



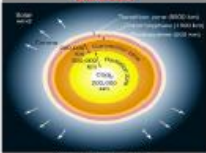


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Inspiring Chemical Education		
Economics	 <p>Ice</p> <p>Cold</p>	Literature
Chemistry	 <p>Nobel</p> <p>Prizes (2015)</p>	Physiology Medicine
Physics	Peace	 <p>HOT</p> <p>SUN</p>

**ICE. Part 2:
Nobel Laurates of 2015**

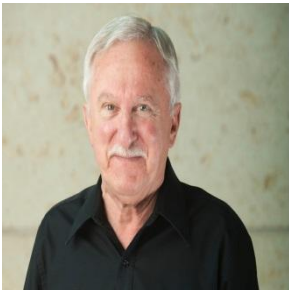


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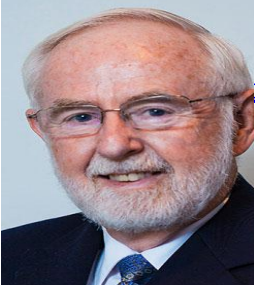



Nobel Prizes are awarded every year since 1901 by the Royal Swedish Academy of Sciences, the Karolinska Institute, and the Norwegian Nobel Committee to individuals or organizations for high impact contributions with a consequence of benefit to mankind. Each recipient (Nobel Laureate) receives a gold medal, a diploma and cash (equivalent to 1.2 million USD for each category). The cutting edge cross disciplinary research pushes the status of fact base of innovations a step further in the ocean of knowledge of understanding Mother Nature. The Nobel Prize winning results for over the century are mile stones in the annals of history of world class knowledge bits. The impact of outcome of the interdisciplinary investigations on other broadly categorized study areas is crystal clear. The focal themes of 2015 Noble prizes, the country of birth of Nobel laureates, institute of affiliation at the time of award and year of birth follow.
















Nobel Laureate (2015)	Prize share	Focal theme	Chemistry	Affiliation	Year and place of birth
Paul Modrich	1/3	<ul style="list-style-type: none"> The process of cells repairing damaged DNA and safeguard the genetic information 		<ul style="list-style-type: none"> Howard Hughes Medical Institute, Durham, NC, USA, Duke University School of Medicine, Durham, NC, USA 	<ul style="list-style-type: none"> 1946
Aziz Sancar	1/3	<ul style="list-style-type: none"> DNA repair and regulation of the circadian clock Mammalian DNA Excision Repair; Mammalian DNA Damage Checkpoints 		<ul style="list-style-type: none"> University of North Carolina, Chapel Hill, NC, USA 	<ul style="list-style-type: none"> 1946 Savur, Turkey
Tomas Lindahl	1/3	<ul style="list-style-type: none"> Mechanistic studies of DNA repair 		<ul style="list-style-type: none"> Francis Crick Institute Hertfordshire, United Kingdom, Clare Hall Laboratory, Hertfordshire, United Kingdom 	<ul style="list-style-type: none"> 1938 Stockholm, Sweden

Nobel laureate (2015)	Prize share	Focal theme	Economics	Affiliation	Year and place of birth
Angus Deaton	1/1	<ul style="list-style-type: none"> ✧ Analysis of consumption ✧ Poverty ✧ welfare 		<ul style="list-style-type: none"> 📖 Princeton University, Princeton, NJ, USA 	<ul style="list-style-type: none"> 📖 1945 📖 Edinburgh, United Kingdom

Nobel laureate (2015)	Prize share	Focal theme	Literature	Residence at the time of the award	Year and place of birth
Svetlana Alexievich	1/1	<ul style="list-style-type: none"> 📖 Polyphonic writings, a monument to suffering and courage in our time 		<ul style="list-style-type: none"> 📖 Belarus 	<ul style="list-style-type: none"> 📖 31 May 1948 📖 Ivano-Frankivsk, Ukraine

Nobel Laureate (2015)	Prize share	Focal theme	Physics	Affiliation	Year and place of birth
Takaaki Kajita	1/2	<ul style="list-style-type: none"> 📖 Discovery of neutrino oscillations, which shows that neutrinos have mass 		<ul style="list-style-type: none"> 📖 University of Tokyo, Kashiwa, Japan 	<ul style="list-style-type: none"> 📖 1959 📖 Higashimatsuyama, Japan

Arthur B. McDonald	1/2	 Discovery of neutrino oscillations, which shows that neutrinos have mass		 Queen's University, Kingston, Canada	 1943  Sydney, Canada
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Nobel Laureate (2015)	Prize share	Focal theme	Physiology/Medicine	Affiliation	Year and place of birth
William C. Campbell	1/4	 Therapy against infections caused by roundworm parasites		 Drew University Madison, NJ, USA	 1930  Ramelton, Ireland
Satoshi Ōmura	1/4	 Therapy against infections caused by roundworm parasites		 Kitasato University Tokyo, Japan	 1935  Yamanashi prefektur, Japan
Youyou Tu	1/2	 Novel therapy against Malaria		 China Academy of Traditional Chinese Medicine, Beijing, China	 1930  Zhejiang Ningpo, China

Nobel laureate (2015)	Prize share		Peace
Tunisian National Dialogue Quartet "	1/1	✈ Building of a pluralistic democracy in Tunisia in the wake of the Jasmine Revolution of 2011".	

Science with no boundaries: Rontgen was awarded Nobel Prize of 1901 for physics in recognition of his extraordinary discovery of remarkable rays (he called them X-rays). Their impact on chemistry and medical diagnosis later was astounding. The contributions of Bohr (NL in Physics, 1923) and Schrödinger (NL in physics, 1933) in atomic physics/chemistry enabled biologists to analyze life processes and paved way for molecular biology. It spread its wings in bringing forth proteomics, genomics, and metabolomics and so on. Delbrück, a physicist turned his focus to biology and won Nobel Prize in physiology for putting forward phage genetics. The studies on sex hormones, a core biologist's pursuit, brought Nobel Prize in Chemistry to Butenandt in 1939. The isotope tracer technique of de Hevesy (NL in 1943 chemistry) is an indispensable tool in biomedical research. The elucidation of structure of insulin and method for sequencing nucleic acids brought two Nobel prizes in chemistry to Sanger in 1958 and 1980 respectively. Dorothy Hodgkin got Nobel Prize in chemistry for the structure elucidation of biochemical substances by X-rays (a pure physics tool). The chemiosmosis theory for energy transfer for biological systems was recognized for Nobel Prize in chemistry (Mitchell, 1978). The progressive researches in molecular genetics brought many Nobel prizes to Morgan (1933), Crick, Watson and Wilkins (1962) and the Roberts and Sharp (1993). Hard core scientists have no boundaries in exploring science of science. The classification persists for convenience of learners during comprehension integrating processes.