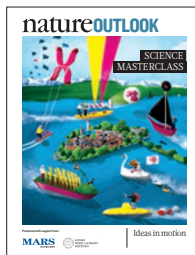


# natureOUTLOOK

## SCIENCE MASTERCLASS

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Lindau is a tiny island, covering two-thirds of a square kilometre. For most of the year, its medieval streets are filled with tourists. For one week in the summer, however, the Bavarian town becomes home to an exchange of ideas that circulate beyond its limits and, in the future, could stretch even further. This is because Lindau is home to the Nobel laureate meetings where past prize winners meet young researchers hoping to pick up wherever their illustrious mentors leave off.

The annual event began in 1951, two years before James Watson and Francis Crick published the structure of DNA. In 2015, it welcomed Elizabeth Blackburn (see page S56), who studies the genetic material at the ends of chromosomes, and Richard Roberts (S58), who found that genes often contain non-protein-coding portions that facilitate the creation of many different proteins from a single gene.

Similarly, by the first Lindau meeting, physicists had not unified electromagnetism and nuclear weak forces. One of this year's guests included François Englert (S61), who imagined the Higgs boson. Laureates Bruce Beutler (S59) and Susumu Tonegawa (S55) — specialists in cellular immunity and emotional memories, respectively — are also furthering fields that barely existed in 1951. This Outlook illuminates all of these Nobel prize winners' discoveries. An in-depth look at super-resolution microscopy — the subject that opened this year's Lindau meeting — describes the impact that the technology is having on molecular and cell biology (S50). This feature and the Q&A with Blackburn are accompanied by an animation; you can also hear the Q&As with Tonegawa and Beutler as a podcast (all available at [www.nature.com/outlook/masterclass2015](http://www.nature.com/outlook/masterclass2015)).

We are pleased to acknowledge financial support from Mars, Incorporated in producing this Outlook. As always, *Nature* has sole responsibility for all editorial content.

**Anna Petherick**  
*Contributing editor*

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