MRC Laboratory of Molecular Biology

- ヒト化抗体の創製
- これまでの特許収入が約1000億円

Cambridge Antibody Technologyの創業
ヒト化抗体の創製技術の開発
AstraZenekaが買収

Greg Winter wins 2018 Nobel Prize for Chemistry

Published on 3rd October, 2018

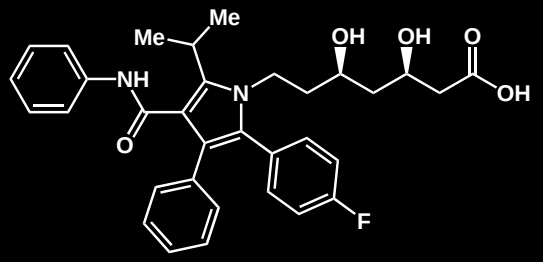
Greg Winter from the LMB's Protein and Nucleic Acid Chemistry (PNAC) Division has been awarded the 2018 Nobel Prize for Chemistry. Greg shares half of this year's prize with George P. Smith, with the other half being awarded to Frances H. Arnold, for developing a method known as phage display and using it for the directed evolution of antibodies, with the aim of producing new pharmaceuticals.

Speaking after today's announcement, Greg responded, "It came as a bit of a shock, and I felt a bit numb for a while. It's almost like you're in a different universe. For a scientist, a Nobel Prize is the highest accolade you can get, and I'm so lucky because there are so many brilliant scientists and not enough Nobel Prizes to go around."

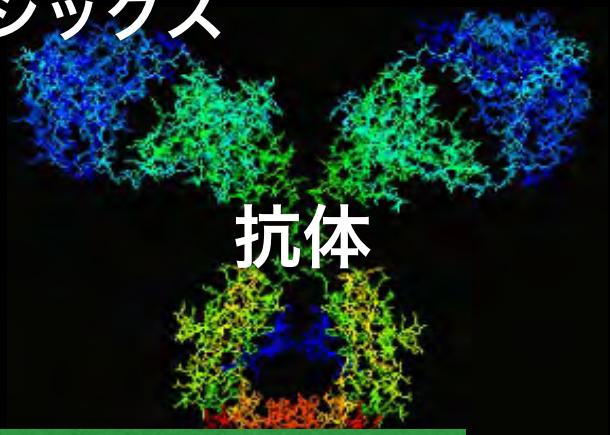
After studying Natural Sciences at the University of Cambridge, Greg completed a PhD at the LMB, working on the amino acid sequence of tryptophanyl tRNA synthetase from the bacterium *Bacillus stearothemophilus*. Greg continued to specialise in protein and nucleic acid sequencing through post-doctoral research in the LMB's PNAC Division and became a Group Leader in 1981.

新しい薬の種：New Modalities

低分子化合物



バイオロジックス



特殊ペプチド
PeptiDream Inc.

NeoBiologics
MiraBiologics Inc.

(Da)
Molecular weight

500 1,000 1,500 2,000 2,500 10,000 30,000 150,000

５のLipinski法則

- Not more than 5 hydrogen bond donors
(nitrogen or oxygen atoms with one or more hydrogen atoms)
- hydrogen bond acceptors (nitrogen or oxygen atoms)
- A molecular mass less than 500 daltons
- An octanol-water partition coefficient[5] log P not greater than 5

Revolutionize the future biologics!

MiraBiologics

Mira = Miracle and Mirai (Future)

Established in 2017, July