

CURRICULUM VITAE

ANTONELLA BANDIERA, PhD

Born in Trieste, Feb 11, 1965



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EDUCATION

13/10/1995 PhD in Biochemistry

Dipartimento di Biochimica, Biofisica e Chimica delle Macromolecole, University of Trieste, Italy, thesis discussed at Dipartimento di Scienze Biochimiche, University of Rome, "La Sapienza", Italy

2/12/1989 Master Degree in Biology

Facoltà di Scienze Matematiche, Fisiche e Naturali, University of Trieste, Italy

CURRENT POSITION

2006 – present Assistant Professor, SSD BIO11/ (Molecular Biology/E05 Biological Sciences)

Dipartimento di Scienze della Vita, University of Trieste, Italy

PREVIOUS POSITIONS

1997 – 2006 Assistant Professor, SSD BIO10 (Biochemistry/E05 Biological Sciences)

Dipartimento di Biochimica, Biofisica e Chimica delle Macromolecole, University of Trieste, Italy

1995-1997 PostDoc research Fellow in Biochemistry

Dipartimento di Biochimica, Biofisica e Chimica delle Macromolecole, University of Trieste, Italy

1994 – 1995 Research Assistant in Biochemistry, Biophysics group

School of Biological Sciences, University of Portsmouth, UK

PATENTS

16/11/2016 EP 2419442 B1 "3D matrices of human elastin-like polypeptides and method of preparation thereof" owned by University of Trieste

16/04/2009 Priority: Italy - No. PD2009A000092 "Matrici 3D di polipeptidi elastina umano-simili e metodo di preparazione delle stesse", inventor A. Bandiera

FELLOWSHIPS AND AWARDS

2018 CERIC-ERIC ELETTRA –Sincrotrone Supporting fellowship, at Department of Surface and Plasma Science, Faculty of Mathematics and Physics, Charles University, Prague, Czech Republic

2012 CSACS (Centre for Self-Assembled Chemical Structures), Visiting fellowship, at McGill (prof. M. Cerruti's Lab), Montreal, Canada

2011 MAE - Joint Scientific and Technological Research Projects, Italy – Quebec, Visiting fellowship, at Laval University (prof. D. Mantovani's Lab), Quebec City, Canada

2006 Start Cup - Business Plan Competition Award, Trieste, Italy

TEACHING ACTIVITY (University of Trieste)

2014-present Laboratory of Molecular Biology, first level degree in Biological Sciences and Technologies,

2010-2014 Biomolecular Laboratory 1, Master degree in Biology

2002-2009 Molecular Biology- mod. C and Biochemistry- mod. D, Master degree in Biological Sciences

2001-2002 Recombinant DNA Technology and Biochemical Technology, Master degree in Biological Sciences

1997-1998 Molecular Biology, Lab Practice course, Master degree in Biological Sciences

SUPERVISION OF GRADUATE STUDENTS AND POSTDOCTORAL FELLOWS

1990-present supervisor of 3 Postdocs/ 2 PhD/ 2 ERASMUS students/more than 60 BSc/Master Students in Biological Sciences and Chemistry and Pharmaceutical Technology at Dipartimento di Scienze della Vita, University of Trieste, Italy

OTHER TEACHING ACTIVITY

2020 Scientific Advisory Board opponent member, International PhD course "Biomedical Investigation" University of Valladolid, Spain

2017 Scientific Advisory Board opponent member, International PhD course "Biomedical Investigation" University of Valladolid, Spain

2016 Scientific Advisory Board opponent member, International PhD course "Biomedical Investigation" University of Valladolid, Spain

2014 Scientific Advisory Board opponent member, Master course at School of Metallurgy and Materials, University of Birmingham, UK

2013 Scientific Advisory Board opponent member, PhD course "Agricultural Science and Biotechnology" University of Udine, Italy

2013 Scientific Advisory Board opponent member, PhD course in "Biorobotics" Scuola Superiore Sant'Anna di Studi Universitari e di Perfezionamento

REVIEWING ACTIVITY

2013- present Reviewer for several Scientific Journals of the like Biopolymers, Acta Biomaterialia, Biomaterials, Biomacromolecules, etc.

2020 Evaluator panel member, International School for Advanced Studies (ISAS), Trieste, Italy

2018 Reviewer and Evaluator of Basic Research, MIUR – REPRISE, Italy

2016 Scientific Project Evaluation, Research funding Programme, Université de Mons, Belgium,

- 2014** Scientific Project Evaluation, South African Medical Research Council, Self-Initiated Research Grants; Faculty of Health Sciences, University of Cape Town, South Africa
- 2013** MIUR, Futuro in Ricerca Project Evaluation
- 2012** Università degli Studi della Basilicata Area: 03 Scienze Chimiche, Bando Assegno di Ricerca

ORGANISATION OF SCIENTIFIC MEETINGS AND DISSEMINATION EVENTS

- Jun 13-17, 2022** Coordinator and Organiser of the I AIMed Summerschool “Strategies and Molecular Tools for Assessment of Antimicrobial Biomaterials”, Trieste, Italy
- Sep 24-26, 2021** Organizer of “HELP against Infections caused by Bacteria resistant to Antibiotics” at Trieste NEXT, X Edition, University of Trieste, Italy
- Sep 25-27, 2015** Co-organizer of “Methods for Muscular and Nerve Fibers regeneration” at Trieste NEXT, IV Edition, University of Trieste, Italy
- Jun 16-20, 2008** Member of the Organisation Committee of the SCI -Società Chimica Italiana-Congress “Dalla Conoscenza alle Strategie d’Intervento”, Porto S. Rocco, Muggia (Trieste), Italy

GRANTS

- Sep 2022 Aug 2025** local unit member of affiliated partner to spoke 2 in iNEST-Ecosistema INEST Interconnected Nord-Est Member of the Workprogramme Taskforce.
- Sep 2022-Aug 2025** “STOP- Surface Transfer of Pathogens” Project n. 101057961, HORIZON – RIA, Partner Team Leader.
- Jan 2020- Dec 2024** “AIMed - Antimicrobial Integrated Methodologies for orthopaedic applications” Project n. 861138, MSCA-ITN-2019 - Innovative Training Networks, Partner Team Leader.
- May 2018-May 2019** “Messa a punto di un materiale composito “intelligente” da impiegare come “bio-inchiostro” e stampabile in 3D” Project, Area Science Park - MADE IN TRIESTE
- Mar 2018-Dec 2019** Finanziamento delle attività base di ricerca (FFABR),
- Jun 2017-Jun 2019** collaboration with DOTT. DINO PALADIN company on “Ricerca e sviluppo di sensori innovativi per la salute” project - Regione Friuli Venezia Giulia/Rilancimpresa FVG – Riforma delle politiche industriali
- Jun 2009** Fondazione CRTrieste, scientific equipment contribution,
- Nov 2014-2020** “Polipeptidi biomimetici HELP: una strategia innovativa per la rigenerazione del tessuto muscolare” Project supported by Fondazione Beneficentia Stiftung,
- Apr-Jul 2008** SISTER-Liaison Office Project - evaluation activity, “Verifica delle proprietà di gelificazione dei biopolimeri basati sui motivi ripetuti dell’elastina umana, caratterizzazione degli idrogel da essi derivati e loro utilizzo quali supporti tridimensionali per colture cellulari”
- 2007** PRIN Project, “Progettazione ed espressione di polipeptidi elastino-simili (HELP, Human Elastin-Like Polypeptides) per la preparazione di matrici nanostrutturate.” Sep 2008- Sep 2010
- Aug-Nov 2006** SISTER-Liaison Office Project - evaluation activity, “Impiego di biopolimeri basati su motivi ripetuti dell’elastina umana in sistemi di monitoraggio e recupero ambientale”

MEMBERSHIPS OF SCIENTIFIC SOCIETIES

- 2021 – present** Member, “SIB Società Italiana di Biomateriali”
2021 – present Member, “ESB European Society of Biomaterials”
1996 – 2009 Member, “SIB - Società Italiana di Biochimica”

PROFESSIONAL SKILLS

1993, professional qualification to practice as a Biologist

Protein extractions from different kind of biological samples, chromatography purifications (HPLC, affinity, ion-exchange, etc.); SDS-PAGE electrophoresis; EMSA; western blot; ion-spray mass spectrometry; cell culture techniques; PCR; nucleic acids extraction; cDNA library construction and screening; phage and plasmid vectors cloning; southern and northern blot; recombinant protein expression and purification by prokaryotic systems; use of informatics tools for biomolecular data mining, immunofluorescence methods, bio-inspired synthetic genes design and expression, bioinspired biomaterial and 3D matrix preparation for cell growth.

SCIENTIFIC ACTIVITY

My research interest is focused on the production of customized non-natural protein polymers. Exploiting my expertise in recombinant DNA technology and protein expression in prokaryotic organisms I undertook the creation of artificial genes coding for bio-inspired polypeptides modeled after elastin. Repetitive artificial polypeptides based on the most structurally regular, entirely naturally occurring region of the human tropoelastin have been produced. These protein polymers named HELPs (Human Elastin-Like Polypeptides) show specific folding propensities, controlled composition and length. They retain several peculiar biophysical features of elastin as, for example, the reversible inverse phase transition, a process related to the variation in the aggregation state in response to temperature rise.

The functionality of these biopolymers can be even extended by addition of functional, bioactive domains, improving the potential of the resulting product. The smart nature of this class of compounds makes them attractive for many applications in the biomedical and biotechnological fields, in particular for biomaterial development. Their employment as smart coating agents or as basic components for realization of biomimetic scaffolds can be envisaged. A method of preparation of HELP-based 3D has already been patented (EP 2419442). Currently, HELPs are studied as carrier of antimicrobial peptides to produce them by an alternative route to chemical synthesis and to provide an innovative smart delivery platform.

MAJOR EXTERNAL COLLABORATIONS

- Prof. Artemis Stamboulis, Antimicrobial Peptides, University of Birmingham, Birmingham, UK
Prof. Albena Daskalova, Antimicrobial Surface Coating, IE-BAS, Sofia, Bulgaria
Prof. Angela Ivask, Antimicrobial activity of elastin-like carriers and derivatives, University of Tartu, Estonia
Prof. Maja Dutour Sikiric, Composites of Nanoparticles and Antimicrobial compounds, Ruder Boskovic Institute, Zagreb, HR
Prof. Daniela Kalafatovic, Bioactive Peptides, University of Rijeka, Rjeka, HR

Dr. Ovidio Catanzano, Nanoparticles & Drug Delivery, Istituto per i Polimeri, Compositi e Biomateriali, CNR, Pozzuoli, Napoli, Italy
Prof. Lisa Elviri, Biopolymers & 3D -printing, Università di Parma, Parma, Italy
Prof. M. Letizia Focarete, Electrospinning & Biomaterials, Università di Bologna, Bologna, Italy,
Prof. Gianni Ciofani, Bioengineering, Istituto Italiano di Tecnologia, Pontedera, Pisa, Italy
Prof. Marta Cerruti, Materials Engineering, McGill University, , Montreal, Canada
Prof. Francesca Boccafoschi, Biomaterials, Università del Piemonte Orientale, Novara Italy
Prof. Diego Mantovani, Bioengineering & Biomaterials, Université LAVAL, Laboratoire de Biomatériaux et Bioingénierie, Québec City, Canada

INVITED TALKS

- “Telomeric DNA binding properties of some proteins belonging to the hnRNP family” at R. Boskovic Institute, Zagreb (Croatia), Jan, 7th 2003
- “New engineered biomaterials obtained by recombinant DNA technology” at “Fidia Farmaceutici Spa” Padova (Italy), Jul 19th,2004
- “Human elastin hexapeptidic motif-based synthetic genes assembly for tunable artificial proteins production” at La Sapienza University, Rome, Italy, May, 27th 2005
- “Human Elastin-Like Polymers: an elastic perspective” at FEBS & 11th IUBMB Conference Athens (Greece), Jun 29th-Jul, 3rd 2008
- “3D Human Elastin-like based Matrices as Potential Drug Delivery System” at 7th Annual Congress of International Drug Discovery Science and Technology (IDDST), Shanghai (China) Oct 22nd-25th, 2009
- “Human Elastin-derived Biomimetic Coating Surface to Support Cell Growth” at the International Conference on Cellular and Molecular Biology (ICCM2010) Cape Town (South Africa) Jan 29th-31st, 2010
- “Surfaces engineering approaches for cell culture substrates using biomimetic Human Elastin-Like Polypeptides” at The Sixth European Elastin Meeting, Maratea (Italy), Jun 28th-Jul 2nd, 2010
- “HELP (Human Elastin-like Polypeptides)-based Advanced Biomaterials: Properties and Applications” at THERMEC 2011-7th International conference on Advanced Materials, Quebec City (Canada), Aug 1st-5th, 2011
- “HELP-based matrices for stimuli-responsive controlled release of bioactive compounds” at ISSIB 2013 – 4th International Symposium on Surface and Interface of Biomaterials, Roma, Sept 24th -28th, 2013
- “HELP: A smart platform for design and production of innovative biomedical devices” at Smart tools for caring: Nanotechnology meets medical challenges International Workshop, Pontedera, Italy March 2nd, 2018
- “Human elastin-like polypeptides: a new platform for biosensing” at 6th International Conference on Bio-Sensing Technology, Kuala Lumpur, June 16th - 19th, 2019
- “From Peptides to Biopolymers and from Biopolymers to Peptides: the Smart Antimicrobial Loop” at the Chemistry and Biology of Peptides Gordon Research Conference, Oxnard CA. USA, October 30th – November 4th, 2022.

“Antimicrobial capacity of elastin-like biopolymer-based thin-layer coatings” at the 6th Stevens Conference on Bacterial-Material Interactions, Hoboken, NJ, May 31st – June 1st, 2023
“The HELP platform: a smart tool for the production of bioactive peptidic domains” at the Peptide Chemistry Day Symposium, Zagreb HR, September 20th, 2023.
“Elastin inspired thermo-responsive sequence: a little HELP to develop multifunctional bioactive interfaces” at the Advanced Materials Lecture at the American Advanced Material Congress, Miami FL. USA, Feb 26th-Mar 1st, 2024.

PUBLICATIONS

Sist, P., Urbani, R., Tramer, F., Bandiera, A., Passamonti, S. (2025)
The HELP-UnaG fusion protein as a bilirubin biosensor: from theory to mature technological development
Molecules, *accepted for publication*

Colomina-Alfaro, L., Sist, P., Ivask, A., Raid, B., Ainelo, H., Shaalan, A., Di Silvio, L., Urbani, R., Stamboulis, A., Bandiera, A. (2024)
Comparison of the activity of two elastin-like recombinant carriers fused to the antimicrobial peptide indolicidin.
Int. J. Biol. Macromol., 283:137682. doi: 10.1016/j.ijbiomac.2024.137682.

Colomina-Alfaro, L., Sist, P., D'Andrea, P., Urbani, R., Marchesan, S., Stamboulis, A., Bandiera, A. (2024)
Materials derived from the human elastin-like polypeptide fusion with an antimicrobial peptide strongly promote cell adhesion.
J Mater Chem B. 12:8966-8976. doi: 10.1039/d4tb00319e.

Sist, P., Saeed, S., Tramer, F., Bandiera, A., Passamonti, S. (2024)
Standardized lab-scale production of the recombinant fusion protein HUG for the nanoscale analysis of bilirubin.
MethodsX. 13:103001. doi: 10.1016/j.mex.2024.103001.

Sist P., Tramer, F., Bandiera, A., Urbani, R., Redenšek Trampuž, S., Dolžan, V., Passamonti, S. (2023)
Nanoscale Bilirubin Analysis in Translational Research and Precision Medicine by the Recombinant Protein HUG
Int. J. Mol. Sci., 24, 16289. doi: 10.3390/ijms242216289.

Bandiera, A., Colomina - Alfaro, L., Sist, P., Gomez d’Ayala, G., Zuppardi, F., Cerruti, P., Catanzano, O., Passamonti, S., Urbani, R., (2023)
Physico-chemical characterization of a biomimetic, elastin inspired polypeptide with enhanced thermo-responsive properties and improved cell adhesion
Biomacromolecules, Oct 27, doi: 10.1021/acs.biomac.3c00782. Online ahead of print

Colomina-Alfaro, L., Sist, P., Marchesan, S., Urbani, R., Stamboulis, A., Bandiera, A. (2023)
A versatile elastin-like carrier for bioactive antimicrobial peptide production and delivery
Macromol Biosci. Sep 12: e2300236. doi: 10.1002/mabi.202300236.

Colomina-Alfaro, L., Marchesan, S., Stamboulis, A., Bandiera, A. (2022)

Biotechnol. Bioeng. Smart tools for antimicrobial peptides expression and application: the elastic perspective.

Biotechnol. Bioeng.,120, 323-332. doi: 10.1002/bit.28283.

Rosetti, B., Scarel, E., Colomina-Alfaro, L., Adorinni, S., Pierri, G., Bellotto, O., Mamprin, K., Polentarutti, M., Bandiera, A., Tedesco, C., Marchesan, S. (2022)

Self-Assembly of Homo- and Hetero-Chiral Cyclodipeptides into Supramolecular Polymers towards Antimicrobial Gels.

Polymers (Basel). 14, 4554. doi: 10.3390/polym14214554.

Mosetti, V., Rosetti, B., Pierri, G., Bellotto, O., Adorinni, S., Bandiera, A., Adami, G., Tedesco, C., Crosera, M., Magnano, G.C., Marchesan, S. (2022)

Cyclodipeptides: From Their Green Synthesis to Anti-Age Activity. *Biomedicines*. 10, 2342. doi: 10.3390/biomedicines10102342.

Sist, P., Bandiera, A., Urbani, R., Passamonti, S. (2022)

Macromolecular and solution properties of the recombinant fusion protein HUG Biomacromolecules. 23, 3336-3348. doi: 10.1021/acs.biomac.2c00447

Bellotto O, Semeraro S, Bandiera A, Tramer F, Pavan N, Marchesan S. (2022)

Polymer Conjugates of Antimicrobial Peptides (AMPs) with d-Amino Acids (d-aa): State of the Art and Future Opportunities.

Pharmaceutics. 14, 446. doi: 10.3390/pharmaceutics14020446.

Catanzano, O., Elviri, L., Bergonzi, C., Bianchera, A., Bettini, R., & Bandiera, A. (2021). Elastolytic-sensitive 3D-printed chitosan scaffold for wound healing applications.

MRS Communications, 11, 924–930. doi.org/10.1557/s43579-021-00124-x

Bandiera, A., Catanzano, O., Bertocin, P., Bergonzi, C., Bettini, R., Elviri, L. (2021)

3D-printed scaffold composites for the stimuli-induced local delivery of bioactive adjuncts.

Biotechnol Appl Biochem. Aug 25. doi: 10.1002/bab.2245.

Sist P., Bandiera A., Urbani R. (2020)

Soil PAH Rhizodegradation using *Festuca arundinacea* in an Urban polluted site in Trieste (Italy). *Research Journal of Chemistry and Environment*, 24, 1-15

Bergonzi, C., Gomez d'Ayala, G., Elviri, L., Laurienzo, P., Bandiera, A., Catanzano, O. (2020).

Alginate/human elastin-like polypeptide composite films with antioxidant properties for potential wound healing application. *Int. J. Biol. Macromol.*, 164, 586-596, DOI: 10.1016/j.ijbiomac.2020.07.084.

Bandiera, A., Corich, L., Tommasi, S., De Bortoli, M., Pelizzo, P., Stebel, M., Paladin, D., Passamonti, S. (2020). Human elastin-like polypeptides as a versatile platform for exploitation of ultrasensitive bilirubin detection by UnaG. *Biotechnol Bioeng.*, 117, 354-361, DOI: 10.1002/bit.27217

Garcia, A.M., Lavendomme, R., Kralj, S., Kurbasic, M., Bellotto, O., Cringoli, M.C., Semeraro, S., Bandiera, A., De Zorzi, R., Marchesan, S. (2020). Self-Assembly of an Amino Acid Derivative into an Antimicrobial Hydrogel Biomaterial. *Chemistry*, 26, 1880-1886, DOI: 10.1002/chem.201905681.

D'Andrea, P., Sciancalepore, M., Veltruska, K., Lorenzon, P., and Bandiera, A. (2019)

Epidermal Growth Factor-based adhesion substrates elicit myoblast scattering, proliferation, differentiation and promote satellite cell myogenic activation

Biochim. Biophys. Acta Mol. Cell Res., 1866, 504-517. doi: 10.1016/j.bbamcr.2018.10.012.

Bandiera, A., Passamonti, S., Dolci, L.S. and Focarete, M.L. (2018)

Biomimetic composite of elastin-based hydrogel and electrospun fibers: the way forward for smart drug delivery

Front. Bioeng. Biotechnol., 6, 127. doi: 10.3389/fbioe.2018.00127.

Corich, L., Busetti, M., Petix, V., Passamonti, S., Bandiera, A. (2017)
Evaluation of a biomimetic 3D substrate based on the Human Elastin-like Polypeptides (HELPS) model system for elastolytic activity detection.

J. Biotechnol., 10, 255, 57-65. doi: 10.1016/j.jbiotec.2017.06.006.

Bandiera, A. (2017)

Elastin-like polypeptides: the power of design for smart cell encapsulation.

Expert Opin. Drug Deliv., 14, 1-12. doi: 10.1080/17425247.2016.1206072.

D'Andrea, P., Civita, D., Cok, M., Ulloa Severino, L., Vita, F., Scaini, D., Casalis, L., Lorenzon, P., Donati, I., Bandiera, A. (2017)

Myoblasts adhesion, proliferation and differentiation on Human Elastin-Like Polypeptide (HELP) hydrogels.

J. App. Biomat. Func. Mat., 15, e43-e53. doi: 10.5301/jabfm.5000331

D'Andrea, P., Scaini, D., Severino Ulloa, L., Borelli, V., Passamonti, S., Lorenzon, P., Bandiera, A. (2015)

In vitro myogenesis induced by human recombinant elastin-like proteins.

Biomaterials, 67, 240-253. doi: 10.1016/j.biomaterials.2015.07.041.

Boccafoschi, F., Ramella, M., Sibillano, T., De Caro, L., Giannini, C., Comparelli, R., Bandiera, A., Cannas, M. (2014)

Human elastin polypeptides improve the biomechanical properties of three-dimensional matrices through the regulation of elastogenesis

J. Biomed. Mater. Res., Part A, 103, 1218–1230. doi: 10.1002/jbm.a.35257

Mattiuzzo, M., De Gobba, C., Runti, G., Mardirossian, M., Bandiera, A., Gennaro, R., Scocchi, M. (2014)

Proteolytic Activity of Escherichia coli Oligopeptidase B Against Proline-Rich Antimicrobial Peptides

J. Microbiol. Biotechn., 24, 160-167. doi: 10.4014/jmb.1310.10015.

Bandiera, A., Markulin, A., Corich, L., Vita, F., Borelli, V. (2014)

Stimuli-Induced Release of Compounds from Elastin Biomimetic Matrix

Biomacromolecules, 15, 416-422. doi: 10.1021/bm401677n

Ciofani, G., Genchi, G.G., Guardia, P., Mazzolai, B., Mattoli, V., Bandiera, A. (2014)

Recombinant human elastin-like magnetic microparticles for drug delivery and targeting.

Macromol. Biosci., 14, 632-642. doi: 10.1002/mabi.201300361.

Ciofani, G., Genchi, G., Mattoli, V., Mazzolai, B., Bandiera, A. (2014)

The potential of recombinant human elastin-like polypeptides for drug delivery

Expert Opin. Drug Del., 11, 1507-1512. doi: 10.1517/17425247.2014.926885.

Ciofani, G., Genchi, G.G., Liakos, I., Athanassiou, A., Mattoli, V., Bandiera, A. (2013)

Human Recombinant Elastin-Like Protein Coatings for Muscle Cell Proliferation and Differentiation

Acta Biomater., 9, 5111-5121. doi: 10.1016/j.actbio.2012.10.016

Çelebi, B., Cloutier, M., Balloni, R., Mantovani, D., Bandiera, A. (2012)

Human elastin- based recombinant biopolymers improved mesenchymal stem cell differentiation

Macromol. Biosci., 12, 1546-1554. doi: 10.1002/mabi.201200170

Bozzini, S., Giuliano, L., Altomare, L., Petrini, P., Bandiera, A., Conconi, M.T., Farè, S., Tanzi, M.C. (2011)

Enzymatic cross-linking of Human Recombinant Elastin (HELP) as biomimetic approach in vascular

tissue engineering

J. Mater. Sci. Mater. Med., 22, 2641-2650. doi: 10.1007/s10856-011-4451-z.

Bandiera, A. (2011)

Transglutaminase-catalyzed preparation of human elastin-like polypeptide-based three-dimensional matrices for cell encapsulation

Enzyme Microb. Tech., 49, 347– 352. doi: 10.1016/j.enzmictec.2011.06.012.

Bandiera A., Sist P., Urbani R. (2010)

Comparison of Thermal Behavior of Two Recombinantly Expressed Human Elastin-Like Polypeptides for Cell Culture Applications.

Biomacromolecules, 11, 3256–3265. doi: 10.1021/bm100644m.

Bandiera A. (2010)

Assembly and optimization of expression of synthetic genes derived from the human elastin repeated motif

Prep. Biochem. Biotechnol., 40, 198-212. doi: 10.1080/10826068.2010.488541.

Bandiera, A., Urbani, R., Sist, P. (2010)

Spontaneous Patterning obtained by Evaporation of Human Elastin-like Polypeptide solutions.

Annu Int Conf IEEE Eng Med Biol Soc., 819-822. doi: 10.1109/IEMBS.2010.5626761.

Bandiera, A. (2010)

Human Elastin-derived Biomimetic coating Surface to Support Cell Growth.

Proceedings of World Academy of Science, Engineering and Technology (ISSN: 1307-6884), 61, 30-34. D.O.I. 10.5281/zenodo.1085475

Bandiera, A., Sist, P., Terdoslavich, M., Urbani, R. (2009)

Phase transition and particle formation of a Human Elastin-Like polypeptide

Proceedings of the IEEE 35th Annual Northeast Bioengineering Conference, IEEE, Boston, MA, Apr 2009 (ISBN 978-1-4244-4362-8, D.O.I. 10.1109/NEBC.2009.4967772).

Mattiuzzo, M., Bandiera, A., Gennaro, R., Benincasa, M., Pacor, S., Antcheva, N., Scocchi, M. (2007)

Mutation of the inner membrane protein SbmA confers increased resistance to the proline-rich antibacterial peptides.

Mol Microbiol., 66, 151-63. DOI: 10.1111/j.1365-2958.2007.05903.x

Bandiera, A., Taglienti, A., Micali, F., Pani, B., Tamaro, M., Crescenzi, V., Manzini, G. (2005)

Expression and characterisation of human elastin repeat-based temperature responsive protein polymers for biotechnological purposes.

Biotechnol. Appl. Biochem., 42, 247-256. DOI: 10.1042/BA20050114

Morassutti, C., De Amicis, F., Bandiera A., Marchetti, s. (2005)

Expression of SMAP-29 cathelicidin-like peptide in bacterial cells by intein-mediated system.

Protein Expr. Purif, 39, 160-168. doi: 10.1016/j.jep.2004.11.006.

Akindahunsi, A.A., Bandiera, A., Manzini, G. (2005)

Vertebrate 2xRBD hnRNP proteins: a comparative analysis of genome, mRNA and protein sequences.

Comput. Biol. Chem., 29, 13-23. doi: 10.1016/j.compbiolchem.2004.11.002.

Bandiera A., Medic N., Akintunde Akindahunsi A., Manzini G. (2005)

In vitro dual binding activity of a evolutionarily related subgroup of hnRNP proteins

Mol. Cell. Biochem., 268, 121-127. doi: 10.1007/s11010-005-3700-1.

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- Manzini G. (2003)
Cytosine-block telomeric type DNA-binding activity of hnRNP proteins from human cell lines.
Arch Biochem Biophys., 409, 305-14.
- Marsich E, Bandiera A, Tell G, Scaloni A, Manzini G.(2001)
A chicken hnRNP of the A/B family recognizes the single-stranded d(CCCTAA)(n) telomeric repeated motif.
Eur J Biochem., 268, 139-48.
- Marchetti, S., Chiabà, C., Chiesa, F., Bandiera, A., Pitotti, A., (1998)
"Isolation and partial characterization of two trypsins from the larval midgut of *Spodoptera littoralis* (Boisduval)"
Insect Biochem. Molec. Biol., 28, 449-458.
- Giancotti, V., Bandiera, A., Sindici, C., Perissin, L. and Crane- Robinson, C., (1996)
"Calcium-dependent ADP-ribosylation of high-mobility-group I (HMGI) proteins
Biochem. J., 317, 865-870.
- Fedele, M., Bandiera, A., Chiappetta, G., Battista, S., Viglietto, G., Manfioletti, G., Casamassimi, A., Santoro, M., Giancotti, V. and Fusco, A. (1996)
"Human colorectal carcinomas express high levels of High Mobility Group HMGI(Y) proteins".
Cancer Res., 56, 1896-1901.
- Bandiera, A., Patel, U. A., Manfioletti, G., Rustighi, A., Giancotti, V. and Crane-Robinson, C. (1995)
"A precursor product relationship in molluscan sperm proteins from *Ensis minor*".
Eur. J. Biochem., 233, 744-749.
- Berlingieri, M. T., Manfioletti, G., Santoro, M., Bandiera, A., Visconti, R., Giancotti, V. and Fusco, A. (1995)
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A handwritten signature in blue ink, appearing to read 'A. Bi', is located in the upper right quadrant of the page. The signature is written in a cursive style with a light blue background behind it.