## **Curriculum Vitae**

#### Personal informations

First name / Surname

irst name / Sumam

Address

Telephone

E-mail

Nationality

Date of birth

Gender

Maria Nitti

75, Via Campo San Leonardo, 83040, Gesualdo (AV), Italy

Home: +39 0825 403282 Mobile: +39 3206769178

nitti\_maria@libero.it

Italian

04/02/1984

female



# Work experience

**Dates** 

Occupation or position held

01/2014 - Up to now

Second Level master in preclinical and clinical drug

development and post-marketing Monitoring

Name and address of employer

'Federico II' University of Naples, Naples, IT

Dates

01/05/2014- Up to now

Occupation or position held

Post doc fellowship

Main activities and responsibilities

To Study the molecular mechanism of Rac1 protein during theacquisition of epithelial cell polarity as regard to:

-understand the intracellular traffic of Rac1 in rat thyroid cell line

-understand the molecular mechanism by Rac1 regulates E-Cadherin

mediated cell junctions

-Identify Rac1 cytosolic partners: protein interaction studies

Name and address of employer

DMMBM - Department of Molecular Medicine and Medical Biotechnology

'Federico II' University - 5, Via S. Pansini, 80131, Naples, Italy

Dates

03/2010 - 08/2013

Occupation or position held

Ph.D. in Molecular Pathology and Pathophysiology

Thesis title

Interfering with Rac1 activity in FRT thyroid epithelial cells impairs the expression of the polarized phenotype and of the E-cadherin function

Main activities and responsibilities

I am studying the role of the Rac1 protein in the acquisition and maintenance of the polarized phenotype in epithelial cells

- RNA-interference analysis on thyroid cell lines
- Study of the Rac1 signal pathway and of Rac1 influence on adherens junction
- Identification of Rac1 cytosolic partners, protein interaction studies

Name and address of employer

Department of Molecular Medicine and Medical Biotechnology 'L.Califano Federico II' University Polyclinic – 5, Via S. Pansini, 80131, Naples, Italy

**Dates** 

03/2009 - 03/2010

Occupation or position held

Internship

Main activities and responsibilities

I worked on a research project to identify the role and function of Rac1 in the acquisition and maintenance of cell polarity in FRT thyroid epithelial cells I improved my experience in molecular and cellular biology, especially we observed the effect of induction inducible active or dominante negative mutant of Rac1 on:

- ·trans-epithelial resistance (TER) acquisition by confluent monolayers grown on filters,
- ·directional migration
- · cell aggregation and formation of polarized cysts in suspension culture

Name and address of employer 'L.Califano' DBPCM - Department of Cellular and Molecular Biology and Pathology

'Federico II' University Polyclinic – 5, Via S. Pansini, 80131, Naples, Italy

# **Education and training**

Dates

11/2007 - 03/2009

Title of qualification awarded

Master's Degree of Science in Medical Biotechnologies

Score: 110/110 cum laude

Principal subjects/occupational skills

Cellular junctional complexes, protein expression

covered

Thesis title: Effects of a inducible Rac1 on the polarized phenotype epithelial cells

Name and type of organisation providing education and training Level in international classification 'Federico II' University of Naples, Naples, IT

ISCED 5

Dates

05/2006 - 03/2007

Title of qualification awarded

Bachelor of Science in Biotechnologies for Health

Score: 110/110

Principal subjects/occupational skills covered

cellular traffic.

Thesis title: construction, expression, analysis of a chimeric protein with green fluorescent protein

Name and type of organisation providing education and training

'Federico II' University of Naples, Naples, IT

Level in international classification

ISCED 5

# Personal skills and competences

Mother tongue

#### Italian

Self-assessment

European level (\*)

English

Understanding				Speaking				Writing	
Listening		Reading		Spoken interaction		Spoken production			
B2	Independent	B2	Independent	B2	Independent	B2	Independent	B1	Independent

(\*) Common European Framework of Reference for Languages

#### Social skills and competences

 Team work: Ability to establish and maintain good working relations with people from different national and cultural backgrounds. Practice of working in research and diagnostic teams, ensuring highest efficiency and contributing with creative approaches to find solutions.

# Organisational skills and competences

- Problem solving: I'm skilled in solving problems by taking initiatives and implementing a
  plan, adopting unexpected and alternative perspectives, based on my past experience,
  research literature and seeking advice from my colleagues.
- **Project management**: I manage my projects and workload with determination by setting priorities, planning and monitoring progress, contributing to research work groups. I am able to present data and results, creating graphics, databases, tables and illustrations.
- Supplies management: I managed lab supplies during my internship at the molecular and cellular biology laboratory. I am able to use wisely available facilities and materials.

#### Personal skills

• I am a tenacious, curious, enthusiastic and very motivated person. I am very organized person, reliable and characterized by dynamism and creativity.

#### Technical skills and competences

#### Cellular biology and biochemistry

Western blotting analysis SDS-Page Immunoprecipitation and Co-immunoprecipitation Wound healing assay

#### Molecular biology

Primers design
Quantitative real time PCR and results analysis
Agarose gel electrophoresis
Transient and stable transfection

#### Microscopy

Confocal microscopy
Phase contrast microscopy
Immunofluorescence signals quantization

#### Immunofluorescence

Immunofluorescence for transmembrane, nuclear and cytoplasmic proteins on cultured cells

#### Cell cultures

Adhesion cell culturing on plastic dishes or coverslips suspension cell culturing

**Optimization and Troubleshooting:** I have adapted and optimized a number of techniques to project needs and different situations.

#### Computer skills and competences

- Microscopy imaging: Zeiss software for confocal microscopy image acquisition, analysis
- Bioinformatics tools: genome and protein databases and basic tools
- Skilled in Microsoft Office and Adobe Photoshop CS5
  - Skilled in Image J

#### Personal interests and likes

- Sport
- Cooking
- Photography
- Travelling

**Driving license** 

Italian driving license. Category B vehicles.

### Additional informations

#### References

- Prof. Dr. MD. Lucio Nitsch <u>nitsch@unina.it</u>
- Dr. Gaetano Calì <u>q.cali@ieos.cnr.it</u>
- Dr. Anna Mascia <u>a.mascia@ieos.cnr.it</u> Dr Simona Paladino <u>spaladin@unina.it</u>,

Thereby authorize the processing of my personal details.

#### **MEETINGS**

**1.** Giornate Scientifiche, Polo delle Scienze e Tecnologie per la Vita. Napoli 11-12 Dicembre 2008, Facoltà di Agraria:

Rac activity regulates polarity of thyroid epithelial cells. Margherita Santoriello, Nunzia Corteggio, Giovanni Amato, Maria Nitti, Gaetano Cali, Corrado Garbi, Lucio Nitsch.

- 2. FISV 2009, 11th annual congress. Riva del Garda 23-25 September 2009:
- **2.1**. A constitutively active Rac impairs the acquisition of epithelial cell polarity Margherita Santoriello, Annunziata Corteggio, Maria Nitti, Anna Mascia, Virginia D'Oriano, Gaetano Calì, Mario Chiariello, Simona Paladino, Lucio Nitsch, Corrado Garbi.
- **2.2.** *Membrane Association of Rac and E-Cadherin in FRT Thyroid Epithelial Cells* Annunziata Corteggio, Margherita Santoriello, Maria Nitti, Anna Mascia, Virginia D'Oriano, Gaetano Calì, Mario Chiariello, Simona Paladino, Corrado Garbi, Lucio Nitsch.
- **3. ABCD** (Associazione di Biologia Cellulare e del Differenziamento), "Traffico di Membrana Biogenesi degli Organelli" .Pontignano, 16-17 Aprile 2010 Pontignano.

Rac1 and the control of cell polarity in FRT thyroid epithelial cells Santoriello M., Corteggio A., Nitti M., Mascia A., Calì G., Paladino S.,R., Nitsch L., GarbiC.

- **4. ABCD** riunione nazionale dottorandi 10-12 giugno 2010 Gubbio *Membrane Association of Rac and E-Cadherin in FRT Thyroid. Epithelial Cells* Annunziata Corteggio, Margherita Santoriello, Maria Nitti, Anna Mascia, Gaetano Calì, Mario Chiariello, Simona Paladino, Corrado Garbi, Lucio Nitsch
- **5.** Giornate Scientifiche, Polo delle Scienze e Tecnologie per la Vita. Napoli 24-26 novembre 2010. Facoltà di Medicina e Chirurgia
- **6.** The EMBO meeting 2010-BARCELLONA 4-7 settembre 2010 *Rac1 and the control of cell polarity in FRT thyroid epithelial cells* Santoriello M., Corteggio A., Nitti M., Mascia A., Calì G., Paladino S., Nitsch L., Garbi C.
- **7. ABCD** (Associazione di Biologia Cellulare e del Differenziamento), "Traffico di Membrana Biogenesi degli Organelli" Ravenna, 8-10 settembre 2011.

Rac1 controls cell polarity in FRT thyroid epithelial cells M.Nitti1, M Santoriello1A.Corteggio1, A. Mascia2, G. Calì 2, S. Paladino1, L. Nitsch1, C. Garbi 1

- **8. ABCD** riunione nazionale dottorandi 20-22 ottobre 2011 Gubbio *Rac1 controls cell polarity in FRT thyroid epithelial cells* M.Nitti1, M.Santoriello1A.Corteggio1 ,A. Mascia2, G. Calì 2, S. Paladino1, L. Nitsch1, C. Garbi 1
- 9. **ABCD** (Associazione di Biologia Cellulare e del Differenziamento), **Membrane Traff icking and Organelle Biogenesis meet ing (MTOB)** PESARO, 4-5 APRILE 2 014