

CURRICULUM VITAE

PERSONAL INFORMATION

Name	Mariaconcetta Sicurella
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Nationality	Italian

WORK EXPERIENCE

Year	January 2013 – Present
Name of employer	University of Ferrara
Type of business or sector	Virology and Microbiology
Occupation or position held	Research Fellow
Main activities and responsibilities	Responsible for the development of vectors based on herpes simplex virus type 1 as a model vaccine against human pathogens: TB, HSV, HIV.
Year	January 2012 – November 2012
Name of employer	University of Ferrara
Type of business or sector	Research and Marketing
Occupation or position held	Research Assistant
Main activities and responsibilities	Market research: detect, discover, allocate and interpret data Collaborate identification of marketing strategies to promote the visibility of the products Manage correspondence of marketing to potential customers and suppliers
Year	January 2009 – December 2011
Name of employer	University of Padova
Type of business or sector	Biomedicine (Virology, Microbiology)
Occupation or position held	PhD Student
Main activities and responsibilities	Responsible for the study on the role of the tat protein of HIV virus in the generation of new herpes Simplex vectors for the development of vaccines
Year	September 2007 – December 2008

Name of employer	University of Ferrara
Type of business or sector	Biochemistry and Molecular Biology
Main activities and responsibilities	Studies on diseases of the blood Tutor for Laboratory of Biochemistry

EDUCATION AND TRAINING

Year of Award	December 2008
Qualification	Practice the profession of biologist
Institution of Education	University of Ferrara
Year of Award	April 2012
Qualification	PhD
Institution of Education	University of Padova
Dissertation Title	Evaluation of the immunogenicity and efficacy of herpes vectors for the development of a vaccine against HSV infection
Evaluation	Excellent
Year of Award	October 2007
Qualification	Master's Degree
Institution of Education	University of Ferrara
Dissertation Title	Nuovi modulatori allosterici per il recettore A1 dell'adenosina:uno studio farmacologico e funzionale
Evaluation	110 cum laude
Year of Award	October 2005
Qualification	Bachelor's Degree
Institution of Education	University of Ferrara
Dissertation Title	Nuovi ligandi antagonisti per il recettore A2B dell'adenosina
Evaluation	104/110
Year of Award	2001
Institution of Education	Liceo socio-psico-pedagogico "F.Crispi" Ribera
Evaluation	100/100

LANGUAGES

MOTHER TONGUE

ITALIAN

OTHER LANGUAGES

ENGLISH

Reading skills

B2

Writing skills

B2

Verbal skills

B2

FRENCH

Reading skills

Good

Writing skills

Elementary

Verbal skills

Good

IT SKILLS

Microsoft Office (such as: Word, Excel, Power Point, Outlook, Photoshop) Apple programs,

Internet, Graphpad for Microsoft and for Apple pc.

COMPETENCES

Medium for bacteria and cells

Culture of bacteria and cells in liquid and solid medium

Determination of bacteria (through quantitative and spectrophotometric methods).

Microscopy:

Confocal and Fluorescence

Recombinant technologies:

Extraction, purification and precipitation of plasmid DNA from bacterial

Cloning Techniques

Preparation of a competent bacteria and transformation analysis

Agarose gel electrophoresis

Transfer of DNA in the filter (Southern Blotting) Preparation of probes DNA

Analysis of protein:

Transfection of cells with CaCl₂ and Lipofectamine

Cell lysis

Determination of proteins concentration (Bradford method or BCA) Electrophoresis of proteins on polyacrylamide gels with Sodiodecilsfosfato (SDS-PAGE)

Transfer of proteins in the filter (Western-blotting)

Hybridization with mono-and polyclonal antibodies

Revelation Chemoluminescenza
Construction of fusion proteins (GST)

Viral expression systems:

Construction of the Herpes vectors and their application *in vitro* and *in vivo*,
Amplification and titration recombinant viruses
Infection of human and murine cells

Immunological assays:

Elispot and ELISA assay
Blood's purification elements

Model *in Vivo*:

BALB/C and C57BL/6
Immunization (Intradermic, subcutaneous, intravaginally)
Eye bleedig and Necropsy
Mucosal samples

Pharmacological Test:

Saturation and competition Binding Assay
Determination of levels of cyclic AMP

Laboratory equipment: use and / or maintenance of the equipment necessary for the implementation of the above listed laboratory techniques.

PUBLICATIONS

An attenuated Herpes simplex virus type 1 (HSV1) encoding the HIV-1 Tat protein protects mice from a deadly mucosal HSV1 challenge.

Sicurella M^{1,3}, Nicoli F², Gallerani E², IVolpi I¹, Berto E¹, Finessi V², Destro F^{2,3}, Manservigi R¹, Cafaro A⁴, Ensoli B⁴, Caputo A³, Gavioli R^{2*}, Marconi P^{1*}
PLoS One. In press

The HIV-1 Tat Protein Induces the Activation of CD8(+) T Cells and Affects In Vivo the Magnitude and Kinetics of Antiviral Responses.

Nicoli F, Finessi V, **Sicurella M**, Rizzotto L, Gallerani E, Destro F, Cafaro A, Marconi P, Caputo A, Ensoli B, Gavioli R.
PLoS One. 2013 Nov 4

Proteasome inhibitors induce the presentation of an Epstein-Barr virus nuclear antigen 1-derived cytotoxic T lymphocyte epitope in Burkitt's lymphoma cells.

Destro F, Sforza F, **Sicurella M**, Marescotti D, Gallerani E, Baldisserotto A, Marastoni M, Gavioli R. Immunology. 2011 May

Studio Prospettico della ferritinemia sui donatori periodici (RE07)

A.Ferri, R. Calza, **M. Sicurella**, F. Gavioli. AVIS 2008

PRESENTATIONS

Congresso SIM: 41° Congresso nazionale della Società Italiana di Microbiologia
Viral vector expressing Tat as immunomodulatory molecule represent a new vaccine strategy against pathogens Riccione 13-16 ottobre 2013

Congresso SIV: “Nuovi itinerari di virologia clinica: Bagagli di esperienze a confronto”
Immunogenicity of HSV-1 vectors expressing the HIV-1 Tat protein Gallipoli 16-18 Settembre 2010

Istituto Superiore di Sanità: Retreat del Centro Nazionale AIDS **Effetto immunomodulatorio della proteina Tat di HIV sull’infezione da Herpes Simplex-1.**
Roma, 16-18 Febbraio 2011

LECTURES AND CONFERENCES

Congresso SIM

41° Congresso nazionale della Società Italiana di Microbiologia Riccione 13-16 ottobre 2013

Epixchange: Gene and cell therapy for brain disease Ferrara 3-4 ottobre 2013

Spinner 2013 Regione Emilia Romagna Bussines Plan,
Bologna, Maggio 2012

Spinner 2013 Regione Emilia Romagna Marketing Strategico
Bologna, Maggio 2012

Istituto Superiore di Sanità, Dott.ssa Barbara Ensoli Dr. Marc H.V. Van Regenmortel: **“Why it is not possible to rationally design an HSV-1 vaccine using crystal structures of viral antingens complexed with neutralizing monoclonal antibodies”** Roma, 30 Maggio 2011

Istituto Superiore di Sanità Dott.ssa Barbara Ensoli, **Retreat del Centro Nazionale AIDS**
Roma, 16-18 Febbraio 2011

Università degli Studi di Pavia, Società per lo studio della biochimica delle cellule del sangue **23a Riunione Nazionale “A. Castellani” dei dottorandi di ricerca in discipline biochimiche,** Brallo di Pregola (PV) 8-11 Giugno 2010

Università degli Studi di Ferrara “Obiettivi del millennio e diritti umani. I vaccini:

ricerca, sviluppo, accesso”. Ferrara, 13 Ottobre 2010

Congresso SIV “Nuovi itinerari di virologia clinica: Bagagli di esperienze a confronto”
Gallipoli 16-18 Settembre 2010

Università degli Studi di Urbino Prof. Mauro Magnani, Nano e Biotecnologie per la diagnostica e la terapia Urbino 10-11 settembre 2009

Università degli Studi di Padova “Summer School” Scuole/Corsi di Dottorato di ricerca dell’area medica Istituto Veneto di Medicina Molecolare (VIMM) Padova 14-18- Settembre 2009

Azienda Ospedaliero-Universitaria “S.Anna” Ferrara Prof. Alastair Compston, Meeting sulla ricerca Sanitaria della sclerosi multipla Ferrara 11 Maggio 2009

Congresso SIB 54th National Meeting of the italian Society of Biochemistry and Molecular Biology
Catania 23-27 Settembre 2009

La sottoscritta acconsente, ai sensi del D.Lgs. 30/06/2003 n. 196, al trattamento dei propri dati personali.

La sottoscritta acconsente alla pubblicazione del presente curriculum vitae sul sito dell'Università di Ferrara.

Ferrara, 10/07/2014

