



Rib-X Pharmaceuticals, Inc. Co-Founder, Thomas A. Steitz, Ph. D., Awarded the 2009 Nobel Prize in Chemistry

-- Novel Antibiotic Compounds Being Developed as a Result of Pioneering Work with the Ribosome --



RIB-X PHARMACEUTICALS, INC., a company focused on the discovery, development and commercialization of novel drugs for the treatment of multi-antibiotic-resistant infections, today announced that Rib-X Co-Founder and Chair of the Scientific Advisory Board, Sterling Professor of Molecular Biophysics and Biochemistry at Yale University and a Howard Hughes Medical Institute Investigator, Thomas A. Steitz, Ph. D., has been awarded the Nobel Prize in Chemistry for 2009 by The Royal Swedish Academy of Sciences.

Dr. Steitz shares the prize with Venkatraman Ramakrishnan of the MRC Laboratory of Molecular Biology, Cambridge, United Kingdom, and Ada E. Yonath, Weizmann Institute of Science, Rehovot, Israel. All three were praised for their work on using "X-ray crystallography to map the position for each and every one of the hundreds of thousands of atoms that make up the ribosome." Dr. Ramakrishnan is also on the Rib-X Scientific Advisory Board.

"Rib-X would like to extend its congratulations to Drs. Steitz, Ramakrishnan and Yonath on receiving the most esteemed award for scientific endeavors and accomplishments," said Dr. Susan Froshauer, President and Chief Executive Officer, Rib-X. "As one of our co-founders, Dr. Steitz recognized the importance of the ribosome early on, and he continues to perform a valuable role to us as Chair of the Scientific Advisory Board."

"I am excited by the prospect that our work on the structure of the ribosome and mechanisms of antibiotic binding is leading to potential new chemical classes which have the potential to treat a wide variety of multi-drug-resistant bacterial infections," commented Dr. Steitz.

Dr. Peter Moore, Sterling Professor of Chemistry at Yale University, and Dr. Harry Noller, Robert Loius Sinsheimer Professor of Molecular Biology at the University of California, Santa Cruz, also co-founders and part of Rib-X's Scientific Advisory Board, have worked closely with Dr. Steitz; together they received the Rosenstiel Award for Distinguished Work in Basic Medical Sciences for their research on the ribosome in 2001.

Rib-X was built on the extraordinary science of these founders and utilizes this award-winning knowledge of the structure and function of the ribosome. Their hard work has yielded several distinctive antibiotics that can be used for the treatment of multi-antibiotic-resistant infections. These include three programs -- radezolid, R χ -04, and R χ -02 that are derived from Rib-X's proprietary discovery engine.

Radezolid is a late stage Phase 2 novel oxazolidinone designed to expand the bacterial spectrum and improve the utility of this class of antibiotics relative to the only other oxazolidinone marketed in the world, Zyvox® (linezolid). Additional programs include R χ -04, which employs a *de novo* approach to develop novel antibiotics that are active against multi-drug-resistant Gram-negative bacteria and R χ -02, which is focused on engineering novel macrolides that have demonstrated activity against known bacterial resistance mechanisms and have also demonstrated activity against methicillin-resistant

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Staphylococcus aureus, (MRSA).

Dr. Steitz, a Professor of Molecular Biophysics and Biochemistry at Yale University, was selected by the Nobel Committee for his research on using X-ray crystallography to map the position for each and every one of the hundreds of thousands of atoms that make up the ribosome. Dr. Steitz focused on a subunit of the ribosome which has proved to be a major target for antibiotics. By generating 3D models that show how different antibiotics bind to the ribosome, scientists can now develop new antibiotics

About Thomas A. Steitz, Ph. D.

Born in Milwaukee, WI, Dr. Steitz received his Ph. D. in Molecular Biology and Biochemistry in 1966 from Harvard University. He was elected to the National Academy of Sciences in 1990. In 2001, Dr. Steitz together with Drs. Moore and Noller received the Rosenstiel Award for Distinguished Work in Basic Medical Sciences for their research on the ribosome. Currently, Dr. Steitz is the Sterling Professor of Molecular Biophysics and Biochemistry and a Howard Hughes Medical Institute Investigator at Yale University. His research in the field of protein and nucleic acid X-ray crystallography, including his recent work with Dr. Moore on the 50S ribosome structure, has had wide-ranging impact in the global scientific community.

About Rib-X Pharmaceuticals, Inc.

Rib-X Pharmaceuticals, Inc. is a product-driven small molecule drug discovery and development company focused on the structure-based design of new classes of antibiotics. The Company's underlying drug discovery engine capitalizes on its proprietary high-resolution crystal structure of the ribosome, which performs an essential role in protein synthesis. Many known, commercially valuable antibiotics exert their effects by binding to the bacterial ribosome. The Company's integrated research strategy, which combines state-of-the-art, proprietary computational analysis, X-ray crystallography, medicinal chemistry, microbiology and biochemistry, allows it to rapidly synthesize new agents designed to avoid typical antibiotic resistance mechanisms. Rib-X's iterative intelligent engine has yielded several distinctive new antibiotics, including radezolid, that can be used for the treatment of either community- or hospital-acquired

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infections. Rib-X has completed successfully Phase 2 trials with delafloxacin (RX-3341), a broad-spectrum fluoroquinolone with potent activity against quinolone-resistant Gram-positive bacteria, including MRSA. Radezolid (RX-1741) an oxazolidinone that was discovered at Rib-X as an oral/IV agent for treatment of serious Gram-positive infections, has completed two Phase 2 trials. The R χ -04 discovery program is developing novel classes of antibiotics active against multi-drug resistant Gram-negative bacteria, and the R χ -02 discovery program is focused on developing an IV/oral macrolide active against methicillin-resistant *S. aureus*, multidrug-resistant *Streptococcus pneumoniae* and *S. pyogenes*. Both delafloxacin and radezolid are currently in late-stage clinical trials.