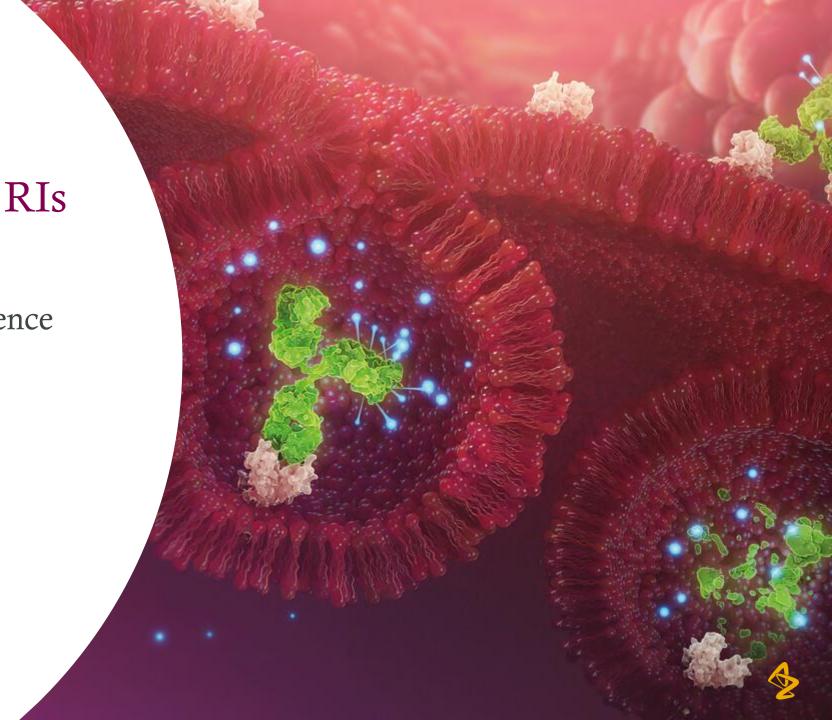
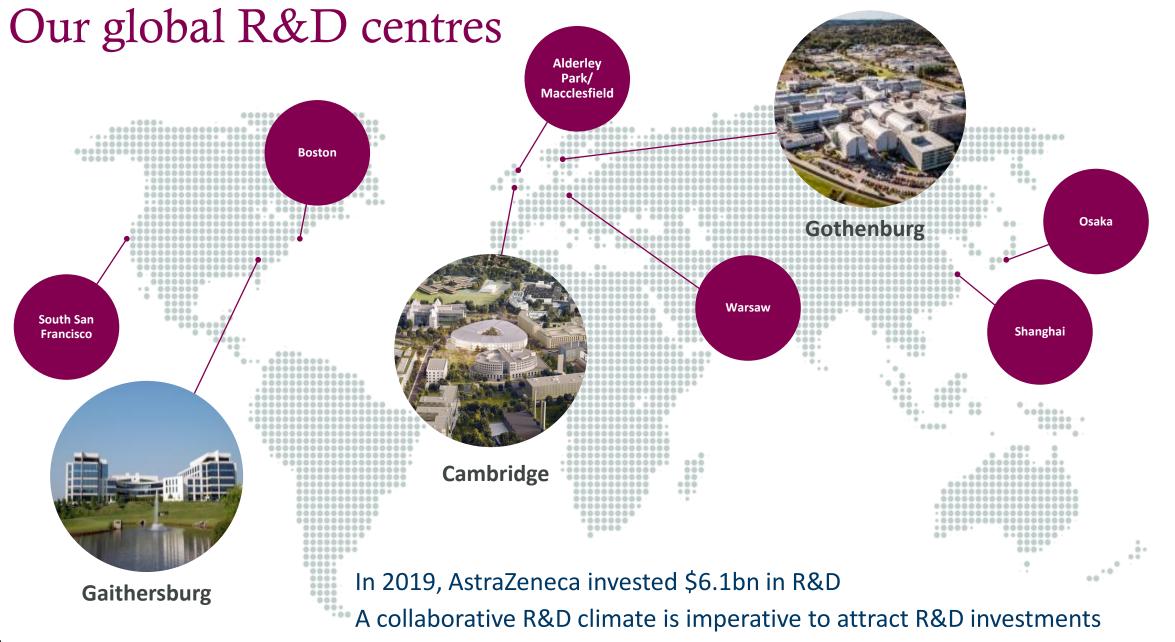


Anna Sandström, Director Science Policy and Relations Europe, AstraZeneca

28 October 2020





Research infrastructures are important platforms for fruitful collaborations



## More than 1,400 active collaborations in 2020

Keeping doors and minds open Joint research **165** 000000000 centres 0000000 0000 00000 .00000000000000000000 445 with 00000000 00000000000000000 000000000000000000 academia 0000000000000000 0000000000000000 00000000000000000 00000 380 \_\_\_\_\_ . . . . . . . . . . . . . . . . . . . 00000000 Innovating with biotech 00000 0000000000000 0000000000 000000000000000000000000000000 0/0000000 00000000000 000000000000 00000000 00000 0000000 00000000000 000000000 0000000 0000000 ........... 000000000 000000 0 000 00000000000 0000 0 00000. Asia 00000000000 .0000000000000 000 000000000 .0000000000000000000 Pacific .0000000000 000000000000000 0000000000000000000000000 Cayman -000000000000000 0000000000000000 .0000 Islands 000000000000 00. 0000 00 00. 00 000000 ........ 00000000000 00000 0 India 0000 000000000000 00000 000000000000 ............. -00000000000 Partnering . 00000000000000000 000000000000000 0 000. 00000000000000000 0000000 . ... .0000000000000000 .0000000000000 000000000000000 00000000000000000 000000000000 with industry 00000000000000000 00000000000 00000000000000 00000000000 000 000000000000 000000000000 000000 ....... 000000000000 00000000000 0000000000 00000 .0000. 0000000000 000000000 0 0 0 0 0 0 0 0 00000000 00000 000. 00000000 South Africa . 0 0000

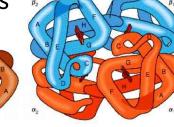


## **Crystallography Nobel Prizes**

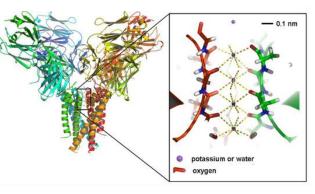
**1997** ATP-ase

**1962** Globular

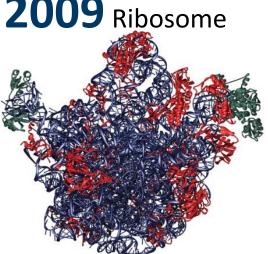
proteins

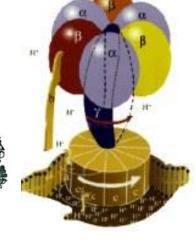


2003 Ion channels

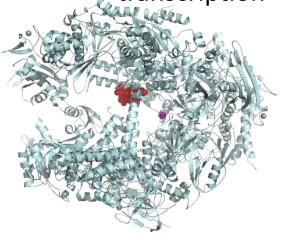


2009 Ribosome



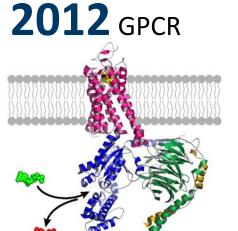


2006 Eukaryotic transcription

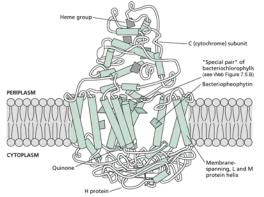


**1962** DNA

1988 Photosynthetic reaction centre

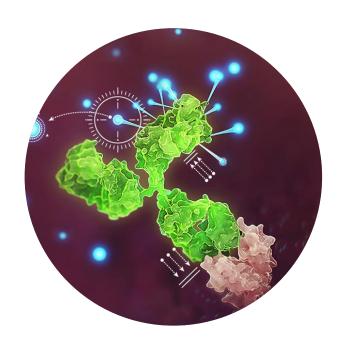


**1964** Vitamin B

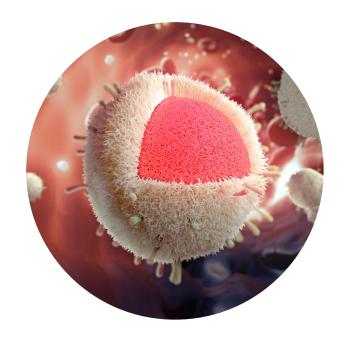




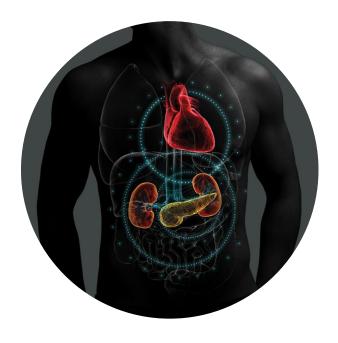
## Use of synchrotrons in future drug discovery and development



Protein structure elucidation will continue to be core to drug discovery



Formulation as well as understanding and developing drug delivery vehicles



Advanced imaging of cells, tissue, organs and organisms



## Maximising impact to tackle societal challenges



- Routine measurements 'fee for service'
- > R&D collaborations:
  - Jointly answering challenging research questions
  - Co-creation to develop new methodologies



**Dialogue** – outreach activities as well as discussions with advanced users on e.g. interfaces/instrumentation

**Competence** – resources and ability to co-develop new technologies and experiments as well as to train, counsel and support industrial users

**Funding** – incentivizing a collaborative climate



