Health  
13. Financing Health in Low Income Countries |
| 3 | Feb 6 | **Private Sector Responses to Global Health Challenges: Part 1**  
The lecture will focus on how the private sector can participate in global health through innovative approaches to drug access, focused research and other programs. |
| 4 | Feb 13 | Guest Speaker:  
Farhad Riahi, MD, MBA  
A Major Pharmaceutical Company Looks at Its Role in Global Health: The Case of Novartis  
Farhad Riahi is Head of Healthcare Systems at Novartis International, AG. Prior to joining Novartis, he was a Partner at McKinsey & Company’s London office, where his work focused on helping healthcare systems improve patient outcomes, and practiced family medicine and emergency medicine in Canada. Farhad holds an MD from McGill University, and an MBA from the Wharton School. |
<p>| 5 | Feb 20 | Guest Speaker |</p>
<table>
<thead>
<tr>
<th>Sandeep Ahuja</th>
<th>Business</th>
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<tbody>
<tr>
<td><strong>Founder &amp; CEO, Operation ASHA</strong></td>
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<td><strong>Fighting TB Worldwide</strong></td>
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<td>As CEO, Sandeep has led the organization since 2006. His sharp business acumen has earned praise and created a cost-effective method of treating tuberculosis. Before founding Operation ASHA, Sandeep served for many years as additional commissioner for the Government of India. He then traveled to the U.S., where he earned a masters degree in public policy at the University of Chicago and a certificate in health policy &amp; administration. During his tenure at the University of Chicago, he was awarded the Harris Fellowship. He was also selected as a McCormick Tribune Community Leadership Fellow in Chicago. Sandeep has also taught a short course titled “Global Health Problems” at the University of Chicago. He has also delivered lectures at WHO Regional Office in New Delhi, Carnegie Mellon University, Dartmouth College, Harvard School of Public Health, University of Colorado at Denver, University of Illinois, Sloan School of Business at MIT and Wellesley College. He has also been a speaker at many international conferences across the world including SOCAP, Europe and the Annual Conference of the European Venture Philanthropy Association. Operation ASHA’s mission is to eliminate tuberculosis among disadvantaged communities. We do this by providing treatment, counseling, education, and supportive services to tuberculosis patients in the communities where we work. We also implement awareness and preventive measures to prevent tuberculosis in these communities. In addition, we seek to build</td>
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capacity among governments, public health organizations and other NGOs to adopt and implement our best practices.

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<thead>
<tr>
<th>Date</th>
<th>Event</th>
<th>Presenter/Details</th>
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<tr>
<td>6 Feb 27</td>
<td>Christopher Dickey, DrPH, MBA CFO, HealthPoint Global</td>
<td>“HealthPoint: An Entrepreneurial Intervention in Indian Healthcare”</td>
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<td>Dr. Dickey has 10 years of experience in health-oriented technology businesses. He was formerly GM and VP Operations of Medical Intelligence Solutions, and he was formerly editor-in-chief of Drug Discovery and Development and of Genomics &amp; Proteomics. Dr. Dickey is a graduate in molecular epidemiology and public health from the Mailman School of Public Health at Columbia University; he conducted post-doctoral research at the Institute of Human Nutrition, Columbia; and he holds an MBA in Entrepreneurship &amp; Finance from Wharton.</td>
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<td>Required Reading</td>
<td>HBS Case: Healthpoint Global (See Study.Net)</td>
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<td>Optional reading from MERSON, BLACK, MILLS</td>
<td>Chapter 17: Cooperation in Global Health</td>
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<td>7 Mar 12</td>
<td>Private Sector Responses to Global Health Challenges: Part 2</td>
<td>Case Discussion: Gilead Sciences, Inc: Access Program</td>
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<td>The Problem of Drug Access and A continuation of private sector strategies. Is there a role for venture capital?</td>
<td>Course Pack:</td>
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<td>Reading 9: Economics of Essential Medicines</td>
<td>Reading 15: Setting Cost Effectiveness Thresholds</td>
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<td>Reading 16: Venture Capital for Development</td>
<td>Reading 17: Venture Capital and Global Health</td>
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<td>Optional Reading:</td>
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<td>Date</td>
<td>Guest Speaker</td>
<td>Reading 7: Business in Partnership with the Non-Profit Sector</td>
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| 8 Mar 19 | Donald R. Joseph, CEO, BioVentures for Global Health | Donald R. Joseph was named Chief Executive Officer for BIO Ventures for Global Health (BVGH) in November 2011 after serving as COO since 2010. Mr. Joseph brings to the organization a wealth of experience in the biopharmaceutical industry. Before joining BVGH, he served in senior executive positions in both legal and business roles at private and publicly held biopharmaceutical companies including Renovis and Abgenix, where he played a key role in its acquisition by Amgen. He has consulted for a number of biopharmaceutical companies and previously served as COO of the Institute for OneWorld Health, a non-profit pharmaceutical company devoted to developing new and affordable medicines for neglected diseases.

Mr. Joseph has extensive business and legal experience, with more than 15 years in the biopharmaceutical industry. His industry projects have included a wide array of commercial, mergers and acquisitions, licensing, collaboration, and financing transactions, while providing business guidance for R&D, product launches, and sales and marketing. His therapeutic areas of experience include neurology, oncology, and antibody technology, as well as malaria and infectious diseases. His operations experience includes involvement with many marketed products in addition to research, preclinical, and clinical development of a number of products and technologies.

Prior to entering the biopharmaceutical industry, Mr. Joseph was an international partner in the San Francisco/Palo Alto office of Baker & McKenzie. He received his JD from the University of Texas Law School. | Course Pack: | MERSON BLACK MILLS Chapter 7: Chronic Diseases and Risks | MERSON BLACK MILLS Chapter 5: Infectious Diseases |
| 9 Mar 26 | Guest Speaker: Wendy Woods | | Optional Reading from: |
### Partner and Global Leader—Social Impact Practice, Boston Consulting Group

Wendy is a partner and managing director in BCG’s Boston Office. In addition to leading the firm’s Social Impact practice, she is the topic leader of BCG’s global health work, as well as a member of the Health Care practice.

In leading BCG’s social impact and global public health efforts, Wendy has built deep expertise in developing countries around the world, and she works extensively with foundations, public-private partnerships, and multilateral organizations. Teaming with these organizations, she has helped develop strategies, create partnerships, strengthen operational capabilities, and improve approaches to delivering health interventions. She has led numerous projects that focus on HIV, tuberculosis, malaria, diarrheal disease, pneumonia, and oncology, across the primary intervention areas of drugs, vaccines, and diagnostics.

Before BCG, Wendy was a consultant to the Organization for Economic Cooperation and Development (OECD), and she also worked as a senior economist for the U.S. Bureau of Labor Statistics. She has a degree in economics from the University of Michigan, and she earned her MBA from the Kellogg Graduate School of Management at Northwestern University.

### Session Objectives:

1. Learn the steps of performing evaluation of large-scale health programs
2. Understand the IMCI Impact Model
3. Learn to create a conceptual framework of factors affecting health for the purpose of evaluating an intervention
4. Be familiar with different evaluation design models and data collection

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<tr>
<th>Date</th>
<th>Objective</th>
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<tbody>
<tr>
<td>Apr 2</td>
<td>Private Sector Responses to Global Health Challenges: Part 3</td>
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<tr>
<td>From Webcafe:</td>
<td>McKinsey Health in Africa Report (read sections of interest to you )</td>
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<td>Optional Reading:</td>
<td>Merson Black Mills Chapter 16: Evaluations of Large-Scale Health Programs</td>
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| 12 | April 16 | **Guest Speaker: Marge McGlynn**  
President and CEO  
International AIDS Vaccine Initiative (IAVI) | Course Pack:  
Reading 8: Globalization and Multilateral Public-Private Health Partnerships |
|   |   | Margaret G. McGlynn is President and CEO of the International AIDS Vaccine Initiative (IAVI), a global not-for-profit organization whose mission is to ensure the development of safe, effective, accessible, preventive HIV vaccines for use |   |
Margaret is an experienced biopharmaceutical executive with significant expertise in the vaccine and antiretroviral markets. She retired from Merck in 2009 after 26 years with the company. Her most recent role was President, Global Vaccines and Anti-Infectives, where she was responsible for a US$7 billion portfolio of products. In addition, she was very involved in global health, and she launched several initiatives to provide access for Merck vaccines and HIV therapies in the developing world. She also served on the board and executive committee of The GAVI Alliance, a public-private partnership to bring life-saving vaccines against common infectious diseases to people across the developing world, and she played a major role in the formation of the Hilleman Center, a research center focused on developing new vaccines for the developing world, via a partnership between Merck and the Wellcome Trust.

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<tr>
<th>13 Apr 23</th>
<th>Student Presentations</th>
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<tr>
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<td>Student teams will have a designated period of time to present a summary of their course projects</td>
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<td>Instructor Summation</td>
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