CURRICULUM VITAE: VENTURA SELENA

PERSONAL INFORMATION

- Last name and name: **VENTURA SELENA**
- Date and place of birth: **26/07/1982 – BOLOGNA (BO)**
- E-mail: **selena.ventura@ior.it**
- Nationality: **ITALIAN**

EDUCATION

- **JUNE 2013**
  PhD in Oncology and Experimental Pathology obtained at the University of Bologna
  Experimental thesis: *" Induction of neural differentiation in Ewing sarcoma cells: identification of new molecular targets and new therapeutic opportunities"*
- **JULY 2008**
  Specialist degree in Biological and Health Sciences obtained at the University of Bologna (final grade: 107/110).
  Experimental thesis: *"Preclinical evaluation of therapeutic efficacy of c-SRC inhibitors in sarcomas"*
- **DECEMBER 2005**
  First level degree in Health Biology obtained at the University of Bologna (final grade: 99/110)
  Experimental thesis: *"Evaluation of metabolic effects and chemoprevention activity of Peach polyphenol in animal model"*
- **JULY 2001**
  Diploma in Computer engineering technician I.T.I.S "O.Belluzzi" Bologna

TRAINING

- **23-26th SEPTEMBER 2013**
  55th Annual Meeting of SIC (Italian Cancer Society) – Catanzaro, Italy
- **6-9th JUNE 2013**
  Paediatric Cancer Research at the INTERFACE Symposium and 25th Anniversary - Vienna, Austria
- **13th NOVEMBER 2012**
  3rd Luciferase Symposium Applications and Next Generation – Rome, Italy
- **1-4th OCTOBER 2012**
  54th Annual Meeting of SIC (Italian Cancer Society) – Bologna, Italy
- **14-16th MAY 2012**
  25th Annual Meeting of EMSOS (European MusculoSkeletal Oncology Society) - Bologna ,Italy
- **19-20th DECEMBER 2011**
  ENCCA Ewing Biology Sub-Network Meeting - Vienna, Austria
- **4-7th OCTOBER 2010**
  52nd Annual Meeting of SIC (Italian Cancer Society) – Rome, Italy
- **8-12th FEBRUARY 2010**
  XXIII course on musculo-skeletal pathology – Bologna, Italy
- **8-10th JULY 2009**
  Meeting Eurobonet RL4 - Helsinki, Finland

WORK EXPERIENCE

- **JANUARY 2013 – NOW**
  Post Doc AIRC fellow, CRS Development of Biomolecular Therapies, Laboratory of Experimental Oncology, Rizzoli Institute, Bologna. Project: *CD99 and EWS-FLI crosstalk is crucial in Ewing sarcoma malignancy: NFkB and MAPK role in neural differentiation*
- **JANUARY 2010 – DECEMBER 2012**
  PhD fellow, CRS Development of Biomolecular Therapies, Laboratory of Experimental Oncology, Rizzoli Institute, Bologna. Project: *Induction of neural differentiation in Ewing sarcoma cells: identification of new molecular targets and new therapeutic opportunities*
- **DECEMBER 2008 – NOVEMBER 2009**
  Research fellow, CRS Development of Biomolecular Therapies, Laboratory of Experimental Oncology, Rizzoli Institute, Bologna. Project: *Evaluation in vitro and in vivo effects of a dual PI3K-mTOR inhibitor (NVP-BEZ235) in the three most common musculoskeletal tumors, like osteosarcoma, Ewing sarcoma and rhabdomyosarcoma*
- **JULY 2008 – NOVEMBER 2008**
  Volunteer Researcher, CRS Development of Biomolecular Therapies, Laboratory of Experimental Oncology, Rizzoli Institute, Bologna.
- **JANUARY 2007 – JULY 2008**
  Intern student, CRS Development of Biomolecular Therapies, Laboratory of Experimental Oncology, Rizzoli Institute, Bologna. Project: *"Preclinical evaluation of therapeutic efficacy of c-SRC inhibitors in sarcomas"*
- **MAY 2005 – NOVEMBER 2008**
  Intern student, Laboratory of Molecular Toxicology, Department of Pharmacology, University of Bologna. Project: *"Evaluation of metabolic effects and chemoprevention activity of Peach polyphenol in animal model"*

TECHNICAL SKILLS

- *In vitro* culturing and maintenance of immortalized lines and primary cells in sterile conditions and determination of growth parameters by trypan blue vital cell count or by MTT assay
- Transfection systems (over expression, silencing by RNA and antisense oligonucleotides)
- Evaluation of cellular apoptosis on cell lines (annexin assay, morphological analysis of nuclei in fixed cells stained with Hoechst)
- Evaluation of cell cycle by BrdU assay
- Evaluation of cellular malignancy (anchorage-independence growth: soft-agar and polyhema; migration and adhesion assays)
- Evaluation of cellular response with simultaneous combined or sequential treatments with chemiotherapeutic agents
- Extraction and quantification of nucleic acids
- Analysis of gene expression by Real time PCR
- Analyses of protein expression by immunofluorescence in adhesion and in suspension (flow cytometry) and by western blotting
- Analyses of transcription factors activity by gene reporter assay

LANGUAGE SKILLS

- **English**
  good reading, writing ability and oral expression

INFORMATIC SKILLS

- Excellent knowledge of operating systems Windows (98/2000/XP/Vista), MAC-OS and good knowledge of operating system Linux
- Excellent knowledge of Microsoft Office: Word, Excel, PowerPoint, Access and Outlook
- Internet use for scientific search (browsers and protein and genomic database)
- Good knowledge of the Primer Express program to design primers for PCR
- Excellent knowledge of the database software FileMaker
- Good knowledge of SigmaPlot (Scientific Data Analysis and Graphing software) and SigmaStat (Statistical Analysis software)
- Good knowledge of Photoshop

FURTHER TRAINING

- **2nd MAY 2011 – 29th FEBRUARY 2012** Abroad training during PhD program under the supervision of Prof. Heinrich Kovar – Molecular Biology Lab - Children's Cancer Research Institute (CCRI) St.Anna Kinderkrebsforshung – Vienna, Austria.

AWARDS

- **JANUARY 2013 – DECEMBER 2015**
  FIRC fellowship from AIRC-FIRC Foundation
- **JANUARY 2010 – DECEMBER 2012**
  PhD fellowship from University of Bologna

ABSTRACTS AND ORAL COMMUNICATIONS

- Capristo M, Garofalo C, Contaldo C, Ventura S, Scotlandi K. **The selective inhibitor of IRS1/2 NT157 is effective against proliferation and migratory of osteosarcoma cell lines.** Abstract and Poster at the 55th Annual Meeting of SIC (Italian Cancer Society) . Catanzaro, Italy, September 23-26, 2013

- Marino MT, Manara MC, Grilli A, Serra M, Carè A, Mattia G, Picci P, Ferrari S, Scotlandi K, Ventura S. **miR-34a validation in Ewing sarcoma: validation of its role as prognostic marker in a highly homogenous series of patients treated at Rizzoli Institute** Abstract and Oral Communication at Paediatric Cancer Research at the INTERFACE Symposium and 25th Anniversary. Vienna, Austria, June 6-9, 2013

- Ventura S, Manara MC, Guerzoni C, Aryee D, Kovar H, Picci P, Scotlandi K. **Transcriptional factor NF-kB drives neural differentiation of Ewing sarcoma cells through CD99-dependent regulation** Abstract and Poster at Paediatric Cancer Research at the INTERFACE Symposium and 25th Anniversary. Vienna, Austria, June 6-9, 2013

- Ventura S, Manara MC, Guerzoni C, Aryee D, Kovar H, Picci P, Scotlandi K. **CD99-dependent regulation of NFkB drives neural differentiation of Ewing sarcoma cells** Abstract and Poster at the 54th Annual Meeting of SIC (Italian Cancer Society) . Bologna, Italy, October 1-4, 2012

- Ventura S, Nakatani F, Ferracin M, Negrini M, Picci P, Scotlandi K. **Prognostic value of MicroRNA expression in Ewing's family tumours** Abstract and Poster at the 52nd Annual Meeting of SIC (Italian Cancer Society) . Rome, Italy, October 4-7, 2010

- Ventura S, Manara MC, Nicoletti G, Landuzzi L, Lollini PL, Maira SM, Garcia-Echeverria C, Garofalo C, Guerzoni C, Picci P, Scotlandi K. **The new dual PI3K/mTOR inhibitor NVP-BEZ235 as a new therapeutic option for sarcomas.** Abstract and Oral Communication at the Meeting Eurobonet RL4. Helsinki, Finland, July 9-10, 2009

PUBLICATIONS

- Kovar H, Alonso J, Aman P, Aryee DN, Ban J, Burchill SA, Burdach S, De Alava E, Delattre O, Dirksen U, Fourtouna A, Fulda S, Helman LJ, Herrero-Martin D, Hogendoorn PC, Kontny U, Lawlor ER, Lessnick SL, Llombart-Bosch A, Metzler M, Moriggl R, Niedan S, Potratz J, Redini F, Richter GH, Riedmann LT, Rossig C, Schäfer BW, Schwentner R, Scotlandi K, Sorensen PH, Staege MS, Tirode F, Toretsky J, **Ventura S**, Eggert A, Ladenstein R. **The first European interdisciplinary ewing sarcoma research summit.** Front Oncol. 2012;2:54. Epub 2012 May 29.

- Nakatani F, Ferracin M, Manara MC, **Ventura S**, Del Monaco V, Ferrari S, Alberghini M, Grilli A, Knuutila S, Schaefer KL, Mattia G, Negrini M, Picci P, Serra M, Scotlandi K. **miR-34a predicts survival of Ewing's sarcoma patients and directly influences cell chemo-sensitivity and malignancy.** J Pathol. 2012 Apr;226(5):796-805. doi: 10.1002/path.3007.

- Scotlandi K, Manara MC, Serra M, Marino MT, **Ventura S**, Garofalo C, Alberghini M, Magagnoli G, Ferrari S, Lopez-Guerrero JA, Llombard-Bosch A, Picci P. **Expression of insulin-like growth factor system components in Ewing's sarcoma and their association with survival.** Eur J Cancer. 2011 May;47(8):1258-66. Epub 2011 Feb 21.

- Manara MC, Nicoletti G, Zambelli D, **Ventura S**, Guerzoni C, Landuzzi L, Lollini PL, Maira SM, Garcia-Echeverria C, Mercuri M, Picci P, Scotlandi K. **NVP-BEZ235 as a new therapeutic option for sarcomas.** Clin Cancer Res. 2010 Jan 15;16(2):530-40. Epub 2010 Jan 12.

REFERENCES

- Dr. Katia Scotlandi
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