Human Genome Would Have Been An Impossible Jigsaw Puzzle Without The Work Of Maynard Olson

He created a way of breaking genomes into manageable pieces, applied it to the yeast genome, and made the human genome project a possibility.

Now he is working to apply genome science to real biological problems-starting with the bacterium that kills many people with cystic fibrosis. And he's continuing to fight for the public ownership of genome information.

For his contribution to genome science Olson, professor of Genome Sciences at the University of Washington, will receive the 2007 Gruber Prize for Genetics on October 24, 2007, at the American Society of Human Genetics Annual Meeting in San Diego, California.

The prize consists of a gold medal and $US500,000.

"When he assembled his physical map of the yeast genome, Maynard developed a new way to piece together the puzzle. He allowed us to mechanize, computerize and organize the process," says 2003 Gruber Genetics Laureate, David Botstein.

"Maynard was one of the top two or three key brains behind the Human Genome Project. And he is a mentor-not just for his students, but for whole institutes."

Olson's latest work could change our approach to treating cystic fibrosis, that dread genetic condition in which victims normally die before they reach 40 from a complication: chronic lung inflammation from a bacterial infection they acquired in early childhood.

Olson and his colleagues have found that *Pseudomonas aeruginosa*, the bacterium which causes the inflammation, evolves in a relatively predictable way inside the human lung.

The result is that the bug which ends up killing its human host has very different characteristics from the one which invaded decades, and thousands of bacterial generations, before. And that means effective treatment should also be different.

He says, "The future now lies in turning genomic methods into true experimental tools, so that we can use them in hundreds of small laboratories to solve real biological problems such as those posed by infectious disease." So, as he has done several times before, he is showing the way.

The Genetics Prize honors leading scientists for distinguished contributions in any realm of genetics research. The Foundation's other international prizes are in Cosmology, Neuroscience, Justice, and Women's Rights. Nominations for the 2008 prizes are now open and close on December 31, 2007.

A profile of Olson, photos, background information and nomination details for 2008 are available online at [http://www.gruberprizes.org](http://www.gruberprizes.org)

[http://www.scienceinpublic.com](http://www.scienceinpublic.com)


**Main News Category:** Genetics
Save time! Get the latest medical news headlines for your specialist area, in a weekly newsletter e-mail. See [http://www.medicalnewstoday.com/newsletters.php](http://www.medicalnewstoday.com/newsletters.php) for details.

Send your press releases to pressrelease@medicalnewstoday.com