

SEMINAR "KNOWLEDGE AS AN ECONOMIC DRIVER: THE CASE OF ISRAEL"

«KNOWLEDGE AS AN ECONOMIC DRIVER:
THE CASE OF ISRAEL»

ISRAEL-CATALONIA:
WHAT CAN WE LEARN?
HOW CAN WE COLLABORATE?

Barcelona, October 2nd 2013

Joacp M. Martorell | Rodon
Director general for Research



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[illegible]Source: Internet, Internet Archive, <https://www.archive.org>. RE: IFC/CIPO/2016/01

Can we implement the learnings?

What we need:

ENVIRONMENT

TIME.



environment:
the capability to
apply own
policies in an
"enabling"
State

What can we learn?

- **TECHNICAL POLICY**
 - **INNOVATION CULTURE**
 - Incentives to R&D
 - Fostering entrepreneurial spirit: practical training and mentorship at all levels, for all kind of people
 - Tax policy open to innovation
 - **PERSONALITY**
 - Top-in industry relationships: Industrial HRM links: Program (HR) to set HR goals
 - Exporting the latest study body to the latest developments in the industry
- **GOVERNANCE**
 - **PRIVATE INSTRUMENTS FOR UNIVERSITIES**
 - Technology Transfer Companies at Universities (TTA, Unisys, etc.)
 - Vision: more than 500 technology business, cover \$2.6 bn in worldwide sales
 - **FLEXIBLE MODEL**
 - Reduced % of tenure tracks for admin staff at universities



And yet, can we do something?

"Nobody made a greater mistake than he who did nothing because he could do only a little." (Edmund Burke - Dublin 1729 - 1797).



A KTT STRATEGY FOR CATALONIA

The agents

- **Catalan**
Universities can create their "ownYixiaohu":

OF WILL

100



The roadmap



السلامة

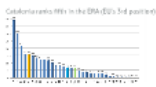
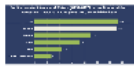
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CONTROL PHIDS

administrative barriers
to the use of mobile devices

gan

CATALONIA: EXCELLENCE IN RESEARCH



WRAP-UP AND LEARNINGS

- We can't copy and paste: Israel's conditions are unique
- Israel's experiences and values can inspire our strategies
- No innovation without risk

How can we collaborate?

- MoU between the Government of Israel and the Government of Catalonia (Agreements at Bilateral level)
- Agreements between Catalonia and Academic / Research Institutions. Example: Weizmann Institute
 - Entrepreneurship training to Catalonia PhD students (funding currently allocated at PI program, starting 2014)
 - Pre-and post-doc exchange (1/4 months "mini-research program")
 - Joint meetings
 - Joint Program at H2020 (co-funding)
- Agreements to provide Synchrotron Light services to IR researchers




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Bilbao, October 2nd 2013

Josep M. Martorell | Director
Director general for Research

 Generalitat de Catalunya
Departament d'Innovació, Recerca i Turisme
Direcció d'Innovació i Professionalitat i Recerca

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AND
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An illustration of a city skyline with various buildings. In the foreground, there are two large interlocking gears, one blue and one pink. A person is climbing a ladder that is part of the pink gear. The sky is blue with white clouds. The entire scene is framed by a thick orange border.

What can we learn?

- **Startups and policies**
 - **Start-up culture**
 - Transition to start
 - Entrepreneurial mindset: practical training and mentorship at all levels for all kind of people.
 - The path to entrepreneurship
 - **Networks**
 - Industry-industry relationships (Innovation Programs) (MFA) and business
 - Encouraging the large student body to the latest developments in the industry
 - **Governance**
 - **INNOVATION POLICY FOR UNIVERSITIES**
 - Technology Transfer Comparison at universities (DAA, Villanova) – Villanova has a 100 technology licenses – over 1000 innovation/sales employees.
 - **INTELLECTUAL PROPERTY**
 - Business & law tracks for a clean exit or exit strategy



AKTT STRATEGY FOR CATALONIA

The agency + Catalan Universities can create their "own" assets?

A MATTER OF WILL

The policies


- DISABLE (SILLIG)
- FACILITATE (INCENTIVES)
- FUND (RESOURCES)

The roadmap

- INDUSTRIAL POLICY
- Reverse legal and administrative barriers
- Matching funds / funding program

And yet, can we do something?

"Nobody made a greater mistake than he who did nothing because he could do only a little." (Edmund Burke - Dublin 1729 - 1797).

A small, square, sepia-toned portrait of Edmund Burke, showing him from the chest up, wearing a dark coat and a white cravat.

CATALUNYA: EXCELLENCE IN RESEARCH

Weight of Catalonia within the EU

Entity	Weight (%)
EU	100
Spain	100
Catalonia	100

EU FP7 funding by country

Country	Funding (M€)
Catalonia	100
Spain	100
EU	100

Catalonia ranks 4th in the EU R&D's best position

Country	R&D Intensity (%)
Catalonia	100
Spain	100
EU	100
Germany	100
France	100
Italy	100
UK	100
Sweden	100
Netherlands	100
Belgium	100
Austria	100
Portugal	100
Greece	100
Poland	100
Czechia	100
Slovakia	100
Slovenia	100
Lithuania	100
Latvia	100
Estonia	100

R&D intensity (GVA/1000 inhabitants)

Region	2007	2010
EU	100	100
Spain	100	100
Catalonia	100	100

How can we collaborate?

- Multi between the Government of Israel and the Government of California (agreements at different levels)
- Agreements between California Academics / Research Institutions, Example Weinman Institute
 - Entrepreneurship training to California PhD students (funding currently allocated at 17 programs, starting 2014)
 - Pre-and-post-doe exchange (1/4 months "immersion program")
 - Joint writings
 - Joint Program at HIRSH (undergoing)
- Agreements to provide Synchrotron Light services to US researchers



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Secretaria d'Universitats i Recerca

ISRAEL-CATALONIA: WHAT CAN WE LEARN? HOW CAN WE COLLABORATE?

	ISRAEL	CATALONIA
AREA	27,000 km ²	32,000 km ²
POPULATION	7.9 million	7.6 million
GDP/HAB	\$ 33,282	27,248 € (= \$36,856)
PUBLIC UNIVERSITIES	8	12
# UNIV. IN AWRU'S TOP 100	3	0
# UNIVE. TOP 100 UNDER 50 YEARS	0	3
PUBLICATIONS NAT&SCI/THOUSAND INHAB. (2008-12)	33.4	32.8
ERC GRANTS / MILLION INHAB.	29.8	15.2
FP7 FUND ATTR.	647 M €	672 M €
% ACADEMIC DEGREES/POP	20%	15%
R&D EXPENDITURE (%GDP)	4.4	1.5
START-UPS	4.800	250
APPLICATIONS TO EPO/BILLION € GDP	13.1	2.7
UNEMPLOYMENT RATE	6.5%	24%

Sources: Idescat, Eurostat, Wikipedia, www.ec.europa.eu, INE, ERC, CERCA, DECO



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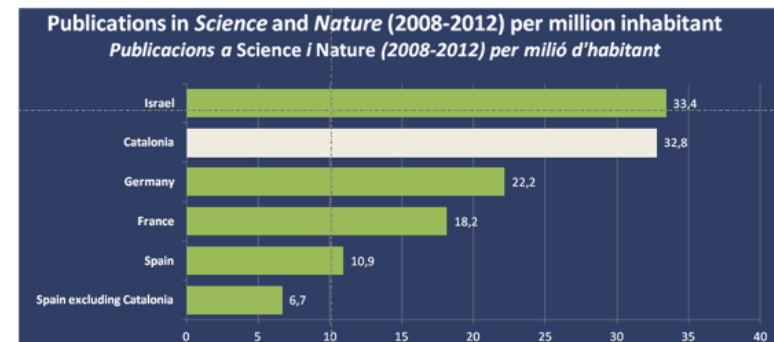
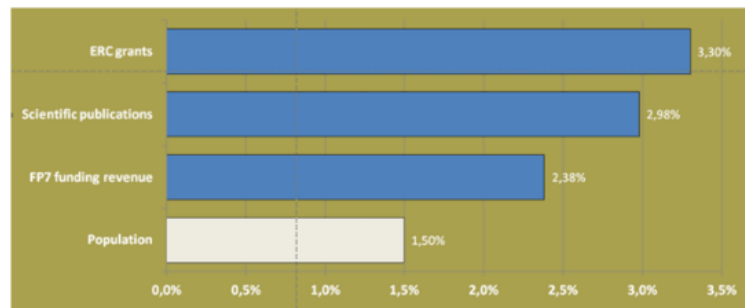
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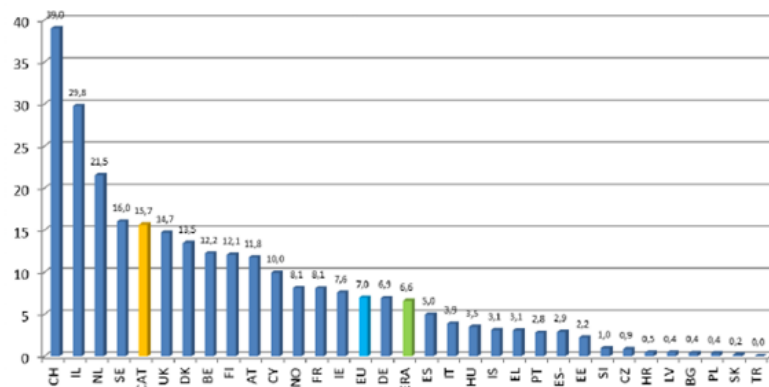
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CATALONIA: EXCELLENCE IN RESEARCH

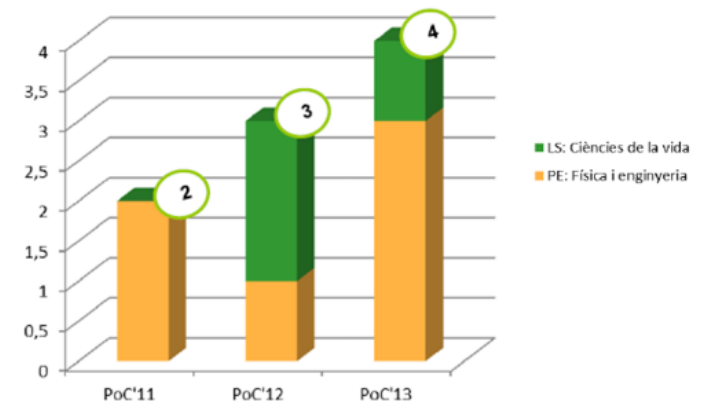
Weight of Catalonia within the EU



Catalonia ranks fifth in the ERA (EU's 3rd position)

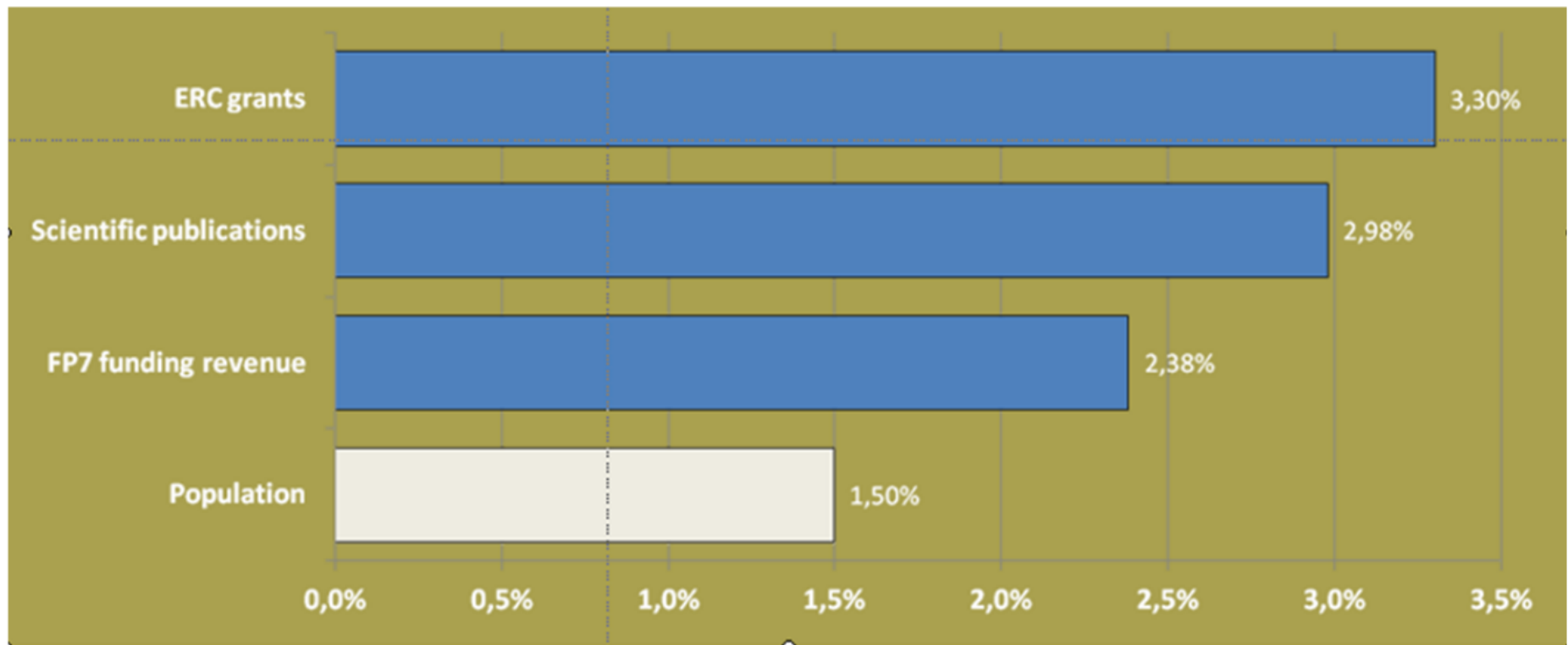


Proof of concept, calls 2011-2013: 6.3% of ERA



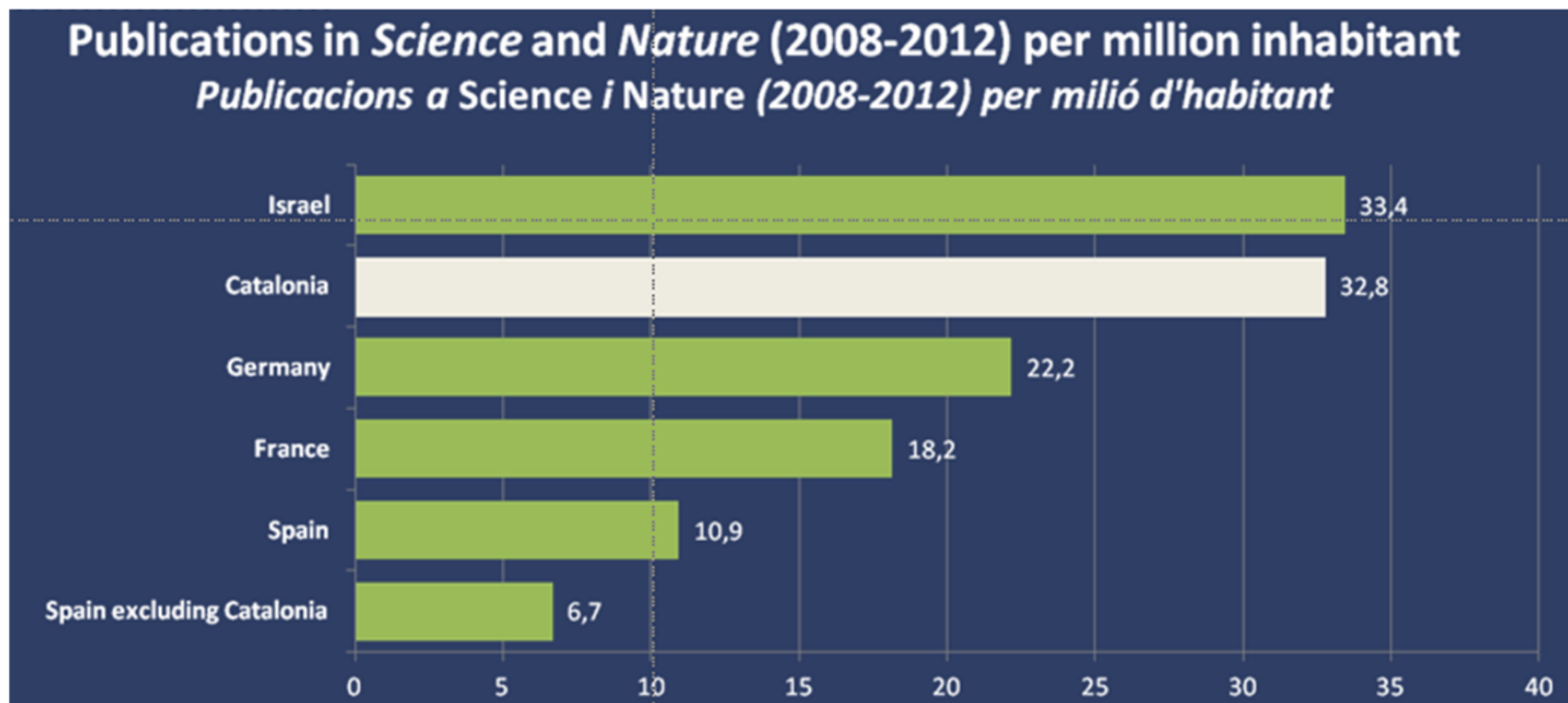
CATALONIA: EXCE

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NCE IN RESEARCH



0,0%

0,5%

1,0%

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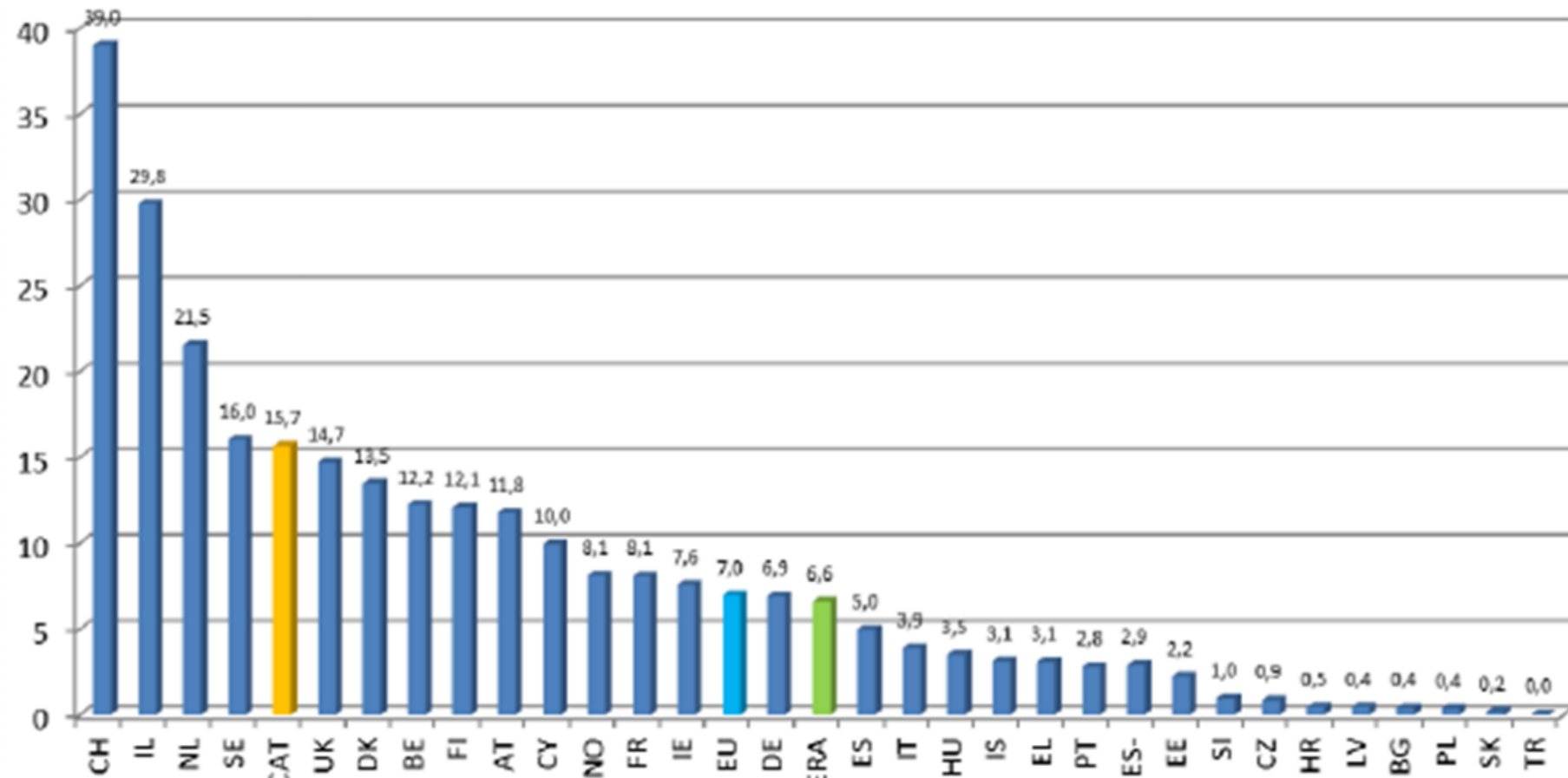
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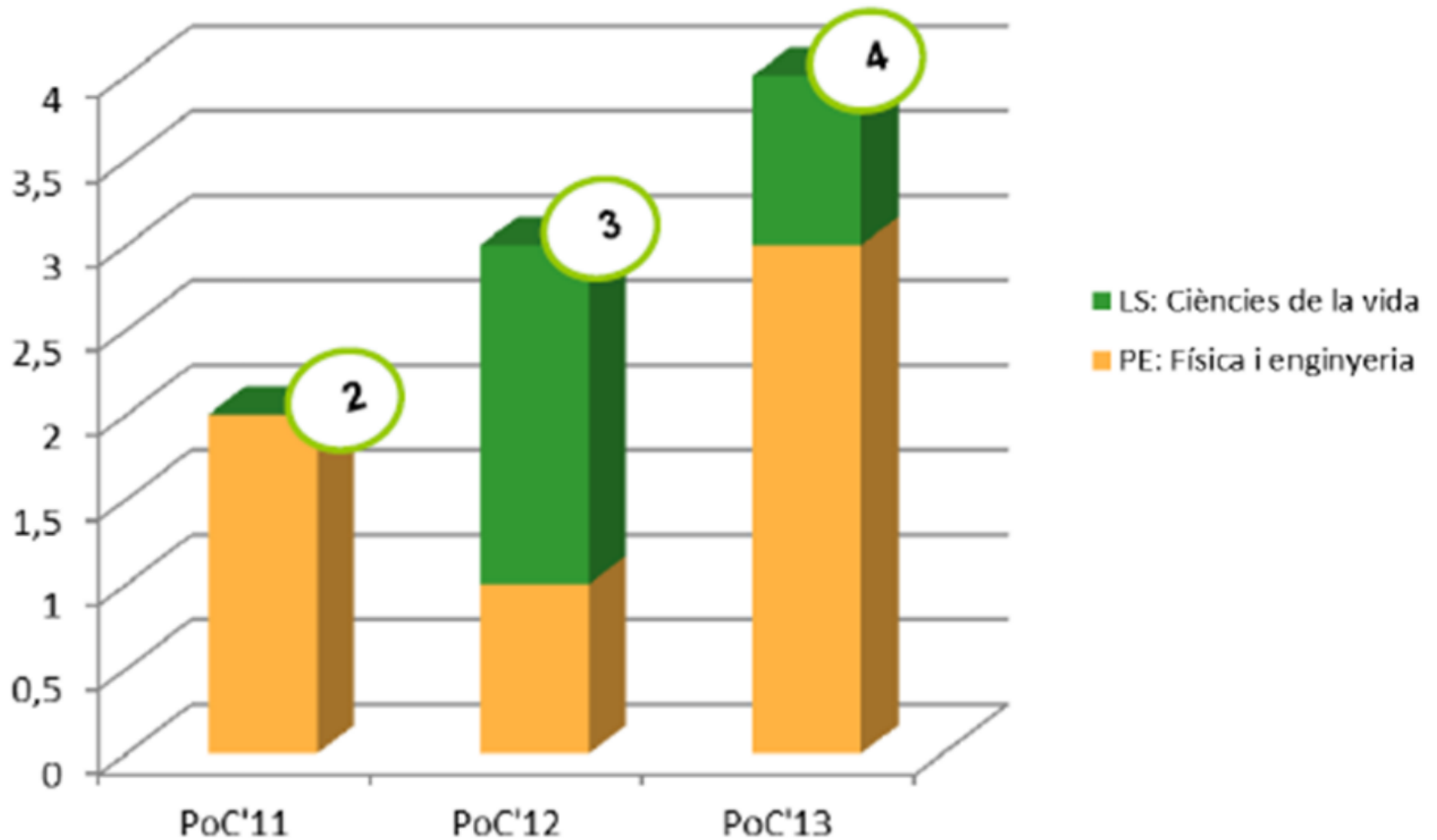
3,0%

3,5%

Catalonia ranks fifth in the ERA (EU's 3rd position)



Proof of concept, calls 2011-2013: 6.3% of ERA



What can we learn?

- Tools and policies
 - INNOVATION CULTURE
 - Incentives to KTT
 - Fostering entrepreneurial spirit: practical training and mentorship at all levels, for all kind of people.
 - Tax policy open to innovation
 - PERMEABILITY
 - University-Industry relationships: Industrial Affiliates Program (IAP) to set bridges
 - Exposing the large student body to the latest developments in the industry
- Governance
 - PRIVATE INSTRUMENTS FOR UNIVERSITIES
 - Technology Transfer Companies at Universities (TAU, Yisum, etc): Yisum: more than 530 technology licenses ; over \$2 billion in worldwide sales every year.
 - FLEXIBLE MODEL
 - Reduced % of tenure tracks for admin staff at universities



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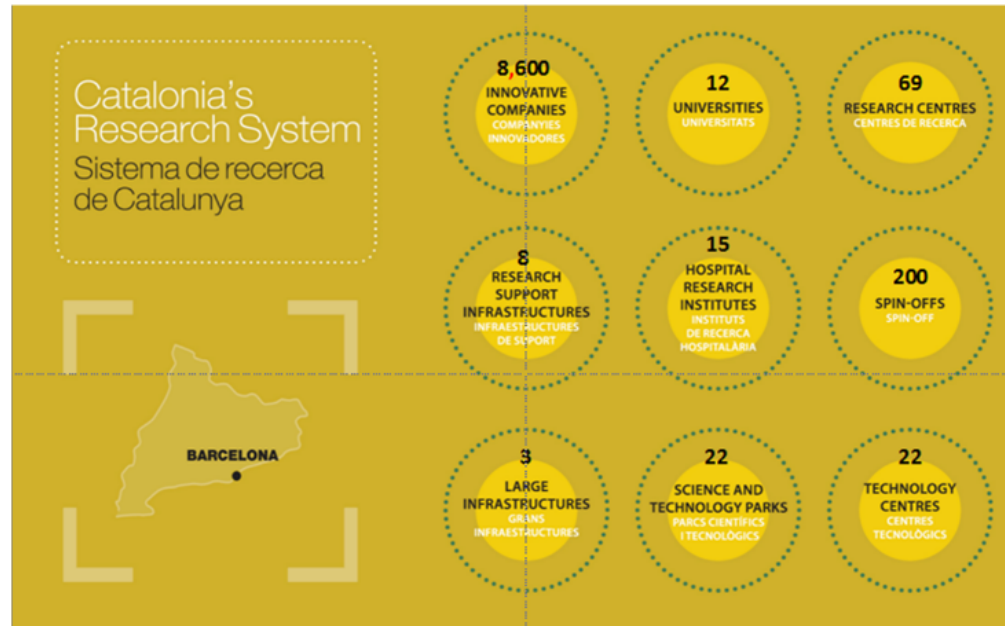
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- Catalan

Universities can
create their
"own Yissum":

A MATTER
OF WILL

A KTT STRATEGY FOR CATALONIA



2

The roadmap



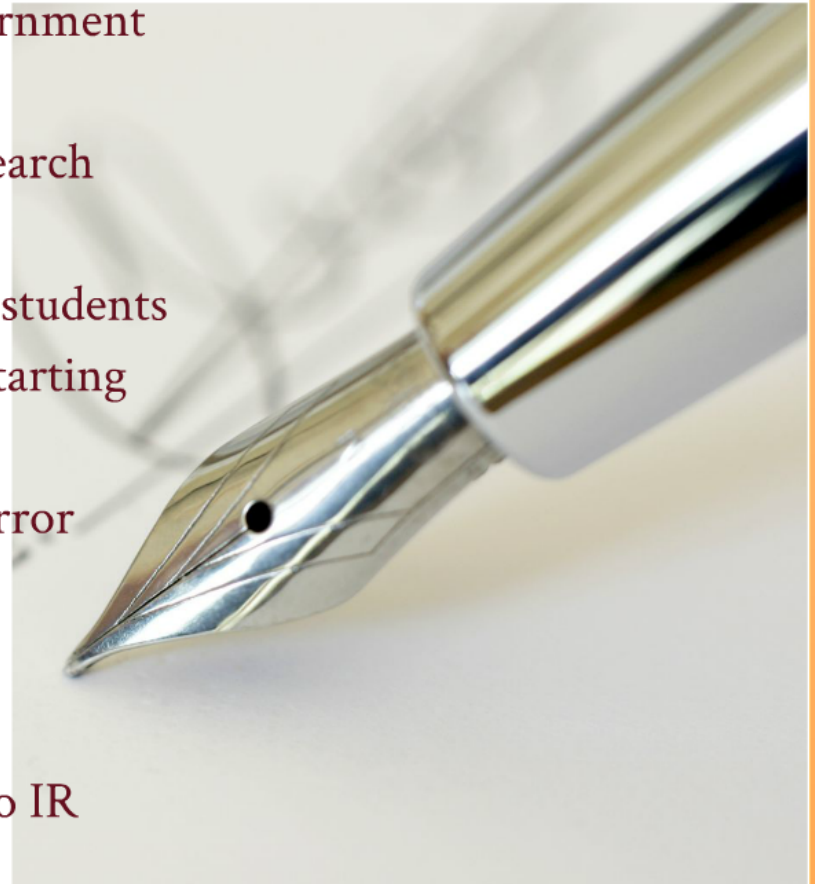
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The policies

- ENABLE (SKILLS) → INDUSTRIAL PHDs
- FACILITATE (INCENTIVES) → Remove legal and administrative barriers
- FUND (RESOURCES) → "Matching funds" funding program

How can we collaborate?

- MoU between the Government of Israel and the Government of Catalonia (agreements at different levels)
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