MUN105Y1 Y - Global Problem-Solving: Laboratory Opportunities – 2015-16
Thursdays 10am-12pm, SK720

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Blckboard: The course syllabus and assignment instructions are available on Blackboard. Course readings and links to resources are also available. From time to time, we will also post announcements or other articles or links of interest. Students are responsible for checking Blackboard regularly.

Course Objectives
This course teaches students how to conduct analytically rigorous social science research to improve their insights into a complex global problem and devise an innovative solution to address it. A unique feature of this class is that students have the opportunity to learn by doing. Students work hands-on in one of five labs dealing with some of the most intractable global problems of our time in the areas of the environment, health, digital governance, security and the gap between rich and poor (see Annex A at the end of this syllabus). By the end of this course students will be able to:

a. Experience and practice the process of social science research
b. Narrow the scope of a complex global challenge into a manageable research problem that can be tackled over the course of the semester
c. Improve their knowledge and insights on a particular global problem
d. Develop a viable, compelling and implementable solution that can help address an aspect of a global problem
e. Pitch a solution in a compelling way to a jury of experts in global affairs

Students will work with their peers in small seminar classes and lab group settings, with the assistance of teaching assistants specializing in global affairs, expert faculty and senior advisors dedicated to addressing global issues in the fields of the environment, health, security, digital governance and political economy.

NOTE: If you require accommodations for a disability, or have any accessibility concerns about the course, the classroom or course materials, please contact Accessibility Services as soon as possible (www.accessibility.utoronto.ca).
Meeting with the Professor: I would like to meet each student individually during my office hours early in the term. Please drop by for a brief chat so I can get to know you. I provide extensive office hours throughout the term to encourage students to visit me with any questions, comments or concerns. Munk One is a very small program where you have unparalleled access to faculty. Having a Professor available to you is a valuable resource and you should take full advantage of this opportunity.

Email: Students who wish to communicate via email are welcome to do so. Please note the following guidelines:
- Use a “utoronto” account to ensure receipt of messages
- Use full sentences and proper grammar when composing messages
- Ensure your questions/comments are clear and comprehensible
- Do not email panicked questions about an assignment the night before it is due
- Avoid unnecessary questions by first consulting the syllabus. I will endeavor to answer emails as soon as I can – sometimes right away, sometimes within 48 hours. Longer questions are best dealt with in office hours. Please note that I cannot proofread assignments via email before they are due.

Academic Support: In addition to the Professor who is available during classes and office hours, a TA will lead a weekly lab group meeting during the second semester.

Administrative Support: Any issues relating to program requirements, speaker or field trip questions, locating University resources, and other matters concerning administrative support, please contact Kevin Rowley, our Munk One Program Assistant at kevin.rowley@utoronto.ca

Assignment Due Dates and Submission Guidelines
Your overall course grade is meant to assess your academic performance in the Munk One seminar classes and labs. A variety of assessment/grading tools were designed to assess your knowledge, skills and achievement of the course objectives; they are presented in the table below, then each of them is described briefly in the sections that follow.

<table>
<thead>
<tr>
<th>ASSIGNMENT</th>
<th>DUE</th>
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<tbody>
<tr>
<td><strong>First Semester</strong></td>
<td></td>
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<tr>
<td>- Research Proposal - outline</td>
<td>October 8, 2015</td>
<td>5%</td>
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<tr>
<td>- Ethnography of Kensington Market assign</td>
<td>October 29, 2015</td>
<td>15%</td>
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<tr>
<td>- Research Proposal –first full draft</td>
<td>November 19, 2015</td>
<td>Peer review</td>
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<tr>
<td>- Research Proposal - final</td>
<td>December 3, 2015</td>
<td>20%</td>
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<tr>
<td>- Participation in class</td>
<td>Ongoing</td>
<td>10%</td>
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<td><strong>Second Semester</strong></td>
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<tr>
<td>- Individual Lab assignments (5% x2)</td>
<td>February 25 &amp; March 17, 2016</td>
<td>10%</td>
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<tr>
<td>- Group Policy Brief</td>
<td>April 7, 2016</td>
<td>20%</td>
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<tr>
<td>- Group’s Dragons’ Den pitch and slide deck</td>
<td>April 7, 2016</td>
<td>10%</td>
</tr>
<tr>
<td>- Participation in labs</td>
<td>Ongoing</td>
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Please note all assignments are to be typed and double spaced, in Times, 12 point form font, and use Chicago Manual of Style for in-text and bibliographic citations (http://www.chicagomanualofstyle.org/tools_citationguide.html).
Research Proposal (outline)
This assignment will be limited to 2 pages, typed and double-spaced (not including bibliography and title page) and provide an outline of what your final research proposal will contain. You will need to present a research question related to your lab challenge and detail how you would tackle this question under the following five headings:

1) **Research question**: What is my specific research question?
2) **Significance**: Why is it significant, what are its implications or why should we care about this question?
3) **Literature Review**: What have others said? This section needs to cover the main academic debates and scholars who have been addressing this research question.
4) **Hypothesis**: What is my hunch? What do I think is the most compelling explanation for my research question? This can include describing what theory can provide a good explanation.
5) **Methods**: How will I test if my hunch is correct? What quantitative or qualitative methods can I employ to test if my hypothesis is correct? Bear in mind that you must devise methods that you can actually deploy (that are accessible to you).

Research Proposal (final)
This assignment will consist of an 8-10 page double-spaced (not including cover page and bibliography) final proposal. You will have to incorporate feedback received from the Professor and peer reviewers on the previous draft, and provide a compelling proposal for conducting a research study on a significant question that addresses your global lab challenge. This proposal needs to include the same five headings used for the outline: research question, significance, literature review, hypothesis and methods.

Ethnography of Kensington Market
Students are required to submit:

1. One personal reflection journal entry (1 page)
2. Photocopies of your scratch notes
3. One complete set of field notes, including analysis (at least 3 pages)
4. Any relevant artifacts or documents collected during the research process (ex. Brochures, maps, letters, photographs, etc.)

Individual Lab Assignments
During the second semester, your lab will provide an opportunity to act on the research you have been conducting during the first semester. You will submit two individual assignments that are practical tools for assessing the context of the problem you will address as a group. The first assignment is a stakeholder analysis and the third is a SWOT (strength, weaknesses, opportunities and threats) assessment of your proposed solution.

Group Policy Brief
Each lab group will prepare one policy brief which outlines the rationale for pursuing their proposed solution. It will consist of 6-8 pages double-spaced (not including the title page and bibliography). Please refer to the instructions on how to write a policy brief provided later in the course.

Group pitch and PPT slide deck/Prezi/video:
Each lab group will have 10 minutes to present, and 7-10 minutes for questions and answers, before a jury of judges who will adjudicate the best solution to the lab challenges on the last class of the year. You should prepare no more than 5-6 PowerPoint slides or a short video. The presentation will
include the following five components

1. A statement of the specific problem you are tackling (this includes your research question)
2. Background to the problem
3. Options/alternatives to address the problem
4. Your analysis of the different options
5. Your own solution to the problem

**Participation in class and labs:** Participation is a key aspect of the course. You are expected to do the assigned readings before the class and lab and come prepared to ask questions, engage in discussion, participate in various exercises, and reflect on your learning by incorporating insights into your assignments. This type of participation implies reasoned, thoughtful and informed contributions to this course. A class attendance record will be kept. You must be present at the beginning of class and stay until it is over to qualify as being present. If there is an exceptional situation that prevents you from staying until the end of class, please inform the Professor before class begins. Students who, for whatever reason, miss a class will have to make arrangements to get notes from another student (not the Professor). If you miss more than two classes (for other than medical reasons, which are documented in a valid medical certificate), you will be required to meet with the Professor to discuss the situation.

Participation grades will be assessed as follows:

- **A**= The student actively listens to classmates, the Professor and TA, arrives fully prepared with notes on readings, observations and questions, offers comments that are relevant, reflects understanding of assigned texts, builds on fellow students’ contributions, comments frequently, helps move seminar conversation forward, and actively participates in class activities.
- **B**= Sometimes displays lack of interest in comments of others, sometimes arrives unprepared or with only superficial preparation, comments sometimes are irrelevant and betray a lack of preparation, or indicate lack of attention to previous remarks of other students during the seminar or lab, comments sometimes advance the conversation, but sometimes do little to move it forward, sometimes participates but at other times is “tuned out.”
- **C to D**= Projects lack of interest, exhibits little evidence of having read or thought about assigned material, comments reflect little understanding of topics of the week or previous remarks in the seminars and lab, comments do not advance the conversation or are actively harmful to it, seldom participates and is generally not engaged.

**Important Term Work Policies**

All assignments are due at the beginning of class (i.e. 10:10am on Thursdays). Students are expected to take responsibility for making appropriate judgments to ensure that their assignments are submitted in a timely manner. If you know that you cannot make it to class when assignments are due, you must make prior arrangements to hand in the work prior to the beginning of class on the assignments’ due dates.

It is also the student's responsibility to keep rough, draft work and hard copies of their assignments until the marked assignments have been returned. Requests for special consideration will not be granted for students who have failed to keep copies of their work.

Students will not be given make-up assignments or extensions due to travel (employment, vacations, and weddings), other personal/professional commitments or because you are busy with other coursework.
Late: Assignments submitted late, but on the due date will be subject to a 2% late penalty. Assignments submitted after the due date will be subject to a 4% per day late penalty, including each day of the weekend. Assignment extensions will be granted based on legitimate medical or compassionate grounds only. Students should discuss their situation with the Professor before the submission deadline. Requests for special consideration and proper documentation (such as the U of T medical form etc.) must be submitted no later than one week after the due date. We accept the UofT medical certificate only. The Medical Certificate must indicate that the doctor diagnosed and treated you when you were ill; it cannot just report that you told the doctor after-the-fact that you were ill previously.

Remarking term work policy: Requests for “remarks” must be submitted in writing first to the TA (if it is a lab assignment, or directly to the Professor if it is a seminar assignment) within two weeks of the date the graded assignment were made available for students to pick up. Late requests will not be accepted. To request a remark, you must submit a written explanation detailing precisely why you believe your assignment should receive a different grade. Please remember that on a remark your grade may go up, stay the same, or go down. If you wish to pursue the remarking request after speaking with your TA, the Professor will assess the assignment. Any remarking done by the Professor will involve the entire assignment, not simply the questions or portion you believe were scored improperly. The grade after the remark will be the grade recorded on the assignment. Note that in the course of remarking your assignment, she may discover errors or defects that were not originally detected on the assignment. As a result, it is possible that your revised mark may actually go down, rather than going up or staying the same. The revised mark stands.

Course Policy on Classroom Courtesy
Students are strongly encouraged to ask questions and participate in debate. However, some of the topics we will discuss are sensitive in nature, it is important that we respect views different from our own. As part of that respect, please be mindful of the fact that comments that are racist, sexist, homophobic or otherwise disrespectful or offensive will not be tolerated.

In order to ensure that class is a productive and enjoyable experience for everyone, please observe the additional rules of classroom courtesy:

1. Except for laptop computers, all other personal electronic devices such as cell phones, tablets, etc. must be silenced and put away during class.
2. Please give your full attention to class. Laptop computers should be used ONLY for taking notes. Refrain from reading extraneous materials during class meetings.
3. Please avoid disrupting class with unnecessary arrivals and departures from the classroom.
4. Please make an effort to arrive promptly, and wait until break or the end of class before leaving the classroom for non-essential phone calls and other similar purposes.
5. Professional note-takers are not permitted in class. All guests must be cleared with the Professor.
6. Please address other students, your Munk One TAs, Lab advisors, class guests and the Professor courteously at all times.

Academic Integrity
The University of Toronto treats cases of academic misconduct very seriously. Academic integrity is a fundamental value of learning and scholarship at the UofT. Participating honestly, respectfully, responsibly, and fairly in this academic community ensures that your UofT degree is valued and respected as a true signifier of your individual academic achievement.

The University of Toronto’s Code of Behaviour on Academic Matters outlines the behaviours that
constitute academic misconduct, the processes for addressing academic offences, and the penalties that may be imposed. You are expected to be familiar with the contents of this document. Potential offences include, but are not limited to:

**In papers and assignments:**
- Using someone else’s ideas or words without appropriate acknowledgement.
- Submitting your own work in more than one course without the permission of the Professor.
- Making up sources or facts.
- Obtaining or providing unauthorized assistance on any assignment (this includes working in groups on assignments that are supposed to be individual work).

**On tests and exams:**
- Using or possessing any unauthorized aid, including a cell phone.
- Looking at someone else’s answers.
- Letting someone else look at your answers.
- Misrepresenting your identity.
- Submitting an altered test for re-grading.

**Misrepresentation:**
- Falsifying or altering any documentation required by the University, including (but not limited to) doctor’s notes.
- Falsifying institutional documents or grades.
- Signing attendance reports on behalf of other students.

Any instance of suspected academic dishonesty will be reported to the appropriate University authorities. For further information on “How Not to Plagiarize,” you might find Margaret Proctor’s guide helpful – click “Using sources” in the advice link: [http://www.writing.utoronto.ca/advice](http://www.writing.utoronto.ca/advice)
Seminar Schedule and Weekly Readings

We will use these books and sources. Other readings and videos will be posted in Blackboard.


**SEMESTER 1**

**Seminar 1 – September 17**
**From Topics to Questions**

1. In this first seminar we will discuss the goals and structure of the Munk One Program, starting with MUN105, and hear your own expectations and goals for this first year of your university experience. We will also start talking about how to do social research that can help solve global problems.

2. **IMPORTANT**: Lab sign up opens on September 18 at 1pm, and closes on September 23 at 1pm.

3. **Reading**: Booth, Colomb and Williams. Chapter 3

4. In preparation for next week install the following in your laptop and REMEMBER TO BRING YOUR LAPTOP TO NEXT CLASS:
   a. **Zotero Standalone** from https://www.zotero.org/download/
   b. **The Microsoft Word plugin** from https://www.zotero.org/support/word_processor_plugin_installation
   c. **ZotFile** from http://zotfile.com/

**NOTE**: Zotero has straightforward instructions on how to install the software at https://www.zotero.org/support/installation. However, anyone having trouble installing Zotero should get in touch with Jeff Newman before the day of the class (jeff.newman@utoronto.ca)

**Seminar 2 – September 24**
**Researching Sources – BRING YOUR LAPTOP TO CLASS**

1. Library resources workshop (led by Courtney Lundrigan, Munk School Librarian): How to find different types of sources and useful materials for your lab research, how to differentiate between sources, and how to narrow your research topic.

2. Citation management and plagiarism – workshop on how to use Zotero citation management so you never have to worry about plagiarism! (led by Jeff Newman, New College Librarian)

3. **Reading**: Booth, Colomb and Williams. Chapters 5 and 6

**Seminar 3 – October 1**
**Research questions, theory and data**

In this seminar class we will examine what is the process of social research, what are researchable questions, what role theory plays in our search for understanding social phenomena and how do we go about collecting data and finding out if our hypothesis are correct?

1. **Reading**: The Research Process, Chapters 1 and 2
Seminar 4 – October 8
Concepts, causality and spuriousness
In this class we will be looking at how to narrow a research problem, or what I call ‘cutting a problem down to size,’ how to state a problem in terms of dependent and independent variables or developing a research objective.

1. Since we will be looking at cause and effect arguments during this class you should find an example of erroneous cause-effect arguments like this on the link between cell phone use and cancer: http://imgs.xkcd.com/comics/cell_phones.png).
2. Reading: The Research Process, Chapter 3
3. Research proposal outline is due today

Seminar 5 – October 15
Quantitative and Qualitative Approaches
By now you will have discovered some of the shortcomings of both quantitative and qualitative approaches. For example, since quantitative studies contain many participants, the answers are somewhat superficial and fixed in that they give do not contain much depth. We may know what percentage of teenagers have used alcohol, tobacco, and other drugs, but not much else. As such, surveys cannot answer questions like ‘why do these teenagers drink?’ ‘what are their thoughts and feelings while they drink?’ and ‘do adolescents ever talk about alcohol use with their parents, and if so, what do they discuss? On the other hand, qualitative approaches suffer from the problem of representativeness and from an over- abundance of narrative information that must be analyzed and interpreted.

1. Reading: The Research Process, Chapter 4
3. Ethnographic assignment handed out

Seminar 6 – October 22: (Meet in front of the Anthropology Building at 19 Russell St.)
Ethnography Lab Introduction


1. After this class, during the week, go to the market on your own and complete your ethnographic assignment.

Seminar 7 – October 29:
Ethnographic Practicum Presentations

1. Ethnography of Kensington Market and presentations due today

Seminar 8 – November 5: Variables
How do we reduce conceptual problems to empirical questions that we can measure, count, record or in some way observe? Come to class having first developed a research statement (a thesis) for the concepts in each of the following examples. Second, identify which concepts are independent and which are dependent. In class, we will operationalize each concept so that they contain valid measures.

a. Gender and educational level
b. Income and occupation
c. Life satisfaction and age
d. Altruism and pro-environmental consumer choices  
e. Care of mentally ill patients and ethnicity  
1. Reading: The Research Process, Chapter 5

Seminar 9 – November 12: Finding ways to measure variables
How do we measure variables? What is it that changes in the variables we are interested in observing, what instrument can we use to measure the way the variables vary and in what units can we report this variation? These may be straightforward questions with physical concepts such as speed or temperature, but what about concepts like class, status or poverty?
1. Reading: The Research Process, Chapter 6

Seminar 10 – November 19:  
Drawing Conclusions – BRING YOUR LAPTOP TO CLASS
In this class we discuss: recalling your hypothesis or research purpose, reviewing what you found out and making statements about how your research contributes to a general area of concern.
1. Full draft of your research proposal is due today BEFORE the beginning of class  
2. Double-blind peer review of research proposal draft  
3. Reading: The Research Process, Chapter 13

Seminar 11 – November 26: Research Ethics
1. In preparation for this week’s class, view Philip Zimbardo’s ‘Stanford Prison Experiment’: ‘Quiet Rage: The Stanford Prison Experiment’ http://youtu.be/L_LKzEqlPto. If you are interested, you can also watch the Hollywood versions: recently released in 2015 with Ezra Miller, and in 2010 with Adrien Brodie and Forest Whitaker at http://www.youtube.com/watch?v=_Xljvdjugxs  
2. Read and watch as many of the following sources as you can and come to class ready to discuss the following 5 issues/questions:  
   d) CBS Sunday Morning: http://www.cbsnews.com/video/watch/?id=6304949n&tag=related;photovideo  
   e) Tavis Smiley at PBS interviews the author: http://video.pbs.org/video/1722974526  
3. Reading: The Research Process, Chapter 9  
4. Using the examples of the Stanford Prison Experiment and Henrietta Lacks, we will discuss ethics in pursuit of research including the following five issues/questions:  
   a. Research guided in the pursuit for profit and commercial gain versus altruistic motives  
   b. Informed consent  
   c. Property rights  
   d. Should Lack’s family and living relatives be compensated?  
   e. Taking advantage of vulnerable minorities (Lacks was a poor African American woman). Is this comparable to cases involving sterilization in Canada (e.g., the Alberta Sexual Sterilization Act of 1928 (the eugenics movement) which targeted, among others, Aboriginal people, Métis, and those identified as ‘mentally defective’?  

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Seminar 12 – December 3: TBA
1. Final research proposal is due today

SEMESTER 2

Lab 1 – January 14
1. Students will hear a presentation on each of the lab challenges and meet the Lab TAs, then break into groups and start their tutorial discussion of the general challenge and the narrow problem that could be addressed.

Lab 2 – January 21
1. In this tutorial groups will discuss and practice how to design a problem and solution tree
2. READING ASSIGNED BY LAB TA

Lab 3 – January 28
1. READING ASSIGNED BY LAB TA

Lab 4 – February 4
1. READING ASSIGNED BY LAB TA
2. Group’s problem tree annex is finalized today

Lab 5 – February 11:
1. In this tutorial, groups will discuss and practice how to carry out a stakeholder analysis
2. READING ASSIGNED BY LAB TA

Reading Week: No class February 18

Lab 6 – February 25
1. Individual stakeholder analysis assignment is due today
2. READING ASSIGNED BY LAB TA

Lab 7 – March 3
1. Group’s stakeholder analysis annex is finalized today
2. READING ASSIGNED BY LAB TA

Lab 8 – March 10
1. Deciding on the best intervention and carrying out a SWOT analysis of your solution. In this tutorial, groups will discuss and practice how to do a SWOT analysis
2. READING ASSIGNED BY LAB TA

Lab 9 – March 17
1. Individual SWOT analysis assignment is due today
2. READING ASSIGNED BY LAB TA

Lab 10 – March 24
1. Group’s SWOT analysis annex is finalized today
2. READING ASSIGNED BY LAB TA

Lab 11 – March 31
1. Each student brings a friend to class and you will form a focus group in each lab.
2. Practice and perfect your pitch and slide deck for the Dragon’s Den competition in front of your focus group.

Lab 12 – April 7: DRAGONS’ DEN inspired competition
1. Groups pitch to a jury of specialists in global affairs
2. Group policy brief and presentation slide deck is due today
Munk One Labs

2015-2016

FIVE GLOBAL CHALLENGES
How can sustainable development be achieved for all while addressing global climate change?

The daily average of atmospheric CO₂ as measured in Hawaii surpassed 400 ppm on May 10, 2013.

Investing 2% of global GDP ($1.3 trillion per year) into 10 key sectors can kick-start a transition toward a low-carbon, resource-efficient green economy that would increase income per capita and reduce ecological footprint by nearly 50% by 2050.

It is time to address climate change, focusing on new technologies like:
- Electric cars
- Solar power
- Urban systems

Some 30% of fish stocks have already collapsed, and 87% of mammal species and 70% of plants are under threat.

The amount of global wealth exposed to natural disasters risk has nearly tripled from $525.7 trillion 40 years ago to $1.58 trillion.

Global waste has increased 10-fold in the last century, and it could double by 2025 from where it is today.

The next 100 years could be disastrous.

Poorer countries that contribute the least to GHGs are the most vulnerable to climate change’s impacts because they depend on agriculture and fisheries, and they lack financial and technological resources to cope.

Glaciers are melting, disease patterns are changing and coral reefs are dying.
How can the global convergence of information and communications technologies work for everyone?

**Challenge #6**

**Global Convergence of ICT**

Open source software and Internet non-ownership model may become a significant element in the next economic system. One of the next "big things" could be the emergence of collective intelligences for issues, businesses, and countries, fomenting new kinds of organizations able to address problems and opportunities outside the bounds of conventional management.

Nearly 40% of humanity uses the Internet.

6.7 billion mobile subscriptions

Uncountable billions of hardware devices are intercommunicating in a vast real-time multinetwork.

New forms of civilization are beginning to emerge from this convergence of minds, information, and technology worldwide.

Ericsson forecasts that 85% of the world's population will be covered by high-speed mobile Internet in 2017.

One report says 77% of net users access the Web only from a mobile device.

**Collaborative systems, social networks, and collective intelligences** are self-organizing into new forms of transnational democracies that address issues and opportunities.

**Internet of Things**

is expected to connect 75-80 billion items to the Internet by 2020.

**Going from Web 2.0 to Web 3.0 and Beyond.**

The World Wide Web is evolving from a user-generated and participatory system into more of a partner mimicking the understanding of and ability to reason over its data.

www.themp.org
How can ethical market economies be encouraged to help reduce the gap between rich and poor?
HOW CAN THE THREAT OF NEW AND REEMERGING DISEASES AND IMMUNE MICROORGANISMS BE REDUCED?

Previous health strategies, sustained growth in health budgets and improving living standards over the last 20 years has resulted in:

Cardiovascular diseases account for most deaths from non-communicable diseases with 17.3 million people annually.

Maternal mortality fell 47% from 1990 to 2010, but is far short of the Millennium Development Goal of 75% reduction.

International collaboration to reduce HIV, SARS, and H1N1 (swine flu) has greatly improved global health systems in general.

Telemedicine and self-diagnosis via biochip sensors and online expert systems increasingly necessary.

Future uses of genetic data, software and nanotechnology will help detect and treat disease at the genetic or molecular level.

On average, a significant new infectious disease has been discovered each year over the past 40 years. Old diseases have reappeared, such as:

- Cholera
- Chikungunya
- Yellow fever
- Plague
- Dengue fever
- Meningitis
- Hemorrhagic fever
- Diphtheria

Non-communicable diseases are emerging and drug-resistant infectious diseases are also increasing.

Poverty, urbanization, travel, immigration, trade, increased encroachment on animal territories, and concentrated livestock production move infectious organisms to more people in less time than ever before and could trigger NEW PANDEMICS.

Total mortality from infectious disease fell from 25% in 1990 to less than 16% in 2010.

Malaria mortality rates have fallen by more than 25% since 2000 and by 33% in the WHO African Region. First clinical trials for a malaria vaccine were successful.

Infectious diseases cause 67% of all preventable deaths of children under five (pneumonia, diarrhea, malaria, and measles).

High-density population growth and slow progress in sanitation in poorer areas keep these diseases active.

The 17 neglected tropical diseases are a group of parasitic and bacterial infections that are the most common afflictions of the world's poorest people. Many of these are waterborne diseases.

New problems may come from unregulated synthetic biology laboratories of the future.
How can shared values and new security strategies reduce ethnic conflicts, terrorism, and the use of weapons of mass destruction?