



TO MAGNIFICO RETTORE OF UNIVERSITA' DEGLI STUDI DI MILANO

ID CODE 4768

I the undersigned asks to participate in the public selection, for qualifications and examinations, for the awarding of a type B fellowship at **Dipartimento di Biotecnologie Mediche e Medicina Traslazionale (BIOMETRA)**

Scientist- in - charge: Prof. ELENA BATTAGLIOLI

CHIARA FORASTIERI

CURRICULUM VITAE

PERSONAL INFORMATION

|               |                   |
|---------------|-------------------|
| Surname       | <b>FORASTIERI</b> |
| Name          | <b>CHIARA</b>     |
| Date of birth | <b>24/02/1993</b> |

PRESENT OCCUPATION

|             |   |
|-------------|---|
| Appointment | Structure                                       |
| PhD student | <b>University of Milan, BIOMETRA Department</b> |

EDUCATION AND TRAINING

| Degree                            | Course of studies  | University          | year of achievement of the degree |
|-----------------------------------|--|---------------------|-----------------------------------|
| Degree                            | <b>Biotecnologie mediche e medicina molecolare (D55, LM-9)</b> | University of Milan | <b>2017</b>                       |
| Specialization                    |  |                     |                                   |
| PhD                               |  |                     |                                   |
| Master                            |  |                     |                                   |
| Degree of medical specialization  |  |                     |                                   |
| Degree of European specialization |  |                     |                                   |
| Other                             |  |                     |                                   |



## REGISTRATION IN PROFESSIONAL ASSOCIATIONS

| Date of registration | Association | City |
|----------------------|-------------|------|
|                      |             |      |

## FOREIGN LANGUAGES

| Languages | level of knowledge |
|-----------|--------------------|
| Italian   | Native language    |
| English   | C1                 |

## AWARDS, ACKNOWLEDGEMENTS, SCHOLARSHIPS

| Year | Description of award   |
|------|--|
| 2018 | EPIGEN grant for EMBO Workshop "From Epigenome towards Epitranscriptome in Cell Fate Choice" (Capri 14-17 October, 2018) |

## TRAINING OR RESEARCH ACTIVITY

| TRAINING ACTIVITY   |
|---|
| March 2015 - July 2015:<br><br>Bachelor's thesis internship in the laboratory of Prof. V. Silani and Prof. A. Ratti (Istituto Auxologico Italiano, Cusano Milanino, Milan, Italy)<br><br>Research project: Methylation analysis of C9Orf72, a major causative gene of Amyotrophic Lateral Sclerosis (ALS), and its effect on gene expression in Italian ALS patients.   |
| November 2016 - October 2017<br><br>Master's thesis internship in the laboratory of Prof. E. Battaglioli (BIOMETRA Department, L.I.T.A. Segrate, Milan, Italy)<br><br>Research project: Characterization of SRFΔ5 an alternative splicing isoform of the transcription factor Serum Response Factor (SRF) in brain and implication of SRF/SRFΔ5 splicing balance in stress response and stress vulnerability. |
| Istituto di ricerche farmacologiche Mario Negri, Milan, Italy<br><br>- March 29-31 <sup>st</sup> , 2017 JAX Seminars: "Genetic drift - What it is and how to minimize its impact on your research" and "Guidelines for sizing experimental mouse colonies"  |
| Institute of Neuroscience CNR, Bergamo, Italy<br><br>- September 27 <sup>th</sup> , 2018 "Spotlight on cell biology"  |
| University of Milan, Milan, Italy<br>- September 10, 11 <sup>th</sup> , 2018 "Modern imaging techniques in biology"   |



- November 5,6<sup>th</sup>, 2018 "Neuroscienze e Psichiatria: quale presente e quale futuro?"

- March 2019 -June 2019 "Benessere dell'animale da laboratorio e animal care"

University of Milan, Milan, Italy: PhD courses

- July 16, 17<sup>th</sup>, 2020 "Translational potential of cell metabolism as new pharmacological target"

- February 19, 20<sup>th</sup>, 2019 "Basics of optics and optical microscopy"

- February 14, 15<sup>th</sup>, 2019 "Bioinformatics and Functional Genomics"

- January 16, 23<sup>rd</sup>, 2019 "Bioinformatics tools to study omic data"

- December 6, 11, 14<sup>th</sup>, 2018 "Biomedical Statistics 2"

#### RESEARCH ACTIVITY

October 1<sup>st</sup> , 2017 - Present (until November 30<sup>th</sup> , 2020)

PhD in Experimental Medicine and Medical Biotechnology (BIOMETRA Department, L.I.T.A. Segrate, Milan, Italy)

Coordinator: Prof. Massimo Locati

Supervisor: Prof. E. Battaglioli and Dr. Francesco Rusconi

Research project: "Role of LSD1 in aging- and stress- dependent epigenetic drift leading to depression and anxiety disorders."

#### PROJECT ACTIVITY

| Year | Project |
|------|---------|
|      |         |

#### PATENTS

|        |
|--------|
| Patent |
|        |

#### CONGRESSES AND SEMINARS

| Date                               | Title   | Place                    |
|------------------------------------|---|--------------------------|
| March 8 <sup>th</sup> , 2017       | Neuro-Nest (1° translational meeting Neuroscience Network at Statale)             | Milan, Italy             |
| December 4-6 <sup>th</sup> , 2017  | 6 <sup>th</sup> European Synapse Meeting  | Milan, Italy             |
| September 24 <sup>th</sup> , 2018  | IV Workshop BIOMETRA 2018   | Segrate, Milan, Italy    |
| October 14-17 <sup>th</sup> , 2018 | EMBO Workshop "From Epigenome towards Epitranscriptome in Cell Fate Choice"       | Capri, Naples, Italy     |
| May 7-10 <sup>th</sup> , 2019      | EMBO Workshop "Cell Biology of the Neuron: Polarity, Plasticity and Regeneration" | Heraklion, Crete, Greece |
| October 4-5 <sup>th</sup> , 2019   | XIX Meeting AIBG 2019   | Milan, Italy             |



## PUBLICATIONS

## Books

[title, place, publishing house, year ...]

## Articles in reviews

Gerosa L, Grillo B, Forastieri C, et al. SRF and SRFΔ5 Splicing Isoform Recruit Corepressor LSD1/KDM1A Modifying Structural Neuroplasticity and Environmental Stress Response. *Mol Neurobiol.* 2020;57(1):393-407. doi:10.1007/s12035-019-01720-8

Longaretti, A, Forastieri, C, Gabaglio, M, Rubino, T, Battaglioli, E, Rusconi, F. Termination of acute stress response by the endocannabinoid system is regulated through lysine-specific demethylase 1-mediated transcriptional repression of 2-AG hydrolases ABHD6 and MAGL. *J Neurochem.* 2020; 00: 1-13. <https://doi.org/10.1111/jnc.15000>

Italia M, Forastieri C, Longaretti A, Battaglioli E, Rusconi F. Rationale, Relevance, and Limits of Stress-Induced Psychopathology in Rodents as Models for Psychiatry Research: An Introductory Overview. *Int J Mol Sci.* 2020 Oct 9;21(20):7455. doi: 10.3390/ijms21207455. PMID: 33050350; PMCID: PMC7589795.

Longaretti A, Forastieri C, Toffolo E, Caffino L, Locarno A, Misević iū té I, Marchesi E, Battistin M, Ponzoni L, Madaschi L, Cambria C, Bonasoni P, Sala M, Perrone D, Fumagalli F, Bassani S, Antonucci F, Tonini R, Francolini M, Battaglioli E and Rusconi F. LSD1, an environment and aging-sensitive negative modulator of the glutamatergic synapse. Accepted at *Neurobiology of Stress* (November 2020)

## Congress proceedings

Neuro-Nest (1° translational meeting Neuroscience Network at Statale) March 8<sup>th</sup>, 2017

New strategies to target hyper-excitability in Rett syndrome.

(Grillo B, Longaretti A, Forastieri C, Toffolo E, Ponzoni L, Sala M, Rusconi F, Battaglioli E)

6<sup>th</sup> European Synapse Meeting, Milan, Italy December 4-6<sup>th</sup>, 2017

Functional interplay between LSD1 and SRF modulates stress response in the mammalian brain.

(Rusconi F, Grillo B, Forastieri C, Longaretti A, Toffolo E, Gerosa L, Passafaro M, Battaglioli E)

IV Workshop BIOMETRA 2018, Segrate, Milan, Italy September 24<sup>th</sup>, 2018

Stress-induced LSD1 and SRF modulation and their potential protective role towards neuropsychiatric disorders.

(Forastieri C, Grillo B, Longaretti A, Monti L, Toffolo E, Francesco Rusconi, Elena Battaglioli)

## CHARACTER: SELECTED SPEAKER

EMBO Workshop, Capri, Naples, Italy October 14-17<sup>th</sup>, 2018

Stress-induced LSD1 and SRF modulation and their potential protective role towards neuropsychiatric disorders.

(Forastieri C, Grillo B, Longaretti A, Monti L, Toffolo E, Francesco Rusconi, Elena Battaglioli)

## CHARACTER: POSTER PRESENTATION

EMBO Workshop, Crete, Greece May 7-10<sup>th</sup>, 2019

New hypotheses of neuroLSD1 modulation: from lncRNA to cryptic exon inclusion.



(Forastieri C, Italia M, Longaretti A, Toffolo E, Rusconi F, Battaglioli E)

#### CHARACTER: POSTER PRESENTATION

V Workshop BIOMETRA 2019, Segrate, Milan, Italy

September 23<sup>rd</sup>, 2019

New hypotheses of neuroLSD1 modulation: from lncRNA to cryptic exon inclusion.

(Forastieri C, Italia M, Longaretti A, Toffolo E, Rusconi F, Battaglioli E)

#### CHARACTER: POSTER PRESENTATION

AIBG 2019 XIX Meeting dell'Associazione Italiana Biologia e Genetica

October 4-5<sup>th</sup>, 2019

New hypotheses of neuroLSD1 modulation: from lncRNA to cryptic exon inclusion.

(Forastieri C, Italia M, Longaretti A, Toffolo E, Rusconi F, Battaglioli E)

#### OTHER INFORMATION

##### Technical skills achieved:

- protein, genomic DNA and total RNA extraction from human and rodent specimen and from cell cultures;
- RNA analysis by RT-PCR, qRT-PCR and rQRT-PCR; agarose gel electrophoresis;
- bisulfite conversion;
- Sanger sequencing;
- chromatin immunoprecipitation (ChIP);
- DNA cloning;
- protein analysis by western blotting, Co-IP and immunofluorescence; evaluation of protein stability;
- cell lines cultivation; transfection; pharmacological treatments; inducible stable cell line generation;
- murine neural stem cells derivation, cultivation and differentiation;
- tissues dissection; murine hippocampal organotypic cultures;
- Golgi staining;
- rodent *in vivo* studies and behavioral tests;
- next generation sequencing by MiSeq platform (Illumina); high-throughput sequencing data analysis by Integrative Genomics Viewer (IGV)
- data processing and analysis by ImageJ, GraphPad Prism 8, DNASTAR Lasergene, GeneMapper

Soft skills achieved: mentoring; written communication; public speaking; team working; project management; time management.

#### TUTORING ACTIVITIES

- Tutor of 2 students during their master thesis internship
- Co-supervisor of 1 master thesis

#### TEACHING ACTIVITIES

- March 2020

Medical Biotechnologies and Molecular Medicine, University of Milan

Tutoring: virtual "practical activities" in the field of molecular biology to first year master students during Covid-19 lockdown

Main Professor: Prof. Marco Venturin (Genetic and molecular bases of diseases; 20 hrs)



- March 2018 and 2019

Medical Biotechnologies and Molecular Medicine, University of Milan

Tutoring: practical activities in the field of molecular biology to first year master students.

Main Professor: Prof. Marco Venturin (Genetic and molecular bases of diseases; 48 hrs)

- November 2018 and 2019

Medical Biotechnologies, University of Milan

Tutoring: practical activities in the field of cell biology to first year bachelor students.

Main Professor: Prof. Elena Battaglioli (Biology; 20 hrs)

- July 2018

CusMiBio "Una settimana da ricercatore 2018"

Tutoring to high school student (10 hrs)

- March-May 2018

International Medical School (IMS), University of Milan

Problem based learning lessons (PBL) in the field of molecular genetics to first year students of IMS.

Main Professor: Prof. Anna Marozzi (Cells Molecules and Genes 2; 8 hrs)

#### EXTRACURRICULAR ACTIVITIES

September 2013 - October 2017 Waitress (Lounge Bar Samoa, Concorezzo, MB, Italy)

September 2011 - June 2014 Rhythmic Gym Trainer (U.S.A. Casati Arcore 1946, Arcore, MB, Italy)

Declarations given in the present curriculum must be considered released according to art. 46 and 47 of DPR n. 445/2000.

The present curriculum does not contain confidential and legal information according to art. 4, paragraph 1, points d) and e) of D.Lgs. 30.06.2003 n. 196.

Place and date: Milan, 24/11/2020

SIGNATURE

Chiara Forastieri



UNIVERSITÀ DEGLI STUDI DI MILANO