

Vito Giuseppe D'Agostino

Ph.D.

Curriculum Vitae - 2020

Personal Information

birth date
nationality
contact

unitn webpage <https://www.cibio.unitn.it/1029/laboratory-of-biotechnology-and-nanomedicine>

Current Position

Jan 2019 – Present **RTD-B.** Dept. CIBIO, University of Trento, Italy.

Research interests Regulation of RNA selectively encapsulated in extracellular vesicles derived from tumor cells and its function in influencing the metastatic outcome. Novel approaches to search and detect tumor-associated biomarkers.

Past research Positions

Jan 2017 – 2018 **RTD-A.** Centre for Integrative Biology (CIBIO), University of Trento, Italy.

Research interests Regulation of RNA selectively encapsulated in extracellular vesicles derived from tumor cells and its function in influencing the metastatic outcome. Novel approaches to search and detect tumor-associated biomarkers.

May 2011 – Dec 2016 **Postdoctoral fellow.** Centre for Integrative Biology (CIBIO), University of Trento, Italy
research interests Biochemical and cell-based characterization of RNA-binding proteins; novel approaches to probe the post-transcriptional events regulating proliferation, tumor progression, and chemoresistance of tumor cells; identification of pharmacological RBP inhibitors; understanding the post-transcriptional control in cells undergoing energy deprivation.

Nov 2009 – Jul 2010 **Postdoctoral fellow.** Dept. of Genetics and Microbiology, University of Pavia, Italy
research interest Implementation of new methods to detect allelic-specific expression in patients with high risk to develop hereditary colorectal and hereditary diffuse gastric cancers.

Education

2010 **PhD** in Genetic and Biomolecular Sciences.

Dept. of Genetics and Microbiology, University of Pavia, Italy.

Dissertation: "Functional analysis of mutant MUTYH proteins associated with familial adenomatous polyposis".

2007 **Master Degree** in Cellular and Molecular Biology.

Dept. of Biomedical Sciences, University of Catania, Italy.

Dissertation: "Systems' Biology: molecular evolution of the apoptotic machinery".

2004 **Bachelor Degree** in Life Sciences.

Dept. of Animal Biology, University of Catania, Italy.

Dissertation: "Infantile leukemia: chromosomal translocations and gene position in interphase nuclei".

ASN

2018 Abilitazione Scientifica Nazionale Seconda Fascia 05/F1 - BIOLOGIA APPLICATA (2018-2024).

2018 Abilitazione Scientifica Nazionale Seconda Fascia 05/E3 – BIOCHIMICA CLINICA E BIOLOGIA MOLECOLARE CLINICA (2018-2024).

Awards

12th Jan 2017 **Fondazione Pezcoller/Marcello Marchi** "per giovani ricercatori" (2017-2020)
Studio sull'aggressività dei tumori solidi

Abroad experiences

Oct-Dec 2008 **Travel fellowship** awarded by Scientific Cooperation Exchange Program ("Progetto Vigoni – 2008").

Institute of Pathology, Munich GSF Institute of Nehuerberg, Germany.

advisors dr. N. Pellegata – GN. Ranzani

Oct-Feb 2011 **Visiting scientist** in the laboratory of Tumor Biology and Genetics.

Centre Hospitalier Universitaire Vaudois (CHUV), Lausanne, Switzerland.

PI dr. M. Hegi

Responsibility of Reserach Grants

2019 – 2021 CARITRO –Biomedicina di Precisione.

Title of the project: "Detecting tumor-derived extracellular vesicles from liquid biopsy".

2019 – 2022 MIUR –PRIN 2017.

Title of the project: "The interplay between the RNA/protein quality control system and exosomes as a spreading mechanism in amyotrophic lateral sclerosis".

2018 – 2020 Ministero della Salute – Bando Ricerca Finalizzata 2016 (GR-2016-02361552).

Title of the project: "Extracellular vesicles RNA: role in Amyotrophic Lateral Sclerosis patients profiling and pathogenesis".

2018 – 2019 MIUR 2017-2018– Finanziamento annuale individuale delle attività di ricerca di base.

Patents

14th Jun 2016 “Nuovi derivati aza-tanshinonici, procedimento per la loro preparazione e loro uso in terapia”.
Protocol number: 102016000061247. PCT extended.

19th Dec 2017 “Metodo per l'isolamento di vescicole extracellulari da materiale biologico.”.
Protocol number: 102017000146281. PCT extended.

PhD students

2019-Present Project title: “*Identification of modulators of extracellular vesicles' secretion upon interfering with RNA-binding proteins*”.
Dr. Jessica Corsi

2019-Present Project title: “*Engineering ex vivo extracellular vesicles to produce nanocarriers with selective anti-cancer activity*.”
Dr. Elena Gurrieri

2019-Present Project title: “*Systematic characterization of EV-content according to cell source and type of stress*”.
Dr. Fabrizio Fabbiano

2016-2019 Project title: “*Exploiting extracellular vesicles for ultrasensitive detection of cancer biomarkers from liquid biopsies*”.
Dr. Michela Notarangelo

2015-2019 Project title: “*Targeting HuR to decipher its post-transcriptional function*”.
Dr. Isabelle Bonomo

2013-2018 Project title: “*Efficacy of the NAMPT inhibitor FK866 in inducing translational arrest in different solid tumors*”. Dr. Natthakan Thongon

2012-2017 Project title: “*Molecular effects of the NAMPT inhibitor FK866 on leukemia cells*”.
Dr. Chiara Zucal

2014-2017 Project title: “*post-transcriptional modulation of TNF mRNA by the natural compounds tanshinones*”.
Dr. Preet Lal

Supervisor or Advisor of Bachelor and Master student's

AA 2017/2018 University of Trento.
Thesis title: “*Effetto dello stress cellulare indotto da chemioterapici sulla produzione e rilascio di vescicole extracellulari*”. **Supervisor** of LT student.

AA 2013/2014 University of Trento.
Thesis title: “*Effetti sull'espressione del trascritto di TNFalpha tramite induzione farmacologica di HuR*”. Advisor of LT student.

AA 2011/2012 University of Trento.
Thesis title: “*Utilizzo di saggi reporter in luminescenza per lo studio di interazioni proteiche*”. Advisor of LT student.

- AA 2012/2013 University of Trento.
Thesis title: *“Valutazione dell’interazione tra le RNA-binding protein RALY e HuR/ELAVL1 in cellule HEK-293T in condizioni di stress cellulari”*. Advisor of LT student.
- AA 2012/2013 University of Trento.
Thesis title: *“Caratterizzazione dell’effetto di regolazione post-trascrizionale di un nuovo inibitore della proteina HuR/ELAVL1 sull’mRNA del TNF- α ”*. Advisor of LT student.
- AA 2008/2009 University of Pavia.
Thesis title: *“Ricerca di alterazioni genetiche in carcinomi del colon retto mediante MLPA”*. Advisor of Master student
- AA 2007/2008 University of Pavia.
Thesis title: *“Caratterizzazione di estese delezioni del gene APC nella poliposi adenomatosa familiare”*. Advisor of Master student

Teaching activity

- 2017-Present University of Trento:
Biotecnologie cellulari e microbiche I modulo: biotecnologie cellulari.
Biologia molecolare della cellula II.
Biotecnologie farmaceutiche.
Molecular Biology of the cell.

Please click here for syllabi details:

<https://webapps.unitn.it/du/it/Persona/PER0084163/Didattica>

International Meetings (oral presentations as invited speaker)

- May 2020 8th Annual Diagnostics Innovation Summit. *“Rapid nickel-based isolation of extracellular vesicles for multidimensional liquid biopsy tests”*. Lisbon, Portugal.
- Nov 2019 First EvIta Symposium. *“Quantitative assessment of RNA targets on NBI-isolated EVs from the blood of mCRC patients”*. Palermo, Italy.
- Oct 2019 XIX Congresso Nazionale AIBG. *“Quantitative assessment of RNA and protein targets on NBI-isolated EVs from the blood of mCRC patients”*. Milan, Italy.
- Jun 2019 Interplay between RNA-binding proteins and non-coding RNAs. *“Tanshinone mimics: A new class of HuR modulators”*. Pavia, Italy.
- Sep 2016 58th Annual Meeting of the Italian Cancer Society. *“Exploiting AlphaScreen technology to target protein-RNA interactions”*. Verona, Italy.
- Nov 2013 PerkinElmer Seminar and Workshop: from in vitro to in vivo molecular interaction studies. *“A novel high-throughput biochemical assay to explore potential RBPs inhibitors”*. Barcelona, Spain.

Jun 2009 Second Erling Seeberg Symposium on DNA repair. "Functional properties of variant MUTYH proteins associated with familial adenomatous polyposis". Alesund-Geiranger, Norway.

Publications (chronological order)

- 2020 Notarangelo M, Ferrara D, Potrich C, Lunelli L, Vanzetti L, Provenzani A, Basso M, Quattrone A, D'Agostino VG. Rapid Nickel-based Isolation of Extracellular Vesicles from Different Biological Fluids. **BioProtocol**, Feb 2020.
- 2019 Notarangelo M, Zucal C, Modelska A, Pesce I, Scarduelli G, Potrich C, Lunelli L, Pederzoli C, Pavan P, la Marca G, Pasini L, Ulivi P, Beltran H, Demichelis F, Provenzani A, Quattrone A, D'Agostino VG. Fast and ultrasensitive detection of cancer biomarkers by isolation of polydisperse extracellular vesicles from blood. **EbioMedicine**. 2019 May.
- 2019 Mandrioli J, Crippa V, Cereda C, Bonetto V, Zucchi E, Gessani A, Ceroni M, Chio A, D'Amico R, Monsurrò MR, Riva N, Sabatelli M, Silani V, Simone IL, Sorarù G, Provenzani A, D'Agostino VG, Carra S, Poletti A. Proteostasis and ALS: protocol for a phase II, randomised, double-blind, placebo-controlled, multicentre clinical trial for colchicine in ALS (Co-ALS). **BMJ Open**. 2019 May
- 2019 D'Agostino VG, Sighel D, Zucal C, Bonomo I, Micaelli M, Lolli G, Provenzani A, Quattrone A, Adami V. Screening approaches for targeting ribonucleoprotein complexes: a new dimension for drug discovery. **SLAS Discovery**. 2019 Mar.
- 2019 Pisapia L, Hamilton R, D'Agostino V, Barba P, Strazzullo M, Provenzani A, Gianfrani C, Del Pozzo G. Tistetraprolin/ZFP36 regulates the turnover of autoimmune-associated HLA-DQ mRNAs. **Cells**. 2019 Dec
- 2018 Tebaldi T, Zuccotti P, Peroni D, Köhn M, Gasperini L, Potrich V, Bonazza V, Dudnakova T, Rossi A, Sanguinetti G, Conti L, Macchi P, D'Agostino V, Viero G, Tollervey D, Hüttelmaier S, Quattrone A. HuD Is a Neural Translation Enhancer Acting on mTORC1-Responsive Genes and Counteracted by the Y3 Small Non-coding RNA. **Mol Cell**. 2018 Jul 19
- 2018 Dalle Vedove A, Spiliotopoulos D, D'Agostino VG, Marchand JR, Unzue A, Nevado C, Lolli G, Caflisch A. Structural Analysis of Small-Molecule Binding to the BAZ2A and BAZ2B Bromodomains. **ChemMedChem**. 2018 May 17.
- 2018 Thongon N, Zucal C, D'Agostino VG, Tebaldi T, Ravera S, Zamporlini F, Piacente F, Moschoi R, Raffaelli N, Quattrone A, Nencioni A, Peyron JF, Provenzani A. Cancer cell metabolic plasticity allows resistance to NAMPT inhibition but invariably induces dependence on LDHA. **Cancer Metab**. 2018 Mar 8.
- 2018 Manzoni L, Zucal C, Di Maio D, D'Agostino VG, Thongon N, Bonomo I, Lal P, Miceli M, Baj V, Brambilla M, Cerofolini L, Elezgarai S, Biasini E, Luchinat C, Novellino E, Fragai M, Marinelli L, Provenzani A, Seneci P. Interfering with HuR-RNA Interaction: Design, Synthesis and Biological Characterization of Tanshinone Mimics as Novel, Effective HuR Inhibitors. **J Med Chem**. 2018 Jan 9.
- 2017 Lal P, Cerofolini L, D'Agostino VG, Zucal C, Fuccio C, Bonomo I, Dassi E, Giuntini S, Di Maio D, Vishwakarma V, Preet R, Williams SN, Fairlamb MS, Munk R, Lehrmann E, Abdelmohsen K, Elezgarai SR, Luchinat C, Novellino E, Quattrone A, Biasini E, Manzoni L, Gorospe M, Dixon DA, Seneci P, Marinelli L, Fragai M, Provenzani A. Regulation of HuR structure and function by dihydrotanshinone-I. **Nucleic Acids Res**. 2017 Sep 19;45(16):9514-9527.
- 2016 Bono S, Lulli M, D'Agostino VG, Di Gesualdo F, Loffredo R, Cipolleschi MG, Provenzani A, Rovida E, Dello Sbarba P. Different BCR/Abl protein suppression patterns as a converging trait of chronic myeloid leukemia cell adaptation to energy restriction. **Oncotarget**. 2016 Dec 20;7:84810-84825.
- 2016 Becattini B, Zani F, Breasson L, Sardi C, D'Agostino VG, Choo MK, Provenzani A, Park JM, Solinas G. JNK1 ablation in mice confers long-term metabolic protection from diet-induced obesity at the cost of moderate skin oxidative damage. **FASEB J**. 2016 Sep;30:3124-32.

- 2016 Latorre E*, Carelli S*, Raimondi I, D'Agostino V, Castiglioni I, Zucal C, Moro G, Luciani A, Ghilardi G, Monti E, Inga A, Di Giulio A, Gorio A, Provenzani A. *The ribonucleic complex HuR-MALAT1 represses CD133 expression and suppresses epithelial-mesenchyme transition in breast cancer.* **Cancer Research**. 2016 May 1;76:2626-36.
- 2016 Thongon N, Castiglioni I, Zucal C, Latorre E, D'Agostino V, Bauer I, Pancher M, Ballestrero A, Feldmann G, Nencioni A, Provenzani A. *The GSK3 β inhibitor BIS I reverts YAP-dependent EMT signature in PDAC cell lines by decreasing SMADs expression level.* **Oncotarget**. 2016 May 3;7:26551-66.
- 2016 Crippa V*, D'Agostino VG*, Cristofani R, Rusmini P, Cicardi ME, Messi E, Loffredo R, Pancher M, Piccolella M, Galbiati M, Meroni M, Cereda C, Carra S, Provenzani A, Poletti A. *Transcriptional induction of the heat shock protein B8 mediates the clearance of misfolded proteins responsible for motor neuron diseases.* **Scientific Reports**. 2016 Mar 10;6:22827.
- 2015 D'Agostino VG, Lal P, Mantelli B, Tiedje C, Zucal C, Thongon N, Gaestel M, Latorre E, Marinelli L, Seneci P, Amadio M, Provenzani A. *Dihydratanshinone-I interferes with the RNA-binding activity of HuR affecting its post-transcriptional function.* **Scientific Reports**. 2015 Nov 10;5:16478.
- 2015 Zucal C*, D'Agostino VG*, Casini A, Mantelli B, Thongon N, Soncini D, Caffa I, Cea M, Ballestrero A, Quattrone A, Indraccolo S, Nencioni A, Provenzani A. *EIF2A-dependent translational arrest protects leukemia cells from the energetic stress induced by NAMPT inhibition.* **BMC Cancer**. 2015 Nov 5;15(1):855.
- 2015 Caffa I, D'Agostino V, Damonte P, Soncini D, Cea M, Monacelli F, Odetti P, Ballestrero A, Provenzani A, Longo VD, Nencioni A. *Fasting potentiates the anticancer activity of tyrosine kinase inhibitors by strengthening MAPK signaling inhibition.* **Oncotarget**. 2015 May 20;6(14):11820-32.
- 2015 Zucal C*, D'Agostino VG*, Loffredo R, Mantelli B, Thongon N, Lal P, Latorre E, Provenzani A. *Targeting the multifaceted HuR protein, benefits and caveats.* **Curr Drug Targets**. 2015;16(5):499-515.
- 2014 Soncini D, Caffa I, Zoppoli G, Cea M, Cagnetta A, Passalacqua M, Mastracci L, Boero S, Montecucco F, Sociali G, Lasigliè D, Damonte P, Grozio A, Mannino E, Poggi A, D'Agostino VG, Monacelli F, Provenzani A, Odetti P, Ballestrero A, Bruzzone S, Nencioni A. *Nicotinamide phosphoribosyltransferase promotes epithelial-to-mesenchymal transition as a soluble factor independent of its enzymatic activity.* **J Biol Chem**. 2014;10.
- 2013 D'Agostino VG, Adami V, Provenzani A. *A Novel High Throughput Biochemical Assay to Evaluate the HuR Protein-RNA Complex Formation.* **PLoS One**. 2013;8(8):e72426.
- 2013 Viiri J, Amadio M, Marchesi N, Hyttinen JM, Kivinen N, Sironen R, Rilla K, Akhtar S, Provenzani A, D'Agostino VG, Govoni S, Pascale A, Agostini H, Petrovski G, Salminen A, Kaarniranta K. *Autophagy Activation Clears ELAVL1/HuR-Mediated Accumulation of SQSTM1/p62 during Proteasomal Inhibition in Human Retinal Pigment Epithelial Cells.* **PLoS One**. 2013 Jul 29;8(7):e69563.
- 2012 Venesio T, Balsamo A, D'Agostino VG, Ranzani GN. *MUTYH-associated polyposis (MAP), the syndrome implicating base excision repair in inherited predisposition to colorectal tumors.* **Front Oncol**. 2012;2:83.
- 2010 D'Agostino VG, Minoprio A, Torreri P, Marinoni I, Bossa C, Petrucci TC, Albertini AM, Ranzani GN, Bignami M, Mazzei F. *Functional analysis of MUTYH mutated proteins associated with familial adenomatous polyposis.* **DNA Repair (Amst)**. 2010 Jun 4;9(6):700-7.
- 2010 Molatore S, Russo MT, D'Agostino VG, Barone F, Matsumoto Y, Albertini AM, Minoprio A, Degan P, Mazzei F, Bignami M, Ranzani GN. *MUTYH mutations associated with familial adenomatous polyposis: functional characterization by a mammalian cell-based assay.* **Hum Mutat**. 2010 Feb;31(2):159-66.
- 2009 Di Pietro C, Ragusa M, Barbagallo D, Duro LR, Guglielmino MR, Majorana A, Angelica R, Scalia M, Statello L, Salito L, Tomasello L, Pernagallo S, Valenti S, D'Agostino V, et al. *The apoptotic machinery as a biological complex system: analysis of its omics and evolution, identification of candidate genes for fourteen major types of cancer, and experimental validation in CML and neuroblastoma.* **BMC Med Genomics**. 2009 Apr 30;2:20.

INFORMAZIONI PERSONALI

Romina Belli

ESPERIENZA
PROFESSIONALE

2013-presente

Staff scientist

Presso CIBIO, UniTn

Posizione Manager della Piattaforma di Spettrometria di massa e Proteomica. Gestione della facility, compreso il budget (con firma del direttore), dei sistemi cromatografia liquida e spettrometri di massa, compresa manutenzione ordinaria, e gestione dell'utenza.

1997-2008

Tecnico responsabile di laboratorio

Presso Dipartimento di Meccanica Strutturale (1997-2001) e Fisica (2001-2008), UniTn.

Posizione Responsabile del laboratorio di Microscopia Elettronica a Scansione e spettroscopia a dispersione di energia

1992-1997

Senion Tecnico

Presso Dipartimento di Meccanica Strutturale, UniTn

Posizione Tecnico nel laboratorio di Microscopia Elettronica a Scansione e spettroscopia a dispersione di energia

1989-1992

Tecnico

Presso Dipartimento di Meccanica Strutturale, UniTn

Posizione Tecnico nel laboratorio di Controllo qualità di rivestimenti creati con il plasma

ISTRUZIONE

2008-2013

Ph.D. in Environmental Science

Università di Newcastle (NSW, Australia)

- Specializzazione: Analisi paleoclimatica e geochimica con l'uso di tecniche spettrometriche e metodi innovativi

Nota: il periodo comprende congedo per maternità e congedo parentale (2010)

2002-2005

B.Sc. cum laude in Scienze dei Beni Archeologici

Università di Trento (Trento, Italia)

- Specializzazione: Studio archeometrico di reperti archeologici con implicazioni paleoclimatologiche

1984-1989

Diploma in Chimica Industriale

Istituto tecnico Industriale Statale (Trento, Italia)

- Specializzazione: Chimica inorganica

**CORSI di FORMAZIONE
specifici**

- 2018 **Targeted Proteomics: Experimental Design and Data Analysis (5 days)**
- Presso: CRG Barcellona (Spagna)
 - Organizzato da: EMBO
- ERASMUS+ (10 days)**
- Presso: Max Delbrück Center for Molecular Medicine -Berlin, Cell Signaling and Mass Spectrometry, Prof. Selbach
- 2017 **Advanced Orbitrap Fusion Mass Spectrometers (3 days)**
- Presso: Nostra sede
 - Organizzato da: Thermo Scientific
- Lipid Analysis on an Orbitrap Fusion Tribid Mass Spectrometer (3 days)**
- Presso: Nostra sede
 - Organizzato da: Thermo Scientific
- 2016 **Orbitrap Fusion Mass Spectrometers (3 days)**
- Presso: Nostra sede
 - Organizzato da: Thermo Scientific
- ERASMUS+ (10 days)**
- Presso: Max Delbrück Center for Molecular Medicine -Berlin, Cell Signaling and Mass Spectrometry, Prof. Selbach
- 2014 **Proteomic and Mass Spectrometry Course**
- Presso: Max Delbrück Center for Molecular Medicine -Berlin, Prof. G. Dittmar
 - Organizzato da: Prof. G. Dittmar, Mass Spectrometry Core Facility
- ERASMUS+ (5 days)**
- Presso: Max Delbrück Center for Molecular Medicine -Berlin, Cell Signaling and Mass Spectrometry, Prof. Selbach
- 2013 **7th European Summer School in Advanced Proteomics (6 days)**
- Presso: Kloster Neustift (Bressanone, Italia)
 - Organizzato da: University of Göttingen, University of München, Medizinisches Proteom Center
- 2011 **Quaternary Techniques Short Course (2 days)**
- Presso: GNS Science (Wellington, NZ)
 - Organizzato da: GNS Science
- 2008 **2nd Cheiron School in Synchrotron Radiation (10 days)**
- Presso: Japanese Synchrotron Radiation Spring-8 (Hyogo, Japan)
 - Organizzato da: Japanese Synchrotron Radiation Spring-8
- 1997 **Qualitative X-Ray Microanalysis of Bulk specimens and Particles Advanced Course (5 days)**
- Presso: Lehigh University of Bethlehem (PA, USA)
 - Organizzato da: Lehigh University of Bethlehem
- 1994 **Spring School in Electron Microscopy (5 days)**
- Presso: Royal Microscopical Society (Oxford, UK)
 - Organizzato da: Royal Microscopical Society

PERSONAL INFORMATION

Cristina Del Bianco

WORK EXPERIENCE

09/12/2015–ad oggi

PTA a tempo indeterminato

CIBIO, Università di Trento, Trento (Italy)

Protein Technology Facility Manager

04/05/2009–06/12/2015

Assegnista di ricerca

CIBIO, Università di Trento, Trento (Italy)

Supervisor Alessandro Quattrone

01/04//2005–31/03/2008

Postdoctoral fellow

HFSP Postdoctoral fellow, Harvard Medical School and Brigham and Women Hospital, Boston (USA)

Supervisor Stephen Blacklow.

EDUCATION AND TRAINING

31/01/2005

Ph.D. in Structural Biology

Università di Firenze, Firenze (Italy)

International PhD in Structural Biology, conferito da Università di Firenze, University of Frankfurt and University of Utrecht. Tesi: Conformational Dynamics of Metalloproteins and their Functional Implications.

Relatore: Prof. Claudio Luchinat

18/05/2001

Laurea in Chimica

Università La Sapienza, Roma (Italy)

Tesi: Sintesi di oligonucleotidi modificati con gruppi chelanti e loro applicazioni.

Relatori: Dott. Luciano Cellai e Prof. Mario Brufani

Voto: 110/110

PERSONAL SKILLS

Mother tongue(s)

Italian

Other language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C2	C2	C2	C2	C2

 Levels: A1 and A2: Basic user - B1 and B2: Independent user - C1 and C2: Proficient user
 Common European Framework of Reference for Languages

ADDITIONAL INFORMATION

Esperienza di insegnamento

Affidamento con titolarità:

Biologia Sintetica, corso di laurea in scienze e tecnologie biomolecolari AA 2016-2015, 2014-2015, 2013-2014,

Biochimica, University of Colorado, Denver, CHEM 3810, AA 2007-2008, AA 2008-2009.

Chimica Organica, University of Colorado, Denver, CHEM 3411, AA 2008-2009.

Chimica Generale, CHE 1800, Metropolitan State College, Denver, Colorado, AA 2008-2009

Principi di Chimica, CHE 1100, Metropolitan State College, Denver, Colorado, AA 2008-2009.

Publications

Articoli Pubblicati/Peer-reviewed Publications

1) Fabio Digiacomo, Gabriele Girelli, Bruno Aor, Caterina Marchioretto, Michele Pedrotti, Thomas Perli, Emil Tonon, Viola Valentini, Damiano Avi, Giovanna Ferrentino, Andrea Dorigato, Paola Torre, Olivier Jousson, Sheref S Mansy, Cristina Del Bianco* (2014), Ethylene-producing bacteria that ripen fruit. *ACS Synthetic Biology* 3, 935-8.

2) Roberta Lentini, Silvia Perez Santero, Fabio Chizzolini, Dario Cecchi, Jason Fontana, Marta Marchioretto, Cristina Del Bianco, Jessica L Terrell, Amy C Spencer, Laura Martini, Michele Forlin, Michael Assfalg, Mauro Dalla Serra, William E Bentley, Sheref S Mansy (2014) Integrating artificial with natural cells to translate chemical messages that direct *E. coli* behavior. *Nature Communications* 5, 4012.

3) Roberta Lentini, Michele Forlin, Laura Martini, Cristina Del Bianco, Amy C. Spencer, Domenica Torino, Sheref S. Mansy (2013) Fluorescent proteins and in vitro genetic organization for cell-free synthetic biology. *ACS Synthetic Biology* 2, 482-9.

4) Cristina Del Bianco, Sheref S. Mansy (2012) Nonreplicating Protocells. *Accounts of Chemical Research* 45, 2125-30.

5) Domenica Torino, Cristina Del Bianco, Lindsey A. Ross, Jennifer L. Ong, Sheref S. Mansy (2011). Intravesicle isothermal DNA replication. *BMC Research Notes* 4, ISSN: 1756-0500, doi: 10.1186/1756-0500-4-128

6) Cristina Del Bianco*, Anastasia Vedenko, Sung H Choi, Mike F. Berger, Leyla Shokr, Martha L. Bulyk, Stephen C. Blacklow (2010) Notch and MAML-1 Complexation Do Not Detectably Alter the DNA Binding Specificity of the Transcription Factor CSL. *PLoS One* 5, e15034.

7) Raymond E. Moellering, Melanie Comejo, Cristina Del Bianco, Michael Hancock, Jon C. Aster, Stephen C. Blacklow, D. Gary Gilliland, Gregory L. Verdine, and James E. Bradner (2009) Direct Inhibition of the Notch Transcription Factor Complex. *Nature* 462, 182-8.

8) Cristina Del Bianco*, Jon Aster and Stephen C. Blacklow (2008) Mutational and energetic studies of Notch1 transcription complexes. *J Mol Biol* 376, 131-40.

9) Terry C. Fang, Yumi Yashiro-Ohtani, Cristina Del Bianco, Dawson M. Knoblock, Stephen C. Blacklow, and Warren S. Pear (2007) Notch directly regulates *Gata3* expression during T helper 2 cell differentiation. *Immunity* 27, 100-110.

10) Benedikt Dolderer, Hartmut Echner, Alexander Beck, Hans-Jürgen Hartmann, Ulrich Weser, Claudio Luchinat and Cristina Del Bianco (2007) Coordination of three and four Cu(I) to the alpha- and beta-domain of vertebrate Zn-metallothionein-1, respectively, induces significant structural changes. *FEBS J* 274, 2349-2362.

11) Andrew P. Weng, John M. Millholland, Yumi Yashiro-Ohtani, Marie Laure Arcangeli, Arthur Lau, Carol Wai, Cristina Del Bianco, Carlos G. Rodriguez, Hong Sai, John Tobias, Yueming Li, Michael S.

Wolfe, Cathy Shachaf, Dean Felsher, Stephen C. Blacklow, Warren S. Pear, and Jon C. Aster (2006) *c-Myc* is an important direct target of Notch1 in T-cell acute lymphoblastic leukemia/lymphoma. *Genes Dev* 20, 2096-2109.

12) Vito Calderone, Benedikt Dolderer, Hans-Juergen Hartmann, Hartmut Echner, Claudio Luchinat, Cristina Del Bianco, Stefano Mangani, and Ulrich Weser (2005) The crystal structure of Yeast Copper Thionein: The solution of a long lasting enigma. *Proc Natl Acad Sci USA* 102, 51-56

13) Elena Babini, Ivano Bertini, Francesco Capozzi, Cristina Del Bianco*, Dominik Hollender, Tamas Kiss, Claudio Luchinat, Alessandro Quattrone (2004) Solution structure of human b-parvalbumin and structural comparison with its paralog a- parvalbumin and with their rat orthologs. *Biochemistry* 43,16076-16085.

14) Cesare Giordano, Cristina Del Bianco*, Sara Faini, Anna Napoli, Giovanni Sindona, and Luciano Cellai (2004) Synthesis of Metal-Chelating Deoxycytidine-Analogue Phosphoramidites for the Automatic Synthesis of Labeled Oligonucleotides. *Synthesis* 11, 1835–1843.

15) Sourajit M. Mustafi, Sulakshana Mukherjee, Kandala V. R. Chary, Cristina Del Bianco, and Claudio Luchinat (2004) Energetics and Mechanism of Ca²⁺ displacement by lanthanides in a calcium binding protein. *Biochemistry* 43, 9320-9331.

16) Irfan Baig, Ivano Bertini, Cristina Del Bianco*, Yogesh K. Gupta, Yong Min Lee, Claudio Luchinat, and Alessandro Quattrone (2004) Paramagnetism-Based Refinement Strategy for the Solution Structure of Human α -Parvalbumin. *Biochemistry* 43, 5562-5573.

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21) Cristina Del Bianco* (2010) Building a cell map as an active learning tool in a biochemistry course. *Journal of Chemical Education* 87, 790–792.

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Honours and awards

Human Frontier Science Program Long-Term Fellowship, 1 Aprile 2005 - 31 Marzo 2008. Numero di fellowship: LT00390/2005-L. Titolo della fellowship "Biochemical Studies on the transcriptional ternary complex involved in notch signaling." Durata 3 anni.

American Heart Association, 1 Aprile 2005, declined

International Ph.D. Structural Biology Fellowship, CERM, Università di Firenze, 01-da 01-01-2002 al 28-02-2003 (vincitrice di borsa di 3 anni, rinuncia in data 28-02-2003 in seguito a vincita di assegno di ricerca).

International Undergraduate Exchange Program Grant, Università di Roma *La Sapienza*, dal 14 Febbraio 2001 al 15 Aprile 2001.

Le informazioni ivi contenute vengono rese ai sensi e per gli effetti degli art. 46 e 47 del DPR 445/2000.

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