The University Computer Science research unit: getting organized inside and outside.

Gaétan Hains, LACL
Université de Paris-12 (part of Paris-Est)
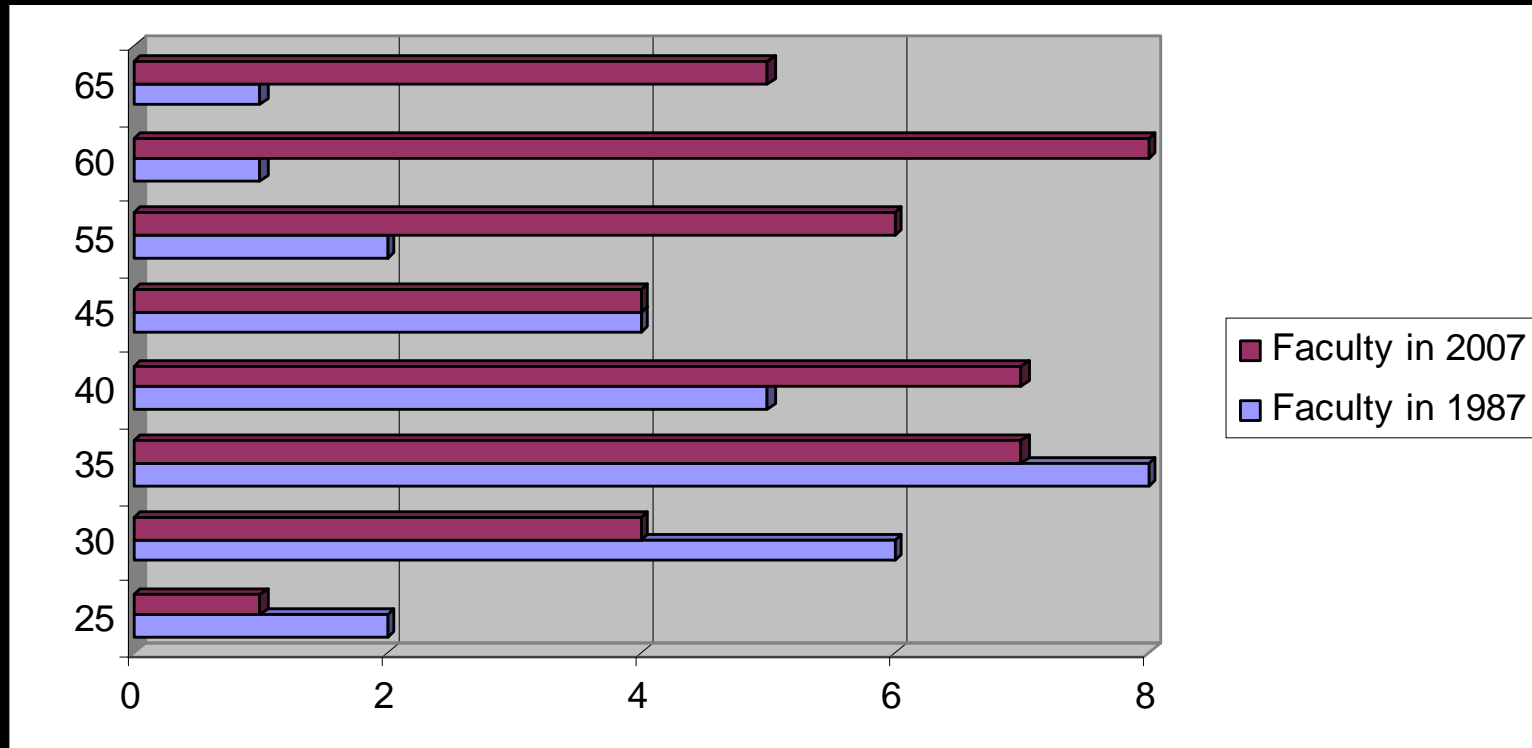
Laboratoire d'Algorithmique Complexité et Logique EA 4213

UNIVERSITE
PARIS XII
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MARNE

CONNAISSANCE
ACTION

➢Computer Science now a recognized science
➢Our faculty demographics are stabilizing
➢C.Sc. (research) unit must penetrate decision instances
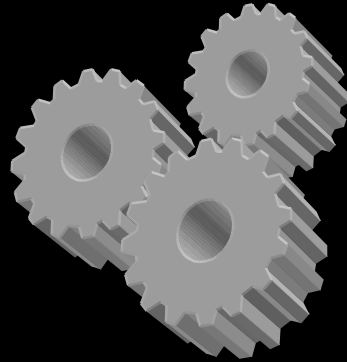➢C.Sc. (research) unit must organize itself accordingly

YES BUT :

•How much does that cost ?

•What is it worth for our colleagues ?

30-person Computer Science Unit: 20 years older

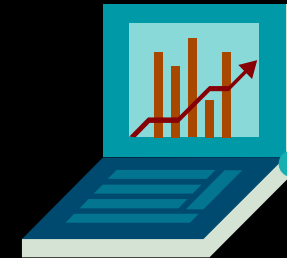More full profs, need more technicians, more doctoral students, increased funding ?
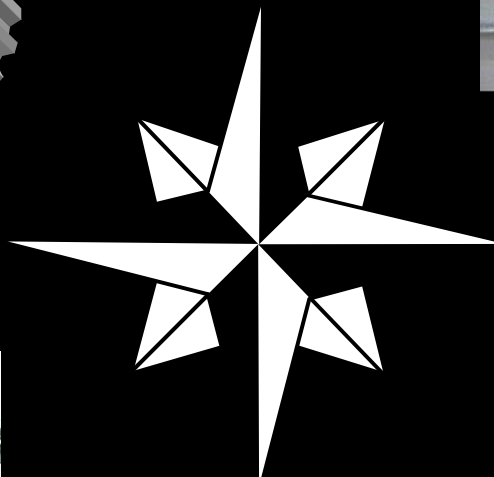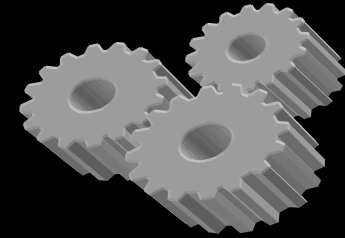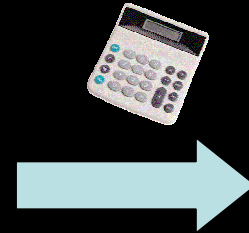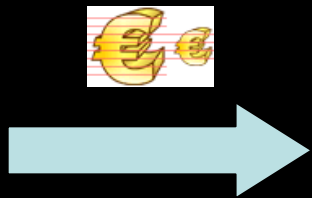

Research

Teaching

Buildings, floor space

External funding

What strategic choices ?

Organize the small unit like a large or private lab.
Balance cost of effort vs gain in resources

What is the cost / gain ?
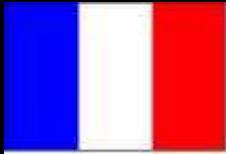Roughly: its salary cost

Who pays for our research ?

EC

Government

Funding agency

Regional gov't

Local gov't

City

Research institutions

The University

UNIVERSITE PARIS XII VAL de MARNE — CONNAISSANCE ACTION

Regional cluster

SYSTEM@TIC PARIS-REGION — Pôle de compétitivité

Partner companies

Helios Biosciences

UbiStorage
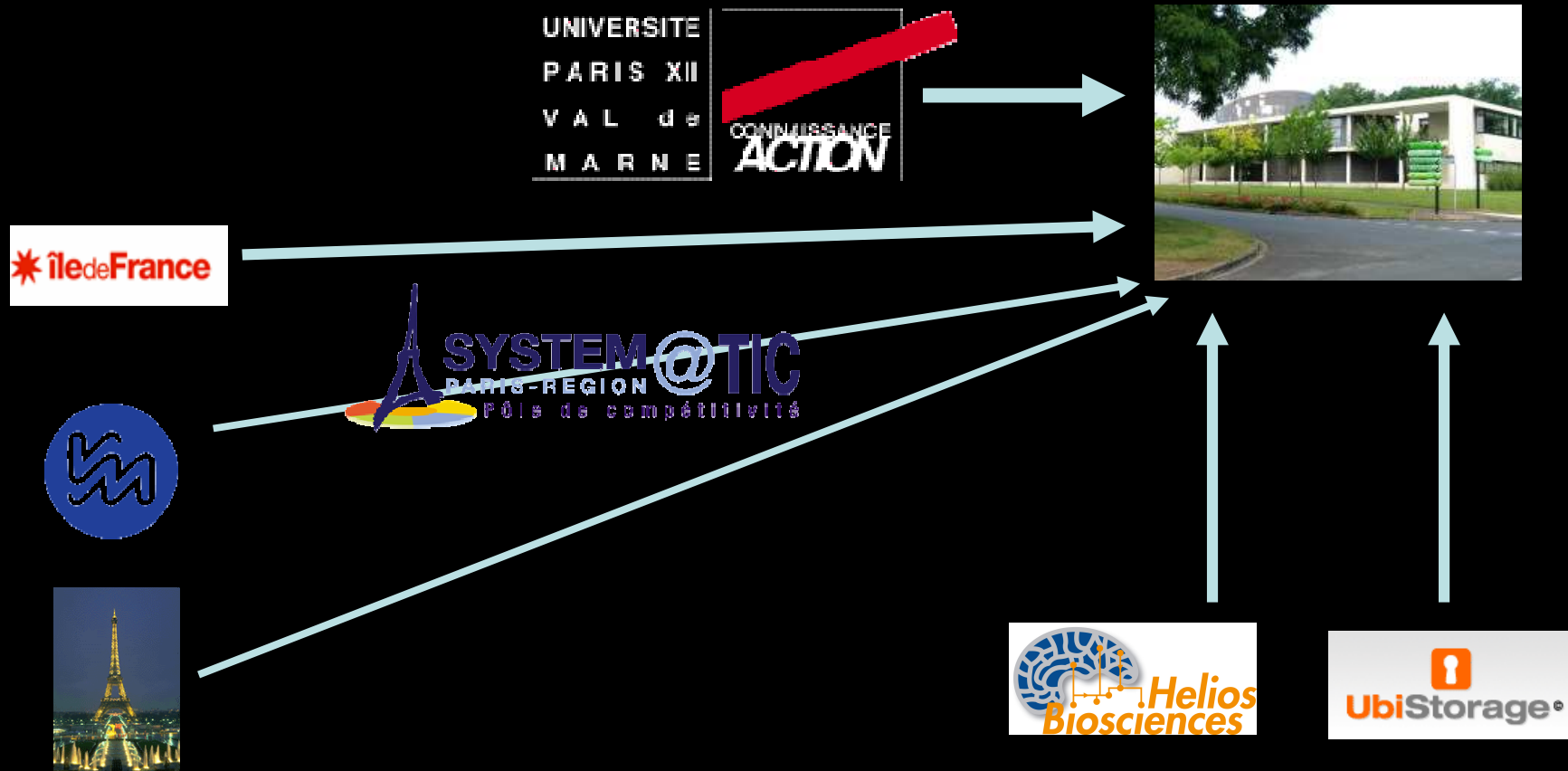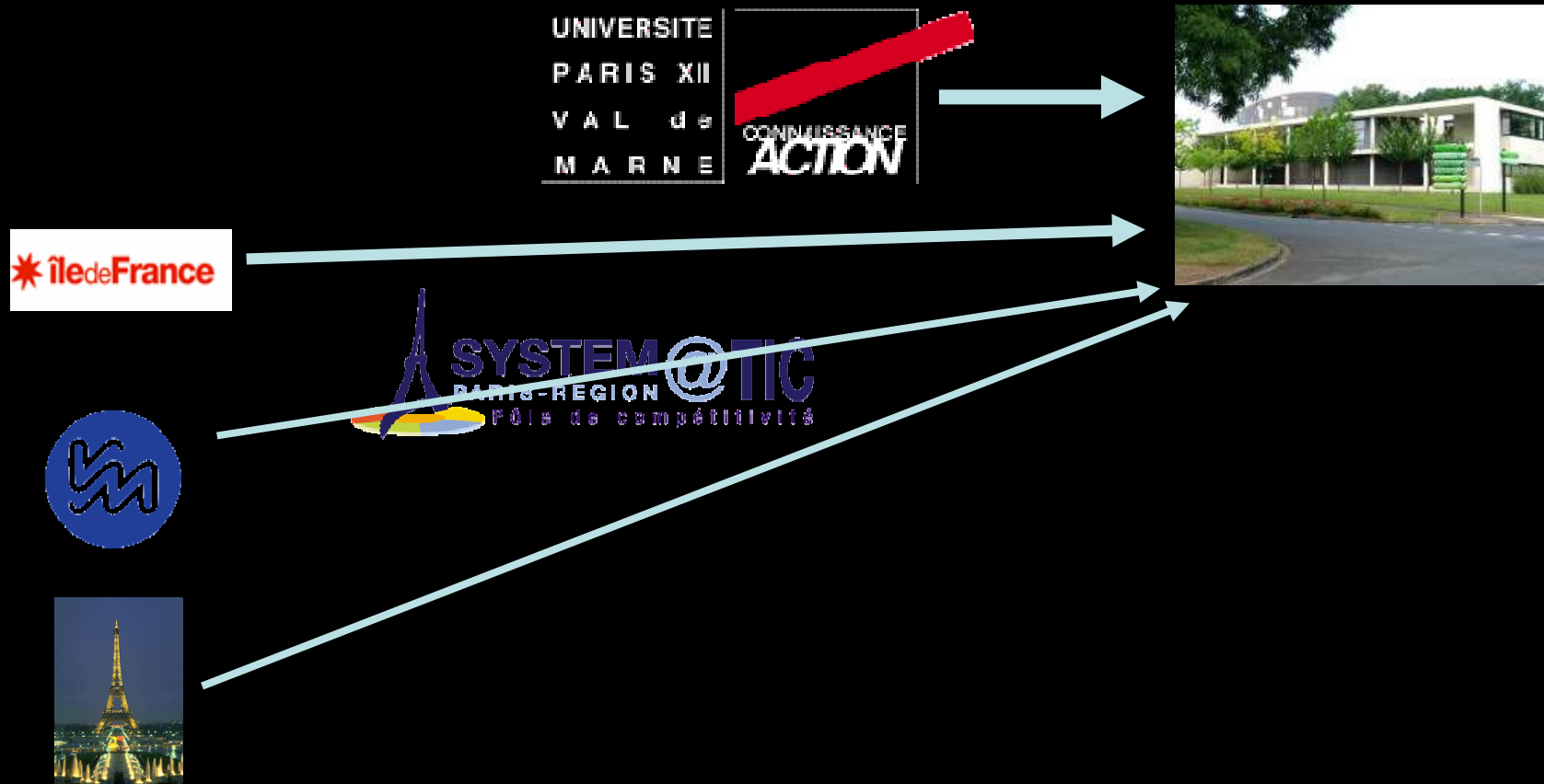
A lab "public relations" officer

- Organizes official publications
- Communicates with the local/national media
- Improves visibility with companies and local governments
- Interacts with the University P.R.
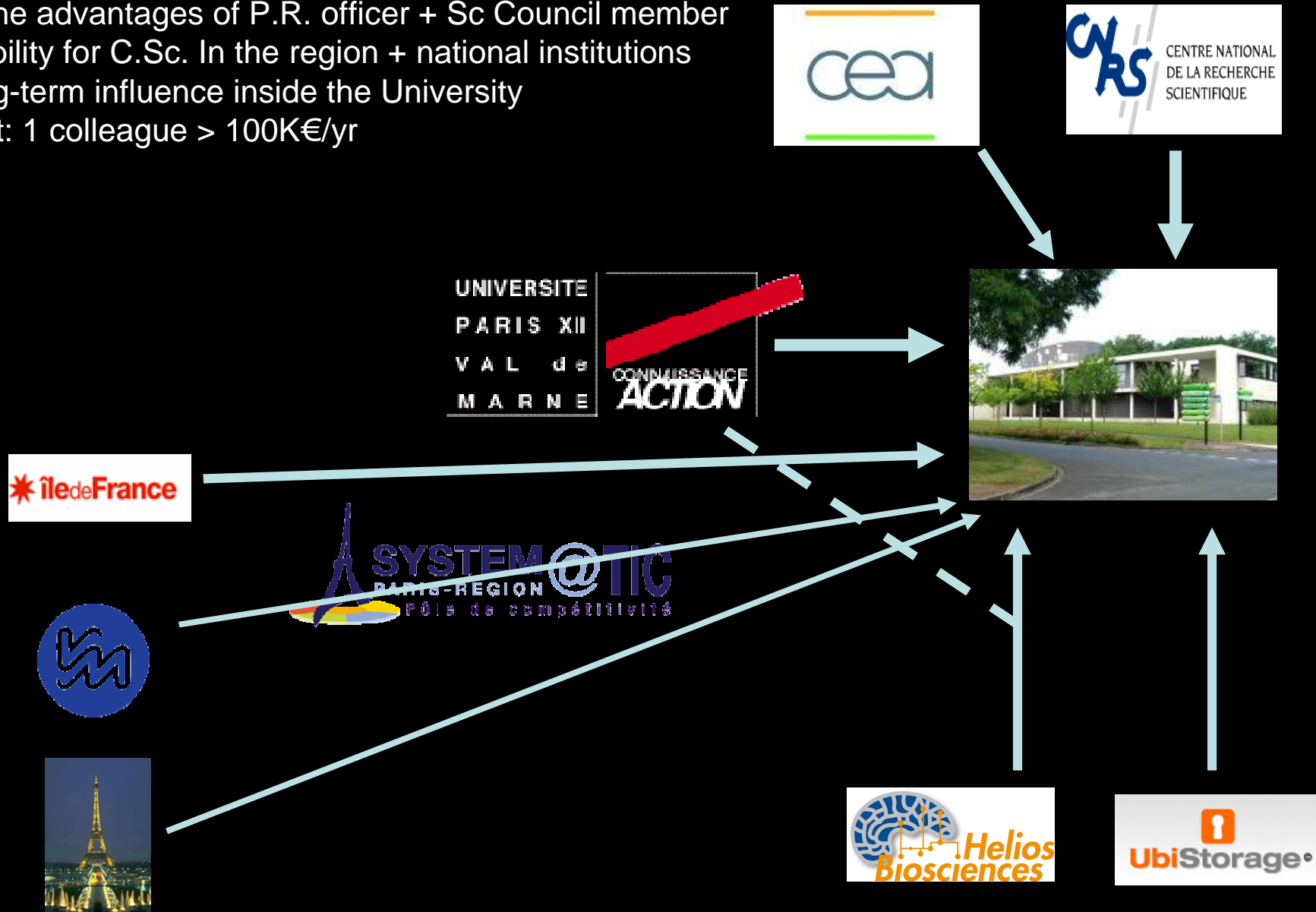- Cost: 1 colleague-day / month << 10K€

1 colleague on University Scientific board / board of directors

- Leverages all local applications for resources:
- New offices, new buildings
- New faculty positions
- Local gov't support for resources shared by several labs
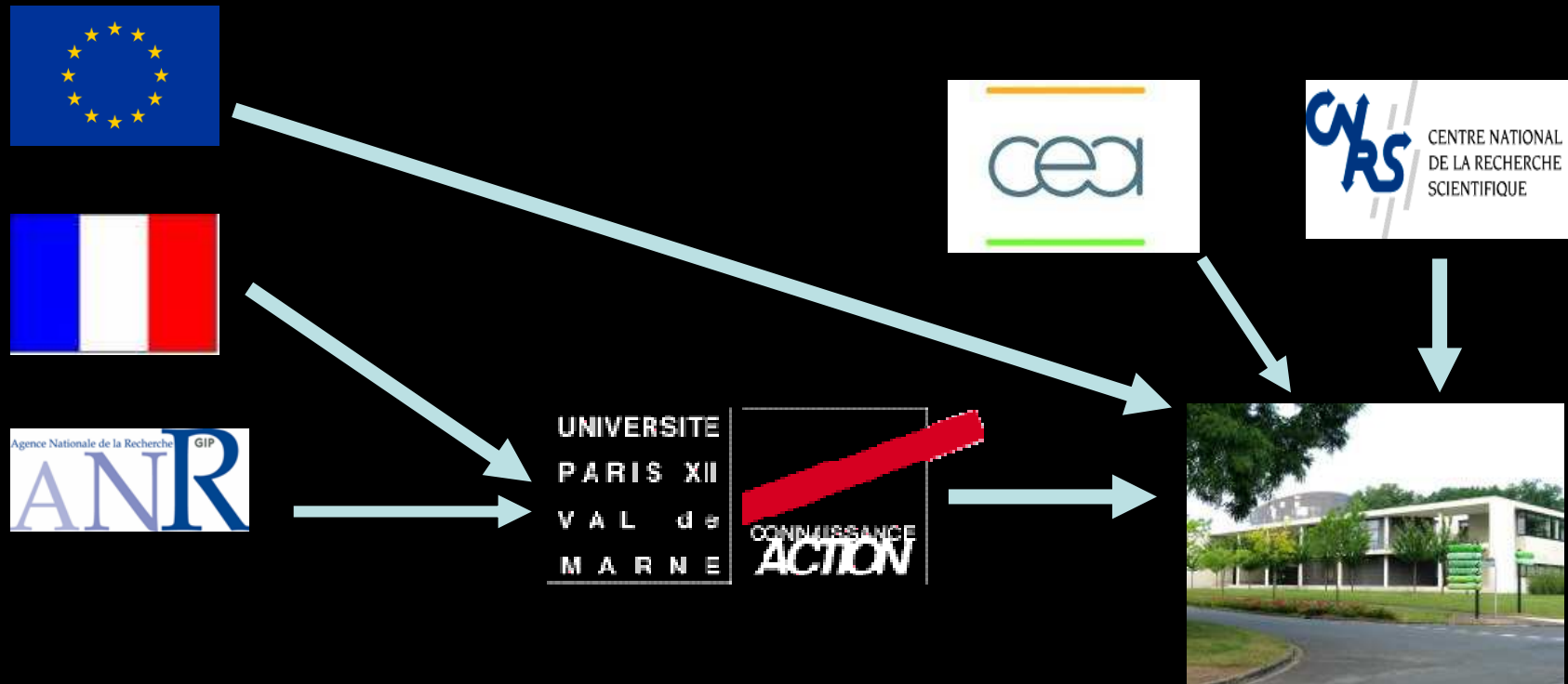- Cost: 2 colleague-days / month << 20K€/yr

Computer Scientist becomes University President

•All the advantages of P.R. officer + Sc Council member
•Visibility for C.Sc. In the region + national institutions
•Long-term influence inside the University
•Cost: 1 colleague > 100K€/yr
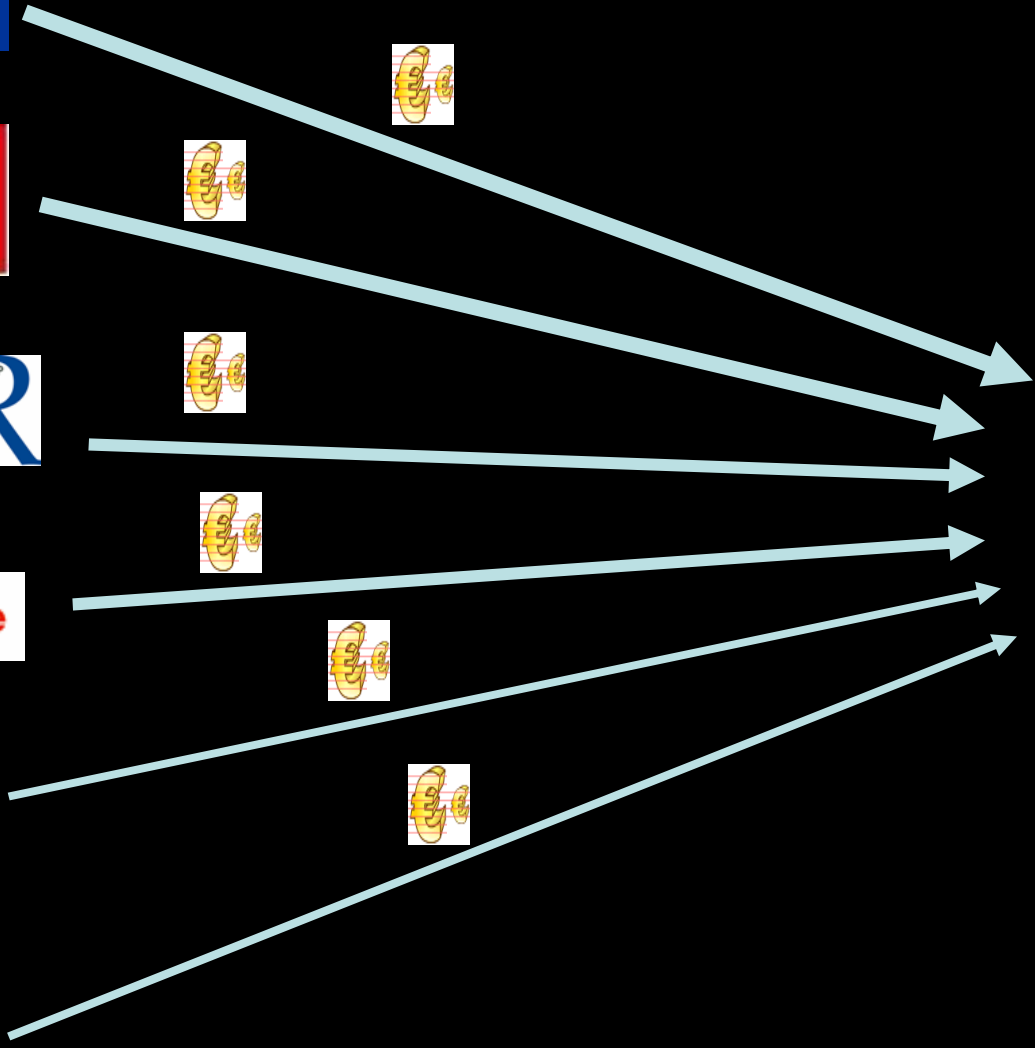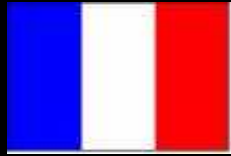
Value of basic research ?

- **At least the value of resources it brings in !**

- FP7 + national basic research funding > 60 K€/yr
- 1-month visiting professor / year > 10K€/yr
- Partnership with national research institutes >> 20K€/yr
- Internal Habilitation/Full-Prof promotions >> +30K€/yr
- May influence new job creations >> +100-200 K€/yr
- Two new PhD scholarships / yr ~ 160K€/yr
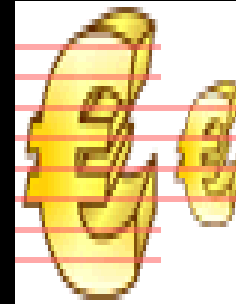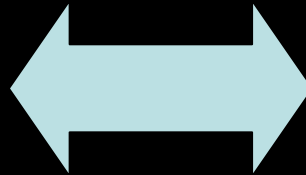- Cost if 1/3 colleagues on it: 500K€/yr

A. Church

PC cluster agrees with most funding sources:
It's a visible equipment

PC cluster is scalable: up and down

20K€

40K€

PC cluster convertible against internal resources

Servers

Storage units

Switches

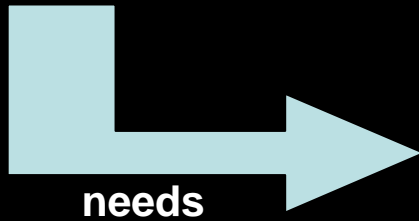# PC cluster supports requests for space and manpower

Cluster
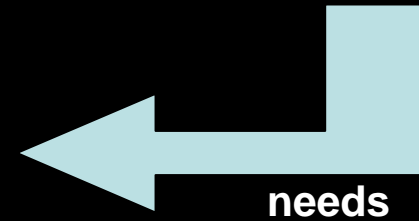
needs

Engineer

needs

needs

Floor space

The PC cluster: a lab manager's best friend

Cluster

Manager

Conclusion: get organized

- **Boost public relations**

- **Step on the Scientific Board**

- **Computer Scientist for President ?**

- **Boost externally funded research: basic & applied**

- **Obtain and maintain mid-size equipments + staff**

- **Increase floor space for the lab**

- **… your ideas here …**

And reap benefits for/of our research