



SIGMA



SIGMA Research



The ultimate solution for the
whole research lifecycle



As open as possible as closed as necessary

What we do?

SIGMA helps higher education to optimise their academic and research management providing the best IT solutions and services.

Who we are?

We are a non-profit organization made up of 10 of the most important academic institutions in Spain. We strive to boost excellence in academic and research management.

UAB
Universitat Autònoma de Barcelona

UAM
UNIVERSIDAD AUTÓNOMA
DE MADRID

**UNIVERSIDAD
DE BURGOS**

uc3m | Universidad Carlos III de Madrid

UNIVERSIDAD DE CORDOBA

upf. Universitat
Pompeu Fabra
Barcelona

upna
Universidad
Pública de Navarra
Nafarroako
Unibertsitate Publikoa

UVa
Universidad de Valladolid

UVIC
UNIVERSITAT DE VIC
UNIVERSITAT CENTRAL
DE CATALUNYA

**Universidad
Zaragoza**

Our mission

Our mission is:

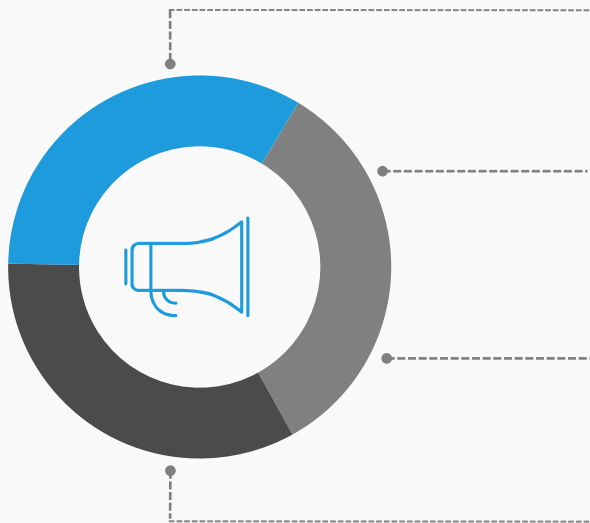
- ✓ To support higher education and research institutions
- ✓ To optimise their academic and research management processes using the best IT solutions
- ✓ To become the functional and technological model in Europe in order to boost excellency in research and higher education



5 distinguishing characteristics



Benefits



1

Adaptability

Our partners take part in the product's **roadmap** definition.

2

Costs

The **collaborative model** between partner universities, implies costs reductions in the software development

3

Best practises

We work together with experts in the field to guarantee a **'State-of-the-art' implementation.**

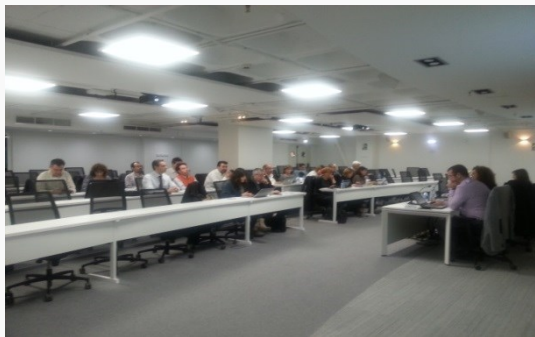
4

Quick installation and integration

Installation experienced, our products can **be integrated with all kinds of internal and external systems.**

Our model

We work in a collaborative model which is recognised by all our partner universities. This unique model allows us to define the best solution for the minimum cost



SIGMA Comittees

- Roadmap definition
- Reporting and follow up of joined projects
- Decision-making body



Working Groups

- Requirements definition and project plan
- Follow up of joined projects (sponsors)
- Testing



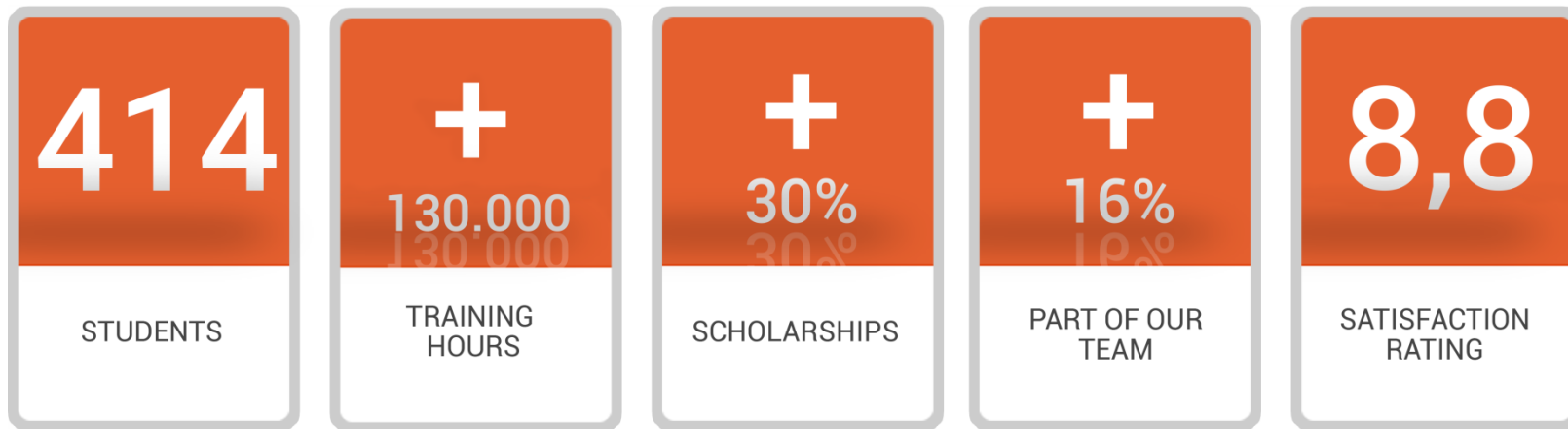
Customized Projects

- Requirements definition and project plan
- Follow up of joined projects
- Testing

Focus on Corporate Social Responsibility



SIGMA Learning Center, our training program with which we contribute to the students' formation and their integration in the workforce.



→ Internship of software programming

Recognised in the field

Penteco
Analista TIC

SIGMA has been included among the best Academic Management solutions in Spain in the Universo Penteco

Gartner®

Recognition of our SaaS solution as well as our mobile communication Apps PIZARRA. Our Learning Center has been shown as a great example of CSR

Our international projection



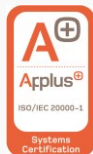
We actively collaborate with European higher education institutions to improve their **interoperability**, share **best practices**, and align processes **following international regulations and standards**

- We ease the cooperation between European universities and IT managers of research centers in order to facilitate the development of high quality information systems. SIGMA is a board member of EUNIS, and member of euroCRIS, and EAIE.
- We boost the management and knowledge dissemination of European institutions' scientific production using standards such as the CERIF model.
- We support the experience exchange among institutions worldwide to encourage their internationalisation.



Our service model

SIGMA offers you a differential maintenance service; it offers proximity, quality and constant improvement.



ISO/IEC 20000-1 Certification
Management system for SIGMA Academic's service



Functional support



Portal. Reference and project management



"Bag of hours". Own developments



Maintenance, SLA, reporting, and follow up



Implementation services on demand



Coordination. Quarter reports



Customer satisfaction surveys

Technological trends

SIGMA's solutions are flexible, agile, and adapted to new digital demands.



Social

We ease collaboration among student communities as well as teaching and research staff



Mobile

Access to applications and services addressed to students and teaching communities through the App Mobile



Analytics

Advanced analytics tools to ease the information visualisation and help the decision process



Cloud

Available as a service (SaaS), no licence or infrastructure investments needed

More than a product

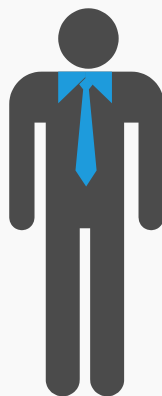
Experience



Proximity

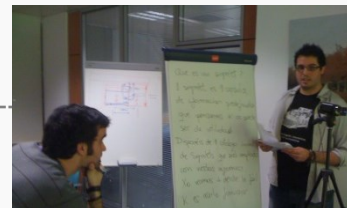


CSR



Client

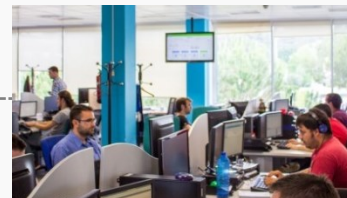
Open innovation



Data analytics
Semantics
Machine Learning



Service orientation



Our products

Two solutions: one for academic management and the other for research management

SIGMA Academic

We support the optimisation of your academic management with best practises aligned with European standards

SIGMA Academic



SIGMA Research

We support the optimisation of your research lifecycle; from the funding process to the results share based on European standards

SIGMA Research



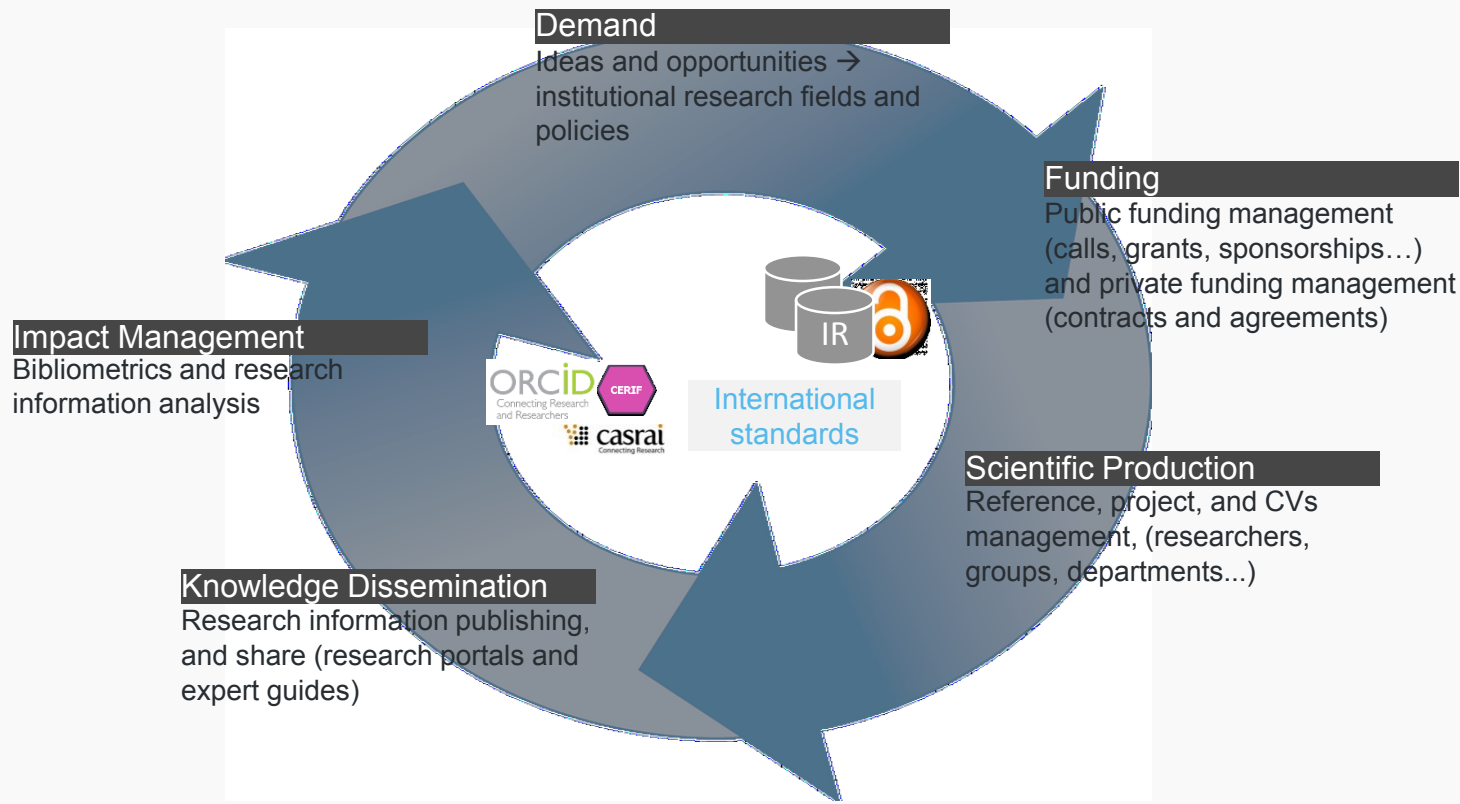
Our product for the research



SIGMA Research is a state-of-the-art 100% cloud platform that supports and enhances the whole research lifecycle; from the moment the demand is generated to the moment the demand is satisfied: it covers research funding, project management, evaluation and Benchmarking, scientific production management and knowledge dissemination.

Our solution for research

SIGMA Research. A 100% cloud solution supporting the whole research lifecycle.



An integral solution

Our solution provides all the functionalities for a **state-of-the-art** research support platform.

Current research information system database	Scientific data import at international level	Open Access management	Standards (CERIF, ORCID, Casrai...)
References management	Curricular management	Public and private funding management	Project management
Bibliometrics, analytics and altmetrics	Evaluation and reporting	Scientific production web portals	Expert directories



An integral solution

With a goal:

...collect data once assuring the quality and integrity of the research information, and then reuse it many times.

An integral solution

It is not only about software implementation, it is about accompanying the institution throughout the whole process.



- Institutional research main procedures analysis
- Analysis of preexisting data
- Information load and data depuration
- Co-designing pilot process



SIGMA Research



Scientific production

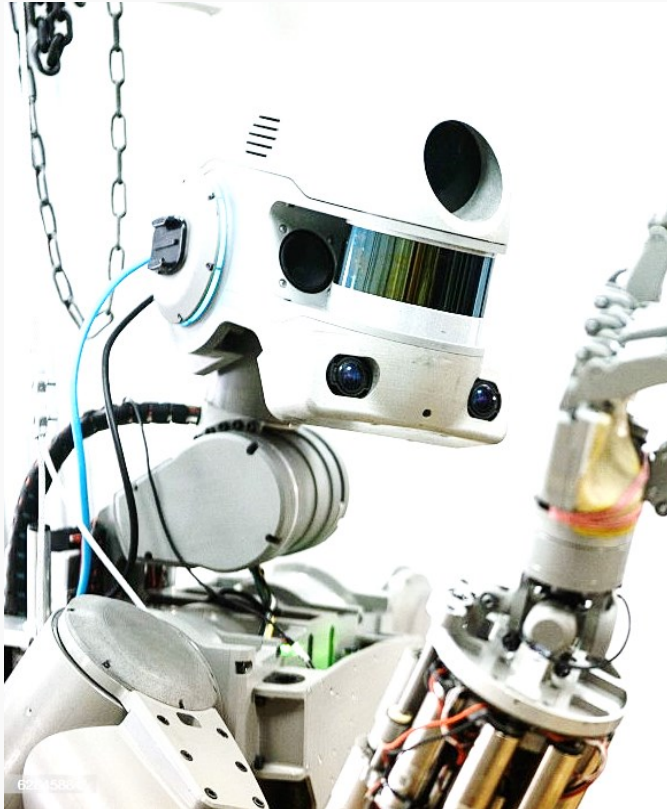
- Research activities management
- Automatic uploads, repository integration
- Project management
- Bibliometrics
- Portals and expert directories
- Reporting, and data analysis
- Visualisation

Management

- Public and private funding
- Project management
- Evaluation
- Reporting y data analysis



SIGMA Research



09/01/2018



SIGMA Research
Scientific production

SIGMA Research scientific production

WEB OF SCIENCE™

Scopus®

Dialnet

ERPs (HR,
Financial...)

Bibliometric
indicators

Altmetric



The collage displays several academic and research management interfaces:

- Academia-e**: A search interface for 'Análisis computacional de la transcripción del ADN' with filters for 'Búsquedas', 'Comentarios & Colecciones', 'Autores', 'Por fecha de publicación', 'Títulos', 'Materias', and 'Por situación'.
- Membria de recerca**: A group page for 'Grup de recerca Grup de Recerca en Comunicacions Mòbils i Intel·ligència (GRC-MI)' with a 'Total Personal' table showing 4 members.
- Precipita**: A platform for financing research with a search bar and filters.
- Articulos de revista**: A list of articles with filters for 'Articulos', 'Revistas', 'Siguientes', and 'Otras'.
- Bibliometric charts**: Various charts and tables showing research metrics, including 'Total Personal', 'Personal', 'Apto a la recerca', and 'Articulos de revista'.

Network medicine analysis of COPD multimorbidities

Solène Grosdidier¹, Antoni Ferrer², Rosa Faner³, Janet Piñero¹, Josep Roca⁴, Borja Cosío⁵, Alvar Agustí^{3,4}, Joaquim Gea², Ferran Sanz¹ and Laura I Furlong^{1*}

Abstract

Background: Patients with chronic obstructive pulmonary disease (COPD) often suffer concomitant disorders that worsen significantly their health status and vital prognosis. The pathogenic mechanisms underlying COPD multimorbidities are not completely understood, thus the exploration of potential molecular and biological linkages between COPD and their associated diseases is of great interest.

Methods: We developed a novel, unbiased, integrative network medicine approach for the analysis of the diseaseome, interactome, the biological pathways and tobacco smoke exposome, which has been applied to the study of 16 prevalent COPD multimorbidities identified by clinical experts.

Results: Our analyses indicate that all COPD multimorbidities studied here are related at the molecular and biological level, sharing genes, proteins and biological pathways. By inspecting the connections of COPD with their associated diseases in more detail, we identified known biological pathways involved in COPD, such as inflammation, endothelial dysfunction or apoptosis, serving as a proof of concept of the methodology. More interestingly, we found previously overlooked biological pathways that might contribute to explain COPD multimorbidities, such as hemostasis in COPD multimorbidities other than cardiovascular disorders, and cell cycle pathway in the association of COPD with depression. Moreover, we also observed similarities between COPD multimorbidities at the pathway level, suggesting common biological mechanisms for different COPD multimorbidities. Finally, chemicals contained in the tobacco smoke target an average of 69% of the identified proteins participating in COPD multimorbidities.

Conclusions: The network medicine approach presented here allowed the identification of plausible molecular links between COPD and comorbid diseases, and showed that many of them are targets of the tobacco exposome, proposing new areas of research for understanding the molecular underpinning of COPD multimorbidities.

Keywords: Diseaseome, Systems biology, Network medicine, Comorbidity, Multimorbidity, COPD, Tobacco chemicals

Background

Multimorbidities, including cardiovascular diseases (CVD), skeletal muscle weakness, osteoporosis, metabolic syndrome, depression and lung cancer, among others, are highly prevalent in patients with chronic obstructive pulmonary disease (COPD) [1-4] and contribute to worsen their health-status and vital prognosis [4,5]. The pathogenic mechanisms linking COPD and its concomitant diseases are incompletely understood [6], but shared risk factors

(tobacco smoking, physical inactivity, ageing) and COPD-related specific mechanisms (systemic inflammation, tissue hypoxia, abnormal protein metabolism) may potentially contribute. It is also possible that COPD and its multimorbidities share genes, proteins and pathways that explain their tendency to co-occur together in a particular patient [7-9]. A systematic investigation of this "shared component hypothesis" can provide insights to improve the prevention, early diagnosis, prognosis and/or treatment of COPD multimorbidities [9,10]. The new discipline of network medi-



OGIN

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Home > SANZ, FERRAN

SANZ, FERRAN

Full university professor
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Molecular Informatics Research Group

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933.160.524

PUBLICATIONS

Journal articles (177)
Books (4)
Book chapters (43)
Conferences (194)
Working papers (1)

CONTRACTS & GRANTS

Projects (69)
Research contracts (22)
Other grants (41)

PUBLICATIONS

Journal articles (177)

Piñero J, Bravo A, Queralt-Rosinach N, Gutiérrez-Sacristán, Deu-Pons J, Gu L, Orozco NET: a comprehensive platform integrating information on human genetic, Acute Research 2017; 45(01): 833-839.

Guàrdia-González R, Albasanz JL, Rodríguez-Espigares I, Pastor M, Sanz F, M H, Hildebrand PW, Martin M, Saleet J. Membrane cholesterol acrolein in Communications 2017; 8: 14505-0.

Mayer MA, Gutiérrez-Sacristán A, Lina A, De La Peña S, Sanz F, Furlong L, Depression and Cancer Comorbidity: Studies in Health Technology and In

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Help

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UPF website

Intranet



You need help?

Advanced search

DEPARTMENT (+)
GROUP (+)
UNIT (+)
SPECIFIC CENTER (+)

What is PPC?

UPF scientific output includes research projects, publications, congresses, directed thesis and other academic and research activities by UPF researchers

PPC figures

1.365 researchers
112.394 publications
3.463 directed thesis

10.555 projects
49.314 congresses

JOURNAL ARTICLES

Journal articles

University authors

Journal title*

Semantic Web - Interoperability, Usability, Applicability

ISSN Journal*

1570-0844



Article title*

Publishing DisGeNET as nanopublications

Authors*

Queralt-Rosinach N, Kuhn T, Chichester C, Dumontier M, Sanz F, Furlong LI,

(Surname, Name)

Display of authors in
the CVN

Queralt-Rosinach N, Kuhn T, Chichester C, Dumontier M, Sanz F, Furlong LI

DOI (digital
identifier)

http://dx.doi.org/ 10.3233/SW-150189

Publication year*
(aaaa)

2016

Volume

8

Number

5

Project



Additional information

* Required field

SIGMA Research scientific production management

Research
activities

Also,
want,

and of

they

PUBLICATIONS	CONTRACTS & GRANTS	OTHERS
- Journal articles (166) - Translation of books (1) - Book chapters (14) - Translation of book chapters (1) - Conference proceedings (22)	- Projects (65) - Research contracts (20) - Other grants (31)	- Doctoral thesis (17) - Conferences (174) - Event organisation (26) - Awards (6) - Patents (1) - Research stays (2) - Courses and seminars given (67) - Experience of R+D management (2) - Editorial collaborations (20) - Participation on committees (10) - Research lines (2) - Recognized research number sections (1) - Scientific entities (12) - Other activities (1)

PUBLICATIONS

> Journal articles (166)

Carrió P, Sanz F, Pastor M. **Toward a unifying strategy for the structure-based prediction of toxicological endpoints.** Archives of toxicology 2016; 90(10): 2445-2460.

Publication link



Carotti A, Cadavid MI, Centeno NB, Esteve C, Loza MI, Martinez A, Nieto R, Ravina E, Sanz F, Segarra V, Sotelo E, Stefanachi A, Vidal B. **Design, Synthesis, and Structure-Activity Relationships of 1-,3-,8-, and 9-Substituted-9-deazaxanthines at the Human A(2B) Adenosine Receptor.** Journal of Medicinal Chemistry 2006; 49(1): 282-299.

Publication link



Piñero J, Bravo A, Queralt-Rosinach N, Gutiérrez-Sacristán, Deu-Pons J, Centeno E, García-García J, Sanz F, Furlong LI. **DisGeNET: a comprehensive platform integrating information on human disease-associated genes and variants.** Nucleic

U-Recerca

Scientific Production Portal UVic-UCC



Home > Search by research group

Research Group on Methodology, Methods, Models and Outcomes

Group's Scientific Production

Overview

The aim of the Group of Investigation MBO is to generate and to transfer knowledge on educational models and of attention in priests of health and social. Between the principal lines of investigation that carries out the group there consist the educational innovation and the models of promotion and education for the health; the active aging; the digital health; the models of attention, health and sport; and the advanced cronoedad, all of them treated from a multidisciplinary, of integration, interuniversity and international perspective.



[LINK TO THIS PAGE](#)

Coordinator Subirana, Mireia

Research lines

- > Integral attention centred on the person, active aging and cognitive functioning
- > Models of attention, PBE and health and social results
- > Advanced Chronic disease
- > Digital Health
- > Health, Sport and Physical Activity
- > Innovation models for the health

Members

Buzquets Alibés, Ester	Palomar-Aumatell, Xavier
Casas Baroy, Joan Carles	Pares Martínez, Carles
Castro-Prat, Ricard	Ramon-Aribau, Anna
Faro Basco, Montserrat	Rodríguez Ballón, María
Font Juglà, Cristina	Romero Mas, Montserrat
Gallejo Sánchez, Vicente	Ruizol Rodríguez, Judit
Gorchs Font, Nària	Sadurni Bassols, M. Ginta
Isern Farrés, Olga	Sureda Valls-Correas, M. Carme
Mila Villarroel, Raimon	Subirana, Mireia
Morales, Esther	Valeri Junca, Xavier

09/01/2018



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Health Science department

Research Group on Methodology, Methods, Models and Outcomes

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Index H in Scopus: 7

Expertise

Promoció i educació per la salut

Recerca en infermeria

Benestar i qualitat de vida

[LINK TO THIS PAGE](#)

PUBLICATIONS

Journal articles (66)

Books (1)

Book chapters (17)

Conferences (39)

CONTRACTS & GRANTS

Projects (12)

Research contracts (1)

Other grants (2)

OTHERS

Research stays (1)

Courses and seminars given (4)

Editorial collaborations (5)

Participation on committees (1)

Recognized research number sections (1)

PUBLICATIONS

Journal articles (66)

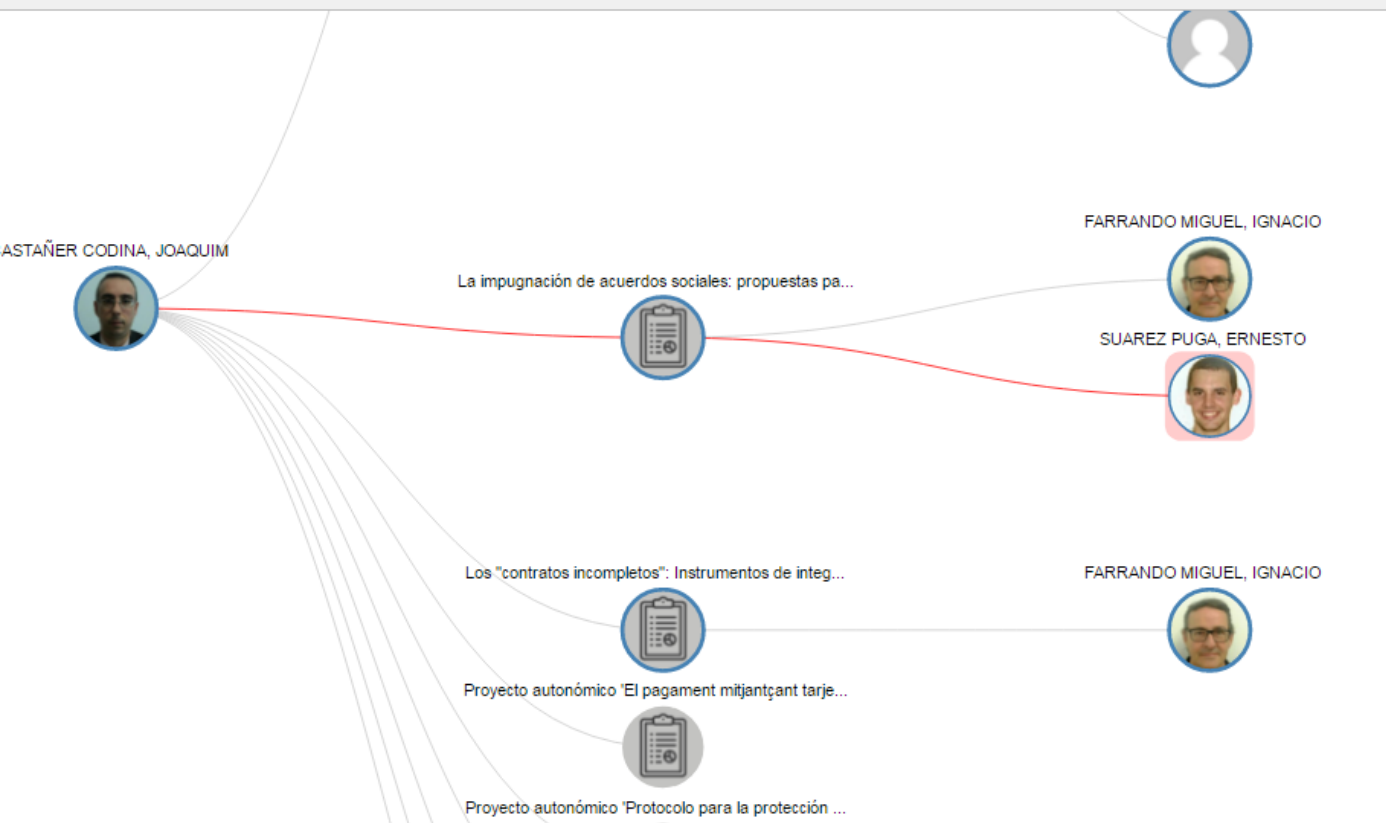
Zabaleta-del-Olmo, Subirana-Casacuberta, M., Ara-Pérez, A., Escuredo-Rodríguez, B., Rios-Rodríguez, M., Carrés-Estevé, L., Jodar-Solà, G., Juvinyà-Canal, D. (2016). Developing Evidence-Based Practice questionnaire for community health nurses: reliability and validity of a Spanish adaptation. *Journal of Clinical Nursing*, 25(2-3), 505-517. doi: 10.1111/jocn.13378.

Serrano, P., Subirana, M., Gómez, A. (2016). La Biblioteca Cochrane Plus: haciendo accesible la mejor evidencia sobre los efectos de la atención sanitaria. *Metas de enfermería*, 19(9), 69-72.

Solà, M., Chirreches, E., Alsina, A., Puigoriol, E., Oriol, M., Subirana, M. (2015). La continuidad de cuidados desde el hospital de agudos: resultados. *Infermería clínica*, 25(4), 177-185. doi: 10.1016/j.enfcli.2015.04.005.

Subirana, M., Long, A., Greenhalgh, J. Firth, J. (2014). A realist logic model of the links between nurse staffing and the outcomes of Nursing. *Journal of Research in Nursing*, 19(1), 8-23.

SIGMA Research scientific production management



Project Map

CASTAÑER CODINA, JOAQUIM

- Visiting lecturer
- Department of Law
- Business Law of the XXI Century Research Group
- 9 Projects

[Research overview](#)

Selected node

SUAREZ PUGA, ERNESTO

- Adjunct lecturer
- Department of Law

[Research overview](#)

Experts guide (UPF)

Enter a keyword or the name of a

Genomic

Advanced search

18 search results for: **Genomic**

If you do not reach an expert, you can
93 542 21 00 / 616 10 75 18

ALBÀ SOLER, MARIA DEL MAR



Department of Experimental and Health Sciences

Areas of Research: T1 at the molecular level focus but collaborate v research lines are the indels and low-comple gene duplication in pro mammals.

Expert: Genomes com malalties. Senyals de l

BERTRANPETIT BUSQU



Department of Experimental and Health Sciences

Areas of Research: G Adaptació. Biologia evi

Expert: From the genc adaptation and population history. Pieces of our evolutionary history



Home > ALBÀ SOLER, MARIA DEL MAR

ALBÀ SOLER, MARIA DEL MAR



Adjunct lecturer

Department of Experimental and Health Sciences

Computational Genomic Research Group

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933160516

Expertise

Genomes computacionals. Evolució dels genomes. Microsatèl·lits i malalties. Senyals de transcripció regulatòria. Famílies de virus proteïcs.

PUBLICATIONS

Journal articles (69)
Book chapters (5)
Conferences (37)

CONTRACTS & GRANTS

Projects (12) 🚩
Other grants (8)

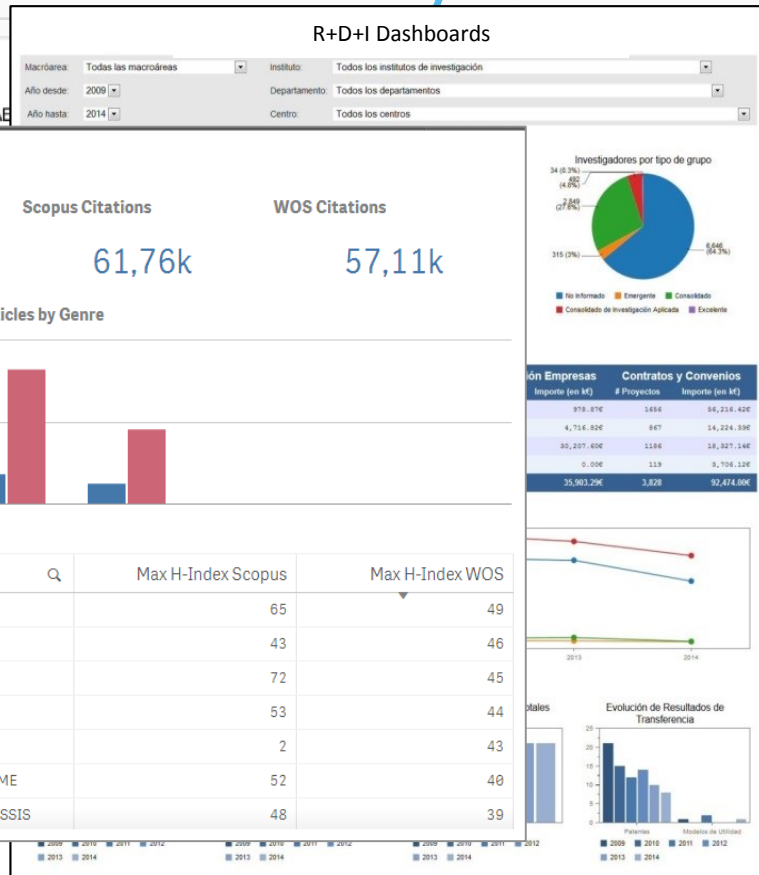
OTHERS

Doctoral thesis (10)
Awards (1)
Research stays (5)
Courses and seminars given (14)
Experience of R+D management (3)
Editorial collaborations (8)
Participation on committees (5)
Event organisation (7)
Research lines (1)
Other activities (27)

See more

SIGMA Research reports and analytics

C V I CURRÍCULUM VÍTAE

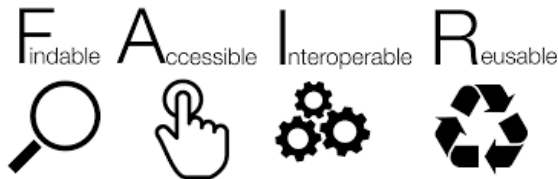


SIGMA Research what's next?

Finally, we are working with an implementation of the Open Source tool VIVO, to have the semantic version of the Scientific output Portal.



And working with the integration with an Open Data repository to make the data FAIR.



SIGMA Research

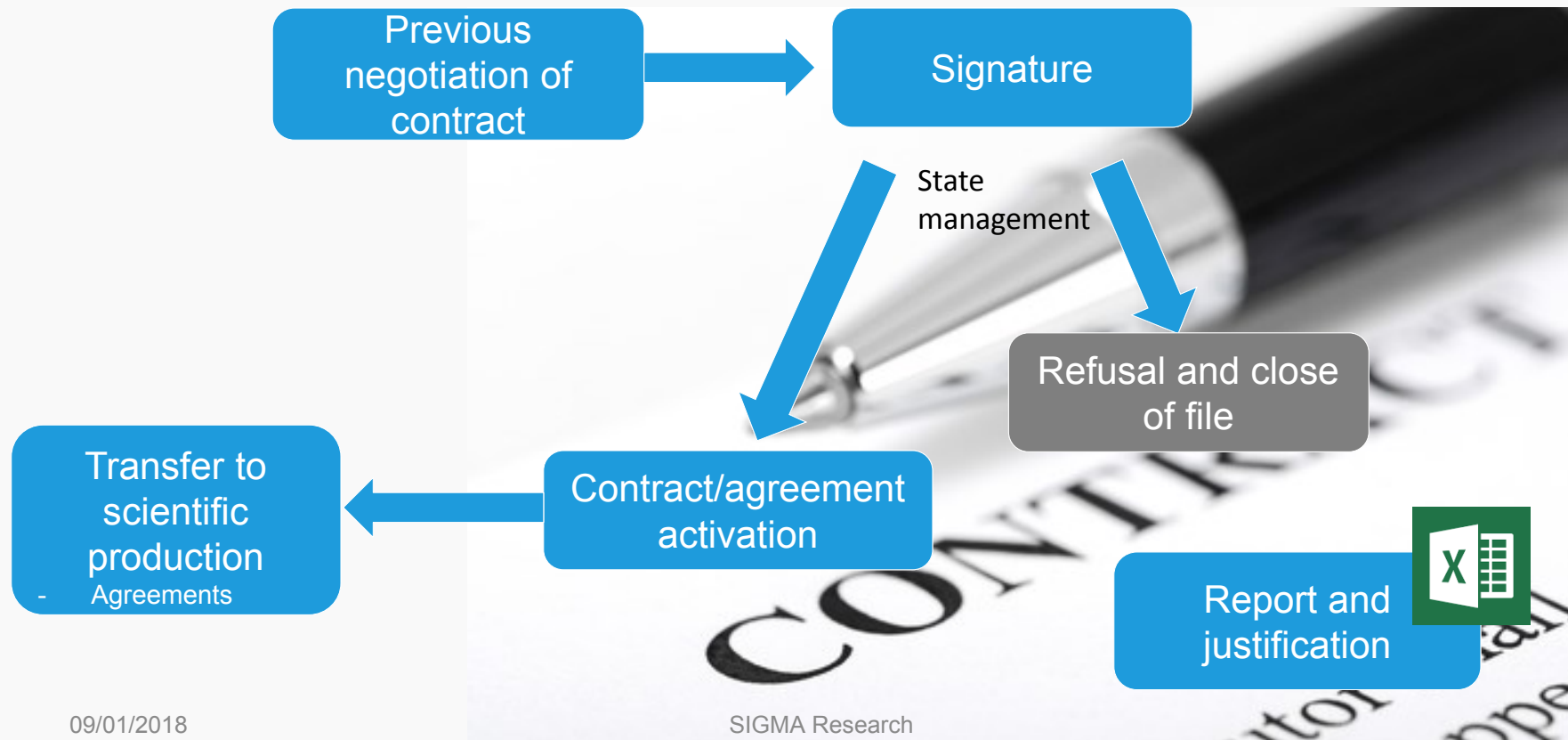


SIGMA Research Management

SIGMA Research management



SIGMA Research management

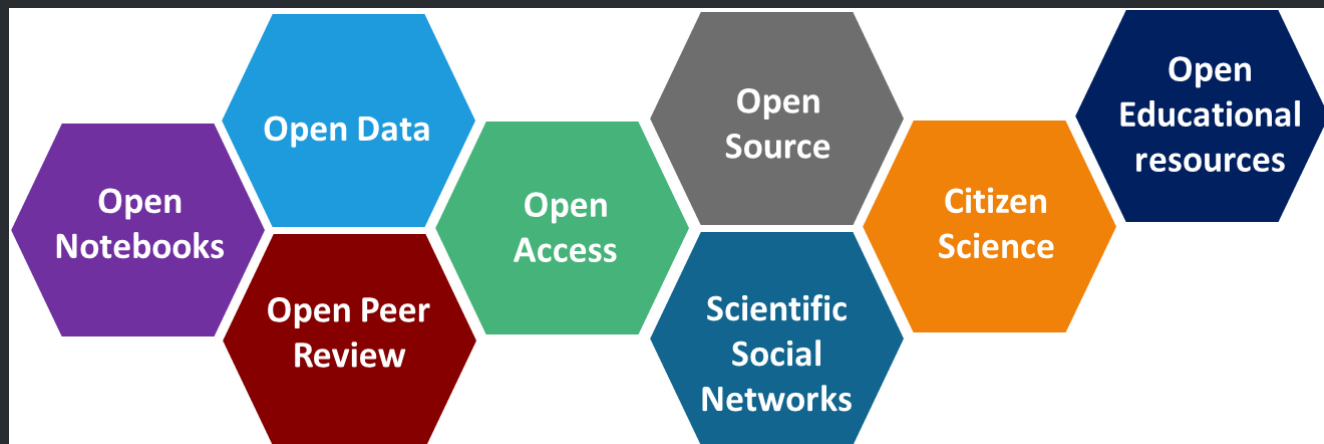


Ubicación del Expediente

Page 10

Concession and project activation

Welcome to the Open World!



We work to boost your research!

Thank you for your attention.

Anna Guillaumet

Anna.guillaumet@sigmaaie.org