



◀ Aziz Sancar, 2015 Nobel laureate in chemistry

AZIZ SANCAR WINS NOBEL PRIZE

✍ by Edward W. Lempinen

The Turkish-born scientist, elected to TWAS in 1994, shares the 2015 Nobel Prize in chemistry for research into DNA repair.

Aziz Sancar, a Turkish-born chemist elected to TWAS in 1994, is one of three scientists named to share the 2015 Nobel Prize in chemistry “for mechanistic studies of gene repair”. He is the seventh TWAS Fellow to win the world’s highest honour for discoveries in chemistry.

Sancar’s research has focused on how DNA can repair itself. He discovered enzymes which can recognize mutations caused by ultraviolet radiation and then cut the

DNA to remove the damaged genetic code. His initial discoveries at Yale University in the United States focused on *E. coli* bacteria; more recently, at the University of North Carolina in the United States, he detailed the workings of this DNA repair in humans.

Sancar is the first native of Turkey to win a Nobel Prize in science. “I am of course honoured to get this recognition for all the work I’ve done over the years,” he said in an interview released by the Nobel organization. “But I’m also proud for my family and for my native country and my adopted country, and especially for Turkey it’s quite important.”

“Aziz Sancar is a researcher of rare accomplishment and impact, and he is also a dedicated teacher who is committed to the global advance of science,” said TWAS Executive Director Romain Murenzi. “We are

extremely proud that he is a member of TWAS, and we offer him heartfelt congratulations.”

Sharing the prize with Sancar are two other chemists who have made pioneering discoveries in gene repair: Swedish native Tomas Lindahl of the Francis Crick Institute and Clare Hall Laboratory in Hertfordshire, UK, and American Paul Modrich of the Howard Hughes Medical Institute and Duke University School of Medicine in North Carolina.

“Systematic work” by the three researchers “has made a decisive contribution to the understanding of how the living cell functions, as well as providing knowledge about the molecular causes of several hereditary diseases and about mechanisms behind both cancer development and aging,” the Royal Swedish Academy of Sciences said in announcing the prizes.

Sancar, 69, was born in Savur, a small town in southeastern Turkey. He was the seventh of eight children. “My parents were both illiterate,” he said in a 2005 profile published in the *Proceedings of the National Academy of Sciences* (USA), “but they valued the importance of education and did their best to ensure that all of their children would receive some education.”

He received his M.D. in 1969 from the Istanbul Medical School in Turkey. At the University of Texas at Dallas, he studied molecular biology, receiving a master’s degree in 1975 and a PhD in 1977.

TWAS now counts 16 Nobel laureates among its over 1,170 members. ◼

Gisela Isten and Sean Treacy contributed to this report.

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