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Date of birth: October 8, 1964, Toulon, France
Married, 3 children
Nationality: French, Swiss
Language: French, English, some German

EDUCATION AND RESEARCH EXPERIENCE

1984: Fellow of the Ecole Normale Supérieure (Paris), Biology Section
1986-90: Ph.D. degree in Dr. J. Davoust's laboratory
 86-88: European Molecular Biology Laboratory (Heidelberg, Germany)
 88-90: Centre d'Immunologie de Marseille-Luminy (Marseille, France)
 "Mechanisms of formation of intracellular transport vesicles"
1990-1992: EMBO Post-doctoral fellow in Dr. R. Klausner's laboratory
 (National Institute of Health, Washington, USA)
 "Transmembrane determinants for assembly and intracellular transport"
1992-1997: Member of the Basel Institute for Immunology (Basel, Switzerland)
 "Mechanisms of membrane sorting in the secretory pathway"
1997-present: Group leader at the University of Geneva (Switzerland)
 (since 2007 Full professor)
 "Phagocytosis and host-pathogen interactions"

TEACHING

- 2016: Founder and academic coordinator of the new Bachelor/Master in Biomedical Sciences of the Geneva Faculty of Medicine
- Cell Biology course to 1st year medical students and to paramedical students
- Tutorial teaching to 2nd year medical students
- Practical course of histology to 2nd and 3rd year medical students
- Writing workshop to medical and biomedical students
- Oral skills to biomedical students

INSTITUTIONAL ROLES

- Since 2016*: Member of the Bureau de la Commission d'Eenseignement
- Since 2016*: President of the Commission d'Opposition

OTHERS

2018: Creation and Editor-in-chief of the scientific journal Antibody Reports
2017: Creation of the ABCD database
2015: Creation and academic coordinator of the Geneva Antibody Facility
2004: Prix Naef for In vitro Research.
2002: Cofounder of Athelas SA, a biotechnology company dedicated to the search for new anti-infective drugs.

2001: Patent filing: The use of *Dictyostelium* amoeba to study pathogen virulence.

1990: French translation of Ivan Roitt's "Essential Immunology", sixth edition, chapters 3 to 9 and of "Antibodies", chapters 6 to 9. Editions Pradel.

1986: Geography section of Memo-Bac 87. Editions Phillipine.

1996-2019 : 16 review articles in French for the general public in Biofutur, Médecine et Science, and La Revue médicale Suisse.

Bosshard, E., Gaspoz, V., Giusti, T.M., Hussami, S., Maxit, O.L., Morel, S., Cosson P. 2019. Contre les infections à staphylocoque doré, une molécule désarmante. Rev Med Suisse. 2019 15:1836-7.

Since 2018 : 7 articles in Antibody Reports

PUBLICATIONS

Cosson, P, de Curtis, I, Pouysségur, J, Griffiths, G and J Davoust. 1989. Low cytoplasmic pH inhibits endocytosis and transport from the trans-Golgi network to the cell surface. **J. Cell Biol.** 108: 377-87.

Salamero, J, Humbert, M, Cosson, P and J Davoust. 1990. Mouse B lymphocyte specific endocytosis and recycling of MHC class II molecules. **EMBO J.** 9:3498-96.

Letourneur, F, Gabert, J, Cosson, P, Blanc, D, Davoust, J and B Malissen. 1990. A signaling role for the cytoplasmic segment of the CD8 a chain detected under limiting stimulatory conditions. **Proc. Natl. Acad. Sci. USA.** 87: 2339-43.

Bonifacino, J, Cosson, P and RD Klausner. 1990. Colocalized transmembrane determinants for ER degradation and subunit assembly explain the intracellular fate of T cell antigen receptor chains. **Cell.** 63: 503-13.

Cosson, P, Lankford, SP, Bonifacino, JS and RD Klausner. 1991. Membrane protein association by potential intramembrane charge pairs. **Nature.** 351:414-16.

Bonifacino, JS, Cosson, P, Shah, N and RD Klausner. 1991. Role of potentially charged transmembrane residues in targeting proteins for degradation within the endoplasmic reticulum. **EMBO J.** 10:2783-93.

Rutledge, T, Cosson, P, Manolios, N, Bonifacino, JS and RD Klausner. 1991. Transmembrane helical interactions : zeta chain dimerization and functional association with the T cell antigen receptor. **EMBO J.** 11:3245-54.

Cosson, P and JS Bonifacino. 1992. Role of transmembrane interactions in the assembly of class II MHC molecules. **Science.** 258:659-62.

Lankford, SP, Cosson, P and RD Klausner. 1993. Transmembrane domain length affects charge-mediated retention and degradation of proteins within the endoplasmic reticulum. **J. Biol. Chem.** 268:4814-20.

Humbert, M, Raposo, G, Cosson, P, Reggio, H, Davoust, J and J Salamero. 1993. The invariant chain induces compact forms of class II molecules localized in late endosomal compartments. **Eur. J. Immunol.** 23:3158-66.

Hennecke, S and P Cosson. 1993. Role of transmembrane domains in assembly and transport of the CD8 molecule. **J. Biol. Chem.** 268:26607-12.

Bonnerot, C, Marks, MS, Cosson, P, Robertson, EJ, Bikoff, EK, Germain, RN and JS Bonifacino. 1994. Association with BiP and aggregation of class II MHC molecules synthesized in the absence of invariant chain. **EMBO J.** 13: 934-944.

Cosson, P and F Letourneur. 1994. Coatamer interaction with di-lysine endoplasmic reticulum retention motifs. **Science.** 263:1629-1631.

Letourneur, F, Gaynor, EC, Hennecke, S, Démollière, C, Duden, R, Emr, SD, Riezman, H, Cosson, P. 1994. Coatomer is essential for retrieval of dilysine-tagged proteins to the endoplasmic reticulum. **Cell**. 79:1199-1207.

Letourneur, F, Hennecke, S, Démollière, C, Cosson, P. 1995. Steric masking of a dilysine endoplasmic reticulum retention motif during assembly of the human FceRI. **J. Cell Biol.** 129:971-978.

Cosson, P, Démollière, C, Hennecke, S, Duden, R, Letourneur, F. 1996. α and β -COP, two coatomer subunits homologous to clathrin adaptors, are involved in ER retrieval. **EMBO J.** 15:1792-1798.

Cosson, P. 1996. Direct interaction between the envelope and matrix proteins of HIV-1. **EMBO J.** 15: 5783-5788.

Cosson, P, Schröder-Köhne, S, Sweet, DS, Démollière, C, Hennecke, S, Frigerio, G, Letourneur, F. 1997. The Sec20/Tip20p complex is involved in ER retrieval of dilysine-tagged proteins. **Eur. J. Cell Biol.** 73:93-97.

Ohno, H, Aguilar, RC, Fournier, MC, Hennecke, S, Cosson, P, Bonifacino, JS. 1997. Interaction of endocytic signals from the HIV-1 envelope glycoprotein complex with members of the adaptor medium chain family. **Virology** 238:305-315.

Letourneur, F, Cosson, P. 1998. Targeting to the endoplasmic reticulum in yeast cells by determinants present in transmembrane domains. **J. Biol. Chem.** 273:33273-33278.

Cosson, P, Lefkir, Y, Démollière, C, Letourneur, F. 1998. New COP1-binding motifs involved in ER retrieval. **EMBO J.** 17:6863-6870.

Dogic, D, De Chasse, B, Pick, E, Cassel, D, Lefkir, Y, Hennecke, S, Cosson, P, Letourneur, F. 1999. The ADP-ribosylation factor GTPase-activating protein Glo3p is involved in ER retrieval. **Eur. J. Cell Biol.** 78:305-310.

Cornillon S, Pech E, Benghezal, M., Ravel, K, Gaynor, E, Letourneur, F, Brückert, F, Cosson, P. 2000. A member of the 9TM superfamily involved in adhesion and phagocytosis in *Dictyostelium* **J. Biol. Chem.** 275:34287-34292.

Benghezal, M, Gotthardt, D, Cornillon, S, Cosson, P. 2001. Localization of the Rh50-like protein to the contractile vacuole in *Dictyostelium*. **Immunogenetics** 52:284-288.

Ravel, K, de Chasse, B, Cornillon, S, Benghezal, M, Zulianello, L, Gebbie, L, Letourneur, F, Cosson, P. 2001. Membrane sorting in the endocytic and phagocytic pathway of *Dictyostelium discoideum*. **Eur. J. Cell Biol.** 80:754-764.

Cornillon, S, Dubois, A, Brückert, F, Lefkir, Y, Marchetti, A, Benghezal, M, De Lozanne, A, Letourneur, F, Cosson, P. 2002. Two members of the beige/CHS (BEACH) family are involved at different stages in the organization of the endocytic pathway in *Dictyostelium*. **J. Cell Sci.** 115:737-744.

Lebrand, C, Corti, M, Goodson, H, Cosson, P, Cavalli, V, Mayran, N, Fauré, J, Gruenberg, J. 2002. Late endosome motility depends on lipids via the small GTPase Rab7. **EMBO J.** 21:1289-1300.

Bruckert F, Decave E, Garrivier D, Cosson P, Brechet Y, Fourcade B, Satre M. 2002. Dictyostelium discoideum adhesion and motility under shear flow: experimental and theoretical approaches. **J Muscle Res Cell Motil.** 23:651-8.

Cosson, P, Zulianello, L, Joint-Lambert, O, Faurisson, F., Gebbie, L, Benghezal, M, van Delden, C, Kocjancic-Curty, L, Köhler, T. 2002. Pseudomonas aeruginosa virulence analyzed in a *Dictyostelium discoideum* host system. **J. Bact.** 184:3027-3033.

Cosson, P, Amherdt, M, Rothman, J, Orci, L. 2002. A resident Golgi protein is excluded from peri-Golgi vesicles in NRK cells. **Proc. Natl. Acad. Sci. USA.** 99:12831-12834.

Kobayashi, T, Beuchat, MH, Chevallier, J, Makino, A, Mayran, N, Escola, JM, Lebrand, C, Cosson, P, Kobayashi, T, Gruenberg, J. 2002. Separation and characterization of late endosomal membrane domains. **J. Biol. Chem.** 277:32157-32164.

Abrami L, Liu S, Cosson P, Leppla SH, van der Goot FG. Anthrax toxin triggers endocytosis of its receptor via a lipid raft-mediated clathrin-dependent process. 2003. **J. Cell Biol.** 105:145-159.

Lefkir, Y, de Chasse, B, Dubois, A, Bogdanovic, A, Brady, RJ, Destaing, O, Bruckert, F, O'halloran, TJ, Cosson, P, Letourneur, F. 2003. The AP-1 clathrin-adaptor is required for lysosomal enzymes sorting and biogenesis of the contractile vacuole complex in *Dictyostelium* cells. **Mol. Biol. Cell.** 14:1835-1851.

Benghezal, M, Cornillon, S, Gebbie, L, Alibaud, L, Brückert, F, Letourneur, F, Cosson, P. 2003. Synergistic control of cellular adhesion by TM9 proteins. **Mol. Biol. Cell.** 14: 2890-9.

Alibaud, L, Cosson, P, Benghezal, M. 2003. Dictyostelium discoideum transformation by oscillating electric field electroporation. **Biotechniques** 35:78-80.

Lefkir Y, Malbouyres M, Gotthardt D, Ozinsky A, Cornillon S, Bruckert F, Aderem AA, Soldati T, Cosson P, Letourneur F. 2004. Involvement of the AP-1 adaptor complex in early steps of phagocytosis and macropinocytosis. **Mol. Biol. Cell.** 15:861-9.

Charette, SJ, Cosson, P. 2004. Preparation of genomic DNA from Dictyostelium discoideum for PCR analysis. **Biotechniques** 36:574-5.

Gebbie, L, Benghezal, M, Cornillon, S, Froquet, R, Cherix, N, Malbouyres, M, Lefkir, Y, Grangeasse, C, Fache, S, Dalous, J, Brückert, F, Letourneur, F, Cosson, P. 2004.

Phg2, a kinase involved in adhesion and focal site modeling in *Dictyostelium*. **Mol. Biol. Cell** 15:3915-25.

Marchetti, A, Mercanti, V, Cornillon, S, Alibaud, L, Charette, SJ, Cosson, P. 2004. Formation of multivesicular endosomes in *Dictyostelium* **J. Cell Sci.** 117:6053-9.

Cosson, P, Ravazzola, M, Varlamov, O, Söllner, TH, Di Liberto, M, Volchuck, A, Rothman, JE, Orci, L. 2005. Dynamic transport of SNARE proteins in the Golgi apparatus. **Proc. Natl. Acad. Sci. USA.** 102:14647-52.

Blanc, C., Charette, S., Chérix, N., Lefir, Y., Cosson, P., Letourneur, F. 2005. A novel PI(4,5)P2 binding domain targeting the Phg2 kinase to the membrane in *Dictyostelium* cells. **Eur. J. Cell Biol.** 84:951-60.

Charette, S., Cornillon, S., Cosson, P. 2006. Identification of low frequency knockout mutants in *Dictyostelium discoideum* by single or double homologous recombination. **J. Biotechnology** 122:1-4.

Benghezal M, Fauvarque MO, Tournebize R, Froquet R, Marchetti A, Bergeret E, Lardy B, Klein G, Sansonetti P, Charette SJ, Cosson, P. 2006. Specific host genes required for the killing of *Klebsiella* bacteria by phagocytes. **Cell. Microb.** 8:139-48.

Mercanti V, Blanc C, Lefkir Y, Cosson P, Letourneur F. 2006. Acidic clusters target transmembrane proteins to the contractile vacuole in *Dictyostelium* cells. **J. Cell Sci.** 119: 817-45.

Cornillon, S., Gebbie, L., Benghezal, M., Nair, P., Keller, S., Wehrle-Haller, B., Charette, S.J., Brückert, F., Letourneur, F., Cosson, P. 2006. An adhesion molecule in free-living *Dictyostelium* amoebae with integrin α features. **EMBO Reports.** 7:617-21.

Charette, S.J., Mercanti, V., Letourneur, F., Bennett, N., Cosson, P. 2006. A role for Adaptor Protein-3 complex in the organization of the endocytic pathway in *Dictyostelium*. **Traffic** 7:1528-38.

Charette, S.J., Cosson, P. 2006. Exocytosis of late endosomes does not directly contribute membrane to the formation of phagocytic cups or pseudopods in *Dictyostelium*. **FEBS Letters** 580:4923-8.

Mercanti V, Charette SJ, Bennet N, Ryckewaert JJ, Letouneur F, Cosson P. 2006. Selective membrane exclusion in phagocytic and macropinocytic cups. **J. Cell Sci.** 119:4079-87.

Cherix, N., Froquet, R., Charette, S.J., Blanc, C., Letourneur, F., Cosson, P. 2006. A Phg2-Adrm1 pathway participates in the nutrient-controlled developmental response in *Dictyostelium*. **Mol. Biol. Cell** 17:4982-7.

Benghezal, M., Adam, E., Lucas, A., Burn, C., Orchard, M.G., Deuschel, C., Valentino, E., Braillard, S., Paccaud, J.P., Cosson, P. 2007. Inhibitors of bacterial virulence identified in a surrogate host model. **Cell. Microb.** 9:1336-42.

Charette, S., Cosson, P. 2007. A LYST/Beige homologue is involved in biogenesis of Dictyostelium secretory lysosomes. **J. Cell Sci.** 120:2338-43.

Froquet, R., Cherix, N., Burr, S., Frey, J., Vilches, S., Tomas, J.M., Cosson, P. 2007. An alternative host model to evaluate *Aeromonas* virulence. **Appl. Environmental Microb.** 73: 5657-9.

Fromme, J.C., Ravazzola, M., Hamamoto, S., Al-Balwi, M., Eyaid, W., Boyadjiev, S.A., Cosson, P., Schekman, R., Orci, L. 2007. The genetic basis of a craniofacial disease provides insight into COPII coat assembly. **Dev. Cell** 13:623-34.

Alibaud, L., Köhler, T., Coudray, A., Prigent-Combaret, C., Bergeret, E., Perrin, J., Benghezal, M., Reimann, C., Gauthier, Y., van Delden, C., Attree, I., Fauvarque, M.O., Cosson, P. 2008. Pseudomonas aeruginosa virulence genes identified in a Dictyostelium host model. **Cell. Microb.** 10: 729-40.

Charette, S.J., Cosson, P. 2008. Altered composition and secretion of lysosome-derived compartments in Dictyostelium AP-3 mutant cells. **Traffic** 9:588-96.

Froquet, R., Cherix, N., Birke, R., Benghezal, M., Cameroni, E., Letourneur, F., Mösch, H.U., De Virgilio, C., Cosson, P. 2008. Control of cellular physiology by TM9 proteins in yeast and Dictyostelium. **J. Biol. Chem.** 283:6764-72.

Cornillon, S., Froquet, R., Cosson, P. 2008. Regulation of cellular adhesion in *Dictyostelium*: role of Sib proteins. **Eukaryotic cell.** 7:1600-5.

Bergeret E, Perrin J, Williams M, Grunwald D, Engel E, Thevenon D, Taillebourg E, Bruckert F, Cosson P, Fauvarque MO. 2008. TM9sf4 is required for Drosophila cellular immunity via cell adhesion and phagocytosis. **J. Cell Sci.** 121:3325-34.

Blanc C, Charette SJ, Mattei S, Aubry L, Smith EW, Cosson P, Letourneur F. 2009. Dictyostelium Tom1 participates to an ancestral ESCRT-0 complex. **Traffic**, 10:161-71.

Froquet, R., Lelong, E., Marchetti, A., Cosson, P. 2009. Dictyostelium discoideum: a model host to measure bacterial virulence. **Nature Protocols.** 4:25-30.

Marchetti, A., Lelong, E., Cosson, P. 2009. A measure of endosomal pH by flow cytometry in Dictyostelium. **BMC Res. Notes** 2:7. « [Highly Accessed](#) »

Orci, L., Ravazzola, M., Le Coadic, M., Shen, W.W., Demaurex, N., Cosson, P. 2009. From the Cover: STIM1-induced precortical and cortical subdomains of the endoplasmic reticulum. **Proc. Natl. Acad. Sci. USA** 106:19358-62.

Vallet-Gely, I., Novikov, A., Augusto, L., Liehl, P., Bolbach, G., Péchy-Tarr, M., Cosson, P., Keel, C., Caroff, M., Lemaitre, B. 2009. Hemolytic activity of Pseudomonas entomophila, a versatile soil bacterium, is linked to cyclic lipopeptide production. **Appl. Environmental Microb.** 76: 910-21.

Smith, E.W., Lima, W.C., Charette, S.J., Cosson, P. 2010. Effect of starvation on the endocytic pathway of Dictyostelium cells. **Euk. Cell.** 9:387-92.

Lavieu, G., Orci, L., Shi, L., Geiling, M., Ravazzola, M., Wieland, F., Cosson, P., Rothman, J.E. 2010. Induction of cortical endoplasmic reticulum by dimerization of a coatamer-binding peptide anchored to endoplasmic reticulum membranes. **Proc. Natl. Acad. Sci. USA.** 107:6876-81.

Mercanti, V., Cosson, P. 2010. Resistance of *Dictyostelium discoideum* membranes to saponin permeabilization. **BMC Res. Notes** 3:120.

Mercanti, V., Marchetti, A., Lelong, E., Perez, F., Orci, L., Cosson, P. 2010. Transmembrane domains control exclusion of membrane proteins from clathrin-coated pits. **J. Cell Sci.** 123:3329-35.

Lelong, E., Marchetti, A., Guého, A., Lima, W.C., Sattler, N., Molmeret, M., Hagedorn, M., Soldati, T., Cosson, P. 2011. Role of magnesium and a phagosomal P-type ATPase in intracellular bacterial killing. **Cell. Microb.** 13:246-58.

Lelong, E., Marchetti, A., Simon, M., Burns, J.L., van Delden, C., Köhler, T., Cosson, P. 2011. Evolution of *Pseudomonas aeruginosa* virulence in infected patients revealed in a *Dictyostelium discoideum* host model. **Clin. Microb. Infect.** 17:1415-20.

Le Coadic, M., Simon, M., Marchetti, A., Ebert, D., Cosson, P. 2012. *Daphnia magna*, a host to evaluate bacterial virulence. **Appl. Environ. Microbiol.** 78:593-5.

Froquet, R., le Coadic, M., Perrin, J., Cherix, N., Cornillon, S., Cosson, P. 2012. TM9/Phg1 and SadA proteins control surface expression and stability of SibA adhesion molecules in *Dictyostelium*. **Mol. Biol. Cell** 23:679-86.

Lima, W.C., Leuba, F., Soldati, T., Cosson, P. 2012. Mucolipin controls lysosome exocytosis in *Dictyostelium*. **J. Cell Sci.** 125:2315-22.

Cosson, P., Marchetti, A., Ravazzola, M., Orci, L. 2012. Mitofusin-2 independent juxtaposition of endoplasmic reticulum and mitochondria: an ultrastructural study. **PLOS One** 7: e46293. "Top 10% cited PLOS One article"

Dias, M., Blanc, C., Thazar-Poulot, N., Ben Larbi, L., Cosson, P., Letourneur, F. 2013. *Dictyostelium* ACAP-A is an ArfGAP involved in cytokinesis, cell migration and actin cytoskeleton dynamics. **J. Cell Sci.** 126:756-66.

Le Coadic, M., Froquet, R., De Lima, W., Dias, M., Marchetti, A., Cosson, P. 2013. Phg1/TM9 proteins control intracellular killing of bacteria by determining cellular levels of the Kill1 sulfotransferase in *Dictyostelium*. **PLOS One**, 8:e53259.

Vernay, A., Cosson, P. 2013. Immunofluorescence labeling of cell surface antigens in *Dictyostelium*. **BMC Res. Notes** 6:317.

Harrison, C., Kicka, S., Trofimov, V., Berschl, K., Ouertatani-Sakouhi, H., Ackermann, N., Hedberg, C., Cosson, P., Soldati, T., Hilbi, H. 2013. Exploring anti-bacterial compounds against intracellular *Legionella*. **PLOS One.** 8:e74813.

Blanc, C., Zufferey, M., Cosson, P. 2014. Use of in vivo biotinylated GST fusion proteins to select recombinant antibodies. **ALTEX**. 31:37-42.

Lima, W., Balestrino, D., Forestier, C., Cosson, P. 2014. Two distinct sensing pathways allow recognition of *Klebsiella pneumoniae* by *Dictyostelium amoebae*. **Cell. Microb.** 16:311-23. "Selected as Editor's choice".

Vinet, A.F., Fiedler, T., Studer, V., Froquet, R., Dardel, A., Cosson, P., Pieters, J. 2014. Initiation of multicellular differentiation in *Dictyostelium discoideum* regulated by coronin A. **Mol. Biol. Cell** 25:688-701.

Köhler, T. Ouertatani, H., Cosson, P., van Delden, C. 2014. QsrO a novel regulator of quorum-sensing and virulence in *Pseudomonas aeruginosa*. **PLOS One** 9:e87814.

Kicka, S., Trofimov, V., Harrison, C., Ouertatani, H., McKinney, J., Scapozza, L., Hilbi, H., Cosson, P., Soldati, T. 2014. Establishment and validation of whole-cell based fluorescence assays to identify anti-mycobacterial compounds using the *Acanthamoeba castellanii* - *Mycobacterium marinum* host-pathogen system. **PLOS One** 9:e87834.

Lima, W.C., Vinet, A., Pieters, J., Cosson, P. 2014. Role of PKD2 in rheotaxis in *Dictyostelium*. **PLOS One** 9:e88682.

Baïlo, N., Cosson, P., Charette, S.J., Paquet, V.E., Doublet, P., Letourneur, F. 2014. Defective lysosome maturation and *Legionella pneumophila* replication in *Dictyostelium* ArfGAP ACAP-A mutant cells. **J. Cell Sci.** 127:4702-13.

Saüc, S., Bulla, M., Nunes, P., Orci, L., Marchetti, A., Antigny, F., Bernheim, L., Cosson, P., Frieden, M., Demaurex, N. 2015. STIM1L traps and gates Ori1 channels without remodeling the cortical ER. **J. Cell Sci.** 128:1568-79.

Perrin, J., Le Coadic, M., Vernay, A., Dias, M., Gopaldass, N., Ouertatani-Sakouhi, H., Cosson, P. 2015. TM9 proteins control surface targeting of glycine-rich transmembrane domains. **J. Cell Sci.** 128: 2269-77.

Slepikas, L., Chiriano, G., Perozzo, R., Tardy, S., Kranjc-Pietrucci, A., Patthey-Vuadens, O., Ouertatani-Sakouhi, H., Kicka, S., Harrison, C., Scignari, T., Perron, K., Hilbi, H., Soldati, T., Cosson, P., Tarasevicius, E., Scapozza, L. 2016. In silico driven design and synthesis of rhodanine derivatives as novel antibacterials targeting the enoyl reductase InhA. **J. Medicinal Chem.** 59 :10917-28.

Sabra, A., Leiba, J., Mas, L., Louwagie, M., Couté, Y., Journet, A., Cosson, P., Aubry, L. 2016. Pycnosomes: condensed endosomal structures secreted by *Dictyostelium amoebae*. **PLOS One** 11:e0154875.

Delincé, M.J., Bureau, J.B., Lopez-Jimenez, A.T., Cosson, P., Soldati, T., McKinney, J.D. 2016. A microfluidic cell-trapping device for single-cell tracking of host-microbe interactions. **Lab on a Chip** 16:3276-85.

Dias, M., Brochetta, C., Marchetti, A., Bodinier, R., Brüchert, F., Cosson, P. 2016. Role of SpdA in cell spreading and phagocytosis in *Dictyostelium*. **PLOS One** 11:e0160376

Leiba, J., Sabra, A., Bodinier, R., Marchetti, A., Lima, W.C., Melotti, A., Perrin, J., Burdet, F., Pagni, M., Soldati, T., Lelong, E., Cosson, P. 2017. Vps13F links bacterial recognition and intracellular killing in Dictyostelium. **Cell. Microb.** 19:e12722

Vernay, A., Marchetti, A., Sabra, A., Scherer, P., Orci, L., Cosson, P. 2017. MitoNEET-dependent formation of inter-mitochondrial junctions. **Proc. Natl. Acad. Sci. USA.** 114:8277-82

Ouertatani-Sakouhi, H., Kicka, S., Gianpaolo, C., Harrison, C., Hilbi, H., Scapozza, L., Soldati, T., Cosson, P. 2017. Inhibitors of Mycobacterium marinum virulence. **Plos One** 12:e0181121

Dhakshinamoorthy, R., Bitzhenner, M., Cosson, P., Soldati, T., Leippe, M. 2018. The saposin-like protein AplD displays pore-forming activity and participates in defence against bacterial infection during a multicellular stage of Dictyostelium discoideum. **Front. Cell. Infect. Biol.** 8:73

Perrin, J., Bary, A., Vernay, A., Cosson, P. 2018. Role of the HIV-1 envelope transmembrane domain in intracellular sorting. **BMC Cell Biol.** 19:3

Lima, W.C., Pillonel, T., Bertelli, C., Ifrid, E., Greub, G., Cosson, P. 2018. Genome sequencing and functional characterization of the non-pathogenic Klebsiella pneumoniae KpGe bacteria. **Microbes and Infection.** 20:293-301

Sattler, N., Bosmani, C., Barisch, C., Ghého, A., Gopaldass, N., Dias, M., Leuba, F., Bruckert, F., Cosson, P., Soldati, T. 2018. Functions of the Dictyostelium LIMP-2 and CD36 homologues in bacteria uptake, phagolysosome biogenesis and host cell defence. **J. Cell Sci.** 131:jcs218040

Vernay, A., Lamrabet, O., Perrin, J., Cosson, P. 2018. TM9SF4 levels determine sorting of transmembrane domains in the early secretory pathway. **J. Cell Sci.** 131:jcs220830

Hammel, P., Lima, W.C., Hartley, O., Cosson, P. 2018. RB250 and RB251 antibodies recognize the human MitoNEET/CISD1 protein by ELISA. **Antibody Rep.** 1:e1

Bodinier, R., Leiba, J., Sabra, A., Jauslin T.N., Lamrabet O., Guilhen C., Marchetti A., Iwade Y., Kawata T., Lima W.C., Cosson P. 2019. LrrkA, a kinase with Leucine-Rich Repeats links folate sensing with Kil2 activity and intracellular killing. **Cell Microbiol.** e13129.

Lima W.C., Gasteiger E., Marcatili, P., Duek, P., Bairoch, A., Cosson P. 2019. The ABCD database: a repository for chemically defined antibodies. **Nucleic Acids Res.** In press.

REVIEWS

Cosson, P. and F. Letourneur. 1996. "Targeting to the endoplasmic reticulum by dilysine motifs : role of coat proteins". Cold Spring Harbor Symposia on Quantitative Biology, Vol. LX: 113-117. Cosson, P, Letourneur, F. 1997. Coatomer (COPI)-coated vesicles : role in intracellular transport and protein sorting. **Curr. Opinion in Cell Biol.** 9:484-487.

Cosson, P, Soldati, T. 2008. Eat kill or die: when amoeba meets bacteria. **Curr. Opinion in Microbiol.** 11: 271-76.

Lima, WC, Lelong, E, Cosson, P. 2011. What can *Dictyostelium* bring to the study of *Pseudomonas* infections? **Seminars-Cell. Dev. Biol.** 22:77-81.

Lima, WC, Cosson, P. 2013. Secretory lysosomes in *Dictyostelium*: visualization, characterization, and dynamics. **Methods Mol. Biol.** 983:445-59.

Cosson, P, Perrin, J, Bonifacino JS. 2013. Anchors aweigh: protein localization and transport mediated by transmembrane domains. **Trends in Cell Biol.** 23:511-7. "Top 10 Editorial Board Favorites for 2013".

Cosson, P, Lima, WC. 2014. Intracellular killing of bacteria: is *Dictyostelium* a model macrophage or an alien? **Cell. Microbiol.** 16:816-23.

Cosson, P., Hartley, O. 2016. Recombinant antibodies for academia: a practical approach. **Chimia** 12:893-97.