DANIELE GUARDAVACCARO

CONTACT INFORMATION

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University of Verona
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EDUCATION

M.S. in Biological Sciences (cum Laude), University of Rome, Italy	1991
Ph.D. equivalent in Neurobiology, National Research Council, Rome, Italy	1998
Ph.D. in Genetics and Cellular Biology, University of Viterbo, Italy	2012

RESEARCH APPOINTMENTS

Postdoctoral Fellow, New York University School of Medicine, New York, USA	1998-2004
Visiting Scientist, Columbia University, New York, USA	1999-2000
Research Instructor, New York University School of Medicine, New York, USA	2004-2008
Group leader, Hubrecht Institute and University Medical Centre Utrecht, The Netherlands	2008-2018
Professor of Molecular Biology, University of Verona, Italy	2018-present

AWARDS AND FELLOWSHIPS

CNR (National Research Council) Fellowship	1993
Adriano Buzzati-Traverso Foundation Fellowship	1994
CNR (National Research Council) Fellowship	1995
IARC (International Agency for Research on Cancer) Fellowship	1998
AICF (American-Italian Cancer Foundation) Fellowship	1999
Susan G. Komen Breast Cancer Foundation Fellowship	2001

PEER REVIEWED PUBLICATIONS

- Ishihara S, Sato T, Du G, Guardavaccaro D, Nakajima A, Sawai S, Kataoka T, Katagiri K. Phosphatidic acid-dependent localization and basal de-phosphorylation of RA-GEFs regulate lymphocyte trafficking.
  BMC Biol. 2020 Jun 29;18(1):75.
- Yuniati L*, Lauriola A*, Gerritsen M, Abreu S, Ni E, Tesoriero C, Onireti JO, Low TY, Heck AJ, Vettori A, Cardozo T, and Guardavaccaro D. Ubiquitylation of the ER-shaping protein Lunapark via the $CRL3^{KLHL12}$ ubiquitin ligase complex. *Equal contribution.
  Cell Reports. 2020 May 19;31(7):107664.
- Lauriola A, Martello A, Fantini S, Marverti G, Zanocco-Marani T, Davalli P, Guardavaccaro D, Mai S, Caporali A, and D'Arca D. Depletion of Trichoplein (TpMs) Causes Chromosome Mis-segregation, DNA Damage and Chromosome Instability in Cancer Cells.
  Cancers 2020 Apr 17;12(4):E993.
- Spiombi E, Angrisani A, Fonte S, De Feudis G, Fabretti F, Cucchi D, Izzo M, Infante P, Miele E, Po A, Di Magno L, Magliozzi R, Guardavaccaro D, Maroder M, Canettieri G, Giannini G, Ferretti E, Gulino A, Di Marcotullio L, Moretti M, De Smaele E. KCTD15 inhibits the Hedgehog pathway in Medulloblastoma cells by increasing protein levels of the oncosuppressor KCASH2.
  Oncogenesis 2019 Nov 4;8(11):64.
- Yuan R, Liu Q, Segeren HA, Yuniati L, Guardavaccaro D, Lebbink RJ, Westendorp B, de Bruin A. Cyclin F-dependent degradation of E2F7 is critical for DNA repair and G2-phase progression.
  EMBO J 2019 Sep 2:e101430
- Bufalieri F, Infante P, Bernardi F, Caimano M, Romania P, Moretti M, Lospinoso Severini L, Talbot J, Melaiu O, Tanori M, Di Magno L, Bellavia D, Puget S, De Smaele E, Canettieri G, Guardavaccaro D, Busino L, Peschiaroli A, Pazzaglia S, Giannini G, Melino G, Locatelli F, Gulino A, Ayrault O, Fruci D, Capalbo C, and Di Marcotullio L. ERAP1 promotes Hedgehog-dependent tumorigenesis by controlling USP47-mediated degradation of βTrCP.
  Nature Commun 10(1):3304, 2019

- Mavrommati, I., Faedda, R., Galasso, G., Li, J., Burdova, K., Fisher, R., Kessler, B.M., Carrero, Z.I., Guardavaccaro, D., Pagano M., D'Angiolella V. βTrCP and Casein Kinase IIα mediated degradation of cyclin F controls timely mitotic progression.
  Cell Reports 24(13):3404-3412, 2018
- Magliozzi, R.*, Carrero, Z.I.*, Low, T.Y., Yuniati, L., Valdes-Quezada, C., Kruiswijk, F., van Wijk, K., Heck, A.J., Jackson, C.L., Guardavaccaro, D. Inheritance of Golgi apparatus and cytokinesis are controlled by degradation of GBF1.
  Cell Reports 23(11):3381-3391, 2018. *Equal contribution.
- Infante, P., Faedda, R., Bernardi, F., Bufalieri, F., Severini, L.L., Alfonsi, R., Mazzà, D., Siler, M., Coni, S., Po, A., Petroni, M., Ferretti, E., Mori, M., De Smaele, E., Canettieri, G., Capalbo, C., Maroder, M., Screpanti, I., Kool, M., Pfister, S., Guardavaccaro, D., Gulino, A., Di Marcotullio, L. Itch/βarrestin2-dependent non-proteolytic ubiquitylation of SuFu controls Hedgehog signaling and medulloblastoma tumorigenesis.
  Nature Commun 9(1):976, 2018.
- D'Angiolella, V., Guardavaccaro, D. Two paths to let the replisome go.
  Cell Death Differ 24(7):1140-1141, 2017.
- Tessadori, F., Noël, E.S., Rens, E.G., Magliozzi, R., Evers-van Gogh, I.J.A., Guardavaccaro, D., Merks, R.M.H., Bakkers, J. Nodal signalling range is regulated by proprotein convertase-mediated secretion.
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- Low, T.Y., Peng, M., Magliozzi, R., Mohammed, S., Guardavaccaro, D., Heck, A.J. A systems-wide screen identifies substrates of the $SCF^{\beta TrCP}$ ubiquitin ligase.
  Science Signaling 7(356):rs8, 2014.
- Kim, J., D'Annibale, S., Magliozzi, R., Low, T.Y., Jansen, P., Shaltiel, I.A., Mohammed, S., Heck, A.J., Medema, R.H., Guardavaccaro, D. USP17- and $SCF^{\beta TrCP}$-regulated degradation of DEC1 controls the DNA damage response.
  Mol Cell Biol. 34(22):4177-85, 2014.
- Magliozzi, R., Kim, J., Low, T.Y., Heck, A.J., Guardavaccaro, D. Degradation of Tiam1 by casein kinase 1 and the $SCF^{\beta TrCP}$ ubiquitin ligase controls the duration of mTOR-S6K signaling.
  J Biol Chem. 289(40):27400-9, 2014.
- D'Annibale, S., Kim, J., Magliozzi, R., Low, T.Y., Mohammed, S., Heck, A.J., Guardavaccaro, D. Proteasome-dependent degradation of Transcription Factor AP4 (TFAP4) controls mitotic division.
  J Biol Chem 289(11):7730-7, 2014.
- Magliozzi, R., Low, T.W., Weijts, B.G.M.W., Cheng, T., Spanjaard, E., Mohammed, S., van Veen, A., Ovaa, H., de Rooij, J., Zwartkruis, F.J.T., Bos, J.L., de Bruin, A., Heck, A.J.R., Guardavaccaro, D. Control of epithelial cell migration and invasion by the IKKβ- and CK1α-mediated degradation of RAPGEF2.
  Dev Cell 27(5):574-85, 2013.
- Karim, R., Tummers, B., Meyers, C., Backendorf, C., Offringa, R., van Ommen, G.B., Melief, C.J.M., M. Boer, J, Guardavaccaro, D., van der Burg, S.H. Human papillomavirus (HPV) upregulates the cellular deubiquitinase UCHL1 to suppress the keratinocyte's innate immune response.
  PLoS Pathogens 9(5), May 2013.
- Low, T.Y., Magliozzi, R., Guardavaccaro, D., Heck, A.J.R. Unraveling the ubiquitin-regulated signaling networks by mass spectrometry-based proteomics
  Proteomics 13(3-4):526-3,7 2013.
- Kruiswijk, F., Yuniati, L., Magliozzi, R., Low, T.W., Lim, R., Bolder, R., Mohammed, S., Proud, C.G., Heck, A.J.R., Pagano, M., Guardavaccaro, D. Coupled activation-degradation of eEF2K regulates protein synthesis in response to genotoxic stress.
  Science Signaling 5(227):ra40, 2012.
  Comment in: **Science Signaling** 5(227):pe25, 2012
- Ping, Z., Lim, R., Bashir, T., Pagano, M., Guardavaccaro, D. APC/C^{Cdh1} controls the proteasome-mediated degradation of E2F3 during cell cycle exit.
  Cell Cycle 11(10):1999-2005, 2012.
- Tee, J.M., Sartori da Silva, M., Rygiel, A., Muncan, V., Bink, R., van den Brink, G., van Tijn, P., Zivkovic, D., Kodach, L., Guardavaccaro, D., Diks, S., Peppelenbosch, M. Asb11 is a regulator of embryonic and adult regenerative myogenesis.
  Stem Cells Dev 21(17):3091-103, 2012.
- Guardavaccaro, D., Clevers, H. Wnt/β-Catenin and MAPK Signaling: Allies and Enemies in Different Battlefields.

Science Signaling 5(219):pe155, 2012.

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  Nature 476(7360):293-7, 2011.
  Comment in: **Nature** 476(7360), 2011.
- Sartori da Silva, M.A., Tee, J.M., Paridaen, J., Brouwers, A., Runtuwene, V., Zivkovic, D., Diks, S.H., Guardavaccaro, D., Peppelenbosch, M.P. Essential role for the d-Asb11 cul5 Box domain for proper notch signaling and neural cell fate decisions in vivo.
  PLoS One 5(11):e14023, 2010.
- Dehan, E., Bassermann, F., Guardavaccaro, D., Vasiliver-Shamis, G., Cohen, M.S., Lowes, K.N., Dustin, M., Huang, D.S., Taunton, J., Pagano, M. βTrCP- and Rsk1/2-mediated degradation of BimEL inhibits apoptosis.
  Mol Cell 33(1):109-16, 2009.
- Frescas, D., Guardavaccaro, D., Kuchay, S.M., Kato, H., Poleshko, A., Basrur, V., Elenitoba-Johnson, K.S., Katz, R.A., Pagano, M. KDM2A represses transcription of centromeric satellite repeats and maintains the heterochromatic state.
  Cell Cycle 7(22):3539-47, 2008.
  Comment in: **Cell Cycle** 7(22):3479-80, 2008.
- Bassermann, F., Frescas, D., Guardavaccaro, D., Busino, L., Peschiaroli, A., Pagano, M. The Cdc14B-Cdh1-Plk1 axis in the control of the G2 DNA damage response checkpoint.
  Cell 134(2):256-67, 2008.
  Comment in: **Cell** 134(2):210-2, 2008.
- Zhao, X., Ik-Tsen Heng, J., Guardavaccaro, D., Jiang, R., Pagano, M., Guillemot, F., Iavarone, A., Lasorella, A. The HECT-domain ubiquitin ligase Ureb1 controls neural differentiation and proliferation by destabilizing the N-Myc oncoprotein.
  Nat Cell Biol 10(6):643-53, 2008.
- Michaelson, D., Abidi, W., Guardavaccaro, D., Zhou, M., Ahearn, I., Pagano, M., Philips, M.R. Rac1 accumulates in the nucleus during the G2 phase of the cell cycle and promotes cell division.
  J Cell Biol 181(3), 485-496, 2008.
- Guardavaccaro, D., Frescas, D., Dorrello, N.V., Peschiaroli, A., Multani, A.S., Cardozo, T., Lasorella, A., Iavarone, A., Chang, S., Hernando, E., Pagano, M. Control of chromosome stability by the βTRCP-REST-MAD2 axis.
  Nature 452(7185) 365-70, 2008.
  Comment in: **Cancer Cell.** 13(5):381-3, 2008
  Comment in: **Nature Reviews Cancer.** 8(5):327, 2008.
- Frescas, D., Guardavaccaro, D., Bassermann, F., Koyama-Nasu, R., Pagano, M. JHDM1B/FBXL10 is a nucleolar protein that represses transcription of ribosomal RNA genes.
  Nature 450(7167) 309-13, 2007.
- Amador, V., Ge, S., Santamaria, P.G., Guardavaccaro, D., Pagano, M. APC/C^{Cdc20} controls the ubiquitin-mediated degradation of p21 in prometaphase
  Mol Cell 27(3):462-73, 2007.
- Fielenbach, N., Guardavaccaro, D., Neubert, K., Chan, T., Li, D., Feng, Q., Hutter, H., Pagano M., Antebi A. DRE-1, an evolutionarily conserved F-box protein that regulates C. elegans developmental age.
  Dev Cell 12(3):443-55, 2007.
- Dorrello, N.V., Peschiaroli, A., Guardavaccaro, D., Colburn, N.H., Sherman, N.E., Pagano, M. S6K1- and betaTRCP-mediated degradation of PDCD4 promotes protein translation and cell growth.
  Science 314(5798):467-71, 2006.
  Comment in: **Science** 314(5798):428-9, 2006
- Peschiaroli, A., Dorrello, N.V., Guardavaccaro, D., Venere, M., Halazonetis, T., Sherman, N.E., Pagano, M. $SCF^{\beta TrCP}$-mediated degradation of Claspin regulates recovery from the DNA replication checkpoint response.
  Mol Cell 23(3):319-29, 2006.
  Comment in: **Curr Biol** 16(21):R932-4, 2006.
- Lasorella, A., Stegmüller, J. Guardavaccaro, D., Liu, G., Carro, M.S., Rothschild, G., de la Torre-Ubieta, L., Pagano, M., Bonni, A., Iavarone, A. Degradation of Id2 by the Anaphase Promoting Complex couples control of cell cycle exit and axonal growth.

Nature 442(7101):471-4, 2006.
Comment in: **Nature** 442(7101):365-6, 2006

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  J Biol Chem 281(33):24058-69, 2006.
- Guardavaccaro, D., Pagano M. Stabilizers and destabilizers controlling cell cycle oscillators.
  Mol Cell 22(1):1-4, 2006.
- Kudo, Y.*, Guardavaccaro, D.*, Gonzalez Santamaria, P., Koyama-Nasu, R., Latres, E. Bronson, R. Yamasaki, L. Pagano M. Role of F-box protein βTrCP1 in mammary gland development and tumorigenesis.
  Mol Cell Biol 24(18):8184-8194, 2004. *Equal contribution.
- Guardavaccaro, D., Pagano, M. Oncogenic aberrations of cullin-dependent ubiquitin ligases.
  Oncogene 23(11):2037-49, 2004.
- Bashir, T., Dorrello, N.V., Amador, V., Guardavaccaro, D., Pagano, M. Control of the $SCF^{Skp2\text{-}Cks1}$ ubiquitin ligase by the APC/C^{Cdh1} ubiquitin ligase.
  Nature 428(6979):190-3, 2004.
  Comment in: **Nature Reviews Molecular Cell Biology** 5, 339 2004
- Busino, L., Donzelli, M., Chiesa, M., Guardavaccaro, D., Ganoth, D., Dorrello, N.V., Hershko, A., Pagano M., Draetta G. Degradation of Cdc25 by βTrCP during S phase and in response to DNA damage.
  Nature 426(6962):87-9, 2003.
- Guardavaccaro, D., Kudo, Y. Boulaire, J., Barchi, M., Busino, L., Donzelli, M., Yamasaki, L., Pagano, M. Control of meiotic and mitotic progression by the F-box protein βTrCP1 in vivo.
  Dev Cell 4: 799–812, 2003.
  Comment in: **Mol Cell** 11(6):1420-1, 2003.
- Corrente, G., Guardavaccaro, D., Tirone, F. PC3 potentiates NGF-induced differentiation and protects neurons from apoptosis.
  Neuroreport 13(4):417-22, 2002.
- Guardavaccaro, D., Corrente, G., Covone, F., Micheli, L., D'Agnano, I., Starace, G., Caruso M., Tirone F. Arrest of G(1)-S progression by the p53-inducible gene PC3 is Rb dependent and relies on the inhibition of cyclin D1 transcription.
  Mol Cell Biol 20: 1797-815, 2000.
- Cenciarelli, C., Chiaur, D. S., Guardavaccaro, D., Parks, W., Vidal, M., Pagano M. Identification of a family of human F-box proteins.
  Curr Biol 9: 1177-1179, 1999.
- Buanne, P., Incerti, B., Guardavaccaro, D., Avvantaggiato, V., Simeone A., Tirone F. Cloning of the human Interferon-Related Developmental Regulator (IFRD1) gene coding for the PC4 protein, member of a novel family of developmentally regulated genes.
  Genomics 51: 233-42, 1998.
- Montagnoli, A., Guardavaccaro, D., Starace G., Tirone F. Overexpression of the PC3 immediate early gene is associated to inhibition of cell proliferation.
  Cell Growth Differ 7: 1327-1336, 1996.
- Guardavaccaro, D., Ciotti, M.T., Schafer, B.W., Montagnoli A., Tirone F. Inhibition of differentiation in myoblasts deprived of the interferon-related protein PC4.
  Cell Growth Differ 6: 159-169, 1995.
- Guardavaccaro, D., Montagnoli, A., Ciotti, M.T., Lotti, L., Di Lazzaro, C., Torrisi, M.R., Gatti A., Tirone F. Nerve Growth Factor regulates the subcellular localization of the NGF inducible protein PC4 in PC12 cells.
  J Neurosci Res 37: 660-674, 1994.

BOOK CHAPTERS

- T. Bashir, D. Guardavaccaro, N. V. Dorrello, V. Amador, and M. Pagano.
  Reciprocal control of the G1/S ubiquitin ligase SCF and the mitotic ubiquitin ligase APC/C: A role for Skp2 and βTrCP in cancer. In: AACR Education Book 1: 1315-1316, 2004.

INVITED SEMINARS - partial list

- The NL-Ubiquitin 2018 Meeting

Utrecht, 24 October 2018

- Erasmus Medical Center - 6th annual SURE Symposium "The Infinite Puzzle"
  Rotterdam, 1 June 2018
- Symposium of the Argentinean Societies for Research on Biosciences (SAIB)
  Buenos Aires, November 13-17, 2017
- Institut Jacques Monod - Université Paris Diderot
  Paris, 30 June 2017
- University of Verona, Department of Biotechnology
  Verona, 22 June 2017
- Ludwig Institute for Cancer Research, University of Oxford, Nuffield Department of Clinical Medicine
  Oxford, 10 May 2017
- University of Manchester, Division of Molecular and Cellular Function
  Manchester, 7 March 2017
- Max-Planck Institute of Molecular Physiology, Department of Mechanistic Cell Biology
  Dortmund, 29 April 2015
- Institute of Translational Medicine, University of Liverpool, Department of Cellular and Molecular Physiology
  Liverpool, 24 March 2015
- NPC Progress Meeting - "Proteomics in a European Context"
  Utrecht, 26-27 January 2015
- Karolinska Institutet, CMB/LICR Seminars
  Stockholm, 4 December 2014
- Benzon Symposium - Nuclear Regulation By Ubiquitin
  Copenhagen, 18-21 August 2014
- SUMO, Ubiquitin, UBL Proteins: Implications for Human Diseases
  MD Anderson Cancer Center and Shanghai Jiao Tong University School of Medicine
  Shanghai, 10-13 May 2014
- sbv IMPROVER Jamboree 2014, Philip Morris International's R&D and IBM's T.J. Watson Research Center
  Montreux, Switzerland, 18-20 March 2014
- University of Rome "Tor Vergata", Department of Biomedicine and Prevention
  Rome, 21 February 2014
- University of Rome "La Sapienza", Department of Molecular Medicine
  Rome, 18 February 2014
- Leiden University Medical Center (LUMC), Department of Molecular Cell Biology
  Leiden, 4 December 2013
- Karolinska Institute, CCK Research Seminar/Department of Oncology-Pathology
  Stockholm, 14 October 2011
- Gordon Conference, Cell Growth and Proliferation - Connecting Cell Cycle Regulation to Cancer Biology
  Biddeford, ME, 26 June - 1 July 2011
- The 7th Salk Institute Cell Cycle Meeting, The Salk Institute
  San Diego, CA, 17 June - 21 June 2011
- The Netherlands Cancer Institute NKI-AVL
  Amsterdam, 12 June 2009
- Nobel Forum, Karolinska Institutet - New Frontiers in Cancer Research and Therapy
  Stockholm, 5-6 March 2009
- Brown University School of Medicine
  Providence, RI, 22 April 2008
- Ludwig Institute for Cancer Research
  Stockholm, 4 April 2008
- Laboratory of Cancer Biology & Genetics, National Cancer Institute, CCR, NIH
  Bethesda, MD, 20 March 2008
- Imperial College London, Dept. of Immunology.
  London, 15 February 2008
- The New York Academy of Sciences - Genome Integrity
  New York, 29 October 2007

- Cell Signaling Fourth Annual Symposium, Interplay between Phosphorylation and Ubiquitination in Cell Signaling Dundee, 30 August - 2 September, 2007
- Cold Spring Harbor Laboratory Meeting - The Ubiquitin Family
  Cold Spring Harbor, NY, 23-27 April 2003
- Strategic Research Institute, Targeting Ubiquitylation for Drug Discovery
  San Diego, CA, 24-25 June 2002

OTHER CONFERENCES - partial list

- Keystone Symposia - The Human Proteome, Stockholm, April 24-29, 2015
- 13th Human Proteome Organization World Congress (HUPO), Madrid 5-8 October 2014
- Prime XS Meeting, Avila, 10th October 2014
- CGC/CBG meeting 'Molecular Mechanisms in Cancer'. Nov 15-16 2012, Koninklijk Instituut voor de Tropen Amsterdam.
- Cold Spring Harbor Laboratory Meeting - The Ubiquitin Family, Cold Spring Harbor, NY, 17-21 May 2011
- Keystone Symposia - The Evolution of Protein Phosphorylation, Keystone, CO, 23-28 2011
- NIH National Graduate Student Research Festival, Bethesda, MD, 11-12 October 2007
- Gordon Research Conference - Cell Growth and Proliferation. Biddeford, ME, 24 June 2007
- Cold Spring Harbor Laboratory Meeting - The Cell Cycle. Cold Spring Harbor, NY, 17-21 May 2006
- Cold Spring Harbor Laboratory Meeting - The Cell Cycle. Cold Spring Harbor, NY, 19-23 May 2004
- The 95th Annual Meeting of American Association for Cancer Research, Orlando, FL, 27-31 March 2004.
- The Second International Conference: Ubiquitin, Ubiquitin-Like Proteins and Cancer. M.D. Anderson Cancer Center Houston, TX, 5-7 February 2004
- Keystone Symposia - Cell Cycle and Development. Snowbird, UT, 6-11 January, 2004
- Cold Spring Harbor Laboratory Meeting - The Ubiquitin Family. Cold Spring Harbor, NY, 23-27 April 2003
- The 12th EuroConference on Cell Cycle Control in Normal and Malignant Cells, Mayrhofen/Zillertal, Lake Louise, Alberta, 10 - 14 February 2001
- Cold Spring Harbor Laboratory meeting - The Cell Cycle - Cold Spring Harbor, NY, May 2000.
- Gordon Research Conference on Cancer - The Central Pathways of Tumorigenesis: RB and p53.
  Newport, RI, August 1999.
- Cold Spring Harbor Laboratory meeting - Biology of Proteolysis, Cold Spring Harbor, NY, May 1999.
- The 11th European Cell Cycle Conference, Gardone Riviera, 23-26 April 1997
- Third International Conference on Nerve Growth Factor (NGF) and related molecules. Chateau Lake Louise, Lake Louise, Alberta, Canada, April 26 - May 1, 1994.
- The 23rd Annual meeting, Society for Neuroscience. Washington, DC, 7-12 November 1993.

FUNDING

- Cariverona Foundation. Role of the Ubiquitin System in Adult Stem Cells
  2020-present
- Dutch Cancer Society (KWF). REST degradation and cancer.
  2015-2019
- EU-IRG Marie Curie FP7. Aberrant ubiquitin-mediated proteolysis in oncogenesis.
  2010-2014
- Dutch Cancer Society (KWF). Aberrant ubiquitin-mediated proteolysis in cancer development.
  2009-2013
- Cancer Genomics Center (CGC) - Ubiquitin ligases and cancer.
  2009-2013
- Medical Research Council (MRC) - Career Development Award. Oncogenic aberrations of SCF ubiquitin ligases.
  2008-2013
- Emerald Foundation. Role of Skp2 and Cks1 in human non-small cell lung cancer.
  2005-2008

EDUCATIONAL ACTIVITIES

- University of Verona
  Undegraduate Program Course in Molecular Biology
  Verona, 2018-present
- Leiden University Medical Center
  Graduate Program Course: "From Molecular Pathogenesis to Targeted Therapy"
  Leiden, November 1-4, 2016
- Utrecht University
  Graduate Program Course: "Cancer Stem cells and Developmental Biology"
  Utrecht, 31 August 2015
- Leiden University Medical Center and Erasmus Medical Center
  Graduate Program Course: "From Molecular Pathogenesis to Targeted Therapy"
  Leiden, October 27-31, 2014
- Utrecht University
  Graduate Program Course: "Cancer Stem cells and Developmental Biology"
  Utrecht, 8-10 September 2014
- Utrecht University
  Graduate Program Course: "Cancer Genetics and Developmental Biology"
  Utrecht, 3 September 2012
- University of Modena and Reggio Emilia
  Graduate Program Course: "Clinical and Experimental Medicine"
  Modena, 2-15 April 2012
- Karolinska Institutet/EU-Rubicon
  Graduate and Postgraduate Course: "The Ubiquitin-Proteasome System in Health and Disease"
  Stockholm, 17-28 August 2009
- New York University School of Medicine
  Sackler Institute of Graduate Biomedical Sciences
  New York, yearly, from 2005 to 2008

Ph.D. AND M.S. THESIS COMMITTEES

- Member of Assessment Committee - Ph.D. thesis, Susana Abreu. New insights into autophagy regulation using yeast Saccharomyces cerevisiae.
  University of Groningen, 10 December 2018
- Supervisor/Examiner - M.S. thesis, Mar Burgaya. Dysregulation of CRL-mediated ubiquitylation in metastasis.
  Master's Programme: Cancer, Stem Cells and Developmental Biology
  Utrecht University, Utrecht, August 2018
- Supervisor/Examiner - M.S. thesis, Gianmarco Puma. Roles of K11/K48-linked polyubiquitylation in neurodegenerative diseases. Master's Programme: Cancer, Stem Cells and Developmental Biology
  University of Utrecht, 5 June 2018
- Supervisor/Examiner - M.S. thesis, Michele Nicastro. CULLIN3-RING Ubiquitin Ligases: an overview. Master's Programme: Cancer, Stem Cells and Developmental Biology
  Utrecht University, Utrecht, 25 August 2017
- Member of Assessment Committee - Ph.D. thesis, Yuan Ruixue. Walking the fine line of atypical E2F regulation during cell division. Utrecht University, Utrecht, 3 July 2018
- Examiner - Ph.D. thesis - Matthew Concannon - Exploring roles and interplay of REST and USP15 in cancer.
  University of Liverpool, 21 September 2017
- Committee member - Ph.D. thesis - Daisy Klein Douwel. Making the cut - How XPF-ERCC1 unhooks DNA interstrand crosslinks. CS&D - Utrecht University, 19 January 2017
- External supervisor - M.S. thesis, Anna Russo, HECT ubiquitin ligases as players in the programmed cell death fields.
  Master's Programme: Cancer, Stem Cells and Developmental Biology.
  University of Utrecht, 12 October 2015
- Examiner - M.S. thesis, Clara Kammüller. Interaction Partners of the Deubiquitylating Enzyme Ataxin-3 in Macroautophagy. Utrecht University, Master's Programme: Cancer, Stem Cells and Developmental Biology.
  University of Utrecht, 29 September 2015

- Committee member - Ph.D. thesis, Michiel Boekhout. APC/C activity during the cell cycle. Netherlands Cancer Institute/University of Utrecht, 14 September 2015
- Supervisor - Ph.D. thesis - CS&D, Jihoon Kim. F-box proteins, cell cycle and cancer. University of Utrecht, 13 January 2015
- Faculty opponent - Ph.D. thesis, Hwee-Fang Ng, Characterization of F-box proteins and their target substrates in cancer. Karolinska Institute, Stockholm, 3 December 2014
- Committee member - Ph.D. thesis - CS&D, Margarita Zacharogianni, Cell biology of stress: cytoplasmic rearrangements and signaling events. University of Utrecht, 20 November 2014
- Supervisor - Ph.D. thesis - CS&D, Sara D'Annibale. Mechanisms of crosstalk between phosphorylation and ubiquitylation in the regulation of cell proliferation. University of Utrecht, 18 November 2014
- Committee member - Ph.D. thesis - CS&D, Wytse Bruinsma. Controlling kinase activity during the cell cycle: from the DNA damage response to mitosis. University of Utrecht, 18 June 2014
- External supervisor - M.S. thesis, Anne van Krieken, Role of CRL3 complexes in cancer. Master Oncology, VU University. Amsterdam 31 January 2014
- Supervisor - Ph.D. thesis - CS&D, Roberto Magliozzi. The challenge of identifying substrates of SCF ubiquitin ligases. University of Utrecht, 21 January 2014
- Committee member - Ph.D. thesis - CS&D, Reinoud de Groot. Mechanisms of Wntless trafficking and Wnt signaling. University of Utrecht, 13 January 2014
- Supervisor - Ph.D. thesis - CS&D, Flore Kruiswijk. Discovering new sides of the E3 ligase by studying its substrates. University of Utrecht, 17 September 2013
- Faculty opponent - Ph.D. thesis, Diana Cepeda. F-box proteins as regulators of oncogenic pathways by ubiquitylation. Karolinska Institute. Stockholm, 13 October 2011
- Supervisor - Ph.D. thesis, Maria Augusta Sartori da Silva. Action and function of ASB proteins in compartment size regulation.
  Erasmus University. Rotterdam, 25 May 2011
- External supervisor - M.S. thesis, Eelco Tromer. F-box proteins In non-cullin complexes.
  University of Utrecht, 26 September 2011
- External supervisor - M.S. thesis, Inger Brandsma, DNA Resection Or Non-Homologous End Joining Upon DNA Double Strand Breaks. Utrecht University, Master's Programme: Molecular And Cellular Life Science.
  University of Utrecht, 16 December 2010
- Outside Reader - Ph.D. thesis, William Tsiaras. Genetic and biochemical analysis of the Grb10-interacting protein-2 (GIGYF2): A link between the Insulin and Insulin-like Growth Factor systems and Parkinson's Disease.
  Brown University School of Medicine. Providence, RI, 21 April 2008

TRAINEES

Undergraduate Students

2009	Zhen Ping
2010	Renske Bolder
2010	Laurensia Yuniati
2010-2011	Monir Bertayli
2011-2012	Ragna de Jonge
2011-2012	Tianhong Cheng
2012	Koen van Wijk
2012-2013	Sharif Rehmy
2012-2013	Petra Jansen
2012-2013	Minglu Dai
2013	Trang Huong Phan
2015-2016	Ana Krotenberg Garcia
2015-2016	Alejandro Hortal Borowski
2016-2017	Manouk Gerritsen (BS)
2017-2018	Manouk Gerritsen (MS)
2020	Emma Cadoria (BS)
2020	Mirco Marogna (BS)
2020	Samuele Fisicaro (BS)

2020	Giulia Citterio (BS)
2020	Anna Baietta (BS)
2020	Rossella Franchini (BS)

Graduate Students

2008-2013	Flore Kruiswijk
2009-2011	Maria Augusta Sartori da Silva
2009-2014	Roberto Magliozzi
2010	Paola Infante
2010-2014	Jihoon Kim
2010-2014	Sara D'Annibale
2009-2010	Rezaul Karim
2019-present	Jacob Onireti
2019-present	Mohsen Hajisadeghian

Postdoctoral Fellows

2014-2017	Roberto Magliozzi
2015-2018	Laurensia Yuniati
2016-2018	Zunamys Carrero
2019-present	Angela Lauriola
2020-present	Matteo Santucci
2020-present	Juliana Haydee Enrique Steinberg

Technicians

2008-2012	Ratna Lim
2016-2017	Susana Abreu
2015-2018	Ilona den Hartog

EDITORIAL RESPONSIBILITIES

Editorial Board member: *Cell Death and Disease, Cell Death and Differentiation.*
Ad Hoc Reviewer: *EMBO Journal, Proceedings of the National Academy of Sciences, Nature Communications, Molecular and Cellular Biology, Molecular Biology of the Cell, Science Signaling, Cell Reports, Oncogene, Biochimica et Biophysica Acta, Nucleic Acids Research, Cancer Research, Cell Death and Differentiation, PLoS Biology, International Journal of Cancer, Cell Research, Scientific Reports.*

PROFESSIONAL ORGANIZATIONS AND SOCIETIES

Member of the New York Academy of Science (2007 – 2008)

OTHER ACTIVITIES

Reviewer for funding agencies:
MRC (Medical Research Council, UK), BBSRC (Biotechnology and Biological Sciences Research Council, UK), KWF (Dutch Cancer Society, NL), NWO (The Netherlands Organization for Scientific Research, NL), FCC (Foundation against Cancer, BE).

SUMMARY OF RESEARCH ACTIVITY

I have a longstanding interest in studying the molecular mechanisms regulating essential cellular processes. After my undergraduate and graduate studies at "La Sapienza" University and the Institute of Neurobiology of the National Research Council in Rome, I joined as a postdoctoral fellow the laboratory of Dr. Michele Pagano at the New York University School of Medicine. In the Pagano laboratory, my studies were focused on the regulation of the cell division cycle by the ubiquitin system in normal cells and on how altered protein degradation by the ubiquitin pathway contributes to the uncontrolled growth and proliferation of cancer cells. To gain experience in gene targeting technologies in mice and study the role of ubiquitin-dependent degradation in vivo, I worked as a visiting scientist in the laboratory of Dr. Lili Yamasaki at Columbia University where I generated the knock-out mouse for betaTrCP, a ubiquitin ligase that controls the proteolysis of important cellular regulators.
As an independent investigator, I continue to study the role of the ubiquitin system in fundamental cellular processes. Research in my laboratory is currently focused on the role of Cullin-RING (CRL) E3s, modular ubiquitin ligases that represent the largest class of ubiquitin ligases in eukaryotes. We have been performing proteomic screens to identify CRL substrates whose ubiquitylation controls cell proliferation and migration. We have identified and validated a number of

cancer-related substrate candidates and are currently studying the biological functions of these ubiquitylation events. To that end, we utilize a number of biochemical, molecular and cell biological approaches.

REFERENCES

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