## Nicolás Palopoli

Researcher in Computational Biology

Teacher and Mentor

Community Leader

### **Contact & Social**

npalopoli.github.io

☑ nicopalo@gmail.com

@npalopoli

#### Selected skills

Design and execution of research projects

Open Science practices

Coding in Python, R, shell, git, markdown

Data wrangling, analysis, and visualization

Management of organizations and professional networks

Science communication

Offline and online, formal and non-formal education

## Languages

Spanish (native), English (advanced), Italian, Portuguese (basic) Tenured researcher with 16 years of experience in Computational Biology, studying protein structure, interactions, and evolution. Open Science learner and advocate. Educator, specialized in active and evidence-based practices for teaching. Talent for leading workgroups guided by empathy, mentoring, and collaboration. Successfully created and managed research projects and communities of practice at the national and international levels.

## **Selected Professional Experience**

#### 2020 - Co-Executive Director

<u>MetaDocencia</u>. A non-profit community that builds scientific and technical capacities in Latin America by co-developing networks, active learning spaces, and accessible resources.

#### 2015 - Tenured Associate/Adjunct Researcher

Consejo Nacional de Investigaciones Científicas y Técnicas (<u>CONICET</u>) - Buenos Aires, Argentina.

- Project leader at <u>Structural Bioinformatics Group</u>,
   Departamento de Ciencia y Tecnología, Universidad
   Nacional de Quilmes (<u>UNQ</u>). Group Leader: Dr. G. Parisi.
- Visiting researcher at <u>EMBL</u> (Germany), <u>UCD</u> (Ireland), and <u>CABD</u> (Spain), among others.
- Director of 2 grants from Ministerio de Ciencia, Tecnología e Innovación of Argentina (MinCyT). Co-director of 1 grant from UNQ. Researcher in 2 grants from CONICET and 2 from Horizon 2020 MSCA-RISE by the European Union.
- **Director/co-director** of 4 undergraduate thesis, 1 master thesis, 3 PhD candidates, and 2 postdoctoral researchers.

#### 2012 - Postdoctoral Researcher

2014 <u>University of Southampton</u>, UK. Integrated in silico prediction of protein interaction motifs using interactome networks and high-resolution 3-dimensional structures. Director: R. J. Edwards, PhD. Funded by BBSRC, UK.

#### 2011 - Postdoctoral Researcher

2012 <u>Universidad de Buenos Aires</u>, Argentina. PhaslbeAm, a multinational consortium for sequencing of the common bean genome. Leader: Dr. A. N. Mentaberry. Funded by MinCyT.

#### 2006 - PhD candidate

2011 UNQ & CONICET, Argentina. Development of a method for the validation of protein tertiary structure based on evolutionary information and its application to characterize starch synthases. Director: Dr. G. Parisi. Funded by MinCyT and CONICET.

# Publication highlights

An ontology of protein disorder experiments Mészáros B, Hatos A, Palopoli N. et al. Minimum information guidelines for experiments structurally characterizing intrinsically disordered protein regions. Nature Methods. 2023; DOI: 10.1038/s41592-023-01915-x

A public, online database and webserver
González Buitrón M (...)
Palopoli N. CoDNaS-RNA:
a database of conformational diversity in the native state of RNA.
Bioinformatics. 2021; DOI:
10.1093/
bioinformatics/btab858

An Al-assisted tool to mine data in published articles **Palopoli N** et al. The articles.ELM resource: simplifying access to protein linear motif literature by annotation, text-mining and classification. Database. 2020; DOI: 10.1093/database/baaa040

A user-friendly, interactive tool to explore networks
Olorin E, O'Brien KT,

Palopoli N. et al.
SLiMScape 3.x: a
Cytoscape 3 app for discovery of Short Linear
Motifs in protein interaction networks.
F1000 Research. 2015;
DOI: 10.12688/
f1000research.6773.1

#### **Publications and Presentations**

- **Author** of 37 published articles, 28 peer-reviewed in 1<sup>st</sup> quartile journals. See *ORCID*: <u>0000-0001-7925-6436</u>.
- **Invited speaker** and **co-author** of posters or papers in 56 national and global research conferences.
- **Curator** of data for the <u>DisProt</u> database of intrinsically disordered proteins. See <u>APICURON profile</u>.
- **Co-author** and **co-editor** of the book <u>Vida.exe</u> Desafíos y aventuras de la Bioinformática. Published by FCE.
- **Speaker** at Night of the Museums, <u>Instituto Leloir</u>.
- **Co-author** of the book <u>Demoliendo Papers</u> La trastienda de las publicaciones científicas. Published by Siglo XXI.

#### **Teaching**

- 2014 **Assistant Professor** in Bioinformatics. University degree (*Licenciatura*) in Biotechnology, UNQ.
- Teacher and Instructor in 25 postgraduate, offline or online courses to teach skills in Bioinformatics, programming or education, at UNQ, <u>Universidad Nacional de San Martín</u>, <u>Universidad Favaloro</u> (UF), <u>Universidad Católica de las Misiones</u>, <u>Pontificia Universidad Católica del Perú</u>, CABD, <u>Argentine Association of Bioinformatics and Computational Biology</u> (A2B2C), <u>The Carpentries</u>, and MetaDocencia.
- 2015 Professor in Bioinformatics. *Licenciatura* (University Degree)
   2018 in Biological Sciences, UF.
- Assistant Professor in Physical Chemistry. Licenciatura in
   Biotechnology, UNQ.

## **Community Experience**

- 2024 • Governance Committee member at OLS.
- 2023 • Nominations and Elections Committee member at <u>DRYAD</u>.
- 2023 • Steering Committee member at ReSA.
- Mentor at the Open Seeds Cohort 8 from OLS.
- 2017 **Secretary** of <u>A2B2C</u>. Led general planning and organization of seminars and courses.
- 2021 • **Curriculum Committee** member at the <u>Licenciatura in</u>
  <u>Bioinformatics</u>, UNQ. Curriculum update. Tutor.
- Interinstitutional Academic Committee member at the Masters in Bioinformatics and Systems Biology, UNQ and Universidad Nacional del Noroeste de la Provincia de Buenos Aires (UNNOBA). Career accreditation. Evaluation of thesis proposals.
- 2016 Core team member of the outreach project <u>Bioinformatics</u>
   2019 <u>goes to school</u>, which aims to teach programming and biology to educators and students in secondary schools.
- 2012 Co-founder and Faculty Advisor of Regional Student
   2019 Group Argentina (RSG-Argentina), affiliated to the <u>ISCB</u>
   Student Council. Organization of courses and workshops.

## **Recognitions**

Gold medal to academic merit 2005, UNQ

1st place in UNQ + Banco Río 2005 Prize to Technological Innovation

14 grants and fellowships to participate in international courses and congresses

Invited chair or reviewer for several annual meetings of the Argentine Association of Bioinformatics and Computational Biology

#### **Editorial & Evaluation Experience**

- Editorial Board Member, PLOS Global Public Health.
- 2023 • **Review Editor** for the <u>Protein Bioinformatics</u> section of the journal Frontiers in Bioinformatics.
  - **Invited Editor** to the <u>Intrinsically Disordered Proteins Working</u>
    Group of the HUPO Proteomics Standards Initiative.
- **Reviewer** for 6 international journals, 9 national research 2016 grant calls, and 9 scientific conference calls for abstracts.
  - Evaluation/Mentoring committee member for 8
- 2016 undergraduate or postgraduate theses.

#### **Selected Education**

- 2006 Doctor (PhD) in Basic and Applied Sciences
- 2011 UNQ, Argentina

2019 -

- 2001 Licenciado (University degree) in Biotechnology
- 2005 UNQ, Argentina
- 2021 **Specialist in Teaching in Virtual Environments** UNQ, Argentina

#### Short format training courses

- **Open Science Badge** earned by completing Open Science 101 by NASA's Transform to Open Science initiative.
- 2018 Certified Trainer and Instructor by The Carpentries.
- 19 professional training courses on specific topics in
   Bioinformatics, computational skills, and education.
- 10 postgraduate graded courses approved, on general or specific topics in Bioinformatics or programming.