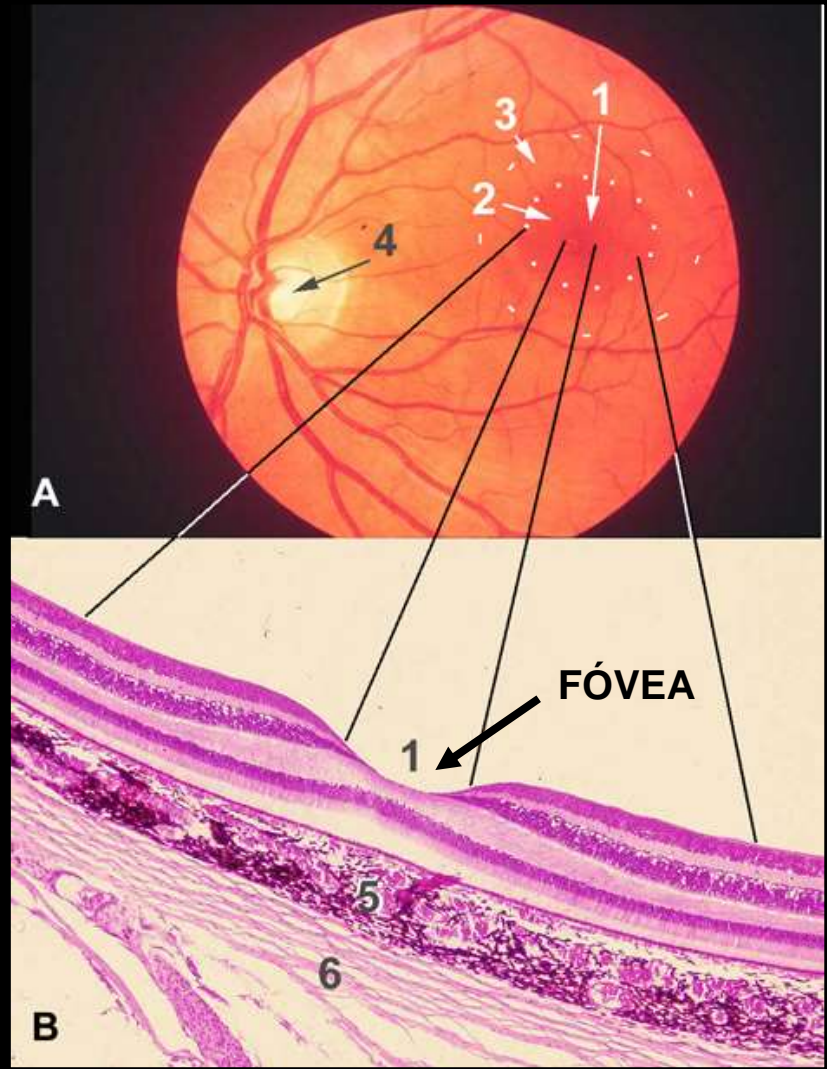
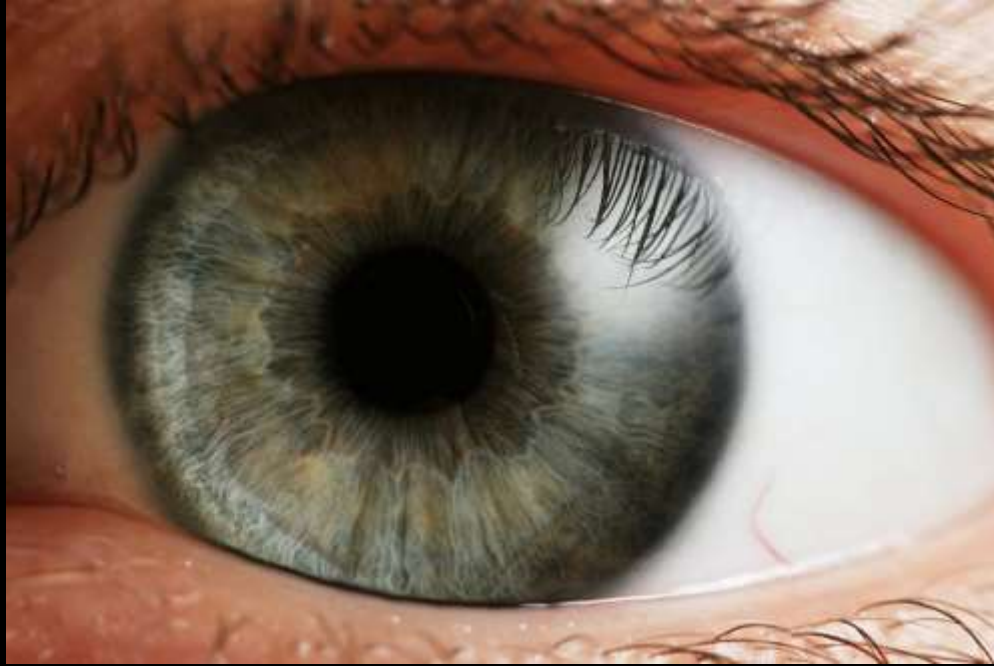


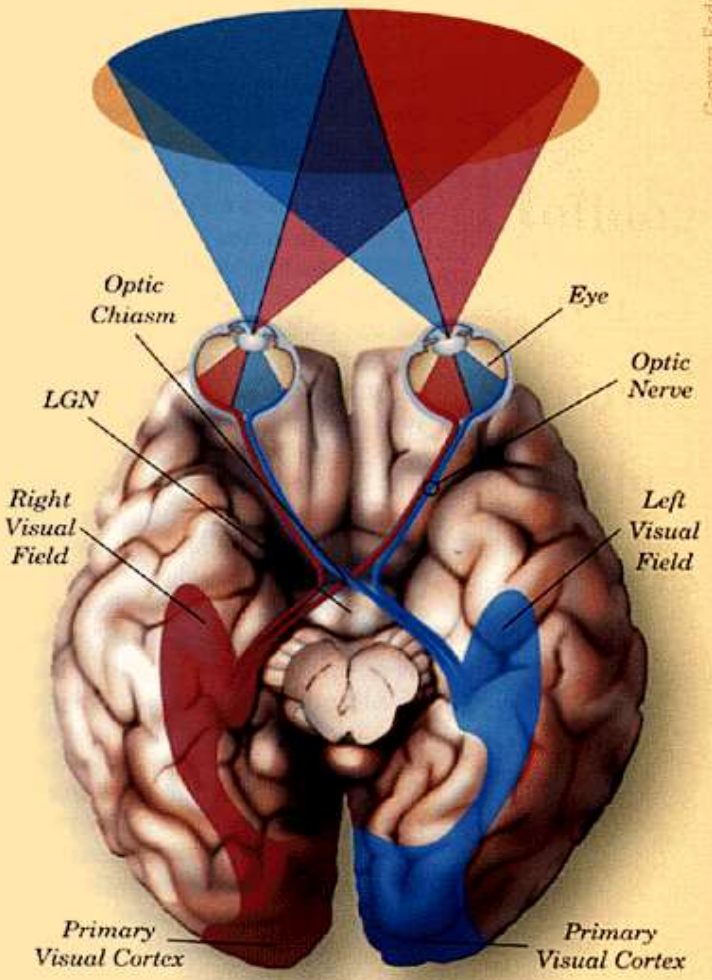
M
C **V**
J **G** **Q**
F **B** **K** **W** **C** **D** **S**
X **M** **G** **B** **Q** **A** **P**
N **Z** **R**
R **L**
P **O** **Y**
H





Albinismo

George Eade







Pepe

Elena



Bea



Fatou



Ablaye



Ana



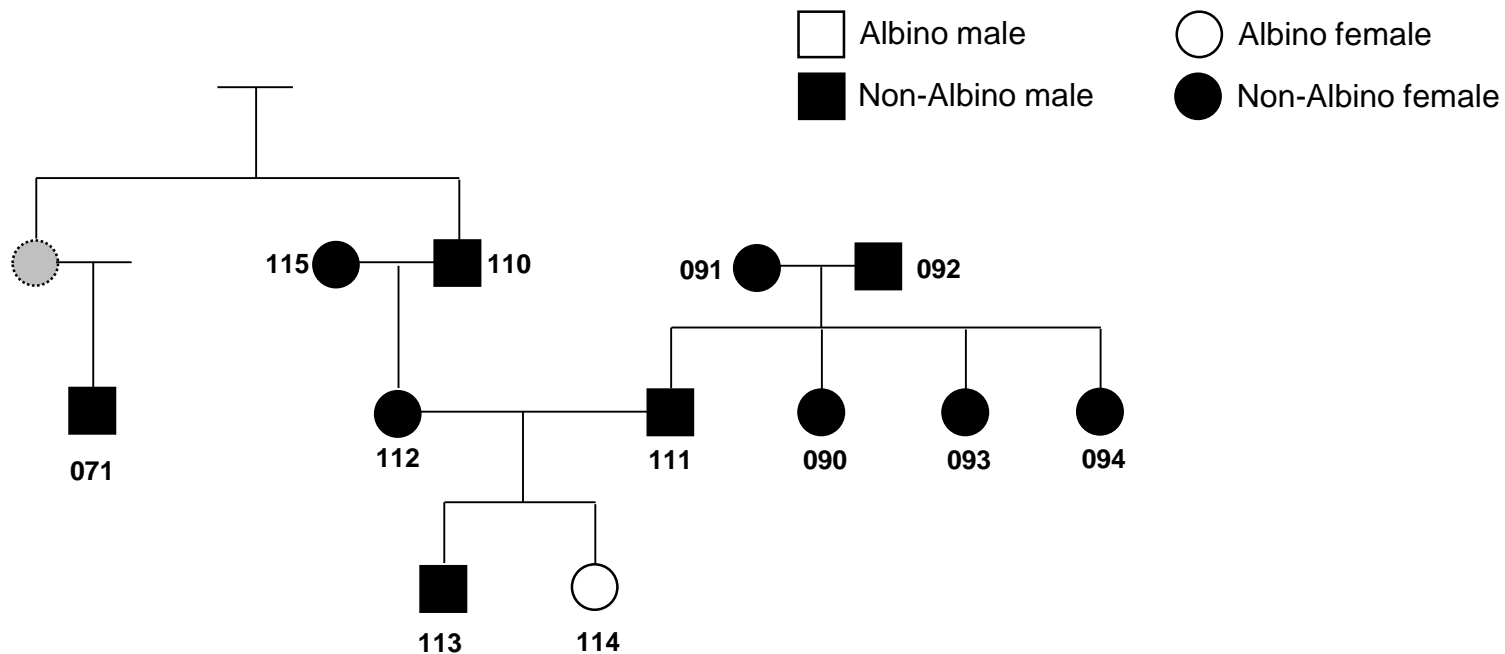
Luis Carlos

TYR	OCA1
OCA2	OCA2
TYRP1	OCA3
SLC45A2	OCA4
4q24	OCA5
SLC24A5	OCA6
C10orf11	OCA7
GPR143	OA1

SLC38A8	FHONDA
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LYST	CHS1
HPS1	HPS1
AP3B1	HPS2
HPS3	HPS3
HPS4	HPS4
HPS5	HPS5
HPS6	HPS6
DTNBP1	HPS7
BLOC1S3	HPS8
BLOC1S6	HPS9
AP3D1	HPS10

20 tipos de albinismo



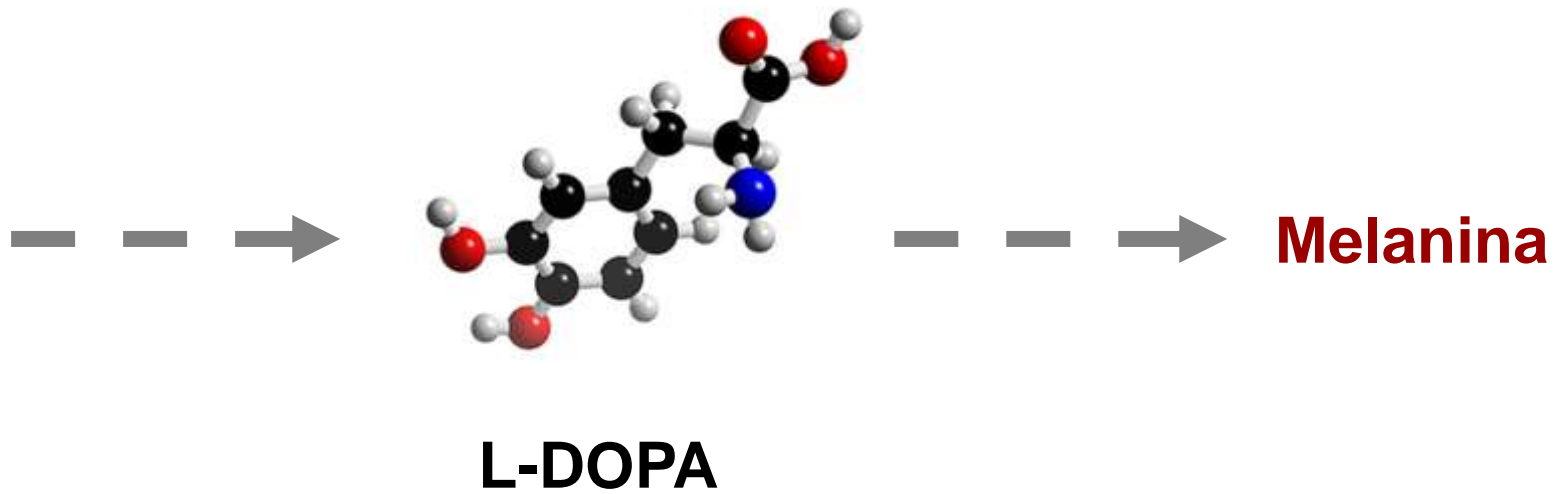
ALBINOCHIP
Diagnóstico Genético
de albinismo
Un proyecto
de investigación

Modelos animales de albinismo





Modelos animales de albinismo



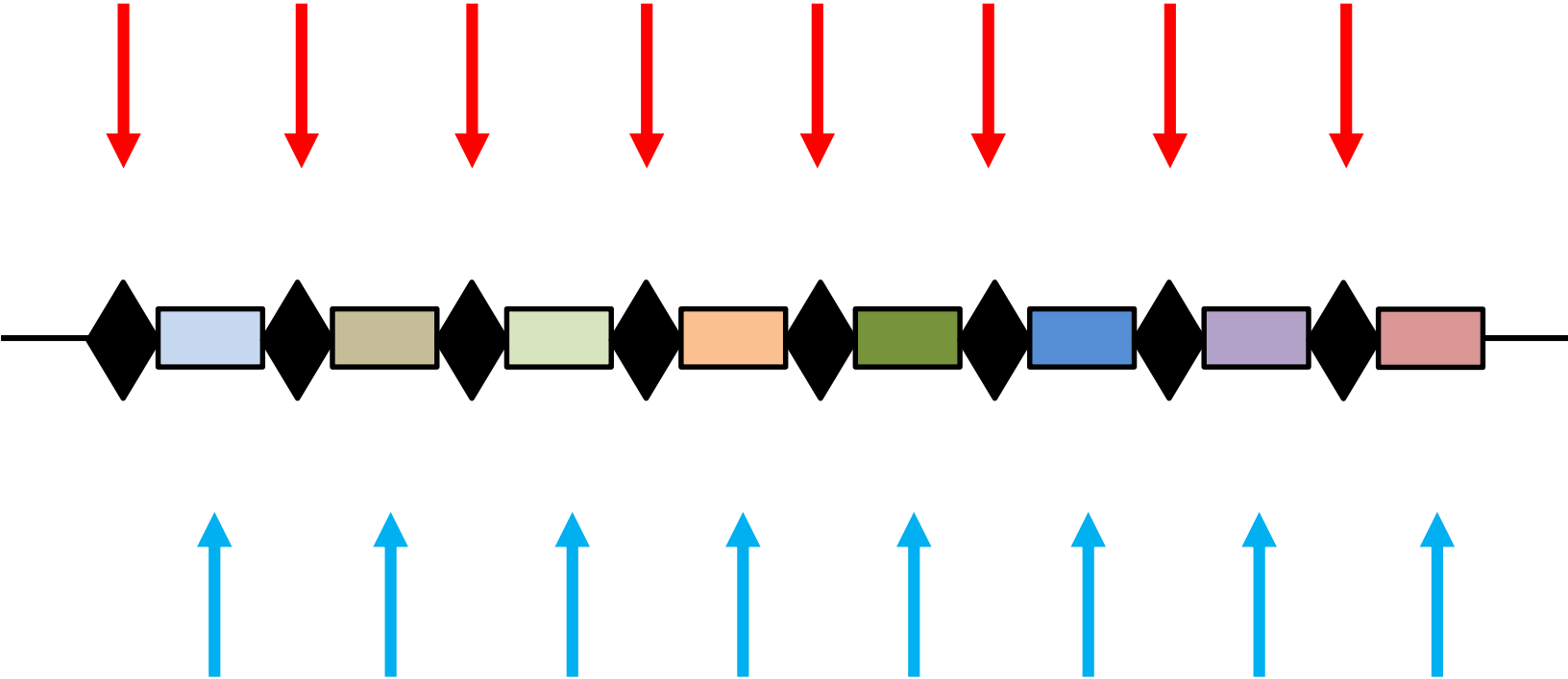




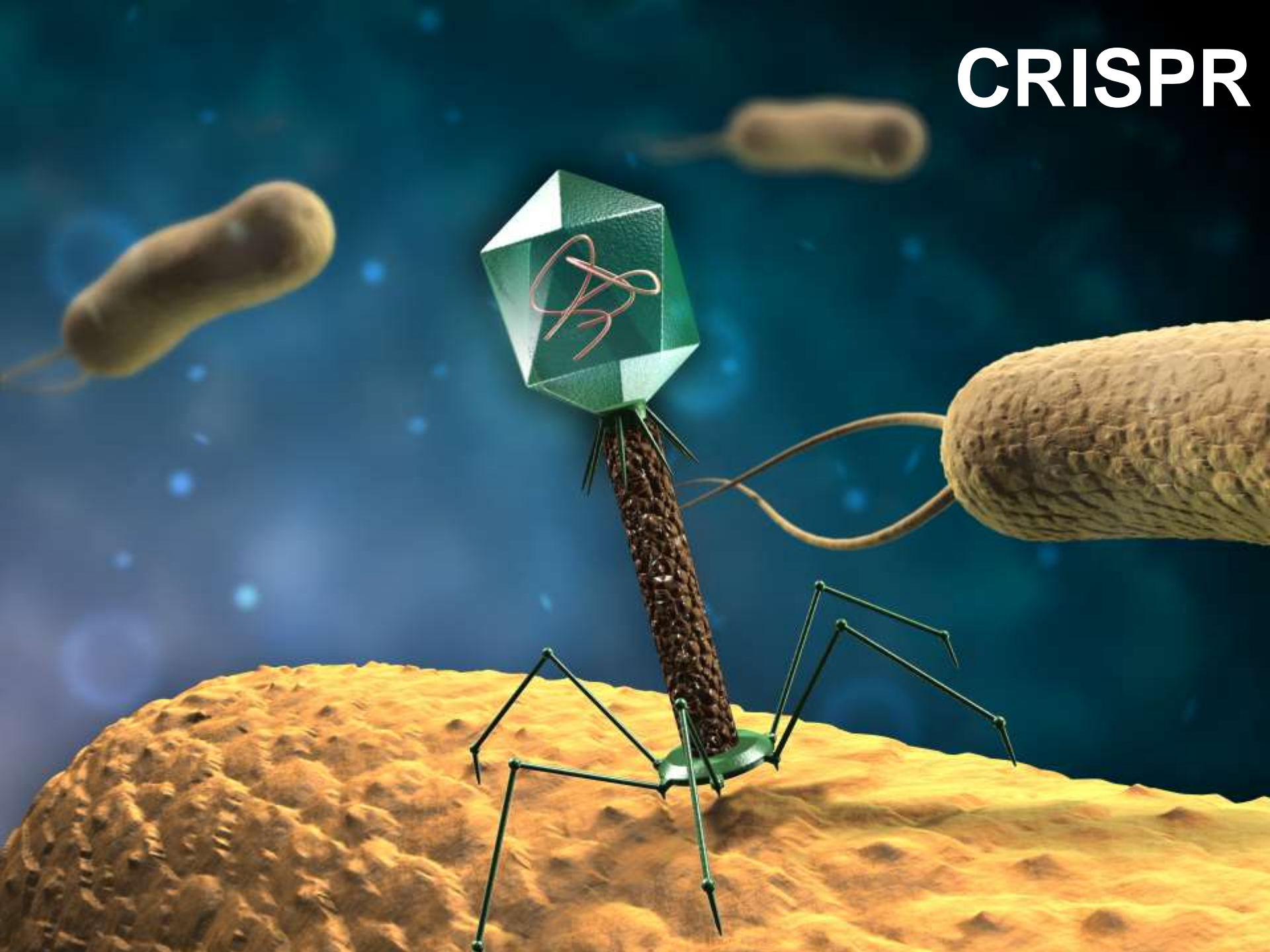
Francisco Juan Martínez Mojica



Salinas de Santa Pola (Alicante)



CRISPR





Francisco Mojica
University of Alicante, Spain



Rodolphe Barrangou
North Carolina State Univ, Raleigh, USA



Philippe Horvath
DuPont Nutrition and Health, France



Luciano Marraffini
The Rockefeller Univ, New York, USA



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Jennifer Doudna
Univ California Berkeley, CA, USA



Virginijus Siksnys
Vilnius University, Lithuania



Feng Zhang
BROAD-MIT, Cambridge, MA, USA



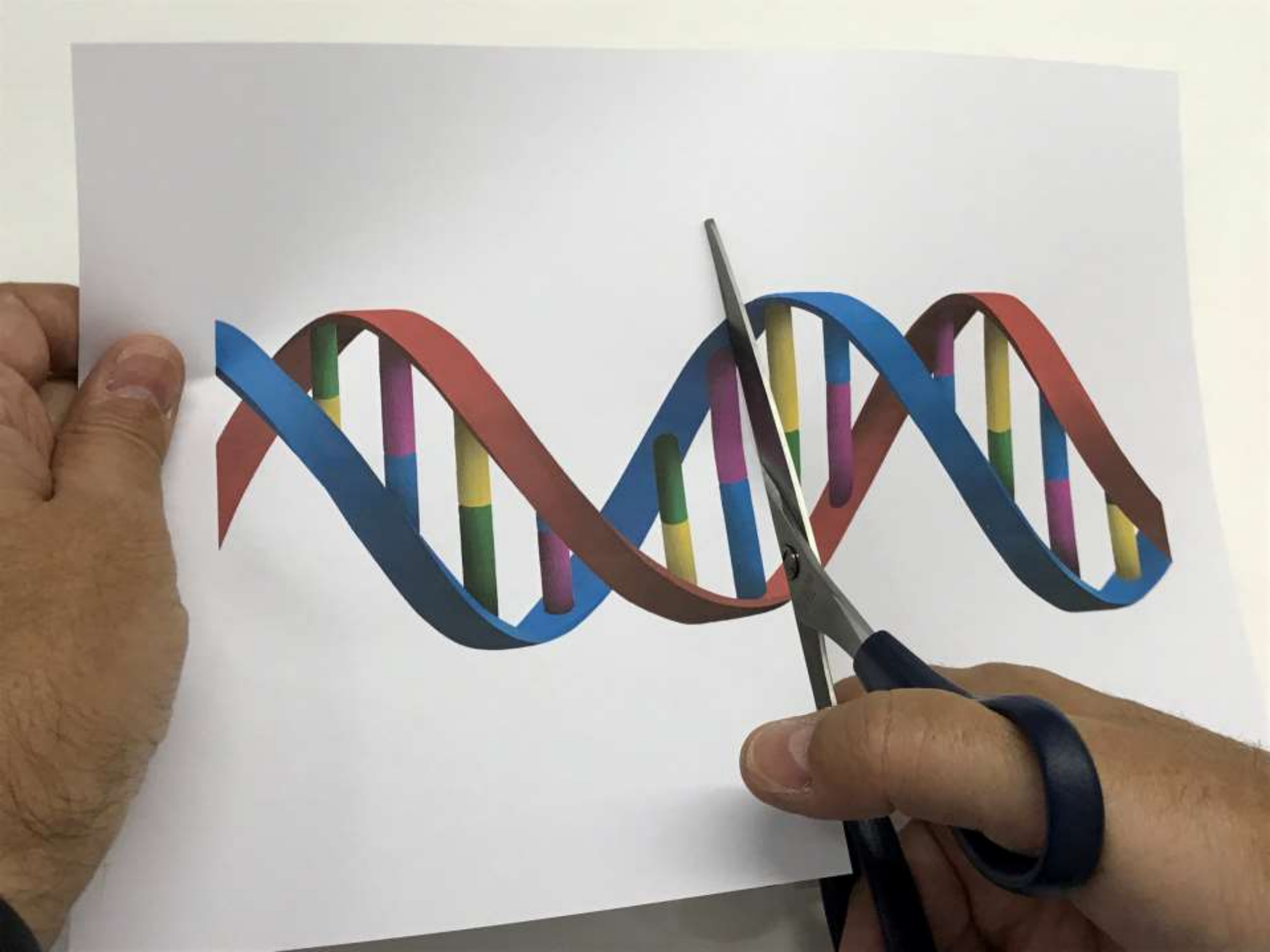
George Church
Harvard Med School, Boston, MA, USA

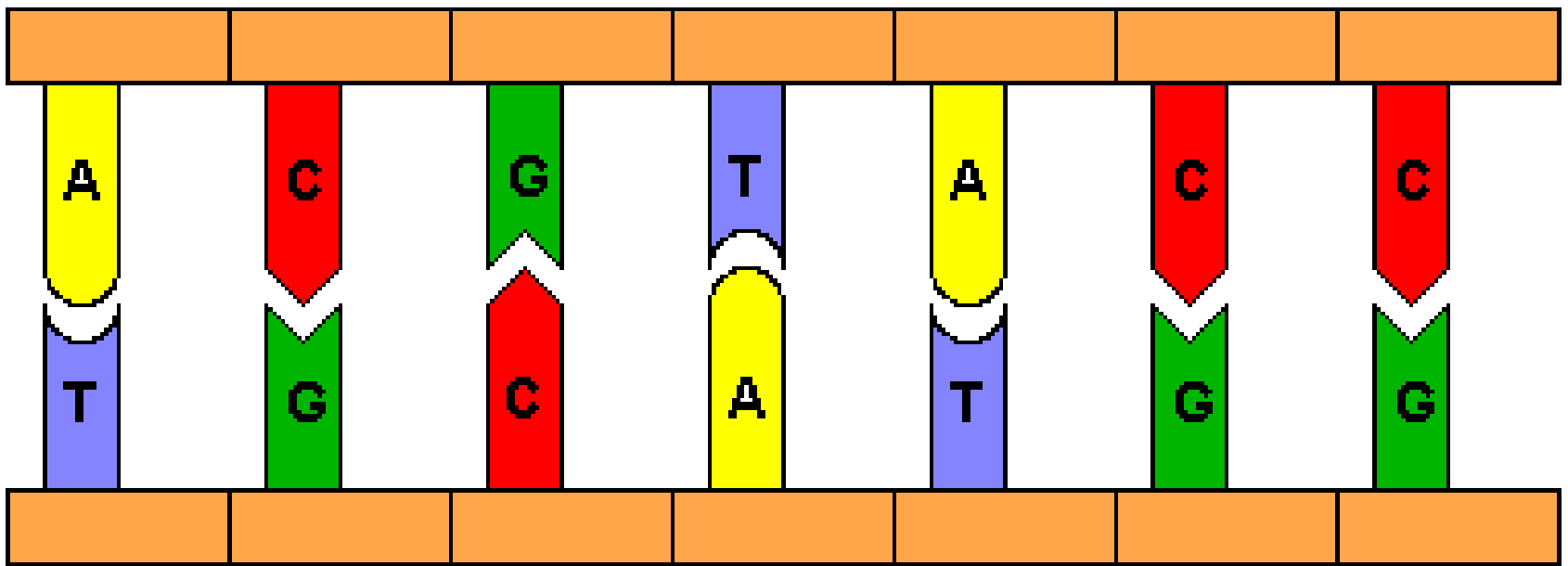


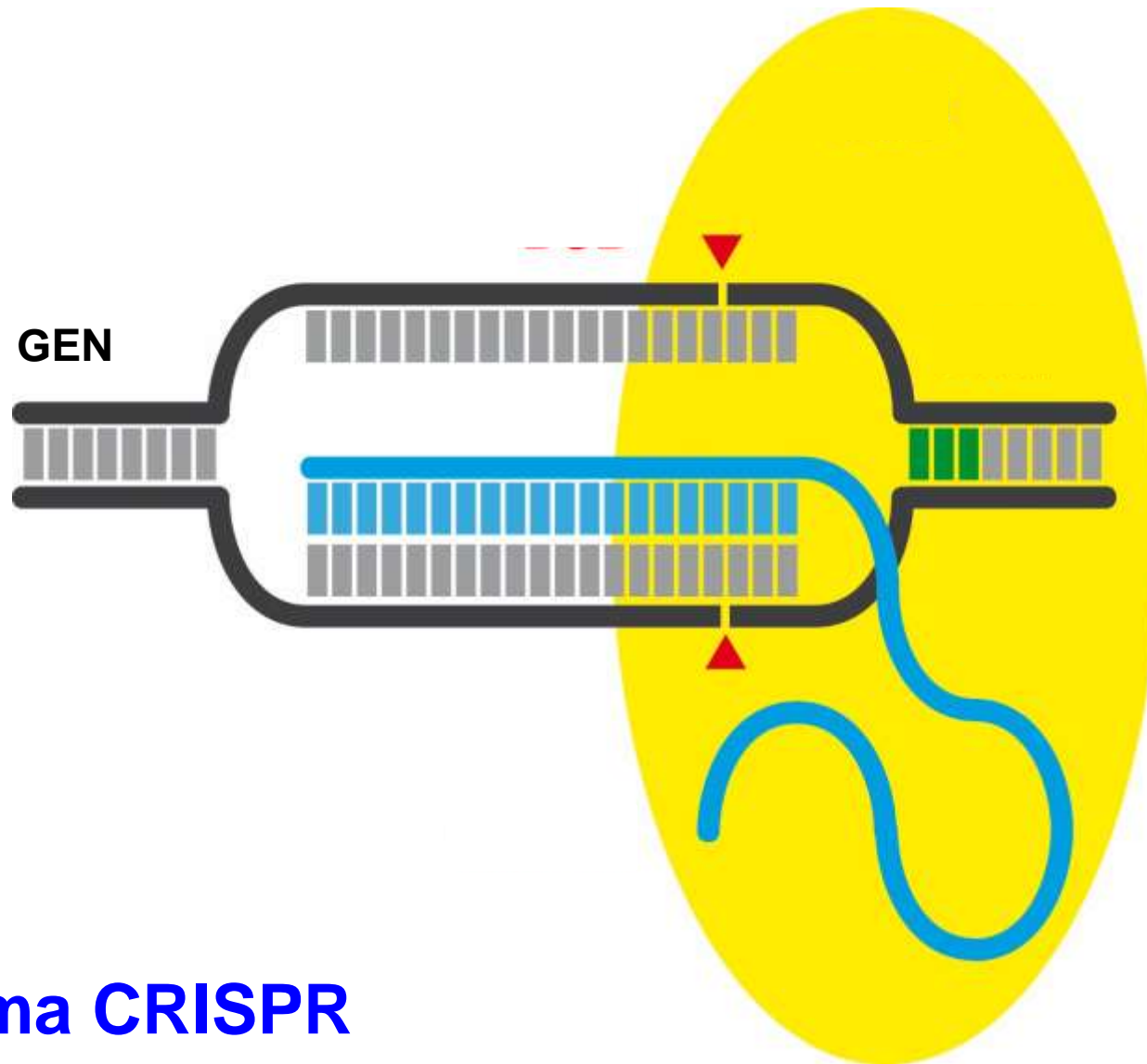
Rudolf Jaenisch
Whitehead Inst, Cambridge, MA, USA



J. Keith Joung
Mass Gen Hosp, Charlestown, MA, USA

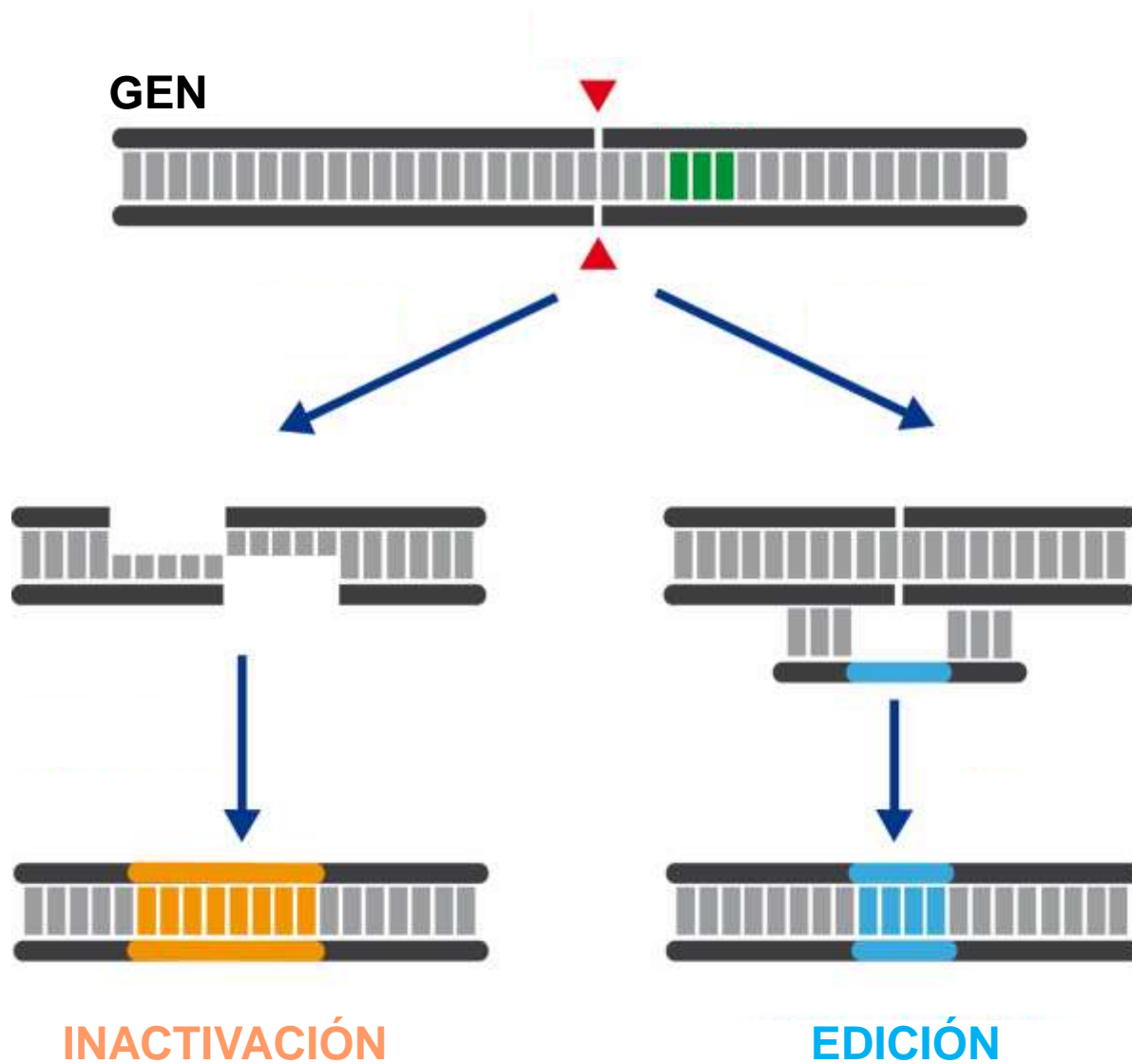






El sistema CRISPR

¿Cómo funcionan las CRISPR?



Con CRISPR podemos...

- **Mutar** un gen
- **Corregir** una mutación de un gen
- **Editar** un gen, cambiar una o varias letras
- **Eliminar** un trozo de un gen
- **Añadir** un fragmento nuevo a un gen
- **Marcar** un gen
- ...



CRISPR

Ratones avatar





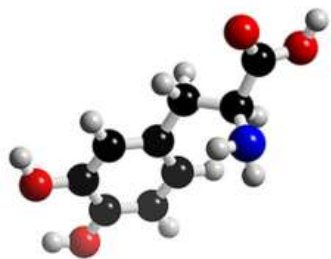
Pepe

OCA1



Patty

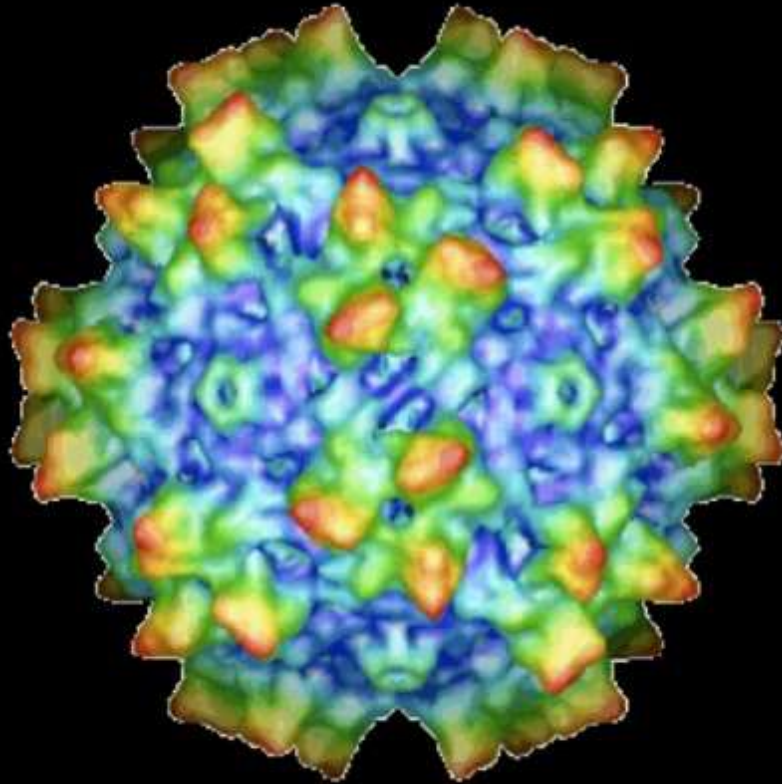
OCA4



Tratamientos



CRISPR



Enfermedades raras tratadas con CRISPR en animales

- Distrofia Muscular de Duchenne (DMD)
- Deficiencia en Ornitina transcarbamilasa (OTC)
- Tirosinemia Hereditaria de tipo I (FAH)
- Cataratas congénitas (CRYGC)
- Enfermedad Crónica Granulomatosa (CGD)
- Retinosis pigmentaria (RP)
- Amaurosis Congénita de Leber (LCA)
- Enfermedad de Huntington (HD)
- ...



EVERYWHERE

Illustration by Chris Labroy © ILLUSTRAC



Original Image

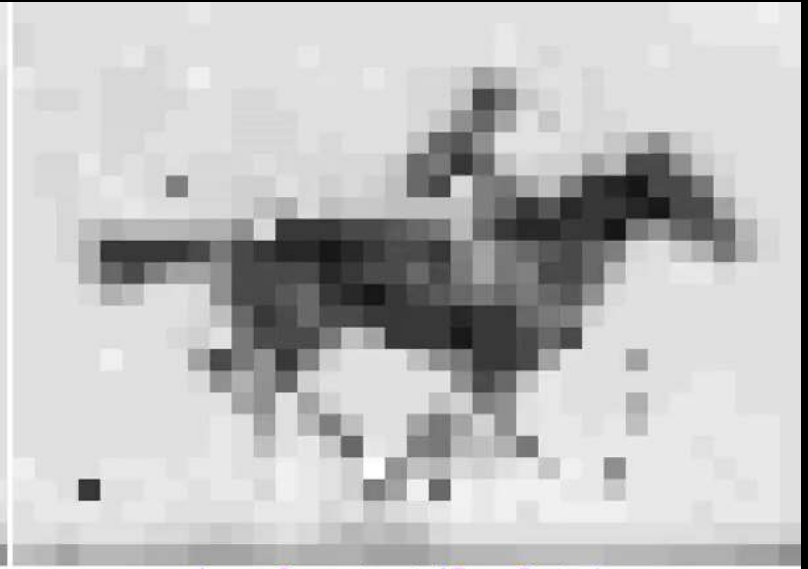
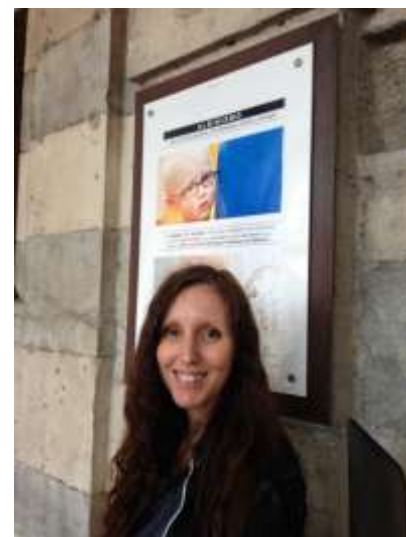


Image Reconstructed From Bacteria



ciberer iscii

