Chiara Chiavelli

Date of birth: 13/01/1984 | **Nationality:** Italian | **Phone number:** (+39) 3473405545 (Mobile) | **Email address:** chiara.chiavelli@unimore.it | **Address:** via Virgiliana 179, 44012, Pilastri, Ferrara, Italy (Home) | **Address:** Largo del Pozzo 71, 41124, Modena, Italy (Work)

WORK EXPERIENCE

UNIVERSITY OF MODENA AND REGGIO EMILIA – MODENA, ITALY

BIOLOGIST - RTDA – 01/12/2023 – CURRENT

Collaboration in research activity and experimentation. Project: “HEAL ITALIA - Health Extended ALliance for Innovative Therapies, Advanced Lab-research, and Integrated Approaches of Precision Medicine”, SPOKE 6 "Healthy Toolbox".
The project is focused on the development of a CAR-T cell approach against both solid tumors, as glioblastoma, melanoma and sarcoma.
In particular, the candidate has gained an extensive and important experience related to:
· primary patient-derived tumor cell cultures
· identification of tumor-associated GD2 antigen in solid tumors and hematologic malignancies
· T lymphocyte manufacturing: PBMCs isolation, T cell selection and scale up expansion
· retroviral and lentiviral T cell transduction with Chimeric Antigen Receptor (CAR)
· anti-GD2 CAR T cell therapy development in *ex vivo* (in particular 3D models) and *in vivo* glioblastoma, melanoma, sarcoma models.

UNIVERSITY OF MODENA AND REGGIO EMILIA – MODENA, ITALY

BIOLOGIST - (CONTRATTISTA) – 16/04/2022 – 15/10/2023

Collaboration in research activity and experimentaton. Project: Immunoterapie cellulari e geniche per neoplasie pediatriche di origine neuroectodermica.
In the last three years, she is involved in a pre-clinical study regarding adoptive cell transfer as a personalized immunotherapy for cancer. The project is focused on the development of a CAR-T cell approach against both solid tumors, as glioblastoma, melanoma and sarcoma, and hematologic malignancies, as T cell acute lymphoblastic leukemia (T-ALL).
In particular, the candidate has gained an extensive and important experience related to:
· primary patient-derived tumor cell cultures
· identification of tumor-associated GD2 antigen in solid tumors and hematologic malignancies
· T lymphocyte manufacturing: PBMCs isolation, T cell selection and scale up expansion
· retroviral and lentiviral T cell transduction with Chimeric Antigen Receptor (CAR)
· anti-GD2 CAR T cell therapy development in *ex vivo* (2d and 3D models) and *in vivo* glioblastoma, melanoma, sarcoma and T-ALL models.

UNIVERSITY OF MODENA & REGGIO EMILIA - DEP. OF MEDICAL AND SURGICAL SCIENCE FOR CHILDREN AND ADULTS – MODENA, ITALY

BIOLOGIST - (ASSEGNISTA) – 04/2018 – 15/04/2022

Collaboration in research activity and experimentaton. Project: Immunoterapie cellulari e geniche per neoplasie pediatriche di origine neuroectodermica.
In the last three years she is involved in a pre-clinical study regarding adoptive cell transfer as a personalized immunotherapy for cancer. The project is focused on the development of a CAR-T cell approach against both solid tumors, as glioblastoma, melanoma and sarcoma, and hematologic malignancies, as T cell acute lymphoblastic leukemia (T-ALL).
In particular, the candidate has gained an extensive and important experience related to:
· primary patient-derived tumor cell cultures
· identification of tumor-associated GD2 antigen in solid tumors and hematologic malignancies
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· anti-GD2 CAR T cell therapy development in *ex vivo* (2d and 3D models) and *in vivo* glioblastoma, melanoma, sarcoma and T-ALL models.

UNIVERSITY OF MODENA AND REGGIO EMILIA - CIDSTEM – MODENA, ITALY

BIOLOGIST - (ASSEGNISTA) – 01/06/2016 – 03/2018

Collaboration in research activity and experimentation. Project:*"Hologene 7 come modello di sviluppo di una terapia avanzata a base di cellule staminali geneticamente corrette."*

UNIVERSITY OF MODENA AND REGGIO EMILIA - CIDSTEM – MODENA, ITALY

BIOLOGIST - (CONTRATTISTA) – 01/10/2015 – 31/05/2016

Collaboration in research activity and experimentation. Project: *"Phase I/II ex vivo gene therapy clinical trial for recessive dystrophic epidermolysis bullosa using skin equivalent grafts genetically corrected with a COL7A1-encoding SIN retroviral vector"*

INTERNATIONAL CENTRE FOR GENETIC ENGINEERING AND BIOTECHNOLOGY - ICGEB – TRIESTE, ITALY

BIOLOGIST – 10/2010 – 09/2015

Research activity and experimentation. Project: "Molecular mechanism of the tissue specific and developmentally regulated alternative splicing of SCN9A Exon 5"

FARMACIA DOTT.SSA MARGUTTI ELVINA – PILASTRI DI BONDENO, ITALY

PHARMACIST – 01/2008 – 09/2008

Responsible for controlling, dispensing and distributing medicine, selling over-the-counter medical products and instructing patients on the use of medicines and medical appliances.

EDIPOWER (POWER STATION) – MOGLIA, ITALY

CHEMICAL SCIENCE TECHNICIAN – 08/2002

Analysis of the quality of the water used in the power station and control of the industrial equipment involved in chemical procedures.

EDUCATION AND TRAINING

01/2011 – 04/2015 Trieste, Italy

PHD IN LIFE SCIENCES ICGEB (International Centre for Genetic Engineering and Biotechnology) – Open University

Molecular biology, biochemistry, cell culture, biotechnology.

Data di riconoscimento: 31/05/2023 - Decreto Rettorale N° 539/2023, prot. 126394 del riconoscimento accademico del dottorato di ricerca in "Doctor of Philosophy in Life Sciences" conseguito presso the Open University di Londra (Regno Unito) col dottorato di ricerca in "Clinical and Experimental Medicine (CEM) - Medicina Clinica e Sperimentale" rilasciato dall'Università di Modena e Reggio Emilia.

Level in EQF EQF level 8

10/2003 – 11/2009 Ferrara, Italy

MASTER'S DEGREE IN CHEMISTRY AND PHARMACEUTICAL TECHNOLOGY 110/110 CUM LAUDE
Università degli Studi di Ferrara

Organic chemistry, pharmaceutical chemistry, biochemistry, toxicology, drugs preparation and quality/quantitative control, drug legislation and record.

Level in EQF EQF level 7

09/1998 – 06/2003 Bondeno, Italy

SCIENTIFIC HIGH SCHOOL CERTIFICATE Liceo Scientifico (indirizzo PNI) Statale "G. Carducci"

Mathematics, physics, biology, philosophy, Latin.

Level in EQF EQF level 4

LANGUAGE SKILLS

Mother tongue(s): **ITALIAN**

Other language(s):

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production	Spoken interaction	
ENGLISH	B2	C1	B2	B2	C1

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

SKILLS

Microsoft Powerpoint | Microsoft Office | Google Drive | Microsoft Excel | Microsoft Word

PUBLICATIONS

2019
Chiavelli C, Attico E, Sceberras V, Fantacci M, Melonari M, Pellegrini G; Stem Cells and Ocular Regeneration

Editor(s): Rui L. Reis - Encyclopaedia of Tissue Engineering and Regenerative Medicine, Academic P

2021
Prapa, M., Chiavelli, C., Golinelli, G., Grisendi, G., Bestagno, M., Di Tinco, R., Dall'Ora, M., Neri, G., Candini, O., Spano, C., Petrachi, T., Bertoni, L., Carnevale, G., Pugliese, G., Depenni, R., Feletti, A., Iaccarino, C., Pavesi, G., & Dominici, M. GD2 CAR T cells against human glioblastoma.

2021
Golinelli, G., Grisendi, G., Dall'Ora, M., Casari, G., Spano, C., Talami, R., Banchelli, F., Prapa, M., Chiavelli, C., Rossignoli, F., Candini, O., D'Amico, R., Nasi, M., Cossarizza, A., Casarini, L., & Dominici, M. Anti-GD2 CAR MSCs against metastatic Ewing's sarcoma.

2021
Dall'Ora, M., Rovesti, G., Reggiani Bonetti, L., Casari, G., Banchelli, F., Fabbiani, L., Veronesi, E., Petrachi, T., Magistri, P., Di Benedetto, F., Spallanzani, A., Chiavelli, C., Spano, M. C., Maiorana, A., Dominici, M., & Grisendi, G. TRAIL receptors are expressed in both malignant and stromal cells in pancreatic ductal adenocarcinoma.

2022
Golinelli, G., Talami, R., Frabetti, S., Candini, O., Grisendi, G., Spano, C., Chiavelli, C., Arnaud, G. F., Mari, G., & Dominici, M. A 3D Platform to Investigate Dynamic Cell-to-Cell Interactions Between Tumor Cells and Mesenchymal Progenitors.

2022
Cozzi, S., Najafi, M., Gomar, M., Ciammella, P., Iotti, C., Iaccarino, C., Dominici, M., Pavesi, G., Chiavelli, C., Kazemian, A., & Jahanbakhshi, A. Delayed Effect of Dendritic Cells Vaccination on Survival in Glioblastoma: A Systematic Review and Meta-Analysis.

2022
Piccinno MS, Petrachi T, Pignatti M, Murgia A, Grisendi G, Candini O, Resca E, Bergamini V, Ganzerli F, Portone A, Mastrolia I, Chiavelli C, Castelli I, Bernabei D, Tagliazucchi M, Bonetti E, Lolli F, De Santis G, Dominici M, Veronesi E. Human Adipose Mesenchymal Stromal/Stem Cells Improve Fat Transplantation Performance.

2022
Mastrolia I, Giorgini A, Murgia A, Loschi P, Petrachi T, Rasini V, Pinelli M, Pinto V, Lolli F, Chiavelli C, Grisendi G, Baschieri MC, Santis G, Catani F, Dominici M, Veronesi E. Autologous Marrow Mesenchymal Stem Cell Driving Bone Regeneration in a Rabbit Model of Femoral Head Osteonecrosis.

2022
Guaitoli G, Neri G, Cabitza E, Natalizio S, Mastrodomenico L, Talerico S, Trudu L, Lauro C, Chiavelli C, Baschieri MC, Bruni A, Dominici M, Bertolini F. Dissecting Immunotherapy Strategies for Small Cell Lung Cancer: Antibodies, Ionizing Radiation and CAR-T.

2023
Casari G, Dall'Ora M, Melandri A, Masciale V, Chiavelli C, Prapa M, Neri G, Spano MC, Murgia A, D'Esposito A, Baschieri MC, Ceccherelli GB, Dominici M, Grisendi G. Impact of soluble tumor necrosis factor-related apoptosis-inducing ligand released by engineered adipose mesenchymal stromal cells on white blood cells.

2023
Mastrolia I, Catani V, Oltrecolli M, Pipitone S, Vitale MG, Masciale V, Chiavelli C, Bortolotti CA, Nasso C, Grisendi G, et al. Chasing the Role of miRNAs in RCC: From Free-Circulating to Extracellular-Vesicle-Derived Biomarkers.

2023
Medici B, Riccò B, Caffari E, Zaniboni S, Salati M, Spallanzani A, Garajovà I, Benatti S, Chiavelli C, Dominici M, Gelsomino F. Early Onset Metastatic Colorectal Cancer: Current Insights and Clinical Management of a Rising Condition.

2023
Petrachi T, Portone A, Arnaud GF, Ganzerli F, Bergamini V, Resca E, Accorsi L, Ferrari A, Delnevo A, Rovati L, Marra C, Chiavelli C, Dominici M, Veronesi E. Novel bioprinted 3D model to human fibrosis investigation.

2023
D'Onofrio R, Omarini C, Toss A, Sperduti I, Piacentini F, Barbolini M, Cortesi L, Barbieri E, Pettorelli E, Chiavelli C, Dominici M, Moscetti L. Adjuvant Endocrine Therapy in Premenopausal Women With Hormone Receptor-Positive Early-Stage Breast Cancer: Risk Stratification in a Real-World Setting.

2023
Davide A, Genna VG, Galaverni G, Chiavelli C, Merra A, Lepore F, Boraldi F, Quaglino D, Evangelista J, Lococo Fi, Pellegrini G. Heterogeneous potential of human airway basal cells: Holoclone-stem cell identification in a clinical-grade system.

2024
Chiavelli C, Prapa M, Rovesti G, Silingardi M, Neri G, Pugliese G, Trudu L, Dall'Ora M, Golinelli G, Grisendi G, Vinet J, Bestagno M, Spano C, Papapietro RV, Depenni R, Di Emidio K, Pasetto A, Nascimento Silva D, Feletti A, Berlucchi S, Iaccarino C, Pavesi G & Dominici M. Autologous anti-GD2 CAR T cells efficiently target primary human glioblastoma.

2024
Grisendi G, Dall'Ora M, Casari G, Spattini G, Farshchian M, Melandri A, Masicale V, Lepore F, Banchelli F, Costantini RC, D'Esposito A, Chiavelli C, Spano C, Spallanzani A, Petrachi T, Veronesi E, Ferracin M, Roncarati R, Vinet J, Magistri P, Catellani B, Candini O, Marra C, Eccher A, Bonetti LR, Horwtiz EM, Di Benedetto F, Dominici M. Combining gemcitabine and MSC delivering soluble TRAIL to target pancreatic adenocarcinoma and its stroma.

2025
Omarini, C., Catani, V., Mastrolia, I., Toss, A., Banchelli, F., Isca, C., Medici, D., Ponzoni, O., Brucale, M., Valle, F., Baschieri, M. C., D'Amico, R., Masciale, V., Chiavelli, C., Caggia, F., Bortolotti, C. A., Piacentini, F., & Dominici, M. Extracellular vesicles-derived miR-21 as a biomarker for early diagnosis and tumor activity in breast cancer subtypes.

2025
1. Riccardo Caraffi, Giulia Rovesti, Arianna Rinaldi, Francesca Rodà, Ilaria Ottonelli, Chiara Lucchi, Chiara Chiavelli, Sabrina Cuoghi, Barbara Ruozi, Maria Angela Vandelli, Giovanni Tosi, Massimo Dominici, Florence Dumas, Emmanuel Garcion, Frank Boury, Giuseppe Biagini and Jason Thomas Duskey. Hybrid polymeric scaffolds for brain applications: locoregional glioblastoma therapy. BOOK: Hybrid Polymeric Systems for Biomedical Applications.

CONFERENCES AND SEMINARS

20/02/2025 – 22/02/2025 Munich
5th International Conference on Lymphocyte Engineering

12/09/2023 – 14/09/2023 Munich
4th International Conference on Lymphocyte Engineering

04/05/2022 – 07/05/2022 San Francisco
ISCT Annual Meeting

24/02/2022 – 25/02/2022 Rome
Soho Italy 1st Clinical And Biological School of CAR T

26/02/2019 – 27/02/2019 London
CAR-TCR Europe 2019

12/09/2018 – 14/09/2018 Firenze
ISCT Europe 2018 Regional meeting

13/04/2015 – 15/04/2015 Trieste
ICGEB 3nd Post-EURASNET

18/11/2013 – 20/11/2013 Trieste
ICGEB 2nd Post-EURASNET

24/10/2012 – 26/10/2012 Trieste
Molecular Biology of Leishmania

18/04/2011 – 21/04/2011 Trieste
RNA Structure and Function

JOB-RELATED SKILLS

Job-related skills

Good organisational skills in tutoring and teaching students.

ORAL PRESENTATIONS

13/04/2015 – 15/04/2015
ICGEB 3rd Post-Symposium "RNA alternative splicing" (Trieste, IT); Short talk: Regulation of alternative splicing in sodium channel genes.

18/06/2013 – 19/06/2013
ICGEB Symposium (Trieste, IT): Mutually exclusive splicing is a pain.

13/05/2024 – 13/05/2024

I tumori rari in Emilia-Romagna & Focus sulle neoplasie cerebrali: facciamo rete. Congresso AIOM Emilia Romagna

Esperienze precliniche a confronto: progetti di ricerca preclinica
C. Chiavelli (Modena), S. Ratti (Bologna), A. Tesei (Meldola)

POSTER PRESENTATIONS

20/02/2025 – 22/02/2025

A Preclinical Platform Challenging Malignant Melanoma by Autologous CAR T. 5th International Conference on Lymphocyte Engineering (Munich, Germany)

Chiara Chiavelli, Giuseppe Pugliese, Marco Silingardi, Leonardo Brini, Laura Cavazzuti, Malvina Prapa, Giulia Rovesti, Giovanni Neri, Lucia Trudu, Giulia Golinelli, Aurora Melandri, Giulia Grisendi, Marco Bestagno, Carlotta Spano, Laura Bertoni, Rosanna Di Tinco, Tiziana Petrachi, Roberta Depenni, Massimo Dominici.

12/09/2023 – 14/09/2023

Autologous anti-GD2 CAR-T cells efficiently target primary human glioblastoma. 4th International Conference on Lymphocyte Engineering (Munich, Germany)

Chiavelli C, Rovesti G, Prapa M, Neri G, Pugliese G, Trudu L, Silingardi M, Dall'Ora M, Golinelli G, Grisendi G, Bestagno M, Spano C, Papapietro RV, Depenni R, Di Emidio K, Pasetto A, Nascimento Silva D, Feletti A, Berlucchi S, Iaccarino C, Pavesi G & Dominici M.

14/06/2023 – 17/06/2023

Airway epithelial stem cells: regenerative properties, differentiative potential and safe expansion for tissue-engineering approaches. ISSCR 2023 Annual Meeting (Boston, USA)

Adamo D, Genna VG, Galaverni G, **Chiavelli C**, Pellegrini G.

01/06/2023 – 03/06/2023

Anti-GD2 CAR T Cells Against Small Cell Lung Cancer. ISCT 2023 Annual Meeting (Paris, France)

Neri G, **Chiavelli C**, Trudu L, Prapa M, Golinelli G, Pugliese G, Silingardi M, Rovesti G, Grisendi G, Bestagno M, Spano C, Benati D, Recchia A, Masciale V, Bertolini F & Dominici M.

04/05/2022 – 07/05/2022

Autologous anti-GD2 CAR T cells efficiently target primary human glioblastoma (San Francisco, USA)

Chiavelli C, Prapa M, Neri G, Pugliese G, Rovesti G, Trudu L, Grisendi G, Golinelli G, Bestagno M, Candini O, Spano C, Di Tinco R, Bertoni L, Carnevali G, Papapietro RV, Depenni R, Feletti A, Iaccarino C, Pavesi G, Dominici M

26/02/2019 – 27/02/2019

Anti-GD2 CAR T Cells Targeting Primary Patient-Derived Glioblastoma Cells. CAR-TCR Summit Europe (London, UK)

Prapa M, **Chiavelli C**, Sautto C, Spano C, Grisendi G, Candini O, Foppiani EM, Golinelli G, Caldrer S, Bestagno M, Cellini M, Paolucci P, Zunarelli E, Feletti A, Depenni R, Campana D, Pavesi G, Dominici M.

12/09/2018 – 14/09/2018

Challenging GD2-specific CAR T Cells Against Primary Patient-derived Glioblastoma Cells. Europe Regional Meeting International Society Cell Therapy (Florence, IT)

Prapa M, **Chiavelli C**, Spano C, Grisendi G, Candini O, Foppiani EM, Golinelli G, Caldrer S, Bestagno M, Sautto C, Cellini M, Campana D, Paolucci P, Zunarelli E, Feletti A, Pavesi G, Dominici M.

18/11/2013 – 20/11/2013

Molecular mechanism of the mutually exclusive splicing regulates the Nav1.7 sodium channel function and consequently nociception. Post-EURASNET symposium (Trieste, IT)

Chiavelli C, Zubovic L, Baralle M, Baralle FE

ASTRACTS

04/05/2022 – 07/05/2022

Autologous anti-GD2 CAR T cells efficiently target primary human glioblastoma (San Francisco, USA)

Chiavelli C, Prapa M, Neri G, Pugliese G, Rovesti G, Trudu L, Grisendi G, Golinelli G, Bestagno M, Candini O, Spano C, Di Tinco R, Bertoni L, Carnevali G, Papapietro RV, Depenni R, Feletti A, Iaccarino C, Pavesi G, Dominici M

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Prapa M, **Chiavelli C**, Spano C, Grisendi G, Candini O, Foppiani EM, Golinelli G, Caldrer S, Bestagno M, Sautto C, Cellini M, Campana D, Paolucci P, Zunarelli E, Feletti A, Pavesi G, Dominici M.

TECHNICAL SKILLS

Molecular biology techniques:

RNA Extraction
Polymerization Chain Reaction (PCR) and Quantitative Real-time PCR
Reverse transcription reaction
Agarose gel electrophoresis
Western Blot
Southern Blot
RNA Pull down assay
Molecular cloning techniques
Minigene system

Cellular biology techniques:

Immortalized cells culture
Erythroid precursor cells culture and PBMC isolation (from peripheral blood of patients)
CAR-T cells production
Dorsal root ganglia dissection from embryonic rat and primary murine DRG neurons culture
Isolation and culture of primary keratinocytes and glioblastoma cells from biopsy
Treatments with biological active compounds in immortalized and primary cells
Clonal analysis
2D and 3D co-culture assays
Viability and cytotoxicity assays
Plasmid transfection in immortalized and primary cells
Antisense treatments (Morpholino, U7smOpt)
siRNA and miRNA transfections
LV and RT Transductions
Immunofluorescence (confocal microscope) and Immunohistochemistry
FACS
Decellularization protocols of biological scaffolds (derma and trachea)
Recellularization of cell-free biological scaffolds

Quanto dichiarato nel presente curriculum vitae corrisponde al vero ai sensi degli artt. 46 e 47 del D.P.R. 445/2000 In ottemperanza al GDPR e al D.Lgs. n. 196 del 30/06/2003, vi autorizzo all'utilizzo e al trattamento dei miei dati personali contenuti in questo documento.

Modena , 19/06/2025