

## ***Curriculum Vitae***

### **Lorena Losi, M.D., Ph.D.**

#### **Education**

1985: Degree in Medicine at the University of Modena with full marks

1985-1987: first two years of Specialization in Pathologic Anatomy

1987-1991: PhD in Human Pathology (with discussion of the thesis at Rome in May 1992)

1993: accomplishment of Specialization in Pathologic Anatomy

#### **Experience**

##### **Periods of research at the Institute of Pathology of Lausanne University (Switzerland), Laboratory of Molecular Pathology:**

- From 1990 to 1991 (18 months) with a period in **April 1991 at the Brigham and Women's Hospital, Boston, USA**

- monthly periods in the following years,

- from 2003 to 2005 (two years consecutively),

- periods each year until today

This collaboration led to the realization of several joint projects on genetic alterations during the neoplastic progression and in the development of sporadic, hereditary and early-onset (< 40 years) colorectal cancers; on the study of the genetic intratumoral heterogeneity and on the comprehension of metastatic process in colorectal carcinoma.

1992 Assistant Professor of Pathologic Anatomy at the University of Modena performing research, histocytological diagnostics of neoplastic and non neoplastic diseases of the different organs and teaching in several courses (Medicine, Medical Biotechnologies, Biology).

Since 2005: Member of the PhD Program in Molecular and Regenerative Medicine of the University of Modena and Reggio Emilia.

From 2010 to 2017: Proposal and Responsibilities of Programmes with the University of Lausanne, Switzerland

- Lifelong Learning Programme Erasmus: Higher Education

- Erasmus Placement with the realization of several dissertations in different courses

From 2014 member of the CIDSTEM (Centro Interdipartimentale Cellule Staminali e Medicina Rigenerativa) of the University of Modena and Reggio Emilia.

From 2017 member of MITO (Multicenter Italian Trials in Ovarian cancer and gynecologic malignancies).

## **Research Activities**

The scientific activity is focused on the study of morphological and molecular alterations involved in the neoplastic pathogenesis; central to the study is the identification of genetic and epigenetic alterations to search biomolecular markers for diagnosis, prognosis and selective therapies in several neoplasias particularly colorectal and ovarian tumours. The colorectal carcinoma has been studied in the epidemiological, clinical, morphological and genetic features in the sporadic and hereditary form; furthermore, the genetic intratumoral heterogeneity and the comprehension of metastatic process were examined with significant impact on personalized therapy and follow-up of patients.

Special attention has been put to the study of the role of neoplastic cutaneous lesions (melanocytic and non) in hereditary cancer syndromes and the importance of immunohistochemical and biomolecular analysis for their identification.

The scientific activity is also part of collaborations with other groups of the Department of Life Sciences of the University of Modena on several projects:

- characterization of epithelial stem cells and their applications in cellular and gene therapies with the Centro di Medicina Rigenerativa "Stefano Ferrari"
- translational research through proteomic studies in ovarian cancer for unique marker tool discoveries;
- comprehension of mechanisms of chemopreventive agents in colorectal cancers and characterization of clinical, pathological and molecular features related to the altered expression of implicated proteins.

The scientific activity made more than 90 international papers, more than 130 abstracts to congress as poster or oral communications, some of them prized and the translation from the English of a chapter of the Atlas of Pathology Robbins-Cotran, Edition 2016.

## **Activity of peer review**

- Activity of peer review for several journals including Cancers, International Journal of Cancer, Epigenomics, Neoplasia, Journal of Clinical Pathology, Cancer Medicine, Histology and Histopathology.
- Peer reviewer for ANVUR (Agenzia Nazionale di Valutazione del sistema Universitario e della Ricerca): research products VQR 2004-2010
- Member of REPRISE (Register of Experts Peer Reviewers for Italian Scientific Evaluation)

## **Funding**

Involvement in 18 scientific projects as collaborator or principal investigator among which MURST, AIRC, BIOMED, MIUR, CNR, PRIN, two Internationals (Swiss National Fund), Fondazione di Vignola, FAR 2015 and 2017 (Fondo di Ateneo per la Ricerca) of the University of Modena and Reggio-Emilia. Other funds are obtained by Banca Popolare dell'Emilia Romagna and an expert advice (LGA Biotecnologie S.r.l.).

## **Teaching activity**

Courses on Medicine, Biology, Medical Biotechnology and Techniques in Biomedical Laboratory.

## **Scientific expertise**

The scientific expertise includes:

- Histocytological examination and diagnostics of the neoplastic and non neoplastic diseases of different tissues and organs and its correlation to specific genetic alterations;
- Macroscopical examination and sampling of tissues and organs

Technical skills and competences include:

- Processing of frozen section and paraffin embedding of tissues and cells;
- Development and interpretation of special stains (histochemistry)
- Development and interpretation of immunohistochemistry (IHC) on fresh and fixed in formalin and paraffin embedded specimens (FFPE);
- Molecular pathology: in situ hybridization (ISH) and other molecular techniques

**Modena, 7 September 2019**