# Female scientists in Catalan streets and schools

Miquel Duran, Sílvia Simon, Cristina Berga, Eva Cabré, and Martina Rodríguez

Càtedra de Cultura Científica i Comunicació Digital Institut de Química Computacional i Catàlisi Universitat de Girona







# Wikidata + OpenStreetMap

- Wikidata is a Knowledge Graph that answers "Where is this?"
- OSM is a geographical database that answers "What is here?"
- They are interwinkled: osm.wikidata.link tool





## WD and OSM

- WD: instance of (P31) street or educational center
  - Eponym: named after someone (P138)
- OSM tags: amenity=school / highway=\*
  - Eponym: name:etymology:wikidata=Qxyz





## Importing in WD, mapping in OSM

- Open Data: regional governments
- Availabily in Catalonia:
  - -complete list of streets
  - -complete list of schools
    But...
- WD has almost no streets
- WD may have schools (Catalonia, València: complete)
- OSM: all streets, but incomplete collection of schools





# How are items and eponyms entered in WD and OSM?

#### Streets:

- WD: not applicable yet; OSM: already there
- Eponyms: WD: n/a; OSM: via Python program and OSM APIs.

#### • Schools:

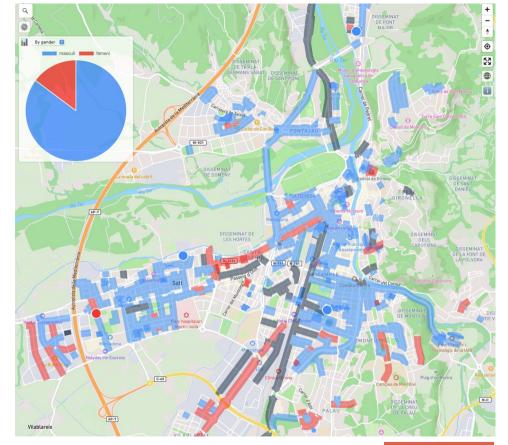
- WD: Openrefine; OSM: manually (either nodes or ways)
- Eponyms: WD: OpenRefine; OSM: via Python program and OSM APIs





#### A nice tool there: Open Etymology Map

- Displays streets having etymology, assigning color to type of eponym: name, place, other.
- https://etymology.dsantini.it











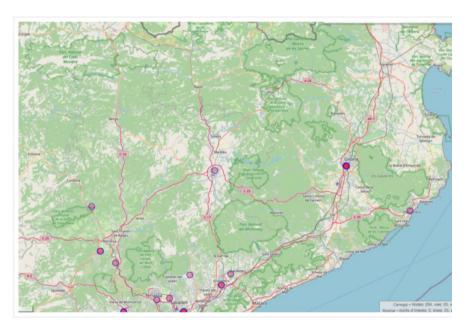
1600 Male names - only 70 STEM

**150** Female names – few STEM

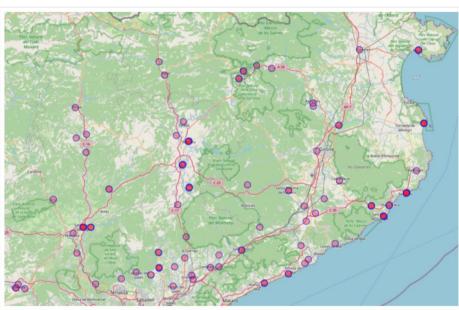
- Marie Sklodowska Curie 28
- Martina Castells 5



### Scientists and street names in Catalonia



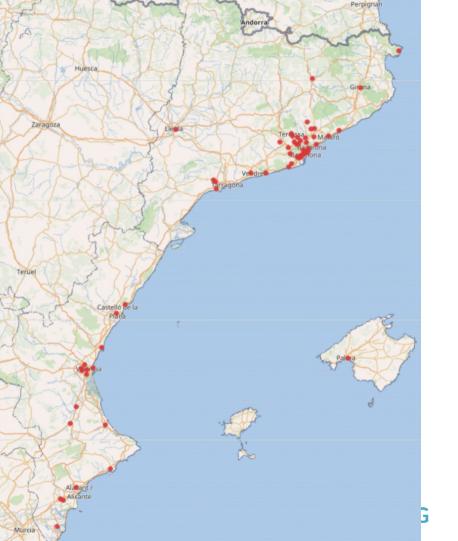
Carrers de Marie Curie



Carrers d'Alexander Fleming







#### **Schools**

699 (cat) + 340 (PV) + 68 (IB) 265 + 146 +28 Person name 61 Female name 15 NO Wikipedia data





#### **Schools**

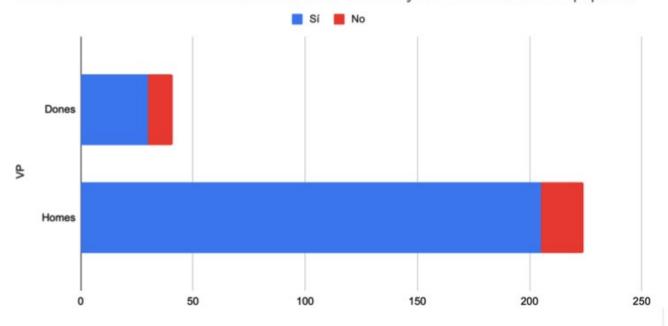
1634 Primary Schools
587 Person Name (36%)
80 Female name (14%)
30 No Wikipedia data(38%)





## High school eponyms and Wikipedia

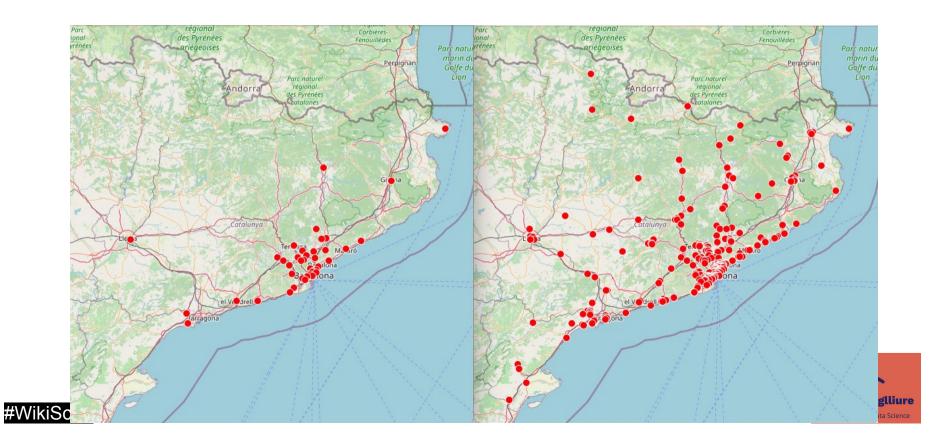
Dones i Homes als noms dels Instituts de Catalunya: Presència a la Viquipèdia







### High schools with female eponym in Catalonia



# Female eponym fact

 Only 14% of high school eponyms in Catalan-speaking are are female

	Total	Total amb epònim	% epònims	Epònim masc	Epònim fem		Manquen fem a vp	%manquem fem vp
<b>Instituts Cat</b>	699	265	38%	224	41	15%	11	27%
IES PV	340	146	43%	128	18	12%	4	22%
IES IB	68	28	41%	26	2	7%	0	0%
Esc Cat								
Prov Girona	232	81	35%	70	11	14%	3	27%
Prov Lleida	219	62	28%	57	5	8%	4	80%
Prov TGN	244	84	34%	61	13	15%	6	46%
Prov BCN	939	360	38%	309	51	14%	17	33%
<b>Total Cat</b>	1634	587	36%	507	80	14%	30	38%





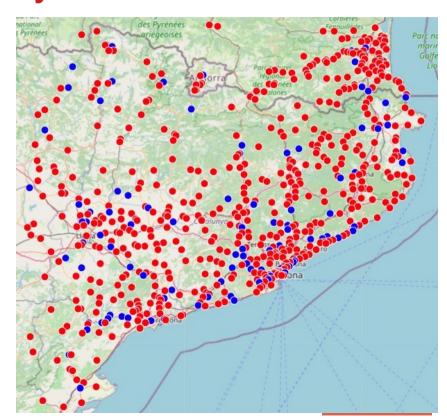
# Academic study in Nature Group journal: Notability

**Laouenan et al**, A cross-verified database of notable people, 3500BC-2018AD, Scientific Data 9, 290 (2022)

Viewer:

https://tjukanovt.github.io/notable-people

Figure: Places where man is the most notable person (red) vs woman (blue)





# More on notability

- Only 197 places in Catalonia has notable scientists (177 men, 45 women)
- Scientists have a hard time to be notable
- Women have a much harder time to be notable
- 71 men and 12 women are the MOST notable in Catalan places





## Contributions

- https://c4dudg.wordpress.com/category/ wikisciw/
- Social networks: #WikiSciW
- Communications to meetings
- Round tables, Wikimedia editathons, etc.





## What's next?

- Higher education (this is really tough)
- Archives, Libraries, Museums, civic centers, etc.
- Sports, Health facilities
- Gender studies of researcher presence in WD
- Areas
  - In Catalan-speaking area
  - Outside Catalan-speaking area
- See <a href="https://ca.wikipedia.org/wiki/Viquiprojecte:Més\_dones">https://ca.wikipedia.org/wiki/Viquiprojecte:Més\_dones</a>
- See #WikiSciW at c4d.udg.edu







#### #WikiSciW





# Thank you!









Miquel Duran, Sílvia Simon, Cristina Berga, Eva Cabré, and Martina Rodríguez



