



Convegno Nazionale Biomateriali

5-7 GIUGNO 2019

**Centro Residenziale e Studi (CRS) della Scuola
Nazionale dell'Amministrazione (SNA)**

***Corso Trieste, 2
81100 Caserta (CE)***

SCIENTIFIC COMMITTEE

NAZIONALE

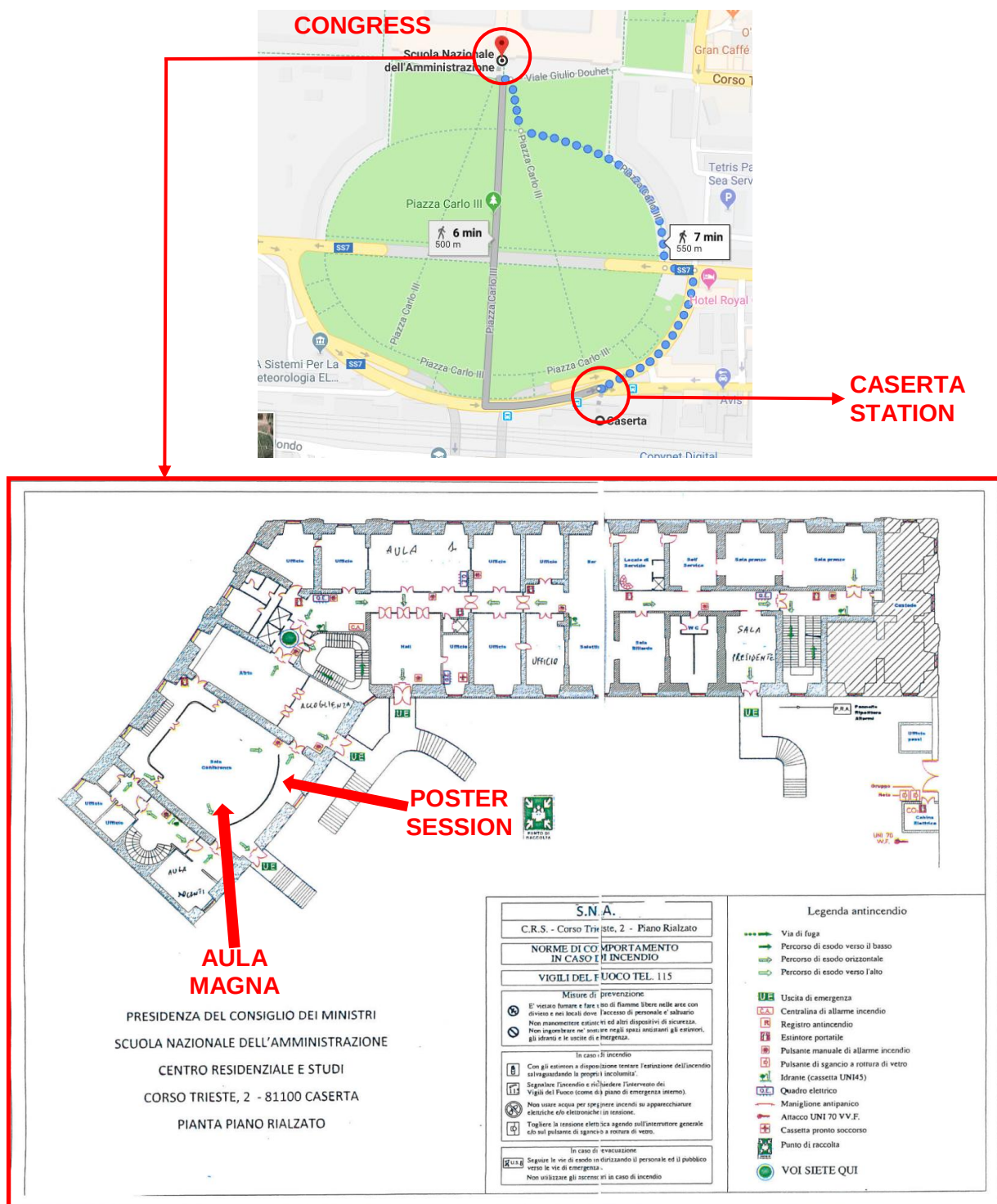
Francesca Boccafoschi, NO
Gerardo Catapano, CS
Roberto Chiesa, MI
Gianluca Ciardelli, TO
Caterina Cristallini, PI
Elvira De Giglio, BA
Roberto De Santis, NA
Silvia Farè, MI (Presidente SIB)
Pietro Favia, BA
Milena Fini, BO
Monica Mattioli Belmonte, AN
Maria Grazia Raucci, NA
Lia Rimondini, NO
Simone Sprio, RA
Livia Visai, PV

LOCALE

Michelina Catauro, CE (Presidente Congresso)
Dante Ronca, CE (Copresidente Congresso)
Marianna Chierchia, NA
Gionata Fragomeni, CZ
Antonio Gloria, NA
Saverio Maietta, NA
Massimo Martorelli, NA
Teresa Russo, NA
Elisabetta Tranquillo, CE

CONGRESS LOCATION AND USEFUL INFORMATION

Congress activities will take place in the *Aula Magna* of the *Centro Residenziale e Studi (CRS)* of the *Scuola Nazionale dell'Amministrazione (SNA)* in Caserta in one of the two elliptical hemicycles of the Palazzo Reale, near Caserta Station (see Map below).



The desk of the organizing secretary will be available near the entrance for registration, for payments, and for information.

In the Aula Magna will be available the WiFi (the information for the WiFi connection will be provided by organizing secretary).

INFORMATION ABOUT THE DINNERS:

On Wednesday, June 5th, the dinner will take place to the "Antica Hosteria Massa" restaurant, Via G. Mazzini, 55.

On Thursday, June 6th, the dinner will take place to "Leucio" restaurant, Via dei Giardini Reali. A bus will depart from Caserta Station and take you to the restaurant.

Please, if you have any food allergies you can report your requirements to the organizing secretary.

PROGRAM AT A GLANCE

WEDNESDAY, JUNE 5 2019		
9:00-17:30		Participants registration
12:30-13:30		Welcome refreshment
13:30-14:00		Opening ceremony
Afternoon sessions		
14:00-14:30		PL1
Oral session I - Surface Modifications		
14:30-14:45	OC1	
14:45-15:00	OC2	
15:00-15:15	OC3	
15:15-15:30	OC4	
Coffee break		
15:30-15:45		
Oral session II - Drug Delivery		
15:45-16:15		PL2
16:15-16:30	OC5	
16:30-16:45	OC6	
16:45-17:00	OC7	
17:00-17:15	OC8	
17:15-17:30	OC9	
17:45-19:30		Guided tour Reggia di Caserta
20:30		Dinner “Antica Hosteria Massa” restaurant

THURSDAY, JUNE 6 2019		
Morning sessions		
9:00-17:30		Participants registration
9:00-9:30		PL3
Oral session III - Tissue Engineering		
9:30-9:45	OC10	
9:45-10:00	OC11	
10:00-10:15	OC12	
10:15-10:30	OC13	
10:30-10:45	OC14	
10:45-11:00	OC15	
Coffee break and Poster Session		
11:00-11:30		
Oral session IV - Antibacterial Strategy		
11:30-11:45	OC16	
11:45-12:00	OC17	
12:00-12:15	OC18	
12:15-12:30	OC19	
12:35-14:00		Lunch break "Royal Caserta Hotel"

THURSDAY, JUNE 6 2019		
Afternoon sessions		
Final Workshop SECOND. R.I. Project		
The MSCA-RISE opportunity		
14:00-14:20		Welcome and Opening remarks
Oral session V - The Second. R.I. experience: bringing together S&T&I ecosystems		
14:20-14:45		PL4
14:45-15:00	OC20	
15:00-15:15	OC21	
15:15-15:30	OC22	
15:30-15:45	OC23	
Coffee break and Poster Session		
15:45-16:00		
16:00-16:15	OC24	
Oral session VI - “Additive manufacturing for biomedical applications” Workshop		
16:15-16:35		PL5
16:35-17:00		PL6
17:00-17:45		Open Debate
18:00-20:00		Guided tour Museo delle Sete di San Leucio
20:30		Social Dinner “Leucio” restaurant

FRIDAY, JUNE 7 2019		
Morning sessions		
9:00-13:30		Participants registration
9:00-9:30		General assembly of SIB
9:30-10:00		PL7
Oral session VII - Engineering Hydrogels		
10:00-10:15	OC25	
10:15-10:30	OC26	
Oral session VIII - Mechanical Characterization		
10:30-10:45	OC27	
10:45-11:00	OC28	
11:00-11:15	OC29	
Coffee break and Poster Session		
11:15-11:35		
Oral session IX - Nanotechnology		
11:35-11:50	OC30	
11:50-12:05	OC31	
12:05-12:20	OC32	
12:20-12:35	OC33	
12:35-12:50	OC34	
12:50-13:05	OC35	
13:05-13:20		Award ceremony for the best presentation
13:20-13:30		End of Congress
13:30-14:30		Lunch

SCIENTIFIC PROGRAM

WEDNESDAY, JUNE 5 2019

9:00-17:30 Participants registration

12:30-13:30 Welcome refreshment

Opening ceremony

13:30-14:00 Furio Cascetta - Head of Engineering Department, University of Campania "Luigi Vanvitelli".
Alessandro Mandolini – President of the Polytechnic and Basic Sciences School, University of Campania "Luigi Vanvitelli".
Gianpiero Zinzi - Member of the Council of Regione Campania.

WEDNESDAY, JUNE 5 2019

Afternoon sessions

Chairs: Silvia Farè and Michelina Catauro

14:00-14:30 **PL1** **Plenary Lecture 1:**
Thomas Groth, *Martin Luther University Halle-Wittenberg*.
“Biomimetic surface coatings and hydrogels to guide cell differentiation for tissue engineering applications”

Oral session I Surface Modifications

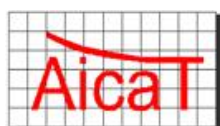
14:30-14:45 Cristallini C, Danti S, Azimi B, Barbani N. *CNR IPCF ss Pisa*.
OC1 “Multifunctional coatings for robotic implanted device”

14:45-15:00 Fasolino I, Raucci MG, Bonadies I, Soriente A, Pezzella A, Ambrosio L.
OC2 *IPCB-CNR*. “Eumelanin decorated electrospun substrates for neuroinflammation treatment”

15:00-15:15 Raffaini G, Ganazzoli F. *Politecnico di Milano*. “Molecular modelling of
OC3 protein adsorption on titanium dioxide polymorphs surfaces”

15:15-15:30 Ronca S, Forte G. *Loughborough University*. “Disentangled ultra high
OC4 molecular weight polyethylene”

15:30-15:45 *Coffee break and Poster Session*



Chairs: Caterina Cristallini and Gerardo Catapano

Plenary lecture 2:

15:45-16:15 **Caterina Lamuta, University of Iowa.**
PL2 "Artificial muscles and bio-inspired material systems"

Oral session II Drug Delivery

16:15-16:30 Cacciotti I, Ciocci M, Di Giovanni E, Melino S. *University of Rome Niccolò Cusano*. "Antimicrobial and antioxidant H₂S releasing fibrous mats as promising platforms for regenerative medicine"
OC5

16:30-16:45 Di Filippo MF, Panzavolta S, Bigi A, Dolci LS, Passerini N, Torricelli P, Parrilli A, Bonvicini F, Albertini B, Fini M, Gentilomi GA. *University of Bologna*. "Development of a novel multi composite bone cement with long-lasting antibacterial effect: from paste to injectable formulation"
OC6

16:45-17:00 Grivet Brancot A, Boffito M, Sartori S, Bronco S, Ciardelli G. *IPCF-CNR*. "Controlled delivery of biomolecules in chronic wounds treatment using thermosensitive injectable gels".
OC7

17:00-17:15 Tirella A. *The University of Manchester*. "Tumour 3D in vitro models: advantages of biomaterials and bioengineering for the recapitulation of early stages of tumour development and chemotherapies delivery"
OC8

17:15-17:30 Preti L, Lambiase B, Montesi M, Panseri S, Pugno N, Tampieri A, Sprio S. *University of Trento*. "Multi-doped biomimetic apatites with enhanced antibacterial and osteogenic properties"
OC9

17:45-19:30 *Guided tour – Reggia di Caserta*

20:30 *Dinner – "Antica Hostaria Massa" restaurant*

THURSDAY, JUNE 6 2019

Morning sessions

9:00-17:30 Participants registration

Chairs: Monica Mattioli-Belmonte and Antonio Gloria

9:00-9:30 PL3 **Plenary Lecture 3:**
Marco Domingos, *University of Manchester*.
“Engineering tissue analogues: present and future perspectives in 3D bioprinting”

Oral session III Tissue Engineering

9:30-9:45 OC10 Campiglio CE, Carcano A, Draghi L. *Politecnico di Milano*. “Modified pectin microfibers as instructive scaffold for guiding cardiac tissue regeneration”

9:45-10:00 OC11 Contessi Negrini N, Buscemi S, Fiorati A, Altomare L, Melone L, Punta C, Farè S. *Politecnico di Milano*. “Bioprinting of pectin/tempo-oxidized cellulose nanofibers hydrogels”

10:00-10:15 OC12 Dapporto M, Montesi M, Panseri S, Longroscino G, Tampieri A, Sprio S. *ISTC-CNR*. “Designing the performance of calcium phosphate self-hardening pastes”

10:15-10:30 OC13 Montanari M, Sangiorgi A, Campodoni E, Dozio S, Panseri S, Montesi M, Sanson A, Tampieri A, Sandri M. *CNR-ISTEC*. “Mould casting and 3d printing technology: comparative study between 3d biomimetic scaffolds for tissue engineering”

10:30-10:45 OC14 Soriente A, Fasolino I, Raucci MG, Demitri C, Ambrosio L. *IPCB-CNR*. “Bioactivation strategies of chitosan-based scaffolds and their effects on biological in vitro models”

10:45-11:00 OC15 Veronesi F, Giavaresi G, Bellini D, Pressato D, Casagrande V, Fini M. *Istituto Ortopedico Rizzoli*. “Evaluation of a new collagen-based medical device (elastico®) for the augmentation of surgical sutures for the treatment of acute Achilles Tendon Injuries: An In Vivo Study”.

11:00-11:30 Coffee break and Poster Session

Chairs: Elvira De Giglio and Milena Fini

Oral session IV Antibacterial Strategy

- 11:30-11:45
OC16 Bertolini M, D'Agostino A, Tana F, De Nardo L, Candiani G, Chiesa R. *Politecnico di Milano*. "Sol-gel antibacterial coatings for CoCrMo implantable orthopedic devices"
- 11:45-12:00
OC17 Cochis A, Ramos Rivera L, Ferraris S, Biser S, Kumar A, Mohammed H, Boccaccini AR, Rimondini L. *Università del Piemonte Orientale*. "Multi-tissue and antibacterial bioactive glass-Zein-copper surface coating to improve bone healing"
- 12:00-12:15
OC18 Prosolov KA, Fosca M, Fadeeva I, Sharkeev Y, and Rau JV. *CNR-ISM*. "Substituted calcium phosphates as antibacterial materials for biomedical applications"
- 12:15-12:30
OC19 Scalia A, Cochis A, Iwatsuki R, Yamaguchi S, Ferraris S, Miola M, Spriano S, Verné E, Takadama H, Rimondini L. *Università del Piemonte Orientale*. "Bioactive and antibacterial chemically-modified titanium and bioactive glass surfaces promoting bone healing and preventing biofilm infections"

12:30-14:00 *Lunch break – Hotel Royal Caserta*

THURSDAY, JUNE 6 2019

Afternoon session

**Final Workshop SECOND. R.I. Project - A Horizon 2020 MSCA-RISE experience
Innovation in health, from ideas to applications: a system approach to design
customized functional tissue analogues**

The MSCA-RISE opportunity

Welcome and Opening remarks

14:00-14:20 Michele Guerrini, Coordinator of the project – National Research Council of Italy

Sun Chengyong (Counsellor of Chinese Embassy in Italy)

Chairs: Maria Grazia Raucci, Manyi Cristofoli

Plenary lecture 4:

14:20-14:45 **Xinzhi Zhang**, CEO, MEDPRIN, China.

PL4

“Our experience on 3D bioprinting and path to commercialization”

Oral session V The Second. R.I. experience: bringing together S&T&I ecosystems

14:45-15:00 Ronca A. IPCB-CNR, Italy. “Modified hyaluronic acid and sol-gel approach to design 3D rapid prototyped scaffolds”
OC20

15:00-15:15 D’Amora U. IPCB-CNR, Italy. “Hyaluronic acid derivative-based composites: relationship between local inflammation and osteogenic capability”
OC21

15:15-15:30 Fan Y. National Engineering Research Center for Biomaterials, Sichuan University, China. “Development of collagen-based hydrogels for articular cartilage regeneration”
OC22

15:30-15:45 Cristofoli M. Tech Transfer coordinator, Queen Mary Innovation, QMUL, U.K. “Technology transfer approach within European research institute”
OC23

15:45-16:00 *Coffee break and Poster Session*

16:00-16:15 Zheng C. *Shanghai Technology Innovation Center (STIC), China.* “Sino-European partnership”
OC24

Chairs: *Nicola Contessi Negrini and Alfredo Ronca*

Oral session VI “Additive manufacturing for biomedical applications” Workshop

16:15-16:35
PL5
Ravi Sinha, *MERLN Institute for Technology Inspired Regenerative Medicine, Maastricht University, Maastricht, The Netherlands.*
“Continuous composition gradient thermoplastic material scaffolds for tissue engineering - technology development and future application perspectives”

16:35-17:00
PL6
Thomas Distler, *Institute of Biomaterials, Department of Materials Science and Engineering Friedrich-Alexander-University, Germany.*
“3D printing, bioprinting and biofabrication: advances at the institute of biomaterials”

Chairs: *Luigi Ambrosio and Xingdong Zhang*

Open Debate

- 17:00-17:45 What is the role of collaborative breakthrough research in shaping innovation?
- a. How can be supported and improved the interaction between public and private sector?
 - b. What will be the role of international cooperation in the development of biomaterials rapid prototyping?
 - c. What can be done at European and international level to promote the development of innovation-based knowledge?
 - d. Do you believe the current landscape of financing instruments it's suitable for biomaterials rapid prototyping?
 - e. Speeding-up the time from bench to bed application

17:45 *Conclusion*

18:00-20:00 *Guided tour – Museo della Seta di San Leucio*

20:30 *Social Dinner - "Leucio" restaurant*

FRIDAY, JUNE 7 2019
Morning sessions

9:00-13:30 Participants registration

9:00-9:30 *General assembly of SIB*

Chairs: *Livia Visai and Gianluca Ciardelli*

9:30-10:00
PL7 **Plenary lecture 5:**
Filippo Causa, *University of Naples "Federico II"*.
Battista E, Netti PA, Causa F. "Particle materials and interfaces for biosensing: toward innovative biomedical devices"

Oral session VII Engineering Hydrogels

10:00-10:15
OC25 La Gatta A, Salzillo R, Catalano C, D'Agostino A, Cammarota M, Pirozzi AVA, Schiraldi C. *University of Campania "Luigi Vanvitelli"*. "Crosslinked Hyaluronan for biomedical uses: effect of the biopolymer molecular weight distribution on final gel properties"

10:15-10:30
OC26 Scalzone A. *School of Engineering, Newcastle University*. "MSCs-Chondrocytes spheroids crosstalk in co-culture speeds up GAGs and collagen production through a natural-based hydrogel"

Chairs: *Roberto De Santis and Massimiliano Dapporto*

Oral session VIII Mechanical Characterization

10:30-10:45
OC27 Fragomeni G, Zanetti E, Pascoletti G, Di Nardo M, Costanzo V, Barbato V, Gualtieri R, Talevi R, Catapano G. *University "Magna Graecia" of Catanzaro*. "Characterization of the mechanical behavior of bovine ovarian cortical tissue"

10:45-11:00
OC28 Terrizzi AR, Di Noi F, Sanosh KP, Fersini M, Rizzo A, D'Ostuni S, Licciulli A. *University of Salento*. "Development of injection molded ZTA for orthopedic implants"

11:00-11:15
OC29 Visco A, Yousef S, Galtieri G, Nocita D, Espro C. *University of Messina*. "Mechanical and physical properties of nanocomposites based on biomedical polyethylene used in mobile joint prosthesis"

11:15-11:35 *Coffee break and Poster Session*

Chairs: Lia Rimondini and Roberto Chiesa

Oral session IX Nanotechnology

- 11:35-11:50
OC30 Blanco I. *University of Catania*. "POSS Nanotechnology, a sustainable marriage between plastics and ceramics: current and under evaluation green applications"
- 11:50-12:05
OC31 Mattu C, Brachi G, Menichetti L, Ciardelli G. *Politecnico di Torino*. "Polyurethane nanoparticles as drug delivery vehicles in cancer nanomedicine"
- 12:05-12:20
OC32 Bonifacio MA, Cerqueni G, Cometa S, Mattioli-Belmonte M, De Giglio E. *University of Bari*. "Arbutin loaded coatings for oxidative stress protection on bone cells"
- 12:20-12:35
OC33 Lazzarini L., Papa V, Cacciotti I. *University of Rome Niccolò Cusano*. "Innovative and osteoconductive composite cranial implants by fused deposition model technique"
- 12:35-12:50
OC34 Russo T., Tunesi M, Raimondi I, Zeppetelli S, Gloria A, De Santis R, Giordano C, Albani D, Ambrosio L. *IPCB-CNR*. "Development and analysis of injectable system for Tat-Hsp70 delivery as a novel strategy in neurodegenerative disorders treatment"
- 12:50-13:05
OC35 Tranquillo E., Barrino F, Catauro M, Naviglio S, Pacifico S. *University of Campania "Luigi Vanvitelli"*. "Biological activities of chlorogenic acid in the silica/peg matrix synthesized via sol-gel technique"
- 13:05-13:20 *Award ceremony for the best oral and poster presentations*
- 13:20-13:30 *End of Congress*
- 13:30-14:30 *Lunch*

POSTER SESSION

- P1 Barrino F, Fontana E, Dal Poggetto G, Piccolella S, Pacifico S and Catauro M.
University of Campania "Luigi Vanvitelli"
"Evaluation of the biological properties as a function of the polymer amount in SiO₂-based hybrid materials synthesized by sol-gel method"
- P2 Barrino F, Fontana E, Bollino F, D'Amelia L, Piccirillo AM, Vecchio Cipriotti S.
University of Campania "Luigi Vanvitelli"
"Chemical and biological characterization of a hybrid system containing Silver"
- P3 Casagrande V, Pressato D, Gutleben K, Voltolini A, Bellini D.
NOVAGENIT S.R.L.
"An association of collagen and hyaluronic acid results in an ideal scaffold for cartilage repair"
- P4 Bertoglio F, Bloise N, Montagna G, De Vita L, Taglietti A, Pallavicini P, Visai L.
University of Pavia
"Multiple silver nanoparticles with pectin: an analysis of anti-bacterial and anti-biofilm activity"
- P5 Bloise N, Prasad Mandal R, Della Pina C, Colombo M, Rossi M, Galliano M, Visai L.
University of Pavia
"Targeting the aberrant oncofoetal glycan expression in breast cancer cells with small sized-gold nanoparticles conjugated to fungal lectin"
- P6 Cascone FD, Martorelli M, Gloria A, Papa S, Lanzotti A.
University of Naples "Federico II"
"Personalized Augmentative and Alternative Communication Systems for students at Federico II"
- P7 Cazzola M, Ferraris S, Prenesti E, Cochis A, Rimondini L, Bosso A, Guaita M, Allizond V, Banche G, Berteà CM, Novara C, Geobaldo F, Vernè E, Spriano S.
University of Piemonte Orientale UPO
"New multifunctional surfaces from the coupling of biomaterials with plant derived natural molecules"
- P8 Crescente G, Piccolella S, Barrino F, Bollino F, Pacifico S, Catauro M.
University of Campania "Luigi Vanvitelli"
"Biomaterials based on quercetin, a natural antioxidant, through sol-gel route"
- P9 de Crescenzo C, Maietta S, Richetta M, Martorelli M, Gloria A.
University of Rome "Tor Vergata"
"Design strategies of hybrid devices for biomedical applications"

- P10 Di Filippo MF, Panzavolta S, Bigi A, Dolci LS, Passerini N, Torricelli P, Parrilli A, Bonvicini F, Albertini B, Fini M, Gentilomi GA.
University of Bologna
“Development of a novel multi composite bone cement with long-lasting antibacterial effect: from paste to injectable formulation”
- P11 Di Nardo M, Costanzo V, Pascoletti G, Zanetti E, Fragomeni G, Barbato V, Gualtieri R, Talevi R, Catapano G.
Magna Graecia University
“Short-term Dynamic Mechanical Challenge of Strips of Bovine Ovarian Cortical Tissue Have No Effect on Follicles Growth and Quality”
- P12 Fucile P, Gallicchio V, Rega A, Russo T, Improta G, D’Antò V, Martorelli M, De Santis R and Gloria A.
University of Naples “Federico II”
“Advanced design and fabrication of scaffolds for mandibular symphysis and ramus tissue engineering”
- P13 Gallicchio V, Fucile P, de Crescenzo C, Rega A, D’Antò V, Russo T, Richetta M, Martorelli M, De Santis R and Gloria A.
University of Naples “Federico II”
“Theoretical and Experimental Analysis on additively manufactured Ti6Al4V lattice structures for biomedical applications”
- P14 Iezzi I, Pagella I, Cerqueni G, Mitsiadis T, Mattioli-Belmonte M.
Marche Polytechnic University
“Dental composites and dental pulp stem cells: preliminary studies for a long-lasting use”
- P15 Illiano M, Tranquillo E, Salzillo A, Ragone A, Chiosi E, Spina A, Sapio L, Naviglio S.
University of Campania “Luigi Vanvitelli”
“Evaluation of biological effects of PCL/ZrO₂ hybrid materials in fibroblast-like cells NIH-3T3”
- P16 Kumar A, Cochis A, Ramos Rivera L, Ferraris S, Biser S, Mohammed H, Boccaccini AR, Rimondini L.
University of Piemonte Orientale UPO
“Cytocompatibility and antibacterial activity of bioactive glass-Zein-copper surface coating for multitargeted tissue regeneration”
- P17 Lazzarini L, Papa V, Cacciotti I.
University of Rome Niccolò Cusano
“Innovative and osteoconductive composite cranial implants by fused deposition model technique”

- P18 Licini C, Molino G, Cerquenia G, Fiorilli S, Ciapetti G, Vitale-Brovarone C, Mattioli-Belmonte M.
Politecnico di Torino
“Mutual biological and chemical/physical bone characterization for customized 3D-printed scaffolds”
- P19 Mohammed H, Kumar A, Cochis A, Rimondini L.
University of Piemonte Orientale UPO
“Carbon nanomaterials impact in tissue engineering and antibacterial activity”
- P20 Montagna G, Waldorff EI, Bloise N, Bertoglio F, Fang S, Zhang N, Jiang J, Ryaby JT, Visai L.
University of Pavia
“Titanium scaffold topography influences osteoblasts behaviour”
- P21 Montagna G, Brangdon CB, Bloise N, Bertoglio F, Pajevic PD, Gerstenfeld C, Visai L.
University of Pavia
“Strontium HA nanoparticles-loaded implants: a new option for bone wound healing and regenerative medicine”
- P22 Naviglio D, Scarano P, Ciaravolo M, Dal Poggetto G., Barrino F, Gallo M.
University of Naples “Federico II”
“Synthesis and characterization of a new complex of iron (II) citrate as a food supplement to offset iron deficiencies”
- P23 Onofrio I, Papallo I, Maietta S, Russo T, Gloria A, Martorelli M.
University of Naples “Federico II”
“Theoretical analysis of customized acetabular cup”
- P24 Papallo I, Onofrio I, Solari D, Uggia L, Cuocolo R, Brunetti A, Cavallo LM, Cappabianca P, Improta G, D’Antò V, Martorelli M, De Santis R, Gloria A, Russo T.
University of Naples “Federico II”
“New strategies towards an advanced design of additively manufactured and injectable devices for preventing CSF leak after endoscopic skull base surgery”
- P25 Peluso V, Russo T, Oliviero O, Improta G, D’Antò V, Gloria A, De Santis R.
University of Naples “Federico II”
“Nanocomposite substrates and magnetic field for regenerative medicine”
- P26 Soriente A, Fasolino I, Buonocore GG, Raucci MG, Ambrosio L.
IPCB-CNR
“Biological properties of biocomposites based on ionic liquids for biomedical applications”

- P27 Stellavato A, Vassallo V, La Gatta A, Alfano A, Diana P, Schiraldi C.
University of Campania "Luigi Vanvitelli"
"Novel hybrid gels based on high molecular weight hyaluronic acid and biotechnological chondroitin improve cell growth and decrease inflammation in an osteoarthritis in vitro model using human primary joint cell"
- P28 Tang H, Di Primio R, Liu S, Licini C, Bonifacio AM, Iezzi I, Cerqueni G, Mattioli-Belmonte M.
Marche Polytechnic University
"Application prospect of herbal extracts in orthopedics and biomaterial science"

ENDORSEMENTS



● Università
degli Studi
● della Campania
Luigi Vanvitelli

AlCIng

Associazione Italiana di
Chimica per Ingegneria



SPONSORSHIPS

MP
strumenti



Ambiente Qualità Sicurezza



**BANCA
GENERALI
PRIVATE**



Soluzioni al servizio della sanità



protesi - ortesi - ausili