

Marie Skłodowska-Curie Actions

**Research and Innovation Staff Exchange (RISE)
Call: H2020-MSCA-RISE-2014**



INPACT

Innovative peptides against cancer and pathogenic bacteria
- with advances in science, biopharmaceutical drug development,
product market targeting, training, and communication.

Miguel A. R. B. Castanho

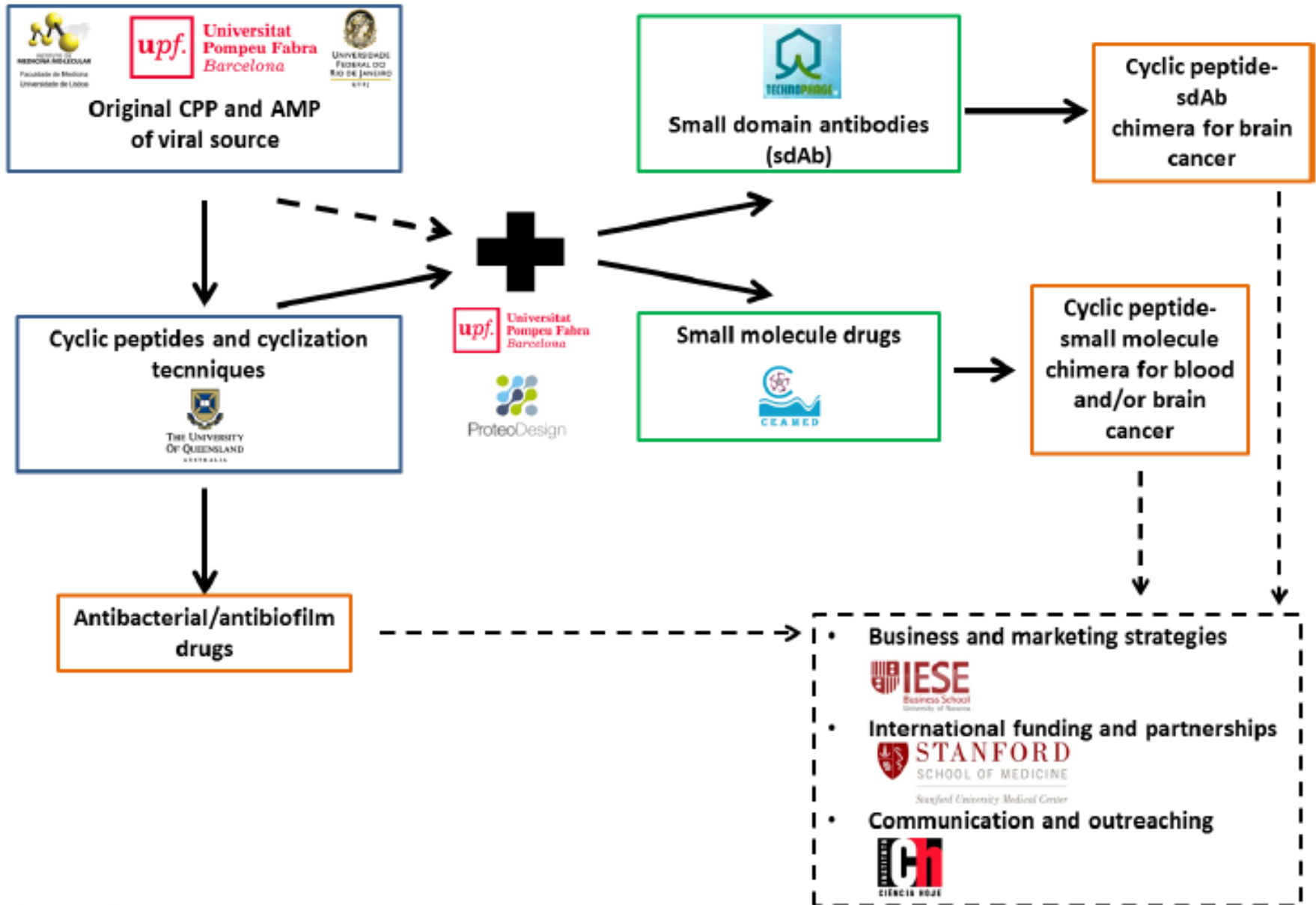


FACULDADE DE
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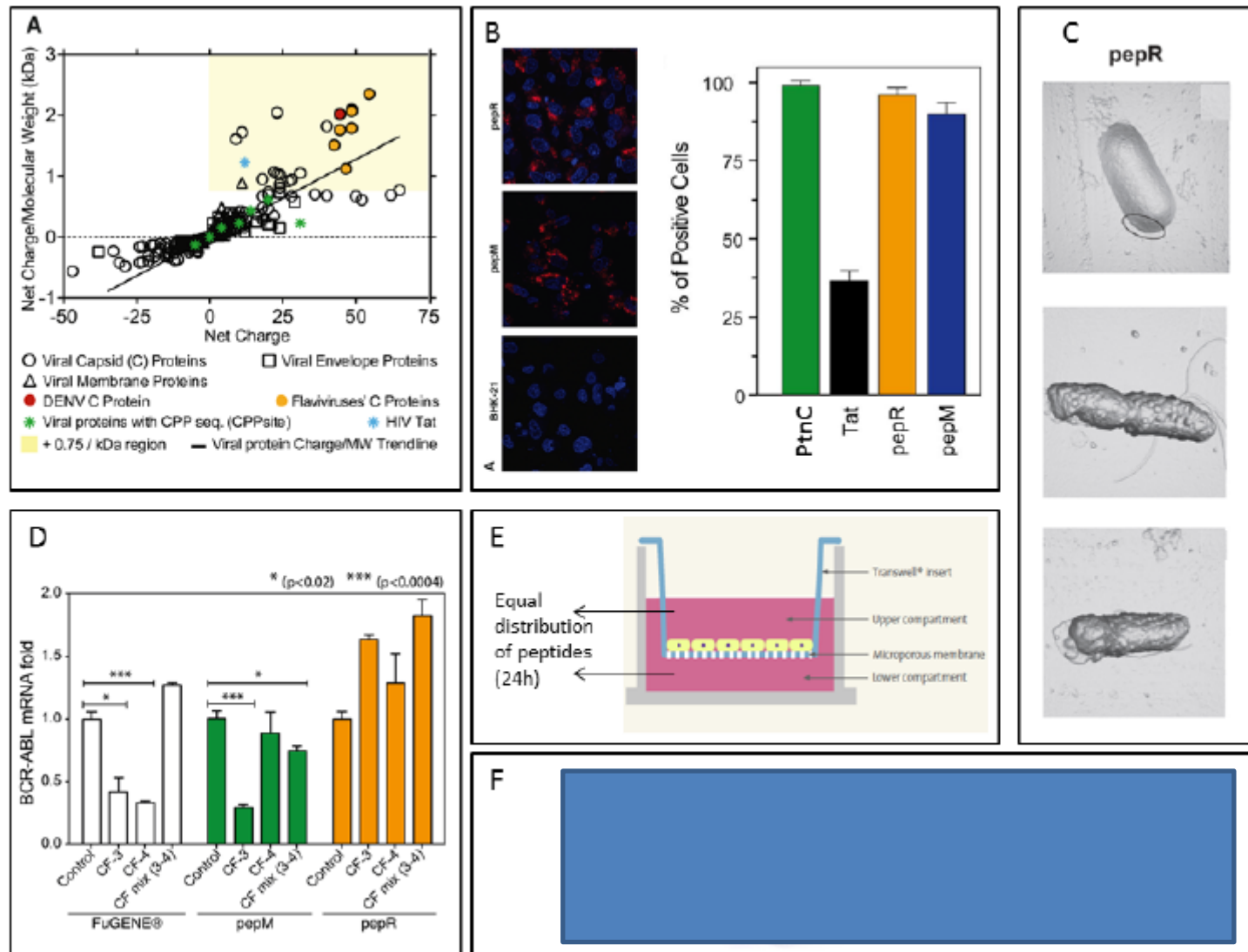


Instituto
de Medicina
Molecular

A consortium of experts with own technology



A consortium built on previous collaborations and results



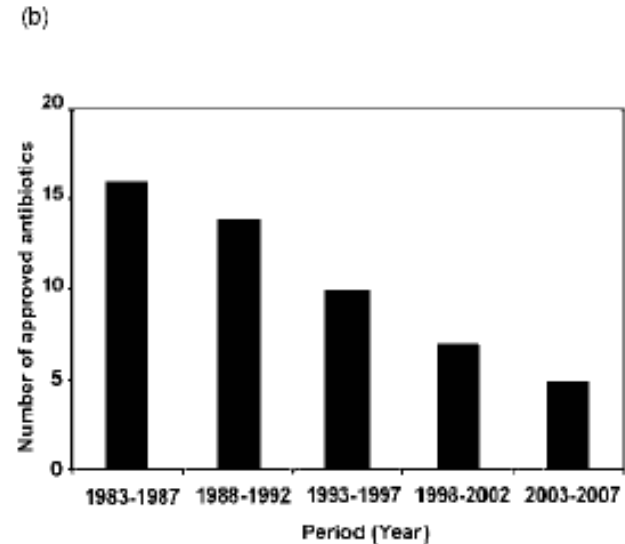
(Part of the data in this figure is yet unpublished – **privileged confidential information**)

Addressing specific needs

(a) **Development of resistance**

Penicillin (1942) Streptomycin (1947) Tetracycline (1952) Vancomycin (1958) Methicillin (1959) Cephalothin (1964) Gentamicin (1967) Cefotaxime: FDA approved (1981) Imipenem, 1st carbapenem (1984) Linezolid, first oxazolidinone: FDA approved (2000)	Penicillinase spread (1945) Transferable penicillinase in <i>Stenococcus</i> (1976) Streptomycin resistance (1947) Tetracycline resistance (1956) Rarely used until the mid 1980s Vancomycin-resistant <i>Enterococcus</i> (VRE) (1987) Vancomycin intermediate resistant <i>S. aureus</i> (VISA) (1996) Methicillin-resistant <i>S. aureus</i> (MRSA) (1961) Community-acquired MRSA (1999) Cephalothin resistance: 1st cephalosporin (1966) Gentamicin resistance (1970) Cefotaxime resistance (1983) First outbreak of 3rd cephalosporin-resistant <i>K. pneumoniae</i> (1987) Carbapenem-resistant <i>Acinetobacter baumannii</i> (1998) Linezolid-resistant <i>S. aureus</i> and VRE (2001)
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Development of antibiotics





RISE vs ITN:

- » ITN: 2 ESR, 3 yrs = 72 fellows*months (discount rotations, outreaching, courses, etc)
- » Success rate
- » Ease of combination with on-going projects
- » Administrative burden and simplicity of the funding scheme

