



**Europass
Curriculum Vitae**

Personal information

First name(s) / Surname(s)	Saula Checquolo
Address(es)	Department of Medico-Surgical Sciences and Biotechnologies, Corso della Repubblica, 79, 04100 Latina (Italy)
Telephone(s)	
Fax(es)	
E-mail	saula.checquolo@uniroma1.it
Nationality	italian
Gender	female
Occupational field	MED-04 (General Pathology)

Work experience

Dates	2022 - today
Occupation or position held	Associate Professor
Main activities and responsibilities	Academic teaching, Research, and Student training in Research
Name and address of employer	"Sapienza" University of Rome - Department of Medico-Surgical Sciences and Biotechnologies - Corso della Repubblica 79 - Latina (Italy)
Dates	2008 - 2022
Occupation or position held	Assistant Professor
Main activities and responsibilities	Academic teaching, Research, and Student training in Research
Name and address of employer	"Sapienza" University of Rome - Department of Medico-Surgical Sciences and Biotechnologies - Corso della Repubblica 79 - Latina (Italy)
Dates	2006 - 2008
Occupation or position held	Research Associate (Post-doc)
Main activities and responsibilities	Research and Student training in Research
Name and address of employer	"Sapienza" University of Rome - Department of Experimental Medicine – Policlinico Umberto I – Viale Regina Elena 324 – Rome (Italy)
Dates	2005 - 2006
Occupation or position held	Research Associate (Post-doc)
Main activities and responsibilities	Research and Student training in Research
Name and address of employer	"Sapienza" University of Rome - Department of Experimental Medicine – Policlinico Umberto I – Viale Regina Elena 324 – Rome (Italy)
Dates	2000 - 2004
Occupation or position held	PhD-Student
Main activities and responsibilities	Research
Name and address of employer	"Sapienza" University of Rome - Department of Experimental Medicine – Policlinico Umberto I – Viale Regina Elena 324 – Rome (Italy)
Dates	1998 - 2000
Occupation or position held	Master Degree Student
Main activities and responsibilities	Research
Name and address of employer	"Sapienza" University of Rome - Department of Experimental Medicine – Policlinico Umberto I – Viale Regina Elena 324 – Rome (Italy)

Education and training

Dates	March 2022
Title of qualification awarded	Associate Professor
Organisation	"Sapienza" University of Rome
Dates	November 2008
Title of qualification awarded	Assistant Professor
Organisation	"Sapienza" University of Rome
Dates	2006 - 2008
Title of qualification awarded	Post-doc Fellowship – Project Title "Progetto:"Studio funzionale delle vie di segnalazione del pre-TCR e di Notch3 nella patogenesi della leucemia linfoblastica acuta a cellule T"
Organisation	Italian Federation of Cancer Research (FIRC)

Dates	2005
Title of qualification awarded	Post-doc Fellowship – Project Title ""Studio funzionale delle vie di segnalazione del pre-TCR e di Notch3 nella patogenesi della leucemia linfoblastica acuta a cellule T"
Organisation	Italian Association of Cancer Research (AIRC)
Dates	February 2005
Title of qualification awarded	PhD, Immunological Sciences – Thesis Title "Il complesso del pre-TCR come integratore dei meccanismi di trasduzione coinvolti nella linfomagenesi T"
Organisation	"Sapienza" University of Rome
Dates	November 2000
Title of qualification awarded	Licence in Biological Sciences
Organisation	"Sapienza" University of Rome
Dates	June 2000
Title of qualification awarded	Master Degree in Biological Sciences (cum laude) – Thesis Title "Il topo transgenico per Notch3 rappresenta un modello di compromissione del differenziamento dei linfociti T a livello dello stadio del Pre-TCR".
Organisation	"Sapienza" University of Rome

Personal skills and competences

Dr Saula Checquolo graduated cum laude in Biology at the University of Rome “La Sapienza” on June 2000. From November 2000 to October 2004 she worked as PhD student in Immunological Sciences, Department of Experimental Medicine, University of Rome “La Sapienza” in the laboratory of Professor Screpanti. The main interest of Dr. Checquolo has been focused on the analysis of cellular and molecular mechanisms involved in i) T cell and thymocytes differentiation and ii) leukemia development and progression, with particular reference to the understanding in details the specific role of Notch signalling pathway. Subsequently, from January 2005 to October 2008 she continued her research activities as Post-doc focusing her studies on the role of Notch3 in leukemia development and progression, thus providing new insights on Notch3 cross-talk with several pathways involved in molecular mechanisms leukemia-related. From 2008 to March 2022, Dr Checquolo was Assistant Professor of General Pathology of the Faculty of Pharmacy & Medicine of the “Sapienza” University of Rome. Her researches continued by focusing on i) the analysis of Notch3 protein regulation through the identification of its post-transductional modifications (PTMs) events, cancer-related, ii) the understanding of how Notch3 signaling can be related to cancer behavior in solid tumors and iii) the potential therapeutic application of Notch3 targeting as novel approach in the treatment of Notch3-driving cancers.

From 31th March 2022 she is Associate Professor.

Dr Checquolo has a high competence and experience in several techniques in cellular and molecular biology, also related to the use of *in vivo* animal models. Indeed, for her research studies, Dr Checquolo fully contributed to the generation, phenotypic and functional characterization of several murine of neoplastic diseases (i.e. Notch3 tg mice and Notch3 tg+/pTalpha-/-, Notch3 tg+/PKCtheta-/- Notch3 tg+/Pin1-/- double mutant mice).

All these researches has been published in highly qualified international journals. Dr Checquolo is author of 34 papers available on Pubmed (H index: 22; Number of total Citations: 1363).

Mother tongue(s) Italian

Other language(s) English

Self-assessment
European level (*)

Language

Understanding		Speaking		Writing
Listening	Reading	Spoken interaction	Spoken production	
C1	C1	B2	C1	C1

(*) [Common European Framework of Reference for Languages](#)

Additional information**Scientific grants:**

2020 - present: PI - Istituto Pasteur Italia - Fondazione Cenci Bolognetti (Call 2020 - under 45); 2009-present: PI - Sapienza University research grants; 2009 - present: Participant as Sapienza partner - National grants (AIRC – PRIN) - European grants (NotchIT project - Notch signaling in development and pathology). 2008 - 2011: Unit coordinator and PI - Fondazione Roma grant.

Society memberships, Awards and Honors

2013 - present: Membership of SIPMET (Società Italiana di Patologia e Medicina Traslazionale); 2006 - 2008: Winner of Post-doc Fellowship - FIRC (Federazione Italiana per la Ricerca sul Cancro); 2005: Winner of Post-doc Fellowship - AIRC (Associazione Italiana per la Ricerca sul Cancro).

Academic activities

2020 - 2022: Member of the Faculty Committee of the “Sapienza” University – Rome

2016 - 2017: Member of Sapienza Research Committee, “Sapienza” University of Rome.

2012 - present: Member of the Academic Board of the PhD Programs, “Sapienza” University of Rome.

Student, PhD Student and Post-doc training in Research

2006 - present: Training activities in Research, “Sapienza” University of Rome (Student: 12; PhD-Student: 7; Post-doc: 3).

Teaching experience

2008 - present: Professor of General Pathology in Faculty of Pharmacy & Medicine, Sapienza University of Rome.

Annexes

List any items attached.

- Giulimondi, Francesca, Vulpis, Elisabetta, Digiacomo, Luca, Giuli, Maria Valeria, Mancusi, Angelica; Capriotti, Anna Laura; Laganà, Aldo; Cerrato, Andrea; Zenezini Chiozzi, Riccardo; Nicoletti, Carmine; Amenitsch, Heinz; Cardarelli, Francesco Masuelli, Laura; Bei, Roberto; Screpanti, Isabella; Pozzi, Daniela; Zingoni, Alessandra; **Checquolo, Saula***, Caracciolo, Giulio*. *Opsonin-Deficient Nucleoproteic Corona Endows UnPEGylated Liposomes with Stealth Properties In Vivo*. ACS Nano (2022). 16(2), pp. 2088–2100. IF: 15.811. * co-corresponding authors
- Giuli, Maria V; Mancusi, Angelica; Giuliani, Eugenia; Screpanti, Isabella; **Checquolo, Saula**. *Notch signaling in female cancers: A multifaceted node to overcome drug resistance*. Cancer Drug Resistance (2021). 4(4), pp. 805–836. IF: 2.461.
- Maria Valeria Giuli, Giulia Diluvio, Eugenia Giuliani, Giulia Franciosa, Laura Di Magno, Maria Gemma Pignataro, Luca Tottone, Carmine Nicoletti, Zein Mersini Besharat, Giovanna Peruzzi, Maria Pelullo, Rocco Palermo, Gianluca Canettieri, Claudio Talora, Giulia d'Amati, Diana Bellavia*, Isabella Screpanti* and **Saula Checquolo***. *Notch3 contributes to T-cell leukemia growth via regulation of the unfolded protein response*. Oncogenesis (2020). 9:93 IF: 7.485. * co-corresponding authors.
- Maria Valeria Giuli, Patrizia Nadia Hanieh, Eugenia Giuliani, Federica Rinaldi, Carlotta Marianecchi, Isabella Screpanti, **Saula Checquolo*** and Maria Carafa. *Current Trends in ATRA Delivery for Cancer Therapy*. Pharmaceutics (2020). 12, 707; doi:10.3390/pharmaceutics12080707. IF: 6.321. * corresponding author.
- Giuli MV, Giuliani E, Screpanti I, Bellavia D, **Checquolo S**. *Notch Signaling Activation as a Hallmark for Triple-Negative Breast Cancer Subtype*. J ONCOL. Jul 11; 2019:8707053 (2019). doi: 10.1155/2019/8707053.. IF: 4.375
- Pelullo M, Nardoza F, Zema S, Quaranta R, Nicoletti C, Besharat ZM, Felli MP, Cerbelli B, d'Amati, G, Palermo R, Capalbo C, Talora C, Marcotullio LD, Giannini G, **Checquolo S***, Screpanti I, Bellavia D*. *Kras/ADAM17-dependent Jag1-ICD reverse signaling sustains colorectal cancer progression and chemoresistance*. Cancer Research. Volume 79, Issue 21, 1 November 2019, Pages 5575-5586. IF: 12.701 * co-corresponding authors.
- Simona Ceccarelli, Francesca Megiorni, Diana Bellavia, Cinzia Marchese, Isabella Screpanti and **Saula Checquolo** (2019). *Notch3 Targeting: A Novel Weapon against Ovarian Cancer Stem Cells*. STEM CELLS INTERNATIONAL, Volume 2019, Article ID 6264931, 8 pages <https://doi.org/10.1155/2019/6264931> IF: 5.443
- Tottone L, Zhdanovskaya N, Carmona Pestaña Á, Zampieri M, Simeoni F, Lazzari S, Ruocco V, Pelullo M, Caiafa P, Felli MP, **Checquolo S**, Bellavia D, Talora C, Screpanti I, Palermo R. *Histone Modifications Drive Aberrant Notch3 Expression/Activity and Growth in T-ALL*. Front Oncol 2019; 9: 198 | PMID: 31001470 IF: 6.244
- De Blasio C, Zonfrilli A, Franchitto M, Mariano G, Cialfi S, Verma N, **Checquolo S**, Bellavia D, Palermo R, Benelli D, Screpanti I, Talora C. (2019). *PLK1 targets NOTCH1 during DNA damage and mitotic progression*. J BIOL CHEM Nov; 294: 17941-17950 | PMID: 31597699 IF: 5.157
- Pelullo M, Zema S, Nardoza F, **Checquolo S**, Screpanti I, Bellavia D. *Wnt, Notch, and TGF-β Pathways Impinge on Hedgehog Signaling Complexity: An Open Window on Cancer*. Front Genet 2019; 10: 711 | PMID: 31552081 IF: 4.599
- Laura Antonucci, Laura Di Magno, Davide D'amico, Simona Manni, Silvia Maria Serrao, Fiorella Di Pastena, Rosa Bordone, Zuleyha Nihan Yurtsever, Miriam Caimano, Marialaura Petroni, Alessandra Giorgi, Maria Eugenia Schinina, John R. Yates Iii, Lucia Di Marcotullio, Enrico De Smaele, **Saula Checquolo**, Carlo Capalbo, Enzo Agostinelli, Marella Maroder, Sonia Coni And Gianluca Canettieri. *Mitogen-activated kinase kinase 1 inhibits hedgehog signaling and medulloblastoma growth through GLI1 phosphorylation*. INTERNATIONAL JOURNAL OF ONCOLOGY, Volume 54, Issue 2, Pages 505-514 (2019). doi: 10.3892/ijo.2018.4638 IF: 5.650

- Giulia Diluvio, Francesca Del Gaudio, Maria Valeria Giuli, Giulia Franciosa, Eugenia Giuliani, Rocco Palermo, Zein Mersini Besharat, Maria Gemma Pignataro, Alessandra Vacca, Giulia d'Amati, Marella Maroder, Claudio Talora, Carlo Capalbo, Diana Bellavia, **Saula Checquolo**. *NOTCH3 inactivation increases triple negative breast cancer sensitivity to gefitinib by promoting EGFR tyrosine dephosphorylation and its intracellular arrest*. ONCOGENESIS, vol. 7, p. 1-15, (2018). ISSN: 2157-9024, doi: 10.1038/s41389-018-0051-9 IF: 7.485
- Bellavia, Diana, Palermo, Rocco, Felli, Maria Pia, Screpanti, Isabella, **Checquolo, Saula**. *Notch signaling as a therapeutic target for Acute Lymphoblastic Leukemia*. EXPERT OPINION ON THERAPEUTIC TARGETS (2018). ISSN: 1472-8222, doi: 10.1080/14728222.2018.1451840 IF: 6.902
- Roberta Quaranta, Maria Pelullo, Sabrina Zema, Francesca Nardoza, **Saula Checquolo**, Dieter Matthias Lauer, Francesca Bufalieri, Rocco Palermo, Maria Pia Felli, Alessandra Vacca, Claudio Talora, Lucia Di Marcotullio, Isabella Screpanti, Diana Bellavia. *Maml1 acts cooperatively with Gli proteins to regulate Sonic hedgehog signaling pathway*. CELL DEATH & DISEASE, vol. 8, p. 1-12, (2017). ISSN: 2041-4889, doi: 10.1038/cddis.2017.326 IF: 8.469
- Giulia Franciosa, Giulia Diluvio, Francesca Del Gaudio, Maria Valeria Giuli, Rocco Palermo, Paola Grazioli, Antonio Francesco Campese, Claudio Talora¹, Diana Bellavia, Giulia D'Amati, Zein Mersini Besharat, Carmine Nicoletti, Christian William Siebel, Lisa Choy, Alessandra Rustighi, Giannino Del Sal, Isabella Screpanti and **Saula Checquolo**. *Prolyl-isomerase Pin1 controls Notch3 protein expression and regulates T-ALL progression*. Oncogene Volume 35, Issue 36, 8 September 2016, Pages 4741-4751. doi:10.1038/onc.2016.5 IF: 9.867
- Verrienti Antonella, Tallini Giovanni, Colato Chiara, Boichard Amélie, **Checquolo Saula**, Pecce Valeria, Sponziello Marialuisa, Rosignolo Francesca, de Biase Dario, Rhoden Kerry, Casadei Gian Piero, Russo Diego, Visani Michela, Acquaviva Giorgia, Ferdeghini Marco, Filetti Sebastiano, Durante Cosimo. *RET mutation and increased angiogenesis in medullary thyroid carcinomas*. ENDOCRINE-RELATED CANCER, vol. 23, p. 665-676, (2016). ISSN: 1351-0088, doi:10.1530/ERC-16-0132 IF: 5.678
- P Vargas Romero, S Cialfi, R Palermo, C De Blasio, **S Checquolo**, D Bellavia, S Chiaretti, R Foà, A Amadori, A Gulino, G Zardo, C Talora and I Screpanti. *The deregulated expression of miR-125b in acute myeloid leukemia is dependent on the transcription factor C/EBPα*. Leukemia 29, 2442–2445. (2015) IF: 11.528
- Samantha Cialfi, Rocco Palermo, Sonia Manca, Carlo De Blasio, Paula Vargas Romero, **Saula Checquolo**, Diana Bellavia, Daniela Uccelletti, Michele Saliola, Angelo D'Alessandro, Lello Zolla, Alberto Gulino, Isabella Screpanti and Claudio Talora. *Loss of Notch1-dependent p21Waf1/Cip1 expression influences the Notch1 outcome in tumorigenesis*. Cell Cycle. Jul 1; 13(13): 2046–2245. (2014) IF: 4.534
- V Kumar, R Palermo, C Talora, AF Campese, **S Checquolo**, D Bellavia, L Tottone, G Testa, E Miele, S Indraccolo, A Amadori, E Ferretti, A Gulino, A Vacca and I Screpanti. *Notch and NF-κB signaling pathways regulate miR-223/FBXW7 axis in T-cell acute lymphoblastic leukemia*. Leukemia 28, 2324–2335. (2014) IF: 11.528
- Maria Pelullo, Roberta Quaranta, Claudio Talora, **Saula Checquolo**, Samantha Cialfi, Maria Pia Felli, Geertruy te Kronnie, Chiara Borga, Zein Mersini Besharat, Rocco Palermo, Lucia Di Marcotullio, Anthony J. Capobianco, Alberto Gulino, Isabella Screpanti and Diana Bellavia. *Notch3/Jagged1 Circuitry Reinforces Notch Signaling and Sustains T-ALL*. Neoplasia, pp. 1007–1017. (2014) IF: 5.715
- NM Martin-Blanco, **S Checquolo**, F Del Gaudio, R Palermo, G Franciosa, L Di Marcotullio, A Gulino, M Canelles and I Screpanti. *Numb-dependent integration of pre-TCR and p53 function in T-cell precursor development*. Cell Death and Disease, 5, e1472; (2014) doi:10.1038/cddis.2014.438. IF: 8.469
- *R. Palermo, ***S. Checquolo**, D. Bellavia, C. Talora and I. Screpanti. *The Molecular Basis of Notch Signaling Regulation: A Complex Simplicity*. Current Molecular Medicine 14, 1-11. (2014) IF: 2.222 *These authors contributed equally to this work.

- Simone Martinelli*, **Saula Checquolo***, Federica Consoli, Emilia Stellacci, Cesare Rossi, Marianna Silvano, Giulia Franciosa, Elisabetta Flex, Carla Cossu, Alessandro De Luca, Robin Foa`, Giovanni Cazzaniga, Andrea Biondi, Isabella Screpanti, Marco Tartaglia. *Loss of CBL E3-ligase activity in B-lineage childhood acute lymphoblastic leukaemia*. British Journal of Haematology. Volume 159, Issue 1, October 2012, Pages 115-119. IF: 6.998 *These authors contribute equally to this work.
- S Cialfi, R Palermo, S Manca, **S Checquolo**, D Bellavia, M Pelullo, R Quaranta, C Dominici, A Gulino, I Screpanti and C Talora. *Glucocorticoid sensitivity of T-cell lymphoblastic leukemia/lymphoma is associated with glucocorticoid receptor-mediated inhibition of Notch1 expression*. Leukemia, Volume 27, Issue 2, February 2013, Pages 485-488. IF: 9.944
- *Palermo R, ***Checquolo S**, Giovenco A, Kumar V, Grazioli P, Campese AF, Giorgi A, Ferrara G, Napolitano M, Canettieri G, Schininà ME, Maroder M, Frati L, Gulino A, Vacca A and Screpanti I. *Acetylation controls Notch3 stability and function in T cell leukemia*. Oncogene. Nov 28 (2012). doi:10.1038/onc.2011.533. IF: 9.867 *These authors contribute equally to this work.
- Martinelli S, De Luca A, Stellacci E, Rossi C, **Checquolo S**, Lepri F, Silvano M, Buscherino F, Consoli F, Ferrara G, Digilio MC, Cavaliere ML, van Hagen A, Zampino G, van der Burgt I, Screpanti I, Yntem HGa, Nillesen WM, Savarirayan R, Zenker M, Dallapiccola B, Gelb BD and Tartaglia M. *Heterozygous Germline Mutations in the CBL Tumor-Suppressor Gene Cause a Noonan Syndrome-like Phenotype*. AM. J. H. Gen. 87, pp. 1-8. (2010) IF: 11.025
- ***Checquolo S**, *Palermo R, Cialfi S, Ferrara G, Oliviero C, Talora C, Bellavia D, Giovenco A, Grazioli P, Frati L, Gulino A, Screpanti I. *Differential subcellular localization regulates c-Cbl E3 ligase activity upon Notch3 protein in T-cell leukemia*. Oncogene, 29(10), pp.1463-74. (2010) IF: 9.867 *These authors contribute equally to this work.
- Campese AF, Grazioli P, Colantoni S, Anastasi E, Mecarozzi M, **Checquolo S**, De Luca G, Bellavia D, Frati L,, Gulino A and Screpanti I. *Notch3 and pTa/pre-TCR sustain the in vivo function of naturally occurring regulatory T cells*. Int Immunol, 21 (6), pp. 727-43, (2009) IF: 4.823
- Bellavia D, **Checquolo S**, Campese AF, Felli MP, Gulino A, Screpanti I. *NOTCH3: FROM SUBTLE STRUCTURAL DIFFERENCES TO FUNCTIONAL DIVERSITY*. Oncogene, 27; pp. 5092-5098, (2008) IF: 9.867
- Felli, M.P., Vacca, A., Calce, A., Bellavia, D., Campese, A.F., Grillo, R., Di Giovine, M., **Checquolo S.**, Talora, C., Palermo, R., Di Mario, G., Frati, L., Gulino, A., and Screpanti, I. *PKC theta mediates pre-TCR signaling and contributes to Notch3-induced T-cell leukemia*. Oncogene, 24, pp. 992-1000, (2005) IF: 9.867
- Anastasi E, Campese AF, Bellavia D, Bulotta A, Balestri A, Pascucci M, **Checquolo S**, Gradini R, Lendahl U, Frati L, Gulino A, Di Mario U and Screpanti I. *Expression of Activated Notch3 in Transgenic Mice Enhances Generation of T Regulatory Cells and Protects against Experimental Autoimmune Diabetes* J of Immunol, 171, pp. 4504-11, (2003) IF: 5.422
- Talora C, Campese AF, Bellavia D, Pascucci M, **Checquolo S**, Gropioni M, Frati L, von Boehmer H, Gulino A and Screpanti I. *Pre-TCR-triggered ERK signalling-dependent downregulation of E2A activity in Notch3-induced T-cell lymphoma*. EMBO Rep, 4 (11); pp.1067-72, (2003) IF: 8.807
- Bellavia D, Campese, A.F, **Checquolo S**, Balestri A, Biondi A, Cazzaniga G, Lendahl U, Feeling HJ, Hayday AC, Frati L, von Boehmer H, Gulino A and Screpanti I. *Combined expression of pT α and Notch3 in T cell leukemia identifies the requirement of preTCR for leukemogenesis*. PNAS, 99 (6), pp.3788-93, (2002) IF: 11.205

Works None

Textbooks (Chapters, etc.)

- Bellavia D., **Checquolo S.**, Palermo R., Screpanti I. *The Notch3 Receptor and Its Intracellular Signaling-Dependent Oncogenic Mechanisms*. In: Borggreffe T., Giaimo B. (eds) *Molecular Mechanisms of Notch Signaling. Advances in Experimental Medicine and Biology*, vol 1066. Springer, Cham (2018) IF: 2.126

Rome, 21-06-2022

Saula Checquolo