

Silvia Onesti - Curriculum Vitae

Higher Education

- 1982-1987 Laurea in Chimica (Chemistry Master degree), University of Pavia: 110/110 cum laude. Alumnus of Collegio Ghislieri.
- 1987-1990 PhD in Biophysics, Imperial College London, Physics Department, under the supervision of Peter Brick & David Blow.

Appointments

- 1991-1994 Post-doctoral research fellow in Prof. David Blow's group at Imperial College.
- 1994-1995 CNR Research Scientist, University of Pavia.
- 1995-2001 Lecturer, Department of Physics, Imperial College.
- 2001-2004 Lecturer, Department of Biological Sciences, Imperial College.
- 2004-2008 Senior Lecturer, Department of Biological Sciences, Imperial College.
- 2008-present Teaching Structural Biology at SISSA
- 2009-present Head of Structural Biology, Sincrotrone Trieste

<http://www.elettra.trieste.it/PEOPLE/index.php?n=SilviaOnesti.HomePage>

<http://www.elettra.trieste.it/labs/structural-biology>

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Other activities

- EMBO Short Term Fellowship to carry out a project at l'École Polytechnique (Palaiseau, Paris) in collaboration with Sylvain Blanquet and Pierre Plateau (September-November 1996).
- Member of the Biological Structures Group Committee of the British Crystallographic Association (BSG-BCA), 1997-2000.
- Maître de conférences at the École Polytechnique (Palaiseau, Paris), March-July 1999.
- Chairman of the of INSTRUCT Italian Working Group on Complementary Techniques (<http://www.cerm.unifi.it/about-cerm/italian-users-of-instruct>).
- Member of the Editorial Board of Scientific Reports, Nature Publishing Group.
- Member of the Commission on Biological Macromolecules (CBM) of the International Union of Crystallography (<http://www.iucr.org/iucr/commissions/cbm.html>).
- Invited by Treccani Cultura to give a *lectio magistralis* in Rome, 14th March 2017 (http://www.treccani.it/webtv/videos/Conv_Onesti_Silvia.html).

Organization of Conferences and Workshops

- Winter meeting of the Biological Structure Groups of the BCA on "Protein-Nucleic Acids Interactions", London (UK), December 1998.
- Microsymposium "Enzymes and allostery" for the XXth Congress and General Assembly of the International Union of Crystallography, Florence (Italy), August 2005 (with A. Wlodaver).
- Workshop on "Emerging application of synchrotron radiation to the life sciences", Trieste (Italy), 25-26 November 2008.
- Scientific Committee of the meeting "Bio&medical sciences with new light sources", British Embassy, Rome (Italy), 12-13 March 2009.
- Workshop "Thermodynamically unstable proteins: chance or necessity?", Trieste (Italy), 14-16 Dec 2009.
- Workshop "R3: DNA replication, recombination and repair", San Miniato (Pisa, Italy), 30 June - 2 July 2010.
- ICTP Advanced School "From genes to atomic structures: an introduction to synchrotron-based structural biology". Trieste (Italy), 23-27 April 2012.
- ICTP Advanced School "Synchrotron radiation techniques and nanotechnology: a synergic approach to life sciences and medicine". iThemba Laboratories, Cape Town (South Africa), 11-22 November 2013.
- Member of the Scientific Committee for the Conference "Proteine 2014", to be held in Padua (Italy) 31st March - 1st April 2014.
- Member of the 2014 International Programme Committee (IPC) for the organization of the XXIII IUCr Congress and General Assembly, to be held in Montreal (Canada), 5-12 August 2014. (http://www.iucr2014.org/side_organization/international_program_committee_e.shtml).
- ICTP Advanced School "Structural Biology: using Synchrotron Radiation to Visualise Biological Molecules" to be held in Trieste (Italy), 15-19th December 2014.
- Member of the Programme Committee for the organization of the meeting 2014: Crystal (cl-)Year to celebrate the International Year of Crystallography to be held in Turin (Italy), 16-17 October 2014.
- Workshop "New synchrotron radiation and optical techniques for nanoscale microscopy of biological systems: from single molecules to cells", Trieste, 9-10 December 2015.

ICTP Advanced School "Imaging, Structural and Single Molecule Approaches to Biology: Understanding Life at Higher Resolution". Jawaharla Nehru Centre for Advanced Scientific Research (JNCASR), to be held in Bangalore (India), 4-15 January 2016.

ICTP-IUCr-IUPAP school: "Laboratory and Synchrotron X-ray Crystallography: Application to Emerging Countries", held in Ziguinchor (Sénégal), 20 November - 2 December 2017.

INSTRUCT course: "Advanced methods for the integration of diverse structural data", to be held in Florence, 19-25 February 2018.

Selected publications

*corresponding author

Ali Shah M., Ullah R., De March M., Salahuddin Shaha M., Ismata F., Habib M., Iqbala M., **Onesti S.**, Rahman M.* (2017). Overexpression and characterization of the 100K protein of Fowl adenovirus-4 as an antiviral target. *Virus Research* [Epub ahead of print]

Deka J., Mojumdar A., Parisse P., **Onesti S.*** and Casalis L.* (2017). DNA-conjugated gold nanoparticles based colorimetric assay to assess helicase activity: a novel route to screen potential helicase inhibitors. *Scientific Rep.* 7, 44358.

De March M., Merino N., Barrera-Vilarmau S., Crehuet R., **Onesti S.***, Blanco F.S.* and De Biasio A*. (2017). *Nature Commun.* 8, 13935.

Carroni M., De March M., Medagli B., Krastanova I., Taylor I.A., Amenitsch H., Araki H., Pisani F.M., Patwardhan A. and **Onesti S.*** (2017). *Scientific Rep.* 7, 40188.

Mojumdar A., De March M., Marino F. and **Onesti S.*** (2017). *J. Biol. Chem.* 292, 4176-4184

Ormaza G., Medagli B., Rodríguez J.A., Ibáñez de Opakua A., Merino N., Villate M., **Onesti S.** and Blanco F.J. (2016). *FEBS Letters*. [Epub ahead of print]

Marino F., Mojumdar A., Zucchelli C. Bhardwaj A., Buratti E., Vindigni A., Musco G. and **Onesti S.*** (2016). *Scientific Rep.* 6, 21501.

Medagli B., De Crescenzo P., De March M. and **Onesti S.*** (2016). Chapter in book: "The initiation of DNA replication in eukaryotes", Ed. D. Kaplan, Springer.

Napolitano L.M.R., Bisha I., De March M., Marchesi A., Arcangeletti M., Demitri N., Mazzolini M., Rodriguez A., Magistrato A., **Onesti S.***, Laio A.* and Torre V.* (2015). *Proc. Natl. Acad. Sci. USA.* 112, E3619-E3628.

Lausi A.*, Polentarutti M., **Onesti S.**, Plaisier J.R., Busetto E., Bais G., Barba L., Cassetta A., Campi G., Lamba D., Pifferi A., Mande S.C., Sarma D.D., Sharma S.M., Paolucci G. (2015). *Eur. Phys. J. Plus* 130: 43.

Wiedemann C., Ohlenschläger O., Medagli B., **Onesti S.** and Görlach M. (2014). *Biomol NMR Assign.* 8, 357-360.

Marino F., Vindigni A. and **Onesti S.*** (2013). *Biophys. Chem.* 177-178, 34-39.

Onesti S. and MacNeill S.A.* (2013). *Chromosoma* 122, 47-53.

Medagli B. and **Onesti S.*** (2013). *Adv. Exp. Med. Biol.* 767, 75-95. Chapter in book: "DNA helicases", Ed. M. Spies, Springer.

Krastanova I., Sannino V., Amenitsch H., Gileadi O., Pisani F.M. and **Onesti S.*** (2012). *J. Biol. Chem.* 287, 4121-4128.

Costa A. and **Onesti S.*** (2009). *Crit. Rev. Biochem. Mol. Biol.* 44, 326-342.

Bae B., Chen Y.-H., Costa A., **Onesti S.**, Brunzelle J.S., Lin Y., Cann I.K.O. and Nair S.K. (2009). *Structure* 17, 211-222.

Jenkinson, E.R., Costa A., Leech, A.P., Patwardhan A., **Onesti S.** and Chong, J.P.* (2009). *J. Biol. Chem.* 284, 5654-5661.

Sampath V., Balakrishnan B., Verma-Gaur J., Onesti S. and Sadhale P.P.* (2008). *J. Biol. Chem.* 283, 3923-3931.

Costa A. and **Onesti S.*** (2008). *Biochem. Soc Trans.* 36, 136-140.

Costa A., Van Dujinen G., Medagli B., Chong J., Sakakibara N., Kelman Z., Nair S.K., Patwardhan A. and **Onesti S.*** (2008). *EMBO J.* 27, 2250-2258.

Costa A., Pape T., van Heel M., Brick P., Patwardhan A. and **Onesti, S.*** (2006). *Nucleic Acid Res.* 34, 5829-5838.

Costa A., Pape T., van Heel M., Brick P., Patwardhan A. and **Onesti, S.*** (2006) *J. Struct. Biol.*, 156, 210-219.

Paraskevopoulou C., Fairhurst S.A., Lowe D.J., Brick P. and **Onesti, S.*** (2006). *Mol. Microbiol.* 59, 795-806.

Palmieri G., Casbarra A., Fiume I., Catara G., Capasso A., Marino G., **Onesti S.** and Rossi M. (2006). *Extremophiles*, 10, 393-402.

Meka H., Werner F., Cordell, S., **Onesti, S.*** and Brick P.* (2005). *Nucleic Acid Res.* 33, 6435-6444.

Pucci B. De Felice M., Rossi M., **Onesti S.*** & Pisani F.* (2004). *J. Biol. Chem.* 279, 49222-49228.

Pape T., Meka H., Chen S., Vicentini G., van Heel M. and **Onesti, S.*** (2003). *EMBO Rep.* 4, 1079-1083.

Meka H., Daoust G., Bourke-Arnvig K., Werner F., Brick P. and **Onesti, S.*** (2003). *Nucleic Acid Res.* 31, 4391-4400.

Todone F., Brick P., Werner, F., Weinzierl R.O.J and **Onesti, S.*** (2001). *Mol. Cell*, 8, 1137-1143.

Todone F., Weinzierl R.O.J, Brick P. and **Onesti, S.*** (2000). *Proc. Natl. Acad. Sci. USA*, 97, 6306-6310.

