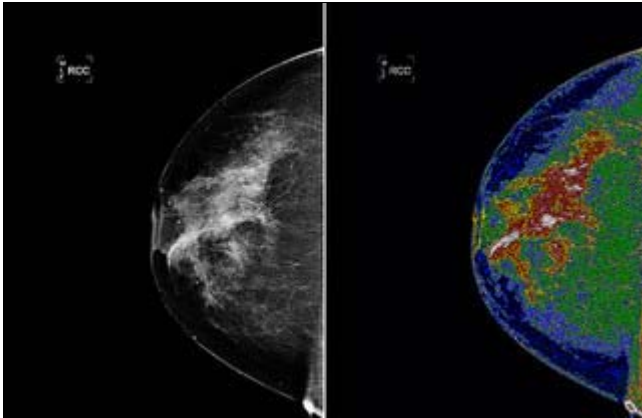


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Current Events in Context: Redefining Cancer



Mammogram cancer-detection technologies. Image Courtesy of NASA Goddard Photo and Video

A group of experts from the National Cancer Institute recently recommended changing the definition of cancer in a report published by the Journal of the American Medical Association. As implied by the report's title, [Overdiagnosis and Overtreatment in Cancer: An Opportunity for Improvement](#), their goal is to create a shift in how doctors and patients approach cancer detection and treatment.

The recommendations are guided by a growing consensus that Americans are overtreating medical conditions that may not be as harmful as their labels suggest. The authors state that a number of conditions detected during cancer screenings for the breast, prostate, thyroid or lungs could be reclassified as "indolent lesions." This change might reduce a pattern of overly aggressive treatment plans. As Dr. Otis Brawley, the chief medical officer for the American Cancer Society, put it, "We need a 21st century definition of cancer, instead of a 19th century definition of cancer."

The social phenomenon of overdiagnosis can be blamed on two dynamics: First, increasingly sophisticated detection technologies increase our ability to find tissue anomalies. For example, a recent [Yale study](#) found a significant increase in MRIs for breast cancer screening, and a corresponding increase in prophylactic mastectomies among those who had MRIs over the past decade. Second, the US health care system creates

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perverse economic incentives for doctors to increase the number of tests and procedures they order. As a result, experts estimate that 10-30% of US health care spending is based on unnecessary interventions, representing anywhere from \$250-800 billion dollars.

Shifting how we describe malignancies is a way to influence the situation. "Changing the language we use to diagnose lesions is essential to give patients confidence that they don't have to treat every finding in a scan," stated a professor of surgery and radiology at the University of California, San Francisco. "The problem for the public is that you hear the word cancer and you think you will die unless you get treated."

The issue is complex because there are no clear-cut answers. To better understand the issues behind this fascinating debate, OCW has several courses that cover the biological and anthropological factors at work.

- 7.342 Cancer Biology: From Basic Research to the Clinic explores the laboratory tools and techniques used to perform cancer research, major discoveries in cancer biology, and the medical implications of these breakthroughs.
- 21A.355J / STS.060J The Anthropology of Biology examines the cultural, political, and economic dimensions of biology. It reviews how the explanations of biology — cellular, molecular, genetic, and informatic — are changing, and with them broader ideas about the relationship between "nature" and "culture."
- 21A.216J / SP.622J / WGS.622J Dilemmas in Bio-Medical Ethics: Playing God or Doing Good? examines the moral foundations of the science and practice of western medicine, and evaluates the challenges that new medical technologies pose to the practice and availability of medical services.

New Courses

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Highlights for High School



Just in time for back to school! The Highlights for High School website is new and improved! We encourage you to check it out.

A great place to start are the Featured Resource, Video Course, and Story on the homepage.

For a little extra help, definitely visit the For Teachers and For Students pages for guidance and frequently asked questions.

> [visit Highlights for High School](#)

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4.605x A Global History of Architecture offers fresh perspective on the principles and forces at play in the discipline.

Mark Jarzombek, MIT Professor of the History and Theory of Architecture, is already deeply familiar with the concepts behind global architecture—he has authored and co-authored two highly regarded books in the field, "A Global History of Architecture" (Wiley Press, 2006) and "Architecture of First Societies: A Global Perspective" (Wiley Press, 2013). Starting this September, however, he'll gain a whole new appreciation for what it means to teach globally when he launches [4.605x A Global History of Architecture](#). "I used to teach this course to 35 students each semester, and now I will be teaching it to 35,000. Of course," he jokes, "I don't know how many of them will survive till the end."

A favorite among students for his engaging lectures, Jarzombek takes his subject matter very seriously...

> [Read the complete article](#)

Views from Supporters



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- Carlos, Independent Learner, Spain

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