

# Gualtiero Alvisi

## Personal data

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**Place of Birth** Bologna, Italy  
**Date of Birth** 20/02/1976  
**Citizenship** Italian  
**Telephone** +393282161733  
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## Education/Degrees

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- 2002-2005** PhD. Molecular and Cellular Biotechnology, University of Bologna, Bologna, Italy “Human Cytomegalovirus DNA polymerase nuclear transport: role of importins”.
- 1995-2001** Bsc, MA Medical Biotechnology, University of Bologna, Bologna Italy. 110/110 cum laude. "Development of an innovative Quantitative Competitive Multiple PCR Technique for the detection of Human Cytomegalovirus in biological samples".

## Grants and Scholarships

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- 2017** Institutional research grant (ex 60%) from University of Padua. € 3000.00  
Finanziamento Annuale Attività di ricerca di Base from MIUR. € 3000.00
- 2016** Institutional research grant (ex 60%) from University of Padua. € 3000.00
- 2015** Institutional research grant (ex 60%) from University of Padua  
“*MOLECULAR CHARACTERIZATION OF VIRUS-HOST CELL INTERACTIONS*”, as Principal Investigator. Code 60A07-1024/15. € 5532.00
- 2014** Institutional research grant (ex 60%) from University of Padua  
“*MOLECULAR CHARACTERIZATION OF VIRUS-HOST CELL INTERACTIONS*”, as Principal Investigator. Code 60A07-2070/14. € 3958.00
- 2014** Progetto di Ateneo grant “Src Family Kinases (SFKs) as critical mediators of hepatitis C virus (HCV) infection: a study on their role in bridging cellular function to viral life cycle” awarded by University of Padua, as Principal Investigator. Code CPDA130224/13. € 52.602. 00
- 2013** Molecular Medicine Department Research Grant for young investigators  
“Molecular Characterization of HCV Mediated cell cycle arrest of human

Hepatocytes, University of Padua, as Principal Investigator. € 4.000.00

- 2013** Institutional research grant (ex 60%) from University of Padua “Host cell-virus interactions: a molecular approach”, as Principal Investigator. Code 60A07-7440/13. € 3676.86
- 2012** PRIN grant 2010-2011 “Pathogenesis of Papillomavirus induced diseases: a multidisciplinary approach”, as Project Participant.
- 2012** Institutional research grant (ex 60%) from University of Padua “Use of Lentiviral vectors for functional studies of viral factors essential for the replication of Human Cytomegalovirus” as Principal Investigator. Code 60A07-5977. € 2.629.00
- 2008** PRIN grant 2007 “Systemic bacterial, fungine, and viral infections in patients with haemopoietic neoplasies: susceptibility and severity biological factors and development of innovative diagnostic tools”, as Project Participant.
- 07/2005- 10/2005** MarcoPolo Alma UE Scholarship, awarded by University of Bologna to join the Department of Biochemistry and Molecular Biology, Monash University (AUS). “Study of the oncogenic potential of HCMV: role of casein kinase II”.
- 11/2002-01/2003** MarcoPolo Alma UE Scholarship, awarded by University of Bologna to join the Department of Biochemistry and Molecular Biology, Monash University (AUS). “Study of the nuclear import of the product of the protein encoded by HCMV ORF UL44”.
- 2004-2005** University of Bologna Scholarship “Study of the nuclear transport of proteins required for HCMV replication”.
- 2002-2004** University of Bologna Scholarship “Study of the nuclear transport of HCMV replication cycle-related proteins”.
- 2001-2002** F.S.E. scholarship “Development of an innovative Quantitative Competitive Multiple PCR Technique for the detection of HCMV in human blood samples”.

## Working experience

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- 03/2011-present** **Assistant Professor** in Microbiology and Clinical Microbiology. Department of Molecular Medicine, University of Padua, Padua (Italy).
- 04/2011-06/2012** **Visiting Professor** Molecular Virology Department, Hygiene Institute, University of Heidelberg, Heidelberg (Germany).
- 01/2009-03/2011** **Postdoctoral Fellow**. Molecular Virology Department, Hygiene Institute, University of Heidelberg, Heidelberg (Germany).
- 07/2005-12/2006** **Postdoctoral Fellow; Visiting Scientist**. Nuclear Signaling Laboratory Department of Biochemistry and Molecular Biology. Monash University, Clayton, VIC (Australia).
- 11/2002-04/2004**
- 1999-2008** MA Student; PhD Student; Postdoctoral Fellow. Molecular Virology Laboratory Department of Experimental and Specialistic Medicine. University of Bologna,

Bologna (Italy).

## Editorial experience

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| <b>2006-present</b> | Reviewer for the peer reviewed journals “Journal of Virology”, “Journal of Cellular Physiology”, “Biochemistry”, “Traffic”, “Experimental Cell Research”, “Antiviral Research”, “World Journal of Virology”, “World Journal of Biological Chemistry”, “World Journal of Hepatology”, “Future Virology”, “Journal of Microencapsulation”, “Cellular Microbiology”, “Analytical Chemistry”, “Viruses”, and “Biochemical and Biophysical Acta-General Subjects”. |
| <b>2013-present</b> | Editorial Board Member of "PlosOne" (2015-ongoing), “Journal of Virology Research” (2012-2015), “Advances in Infectious Diseases” (2012-2015), “World Journal of Virology” (2011-2015), and “Clinical Journal of Microbiology and Pathology” (2014-2015).                                                                                                                                                                                                     |
| <b>2011-present</b> | Series Editor of the Hot Topic Highlight “Reprogramming the host: Modification of cell functions upon viral infection” for World Journal of Virology                                                                                                                                                                                                                                                                                                          |
| <b>2012-present</b> | Reviewer for several national funding programs: MIUR, French National Research Agency (ANR), Hong Kong Research Grants Council (RGC).                                                                                                                                                                                                                                                                                                                         |

## Teaching activity

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- 2017-2018
  - Degree in Medicine and Surgery, University of Padua, "Microbiology". MED/07; 5 CFU, MEP5071038
  - Degree in Medical Biotechnologies, University of Padua, Genome Editing module, within the course "Advanced Biomedical Technologies". MED/07; 2 CFU, MEP3052680.
  - Degree in Dietistic, University of Padua, Microbiology module within the course "Chemistry and Microbiology". MED/07; 2 CFU, MEN1033430
  - Degree in Nursery, University of Padua, Microbiology module within the course "Pathology and Microbiology". MED/07; 2 CFU, MEP4063586.
  - Degree in Medical Biotechnologies, University of Padua, "LABORATORY ACTIVITIES 1: CELLULAR AND MOLECULAR THERAPIES", within the course "LABORATORY ACTIVITIES 1: CELLULAR AND MOLECULAR THERAPIES". MED/07; 1 CFU, MEP7079237.
- 2016-2017
  - Degree in Dietistic, University of Padua, Microbiology module within the course "Chemistry and Microbiology". MED/07; 2 CFU, MEN1033430
  - Degree in Nursery, University of Padua, Microbiology module within the course "Pathology and Microbiology". MED/07; 2 CFU, MEP4063586.
  - Degree in Medical Biotechnologies, University of Padua, "LABORATORY ACTIVITIES", within the course "LABORATORY ACTIVITIES". MED/07; 1 CFU, MEP3052688.
- 2015-2016
  - Degree in Medical Biotechnologies, University of Padua, Genome Editing module, within the course "Advanced Biomedical Technologies". MED/07; 2 CFU, MEP3052680.
  - Degree in Dietistic, University of Padua, Microbiology module within the course "Chemistry and Microbiology". MED/07; 2 CFU, MEN1033430.
  - Degree in Nursery, University of Padua, Microbiology module within the course "Pathology, Microbiology and Genetics". MED/07; 2 CFU, MEP4063586.
  - Degree in Nursery, University of Padua, course "How to Write a Scientific Paper, a Poster and a Thesis for bachelor's Degree". MED45; 3 CFU, MEP3053066.
  - Degree in Biomedical Laboratory Techniques, University of Padua, Microbiology module within the course "Microbiology, Virology and Parasitology applied to Medicine" – Vicenza. MED/07; 4 CFU, MEN1036443.
- 2014-2015
  - Degree in Dietistic, University of Padua, Microbiology module within the course "Chemistry and Microbiology". MED/07; 2 CFU, MEN1033430.
  - Degree in Nursery, University of Padua, Microbiology module within the course "Pathology, Microbiology and Genetics". MED/07; 2 CFU, MEP4063586.
  - Degree in Nursery, University of Padua, course "How to Write a Scientific Paper, a Poster and a Thesis for bachelor's Degree". MED45; 3 CFU, MEP3053066.
  - Degree in Biomedical Laboratory Techniques, University of Padua, Microbiology module within the course "Microbiology, Virology and Parasitology applied to Medicine" – Vicenza. MED/07; 4 CFU, MEN1036443.
- 2013-2014
  - Degree in Dietistic, University of Padua, Microbiology module within the course "Chemistry and Microbiology". MED/07; 2 CFU, MEN1033430.

- Degree in Nursery, University of Padua, Microbiology module within the course “Pathology, Microbiology and Genetics”. MED/07; 2 CFU, MEN1033826.
- Degree in Medical Biotechnologies, University of Padua, Genome Editing module, within the course “Advanced Biomedical Technologies”. MED/07; 2 CFU, MEP3052680.
- Teaching support activity, degree in Medicine and Surgery, University of Padua, course of Microbiology.
- 2012-2013
  - Degree in Biotechnology, University of Padua, module of Applied Microbiology within the course “Applied microbiology and genetic engineering”. MED/07; 6 CFU, SCO2045392
  - Degree in Medical Biotechnology, University of Padua, course “genome editing for the cure of chronic viral infections”. MED/07; 1 CFU, MEO2046675
  - Teaching support activity, degree in Medicine and Surgery, University of Padua, course of Microbiology.
- 2002-2003; tutorial activity, degree in Biotechnology, University of Bologna.

## Scientific Societies

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Member of the following scientific societies:

- Società Italia di Virologia (SIV), from 2002.
- European Society for Virology (ESV), from 2013.
- International Society for Antiviral Research (ISAR), from 2018.

## Awards

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- **Italian Virology Society Annual VII Meeting Best Poster Award, Orvieto (June 24-26, 2007):** A Bipartite Nuclear Localization Signal Mediates Importin  $\alpha/\beta$  Targeting of the Human Herpes Simplex Type 1.
- **Italian Virology Society Annual VII Meeting Eurovirology Travel Grant for Oral Presentation, Orvieto (June 24-26, 2007):** Analysis of HCMV ppUL44 homodimerization, intra-nuclear mobility and phosphorylation-regulated nuclear transport using live cells imaging.

## Current Research

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- Protein regulation of subcellular localization and functional activity by post translational modifications.
- Identification of host factors required for the Life cycle of members of the Flaviviridae family.
- Identification of host factors regulating lipid homeostasis in human liver cells.
- Identification of small molecules disruptin protein-protein interactions for as new antiviral agents.

## Courses and congresses

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| <b>06/2018</b> | “31 <sup>st</sup> International Conference on Antiviral Research”, Porto (Portugal). |
| <b>02/2018</b> | “Viruses 2018 - Breakthroughs in Viral Replication”, Barcellona, Spain.              |

**06/2016** "4th European Seminar in Virology, Oncogenic and Oncolytic Viruses (EuSeV)", Bertinoro (FC), Italy.  
**09/2014** "Italian Virology Society XII Meeting" Orvieto, Italy.  
**10/2013** "41<sup>st</sup> congress of the Italian Society for Microbiology", *Riccione, Italy*.  
**09/2013** "5<sup>th</sup> European Congress of Virology" Lyon, France  
**12/2012** "Epatite B ed Epatite C; due virus e due malattie a confronto" Padova, Italy.  
**10/2012** "19th International Symposium on Hepatitis C Virus and Related Viruses" Venice, Italy.  
**09/2012** "Italian Virology Society Annual XI Meeting" Orvieto Italy.  
**03/2011** "21st Annual Meeting of the German Society for Virology" Freiburg, Germany.  
**10/2010** "5th Mini Herpesvirus Workshop", Berlin, Germany.  
**11/2009** "19th European Workshop on Lipid Binding Proteins" Copenhagen, Denmark.  
**10/2009** "16th International Symposium on Hepatitis C Virus and Related Viruses" Nice, France.  
**09/2007** "3rd European Virology Meeting" Nurnberg, Germany.  
**06/2007** "Italian Virology Society Annual VII Meeting" Orvieto (TR), Italy.  
**05/2007** "11th International CMV & beta Herpesviruses Workshop", Toulouse, France.  
**12/2005** "3rd Australian Virology Group Meeting", Phillip Island, VIC, Australia.  
**09/2004** "Italian Virology Society Annual IV Meeting" Orvieto (TR), Italy.  
**07/2004** "29th International Herpes virus Workshop" Reno, Nevada, USA.  
**06/2004** "Annual Biochemistry XV Meeting" Brallo di Pergola (PV), Italy.  
**05/2004** "International Gateway users symposium" Nice, France.  
**11/2003** "Italian Virology Society Annual III Meeting" Cortona (AR), Italy.  
**11/2002** "Italian Virology Society Annual II Meeting" Cortona (AR), Italy.  
**05/2002** "Annual Biochemistry XIII Meeting" Brallo di Pergola (PV), Italy.  
**07/2001** "Vertical Virus Transmission", Bertinoro (FC), Italy.

## Oral Presentations

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- 05/2016**      **"Host factors in HCV replication"**– invited speaker  
Department of Molecular Medicine meeting, Padua, Italy.
- 10/2013**      **"A comparative functional RNA interference screen identifies factors differentially required for lipid droplet homeostasis and life cycle of Flaviviridae members"** – invited speaker  
41<sup>st</sup> National Congress of the Italian Society for Microbiology, Riccione, Italia.
- 09/2013**      **A comparative functional RNA interference screen identifies factors differentially required for lipid droplet homeostasis and life cycle of Flaviviridae members** - selected oral presentation  
"5<sup>th</sup> European Congress of Virology" Lyon, France.
- 12/2012**      **Aspetti patogenetici e molecolari delle Infezioni da HBV e HCV** - invited speaker  
Congress "Epatite B ed Epatite C; due virus e due malattie a confronto", Padova, Italy.
- 10/2010**      **Multiple phosphorylation at the C-terminus differentially regulate the nuclear import of HCMV DNA polymerase processivity factor UL44** - selected oral presentation  
5<sup>th</sup> Mini Herpesvirus Workshop, Berlin, Germany.
- 06/2007**      **Analysis of HCMV ppUL44 homodimerization, intra-nuclear mobility and phosphorylation-regulated nuclear transport using live cells imaging (EUROVIROLOGY TRAVEL GRANT FOR BEST ORAL PRESENTATIONS)**  
Italian Virology Society Annual VII Meeting. Orvieto, Italy.
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## Abstracts

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- 06/2018**      **Divide Et Impera, Small Molecule Disruptors of UL44 DNA Polymerase Processivity Factor: A New Class of Cytomegalovirus Inhibitors**  
31<sup>st</sup> International Conference on Antiviral Research”, Porto (Portugal).
- 02/2018**      **Identification of Small Molecules Inhibiting the Dimerization of HCMV DNA Polymerase Processivity Factor UL44**  
Viruses 2018 - Breakthroughs in Viral Replication, Barcelona, Spain.
- 09/2015**      **The homodimerization of Human Papillomavirus oncoprotein E6 as a target for the development of new anti-HPV drugs**  
Italian Virology Society Annual XII Meeting. Orvieto, Italy.
- 07/2015**      **Intersectin-1s: a novel nucleo-cytoplasmic endocytic protein**  
40th FEBS Congress, The Biochemical Basis of Life, Berlin, Germany
- 09/2014**      **Identification of small molecules inhibiting the dimerization of HCMV DNA polymerase processivity factor UL44**  
Italian Virology Society Annual XII Meeting. Orvieto, Italy.
- 10/2013**      **A comparative functional RNA interference screen identifies factors differentially required for lipid droplet homeostasis and life cycle of Flaviviridae members – invited speaker**  
41<sup>st</sup> National Congress of the Italian Society for Microbiology, Riccione, Italia.
- 09/2013**      **A comparative functional RNA interference screen identifies factors differentially required for lipid droplet homeostasis and life cycle of Flaviviridae members - selected oral presentation**  
“5<sup>th</sup> European Congress of Virology” Lyon, France.
- 12/2012**      **Aspetti patogenetici e molecolari delle Infezioni da HBV e HCV - invited speaker**  
Congress “Epatite B ed Epatite C; due virus e due malattie a confronto”, Padova, Italy.
- 10/2010**      **Multiple phosphorylation at the C-terminus differentially regulate the nuclear import of HCMV DNA polymerase processivity factor UL44 - selected oral presentation**  
5<sup>th</sup> Mini Herpesvirus Workshop, Berlin, Germany.
- 09/2009**      **The flexible loop of human cytomegalovirus DNA polymerase processivity factor ppUL44 is required for efficient DNA binding and replication in cell**  
“**A Herpesvirus DNA Polymerase Processivity Factor is Modified by SUMO in the Host Cell**”  
“**Susceptibility of Human placenta derived Mesenchymal Stromal Cells to human herpesviruses infection.**”  
Italian Virology Society Annual IX Meeting. Orvieto, Italy.
- 09/2007**      **Analysis of HCMV ppUL44 homodimerization, intra-nuclear mobility and phosphorylation-regulated nuclear transport using live cells imaging**

- 3rd European Congress of Virology, Nurnberg, Germany
- 06/2007**     **The HCMV DNA polymerase accessory subunit, UL44, functions as a dimer *in vitro* and in cells**
- “     **A Bipartite Nuclear Localization Signal Mediates Importin  $\alpha/\beta$  Targeting of the Human Herpes Simplex Type 1 DNA Polymerase Catalytic Subunit pUL30 to the nucleus (BEST POSTER AWARD)**
- “     **Analysis of HCMV ppUL44 homodimerization, intra-nuclear mobility and phosphorylation-regulated nuclear transport using live cells imaging (EUROVIROLOGY TRAVEL GRANT FOR BEST ORAL PRESENTATIONS)**
- “     **Human Placenta derived mesenchymal stem cells are fully permissive to human cytomegalovirus infection**
- Italian Virology Society Annual VII Meeting. Orvieto, Italy.
- 06/2007**     **Regulated nucleocytoplasmic trafficking of viral gene products; a therapeutic target?**
- 5th International Conference on Inhibitors of Protein Kinases, Warsaw, Poland.
- 05/2007**     **Analysis of HCMV ppUL44 homodimerization, intra-nuclear mobility and phosphorylation-regulated nuclear transport using live cells imaging**
- Human Placenta derived mesenchymal stem cells are fully permissive to human cytomegalovirus infection**
- 11<sup>th</sup> International CMV and BetaHerpesvirus Workshop. Toulouse, France.
- 07/2005**     **Human cytomegalovirus DNA polymerase processivity factor translocates into the cell nucleus as a dimer**
- 30th International Herpesvirus Workshop. Turku, Finland.
- 09/2004**     **Characterization of the nuclear import pathway of the Human Cytomegalovirus DNA polymerase subunits.**
- Italian Virology Society Annual IV Meeting. Orvieto, Italy.
- 07/2004**     **Characterization of the nuclear import pathway of the Human Cytomegalovirus DNA polymerase subunits.**
- 29th International Herpesvirus Workshop, Reno, Nevada, USA.
- 09/2003**     **A Casein kinase II consensus sequence modulates the nuclear import of HCMV UL44 gene product.**
- “     **Nuclear localization signals on human Cytomegalovirus UL54 and UL70 protein products.**
- “     **Expression of the human Cytomegalovirus encoded DNA helicase (UL105).**
- Italian Virology Society Annual III Meeting. Cortona, Italy.
- 09/2002**     **Espressione di una proteina di fusione tra Beta-Galattosidasi e dsRed-1 come marker di funzionalità di sequenze di localizzazione nucleare.**
- Italian Virology Society Annual II Meeting. Cortona, Italy.

Author or co-author of 40 publication in *peer reviewed journals*, including *Nature*, *Cell Host and Microbe* and *Journal of Virology*, 14 of which as *corresponding author* (h-index Scholar: 18; h-index Scopus: 16; citations: 991), and two book chapters.

- [1] **Alvisi, G.**, Jans, D., Guo, J., Pinna, L., and Ripalti, A. (2005) A protein kinase CK2 site flanking the nuclear targeting signal enhances nuclear transport of human cytomegalovirus ppUL44, *Traffic* 6, 1002-1013.
- [2] Wagstaff, K. M., Dias, M. M., **Alvisi, G.**, and Jans, D. A. (2005) Quantitative analysis of protein-protein interactions by native page/fluorimaging, *J Fluoresc* 15, 469-473.
- [3] **Alvisi, G.\***, Jans, D., and Ripalti, A. (2006) Human cytomegalovirus (HCMV) DNA polymerase processivity factor ppUL44 dimerizes in the cytosol before translocation to the nucleus, *Biochemistry* 45, 6866-6872.
- [4] **Alvisi, G.**, Poon, I. K., and Jans, D. A. (2006) Tumor-specific nuclear targeting: promises for anti-cancer therapy?, *Drug resistance updates: reviews and commentaries in antimicrobial and anticancer chemotherapy* 9, 40-50.
- [5] **Alvisi, G.\***, Ripalti, A., Ngankeu, A., Giannandrea, M., Caraffi, S. G., Dias, M. M., and Jans, D. A. (2006) Human cytomegalovirus DNA polymerase catalytic subunit pUL54 possesses independently acting nuclear localization and ppUL44 binding motifs, *Traffic* 7, 1322-1332.
- [6] **Alvisi, G.\***, Musiani, D., Jans, D. A., and Ripalti, A. (2007) An importin alpha/beta-recognized bipartite nuclear localization signal mediates targeting of the human herpes simplex virus type 1 DNA polymerase catalytic subunit pUL30 to the nucleus, *Biochemistry* 46, 9155-9163.
- [7] **Alvisi, G.\***, Avanzi, S., Musiani, D., Camozzi, D., Leoni, V., Ly-Huynh, J. D., and Ripalti, A. (2008) Nuclear import of HSV-1 DNA polymerase processivity factor UL42 is mediated by a C-terminally located bipartite nuclear localization signal, *Biochemistry* 47, 13764-13777.
- [8] **Alvisi, G.**, Rawlinson, S. M., Ghildyal, R., Ripalti, A., and Jans, D. A. (2008) Regulated nucleocytoplasmic trafficking of viral gene products: a therapeutic target?, *Biochim Biophys Acta* 1784, 213-227.
- [9] Kuusisto, H. V., Wagstaff, K. M., **Alvisi, G.#**, and Jans, D. A.# (2008) The C-terminus of apoptin represents a unique tumor cell-enhanced nuclear targeting module, *International journal of cancer. Journal international of cancer* 123, 2965-2969.
- [10] Sinigalia, E.#, **Alvisi, G.#**, Mercorelli, B., Coen, D. M., Pari, G. S., Jans, D. A., Ripalti, A., Palu, G., and Lorigian, A. (2008) Role of homodimerization of human cytomegalovirus DNA polymerase accessory protein UL44 in origin-dependent DNA replication in cells, *J Virol* 82, 12574-12579.
- [11] **Alvisi, G.**, Kuusisto, H. V., Jans, D. A., and Wagstaff, K. M. (2009) The tumor cell specific nuclear targeting signal of Apoptin, In *Proteins Killing Tumour Cells* (Backendorf, C., Noteborn, M. H. M., and Tavassoli, M., Eds.), p 11, Research-Signpost, Trivandrum.
- [12] **Alvisi, G.\***, Roth, D. M., Camozzi, D., Pari, G. S., Lorigian, A., Ripalti, A., and Jans, D. A. (2009) The flexible loop of the human cytomegalovirus DNA polymerase processivity factor ppUL44 is required for efficient DNA binding and replication in cells, *J Virol* 83, 9567-9576.
- [13] Fulcher, A. J., Roth, D. M., Fatima, S., **Alvisi, G.**, and Jans, D. A. (2010) The BRCA-1 binding protein BRAP2 is a novel, negative regulator of nuclear import of viral proteins, dependent on phosphorylation flanking the nuclear localization signal, *FASEB J* 24, 1454-1466.
- [14] Gaibani, P., Pellegrino, M. T., Rossini, G., **Alvisi, G.**, Miragliotta, L., Prati, C., and Sambri, V. (2010) The central region of the msp gene of *Treponema denticola* has sequence

heterogeneity among clinical samples, obtained from patients with periodontitis, *BMC Infect Dis* 10, 345.

- [15] **Alvisi, G.#**, Madan, V.#, and Bartenschlager, R. (2011) Hepatitis c virus and host cell lipids An intimate connection, *Rna Biology* 8, 258-269.
- [16] **Alvisi, G.\***, Marin, O., Pari, G., Mancini, M., Avanzi, S., Loregian, A., Jans, D. A., and Ripalti, A. (2011) Multiple phosphorylation sites at the C-terminus regulate nuclear import of HCMV DNA polymerase processivity factor ppUL44, *Virology* 417, 259-267.
- [17] Kuusisto, H. V., Wagstaff, K. M., **Alvisi, G.**, Roth, D. M., and Jans, D. A. (2012) Global enhancement of nuclear localization-dependent nuclear transport in transformed cells, *FASEB J* 26, 1181-1193.
- [18] Pichlmair, A., Kandasamy, K., **Alvisi, G.**, Mulhern, O., Sacco, R., Habjan, M., Binder, M., Stefanovic, A., Eberle, C. A., Goncalves, A., Burckstummer, T., Muller, A. C., Fauster, A., Holze, C., Lindsten, K., Goodbourn, S., Kochs, G., Weber, F., Bartenschlager, R., Bowie, A. G., Bennett, K. L., Colinge, J., and Superti-Furga, G. (2012) Viral immune modulators perturb the human molecular network by common and unique strategies, *Nature* 487, 486-490.
- [19] Ruggieri, A., Dazert, E., Metz, P., Hofmann, S., Bergeest, J. P., Mazur, J., Bankhead, P., Hiet, M. S., Kallis, S., **Alvisi, G.**, Samuel, C. E., Lohmann, V., Kaderali, L., Rohr, K., Frese, M., Stoecklin, G., and Bartenschlager, R. (2012) Dynamic oscillation of translation and stress granule formation mark the cellular response to virus infection, *Cell Host Microbe* 12, 71-85.
- [20] Sinigalia, E.#, **Alvisi, G.#**, Segre, C. V.#, Mercorelli, B.#, Muratore, G., Winkler, M., Hsiao, H. H., Urlaub, H., Ripalti, A., Chiocca, S., Palu, G., and Loregian, A. (2012) The human cytomegalovirus DNA polymerase processivity factor UL44 is modified by SUMO in a DNA-dependent manner, *PLoS One* 7, e49630.
- [21] **Alvisi, G.\***, and Palu, G.\* (2013) Reprogramming the host: Modification of cell functions upon viral infection, *World J Virol* 2, 16-17.
- [22] Amberkar, S., Kiani, N. A., Bartenschlager, R., **Alvisi, G.\***, and Kaderali, L. (2013) High-throughput RNA interference screens integrative analysis: Towards a comprehensive understanding of the virus-host interplay, *World J Virol* 2, 18-31.
- [23] Avanzi, S., **Alvisi, G.**, and Ripalti, A. (2013) How virus persistence can initiate the tumorigenesis process, *World J Virol* 2, 102-109.
- [24] Avanzi, S., Leoni, V., Rotola, A., Alviano, F., Solimando, L., Lanzoni, G., Bonsi, L., Di Luca, D., Marchionni, C., **Alvisi, G.**, and Ripalti, A. (2013) Susceptibility of human placenta derived mesenchymal stromal/stem cells to human herpesviruses infection, *PLoS One* 8, e71412.
- [25] Di Iorio, E., Barbaro, V., Del Vecchio, C., **Alvisi, G.**, Poletti, V., Parekh, M., Palù, G., and Parolin, C. (2013) Gene therapy approaches for corneal diseases, In *New Insight on Biobanks* (Caenazzo, L., Ed.).
- [26] **Alvisi, G.\***, Jans, D. A., Camozzi, D., Avanzi, S., Loregian, A., Ripalti, A., and Palu, G.\* (2013) Regulated transport into the nucleus of herpesviridae DNA replication core proteins, *Viruses* 5, 2210-2234.
- [27] **Alvisi, G.\***, and Jans, D. A.\* (2014) Comment on Phosphorylation adjacent to the nuclear localization signal of human dUTPase abolishes nuclear import: structural and mechanistic insights by Rona et al. (2013), *Acta crystallographica. Section D, Biological crystallography* 70, 2775-2776.
- [28] Eberle, C. A., Zayas, M., Stukalov, A., Pichlmair, A., **Alvisi, G.**, Muller, A. C., Bennett, K. L., Bartenschlager, R., and Superti-Furga, G. (2014) The lysine methyltransferase SMYD3 interacts with hepatitis C virus NS5A and is a negative regulator of viral particle production, *Virology* 462-463, 34-41.

- [29] **Alvisi, G.**, and Jans, D. A. (2015) Basis of cargo recognition by importin alphas: the power of structure, *Structure* 23, 251-252.
- [30] **Alvisi, G.**, and Jans, D. A. (2015) Regulating post-mitotic nuclear access: Cdk1-phosphorylation of NLSs, *Cell cycle* 14, 695-696.
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