

UNIVERSITÀ DEGLI STUDI DI MILANO

Procedura di selezione per la chiamata a professore di II fascia da ricoprire ai sensi dell'art. 18, commi 1 e 4, della Legge n. 240/2010 per il settore concorsuale 05/E2 - Biologia Molecolare, (settore scientifico-disciplinare BIO/11 - Biologia Molecolare) presso il Dipartimento di Bioscienze, (avviso bando pubblicato sulla G.U. n. 50 del 30/06/2020) - Codice concorso 4384

Michele Cioffi

CURRICULUM VITAE

INFORMAZIONI PERSONALI (NON INSERIRE INDIRIZZO PRIVATO E TELEFONO FISSO O CELLULARE)

COGNOME	CIOFFI
NOME	MICHELE
DATA DI NASCITA	15/07/1985

Profile

- Motivated and dedicated scientist with more than 10 years of interdisciplinary experience in basic and pre-clinical oncology, immuno-oncology and cancer targeted therapies.
- Excellent communication skills demonstrated through scientific publications, reports, grants writing, and oral presentations for diverse audiences, including clinicians, scientists, reviewers, and technical and lay audiences.
- Strong ability to work independently and as part of a team to lead collaborative projects and mentor other colleagues. Ability to work concurrently on several complex projects, meet aggressive deadlines, and adjust priorities rapidly as a situation demands with positive attitude and a problem solving personality.

Education

PhD Biomedicine/Oncology - 2014 Univesidad Autonoma de Madrid (Spain)

MSc Medical Biotechnology (110/110 Cum Laude) - 2009 University of Naples Federico II (Italy)

BSc Biotechnology (110/110) - 2006 University of Naples Federico II (Italy)

Certifications

Italian National Scientific Habilitation - 2019 Associate Professor (Scientific Field: 05/E2 Molecular Biology)

Drug Development and FDA Regulations - 2019 Barnett International

Design and Interpretation of Clinical Trials - 2018 Johns Hopkins University School of Education

Professional Experience

Senior Scientist in Oncology 2016 - present. Weill Cornell Medicine, New York (USA)

- Established a bio-bank of cancer organoids from patient biopsies to test new therapeutic approaches in preclinical settings, functional validation for precision medicine and identification of new biomarkers for several cancer types and COVID-19.
- Identification of exosomes proteins as diagnostic and prognostic biomarkers in liquid biopsy for multiple types of cancer
- Study of role of cancer associated fibroblasts exosomes from pancreatic cancer patients in the regulation of the pre-metastatic niches in the liver and lungs
- Build relationships and collaborate with scientific leaders, academic partners and biotech companies, develop scientific presentations and provide scientific support.
- Managed four independent research projects; two first author papers are under preparation.
- Led a group of two technicians and mentored three summer and two PhD students, one of them awarded with the NIH F30 grant.
- Builds relationships and initiated scientific collaborations with MSKCC, Cornell and NYU physicians, and biotech companies, develop scientific presentations and provide scientific support.

Postdoctoral Fellow 2015 - 2016. Hospital Clinic (IDIBAPS), Barcelona (Spain)

- Identification of transcription regulation during epithelial mesenchymal transition in Multiple Myeloma dissemination and metastasis.
- Evaluation of new specific inhibitors in preclinical trials in combination with standard chemotherapy.

PhD - Postdoctoral Fellow 2009 - 2015. Spanish National Cancer Centre (CNIO), Madrid (Spain)

- Identification and characterization of self-renewal machinery and chemoresistance mechanisms in pancreatic cancer stem cells and validation of therapeutic agents that selectively eliminate cancer stem cells without affecting normal stem cells for personalized medicine and phase I clinical trials.
- Acquire knowledge and experience of oncology products, clinical trials and patient treatments, with excellent understanding of scientific literature and provide scientific exchange at international meetings via oral presentations.
- Published seven first author paper in a peer-reviewed journal; acquired excellent understanding of scientific literature and provide scientific exchange at international meetings via oral presentations.

Internship 2006 - 2009. National Cancer Institute, Naples (Italy)

- Immunoregulation in solid tumors metastasis and identification of specific inhibitors in preclinical models
- Scientific support to students and organization of scientific meetings.

Teaching experience

- Molecular Biology course for Biology Master students at Autonomia University of Madrid (Spain)
- Molecular Biology classes for MD/PhD students at Weill Cornell Medicine (USA)

Relevant Experience

Covid19 emergency volunteer WCMC/New York Presbyterian Hospital, New York (USA) 2020

- Assisting healthcare staff at NYP hospital by coordinating MD students volunteers, organizing meal boxes, collect and distribute personal protective equipment, maintenance in the clinical wellness lounges

Freelance Scientific Consultant - BioExpert 2017 - present

- Review scientific projects from biotech startups, help to develop their business and give feedbacks for investors.

Freelance Medical-Scientific Writer Cactus Communications - Kolabtree 2016 - present

- Develop and edit high-quality, publication-ready scientific documents according to client needs;
- Contribute to making cutting-edge research accessible to specific audiences across therapeutic areas or disciplines.

Ad hoc reviewer for Oncogene and Molecular Oncology journals 2016 - present

Team coordinator CNIO Researcher nights Madrid (Spain) 2013 - 2014

- Organized and coordinated ten meeting sessions and interactive scientific activities during a two nights event for a lay audience, in particular high school and undergraduate students, to highlight the appeal of pursuing a career in research.

Volunteer for AIRC (Italian Association for Cancer Research) Naples (Italy) 2006 - 2009

- Managed and executed fundraising events to support cancer research.

Awards

2009 - 2013 La Caixa - CNIO International PhD Investigation Grant (Madrid) (4 years, top 10% - 100,000 \$)

2015 - 2016 Sara Borrell Foundation Investigation Grant (Barcelona) (4 years, top 10% - 140,000 \$)

Publications

Hoshino A*, Kim HS*, Bojmar L*, Gyan K*, Cioffi M, Hernandez J, Zambirinis C et al. *"Extracellular Vesicle and Particle Biomarkers Define Multiple Human Cancers"*. Cell (In press). * co-first author

Bezdan D, Grigorev K, Meydan C, Vatter FA, Rao V, Nakahir K, Burnha P, Afshinnkoo E, Westover C, Butler D, Foox J, Mishra T, Cioffi M, et al. *"Dynamics of cell-free DNA from Twin Astronauts before, during, and after long-duration human spaceflight"* Cell (Under revision)

Cioffi M, Vatter F, Hanna S, Matei I, Lyden D. "Exosome -mediated communication with and within the immune system". J Exp Med (Under revision)

Cioffi M, Bojmar L, Zambirinis C, Hernandez J et al. *"Cancer associated fibroblast exosomes regulates pre-metastatic niches of liver and lungs in pancreatic cancer"*. (In preparation).

Bojmar L*, Cioffi M*, Zambirinis C, Hernandez J, et al. "Metabolic and immune regulation in pre-metastatic livers from pancreatic cancer patients". (In preparation). * co-first author

Wortzel I, Liu Y, Kim H, Xu A, Cioffi M, et al. "Exosome DNA regulates immune infiltration during pre-metastatic niche formation" (In preparation).

Yang L, Han Y, Nilsson-Payant BE, Gupta V, Wang P, Duan X, Tang X, Zhu J, Zhao Z, Jaffré F, Zhang T, Kim TW, Harschnitz O, Redmond D, Houghton S, Liu C, Naji A, Ciceri G, Guttikonda S, Bram Y, Nguyen DT, Cioffi M, et al. "A Human Pluripotent Stem Cell-based Platform to Study SARS-CoV-2 Tropism and Model Virus Infection in Human Cells and Organoids". *Cell Stem Cell* 2020 July 2.

Cioffi M, Trabulo SM, Vallespinos-Serrano M, Saif J, et al. "The miR-25-93-106b cluster regulates SDF-1 and PD-L1 expression in response to tissue injury". *Oncotarget*. 2017 Feb 18

Cioffi M, Sanchez-Ripoll Y, Trabulo SM, Aicher A, et al. "The miR-17-92 cluster counteracts quiescence and chemoresistance in a distinct population of pancreatic cancer stem cells". *GUT*. 2015 Apr 17

Cioffi M, Trabulo S., Hidalgo M., Costello E., et al. "Inhibition of CD47 effectively targets pancreatic cancer stem cells via dual mechanism". *Clinical Cancer Research*. 2015 Feb 23.

Cioffi M, Trabulo SM, Gonzalez-Galvez B, Reis C, Mulero F, et al. "Mir-93 regulates adipogenesis by inhibition of Sirt7 and Tbx3". *Cell Reports*. 2015 Aug 26.

Lonardo E, Cioffi M, Sancho P, Crusz S, Heeschen C. "Studying Pancreatic Cancer Stem Cell Characteristics for Developing New Treatment Strategies". *J Vis Exp*. 2015 Jun 20

Cioffi M, D'Alterio C, Camerlingo R, Tirino V, et al. "Identification of a distinct population of CD133+CXCR4+ cancer stem cell in ovarian cancer". *Scientific Reports*. 2015 May 28

Sainz B Jr, Alcala S, Garcia E, Sanchez-Ripoll Y, Azevedo M, Cioffi M, Tatari M, et al. "The human cathelicidin antimicrobial peptide hCAP-18/LL-37 is a pro-pancreatic cancer stem cell microenvironmental factor". *GUT*. 2015 Apr 3

Miranda-Lorenzo I, Dorado J, Lonardo E, Alcala S, Serrano AG, Clausell-Tormos J, Cioffi M, Megias D, et al. "Intracellular autofluorescence: a biomarker for epithelial cancer stem cells". *Nat Methods*. 2014 Nov 11

Balic A, Dræby Sørensen M, Trabulo SM, Sainz B Jr, Cioffi M, Vieira CR, et al. "Chloroquine targets pancreatic cancer stem cells via inhibition of CXCR4 and hedgehog signaling". *Mol Cancer Ther*. 2014 Jul 13

Lonardo E*, Cioffi M*, Sancho P, Sanchez-Ripoll Y, Trabulo SM, et al. "Metformin targets the metabolic achilles heel of human pancreatic cancer stem cells". *PLoS One*. 2013 Oct 18;8(10). * co-first author

Cioffi M, Heeschen C. "Immuno-targeting of pancreatic cancer stem cells: A new therapeutic strategy against a devastating disease? *Oncoimmunology*. 2012 Jul 1

Cioffi M, Dorado J, Baeuerle PA, Heeschen C. "EpCAM/CD3-bispecific T cell engaging antibody M110 eliminates primary human pancreatic cancer stem cells". *Clin Cancer Res*. 2012 Jan 15

Hermann PC, Bhaskar S, Cioffi M, Heeschen C. "Cancer stem cells in solid tumors". *Semin Cancer Biol*. 2010 Apr 20

D'Alterio C, Cindolo L, Portella L, Polimeno M, Consales C, Riccio A, Cioffi M, Franco R, et al. "Differential role of CD133 and CXCR4 in renal cell carcinoma". *Cell Cycle*. 2010 Dec 7

D'Alterio C, Consales C, Polimeno MN, Franco R, Cindolo L, Portella L, Cioffi M, et al. "Concomitant CXCR4 and CXCR7 Expression Predicts Poor Prognosis in Renal Cancer". *Curr Cancer Drug Targets*. 2010 Nov 10

Ieranò C, Giuliano P, D'alterio C, Cioffi M, Mettievier V, et al. "A point mutation (G574A) in the chemokine receptor CXCR4 detected in human cancer cells enhances migration". *Cell Cycle* 2009 Apr 23

Presentations at International Conferences

Pancreatic Cancer Microenvironment, Washington DC (USA), 2019 - Speaker

Pediatric Oncology Experimental Therapeutic, Banff (Canada), 2018 - Invited Speaker

Croucher summer course in cancer biology, Hong Kong (Cina), 2017 - Speaker

Cancer Bio-Immunotherapy - XIIth NIBIT, Siena (Italia), 2014 - Invited Speaker

Cancer Biology & Therapeutics, Cold Spring Harbor Laboratory, New York (USA), 2013 - Speaker

Annual Stem Cell International Symposium - Stem cells in Cancer, Cambridge (UK), 2012 - Speaker

Molecular Mechanisms in Signal Transduction and Cancer, Spetses (Grecia), 2011 - Speaker

Skill Highlights

- Experience in design and interpretation of basic and clinical data in multiple therapeutic areas with an ability to communicate an understanding of that data
- Informatics skills MS Office, Adobe Photoshop, biologic databases and bioinformatics software
- Ability to work concurrently on several complex projects, meet aggressive deadlines, and adjust priorities rapidly as a situation demands
- Excellent interpersonal communication skills, able to drive global collaborations in cross-functional, multi-cultural organizations
- Excellent oral and written communication skills that includes writing, reviewing, and editing scientific documents as well as presentations at international conferences

Languages

Italian - Native language

English - Advanced C2

Spanish - Advanced C2

Data

14/07/2020

Luogo

New York City