

## Curriculum Vitae

### PERSONAL INFORMATION

**Name** Djouder Nabil  
**ORCID ID** 0000-0001-8423-1030  
**Nationality** French and Algerian

### EDUCATION

**1997 - 2001** **PhD** in Molecular Pharmacology and Pharmacochimistry, University Louis Pasteur (ULP), Strasbourg, France (with honours).  
**1996 - 1997** **DEA** in Molecular Pharmacology and Biochemistry, ULP, Strasbourg, France.  
**1991 - 1996** **Honours BSc and Master** in Biochemistry and Cell Biology, ULP, Strasbourg, France.

### CURRENT POSITION

**2019/01 – to date** **Senior group leader** (equivalent to full professor), **Centro Nacional de Investigaciones Oncológicas (CNIO)**, Madrid, Spain, in the Molecular Oncology Programme directed by Prof. Dr. Oskar Fernandez-Capetillo.

### PREVIOUS POSITIONS

**2018/02 - 2018/12** **Senior group leader** (equivalent to full professor), **CNIO**, Madrid, Spain, in the Cancer Cell Biology Programme directed by Prof. Dr. Erwin Wagner.  
**2010/01 - 2018/01** **Junior group leader** (equivalent to assistant professor), **CNIO**, Madrid, Spain, in the Cancer Cell Biology Programme directed by Prof. Dr. Erwin Wagner.  
**2003/11 - 2009/11** **Post-doctoral fellow** in the group of Prof. Dr. Wilhelm Krek, Institute of Cell Biology at Swiss Federal Institute of Technology (**ETH**), Switzerland.  
**2001/05 - 2003/10** **Post-doctoral fellow** in the group of Prof. Dr. Wilhelm Krek, Friedrich-Miescher Institute (**FMI**), Basel, Switzerland.  
**1997/10 - 2001/04** **PhD** in Molecular Pharmacology and Pharmacochimistry in the group of Prof. Dr. Dr. Klaus Aktories, Institute of Pharmacology and Toxicology, Freiburg, Germany.

### PRIZES, FELLOWSHIPS, PATENTS AND AWARDS

**2022** BBVA grant Award in Biomedicine  
**2021** AECC grant Award for liver cancer research  
**2011 - 2019** EFSD grant Awards for diabetes and metabolic disorders (X3)  
**2016** Foundation Olga Torres (FOT) Award for colorectal cancer research  
**2016** Patent, WO 2016/016391: "Agents for use in treating liver cancer"  
**2014** Best talk in EMBO Workshop: "*Translational Advances in Cancer Cell Signalling and Metabolism*"  
**2011** Ramón y Cajal Award  
**2010** AICR/WCR Grant Award

### SUPERVISION OF GRADUATE STUDENTS AND POSTDOCTORAL FELLOWS

**2009 - to date** I have trained/am training **technicians** (2 previous/2 current), **undergraduate students** (4 previous/2 current), **master students** (9 previous/1 present), **graduate students** (6 previous/8 current), **medical residents** (2 previous/1 present) and **postdoctoral fellows** (6 previous/ 2 current). 75% of supervised fellows are/were women.

**7 PhD students** have already obtained their doctoral degree at Madrid University with the best grade exceptional cum laude, received several awards (best publication awards, and best student awards) and

embarked themselves in postdoctoral studies in top-notch labs as follows:

<b>2017/03 – 2023/06</b>	<b>Sergio de la Rosa:</b> “ <i>Role of URI during embryonic development</i> ”. Universidad Autónoma de Madrid. He is seeking a PostDoc.
<b>2017/01 - 2022/06</b>	<b>Tatiana Grazioso:</b> “ <i>Unconventional therapies for cancer treatment</i> ” - PostDoc with Dr. Jesus-Garcia Donas, HM Hospital, Madrid, Spain, start on Jan. 2023
<b>2015/02 - 2020/12</b>	<b>Dr. Amanda Garrido:</b> “ <i>Role and functions of MCRS1 in liver disease</i> ” - PostDoc with Dr. Rafael de Cabo, NIH, Baltimore, USA, start on Oct. 2021.
<b>2015/02 - 2020/09</b>	<b>Dr. Ana Teijeiro:</b> “ <i>IL-17A in obesity, metabolic syndrome and HCC</i> ” - PostDoc with Dr. Yasmine Belkaid, NIH, Bethesda, USA, start on Nov. 2021.
<b>2013/09 - 2019/02</b>	<b>Dr. Almudena Chaves:</b> “ <i>Role of URI in Intestinal Homeostasis and Radiation Enteropathy</i> ” - PostDoc with Dr. Scott Lowe, MMSK centre, NY, USA.
<b>2011/10 - 2017/05</b>	<b>Dr. Marta Brandt:</b> “ <i>Role of MCRS1 in Intestinal Homeostasis and Colorectal Cancer</i> ” - PostDoc with Dr. Ramxíc Xavier, Broad Institute, Boston.
<b>2009/09 - 2015/08</b>	<b>Dr. Krishna Seshu Tummala:</b> “ <i>Molecular and Cellular Mechanisms of Hepatocarcinogenesis</i> ” - PostDoc with Dr. Nabeel Bardeesy, HMS, Boston.

**7 former postdocs** obtained leading or professorship jobs in academia and pharma companies, as follows:

<b>05/2019 - 12/2021</b>	<b>Dr. Eunjeong Kim</b> is assistant professor in South Korea
<b>02/2017 - 10/2018</b>	<b>Dr. Sebastian Thompson</b> is assistant professor IMDEA, Madrid
<b>07 2011 - 04/2019</b>	<b>Dr. Hugo Bernard</b> is a Director Medical Adviser, Spain
<b>06/2010 - 12/2014</b>	<b>Dr. Mohamad-Ali Fawal</b> is Researcher at SYNAXYS, France
<b>04/2010 - 09/2014</b>	<b>Dr. Stefan Buren</b> is assistant professor, CBPG, Madrid
<b>09/2011 - 12/2014</b>	<b>Dr. Ana Gomes</b> is senior scientist, CRICK Institute, London, UK
<b>06/2010 - 01/2013</b>	<b>Dr. Mahmut Yilmaz</b> is scientific communication director, Roche, Basel

### TEACHING ACTIVITIES

<b>2010 - to date</b>	Lectures on metabolic pathways, metabolic diseases and gastrointestinal tract disorders to undergraduate and graduate students from Madrid Universities.
<b>1999 - 2008</b>	Practical courses for undergraduate and Master students.

### ORGANISATION OF SCIENTIFIC MEETINGS

<b>2022/10</b>	Caixa-CNIO Frontiers Meeting: “ <i>Diet, Nutrition and Cancer Cell Metabolism</i> ”. Co-organized with M. Malumbres (CNIO, Madrid) V. Longo (IFOM, Milan).
<b>2018/07</b>	Caixa-CNIO Frontiers Meeting: “ <i>Frontiers in Immunomodulation and Cancer Therapy</i> ”. Co-organized with L. Zitvogel (Gustave Roussy, Paris).
<b>2017/05</b>	Caixa-CNIO Frontiers Meeting: “ <i>Molecular Chaperones in Cancer</i> ”. Co-organized with W. Krek (ETH, Zurich), P. Workman (ICR, London).
<b>2017/04</b>	EMBO Workshop: “ <i>Metabolic Disorders and Liver Cancer</i> ”. Co-organized with R. Davis (UMASS, Worcester), G. Sabio (CNIC, Madrid), E. Wagner (CNIO, Madrid).

### INSTITUTIONAL RESPONSIBILITIES

<b>2009 - 2021</b>	Member of the Dean Office, organizing CNIO Lab-Day, student CNIO activities...
<b>2009 - to date</b>	Serving the CNIO scientific as well as grants/fellowships evaluating committees
<b>2009 - to date</b>	Serving several PhD thesis committees and member of several PhD thesis tribunals
<b>2009 - to date</b>	Chair of several CNIO working groups

### REVIEWING ACTIVITIES SINCE 2015

**Ad hoc Reviewer at international Journals:** Nature (8x), Nature Cell Biology (5x), Molecular Cell (2x), Nature Communications (6x), Nature Cancer (6x), Journal of Experimental Medicine (3x),

**Gastroenterology (3x), Gut (8x), Journal of Hepatology (2x), Hepatology (3x), Journal of Cell Biology (1x), Cell Death & Differentiation (4x), Molecular Oncology (5x), FEBS Letters (3x), Plos One (2x), Disease Models and Mechanisms (1x), Molecular Oncology (1x), Molecular Metabolism (3x)....**

**Journals' editorial board:** Frontiers Cell and Developmental Biology, Cell stress, Translational Oncology.  
**Grant agencies:** WCR (AICR), ERC, Spanish Ministry Grants and Fellowships (e.g. Retos, FIS, RyC), AECC (Spain), BBVA (Spain), ARC (France), FNRS (Belgium)

**Member of institute evaluation:** Member for the High Council for the Evaluation of Research and Higher Education (HCERES) in France, and evaluation committee to assess the institute IAB in Grenoble, France.

## **MEMBERSHIPS OF SCIENTIFIC SOCIETIES**

**2022 - to date** Elected Member of the Spanish Society of Medical Oncology: SEOM

**2011 - to date** Elected Member of the European Association for the Study of Diabetes: EASD

**2012 - to date** Elected Member of the European Association for the Study of Liver Diseases: EASL

## **MAJOR AND MOST RELEVANT COLLABORATIONS SINCE 2015**

My group has extensively collaborated and published with the following renowned scientists: **Dr. Erwin Wagner** (Medical University of Vienna, Austria), **Dr. Mathias Heikenwälder** (DKFZ, Heidelberg, Germany), **Dr. Kingston H G Mills** (Trinity College Dublin, Ireland), **Dr. Angel Nebreda** (IRB, Barcelona, Spain), **Dr. Ari Waisman** (University of Mainz, Germany), **Dr. Robert Schwabe** (Columbia University, New York, USA), **Dr. Daniel Lietha** (CIB, Madrid, Spain). **Guillermo Vicente** (Molecular Biology Institute of Barcelona, Spain). We are currently collaborating with other prominent scientists including **Dr. Mariano Barbacid** (CNIO, Madrid, Spain), **Stephen Galli** (Stanford University, USA), **Thomas Hehlhans** (RCII, Germany), **Benjamin Izar** (Herbert Irving Comprehensive Cancer Center, Columbia University, NY, USA). Other extensive external collaborations are ongoing with **Dr. Rafael Álvarez Gallego** and **Emilio Vicente**, clinicians and experts in liver diseases (HM hospital, Madrid) **Dr. Gianni Ciofani** (Polytechnic University of Torino), **Dr. Ricardo Garcia** (Instituto de Ciencia de Materiales, Madrid).

## **PUBLICATIONS**

**Best last and corresponding author publications from the last years (average impact factor = 27)**

**2022.** Chaves-Pérez A, Santos-de-Frutos K, De la Rosa S, Herranz-Montoya I, Perna C and **Djouder N** (2022) Transit-amplifying cells control R-spondins in the mouse crypt to modulate intestinal stem cell proliferation. *Journal of Experimental Medicine*, 2022, 219: e20212405.

**2021.** Garrido A, Kim E, Teijeiro A, Sánchez Sánchez P, Gallo R, Nair A, Matamala M, Perna C, Vicent GP, Muñoz J, Campos-Olivas R, Melms JC, Izar B, Schwabe RF and **Djouder N** (2021) Histone acetylation of bile acid transporter genes plays a critical role in liver cirrhosis. *Journal of Hepatology*, 2021, S0168: 02294-7.

**2021.** Teijeiro A, Garrido A, Ferre A, Perna C and **Djouder N** (2021) Inhibition of the IL-17A axis in adipocytes suppresses diet-induced obesity and metabolic disorders in mice. *Nature Metabolism*; 2021 Apr;3(4):496-512.

**Preview. Greenhill C (2021) Nature Reviews Endocrinology; 2021 Jul;17(7):383.**

**2020.** Bernard H, Chaves-Pérez A, Teijeiro A, Perna C, Satish B, Novials A, Wang JP and **Djouder N** (2020) Cocksackievirus B Type 4 Infection in beta Cells Downregulates the Chaperone Prefoldin URI to Induce a MODY4-like Diabetes via *Pdx1* Silencing. *Cell Reports Medicine*; 2020 Oct 20;1(7):100125.

**2019.** Chaves-Pérez A, Yilmaz M, Perna C, De la Rosa S and **Djouder N** (2019) URI is required to maintain intestinal architecture during ionizing radiation. *Science*; 2019 May 31;364(6443).

**2018.** Brandt M, Grazioso TP, Fawal MA, Tummala KS, Torres-Ruiz R, Rodriguez-Perales S, Perna C and **Djouder N** (2018) **mTORC1 Inactivation Promotes Colitis-Induced Colorectal Cancer but Protects from APC loss-Dependent Tumorigenesis.** *Cell Metabolism*; 2018 Jan 9;27(1):118-135.

**2017.** Tummala KS, Brandt M, Teijeiro A, Graña O, Schwabe RF, Perna C and **Djouder N** (2017) Hepatocellular Carcinomas Originate Predominantly from Hepatocytes and Benign Lesions from Hepatic Progenitor Cells. *Cell Reports*; Apr 18;19(3):584-600.

**2016.** Burén S, Gomes AL, Fawal MA, Teijeiro A, Yilmaz M, Tummala KS, Perez M, Rodriguez-Justo M, R, Megias D and **Djouder N** (2016) Regulation of OGT by URI in Response to Glucose Confers c-MYC-Dependent Survival Mechanisms. *Cancer Cell*; Aug 8;30(2):290-307.

**2016.** Gomes AL, Teijeiro A, Burén S, Tummala KS, Yilmaz M, Waisman A, Theurillat JP, Perna C and **Djouder N** (2016) Metabolic Inflammation-Associated IL17A Causes Non-Alcoholic Steatohepatitis and Hepatocellular Carcinoma Development. *Cancer Cell*; Jul 11; 30(1):161-175.

*Preview. Weber A and Heikenwalder M (2016) Cancer Cell; 2016 Jul 11;30(1):15-17*

**2015.** Fawal MA, Brandt M, and **Djouder N** (2015) MCRS1 Binds and Couples Rheb to Amino Acid-Dependent mTORC1 Activation. *Developmental Cell* 2015 Apr 6;33(1):67-81.

**2014.** Tummala KS, Gomes AL, Yilmaz M, Graña O, Bakiri L, Ruppen I, Ximénez Embún P, Sheshappanavar V, Rodriguez-Justo M, Pisano D, Wagner EF and **Djouder N** (2014) Inhibition of *De Novo* NAD<sup>+</sup> Synthesis by Oncogenic URI Causes Liver Tumorigenesis through DNA Damage. *Cancer Cell*; **2014** Dec 8;26(6):826.

*Preview. Mederacke I and Schwaber RF (2014) Cancer Cell; 2014 Dec 8;26(6):777-778.*

**Best last and corresponding author peer-reviewed reviews and methods from the last 5 years**

**2023.** Grazioso TP and **Djouder N** (2023) The forgotten art of cold therapeutic properties in cancer: a comprehensive historical guide. *iScience*. 2023. May 29;26(7):107010.

**2023.** Martinez-Garay C and **Djouder N** (2023) Dietary interventions and precision nutrition in cancer therapy. *Trends in Molecular Medicine*. 2023 Jul;29(7):489-511.

**2023.** Grazioso TP and **Djouder N** (2023) A mechanistic view of the use of cold temperature in the treatment of cancer. *iScience*. 2023. Mar 30;26(4):106511.

**2022.** Rigual MdM, Sánchez Sánchez P and **Djouder N** (2021) Is liver regeneration key in hepatocellular carcinoma development? *Trends in Cancer*. 2022 Nov 5:S2405-8033(22)00228-X.

**2021.** Herranz-Montoya I, Park S, **Djouder N** (2021) A comprehensive analysis of prefoldins and their implication in cancer. *iScience*. 2021 Oct 15;24(11):103273.

**2021.** Sánchez Sánchez P, Rigual MDM, **Djouder N** (2021) Inflammatory and Non-Inflammatory Mechanisms Controlling Cirrhosis Development. *Cancers* (Basel). 2021 Oct 9;13(20):5045.

**2021.** Torres-Ruiz R, Grazioso T, Brandt M, Martinez-Lage M, Rodriguez-Perales S and **Djouder N** (2021) Detection of Chromosome Instability by Interphase FISH in Mouse and Human Tissues. *STAR Protocols*; Jun 28;2(3):100631.

**2021.** Santos-de-Frutos K and **Djouder N** (2021) When dormancy fuels tumour relapse. *Communications Biology*; Jun 16;4(1):747.

**2020.** Garrido A and **Djouder N** (2020) Cirrhosis, a questioned risk factor for HCC. *Trends in Cancer*; Sep 8:S2405-8033(20): 30237-5.

**2019.** Grazioso TP, Brandt M and **Djouder N** (2019) Diet, Microbiota and Colorectal Cancer. *iScience*; 2019 Oct 10;21:168-187.

**2017.** Garrido A and **Djouder N** (2017) NAD<sup>+</sup> deficits in age-related diseases and cancer. *Trends in Cancer*; 2017 Aug;3(8):593-610.

### **Book chapters**

**2018.** **Djouder N** (2018) Prefoldins: the new chaperones. **Djouder, N** (ed.); *Advances in Experimental Medicine and Biology. Springer Nature*. vol. 1106. ISBN 978-3-030-00736-2.

**2018.** Chaves-Pérez A, Thompson S, **Djouder N** (2018). Roles and Functions of the Unconventional Prefoldin URI, vol. 1106:95-108; *Advances in Experimental Medicine and Biology. Springer Nature*.

### **Best publications co-authored in collaboration from the last years**

**2021.** Pfister D,..., **Djouder N**,..., Heikenwälder M (2021) NASH limits anti-tumor surveillance in immunotherapy-treated HCC. *Nature*; 2021. Apr;592(7854):450-456.

**2020.** McGinley AM, ..., **Djouder N**, Mills KHG (2020) Interleukin-17A Serves a Priming Role in Autoimmunity by Recruiting IL-1 $\beta$ -Producing Myeloid Cells that Promote Pathogenic T Cells. *Immunity*; 2020 Jan 27. pii: S1074-7613(20)30029-7.

**2019.** Malehmir M, ..., **Djouder N**,..., Heikenwalder M (2019) Platelet GPIIb $\alpha$  is a mediator and potential interventional target for NASH and subsequent liver cancer. *Nature Medicine*; 2019 Apr;25(4):641-655.

**2018.** Youssif C, ..., **Djouder N**, Nebreda AR (2018) Myeloid p38 $\gamma$  signaling promotes intestinal IGF-1 production and inflammation-associated tumorigenesis. *EMBO Mol Med*; 2018 Jul;10(7). pii: e8403.

**2011.** Theurillat JP, Metzler SC, Henzi N, **Djouder N**, Helbling M, Zimmermann AK, Jacob F, Soltermann A, Caduff R, Heinzlmann-Schwarz V, Moch H, Krek W (2011) *URI* Is an Oncogene Amplified in Ovarian Cancer Cells and Required for Their Survival. *Cancer Cell*; 2011; 19(3):317-32.

### **Most important and recently invited speaker**

**2023/02.** Alberto Sols Institute, Madrid, Spain. **2022/10.** CNIO-Caixa conference, Madrid, Spain. **2021/06.** iFiT, Tübingen, Germany. **2021/06.** EASL Meeting, International Liver Congress (Online). **2021/01.** Mechanobiology Institute (MBI), Singapore (Online). **2020/11.** University of Orleans, France (Online). **2020/12.** Karolinska Institute, Stockholm, Sweden (Online). **2020/07.** University of Tübingen, Germany. **2019/12.** Instituto de Biomedicina de Sevilla (IbiS), Sevilla, Spain. **2019/09.** HemOnc Grand Rounds, Chicago University, Chicago, USA. **2019/09.** International Liver Cancer Association (ILCA), Chicago, USA.