

**DANIELE GUARDAVACCARO**

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**FORMAZIONE ACCADEMICA**

M.S. in Science Biologiche (cum Laude), Università of Roma	1991
Ph.D. equivalente in Neurobiologia, Consiglio Nazionale delle Ricerche, Roma	1998
Ph.D. in Genetics and Cellular Biology, Università di Viterbo	2012

**ESPERIENZE PROFESSIONALI**

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, Paesi Bassi	2008-2018
Professore di Biologia Molecolare, Università di Verona	2018-presente

**PREMI E BORSE DI STUDIO**

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

**PUBBLICAZIONI**

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**J Cell Biol** 181(3), 485-496, 2008.
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Comment in: **Cancer Cell**. 13(5):381-3, 2008  
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**Nature** 450(7167) 309-13, 2007.
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**Mol Cell** 22(1):1-4, 2006.
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**Nature** 426(6962):87-9, 2003.
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#### CAPITOLI IN VOLUME

- 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  $\beta$ TrCP in cancer. In: AACR Education Book 1: 1315-1316, 2004.

### **SEMINARI SU INVITO – lista parziale**

- Institute of Molecular Biology and Pathology (IBPM), National Research Council (CNR)  
Rome, 12 May 2023
- The NYU Ubiquitin System Workshop  
New York, July 30th-31st 2022
- 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

### CONVEGNI - lista parziale

- EMBO2024 Ubiquitin and Ubl Proteins in Health and Disease, Cavtat, 27 September – 01 October 2024
- Keystone Symposia - The Human Proteome, Stockholm, April 24-29, 2015
- 13<sup>th</sup> 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.

### FINANZIAMENTI PER LA RICERCA

- Ministry of Foreign Affairs and International Cooperation and Swedish Research Council  
Exploiting the Ubiquitin System to Target the "Undruggable" Cancer Proteome  
1/1/2024 - 31/12/2026
- Ministry of University and Research - PRIN-PNRR  
Exploring the molecular mechanisms underlying the homeostasis of the intestinal epithelium  
30/11/2023 - 30/11/2025
- Ministry of University and Research - PRIN 2022

Decipher how ubiquitylation shapes membrane and membraneless organelles to promote neuronal homeostasis  
28/9/2023 - 28/9/2025

- Telethon Foundation. Molecular mechanisms underlying Joubert syndrome  
2023-2025
- Banca Intesa San Paolo Foundation. Innovative strategy to block coronavirus infections by specific degradation of viral proteins  
2022-2023
- Cariverona Foundation – Call “Ricerca Scientifica di Eccellenza”. Role of the Ubiquitin System in Adult Stem Cells  
2020-2023
- 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

#### **ATTIVITÀ DIDATTICHE**

- University of Verona, PhD program in Molecular, Industrial and Environmental Biotechnologies  
Teaching: various  
Verona, 2024-present, yearly.
- University of Verona, Master's degree in Molecular and Medical Biotechnology  
Teaching: Cell Signaling in Health and Disease  
Verona, 2020-present, yearly.
- University of Verona, Bachelor's degree in Biotechnology  
Teaching: Molecular Biology  
Verona, 2019-present, yearly.
- 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

Vilcek Institute of Graduate Biomedical Sciences  
New York, yearly, from 2005 to 2008

### COMMISSIONI TESI PhD/MS

- Examination Board - Ph.D. thesis, Andra Brummer. From oncogenic replication stress to drug resistance: f-box proteins as signaling hubs in cancer. Karolinska Institute, Stockholm, 19 February 2021
- 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

## **STUDENTI/TIROCINANTI/POSTDOC/STAFF**

### Studenti BS/MS

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
2017-2018	Manouk Gerritsen
2020	Emma Cadoria
2020	Mirco Marogna
2020	Samuele Fisicaro
2020	Giulia Citterio
2020	Anna Baietta
2020	Rossella Franchini
2021	Francesca Taddei
2021	Samanta Comincioli
2021	Giovanni Giglio
2021	Anna Pianazzola
2022	Richard Pozzetto Huot
2022	Francesco Ghirotto
2023	Benedetta Avesani
2023	Pietro Scandola
2023	Lorenzo Giovannozzi
2024	Andrea Sperotto
2024	Phan Thi Thao Nguyen
2024-25	Gabriele Avi
2025	Claudia Zandonà

### Dottorandi

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  
 2019-2023 Jacob Onireti  
 2019-2023 Mohsen Hajisadeghian  
 2024-present Giulia Citterio

**Postdoc**

2014-2017 Roberto Magliozzi  
 2015-2018 Laurensia Yuniati  
 2016-2018 Zunamys Carrero  
 2020-2023 Matteo Santucci  
 2019-2024 Angela Lauriola  
 2020-present Juliana Haydee Enrique Steinberg

**Assistenti di ricerca**

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

**RESPONSIBILITÀ EDITORIALI**

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*.

**ORGANIZZAZIONI PROFESSIONALI E SOCIETÀ**

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

**ATTIVITÀ DI VALUTATORE**

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), NWCR (North West Cancer Research, UK).

**SOMMARIO DELLE ATTIVITÀ DI RICERCA**

Our laboratory, located within the Department of Biotechnology at the University of Verona, investigates how eukaryotic cells receive, process, and transmit signals from the extracellular environment, and how the integration of multiple signals leads to a specific biological outcome. In the cell, such signaling networks are spatiotemporally controlled by post-translational modifications. We are particularly interested in the role of ubiquitylation, a versatile post-translational modification that controls all crucial biological processes by either targeting proteins for proteasomal degradation or triggering a multitude of regulatory signaling events. To that end, we employ a range of biochemical, molecular, and cell biological approaches, including proteomics, live imaging, and organoid technology, as well as genetic tools such as CRISPR genome editing and RNA interference.

**REFERENZE****Michele Pagano**

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 New York University School of Medicine  
 HHMI Investigator  
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**Avram Hershko**

Nobel laureate  
 Department of Biochemistry,  
 The Rappaport Faculty of Medicine  
 Technion-Israel Institute of Technology  
 E-mail: hershko@technion.ac.il

**Guido Franzoso**

Chair in Inflammation and Signal Transduction  
 Faculty of Medicine, Department of Medicine  
 Imperial College London  
 E-mail: g.franzoso@imperial.ac.uk

**Eva Hernando**

Vice Chair for Science  
 Department of Pathology  
 New York University School of Medicine  
 E-mail: Eva.Hernando-Monge@nyumc.org