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*News Release*

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## **Nanotech and Synbio: Americans Don't Know What's Coming**

### ***Landmark poll shows little knowledge of emerging technologies***

Washington, DC — A groundbreaking poll finds that almost half of U.S. adults have heard nothing about nanotechnology, and nearly nine in 10 Americans say they have heard just a little or nothing at all about the emerging field of synthetic biology, according to a new report released by the Project on Emerging Nanotechnologies (PEN) and Peter D. Hart Research. Both technologies involve manipulating matter at an incredibly small scale to achieve something new.

This new insight into limited public awareness of emerging technologies comes as a major leadership change is about to take hold in the nation's capital. Public policy experts are concerned, regardless of party, that the federal government is behind the curve in engaging citizens on the potential benefits and risks posed by technologies that could have a significant impact on society.

“Early in the administration of the next president, scientists are expected to take the next major step toward the creation of synthetic forms of life. Yet the results from the first U.S. telephone poll about synthetic biology show that most adults have heard just a little or nothing at all about it,” says PEN Director David Rejeski. The poll findings are contained a report published today, ***The American Public's Awareness Of And Perceptions About Potential Risks and Benefits of Nanotechnology & Synthetic Biology***, and available at: [www.nanotechproject.org/n/synbio](http://www.nanotechproject.org/n/synbio)

Synthetic biology is the use of advanced science and engineering to construct or re-design living organisms—like bacteria—so that they can carry out specific functions. This emerging technology is likely to develop rapidly in the coming years, much as nanotechnology did in the last decade. In the near future the first synthetic biology "blockbuster" drug is anticipated to hit the market—an affordable treatment for the 500 million people in the world suffering from malaria.

The poll, which was conducted by the same firm that produces the well-known **NBC News/Wall Street Journal** polls, found that about two-thirds of adults say they have heard nothing at all about synthetic biology, and only 2 percent say they have heard “a lot” about the new technology. Even with this very low level of awareness, a solid two-thirds of adults are willing to express an initial opinion on the potential benefits versus risks tradeoff of synthetic biology.

This survey was informed by two focus groups conducted in August in suburban Baltimore. This is the first time—to the pollsters’ knowledge—that synthetic biology has been the subject of a representative national telephone survey.

At the same time, the poll found that about half of adults say they have heard nothing at all about nanotechnology. About 50 percent of adults are too unsure about nanotechnology to make an initial judgment on the possible tradeoffs between benefits and risks. Of those people who are willing to make an initial judgment, they think benefits will outweigh risks by a three to one margin when compared to those who believe risks will outweigh benefits. The plurality of respondents, however, believes that risks and benefits will be about equal. A major industry forecasting firm determined that last year nanotech goods in the global marketplace totaled \$147 billion.

According to the poll, the level of U.S. public awareness about nanotechnology has not changed measurably since 2004 when Hart Research conducted the first poll on the topic on behalf of the PEN.

### **About Nanotechnology**

Nanotechnology is the ability to measure, see, manipulate and manufacture things usually between 1 and 100 nanometers. A nanometer is one billionth of a meter; a human hair is roughly 100,000 nanometers wide. In 2007, the global market for goods incorporating nanotechnology totaled \$147 billion. Lux Research projects that figure will grow to \$3.1 trillion by 2015.

### **About Synthetic Biology**

Synthetic biology is the use of advanced science and engineering to make or re-design living organisms, such as bacteria, so that they can carry out specific functions. Synthetic biology involves making new genetic code, also known as DNA, that does not already exist in nature.

The **Project on Emerging Nanotechnologies** is an initiative launched by the Woodrow Wilson International Center for Scholars and The Pew Charitable Trusts in 2005. It is dedicated to helping business, government and the public anticipate and manage possible health and environmental implications of nanotechnology. For more information about the project, log on to [www.nanotechproject.org](http://www.nanotechproject.org).

The **Pew Charitable Trusts** ([www.pewtrusts.org](http://www.pewtrusts.org)) is a national charitable organization serving the public interest by informing the public, advancing policy

solutions and supporting civic life. Based in Philadelphia, with an office in Washington, DC, the Trusts invested \$248 million in fiscal year 2007 to provide organizations with fact-based research and practical solutions for challenging issues.

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