

# MAR GINER-CALABUIG

## Postdoctoral Associate

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🔗 [linkedin.com/in/mar](https://www.linkedin.com/in/mar)

📍 New Haven

## EDUCATION

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### PhD in Biological and Experimental Sciences (Cum Laude)

University of Alicante

📅 09/2015 - 11/2020

### Masters in Biology and Clinics of Cancer

Universidad de Salamanca

📅 09/2014 - 06/2015

### Biomedical Sciences

Universitat de Lleida

📅 09/2010 - 07/2014

## EXPERIENCE

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### Postdoctoral Associate

Yale University School of Medicine

📅 05/2021 - Ongoing   📍 New Haven, United States

Llor's and Xicola's Lab

- Programming languages: R, Python and basic Unix
- Cell culture of CRISPR engineered cells
- Germline and somatic mutational analysis
- RNAseq analysis
- Methylation analysis
- Neoepitope prediction analysis
- Western Blot

### Lab Manager

IMED Hospitals

📅 11/2020 - 04/2021   📍 Elx, Spain

Private Hospital

- Managed a team of 14 researchers and technicians working 24/7
- implemented the in-house pipeline from sample collection and processing to software designing
- increased productivity x4
- Secured result availability in <12h from extraction

### Molecular Biologist Scientist

IMED Hospitals

📅 08/2020 - 04/2021   📍 Elx, Spain

Private Hospital

- BSL-3 Laboratory good practices
- Processing SARS-CoV-19 samples from saliva, nasopharyngeal swab and pharyngeal exudate
- RNA extraction, RT-qPCR
- HIPPA certification

# EXPERIENCE

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## Posgraduate Research Associate

### University of Yale

📅 11/2016 - 11/2019 📍 New Haven, United States

International PhD doctorate program at Llor's and Xicola's Lab

- Conducted the majority of my PhD research
- WES analysis using an in-house pipeline using Unix commands
- Germline and somatic analysis of cancer-predisposing variants
- Mutational Signatures analysis (MutationalPatterns)
- Cell culture and flow cytometry of LCLs
- R Data analysis and Statistical analysis

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## PhD Candidate Researcher

### Universitat d'Alacant

📅 06/2019 - 08/2020 📍 Alicante, Spain

Jover's Lab

Thesis: Novel Germline and somatic processes in mismatch repair deficient tumors

- Molecular biology techniques: qPCR, Sanger sequencing
- Database management

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## Masters Thesis: Postgraduate Research Assistant

### IBMCC-FICUS

📅 09/2014 - 06/2015 📍 Location

Fernandez-Roldan's and Sanchez-Guijo Lab

Thesis: Resistance to Tyrosin Kinase Inhibitors activity in Chronic Myeloid Leukemia: Role of Mesenchymal Stem Cells

- Establishment of Mesenchymal Stem Cells (MSC) from bone marrow, peripheral blood, adipose tissue and nucleus pulposus
- MSC differentiation to adipose, blastocyst and chondrocyte
- Effects of cell co-culture and drug response

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## Bachelor Thesis: Undergraduate Research Assistant

### University of Iowa

📅 02/2014 - 06/2014 📍 Iowa City, United States

Dupuy's Lab

Thesis: Ad-PB a new rapid in vivo strategy to test putative drivers in Hepatocellular Carcinoma Practicum

- Gene cloning and recombineering
- PCR primer design, PCR amplification and troubleshooting
- Bacterial culture, transformation and DNA extraction
- Viral transfection

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## Summer Research

### University of Iowa

📅 08/2013 - 09/2013 📍 Iowa City, United States

Chapeu's Lab

Project: Role of the methionine sulfoxide reductase A (MsrA) in cardiovascular disease

- Animal handling
- Pump implantation in mice
- Blood pressure control using a tail cuff system

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## Summer Research

### Medical University of Graz

📅 08/2012 - 09/2012 📍 Graz, Austria

Oetl's Lab

- Forearm dissection
- Introduction to molecular biology techniques and HPLC

# EXPERIENCE

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## Summer Research

Ural State Medical Academy

07/2011 - 08/2011 Yekaterinburg, Russia

Ophthalmology department

- Processed ophthalmological samples from surgery

# PUBLICATIONS

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Mutational signature profiling classifies subtypes of clinically different mismatch-repair-deficient tumours with a differential immunogenic response potential

British Journal of Cancer

Mar Giner-Calabuig, Seila De Leon, Julian Wang, Tara D Fehlmann, Chinedu Ukaegbu, Joanna Gibson...Rosa M Xicola

02/2022  <https://www.nature.com/articles/s41416-022-01754-1>

Heterozygous Mutations In DNA Repair Genes Confer Genetic Susceptibility to Colorectal Cancer Among Lynch- Like Case

Publication in progress

Mar Giner-Calabuig, Seila V. De Leon, Gemma Vidal-Pedrola, Tara D.Fehlmann, Chinedu Ukaegbu ...Rosa M. Xicola

2022  URL

Lynch-like Syndrome: Potential Mechanisms and Management

Cancers

Alejandro Martínez-Roca\*, Mar Giner-Calabuig\*, Oscar Murcia, Adela Castillejo, Jose Luis Soto, Anabel Garcia-Heredia, Rodrigo Jover. \*Co-first author

02/2022  <https://www.mdpi.com/2072-6694/14/5/1115>

Effects of Somatic Methylation in Colonic Polyps on Risk of Developing Metachronous Advanced Colorectal Lesions

Cancers

Oscar Murcia, Alejandro Martinez-Roca, Miriam Juarez, Mar Giner-Calabuig, Miren Alustiza, Cristina Mira...Rodrigo Jover

01/2021  <https://www.mdpi.com/2072-6694/13/2/246>

Risk of Cancer in Family Members of Patients with Lynch-Like Syndrome

Cancers

María Dolores Picó, Ana Beatriz Sánchez-Heras, Adela Castillejo, Mar Giner-Calabuig, Miren Alustiza ... Rodrigo Jover

08/2020  <https://www.mdpi.com/2072-6694/12/8/2225>

Increased Th17-Related Cytokine Serum Levels in Patients With Multiple Polyps of Unexplained Origin

Clinical Translational Gastroenterology

Miren Alustiza, Eva Hernández-Illán, Miriam Juárez, Mar Giner-Calabuig, Cristina Mira, Alejandro Martínez-Roca... Rodrigo Jover

03/2020  [https://journals.lww.com/ctg/Fulltext/2020/03000/Increased\\_Th17\\_Related\\_Cytokine\\_Serum\\_Levels\\_in.11.aspx](https://journals.lww.com/ctg/Fulltext/2020/03000/Increased_Th17_Related_Cytokine_Serum_Levels_in.11.aspx)

Clinical and Pathological Characterization of Lynch-Like Syndrome

Clinical Gastroenterology and Hepatology

María Dolores Picó, Adela Castillejo, Óscar Murcia, Mar Giner-Calabuig, Miren Alustiza, Ariadna Sanchez ... Rodrigo Jover

02/2020  <https://www.sciencedirect.com/science/article/pii/S1542356519306500?via%3Dihub>

## PUBLICATIONS

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Colorectal cancer molecular classification using BRAF, KRAS, microsatellite instability and CIMP status: Prognostic implications and response to chemotherapy

PLoS One

Oscar Murcia, Míriam Juárez, María Rodríguez-Soler, Eva Hernández-Illán, Mar Giner-Calabuig, Miren Alustiza... Rodrigo Jover  
09/2018 <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0203051>

KRAS and BRAF somatic mutations in colonic polyps and the risk of metachronous neoplasia

PLoS One

Miriam Juárez, Cecilia Egoavil, María Rodríguez-Soler, Eva Hernández-Illán, Carla Guarinos, Araceli García-Martínez 1, Cristina Alenda, Mar Giner-Calabuig, Oscar Murcia ... Rodrigo Jover  
09/2017 <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0184937>

Serrated colorectal cancer: Molecular classification, prognosis, and response to chemotherapy

World J Gastroenterology

Oscar Murcia, Miriam Juárez, Eva Hernández-Illán, Cecilia Egoavil, Mar Giner-Calabuig, María Rodríguez-Soler, Rodrigo Jover  
04/2016 <https://www.wjgnet.com/1007-9327/full/v22/i13/3516.htm>

## GRANTS

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Early Career Researchers Grant

2018 - 2019 📍 Valencia

FISABIO-ISABIAL

Project: Etiology and Molecular Characterization of Lynch-like syndrome patients

Pre-doctoral grant from Instituto de Investigación Sanitaria y Biomédica de Alicante ISABIAL

2016 📍 Valencia

FISABIO

Ayudas para la contratación de personal investigador en formación de carácter predoctoral

05/2016 - 05/2019 📍 Valencia

VALI+d. EXP ACIF/2016/002 predoctoral grant.

Becas para estancias de contratados predoctorales en centros de investigación fuera de la Comunitat Valenciana

2018 - 2019 📍 Valencia

VALI+d. EXP ACIF/2010/018 travel grant to do research at other institutions

## WORK PRESENTED AT INTERNATIONAL CONFERENCES

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Heterozygous Mutations In DNA Repair Genes Confer Genetic Susceptibility to Colorectal Cancer Among Lynch- Like Case

DDW 2022, San Diego

# WORK PRESENTED AT INTERNATIONAL CONFERENCES

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Relevant Heterogeneity in Mismatch Repair Deficient Tumors  
DDW 2020, Chicago

Clinical and Molecular Characterization of Lynch-Like Syndrome  
DDW 2018, Washington DC

Etiology and Molecular Characterization of Lynch-like syndrome patients  
European Hereditary Tumor Group 2020, Nice

Comprehensive Analysis of Methylation Field Defect in Colorectal Carcinogenesis  
AGA 2018, Chicago

BRAF and KRAS mutations in colonic polyps as molecular marker of risk of metachronous advanced neoplasias  
DDW 2016, San Diego

## CERTIFICATION

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Cancer Genomics and Bioinformatics  
Decode Life, 2022

Python Programming  
Udemy, 2022(ongoing)

Certificate in Advanced English  
University of Cambridge, 2008

Inglés Nivel Avanzado – Advanced Level of English -  
Escuela Oficial de Idiomas  
Escuela Oficial de Idiomas, 2008

C1 Coneixement del Valencià - Junta Qualificadora  
de Coneixements de Valencià (JQCV)  
IVAJ, 2017

Certificate Name  
Which institution issued the certificate and when?

## LANGUAGES

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Spanish  
Native



English  
Proficient



Catalan  
Native



## AWARDS

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★ Cum Laude PhD

★ Outstanding Poster  
Presentation Award at the  
YPA Symposium 2022

★ Marie Skłodowska Curie  
Candidate

★ Utah Honor Roll Student  
2007

# SKILLS

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Project Management    Creative thinking    Ability to learn quickly    Oral Communication Skills

Managing Skills    Adaptability    Teamwork

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Molecular biology    PCR    RT-qPCR    Sequencing    Blotting: Western Blotting    Cell culture

Flow cytometry    Bacterial culture

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Cancer Genomics    R    Python    Advanced Excel

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Patient sample handling    HIPAA regulation    Blood processing    Human tissue