

8<sup>th</sup> Global**Cardiologists & Echocardiography Annual Meeting**

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**Ada Yonath***Weizmann Institute of Science, Israel***Towards control of resistance to antibiotics**

Resistance to antibiotics and the spread of antibiotics metabolites are severe problems in contemporary medicine and ecology. Structures of complexes of eubacterial-ribosomes with antibiotics paralyzing them illuminated common pathways in inhibitory-actions, synergism, differentiation and resistance. Recent structures of ribosomes from a multi-resistant pathogens identified features that can account for species-specific diversity in infectious-diseases susceptibility. These may lead to design of environmental-friendly degradable antibiotics, which will also be species-specific antibiotics-drugs, thus the basis for a revolution in the antibiotics field, which its current preference for wide-spectrum drugs. Thus, reducing resistance while protecting the environment and preserving the microbiome.

**Biography**

Ada Yonath is focusing on protein biosynthesis and the antibiotics hampering it. In the seventies she established the first structural-biology laboratory in Israel. She is the Director of Kimmelman Center for Biomolecular-Structure. During 1986-2004 she also headed Max-Planck-Research-Unit for Ribosome Structure in Hamburg. Among others, she is a member of US-National-Academy-of-Sciences; Israel Academy; German Science Academy; PontificiaAccademia-delle-Scienze (Vatican). She holds honorary doctorates from Oslo, NYU, Mount-Sinai, Oxford, Cambridge, Hamburg, Berlin-Technical, Patras, De-La-Salle, Xiamen, Lodz universities. Her awards include the Israel Prize; Louisa-Gross-Horwitz Prize; Linus-Pauling Gold Medal; Wolf-Prize; UNESCO/L'Oreal Award; Albert-Einstein World Award for Excellence; and Nobel Prize for Chemistry.

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