WORK ADDRESS: Menarini Ricerche (Pomezia, RM)

SUPERVISOR: Alessandro Bressan

PREVIOUS RESEARCH EXPERIENCE:

06/2017 – today

Scientist at Menarini Ricerche, Department of experimental and translational oncology

12/2015 – 05/2017

Fellowship at the IRCCS Foundation - National Cancer Institute of Milano - DOSMM - Functional Genomics Service.

10/2014-09/2015

Stage at the Department of Health Sciences, University of Milan

CAREER:

01/10/2013-5/10/2015

Master's Degree in Medical Biotechnology and Molecular Medicine at the University of Milan-Faculty of Medicine with voting 108/110

01/10/2008-10/12/2012

Bachelor's Degree in Biotechnology at the University of L’Aquila - Biotechnology Faculty with voting 110/110 cum laude

1/09/2003-10/06/2008

High school diploma at the Liceo Scientifico G.Galilei (PE) with voting 98/100

SKILLS:

Extraction of DNA and RNA from frozen tissue, FFPE and biological fluids

Quality control through Bioanalyzer 2100, Tapestation 4200, Nanodrop, Qubit

CNV analysis, somatic mutations, whole transcriptome, miRNA profiling Cell lines/mouse model characterization (NGS) in R&D envirorment

Gene expression studies (RNAseq, RTqPCR)

Bioinformatic analysis of sequences data with SureCall, strand-NGS Softwares, workbench and IPA

Elisa

RTqPCR

Transfection (Lentivirus, Lipo)

QUALIFICA ATTUALE

Prof. Ordinario, Patologia Generale, MED/04

DIPARTIMENTO MEDICINA MOLECOLARE

ALTRI INCARICHI

* Responsabile dell’Unità di Ricerca “Genetica Molecolare del Cancro”, presso il Dip. Medicna Molecolare, Università La Sapienza
* Responsabile Unità Operativa Semplice Dipartimentale (UOSD) di Oncologia Molecolare, DAI Medicina Diagnostica e Radiologia, Policlinico Umberto I, Facoltà di Farmacia e Medicina, Università di Roma La Sapienza

FORMAZIONE E CARRIERA

2011- presente: Professore Ordinario, SSD MED/04 – Patologia Generale, Dip. di Medicina Molecolare, Facoltà Farmacia e Medicina, Università di Roma “La Sapienza”.

2001 – 2011: Professore di ruolo di II fascia, SSD MED/04, Dipartimento di Medicina Sperimentale, I Facoltà di Medicina e Chirurgia, Università di Roma “La Sapienza”.
1998 – 2001: Ricercatore Universitario, SSD F04A, Dipartimento di Medicina Sperimentale e Patologia, Facoltà di Medicina e Chirurgia, Università di Roma La Sapienza.
1996 – 1997: Visiting Scientist, sezione di Cellular and Molecular Biology del National Cancer Institute (NCI), National Institutes of Health (NIH), Bethesda, MD, USA.
1993-1997: Specializzazione in Oncologia con lode, Facoltà di Medicina e Chirurgia dell'Università degli studi de L'Aquila.

1990 – 1993: Ricercatore presso lo European Molecular Biology Laboratory (EMBL), Heidelberg, Germania, nel gruppo del Direttore, Prof. L. Philipson.

1989 – 1990: Ricercatore presso la “Raggio-Italgene”, S.p.A., Pomezia (RM), nel laboratorio di "Genetica Molecolare".
1987-1990: Specializzazione in Allergologia con lode, Facoltà di Medicina e Chirurgia dell'Università degli Studi La Sapienza, Roma.

1981-1987: Laurea in Medicina e Chirurgia con lode, Università degli Studi La Sapienza, Roma.

PRINCIPALI LINEE DI RICERCA

1. Development and cancer (medulloblastoma) in the cerebellum: crossroads between replication stress, the DNA Damage Response and the Sonic Hedgehog pathway;

2. The Nijmegen Breakage Syndrome and the MRN complex;

3. Molecular targets and mechanisms of MYCN-driven tumor development (neuroblastoma);

4. Hereditary Breast cancer: BRCA1 and BRCA2 genes and beyond;

5. Molecular biomarkers and target therapy for cancer.

ALTRO

CINQUE PUBBLICAZIONI SELEZIONATE

1. Di Giulio S, Colicchia V, Pastorino F, Pedretti F, Fabretti F, Nicolis Di Robilant V, Ramponi V, Scafetta G, Moretti M, Licursi V, Belardinilli F, Peruzzi G, Infante P, Goffredo B, Coppa A, Canettieri G, Bartolazzi A, Ponzoni M, Giannini G, Petroni M. A combination of PARP and CHK1 inhibitors efficiently antagonizes MYCN-driven tumors. ***Oncogene***. 2021 Oncogene. 2021 Oct;40(43):6143-6152. doi: 10.1038/s41388-021-02003-0.
2. Nicolazzo C, Barault L, Caponnetto S, De Renzi G, Belardinilli F, Bottillo I, Bargiacchi S, Macagno M, Grammatico P, Giannini G, Cortesi E, Di Nicolantonio F, Gazzaniga P. True conversions from RAS mutant to RAS wild-type in circulating tumor DNA from metastatic colorectal cancer patients as assessed by methylation and mutational signature. ***Cancer Letters.*** 2021 Jun 1;507:89-96. doi: 10.1016/j.canlet.2021.03.014.
3. Petroni M, Sahùn Roncero M, Ramponi V, Fabretti F, Nicolis Di Robilant V, Moretti M, Alfano V, Corsi A, De Panfilis S, Giubettini M, Di Giulio S, Capalbo C, Belardinilli F, Coppa A, Sardina F, Colicchia V, Pedretti F, Infante P, Cardinali B, Tessitore A, Canettieri G, De Smaele E, Giannini G. SMO-M2 mutation does not support cell-autonomous Hedgehog activity in cerebellar granule cell precursors. ***Scientific Reports***. 2019 Dec 23;9(1):19623. doi: 10.1038/s41598-019-56057-y.
4. Patel VL, Busch EL, Friebel TM, Cronin A, …………..Giannini G, …………..Neuhausen SL, Ottini L, Nielsen HR, Rebbeck TR. Association of Genomic Domains in BRCA1 and BRCA2 with Prostate Cancer Risk and Aggressiveness. ***Cancer Research.*** 2020 Feb 1;80(3):624-638. doi: 10.1158/0008-5472.CAN-19-1840.
5. Petroni M, Sardina F, Infante P, Bartolazzi A, Locatelli E, Fabretti F, Di Giulio S, Capalbo C, Cardinali B, Coppa A, Tessitore A, Colicchia V, Sahùn Roncero M, Belardinilli F, Di Marcotullio L, Soddu S, Comes Franchini M, Petricci E, Gulino A, Giannini G. MRE11 inhibition highlights a replication stress-dependent vulnerability of MYCN-driven tumors. ***Cell Death and Disease***. 2018 Aug 30;9(9):895. doi: 10.1038/s41419-018-0924-z.

SHORT CURRICULUM VITAE

PRESENT POSITION

Full Professor, General Pathology, MED/04

DEPT. OF MOLECULAR MEDICINE

ADDITIONAL POSITIONS

* Head, Research Unit “Cancer Molecular Genetics”, Dept. Molecular Medicine, University La Sapienza
* Head, Unità Operativa Semplice Dipartimentale (UOSD) di Oncologia Molecolare, DAI Medicina Diagnostica e Radiologia, Policlinico Umberto I, Facoltà di Farmacia e Medicina, Università di Roma La Sapienza

EDUCATION AND CAREER

2011- today: Full Professor, General Pathology (SSD Med04), Dept. Molecular Medicine, University La Sapienza.
2001 – 2011: Associate Professor, General Pathology (SSD Med04), Dept. Experimental Medicine, University La Sapienza

1998 – 2001: Assistant Professor, General Pathology, Dept. Experimental Medicine, University La Sapienza.

1996 – 1997: Visiting Scientist, Cellular and Molecular Biology Section, NCI, NIH, Bethesda Maryland, USA.

1993 – 1997: Post-Graduate Specialty School, University Of L’Aquila, Faculty Of Medicine, L’Aquila, Italy. Graduation Cum Laude, Oncology.

1990 – 1993: Post-Doctoral Fellow, Lennart Philipson Director’s Group, European Molecular Biology Laboratory (EMBL), Heidelberg, Germany

1989 – 1990: Scientist, Molecular Genetics Laboratory, Raggio Italgene, Spa, Pomezia (Rm) Italy

1987 – 1990: Post-Graduate Specialty School, University La Sapienza, Faculty Of Medicine, Rome, Italy, Graduation Cum Laude, Allergy.
1981 – 1987: Degree in Medicine And Surgery, University La Sapienza, Faculty Of Medicine, Rome, Italy. Graduation Cum Laude.

MOST RELEVANT RESEARCH LINES

1. Development and cancer (medulloblastoma) in the cerebellum: crossroads between replication stress, the DNA Damage Response and the Sonic Hedgehog pathway;

2. The Nijmegen Breakage Syndrome and the MRN complex;

3. Molecular targets and mechanisms of MYCN-driven tumor development (neuroblastoma);

4. Hereditary Breast cancer: BRCA1 and BRCA2 genes and beyond;

5. Molecular biomarkers and target therapy for cancer.

ADDITIONAL INFO

FIVE SELECTED PUBLICATIONS

1. Di Giulio S, Colicchia V, Pastorino F, Pedretti F, Fabretti F, Nicolis Di Robilant V, Ramponi V, Scafetta G, Moretti M, Licursi V, Belardinilli F, Peruzzi G, Infante P, Goffredo B, Coppa A, Canettieri G, Bartolazzi A, Ponzoni M, Giannini G, Petroni M. A combination of PARP and CHK1 inhibitors efficiently antagonizes MYCN-driven tumors. ***Oncogene***. 2021 Oncogene. 2021 Oct;40(43):6143-6152. doi: 10.1038/s41388-021-02003-0.
2. Nicolazzo C, Barault L, Caponnetto S, De Renzi G, Belardinilli F, Bottillo I, Bargiacchi S, Macagno M, Grammatico P, Giannini G, Cortesi E, Di Nicolantonio F, Gazzaniga P. True conversions from RAS mutant to RAS wild-type in circulating tumor DNA from metastatic colorectal cancer patients as assessed by methylation and mutational signature. ***Cancer Letters.*** 2021 Jun 1;507:89-96. doi: 10.1016/j.canlet.2021.03.014.
3. Petroni M, Sahùn Roncero M, Ramponi V, Fabretti F, Nicolis Di Robilant V, Moretti M, Alfano V, Corsi A, De Panfilis S, Giubettini M, Di Giulio S, Capalbo C, Belardinilli F, Coppa A, Sardina F, Colicchia V, Pedretti F, Infante P, Cardinali B, Tessitore A, Canettieri G, De Smaele E, Giannini G. SMO-M2 mutation does not support cell-autonomous Hedgehog activity in cerebellar granule cell precursors. ***Scientific Reports***. 2019 Dec 23;9(1):19623. doi: 10.1038/s41598-019-56057-y.
4. Patel VL, Busch EL, Friebel TM, Cronin A, …………..Giannini G, …………..Neuhausen SL, Ottini L, Nielsen HR, Rebbeck TR. Association of Genomic Domains in BRCA1 and BRCA2 with Prostate Cancer Risk and Aggressiveness. ***Cancer Research.*** 2020 Feb 1;80(3):624-638. doi: 10.1158/0008-5472.CAN-19-1840.
5. Petroni M, Sardina F, Infante P, Bartolazzi A, Locatelli E, Fabretti F, Di Giulio S, Capalbo C, Cardinali B, Coppa A, Tessitore A, Colicchia V, Sahùn Roncero M, Belardinilli F, Di Marcotullio L, Soddu S, Comes Franchini M, Petricci E, Gulino A, Giannini G. MRE11 inhibition highlights a replication stress-dependent vulnerability of MYCN-driven tumors. ***Cell Death and Disease***. 2018 Aug 30;9(9):895. doi: 10.1038/s41419-018-0924-z.