

Maria Teresa Catanese

## Employment

### Research output

#### **3D microfluidic liver cultures as a physiological preclinical tool for hepatitis B virus infection**

Ortega-Prieto, A. M., Skelton, J. K., Wai, S. N., Large, E., Lussignol, M., Vizcay-Barrena, G., Hughes, D., Fleck, R. A., Thursz, M., Catanese, M. T. & Dorner, M., 31 Dec 2018, In: *Nature Communications*. 9, 15 p., 682.

#### **The interferon inducible isoform of NCOA7 inhibits endosome-mediated viral entry**

Doyle, T., Moncorgé, O., Bonaventure, B., Pollpeter, D., Lussignol, M., Tauziet, M., Apolonia, L., Catanese, M. T., Goujon, C. & Malim, M., 1 Dec 2018, In: *Nature Microbiology*. 3, 12, p. 1369–1376

#### **Proteomics of HCV virions reveals an essential role for the nucleoporin Nup98 in virus morphogenesis**

Lussignol, M., Kopp, M., Molloy, K., Vizcay-Barrena, G., Fleck, R. A., Dorner, M., Bell, K. L., Chait, B. T., Rice, C. M. & Catanese, M. T., 1 Mar 2016, In: *Proceedings of the National Academy of Sciences of the United States of America*. 113, 9, p. 2484-2489 6 p.

#### **Advances in experimental systems to study hepatitis C virus in vitro and in vivo**

Catanese, M. T. & Dorner, M., 1 May 2015, In: *Virology*. 479-480, p. 221-233 13 p.

#### **Hepatitis C virus RNA functionally sequesters miR-122**

Luna, J. M., Scheel, T. K. H., Danino, T., Shaw, K. S., Mele, A., Fak, J. J., Nishiuchi, E., Takacs, C. N., Catanese, M. T., de Jong, Y. P., Jacobson, I. M., Rice, C. M. & Darnell, R. B., 12 Mar 2015, In: *Cell*. 160, 6, p. 1099-1110 12 p.

#### **Role of hypervariable region 1 for the interplay of hepatitis C virus with entry factors and lipoproteins**

Bankwitz, D., Vieyres, G., Hueging, K., Bitzegeio, J., Doepke, M., Chhatwal, P., Haid, S., Catanese, M. T., Zeisel, M. B., Nicosia, A., Baumert, T. F., Kaderali, L. & Pietschmann, T., Nov 2014, In: *Journal of virology*. 88, 21, p. 12644-12655 12 p.

#### **Successful anti-SR-BI mAb therapy in humanized mice after challenge with HCV variants with in vitro resistance to SR-BI-targeting agents**

Vercauteren, K., Van Den Eede, N., Mesalam, A. A., Belouzard, S., Teresa Catanese, M., Bankwitz, D., Wong-Staal, F., Cortese, R., Dubuisson, J., Rice, C. M., Pietschmann, T., Leroux-Roels, G., Nicosia, A. & Meuleman, P., 2014, (E-pub ahead of print) In: *Hepatology*. N/A, N/A, p. N/A 24 p., N/A.

#### **Completion of the entire hepatitis C virus life cycle in genetically humanized mice**

Dorner, M., Horwitz, J. A., Donovan, B. M., Labitt, R. N., Budell, W. C., Friling, T., Vogt, A., Catanese, M. T., Satoh, T., Kawai, T., Akira, S., Law, M., Rice, C. M. & Ploss, A., 12 Sept 2013, In: *NATURE*. 501, 7466, p. 237-241 5 p., N/A.

#### **Different Requirements for Scavenger Receptor Class B Type I in Hepatitis C Virus Cell-Free versus Cell-to-Cell Transmission**

Catanese, M. T., Loureiro, J., Jones, C. T., Dorner, M., Von Hahn, T. & Rice, C. M., 1 Aug 2013, In: *Journal of Virology*. 87, 15, p. 8282-8293 12 p., N/A.

#### **Ultrastructural analysis of hepatitis C virus particles**

Catanese, M. T., Uryu, K., Kopp, M., Edwards, T. J., Andrus, L., Rice, W. J., Silvestry, M., Kuhn, R. J. & Rice, C. M., 4 Jun 2013, In: *Proceedings of the National Academy of Sciences of the United States of America*. 110, 23, p. 9505-10 6 p.

#### **A Human monoclonal antibody targeting scavenger receptor class B type I precludes hepatitis C virus infection and viral spread in vitro and in vivo**

Meuleman, P., Catanese, M. T., Verhoye, L., Desombere, I., Farhoudi, A., Jones, C. T., Sheahan, T., Grzyb, K., Cortese, R., Rice, C. M., Leroux-roels, G. & Nicosia, A., 1 Feb 2012, In: *Hepatology*. 55, 2, p. 364-372 9 p., N/A.

**Expression of paramyxovirus V proteins promotes replication and spread of hepatitis C virus in cultures of primary human fetal liver cells**

Andrus, L., Marukian, S., Jones, C. T., Catanese, M. T., Sheahan, T. P., Schoggins, J. W., Barry, W. T., Dustin, L. B., Trehan, K., Ploss, A., Bhatia, S. N. & Rice, C. M., 1 Dec 2011, In: *Hepatology*. 54, 6, p. 1901-1912 12 p., N/A.

**A genetically humanized mouse model for hepatitis C virus infection**

Dorner, M., Horwitz, J. A., Robbins, J. B., Barry, W. T., Feng, Q., Mu, K., Jones, C. T., Schoggins, J. W., Catanese, M. T., Burton, D. R., Law, M., Rice, C. M. & Ploss, A., 9 Jun 2011, In: *NATURE*. 474, 7350, p. 208-211 4 p., N/A.

**Real-time imaging of hepatitis C virus infection using a fluorescent cell-based reporter system**

Jones, C. T., Catanese, M. T., Law, L. M. J., Khetani, S. R., Syder, A. J., Ploss, A., Oh, T. S., Schoggins, J. W., Macdonald, M. R., Bhatia, S. N. & Rice, C. M., Feb 2010, In: *Nature Biotechnology*. 28, 2, p. 167-171 5 p., N/A.

**Role of Scavenger Receptor Class B Type I in Hepatitis C Virus Entry: Kinetics and Molecular Determinants**

Catanese, M. T., Ansuini, H., Graziani, R., Huby, T., Moreau, M., Ball, J. K., Paonessa, G., Rice, C. M., Cortese, R., Vitelli, A. & Nicosia, A., 1 Jan 2010, In: *Journal of Virology*. 84, 1, p. 34-43 10 p., N/A.

**High-Avidity Monoclonal Antibodies against the Human Scavenger Class B Type I Receptor Efficiently Block Hepatitis C Virus Infection in the Presence of High-Density Lipoprotein**

Catanese, M. T., Graziani, R., Von Hahn, T., Moreau, M., Huby, T., Paonessa, G., Santini, C., Luzzago, A., Rice, C. M., Cortese, R., Vitelli, A. & Nicosia, A., 1 Aug 2007, In: *Journal of Virology*. 81, 15, p. 8063-8071 9 p., N/A.

**AROS-29 is involved in adaptive response to oxidative stress**

Gesualdi, N. M., Chirico, G., Catanese, M. T., Pirozzi, G. & Esposito, F., 2006, In: *Free Radical Research*. 40, 5, p. 467-476 10 p., N/A.

## **Awards**

**Dissecting the role of nucleoporins in the life cycle of positive-strand RNA viruses**

Catanese, M. T. (Primary Investigator) & Fleck, R. (Co-Investigator)

KHP King's Health Partners: £77,700.00

1/10/2016 → 30/09/2017