

## CURRICULUM VITAE

### Personal Data

Name and surname: **Silvia Carrasco Garcia**

Place and date of birth: Pamplona, Navarra, Spain. August 29th, 1977

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### Education

- 1998 B.S. in Biology. School of Science, Autonoma University of Madrid, Spain.
- 2000 M.S. in Biochemistry. School of Science, Autonoma University of Madrid, Spain.
- 2002 M.S. in Molecular Biology. School of Science, Autonoma University of Madrid, Spain.
- 2006 Ph.D. in Molecular Biology and Biochemistry, School of Science, Autonoma University of Madrid, Spain.
- Lecture date: February 15th, 2006
- Title: Diacylglycerol: regulation, distribution and function in lymphocytes
- Summa cum laude*. Ph.D. Thesis extraordinary award.
- Ph.D. Advisor: Professor Isabel Merida
- Ph.D. Program Advisor: Professor Carlos Martinez-A

### Research and Professional experience

- 1996-1998 Research in the laboratory of Professor Agustin G. Zapata at Complutense University of Madrid, Spain.
- 1999-2000 Research in the laboratory of Professor Isabel Merida at the Center of National Biotechnology (CNB/CSIC), Madrid, Spain.
- 2000-2006 Ph.D. Thesis research in the laboratory of Professor Isabel Merida at the Center of National Biotechnology (CNB/CSIC), Madrid, Spain.
- 2006-2008 Research in the laboratory of Professor Isabel Merida at the Center of National Biotechnology (CNB/CSIC), Madrid, Spain.
- 2008-2012 Postdoctoral scholar in the laboratory of Professor Tobias Meyer, Department of Chemical and Systems Biology, School of Medicine, Stanford University, California, USA.
- 2012- Lab Manager and LSRA in the laboratory of Professor Markus Covert, Department of Bioengineering, School of Engineering, Stanford University, California, USA.

## Teaching experience

- 2001 Graduate teaching assistant laboratory sections for the course "Biochemical instrument techniques" (50 students, 50 teaching hours) at the Molecular Biology and Biochemistry Department, Autonomía University of Madrid, Spain.
- 2002-2008 Mentoring one undergraduate student and two graduate students in the laboratory of Professor Isabel Merida at the Center of National Biotechnology (CNB/CSIC), Madrid, Spain.

## Awards

- 1999-2000 Undergraduate Fellowship from Spanish Ministry of Education and Science.
- 2000 Undergraduate Fellowship from Spanish National Research Council (CSIC).
- 2000-2001 Graduate Fellowship from Autonomía University of Madrid, Spain.
- 2001-2002 Graduate Fellowship from Education Office of Madrid Autonomous Region, Spain.
- 2002-2006 Graduate Fellowship from Spanish Ministry of Education and Science.
- 2006 Ph.D. Thesis extraordinary award.
- 2008 Postdoc Fellowship from Fundación Alfonso Martín Escudero.  
Postdoc Fellowship from Fundación Ramón Areces.
- 2008-2010 Postdoc Fellowship from Spanish Ministry of Education and Science.

## Publications

- Deletion of acidic-rich domain of the IL-2R $\beta$  chain increases receptor-associated PI3K activity.  
A.Ciprés, **S.Carrasco**, I.Merida.  
FEBS Letters 2001; 500: 99-104
- Dynamics of DGK $\zeta$  translocation in living T cells. Study of the structural domain requirements for translocation and activity.  
T.Santos, **S.Carrasco**, DR.Jones, I.Merida, A.Eguinoa.  
J Biol Chem 2002; 277(33): 30300-9
- *Dictyostellium discoideum* has a single diacylglycerol kinase gene with similarity to mammalian theta isoforms.  
M.de la Roche, JL.Smith, M.Rico, **S.Carrasco**, I.Merida, L.Licate, GP.Côte, TT.Egelhoff.  
Biochem J 2002; 368 (Pt3): 809-15.
- Regulation of diacylglycerol kinase  $\alpha$  by phosphoinositide 3-kinase lipid products.  
A.Ciprés, **S.Carrasco**, E.Merino, E.Díaz, UM.Krishna, JR.Falck, C.Martínez-A, I.Merida.  
J Biol Chem 2003; 278(37): 35629-35

- Diacylglycerol-dependent binding recruits PKC $\theta$  and RasGRP1 C1 domains to specific subcellular localizations in living T lymphocytes  
**S.Carrasco**, I.Merida.  
Mol Biol Cell 2004; 15: 2932-42
- Beta-2 chimaerin modulates CXCL12-dependent adhesion and chemotaxis in Jurkat T cells  
M.Siliceo, D.Garcia-Bernal, **S.Carrasco**, E.Diaz-Flores, FC.Leskow, J.Teixido, MG.Kazanietz, I.Merida  
J. Cell Science 2006; 119(Pt 1):141-52.
- Diacylglycerol, when simplicity becomes complex  
**S.Carrasco**, I.Merida  
Trends Biochem Sci 2007; 32(1):27-36.
- Cracking CRAC  
**S.Carrasco**, T.Meyer  
Nat Cell Biol 2010; 12(5):416-8.  
Comment on: Nat Cell Biol 2010; 12(5):436-46
- STIM proteins and endoplasmic reticulum-plasma membrane junctions  
**S.Carrasco**, T. Meyer  
Ann Rev Biochem 2011; 80:973-1000
- Whole-cell model quantitatively predicts experimental outcomes at the cellular and molecular scale  
JC. Sanghvi, S. Regot, **S. Carrasco**, JR. Karr, MV. Gutschow, B. Bolival Jr., MW. Covert  
Nat Methods 2013; 10(12):1192-5
- A polarized Ca(2+), diacylglycerol and STIM1 signalling system regulates directed cell migration  
FC. Tsai, A. Seki, HW. Yang, A. Hayer, **S. Carrasco**, S. Malmersjö, T. Meyer  
Nat Cell Biol 2014; 16(2):133-44
- High-sensitivity measurements of multiple kinase activities in live single cells.  
S. Regot, J. Hughey, B. Bajar, **S. Carrasco**, MW. Covert  
Cell 2014; 157(7):1724-34

#### **Contributions to meetings and conferences**

- Role of DGK $\alpha$  in cytoskeletal reorganization (poster)  
**S.Carrasco**, I.Merida  
2002 Workshop on exchange factors  
Center for International Meetings on Biology, Juan March Institute, Madrid, Spain

- Role of DGK $\alpha$  in cytoskeletal reorganization (poster)  
**S.Carrasco**, I.Merida  
2003 EMBL workshop: Mechanisms of cell migration  
EMBO, Heidelberg, Germany
- C1 domains as diacylglycerol biosensors in T cells (poster and oral presentation)  
**S.Carrasco**, I.Merida  
2004 EMBL symposium: lipid binding domains and signaling  
EMBO, Heidelberg, Germany
- Diacylglycerol dependent binding recruits PKC $\theta$  and RasGRP1 C1 domains to specific subcellular localizations in living T lymphocytes (poster)  
**S.Carrasco**, I.Merida  
2004 Workshop on molecular advances in DAG signaling  
Center for International Meetings on Biology, Juan March Institute, Madrid, Spain
- Ras binding to RasGRP1 defines a mechanism for decoding DAG signals (poster and oral presentation)  
**S.Carrasco**, M. Almena, I.Merida  
2007 EMBO Workshop: Common regulatory mechanisms in haemopoiesis and neurogenesis  
EMBO, Heidelberg, Germany
- A new approach to identify proteins localized in the endoplasmic reticulum-plasma membrane (ER-PM) junction (poster)  
**S.Carrasco**, H.Imoto, T.Wandless, T.Meyer  
2011, Special Symposia: Cellular Traffic of Lipids and Calcium at Membrane Contact Sites  
ASBMB Special Symposia Series 2011, Utah, USA

### **Complementary education and courses**

- Summer school: Developmental Biology: morphogenesis in animals  
Menendez Pelayo International University  
1999, Santander, Spain
- Workshop on Membranes, Trafficking and Signaling during animal development  
Center for International Meetings on Biology, Juan March Institute  
2003, Madrid, Spain
- 14th Congress of Ca $^{2+}$  binding proteins and Ca $^{2+}$  function in health and disease (CaBP-2007)  
2007, La Palma, Spain
- The American Society for Cell Biology (ASCB) 49<sup>th</sup> Annual Meeting  
2009, San Diego, California, USA