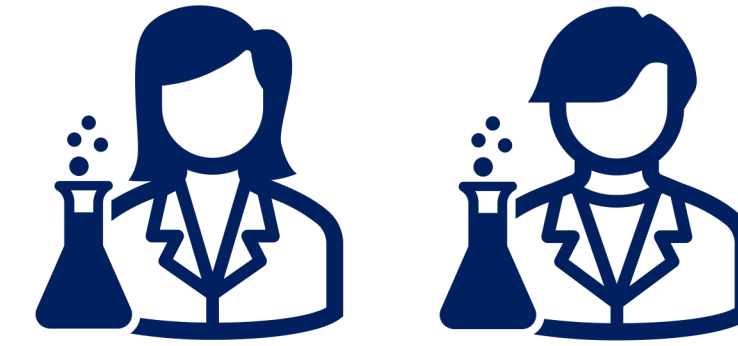


Más allá de los laboratorios: El emprendedor científico y su impacto

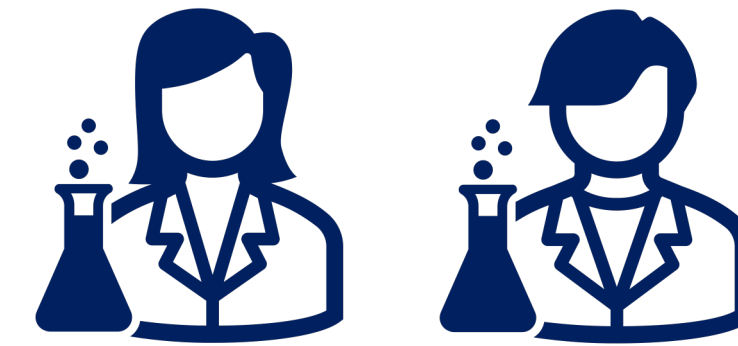
Maier Avendaño. Ph.D.



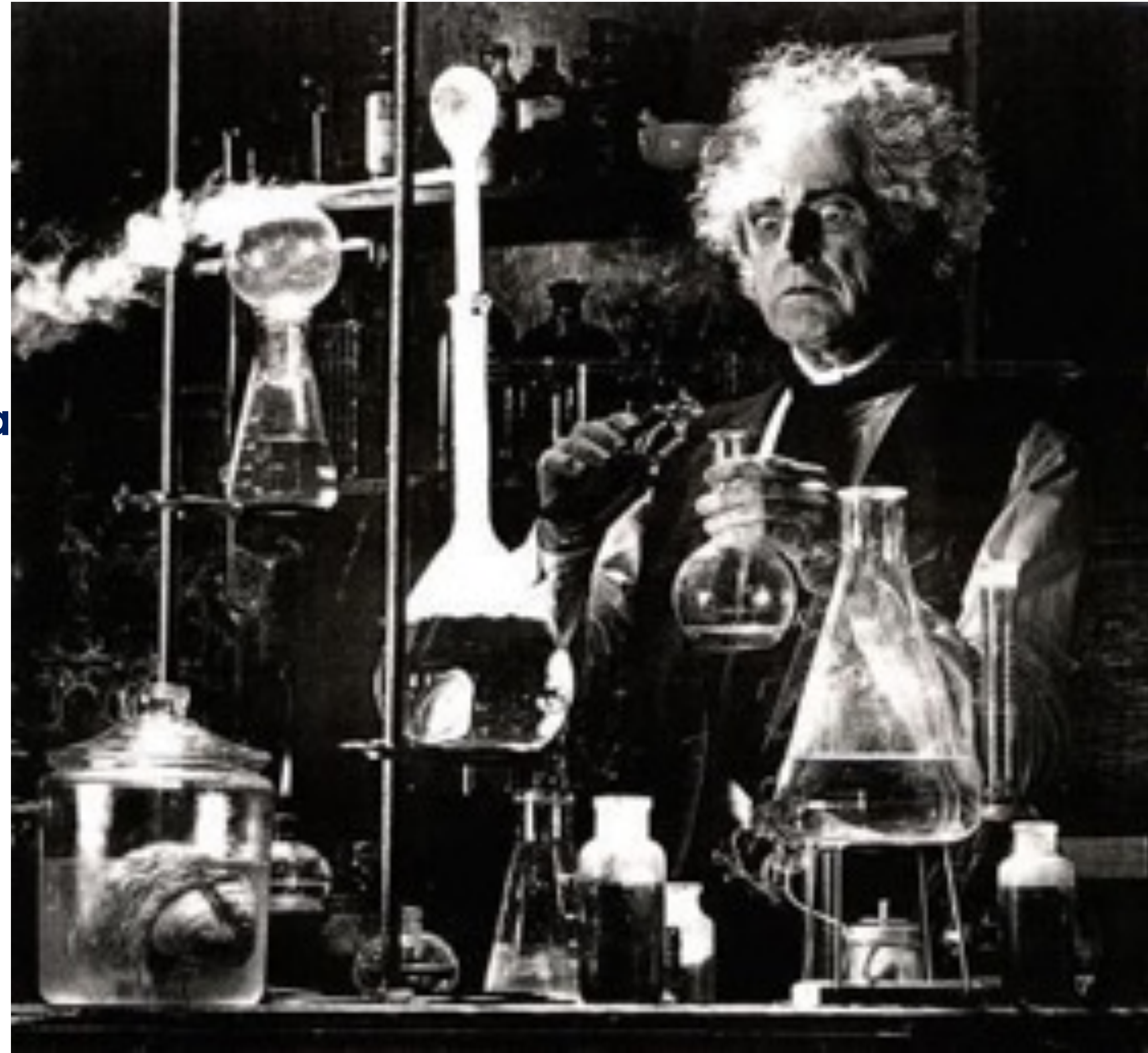
¿Cómo se imagina a un científic@?



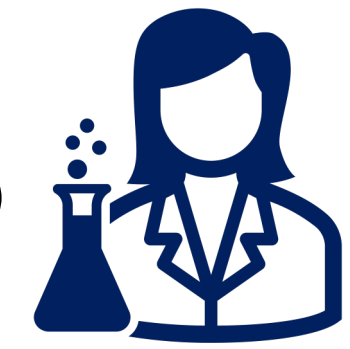
¿Cómo se imagina a un científic@?



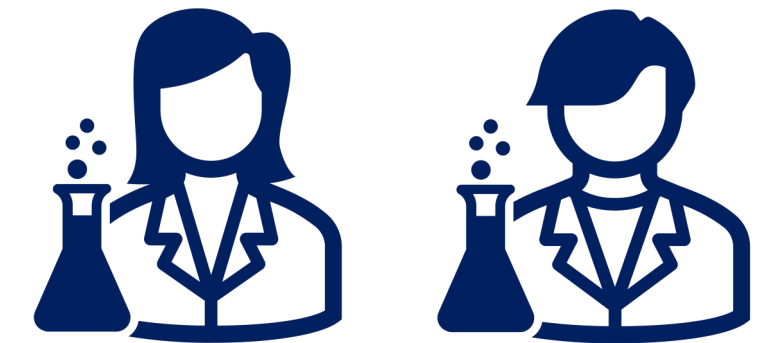
Culturalmente, tenemos una percepción errónea del científico!



¿Cuál es el role y que impacto tiene en la sociedad?

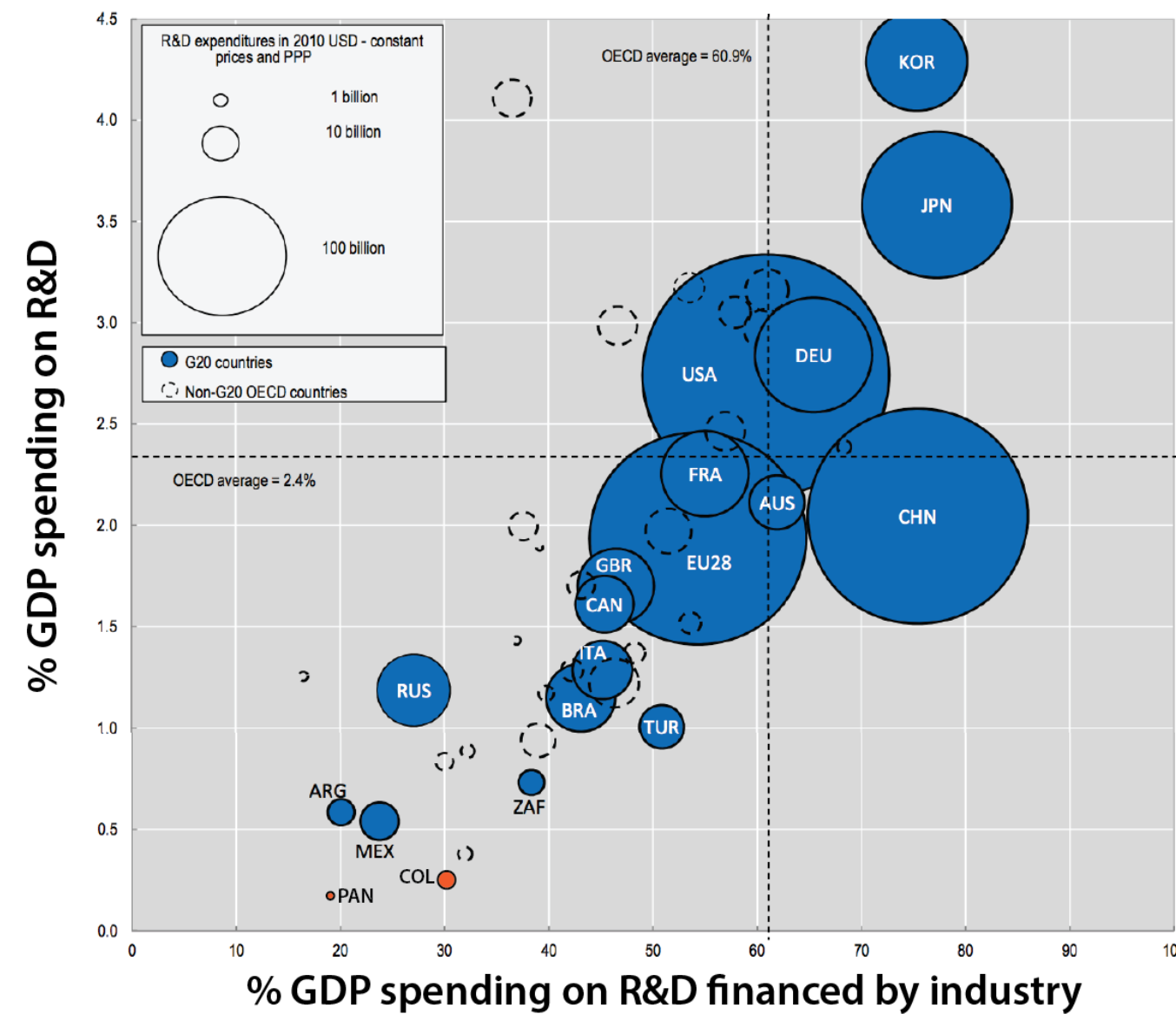


¿Cuál es el role y que impacto tiene en la sociedad?

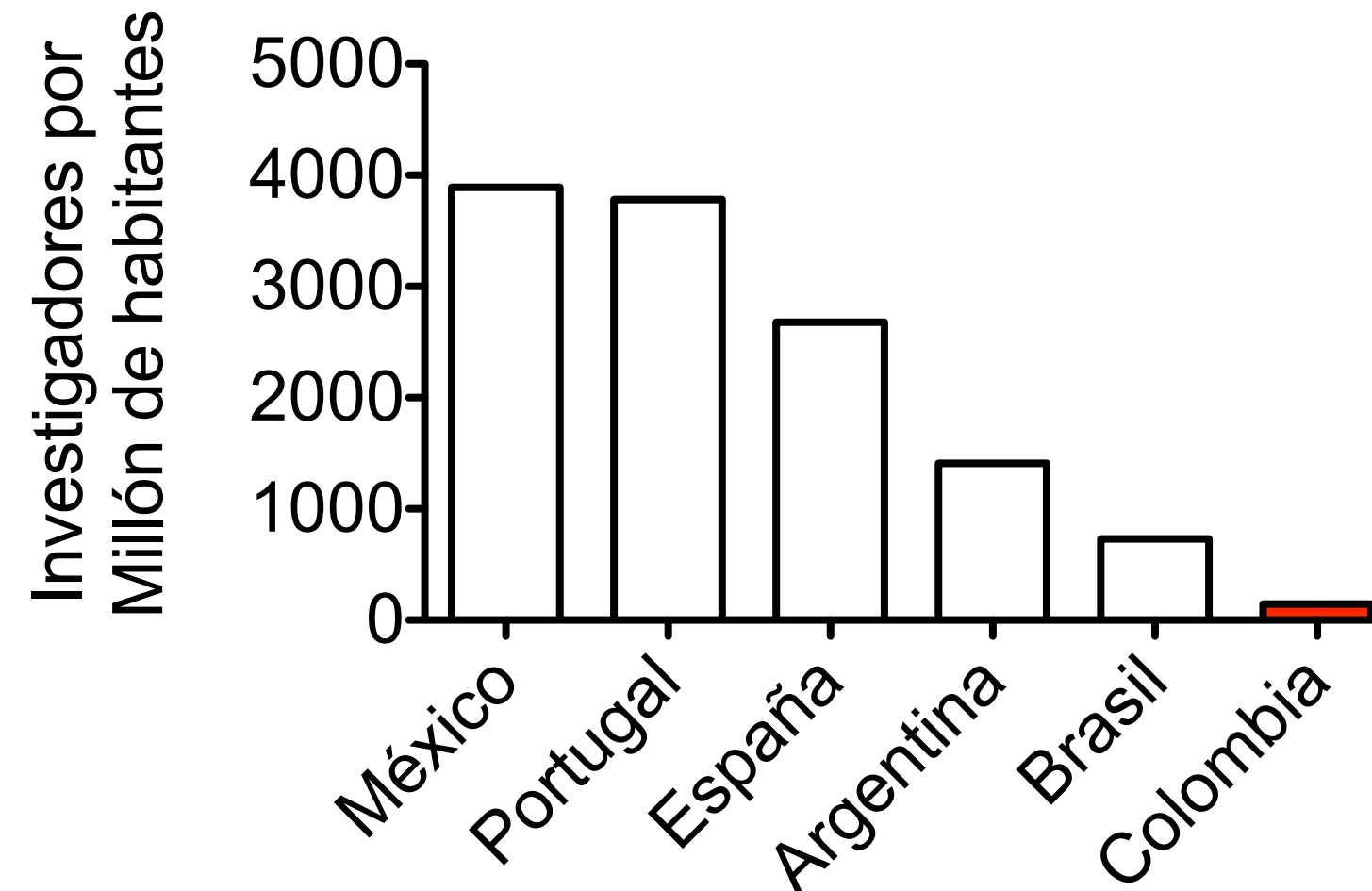


La ciencia y la tecnología se perciben como un lujo y no como la base para el desarrollo social y económico

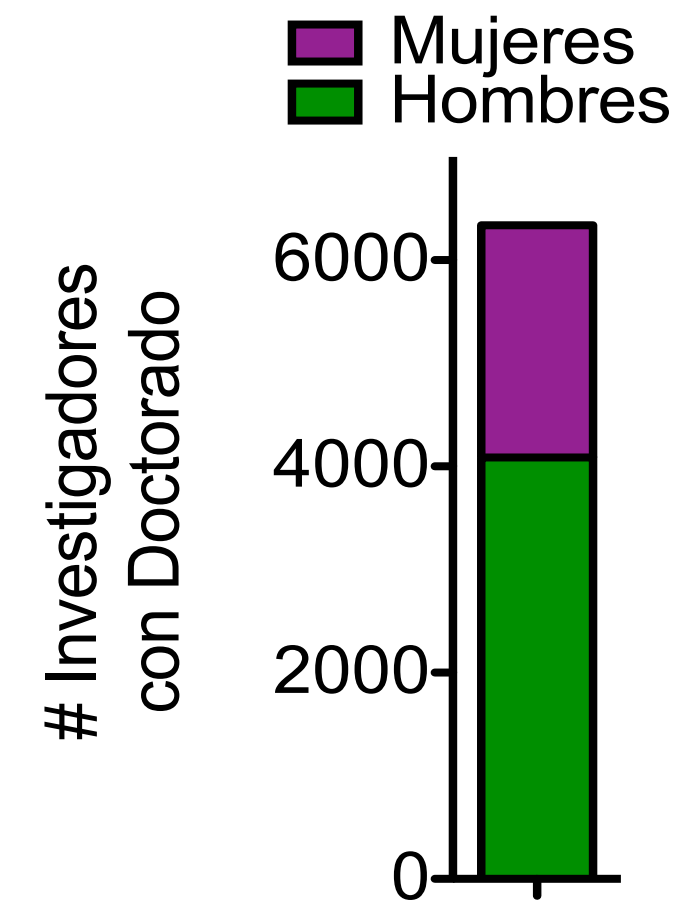
Minimal amount of investment in R&D



Scarce human capital



Strong gender bias

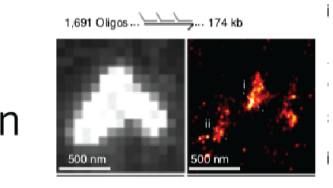
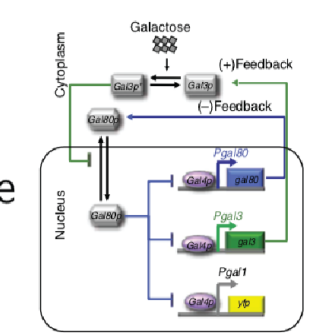
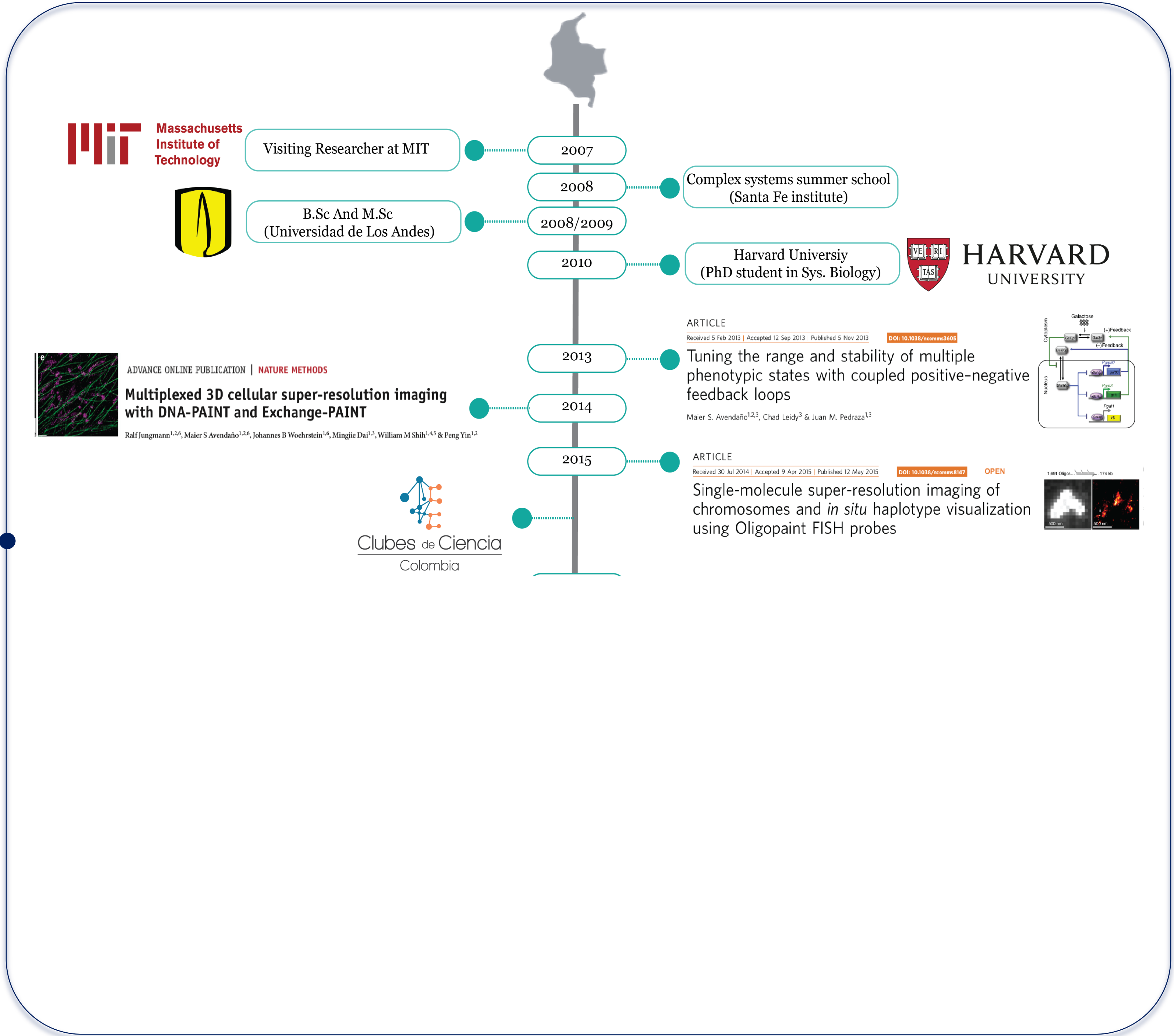


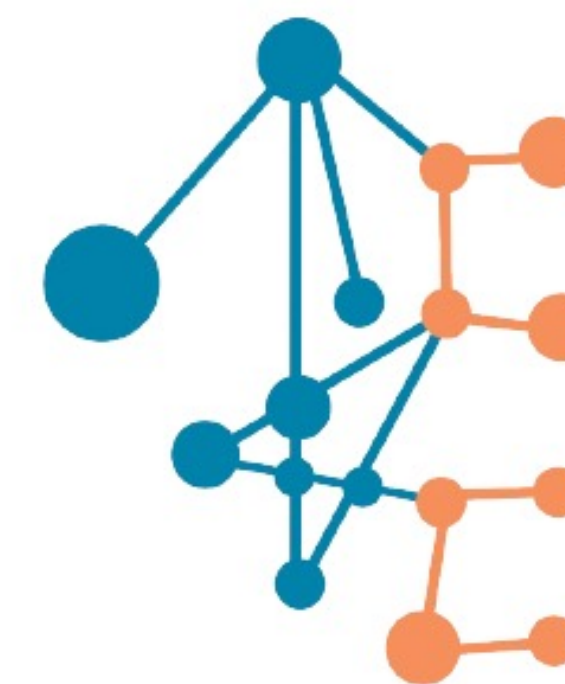
Take Home Messages

La ciencia y el emprendimiento se pueden entrelazar para dar vida a soluciones que trascienden las barreras y crean un impacto duradero en la Sociedad



**Career path time-line:
it is never a straight line**





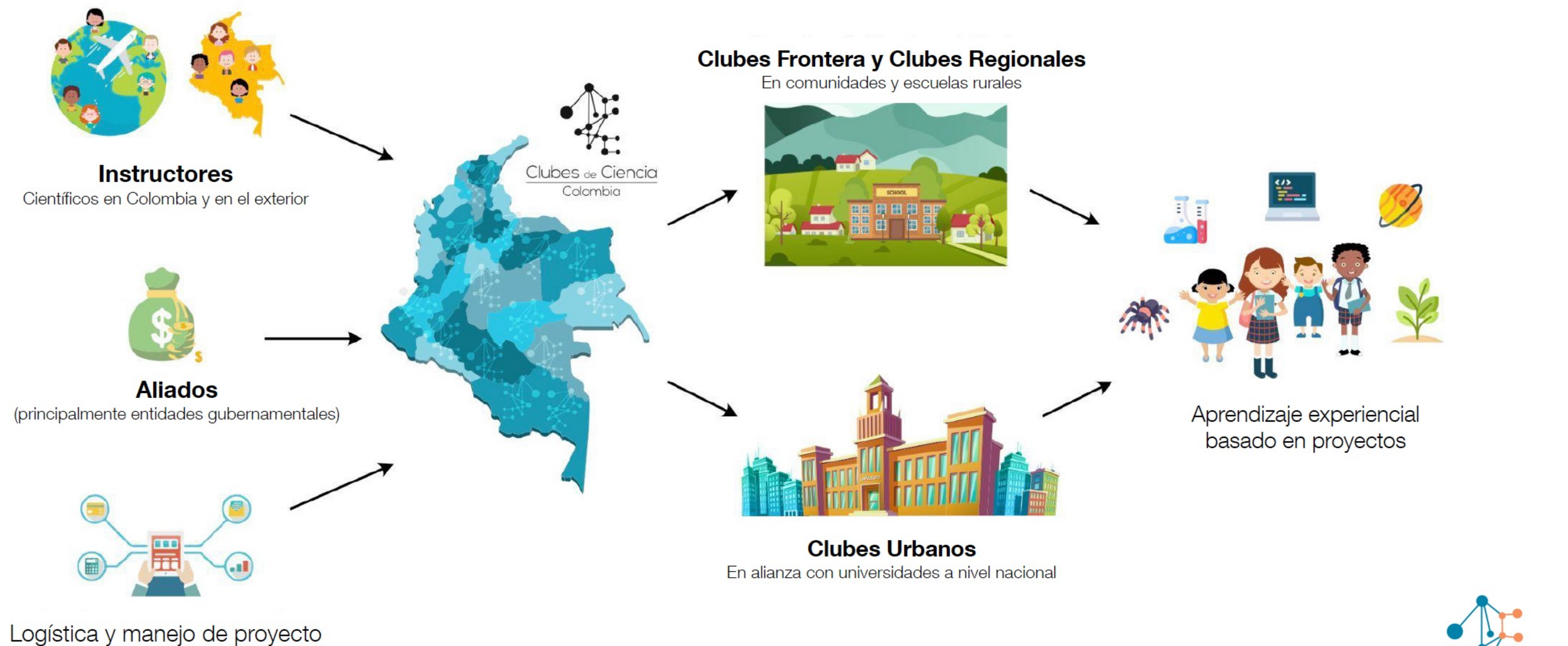
Clubes de Ciencia
Colombia

Un proyecto de:

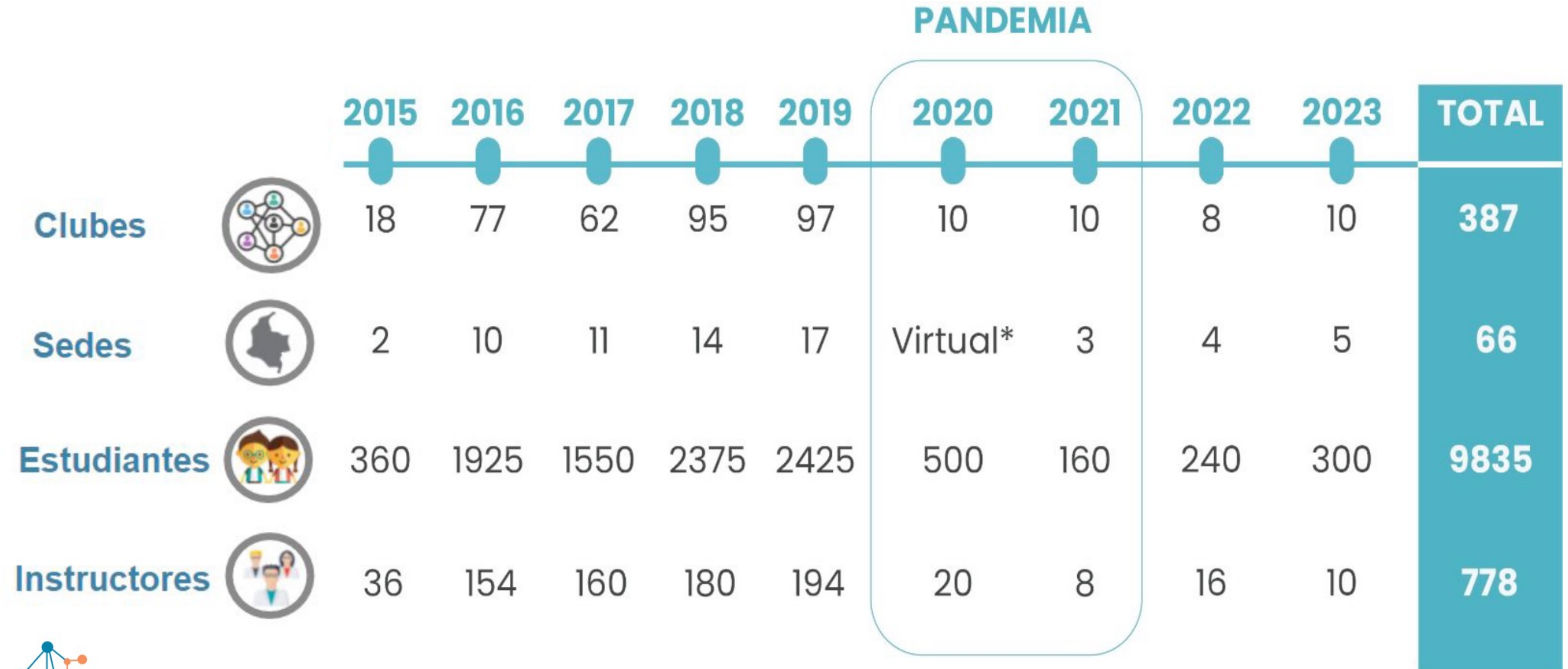
SCIENTELAB
Transformando Con Ciencia

Generando **transformación social** a través de la **ciencia**, la **tecnología** y la **innovación**.

Componentes de un Club de Ciencia



CdeC en números



**Career path time-line:
it is never a straight line**

2007 Visiting Researcher at MIT

2008 Complex systems summer school (Santa Fe institute)

2008/2009 B.Sc And M.Sc (Universidad de Los Andes)

2010 Harvard University (PhD student in Sys. Biology)

2013 **ARTICLE**
Received 5 Feb 2013 | Accepted 12 Sep 2013 | Published 5 Nov 2013 | DOI: 10.1038/ncomms3605
Tuning the range and stability of multiple phenotypic states with coupled positive-negative feedback loops
Maier S. Avendaño^{1,2,3}, Chad Leidy³ & Juan M. Pedraza^{1,3}

2014 **ADVANCE ONLINE PUBLICATION | NATURE METHODS**
Multiplexed 3D cellular super-resolution imaging with DNA-PAINT and Exchange-PAINT
Ralf Jungmann^{1,2,6}, Maier S Avendaño^{1,2,6}, Johannes B Woehrstein^{1,6}, Mingjie Dai^{1,3}, William M Shih^{1,4,5} & Peng Yin^{1,2}

2015 **ARTICLE**
Received 30 Jul 2014 | Accepted 9 Apr 2015 | Published 12 May 2015 | DOI: 10.1038/ncomms8147 | OPEN
Single-molecule super-resolution imaging of chromosomes and *in situ* haplotype visualization using Oligopaint FISH probes

2016 **ADVANCE ONLINE PUBLICATION | NATURE M**
Quantitative super-resolution imaging with qPAINT
Ralf Jungmann^{1,2,5,6}, Maier S Avendaño^{1,2,6}

2017 **SCIENTIFIC REPORTS**
Multiplexed Exchange-PAINT imaging reveals ligand-dependent EGFR and Met interactions in the plasma membrane
Jeffrey L Werbin¹, Maier S. Avendaño^{1,3}, Verena Becker¹, Ralf Jungmann^{1,3,4}, Peng Yin^{1,3}

2018 invaio
Science & Tech Symposium 2.0

FLAGSHIP PIONEERING

A LIFE SCIENCE INNOVATION INSTITUTION

Flagship Labs, Enterprise and Ecosystem



FLAGSHIP LABS

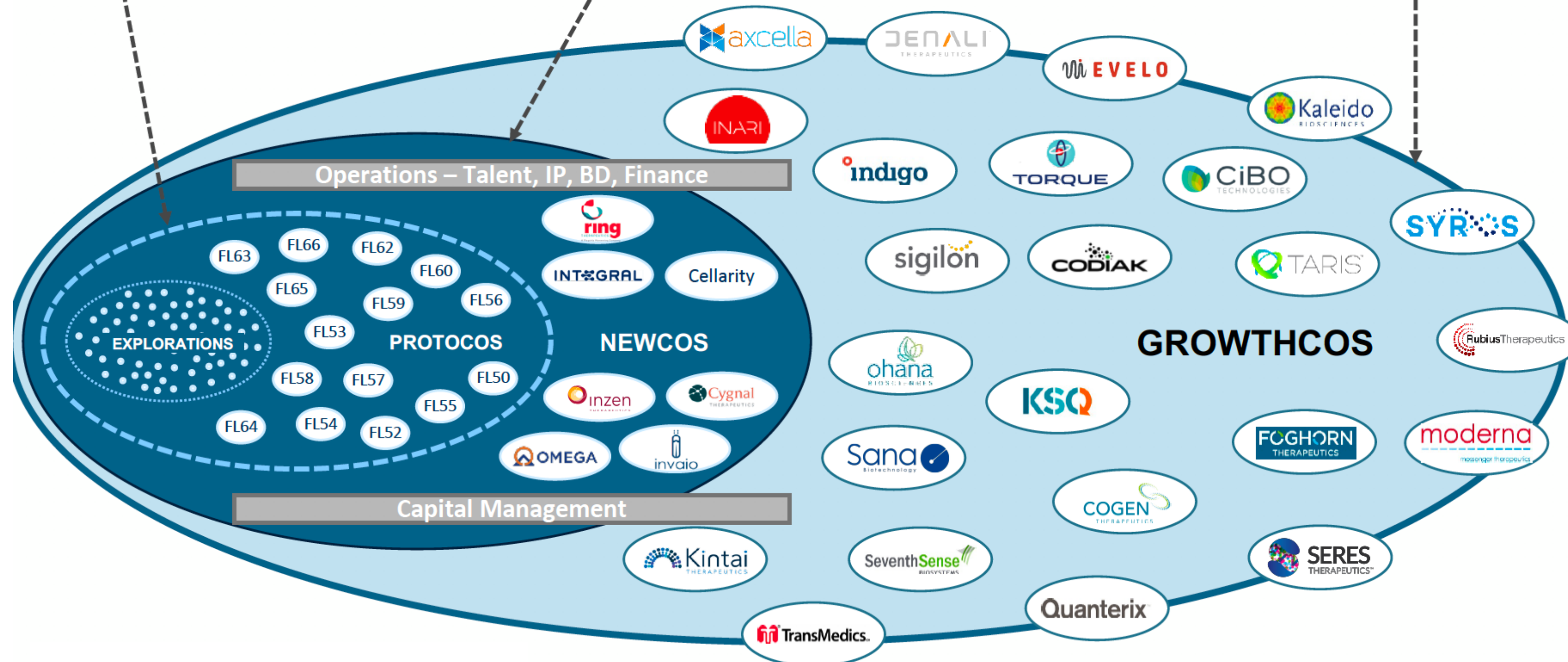
Experienced scientists, entrepreneurs and operational executives providing economies of scale to the creation and growth of our companies – Exploration and ProtoCompanies (>100 members)

FLAGSHIP PIONEERING ENTERPRISE

Includes wholly owned companies conceived by Flagship Labs team and led by Flagship executives during first 2-3 years (300+ members and 250K sq. ft. space)

FLAGSHIP PIONEERING ECOSYSTEM

Includes growth-stage companies spun-out of Enterprise (3200+ members and 1.3M sq. ft. space)



Reimagining the future of agriculture

invaiio™ Leaving every
acre better

A Flagship Pioneering Company



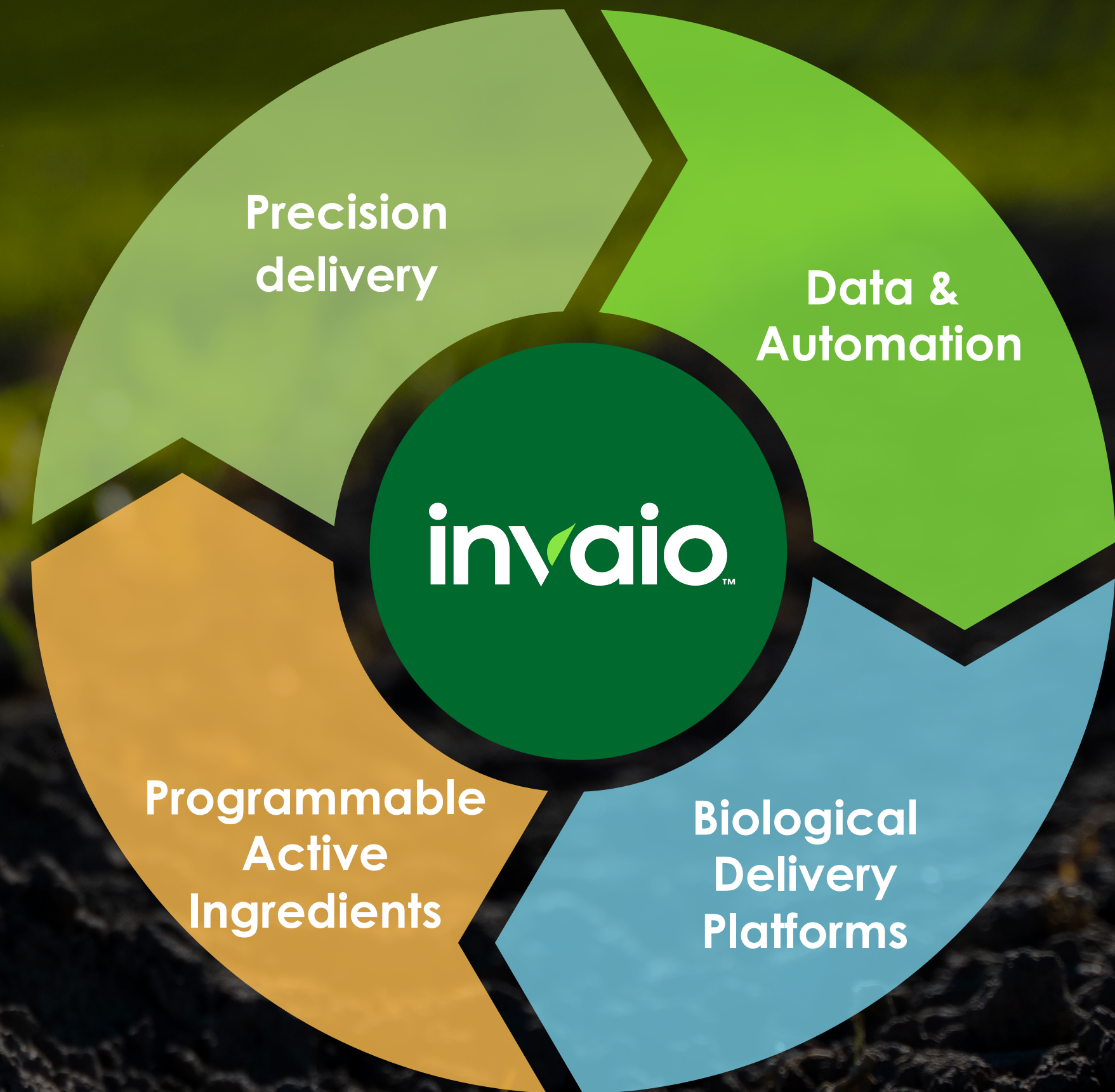
Agriculture and food production urgently need to change

- Less fertilizer & fewer chemicals per acre
- More targeted and effective use of biologicals
- Net carbon negative
- Digitally enabled
- Economically attractive for all
- Focused on consumer demands
- Fully traceable



Invaio is a BioPlatform company driving innovation for better agriculture

We leverage advances in human health and computing to enable a more sustainable future for global agriculture.



How We Innovate

Invaio Sciences

Founded in

2018

By Flagship Pioneering

Team of

140

biologists, agronomists,
engineers, digital pioneers
and industry experts

Patent applications filed

433

in 39 patent families

14 patents / allowances issued

Sites

7

HQ: Cambridge (US)
RTP North Carolina (US)
Basel (Switzerland)
Puglia (Italy)
Sao Paulo (Brazil)
Barcelona (Spain)
Ft. Pierce, Florida (US)



Crop health solutions

For all major markets



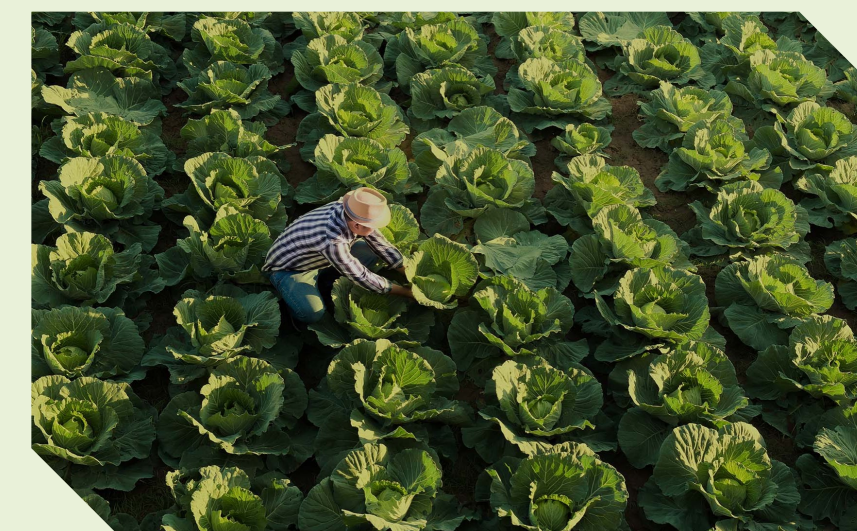
PERENNIAL CROPS

- Disease and vector control
- Tree nutrition & health
- Carbon sequestration



ROW CROPS

- Seed applied technologies
- Insect management



VEGETABLES

- Bacterial, fungal disease control
- Insect Management
- Food safety

Take Home Messages

La ciencia y el emprendimiento se pueden entrelazar para dar vida a soluciones que trascienden las barreras y crean un impacto duradero en la Sociedad

Un emprendedor científico:

Resuelve problemas, crea oportunidades y transforma desafíos en avances que benefician a toda la Sociedad

Convierte ideas innovadoras en realidades impactantes que moldean nuestro mañana

Lideran los avances hacia un futuro más brillante y sostenible

La colaboración es el pilar fundamental en el proceso de innovación.

**Creatividad es siempre el resultado del trabajo
equipo**



Gracias
mavendano@invaio.com