Università degli Studi di Roma "Tor Vergata"

CURRICULUM DIDATTICO-SCIENTIFICO DEL PROF. LORENZO STELLA

DATI PERSONALI
Nome e Cognome: Lorenzo Stella
Luogo e data di nascita: Roma 24/9/1968

***ATTUALE POSIZIONE*:** Professore Associato di Chimica Fisica
Dipartimento: Dipartimento di Scienze e Tecnologie Chimiche
Indirizzo: via della Ricerca Scientifica, 00133 Roma
Numero studio: 0672594463
E-mail: stella@stc.uniroma2.it
Orario ricevimento: tutti i giorni, previa appuntamento
Settore scientifico-disciplinare: CHIM/02

ATTIVITA' DIDATTICA - SCIENTIFICA

Titoli accademici e di studio:
1997: Dottorato in Biofisica, Università di Roma "La Sapienza".
1993: Laurea in Fisica, con lode, Università di Roma "La Sapienza".

Formazione post-laurea presso istituzioni italiane ed estere ed incarichi professionali (didattici e di ricerca):
1/11/2006-oggi: **Professore Associato** di Chimica Fisica, Università di Roma Tor Vergata.
5/2/2001-31/10/2006: **Ricercatore** di Chimica Fisica, Università di Roma Tor Vergata.
4/11/1996-4/2/2001: **Funzionario Tecnico**, Università di Roma Tor Vergata.
10/1993-8/1994: **Research associate**, Department of Biochemistry, Swiss Federal Institute of Technology, Supervisore: Prof. G. Semenza.
11/1992-7/1993: **Visiting scientist**, Laboratory for Fluorescence Dynamics, Department of Physics, University of Illinois, Supervisore: Prof. E. Gratton.

Finanziamenti e premi ricevuti per attività di ricerca:
- 2017-2019 Responsabile del progetto AIRC "*Allosteric modulation of protein tyrosine phosphatase SHP2 as a novel strategy against hematologic malignancies*"
- 2017-2019 Coordinatore locale del progetto PRIN *"Tumor-targeting peptidomimetics: synthesis and bio-medical applications"*.
- Premio "Lucio Senatore" della Società Italiana di Chimica.
- Finalista per lo Zervas Award della European Peptide Society.
- Best Paper Award 2011 del Journal of Peptide Science.
- "Sentinels of Science" Award (Chimica), Publons
- Abilitazione a Professore Ordinario in Chimica Fisica, Biochimica e Fisica Applicata.
- Membro del comitato editoriale del Journal of Molecular Structure
- Membro del comitato editoriale del Journal of Peptide Science

Attività di ricerca: 15 pubblicazioni selezionate

1. F. Savini, S. Bobone, D. Roversi, M. Luisa Mangoni and **L. Stella**. *From liposomes to cells: filling the gap between physicochemical and microbiological studies of the activity and selectivity of host-defense peptides.* Biopolymers, DOI: 10.1002/pep2.24041.
2. F. Savini, V. Luca, A. Bocedi, R. Massoud, Y. Park, M. L. Mangoni, **L. Stella**. *Cell-Density Dependence of Host-Defense Peptide Activity and Selectivity in the Presence of Host Cells.* ACS Chem. Biol., 2017, 12: 52–56.
3. F. Kortüm, V. Caputo, C. K. Bauer, **L. Stella**, A. Ciolfi, M. Alawi, G. Bocchinfuso, E. Flex, S. Paolacci, M. L. Dentici, P. Grammatico, G. C. Korenke, V. Leuzzi, D. Mowat, L. D. V. Nair, T. T. M. Nguyen, P. Thierry, S. M. White, B. Dallapiccola, A. Pizzuti, P. M. Campeau, M. Tartaglia, K. Kutsche. *Mutations in KCNH1 and ATP6V1B2 cause Zimmermann-Laband syndrome.* Nat. Genet., 2015, 47: 661–667.
4. Farrotti, G. Bocchinfuso, A. Palleschi, N. Rosato, B. Bechinger, **L. Stella**. *Molecular dynamics methods to predict peptide location in membranes: LAH4 as a stringent test case*. Biochim. Biophys. Acta, 2015, 1848: 581–592.
5. D. Roversi, V. Luca, S. Aureli, Y. Park, M. L. Mangoni, **L. Stella**. *How many antimicrobial peptide molecules kill a bacterium? The case of PMAP–23.* ACS Chem. Biol., 2014, 9: 2003−2007.
6. V. Cordeddu, B. Redeker, E. Stellacci, A. Jongejan, A. Fragale, T. E. J. Bradley, M. Anselmi, A. Ciolfi, S. Cecchetti, V. Muto, L. Bernardini, M. Azage, D. R. Carvalho, A. J. Espay, A. Male, A.-M. Molin, R. Posmyk, C. Battisti, A. Casertano, D. Melis, A. van Kampen, F. Baas, M. M. Mannnens, G. Bocchinfuso, **L. Stella**, M. Tartaglia, R. C. Hennekam. *Mutations in ZBTB20 cause Primrose syndrome*. Nat. Genet., 2014, 46: 815–817.
7. S. Bobone, G. Bocchinfuso, Y. Park, A. Palleschi, K. -S. Hahm, and **L. Stella**. *The importance of being kinked: role of Pro residues in the selectivity of the helical antimicrobial peptide P5.* J. Pept. Sci., 2013, 19: 758–769.
8. S. Bobone, Y. Gerelli, M. De Zotti, G. Bocchinfuso, A. Farrotti, B. Orioni, F. Sebastiani, E. Latter, J. Penfold, R. Senesi, F. Formaggio, A. Palleschi, C. Toniolo, G. Fragneto, **L. Stella**. *Membrane thickness and the mechanism of action of the short peptaibol trichogin GA IV.* Biochim. Biophys. Acta, 2013, 1828: 1013–1024.
9. S. Bobone, D. Roversi, L. Giordano, M. de Zotti, F. Formaggio, C. Toniolo, and **L. Stella**. *The lipid dependence of antimicrobial peptide activity is an unreliable experimental test for different pore models.* Biochemistry (*Rapid Reports*) 2012, 51: 10124-10126.
10. M. van de Weert and **L. Stella**. *Fluorescence quenching and ligand binding: a critical discussion of a popular methodology.* J. Mol. Struct., 2011, 998: 144-150.
11. G. Bocchinfuso, S. Bobone, A. Palleschi, **L. Stella**. *Fluorescence spectroscopy and molecular dynamics simulations in studies on the mechanism of membrane destabilization by antimicrobial peptides.* Cell. Mol. Life Sci., 2011, 68:2281-2301.
12. C. Mazzuca, B. Orioni, M. Coletta, F. Formaggio, C. Toniolo,G. Maulucci, M. De Spirito, B. Pispisa, M. Venanzi and **L. Stella** *Fluctuations and the rate-limiting step of peptide-induced membrane leakage.* Biophys. J., 2010, 99: 1791-1800.
13. B. Orioni, G. Bocchinfuso, J. Y. Kim, A. Palleschi, G. Grande, S. Bobone, Y. Park, J. I. Kim, K. S. Hahm and **L. Stella**. *Membrane perturbation by the antimicrobial peptide PMAP-23: a fluorescence and molecular dynamics study.* Biochim. Biophys. Acta, 2009, 1788: 1523-1533.
14. G. Bocchinfuso, A. Palleschi, B. Orioni, G. Grande, F. Formaggio, C. Toniolo, Y. Park, K.S. Hahm and **L. Stella**. *Different mechanisms of action of antimicrobial peptides: insights from fluorescence spectroscopy experiments and molecular dynamics simulations.* J. Pept. Sci. 2009, 15: 550-558.
15. **L. Stella**, A. L. Capodilupo, M. Bietti, *A reassessment of the association between azulene and [60]fullerene. Possible pitfalls in the determination of binding constants through fluorescence spectroscopy.* Chem. Commun., 2008, 4744-474.

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ACADEMIC AND SCIENTIFIC CURRICULUM OF PROF. LORENZO STELLA

PERSONAL DATA
Name and Surname: Lorenzo Stella
Place and date of birth: July 24th, 1968

***CURRENT POSITION*:** Associate Professor in Phys. Chemistry
Department: Chemical Science and Technologies
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Consulting hours: every day, by arranging an appointment
Italian Ministry of Education Academic-Scientific sector: CHIM/02

SCIENTIFIC AND DIDACTIC ACTIVITY
Education and academic positions:
1997: PhD degree in biophysics, University of Rome "La Sapienza".
1993: "Laurea" degree in physics, University of Rome "La Sapienza". Mark: 110/110 cum laude.
Professional and didactic activities in Italian and Foreign Institutions:
1/11/2006-present: **Associate professor** of Physical Chemistry, University of Rome Tor Vergata, Italy.
5/2/2001-31/10/2006: **Research assistant professor** (Ricercatore) in Physical Chemistry, University of Rome Tor Vergata, Italy.
4/11/1996-4/2/2001: **Post doctoral fellow** (Tecnico Laureato), University of Rome Tor Vergata, Italy.
10/1993-8/1994: **Research associate**, Department of Biochemistry, Swiss Federal Institute of Technology, Advisor: Prof. G. Semenza.
11/1992-7/1993: **Visiting scientist**, Laboratory for Fluorescence Dynamics, Department of Physics, University of Illinois, Advisor: Prof. E. Gratton.
Awards and funding:

- 2017-2019 Principal investigator in the AIRC investigator grant "*Allosteric modulation of protein tyrosine phosphatase SHP2 as a novel strategy against hematologic malignancies*"
- 2017-2019 Research Unit Coordinator for the Research Project of National Interest "*Tumor-targeting peptidomimetics: synthesis and bio-medical applications*".
- "Lucio Senatore" award of the Italian Society of Chemistry.
- Finalist for the Zervas Award of the European Peptide Society.
- Best Paper Award 2011 of the Journal of Peptide Science.
- "Sentinels of Science" Award in the field of Chemistry, awarded by Publons
- National qualification ("*abilitazione*") to full professor in Physical Chemistry, in Biochemistry and in Applied Physics.
- Member of the editorial board of Journal of Molecular Structure
- Member of the advisory editorial board of Journal of Peptide Science

Research activity: 15 most significant publications

1. F. Savini, S. Bobone, D. Roversi, M. Luisa Mangoni and **L. Stella**. *From liposomes to cells: filling the gap between physicochemical and microbiological studies of the activity and selectivity of host-defense peptides.* Biopolymers, DOI: 10.1002/pep2.24041.
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15. **L. Stella**, A. L. Capodilupo, M. Bietti, *A reassessment of the association between azulene and [60]fullerene. Possible pitfalls in the determination of binding constants through fluorescence spectroscopy.* Chem. Commun., 2008, 4744-4746.