



**UNIVERSITÀ  
DI TORINO**

Dipartimento di  
Biotecnologie Molecolari  
e Scienze per la Salute

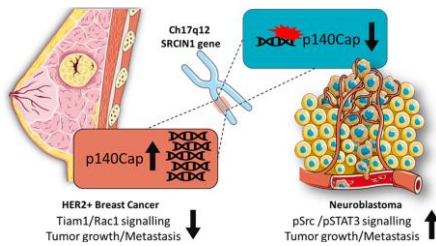


**Research Fellowship (Assegno di ricerca)  
duration 18 months  
The p140Cap adaptor protein in tumor progression**

**Paola Defilippi's lab  
Department of Molecular Biotechnology and Health Sciences  
MBC1, Via Nizza 52, 10126 Torino, 011-6706434  
paola.defilippi@unito.it**

Breast cancer (BC) is the most frequent form of tumor in women. Every year in Italy there are around 50,000 new cases of BC. Despite consolidated therapeutic protocols, approximately 15% of patients experience drug resistance. Overexpression of the receptor tyrosine kinase ErbB2 characterizes approximately 20% of human BC. ERBB2+ and Triple Negative subtypes undergo frequent relapses and drug resistance.

In our laboratory we have shown that the adapter protein p140Cap confers protection against the harmful effects of the ERBB2 oncogene. Thanks to the analysis of a large cohort of patients, we found that this protein is expressed in approximately 50% of ErbB2 positive BC patients where it correlates with greater survival and a lower risk of metastasis, identifying p140Cap as a new predictive marker in this pathology. Furthermore, some of the mechanisms through which p140Cap is able to limit the growth of ERBB2 positive tumors and decrease their ability to give rise to metastasis have been demonstrated, in cellular and preclinical models (Grasso et al., 2017; Salemme et al., 2023; Centonze, Natalini et al., in press). This project aims to identify at cellular and preclinical levels new molecular mechanisms controlled by p140Cap, useful for both diagnosis and therapy.



Defilippi's lab will offer to the applicant all the conditions to carry out her/his work, with innovative techniques in a centre which benefit of the facilities required to carry on the proposed research, including fully equipped cell culture, microscope and animal facility.

List of publications at:

[https://iris.unito.it/simple-search?query=Defilippi+Paola&rpp=10&sort\\_by=bi\\_sort\\_2\\_sort&order=DESC&filter\\_field\\_1=pubtype&filter\\_type\\_1=eq&filter\\_value\\_1=03-CONTRIBUTO+IN+RIVISTA#.XXtJt5MzZBw%E2%80%A2IRIS](https://iris.unito.it/simple-search?query=Defilippi+Paola&rpp=10&sort_by=bi_sort_2_sort&order=DESC&filter_field_1=pubtype&filter_type_1=eq&filter_value_1=03-CONTRIBUTO+IN+RIVISTA#.XXtJt5MzZBw%E2%80%A2IRIS)

**If interested, please write to [paola.defilippi@unito.it](mailto:paola.defilippi@unito.it) for a meeting.**



Università degli Studi di Torino

Dipartimento di Biotecnologie Molecolari e Scienze per la Salute

Direttore: Prof. Francesco Novelli

Vice-Direttrice Didattica e Vicaria Prof.ssa Marina Marchisio – Vice Direttore Ricerca Prof. Paolo E.Porporato

Sede Dipartimento: Via Nizza 52, 10126 Torino – C.F. 80088230018 – P.IVA IT02099550010

E-mail: direzione.biotec@unito.it – PEC: biotecnologie@pec.unito.it