

## CURRICULUM VITAE ABREVIADO (CVA)

### Part A. PERSONAL INFORMATION

<b>First name</b>	FRANCISCO JAVIER		
<b>Family name</b>	CUBERO PALERO	<b>CV date</b>	21/01/2024
<b>Gender (*)</b>	Male	<b>Birth date (dd/mm/yyyy)</b>	09/12/1974
<b>Social Security, Passport, ID</b>	50857577T	<b>e-mail</b>	fcubero@ucm.es
<b>Open Researcher and Contributor ID (ORCID)</b>	0000-0003-1499-650X		

#### A.1. Current position

<b>Position</b>	Catedrático de Universidad (Full Professor)		
<b>Initial date</b>	21/02/2022		
<b>Institution</b>	Universidad Complutense de Madrid (UCM)		
<b>Department/Center</b>	Departamento de Inmunología, Oftalmología y Otorrinolaringología	Facultad de Medicina	
<b>Country</b>	SPAIN	<b>Teleph. number</b>	(+34) 913941385; 671251556
<b>Key words</b>	Liver, ER, JNK, MAFLD/MASH, ArLD, DILI, HCC/CCA		

#### A.2. Previous positions (research activity interruptions, indicate total months)

Period	Position/Institution/Country/Interruption cause
2016-2022	Ramón y Cajal Researcher/PDI, Facultad de Medicina (UCM), Madrid, Spain
2009-2016	Senior Scientist/Principal Investigator (UKA Aachen) Aachen, Germany
2006-2009	Postdoctoral Researcher (Becario MEC), Mount Sinai Hospital, New York, US
2004-2006	Teaching Assistant and Lecturer (Trinity College Dublin), Dublin, Ireland
2001-2004	Becario Predoctoral FISS (Cirugía Exp., Hosp. Puerta Hierro), Madrid, Spain
1998-2000	Becario Técnico CAM, Facultad Biología (UCM), Madrid, Spain

#### A.3. Education

PhD, Licensed, Graduate	University/Country	Year
Bachelor in Science (B.Sc)	Universidad Complutense de Madrid	1997
Master in Science (M.Sc)	Universidad Complutense de Madrid	2000
Doctor in Biology (Physiology) (Ph.D.)	Universidad Complutense de Madrid	2004

### Part B. CV SUMMARY (max. 5000 characters, including spaces)

I graduated from the Universidad Complutense Madrid (UCM) and started my predoctoral stage, granted with a Fellowship from the Regional Government of Madrid. I focused my MSc and then my PhD thesis on **inborn-errors of metabolism in the liver**, with the financial support of a predoctoral fellowship of the Spanish FISS (ISCIII). My postdoctoral experience began at Trinity College Dublin in Anatomy and Physiology under the Supervision of Prof. Gabrielle McKee (2004-2006). Later, I joined Dr. Natalia Nieto's lab, in the Division of Liver Diseases at Mount Sinai School of Medicine as a Postdoctoral Fellow first and then as a recipient of a postdoctoral fellowship from the Spanish Ministry of Science and Education (Beca MEC/Fulbright), under the auspices of Prof. Scott Friedman, where I approached the study of the **pathophysiology of alcohol-induced liver fibrosis** (2006-2009). In 2009, I joined the research group headed by Prof. Trautwein (University Hospital RWTH Aachen) who is a renowned expert on the functional relevance of **cell-type specific signaling pathways in animal models of liver injury and liver cancer**, where I became Research Associate (2009-2016). In 2016, I obtained a Ramón y Cajal Fellowship, and, in February 2022, I was appointed Catedrático de Inmunología (Full Professor) in the Department of Immunology, Ophthalmology and ENT at the Complutense University School of Medicine where I have focused my research on the functions of **signaling pathways and endoplasmic reticulum (ER) and oxidant stress in the context of liver disease progression from acute (DILI) to chronic liver disease (MAFLD/MASLD/ArLD/liver cancer)**. Moreover, in the last years we have also focused our research on Extracellular Vesicles (EVs) and the Gut-Liver-



(Brain) axis. I have to highlight our **collaborations** with national and international scientific leaders including Jordi Gracia-Sancho and Pau Sancho-Bru (IDIBAPS), Raul Andrade & Maribel Lucena (UMA/IBIMA), Guadalupe Sabio (CNIO), Patricia Aspichueta (EHU), Malu Martínez-Chatar (CICBiogune), Rubén Francés (UMH), Matías Ávila (CIMA), Ricardo Macías-Rodríguez (Salvador de Zubirán, México), Scott Friedman (MSSM, NY), Robert F. Schwabe (Columbia University, NY), Gareth Sullivan (University of Oslo, Norway), Christian Trautwein (UKA Aachen, Germany) and Roger J. Davis (UMASS, Boston).

During my career, I have always tried to help as much as possible all **Young Investigators**. First I have annually participated in Dissemination activities such as Semana de la Ciencia o PhD day, and NASH Day (Madrid and Ciudad de México). I also actively participate in the Gilead Liver Seminars and hosted (Prof. Tom Luedde; 2023, Prof. Steven Dooley; 2018) in Madrid, and together with Drs. Jordi Gracia-Sancho (IDIBAPS) and Rocío Gallego (IBIS) co-directed several editions of the AEEH Translational Meetings, and co-directed an EMBO Meeting "Energy balance in metabolic disorders (Torremolinos, 2022)" together with Guadalupe Sabio, Roger J. Davis and Rubén Nogueiras (CIMUS). Moreover, since 2022, I co-direct together with Prof. Maribel Lucena (UMA) the Young Investigator Seminars Edition (online). I have supervised over 13 PhD theses and have several ongoing. To obtain funding for all PhD candidates has been one of my main goals. I have established a cooperation via the Chinese Scholarship Council (CSC) which has funded many of my doctoral students who are now leaders in hospitals throughout China. Thanks to the funding obtained (see **C.3.**, and collaborative funding such as TRANSCAN3-2022 Bile can meet (Leader: M. Ávila, CIMA) and CIBERehd/CIBERobn joint projects (Leader: Manuel Rodríguez Perálvarez, IBIMIC), I have been able to fund researchers who are now most of them postdocs or MDs in national and international institutions. I have been a member of the COST Action CA18122 EURO-CHOLANGIO-NET (2019-2023), and Cost Action CA11712 ProEURO DILI Registry (2018-2022) in which I have served as Short Term Scientific Missions (STSM) Coordinator, Core Group member and Grant Awarding Coordinator. This has given many of my PhD students to participate in multiple scientific exchanges in European Institutions (e.g.: Laura Morán Blanco-FZU, Prague; Alex Hionides; University of Norway, Oslo) and attend a great number of scientific conferences. I have also hosted scientists from other institutions (Judith Domenech, Leuven, Belgium). Additionally, I promote attendance to national and international conferences (EASL/AEEH/AASLD, etc). In 2021, I became part of the CIBERehd as part of the group of Prof. Rafael Bañares which has also given us the opportunity to promote our students to multiple courses. Thanks to this cooperation, we were funded in two consecutive periods the ExoHEP by the Comunidad de Madrid/Biomedicina in order to work with several groups including the Instituto the Investigación Gregorio Marañón, to which I am affiliated. ExoHEP has also promoted the scientific knowledge of our students by broadening the techniques they are using (see **C.3.**). I have constituted two different research teams, my Team at UCM, "Liver Injury and Inflammation" and together, with Prof. Yulia Nevzorova, the validated UCM group "Liver Pathophysiology" (Ref. 970935). I am also a member of the UCM group Immunología Linfocitaria (Ref. 920631).

I participate in national (ISCIII/MICINN/ANEP/PND) and international **evaluation procedures** (ANR- France, DFG-Germany, MRC-UK, Czech Science Foundation, SEPIE). I belong to the **Editorial Board** of Gut, Journal of Hepatology, Livers and Explorative Digestive Diseases and I am the Coordinator of the HORIZON-HLTH-2022-STAYHLTH-02 financed with over 6,7 million € (see **C.3.**). Additionally, I am part of the Steering Committee of EASL DHILI Consortium, member of the Scientific Committee for the Spanish Association for the Study of the Liver (AEEH) since 2022 and for the European Association for the Study of the Liver (EASL) since 2024. I am also a member of the American Association for the Study of Liver Disease (AASLD) and the International Society for Hepatic Sinusoidal Research (ISHSR).

I have received relevant **Honors and Awards** including the Premio de Investigación Médica Básica de la Real Academia Nacional de Medicina de España- RANME (2023), ERAB Best Publication Award (2020), International Liver Scholar Award, Gilead (2018-2020), German Liver Foundation Award (2016), Ramón y Cajal Fellowship (2016-2022), Torres Quevedo Fellowship (2015, declined), Postdoctoral Fellowship of the New York Center for Systems Biology (2008), Liver Scholar Award (2008), Postdoctoral Fellowship, MEC (2006-2018) and the Predoctoral Fellowship, Comunidad Autónoma de Madrid (1997-2000).



## Part C. RELEVANT MERITS

I have published over 105 scientific papers indexed in Pubmed including Reviews and Editorials; most of the papers published in D1/Q1 in journals with an impact factor (IF) higher than 10. Total Citations: 4021, Last 5-year Citations: 3143; h-Index 36 (Google Scholar).

### C.1. Publications

#### Senior authorship and/or Corresponding Authorship (selection)

1. Mohamed MR, Haybaeck J, Wu H, ..., **Cubero FJ\***, Trautwein C. JNKs protect from cholestatic liver disease progression by modulating Apelin signalling. JHEP Rep. 2023, 8;5(11):100854. **IF: 8.3 (\*co-senior author, 13/14, Q1)**.
2. Zheng K, Hao F, Medrano-Garcia S, ..., **Cubero FJ\***. Neuroblastoma RAS viral oncogene homolog (N-RAS) deficiency aggravates liver injury and fibrosis. Cell Death Dis. 2023, 10;14(8):514. **IF: 9.0 (\*AC, 36/36, Q1)**.
3. Ye H, Chen C, Wu H, ..., **Cubero FJ\***. Genetic and pharmacological inhibition of XBP1 protects against APAP hepatotoxicity through the activation of autophagy. Cell Death Dis. 2022 10;13(2):143. **IF: 9.0 (\*AC, 23/23, Q1)**.
4. Liao L, Schneider KM, Galvez EJC, **Cubero FJ\***., Trautwein C. Intestinal dysbiosis augments liver disease progression via NLRP3 in a murine model of primary sclerosing cholangitis. Gut. 2019;68(8):1477-1492. **IF: 19.819 (\*co-senior author, 21/22, D1)**.
5. **Cubero FJ\***, Peng J, Liao L, ..., Trautwein C. Inactivation of caspase 8 in liver parenchymal cells confers protection against murine obstructive cholestasis. J Hepatol. 2018; 69(6):1326-1334. **IF: 18.946 (\*AP, 1/15, D1)**.
6. **Cubero FJ\***, Zoubek ME, Hu W, ..., Trautwein C. Combined Activities of JNK1 and JNK2 in Hepatocytes Protect Against Toxic Liver Injury. Gastroenterology 2016,150: 968-81. **IF: 19.233 (\*AP, 1/17, D1)**.

#### Collaborative studies (selection)

7. Aguilar-Bravo B, Ariño S, Blaya D, ..., **Cubero FJ**, ..., Sancho-Bru, P. Hepatocyte dedifferentiation profiling in alcohol-related liver disease identifies CXCR4 as a driver of cell reprogramming. J Hepatol. 2023 Sept 79(3):728-740. **IF: 25.7 (19/27, D1)**.
8. Tomás-Loba A, Manieri E, González-Terán B, ..., **Cubero FJ**, ..., Sabio G. p38 $\gamma$  is essential for cell cycle progression and liver tumorigenesis. Nature 2019;568(7753):557-560. **IF: 42.778 (27/33, D1)**.

#### Reviews (selection)

9. Fernandez-Checa JC, Bagnaninchi P, Ye H, **Cubero FJ\***, ..., Nelson LJ. Advanced preclinical models for evaluation of drug-induced liver injury - consensus statement by the European Drug-Induced Liver Injury Network [PRO-EURO-DILI-NET]. J Hepatol. 2021;75(4):935-959. **IF: 30.083 (\*co-senior author, 20/21, D1)**.

#### Book Chapters

10. Mesquita M, Andrade RJ, **Cubero FJ\***. Drug-induced liver injury (Chapter 9). IN: Sinusoidal Cells in Liver Diseases. Role in their pathophysiology, diagnosis and treatment, 2024. Editor: Jordi Gracia-Sancho. ISBN: 9780323952620. Elsevier, Amsterdam (**\*AC, 3/3**).

### C.2. Congresses

1. **5th Meeting of Translational Hepatology (AEEH)**, Sevilla, 5-6 Oct 2023. Alcohol: Is there a "healthy" use or is it always a toxic abuse? **F.J. Cubero**. Invited conference.
2. **NASH WEEK. Mejorando y promoviendo la atención y el conocimiento del hígado graso**. Ciudad de México, 8-10 June 2023. Mecanismos de la hepatocarcinogénesis en hígado graso. & Importancia del estrés oxidativo en hígado graso. **F.J. Cubero**. Invited conferences.
3. **CiMUS Seminars**. Santiago (Spain), 12 May 2023. Modulating endoplasmic reticulum stress in liver disease. **Cubero FJ**. Invited conference.
4. **4º Reunión de Hepatología Traslacional (AEEH). Cáncer de Hígado**. Santiago de Compostela, Spain, 16-17 Dec. 2022. Experimental models of liver cancer. **F.J. Cubero**. Invited conference.
5. **3ª Reunión de Hepatología Traslacional. Enfermedad hepática metabólica: del hígado graso a la cirrosis y sus complicaciones**. Alicante, Spain. 22-23 oct. 2021. Estrés oxidativo y muerte celular. **F.J. Cubero**. Invited Conference.
6. **EMBO Meeting. Energy balance in metabolic disorders**. Málaga, Spain, 3-6 Oct. 2022. Blood and



faecal extracellular vesicles (EVs) as biomarkers of injury in the gut-liver axis during metabolic-associated fatty liver disease. **F.J. Cubero**. [Invited conference](#).

7. **Joint Meeting ISBRA & ESBRA 2<sup>nd</sup> World Congress on Alcohol and Alcoholism**. Krakow, Poland, 17-20 Sept 2022. Blood and faecal extracellular vesicles (EVs) as biomarkers of injury in the gut-liver axis during alcohol-induced liver disease. **F. J. Cubero**. [Invited Conference](#).
8. **International workshop on liver and gut fibrosis**. Valencia, Spain. 7-8 oct. 2021. Experimental models of murine liver fibrosis. **F.J. Cubero**. [Invited Conference](#).
9. **4th ISHR (International Symposium on Cells of the Hepatic Sinusoid)**. Sydney, Australia, 4-7 Sept 2019. Genetic deletion of Keap1 in hepatocytes triggers hepatitis in an Nrf2- dependant manner in an experimental toxic injury model. **F.J. Cubero**. [Invited Conference](#).
10. **1<sup>a</sup> Reunión Hepatología Traslacional**. San Sebastián, Spain, 4-5, Oct 2019. Anatomy and Embriology of the liver. **FJ Cubero**. [Invited Conference](#).

### C.3. Research projects:

1. **Rational to modulate the Microbiome-induced Endoplasmic Reticulum stress as tool to avoid the immune evasion in Hepatocellular Carcinoma (RETO)**. PIs: J.M. Argemi (CIMA), I. Ochoa (UNAV), M. Vergara (Sabadell), R. Virto (CNTA), **F.J. Cubero** (UCM) and M. Reig (Clinic, coordinator). Funding Body: AEEC, Proyectos Coordinados 2023. Duration: 2024-2029. Amount: 1,000.000 EUR.
2. **Intestinal Microbiota Transplant as a Strategy to Enhance the Resilience Capacity of the Elderly Aiming to Retain Muscular, Cognitive, and Metabolic Functions in a Stressful Environment**. PI: G. Jorquera (INTA, Chile) & co-PI **F.J. Cubero** (UCM). Funding Body: Wellcome Leap (Dynamic Resilience). Duration: 2024-2027. Amount: 350,000 USD.
3. **Vesículas extracelulares en la fisiopatología hepática: Relevancia mecanística, diagnóstica y terapéutica (EXOHEP2CM)**. PI: **F J Cubero** (UCM), R. Bañares (IISGM), L. Moreno (UCM), A. Dávalos (IMDEA). R. Herrero (HUG). Funding body: Comunidad de Madrid S2022/BMD-7409; Duration: 2023-2027. Amount: 756,800 EUR.
4. **Discovering chronic inflammation biomarkers that define key stages in the Healthy-to-NASH (nonalcoholic steatohepatitis) transition to inform early prevention and treatment strategies. (Halt-RONIN)**. Coordinator: **FJ Cubero** (UCM). Funding body: HORIZON-HLTH-2022-STAYHLTH-02 Duration: 2022-2026. Amount: 6,7 million EUR.
5. **Estrés del retículo endoplásmico y señalización de JNK en la inflamación crónica: comprendiendo el camino a la malignificación epitelial**. PI: **FJ Cubero** & E. Martínez Naves (UCM). Funding Body: MICINN PID117941RB-I00. Duration: 2021-2024. Amount: 126.000 EUR.
6. **Nuevas aplicaciones de la nanotecnología en la enfermedad hepática crónica**. PI: R. Bañares and M. Descó (IISGM) (**FJ Cubero**, UCM, Team Member). Funding body: Comunidad de Madrid; Y2018/NMT-4949. Duration: 2019-2022. Amount: 771.100 EUR.
7. **A novel therapy against cholangiocarcinoma**. PIs: **F.J. Cubero (UCM)**, M. A. Ávila (CIMA) and L.J. Nelson (UoE). Funding Body: AMMF 2018/117. Duration: 2018-2022. Amount: 67.000 St. Pounds.
8. **Interdependence of oxidative stress and inflammation during chronic liver injury: a novel tool for theranostics**. PI: **F.J. Cubero**. Funding Body: GILEAD 44/2018. Duration: 2018-2022. Amount: 130.000 EUR.
9. **Comunicación por exosomas y otras vesículas extracelulares en la fisiología y fisiopatología hepática**. PI: R. Bañares (IISGM) and E. Martínez-Naves (UCM) (**F.J. Cubero**, Team Member). Funding body: Comunidad de Madrid B2017/BMD-3727. Duration: 2018-2021. Amount: 843.000 EUR.
10. **Deconstructing the role of JNK and ER stress in alcoholic liver injury**. PI: **F.J. Cubero** & E. Martínez-Naves (UCM). Funding body: MINECO RETOS; SAF2016-78711. Duration: 2016-2019. Amount: 170.000 EUR.

### C.4. Contracts, technological or transfer merits.

**Identification of kinases responsible for cell death processes in liver disease**. Funding Body: art. 83; 211/2016; RWTH Aachen University. Participant entities: UCM. Duration: 06/2016-12/2016. Amount: 18.000 EUR, PI: **F.J. Cubero**.