ALLEGATO B

UNIVERSITÀ DEGLI STUDI DI MILANO
selezione pubblica per n.1 posto di Ricercatore a tempo determinato ai sensi dell'art.24, comma 3, lettera b) della Legge 240/2010 per il settore concorsuale 03/C1 - CHIMICA ORGANICA, settore scientifico-disciplinare CHIM/06 - CHIMICA ORGANICA presso il Dipartimento di CHIMICA, (avviso bando pubblicato sulla G.U. n. 68 del 01/09/2020) Codice concorso 4438

Alberto Dal Corso
CURRICULUM VITAE

Personal Information

First name / Surname	**Alberto Dal Corso**
Address	Università degli Studi di Milano, Dipartimento di Chimica Via Golgi 19, 20133 Milan (Italy)
e-mail	alberto.dalcorso@unimi.it ; alberto.dalcorso@pec.it
Nationality	Italian
Date of birth	24th January 1989
ORCID	0000-0003-4437-8307

Professional Experience

March 2018 - now	**Postdoctoral Fellow - Assegno di Ricerca di tipo A**
	Università degli Studi di Milano - Milan (Italy) Dipartimento di Chimica
Research Activities	Synthesis of small-molecule ligands for therapeutically-relevant proteins; synthesis of novel tumor-targeted conjugates and new linkers for tumor-selective release of anticancer drugs Position renewed from 1st March 2020 to 28th February 2022
Supervisor	Prof. Dr. Cesare Gennari
January 2017 - February 2018	**Postdoctoral Fellow**
	Swiss Federal Institute of Technology (ETH) - Zurich (Switzerland) Department of Chemistry and Applied Biosciences Institute of Pharmaceutical Sciences (IPW)
	1-year Scholarship granted by Novartis Foundation for Medical-Biological Research Project title: *Next-Generation Targeted Anticancer Drugs from DNA-Encoded Chemical Libraries*
Research Activities	Fragment-based drug discovery; validation and affinity maturation of small organic binders identified by screening DNA-encoded chemical libraries; determination of binding affinities (K_d) through fluorescence polarization, surface plasmon resonance and microscale thermophoresis experiments
Supervisor	Prof. Dr. Dario Neri
August 2016 - December 2016	**Research Scientist**
	Philochem AG - Otelfingen (Switzerland)
Research Activities	Synthesis of small organic scaffolds for the construction of DNA-Encoded Chemical Libraries; synthesis of fluorescent ligands of tumor-associated antigens as tools in immunohistochemistry of tissue sections; synthesis and biological evaluation of Small Molecule-Drug Conjugates

November 2015 - July 2016	**Postdoctoral Fellow**
	Swiss Federal Institute of Technology (ETH) - Zurich (Switzerland) Department of Chemistry and Applied Biosciences Institute of Pharmaceutical Sciences (IPW)
Research Activities	Synthesis and *in vitro/in vivo* biological evaluation of Antibody-Drug Conjugates and Small Molecule-Drug Conjugates
Supervisor	Prof. Dr. Dario Neri

Education and Training

October 2015	**PhD in Industrial Chemistry**
	Università Degli Studi di Milano - Milan (Italy) Dipartimento di Chimica
Thesis Title	*"Tumor Targeting via Integrin Ligands: Synthesis and Biological Evaluation of RGD Peptidomimetic-Drug Conjugates"*
Supervisors	Prof. Dr. Cesare Gennari (tutor, University of Milan) Dr. Luca Pignataro (academic co-tutor, University of Milan) Dr. Michele Caruso (industrial co-tutor, Nerviano Medical Sciences)
October 2012	**MSc in Chemical Sciences** (110/110)
	Università Degli Studi di Milano - Milan (Italy)
Principal subjects	Organic chemistry, advanced synthetic and catalytic methodologies, medicinal chemistry
Thesis Title	*"Synthesis of cyclic peptidomimetics containing the isoDGR sequence as new potent integrin ligands"*
Supervisors	Prof. Dr. Cesare Gennari (tutor, University of Milan) Dr. Luca Pignataro (co-tutor, University of Milan)

Teaching and tutoring Activities

March - June 2020	10-hour tutoring activity within the course "*Chimica Organica I*" supervised by Prof. A. Bernardi (B.Sc. course in Chemistry, Università degli Studi di Milano) according to Art. 45 of the General Regulation of the University of Milan
March - June 2019	20-hour tutoring activity within the course "*Laboratorio di Chimica (con Prevenzione e Sicurezza)*" supervised by prof. Passarella/Raimondi/Rizzato/Carlucci/Rossi (B.Sc. course in Biological Sciences, Università degli Studi di Milano) according to Art. 45 of the General Regulation of the University of Milan
April - June 2014/2015	In charge of exercise sessions within the course "*Approfondimenti di Chimica Organica*" supervised by prof. Passarella (B.Sc. course in Chemistry, Università degli Studi di Milano)

Contribution to Network Grants

November 2019 - now	Participation to the research project: "Small Molecule Drug Conjugates for Targeted Delivery in Tumor Therapy" (MAGICBULLET::RELOADED). Funding Program: "Marie Skłodowska-Curie" ITN-ETN Network (Horizon 2020) contract no. 861316. Funding agency: European Commission. Coordinator: Prof. Norbert Sewald (University of Bielefeld, Germany). Partner units: Università degli Studi di Milano (UNIMI), 8 other academic partners, 1 public research institute and 5 industrial partners. Scientist in Charge of the UNIMI unit: Prof. Cesare Gennari. Start/end date of the project: 1st November 2019 - 31st October 2023.
Role of the candidate within the project	Elaboration of the scientific program; contribution to the candidate selection for the doctoral fellowship; participation to the kick-off Network meeting; day-to-day training of the PhD student.

March 2018 - February 2020

Participation to the research project: "Tumor-targeting peptidomimetics: synthesis and bio-medical applications".
Funding Program: PRIN 2015, project no. 20157WW5EH.
Funding agency: Ministero dell'Istruzione, dell'Università e della Ricerca (MIUR).
Coordinator: Prof. Cesare Gennari (Università degli Studi di Milano).
Partner units: Università degli Studi di Milano and 8 other academic partners.
Start/end date of the project: 5th February 2017 - 5th February 2020.

Role of the candidate within the project

Elaboration of the scientific program and practical laboratory work; day-to-day training of Master and PhD students; article writing and submission for publication.

January 2015 - October 2015
March 2018 - December 2018

Participation to the research project: "Peptide-Drug Conjugates for Targeted Delivery in Tumor Therapy" (MAGICBULLET).
Funding Program: "Marie Skłodowska-Curie" ITN-ETN Network (Horizon 2020), contract no. 642004.
Funding agency: European Commission.
Coordinator: Prof. Norbert Sewald (University of Bielefeld, Germany).
Partner units: Università degli Studi di Milano (UNIMI), 6 other academic partners and 2 industrial partners.
Scientist in Charge of the UNIMI unit: Prof. Cesare Gennari.
Start/end date of the project: 1st January 2015 - 31st December 2018

Role of the candidate within the project

Elaboration of the scientific program; day-to-day training of PhD students; article writing and submission for publication.

Additional Courses and Activities

28th February 2019

Attended training course: "*Incontro di formazione organizzato dal COSP nell'ambito del Piano Lauree Scientifiche (PLS)*" - Università degli Studi di Milano (Italy)

3rd - 5th April 2017

Individual training session on Microscale Thermophoresis (MST) - NanoTemper Technologies GmbH, Munich (Germany)

Since 2017

Reviewer for international journals such as EBioMedicine (Elsevier, IF 2019: 5.736), Molecular Cancer Therapeutics (AACR; IF 2019: 5.615) and Molecules (MDPI, IF 2019: 3.267)

Prizes and Awards

- Prize "Organic Chemistry for Life Sciences 2019 - Junior" by the Organic Chemistry Division of the Italian Chemical Society (SCI)

Publications and Communication Activities

Communications in International Conferences

- Junior Prize Lecture at the "XXXIX Convegno Nazionale della Divisione di Chimica Organica della Società Chimica Italiana" (PR-J4, Torino, Italy; 8th - 12th September 2019): "*New-generation Self-Immolative Spacers Enable Fast Release of Anticancer Drugs*"
- Flash Communication at the "XXII International Conference on Organic Synthesis - 22-ICOS" (FLP8, Firenze, Italy; 16th - 21st September 2018): *"Chemically-defined Antibody- and Small Molecule-Drug Conjugates for in vivo Tumor Targeting Applications: a Comparative Analysis"* - Scholarship granted by Società Chimica Italiana
- Flash Communication at the 25th Meeting of the Portuguese Chemical Society (FC2, Lisbon, Portugal; 16th - 19th June 2017): "*Noninternalizing antibody-drug conjugates release potent cytotoxic agents at the tumor site upon proteolytic linker cleavage*"
- Oral Communication at the 40th ed. "A. Corbella" International Summer School on Organic Synthesis ISOS 2015 (O4, Gargnano, Italy; 14th - 18th June 2015): "*Synthesis and Biological Evaluation of RGD Peptidomimetic-Paclitaxel Conjugates bearing Lysosomally Cleavable Linkers*" - Scholarship granted by Società Chimica Italiana

- Poster Communication at the Ischia Advanced School of Organic Chemistry (P12, Lacco Ameno - Ischia - Naples, Italy; 21st - 25th September 2014): *"Synthesis and Biological Evaluation of a New RGD-Camptothecin Conjugate Bearing a Cathepsin B-Sensitive Linker"* - Scholarship granted by Società Chimica Italiana

Book Chapter

- A. Dal Corso, S. Cazzamalli, D. Neri. (**2018**) *Antibody-Drug Conjugates: Targeting the Tumor Microenvironment*. DOI: 10.1007/978-3-319-78154-9_13
  In: Damelin M. (eds) "Innovations for Next-Generation Antibody-Drug Conjugates"
  Cancer Drug Discovery and Development. Humana Press, Cham

Publications - Outreach Activities

- A. Dal Corso – Chemioterapia a Bersaglio Molecolare.
  La Chimica e L'industria **2020**, *3*, 59-61. DOI: 10.17374/CI.2020.102.3.59

Publications in Peer-Reviewed International Journals

* = corresponding Author
‡ = equal contribution

[27] A. Dal Corso.* Targeted Small-Molecule Conjugates: the Future is Now.
ChemBioChem **2020**, DOI: 10.1002/cbic.202000507
IF (2019) 2.576 – Citations (Scopus): 0 (Total) 0 (Excluding self-citations)

[26] A. Pina, M. Kadri, D. Arosio, A. Dal Corso, J. L. Coll, C. Gennari, D. Boturyn, Multimeric Presentation of RGD Peptidomimetics Enhances Integrin Binding and Tumor Cell Uptake.
Chem. Eur. J. **2020**, *26*, 7492-7496
IF (2019) 4.857 – Citations (Scopus): 0 (Total) 0 (Excluding self-citations)

[25] A. Dal Corso,* V. Borlandelli, C. Corno, P. Perego, L. Belvisi, L. Pignataro, C. Gennari* - Fast Cyclization of a Proline-Derived Self-Immolative Spacer Improves the Efficacy of Carbamate Prodrugs.
Angew. Chem. Int. Ed. **2020**, *59*, 4176-4181
IF (2019) 12.959 – Citations (Scopus): 1 (Total) 1 (Excluding self-citations)

[24] G. Sacco, A. Dal Corso,* D. Arosio, L. Belvisi, M. Paolillo, L. Pignataro, C. Gennari* - A dimeric bicyclic RGD ligand displays enhanced integrin binding affinity and strong biological effects on U-373 MG glioblastoma cells.
Org. Biomol. Chem. **2019**, *17*, 8913-8917
IF (2019) 3.412 – Citations (Scopus): 0 (Total) 0 (Excluding self-citations)

[23] A. Dal Corso,* L. Pignataro, L. Belvisi, C. Gennari* - Innovative linker strategies for tumor-targeted drug conjugates.
Chem. Eur. J. **2019**, 25, 14740-14757
IF (2019) 4.857 – Citations (Scopus): 4 (Total) 3 (Excluding self-citations)
- Selected by the Editors for the "Review Showcase" of *Chem. Eur J.*
- Recognized as a "Top Downloaded Paper 2018-2019", being among the top 10% downloaded articles published in *Chem. Eur J.* from January 2018 to December 2019.

[22] X. Bai, F. Aiolfi, M. Cettolin, U. Piarulli, A. Dal Corso, L. Pignataro, C. Gennari - Hydrogen-Borrowing Amination of Secondary Alcohols Promoted by a (Cyclopentadienone)iron Complex.
Synthesis **2019**, *51*, 3545-3555
IF (2019) 2.675 – Citations (Scopus): 2 (Total) 2 (Excluding self-citations)

[21] P. López Rivas, C. Müller, C. Breunig, T. Hechler, A. Pahl, D. Arosio, L. Belvisi, L. Pignataro, A. Dal Corso, C. Gennari - β-Glucuronidase Triggers Extracellular MMAE Release from an Integrin-Targeted Conjugate.
Org. Biomol. Chem. **2019**, *17*, 4705-4710
IF (2019) 3.412 – Citations (Scopus): 1 (Total) 0 (Excluding self-citations)

[20] A. Raposo Moreira Dias, L. Bodero, A. Martins, D. Arosio, S. Gazzola, L. Belvisi, L. Pignataro, C. Steinkühler, A. Dal Corso, C. Gennari, U. Piarulli - Synthesis and Biological Evaluation of RGD and *iso*DGR–Monomethyl Auristatin Conjugates Targeting Integrin $\alpha v\beta_3$.
ChemMedChem **2019**, *14*, 938-942
IF (2019) 3.124 – Citations (Scopus): 3 (Total) 2 (Excluding self-citations)

[19] X. Bai, M. Cettolin, G. Mazzoccanti, M. Pierini, U. Piarulli, V. Colombo, A. Dal Corso, L. Pignataro, C. Gennari - Chiral (cyclopentadienone)iron complexes with a stereogenic plane as pre-catalysts for the asymmetric hydrogenation of polar double bonds.
Tetrahedron **2019**, *75*, 1415-1424
IF (2019) 2.233 – Citations (Scopus): 6 (Total) 5 (Excluding self-citations)

[18] A. Raposo Moreira Dias, A. Pina, A. Dean, H.-G. Lerchen, M. Caruso, F. Gasparri, I. Fraietta, S. Troiani, D. Arosio, L. Belvisi, L. Pignataro, A. Dal Corso, C. Gennari - Neutrophil Elastase Promotes Linker Cleavage and Paclitaxel Release from an Integrin-Targeted Conjugate.
Chem. Eur. J. **2019**, *25*, 1696-1700
IF (2019) 4.857 – Citations (Scopus): 9 (Total) 4 (Excluding self-citations)
- Marked as "Hot Paper" by *Chem. Eur J.*
- Highlighted in ChemViews Magazine edited by Wiley-VCH and ChemPubSoc Europe: *Tumor Targeting Using Cancer-Associated Inflammation* (www.chemistryviews.org).

[17] P. López Rivas, I. Ranđelović, A. Raposo Moreira Dias, A. Pina, D. Arosio, J. Tóvári, G. Mező, A. Dal Corso, L. Pignataro, C. Gennari - Synthesis and Biological Evaluation of Paclitaxel Conjugates Involving Linkers Cleavable by Lysosomal Enzymes and $\alpha_V\beta_3$-Integrin Ligands for Tumor Targeting.
Eur. J. Org. Chem. **2018**, *2018*, 2902-2909
IF (2019) 2.889 – Citations (Scopus): 7 (Total) 4 (Excluding self-citations)

[16] A. Dal Corso,‡ M. Catalano,‡ A. Schmid, J. Scheuermann, D. Neri - Affinity enhancement of protein ligands by reversible covalent modification of neighboring lysine residues.
Angew. Chem. Int. Ed. **2018**, *57*, 17178-17182
IF (2019) 12.959 – Citations (Scopus): 7 (Total) 7 (Excluding self-citations)
- Highlighted in "Swiss Science Concentrates", edited by the Swiss Chemical Society: - Affinity Enhancement of Protein Ligands by Reversible Covalent Modifications (*CHIMIA* **2019**, *73*, 205)
- Featured in the Virtual Issue: "54th Bürgenstock Conference" (*Angew. Chem. Int. Ed.*, 1 May 2018)

[15] S. Cazzamalli, A. Dal Corso, F. Widmeyer, D. Neri - Chemically-defined antibody- and small molecule-drug conjugates for *in vivo* tumor targeting applications: a comparative analysis.
J. Am. Chem. Soc. **2018**, *140*, 1617-1621
IF (2019) 14.612 – Citations (Scopus): 38 (Total) 33 (Excluding self-citations)
- Highlighted in "Medicinal Chemistry and Chemical Biology Highlights", edited by the Swiss Chemical Society: K. H. Altmann - *Tumor Targeting with Small Molecule-Drug Conjugates (SMDCs) - Can They be Better than ADCs?* (*CHIMIA* **2018**, *72*, 154-155).

[14] S. Cazzamalli, A. Dal Corso, D. Neri - Targeted Delivery of Cytotoxic Drugs: Challenges, Opportunities and New Developments.
CHIMIA **2017**, *71*, 712-715
IF (2019) 1.478 – Citations (Scopus): 4(Total) 4 (Excluding self-citations)

[13] M. Bigatti, A. Dal Corso, S. Vanetti, S. Cazzamalli, U. Rieder, J. Scheuermann, D. Neri, F. Sladojevich - Impact of a central scaffold on the binding affinity of fragment pairs isolated from DNA-encoded self-assembling chemical libraries.
ChemMedChem **2017**, *12*, 1748-1752
IF (2019) 3.124 – Citations (Scopus): 12 (Total) 11 (Excluding self-citations)

[12] A. Dal Corso, R. Gébleux, P. Murer, A. Soltermann, D. Neri - A non-internalizing antibody-drug conjugate based on an anthracycline payload displays potent therapeutic activity *in vivo*.
J. Control. Release **2017**, *264*, 211-218
IF (2019) 7.727 – Citations (Scopus): 22 (Total) 16 (Excluding self-citations)

[11] A. Raposo Moreira Dias, A. Pina, A. Dal Corso, D. Arosio, L. Belvisi, L. Pignataro, M. Caruso, C. Gennari - Multivalency Increases the Binding Strength of RGD Peptidomimetic-Paclitaxel Conjugates to Integrin $\alpha_V\beta_3$.
Chem. Eur. J. **2017**, *23*, 14410-14415
IF (2019) 4.857 – Citations (Scopus): 11 (Total) 5 (Excluding self-citations)

[10] A. Dal Corso,‡ S. Cazzamalli,‡ R. Gébleux, M. Mattarella, D. Neri - Protease-Cleavable Linkers Modulate the Anticancer Activity of Noninternalizing Antibody−Drug Conjugates.
Bioconjugate Chem. **2017**, *28*, 1826-1833
IF (2019) 4.031 – Citations (Scopus): 26 (Total) 19 (Excluding self-citations)

[9] A. Pina, A. Dal Corso, M. Caruso, L. Belvisi, D. Arosio, S. Zanella, F. Gasparri, C. Albanese, U. Cucchi, I. Fraietta, A. Marsiglio, L. Pignataro, D. Donati, C. Gennari - Targeting Integrin $\alpha_v\beta_3$ with Theranostic RGD-Camptothecin Conjugates Bearing a Disulfide Linker: Biological Evaluation Reveals a Complex Scenario.
ChemistrySelect **2017**, *2*, 4759-4766
IF (2019) 1.811 – Citations (Scopus): 9 (Total) 4 (Excluding self-citations)

[8] S. Cazzamalli,‡ A. Dal Corso,‡ D. Neri - Linker stability influences the anti-tumor activity of acetazolamide-drug conjugates for the therapy of renal cell carcinoma.
J. Control. Release **2016**, *246*, 39-45
IF (2019) 7.727 – Citations (Scopus): 35 (Total) 28 (Excluding self-citations)

[7] S. Cazzamalli, A. Dal Corso, D. Neri - Acetazolamide serves as selective delivery vehicle for dipeptide-linked drugs to renal cell carcinoma.
Mol. Cancer Ther. **2016**, *15*, 2926-2935
IF (2019) 5.615 – Citations (Scopus): 25 (Total) 15 (Excluding self-citations)

[6] A. Dal Corso, L. Pignataro, L. Belvisi, C. Gennari - $\alpha_v\beta_3$ Integrin-Targeted Peptide/Peptidomimetic-Drug Conjugates: In-Depth Analysis of the Linker Technology.
Curr. Top. Med. Chem. **2016**, *16*, 314-329
IF (2019) 3.218 – Citations (Scopus): 32 (Total) 24 (Excluding self-citations)

[5] S. Zanella, M. Mingozzi, A. Dal Corso, R. Fanelli, D. Arosio, M. Cosentino, L. Schembri, F. Marino, M. De Zotti, F. Formaggio, L. Pignataro, L. Belvisi, U. Piarulli, C. Gennari - Synthesis, characterization and biological evaluation of a dual action ligand targeting $\alpha_V\beta_3$ integrin and VEGF receptors.
ChemistryOpen **2015**, *4*, 633-641
IF (2019) 2.370 – Citations (Scopus): 16 (Total) 12 (Excluding self-citations)

[4] A. Dal Corso, M. Caruso, L. Belvisi, D. Arosio, U. Piarulli, C. Albanese, F. Gasparri, A. Marsiglio, F. Sola, S. Troiani, B. Valsasina, L. Pignataro, D. Donati, C. Gennari - Synthesis and Biological Evaluation of RGD Peptidomimetic-Paclitaxel Conjugates bearing Lysosomally Cleavable Linkers.
Chem. Eur. J. **2015**, *21*, 6921-6929
IF (2019) 4.857 – Citations (Scopus): 35 (Total) 23 (Excluding self-citations)

[3] S. Panzeri, S. Zanella, D. Arosio, L. Vahdati, A. Dal Corso, L. Pignataro, M. Paolillo, S. Schinelli, L. Belvisi, C. Gennari, U. Piarulli - Cyclic *iso*DGR and RGD Peptidomimetics Containing Bifunctional Diketopiperazine Scaffolds are Integrin Antagonists.
Chem. Eur. J. **2015**, *21*, 6265-6271
IF (2019) 4.857 – Citations (Scopus): 24 (Total) 19 (Excluding self-citations)

[2] M. Mingozzi, L. Manzoni, D. Arosio, A. Dal Corso, M. Manzotti, F. Innamorati, L. Pignataro, D. Lecis, D. Delia, P. Seneci, C. Gennari - Synthesis and biological evaluation of dual action *cyclo*-RGD/SMAC mimetic conjugates targeting $\alpha_v\beta_3/\alpha_v\beta_5$ integrins and IAP proteins.
Org. Biomol. Chem. **2014**, *12,* 3288-3302
IF (2019) 3.412 – Citations (Scopus): 18 (Total) 11 (Excluding self-citations)

[1] M. Mingozzi, A. Dal Corso, M. Marchini, I. Guzzetti, M. Civera, U. Piarulli, D. Arosio, L. Belvisi, D. Potenza, L. Pignataro, C. Gennari - Cyclic *iso*DGR Peptidomimetics as Low-Nanomolar $\alpha_v\beta_3$ Integrin Ligands.
Chem. Eur. J. **2013**, *19*, 3563-3567
IF (2019) 4.857 – Citations (Scopus): 25 (Total) 23 (Excluding self-citations)

Bibliometric data (Scopus)

Scopus ID: 55614026700
Total Publications in Peer-Reviewed Journals: 27
Total Impact Factor: 135.4
Average Impact Factor per Article: 5.0
Citations: 372 (Total) 274 (Excluding self-citations)
Average Citations per Article: 13.8 (Total) 10.1 (Excluding self-citations)
h Index: 12 (Total) 11 (Excluding self-citations)

Data	08/09/2020	Luogo	Milano