



DIEGO TRUCCO

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- Italian
- Category B
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Professional summary

Highly motivated individual committed to hard work and intensive analysis. Flexible and polished Young Researcher promoting well-developed skills in Bioengineering, in BioRobotics and in Orthopedic research field.

Education

October 2019 - Today	Sant'Anna School of Advanced Studies Doctor of Philosophy - PhD student in BioRobotics <ul style="list-style-type: none">• PhD student in BioRobotics with a joint scholarship between the Sant'Anna School of Advanced Studies (Pisa, PI) and the Rizzoli Orthopedic Institute (Bologna, BO)• Project title: "Novel strategies for osteo-articular tissue regeneration"	Pisa
February 2019	University di Pisa Graduation to Professional Biomedical Engineer Section A, Industrial Engineering sector <ul style="list-style-type: none">• Section A, Industrial Engineering sector (Italian legislation)• Graduation mark: 173/240	Pisa
May 2018	University of Pisa Master Degree in Biomedical Engineering Biomedical Engineering (LM-21) <ul style="list-style-type: none">• Biomedical Engineering Degree (LM-21)• Thesis: "3D Bioprinting: ingegnerizzazione di scaffold a base di fibroina della seta per la rigenerazione osteocondrale"• Graduation mark: 107/110	Pisa
April 2016	University of Pisa Bachelor Degree in Biomedical Engineering Biomedical Engineering (L-8) <ul style="list-style-type: none">• Biomedical Engineering Degree (L-8)• Thesis: "Analisi del salto Flip nel pattinaggio artistico a rotelle"• Graduation mark: 91/110	Pisa
2011	Liceo Classico e Scientifico "T. Parentucelli" Scientific High School Diploma: Curriculum Scientifico, Naturalistico + PNI <ul style="list-style-type: none">• Curriculum Scientifico, Naturalistico + PNI• Diploma mark: 72/100	Sarzana

Abroad periods

19/09/2022-Today:

- **Visiting Period** - Kelly Lab, Trinity Biomedical Science Institute, Trinity College of Dublin, Dublin (Ireland)
- 19/11/2019-19/12/2019:
- **Exchange Programme** - Department of Textile and Fibre Engineering, IIT Delhi, New Delhi (India)
- 23/07/2010-06/08/2010:
- **English Summer Vacation** - Alpha College of English, Dublin (Ireland) - Level: B1
- 27/07/2009-03/08/2009:
- **English Language Training Programme**, Conlan School, Abergele (Galles) - Level: PreB1

Work history

January 2016 -	Federazione Italiana Sport Rotellistici Figure skating referee	Italy
Today	<ul style="list-style-type: none"> Supported smooth running of events by arriving on-time and well-equipped. Educated participants on acceptable behaviour and standards of play. Coordinated preparatory activities with competition schedules. Built rapport with managers, participants and assistant officiators by communicating confidently, clearly and efficiently. 	
November 2018 -	Rizzoli Orthopaedic Institute (IOR) Research Fellow	Bologna
September 2019	<ul style="list-style-type: none"> Research in the orthopaedic field for the regeneration of bone and cartilaginous tissues Planning of experiments and production of data for scientific publications Planning and using additive manufacturing techniques (e.g. 3D bioprinting) Learning and applying the principles of cell culture techniques 	
March 2013 -	Tripoli bar Barman	La Spezia
December 2013	<ul style="list-style-type: none"> Maintained bar stocks, replenishing daily as necessary. Prepared mixed drinks and poured wine, beer and non-alcoholic beverages within target service timeframes. Engaged with guests to create positive rapport, encouraging loyalty and repeat visits. Changed beer kegs safely and efficiently, consistently following health and hygiene guidelines. 	

Skills

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|---|---|
| <ul style="list-style-type: none"> Oral and written communication Research and analysis Protocol development Advanced problem solving | <ul style="list-style-type: none"> Project planning and development Strategic planning Project Management Team Building and Bonding |
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Languages

Italian: Native language

English:

B2

Upper intermediate

Certifications

- **English Language Certification** - B2 level - Atlas English School, Dublin, Ireland (September 2022 - Today)
- **Microscopy School** - Deep Imaging - IRST, Istituto Scientifico Romagnolo per lo studio e la cura dei tumori, Meldola, Italy (May 2019)
- **English Language Certification** - B1 level - University Linguistic Center, University of Pisa, Pisa, Italy (February 2017)
- **DAE Certification** - First Aid (July 2016)
- **Barman Training Certification** - AIBN (Associazione Italiana Bartender e Mixologist), La Spezia, Italy

Accomplishments

Publications:

- Trucco, D., Riacci, L., Vannozzi, L., Manferdini, C., Arrico, L., Gabusi, E., Lisignoli, G., Ricotti, L. *Primers for the Adhesion of Gellan Gum-Based Hydrogels to the Cartilage: A Comparative Study* (2022) Macromolecular Bioscience, 22 (10), art. no. 2200096, . Cited 1 time.
DOI: 10.1002/mabi.202200096
- Trucco, D., Manferdini, C., Saleh, Y., Gabusi, E., Dolzani, P., Lenzi, E., Vannozzi, L., Ricotti, L., Lisignoli, G. *RGD-Functionalized Hydrogel Supports the Chondrogenic Commitment of Adipose Mesenchymal Stromal Cells* (2022) Gels, 8 (6), art. no. 382, . Cited 1 time.
DOI: 10.3390/gels8060382
- Mazzocchi, T., Guarnera, D., Trucco, D., Restaino, F.R., Vannozzi, L., Siliberto, A., Lisignoli, G., Zaffagnini, S., Russo, A., Ricotti, L. A Novel approach for Multiple Material Extrusion in Arthroscopic Knee Surgery (2022) Annals of Biomedical Engineering.
DOI: 10.1007/s10439-022-03061-5
- Chawla, S., Desando, G., Gabusi, E., Sharma, A., Trucco, D., Chakraborty, J., Manferdini, C., Petretta, M., Lisignoli, G., Ghosh, S. *The effect of silk-gelatin bioink and TGF- β 3 on mesenchymal stromal cells in 3D bioprinted chondrogenic constructs: A proteomic study* (2021) Journal of Materials Research, 36 (19), pp. 4051-4067. Cited 6 times.
DOI: 10.1557/s43578-021-00230-5
- Trucco, D., Sharma, A., Manferdini, C., Gabusi, E., Petretta, M., Desando, G., Ricotti, L., Chakraborty, J., Ghosh, S., Lisignoli, G. *Modeling and fabrication of silk fibroin-gelatin-based constructs using extrusion-based three-dimensional bioprinting* (2021) ACS Biomaterials Science and Engineering, 7 (7), pp. 3306-3320. Cited 18 times.
DOI: 10.1021/acsbiomaterials.1c00410
- Mazzeo, A., Iacovacci, V., Riacci, L., Trucco, D., Lisignoli, G., Vistoli, F., Ricotti, L. *3D Printed Perfusionable Renal Proximal Tubule Model with Different Extracellular Matrix Compositions* (2021) IEEE Transactions on Medical Robotics and Bionics, 3

(2), art. no. 9417110, pp. 328-336.

DOI: 10.1109/TMRB.2021.3076210

- Trucco, D., Vannozzi, L., Teblum, E., Telkhozhayeva, M., Nessim, G.D., Affatato, S., Al-Haddad, H., Lisignoli, G., Ricotti, L. *Graphene Oxide-Doped Gellan Gum-PEGDA Bilayered Hydrogel Mimicking the Mechanical and Lubrication Properties of Articular Cartilage* (2021) Advanced Healthcare Materials, 10 (7), art. no. 2001434, . Cited 23 times.
DOI: 10.1002/adhm.202001434
- Affatato, S., Trucco, D., Taddei, P., Vannozzi, L., Ricotti, L., Nessim, G.D., Lisignoli, G. *Wear behavior characterization of hydrogels constructs for cartilage tissue replacement* (2021) Materials, 14 (2), art. no. 428, pp. 1-15. Cited 6 times.
DOI: 10.3390/ma14020428
- Manferdini, C., Saleh, Y., Dolzani, P., Gabusi, E., Trucco, D., Filardo, G., Lisignoli, G. *Impact of isolation procedures on the development of a preclinical synovial fibroblasts/macrophages in an in vitro model of osteoarthritis* (2020) Biology, 9 (12), art. no. 459, pp. 1-20. Cited 2 times.
DOI: 10.3390/biology9120459
- Sharma, A., Desando, G., Petretta, M., Chawla, S., Bartolotti, I., Manferdini, C., Paolella, F., Gabusi, E., Trucco, D., Ghosh, S., Lisignoli, G. *Investigating the Role of Sustained Calcium Release in Silk-Gelatin-Based Three-Dimensional Bioprinted Constructs for Enhancing the Osteogenic Differentiation of Human Bone Marrow Derived Mesenchymal Stromal Cells* (2019) ACS Biomaterials Science and Engineering, 5 (3), pp. 1518-1533. Cited 23 times.
DOI: 10.1021/acsbiomaterials.8b01631

Abstracts:

- Trucco D., Sharma A., Desando G., Petretta M., Chawla S., Bartolotti I., Manferdini C., Paolella P., Gabusi E., Ghosh S. and Lisignoli G., *Calcium-functionalized 3D silk gelatin bioink promotes osteogenesis of mesenchymal stromal cells: perspectives for orthopedic surgery*, International Silk Conference 2019, Trento, Italy.
- Al-Haddad H., Vannozzi L. Trucco D., Lisignoli L., Ricotti L., *Tunable mechanical properties of gellan gum-poly (ethylene glycol) diacrylate hydrogels for articular cartilage engineering*, TERMIS EU 2019, Rhodes, Greece.
- Manferdini C., Paolella F., Gabusi E., Cattini L., Trucco D., Rojewski M., Schrezenmeier H., Addimanda O., Meliconi R., Lisignoli G., *Osteoarthritic milieu and hypoxia exert specific effect on Adipose Mesenchymal Stromal Cell Migration and cytokine receptor expression*, OARSI 2019 World Congress, Toronto, Canada.
- Paolella F., Gabusi E., Cattini L., Trucco D., Rojewski M., Schrezenmeier H., Addimanda O., Meliconi R., Lisignoli G., *Specific effects of osteoarthritic milieu and hypoxic conditions on adipose mesenchymal stromal cell migration and cytokine receptor expression*, SCR Meeting 2019, Naples, Italy.
- Manferdini C., Desando G., Petretta M., Bartolotti I., Paolella P., Gabusi E., Trucco D., Chawla S., Sharma A., Ghosh S. and Lisignoli G., *Calcium-functionalized 3D silk gelatin bioink promotes osteogenesis of mesenchymal stromal cells: perspectives for orthopedic surgery*, SCR Meeting 2019, Naples, Italy.

- Trucco D, Vannozzi L, Lisignoli G, Ricotti G, *Graphene Oxide-doped Gellan Gum-PEGDA hydrogel mimicking the mechanical and lubrication properties of articular cartilage*, TERMIS 2021, Maastricht, Netherlands.
- Trucco D, Riacci L., Vannozzi L., Arrico L., Lisignoli G., Ricotti L., *Primers for the adhesion of gellan gum-based hydrogels to cartilage*, MRS 2021, Boston, USA.
- Trucco D, Vannozzi L., Agresti L., Bacci A., Riacci L., Lisignoli G., Ricotti L., *Visible light-crosslinked methacrylated gellan gum hydrogels for the embedding of human chondrocytes*, Biofabrication 2022, Montecatini, Italy.
- Ricotti L., Trucco D, Vannozzi L., Caffarelli A., Manferdini C., Gabusi E., Dolzani P., Saleh Y., Columbaro M., Lisignoli G., *Ultrasound stimulation of piezoelectric hydrogels boosts chondrogenic differentiation of human adipose tissue-derived stromal cells*, ESAO 2022, Krems, Austria.
- Ricotti L., Trucco D, Vannozzi L., Caffarelli A., Manferdini C., Gabusi E., Dolzani P., Saleh Y., Columbaro M., Lisignoli G., *Nano-doped piezoelectric hydrogels and low-intensity pulsed differentiation of human adipose tissue-derived stromal cells*, ESB 2021, Bourdeaux, France.
- Ricotti L., Trucco D, Vannozzi L., Caffarelli A., Manferdini C., Gabusi E., Dolzani P., Saleh Y., Columbaro M., Lisignoli G., *Ultrasound stimulation of nano-doped piezoelectric hydrogels enhances the chondrogenic differentiation of human adipose tissue-derived stromal cells*, MRS 2023, San Francisco, USA.

Privacy

Autorizzo il trattamento dei miei dati personali ai sensi del decreto legislativo n. 196 del 30 giugno 2003 "Codice in materia di protezione dei dati personali" e dell'art. 13 GDPR (Regolamento UE 2016/679) ai fini della ricerca e selezione del personale.

Declaration of Self-Certification and Notoriety

- Dichiaro che tutto quanto indicato nel presente Curriculum Vitae corrisponde al vero ai sensi dell'art. 46 del D.P.R. 445/2000 e che le eventuali fotocopie allegate sono conformi all'originale ai sensi dell'art. 46 del D.P.R. 445/2000.
- Dichiaro di essere a conoscenza delle sanzioni penali, nel caso di dichiarazioni non veritiere, di formazione o uso di atti falsi, richiamate dall'art. 76 del D.P.R. 445/2000.
- Dichiaro di essere a conoscenza dell'art. 75 del D.P.R. 445/2000 relativo alla decaduta dai benefici eventualmente conseguiti al provvedimento emanato qualora l'Amministrazione, a seguito di controllo, riscontri la non veridicità del contenuto della suddetta dichiarazione.
- Dichiaro inoltre di essere informato, ai sensi e per gli effetti di cui al D. Legislativo 196/2003 che i dati personali raccolti saranno trattati, anche con strumenti informatici, esclusivamente nell'ambito del procedimento per il quale la presente dichiarazione viene resa.