

# CURRICULUM VITAE

FORMATO EUROPEO/EUROPEAN FORMAT

## INFORMAZIONI PERSONALI/ PERSONAL INFORMATION

Nome, Cognome/Name, Surname Paolo Tieri  
Indirizzo/Address CNR Via dei Taurini 19, 00185 Rome, Italy  
Via, numero civico, c.a.p., città,  
nazione/ House number, street  
name, postcode, city, country  
Telefono/Telephone  
Fax  
E-mail  
Sito web/Website  
Nazionalità/Nationality **Italian**  
Luogo e data di nascita/ Place and  
Date of birth

## ESPERIENZA PROFESSIONALE /WORK EXPERIENCE

Se dipendente CNR indicare: **QUALIFICA: PRIMO RICERCATORE  
LIVELLO: II**

In ordine di data /Dates (from – to) **02/2017-now**

Nome e indirizzo del datore di lavoro / Name and address of employer Sapienza Università di Roma  
Tipo o settore di attività / Type of  
business or sector Education/Research  
Funzione o posto occupato /  
Occupation or position held Adjunct Professor  
Principali mansioni e responsabilità /  
Main activities and responsibilities Network Biology and Bioinformatics course at the Data Science Master Degree

In ordine di data /Dates (from – to) **10/2011-now**

Nome e indirizzo del datore di lavoro / Name and address of employer CNR, Consiglio Nazionale delle Ricerche, IAC Istituto per le Applicazioni del Calcolo, Roma,  
Italy  
Tipo o settore di attività / Type of  
business or sector Government research agency

Funzione o posto occupato / Occupation or position held	Staff scientist
Principali mansion e responsabilità / Main activities and responsibilities	Bioinformatics, computational biology, systems biology, network biology, mathematical models for immunology, multi-omic data; fund raising; mentor for graduate and PhD students
In ordine di data /Dates (from – to)	<b>03/2012-09/2012</b>
Nome e indirizzo del datore di lavoro / Name and address of employer	MPG-CAS Partner Institute for Computational Biology, Shanghai, China
Tipo o settore di attività / Type of business or sector	Academic research
Funzione o posto occupato / Occupation or position held	Visiting scientist
Principali mansion e responsabilità / Main activities and responsibilities	Computational biology of rheumatoid arthritis, network biology, multi-omic data analysis and integration
In ordine di data /Dates (from – to)	<b>2003-2011</b>
Nome e indirizzo del datore di lavoro / Name and address of employer	Università di Bologna, Dept. of Experimental Medicine, Bologna, Italy
Tipo o settore di attività / Type of business or sector	Government research agency
Funzione o posto occupato / Occupation or position held	Research fellow (titolare di assegni di ricerca)
Principali mansion e responsabilità / Main activities and responsibilities	Systems immunology, functional genomics of aging, bioinformatics, computational biology, systems biology, network biology; fund raising; mentor for graduate and PhD students

## **ISTRUZIONE E FORMAZIONE / EDUCATION AND TRAINING**

In ordine di data /Dates (from – to)	<b>2009</b>
Nome e tipo d'istituto di istruzione o formazione / Name and type of organisation providing education and training	Università di Bologna, Dept. of Experimental Medicine, Bologna, Italy
Principali materie e competenze professionali apprese / Principal subjects occupational skills covered	Systems biology and experimental pathology
Certificato o diploma ottenuto /Title of qualification awarded	PhD Philosophiae Doctor
In ordine di data /Dates (from – to)	<b>1999</b>
Nome e tipo d'istituto di istruzione o formazione / Name and type of organisation providing education and training	Università di Bologna, Dept. of Physics, Bologna, Italy
Principali materie e competenze professionali apprese / Principal subjects occupational skills covered	Physics, final thesis in biomedical physics
Certificato o diploma ottenuto /Title of qualification awarded	Laurea Magistralis

**ATTIVITA' DI RICERCA /  
RESEARCH ACTIVITIES**

Attuali campi di ricerca / Research  
sectors

Network medicine, network biology, bioinformatics, computational biology, systems biology, mathematical models for biology, multi-omic data integration and analysis with particular focus on immune system and immune-related pathologies

Recenti attività scientifiche/ Recent  
Scientific Activities.

Project **PRAESIDIUM** Physics Informed Machine Learning-Based Prediction And Reversion Of Impaired Fasting Glucose Management – HORIZON-HLTH-2022-STAYHLTH-02 Project no. 101095672 2023-2026, role: WorkPackage Leader

Project **iPC** individualized Paediatric Cure – H2020 Project no. 826121 2019-2023, role: Researcher

Project **ERA4TB** European Regimen Accelerator for Tuberculosis – IMI2 grant agreement No 853989 2019-2024, role: Researcher

**NMI**, Network Medicine Institute, nonprofit entity recognized by the US and EU 2019-present, role: Scientific Committee Member

Project **OpenMultiMed** Open Multiscale Systems Medicine COST Action CA15120 2016-2020, role: Management Committee Member, Short Missions Coordinator

Project **MISSION-T2D** Multiscale Immune System Simulator for the ONset of Type 2 Diabetes integrating genetic, metabolic and nutritional data, P.I. for WP6 'Model Integration', European Union FP7, 2013-2015, <http://www.mission-t2d.eu/> role: WP leader

**Chinese Academy of Sciences**, 2012, Visiting Fellowship Award, in collaboration with Prof C Nardini group, role: co-P.I. in network biology approach in rheumatoid arthritis

Project **KEPAMOD** Knowledge exchange in processing and analysis of multi-omic data, Marie Curie Action, European Union FP7, 2012-2014, grant no. 294935, role: co-P.I. in network biology approach in rheumatoid arthritis.

Project **INTEROMICS**, WP 'Predictive and Pre-screening Computational Multiscale Tools for Patient-Specific Immune Response', CNR-MIUR, 2012-2014, role: Researcher

- Punzi, C., **Tieri, P.**, Girelli, L., Petti, M. Network-based validation of the psychometric questionnaire EDI-3 for the assessment of eating disorders (2023) *Scientific Reports*, 13 (1)
- Palumbo, M.C., de Graaf, A.A., Morettini, M., **Tieri, P.**, Krishnan, S., Castiglione, F. A computational model of the effects of macronutrients absorption and physical exercise on hormonal regulation and metabolic homeostasis (2023) *Computers in Biology and Medicine*, 163
- Castiglione, F., Nardini, C., Onofri, E., Pedicini, M., **Tieri, P.** Explainable Drug Repurposing Approach from Biased Random Walks (2023) *IEEE/ACM Transactions on Computational Biology and Bioinformatics*, 20 (2), pp. 1009-1019.
- Stolfi, P., Mastropietro, A., Pasculli, G., **Tieri, P.**, Vergni, D. NIAPU: network-informed adaptive positive-unlabeled learning for disease gene identification (2023) *Bioinformatics*, 39 (2)
- Punzi, C., Petti, M., **Tieri, P.** Network-based methods for psychometric data of eating disorders: A systematic review (2022) *PLoS ONE*, 17
- Amatya, P., Stolfi, P., Lombardi, F., **Tieri, P.** DruSiLa: an integrated, in-silico disease similarity-based approach for drug repurposing (2022) *Proceedings - 2022 IEEE International Conference on Bioinformatics and Biomedicine, BIBM 2022*, pp. 1879-1885.
- De Luca, R., Carfora, M., Blanco, G., Mastropietro, A., Petti, M., **Tieri, P.** PROCONSUL: PRObabilistic exploration of CONnectivity Significance patterns for disease modULe discovery (2022) *Proceedings - 2022 IEEE International Conference on Bioinformatics and Biomedicine, BIBM 2022*, pp. 1941-1947.
- Shahini E, Pasculli G, Mastropietro A, Stolfi P, **Tieri P**, Vergni D, Cozzolongo R, Pesce F, Giannelli G. Network Proximity-Based Drug Repurposing Strategy for Early and Late Stages of Primary Biliary Cholangitis. *Biomedicines*. 2022;10(7):1694. doi: 10.3390/biomedicines10071694. PMID: 35884999
- Castiglione F, Nardini C, Onofri E, Pedicini M, **Tieri P**. Explainable Drug Repurposing Approach From Biased Random Walks. *IEEE/ACM Trans Comput Biol Bioinform*. 2022; doi: 10.1109/TCBB.2022.3191392. PMID: 35839194
- Zolotareva O, Nasirigerdeh R, Matschinske J, Torkzadehmahani R, Bakhtiari M, Frisch T, Späth J, Blumenthal DB, Abbasinejad A, **Tieri P**, Kaissis G, Rückert D, Wenke NK, List M, Baumbach J. Flimma: a federated and privacy-aware tool for differential gene expression analysis. *Genome Biol*. 2021;22(1):338. doi: 10.1186/s13059-021-02553-2. PMID: 34906207
- Zanin M, Aitya NAA, Basilio J, Baumbach J, Benis A, Behera CK, Bucholc M, Castiglione F, Chouvarda I, Comte B, Dao TT, Ding X, Pujos-Guillot E, Filipovic N, Finn DP, Glass DH, Harel N, Iesmantas T, Ivanoska I, Joshi A, Boudjeltia KZ, Kaoui B, Kaur D, Maguire LP, McClean PL, McCombe N, de Miranda JL, Moisescu MA, Pappalardo F, Polster A, Prasad G, Rozman D, Sacala I, Sanchez-Bornot JM, Schmid JA, Sharp T, Solé-Casals J, Spiwok V, Spyrou GM, Stalidzans E, Stres B, Sustersic T, Symeonidis I, **Tieri P**, Todd S, Van Steen K, Veneva M, Wang DH, Wang H, Wang H, Watterson S, Wong-Lin K, Yang S, Zou X, Schmidt HHHW. An Early Stage Researcher's Primer on Systems Medicine Terminology. *Netw Syst Med*. 2021 Feb 25;4(1):2-50. doi: 10.1089/nsm.2020.0003. PMID: 33659919; PMCID: PMC7919422.
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- Stolfi P, Valentini I, Palumbo MC, **Tieri P**, Grignolio A, Castiglione F. Potential predictors of type-2 diabetes risk: machine learning, synthetic data and wearable health devices. *BMC Bioinformatics*. 2020 Dec 14;21(Suppl 17):508. doi: 10.1186/s12859-020-03763-4. PMID: 33308172; PMCID: PMC7733701.
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- Manni L, **Tieri P**, Soligo M. (2020). A contribution to the hypothesis of nicotinic challenge as therapeutic option for COVID-19 patients. *Qeios*. doi:10.32388/UJX3KN.3. (preprint)
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- **Tieri P**, Farina L, Petti M, Astolfi L, Paci P, Castiglione F (2018) *Network inference and reconstruction in Bioinformatics*, in *Encyclopedia of Bioinformatics and Computational Biology*, 1st Ed., Editors-in-Chiefs: Ranganathan S, Nakai K, Schonbach C, in press
- Zanin M, Chorbev I, Stres B, Stalidzans E, Vera J, **Tieri P**, Castiglione F, Groen D, Zheng H, Baumbach J, Schmid JA, Basilio J, Klimek P, Debeljak N, Rozman D, Schmidt HHHW (2017) *Community effort endorsing multiscale modelling, multiscale data science and multiscale computing for systems medicine.* *Brief Bioinform.* doi: 10.1093/bib/bbx160
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- Cappuccio A, Tieri P, Castiglione F. (2015) Multi-scale modeling in immunology, a review. Brief Bioinform. 10.1093/bib/bbv012
- Tieri P, Prana V, Colombo T, Santoni D, Castiglione F. (2014) Multi-scale Simulation of T Helper Lymphocyte Differentiation. In: Campos S, editor. Advances in Bioinformatics and Computational Biology. Lecture Notes in Computer Science. 8826: Springer International Publishing; p. 123-34 doi: 10.1007/978-3-319-12418-6\_16
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Additional Information  
Mothertongue  
Other languages

ITALIAN

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C1	C2	C2	C2	C2

**TRATTAMENTO DEI DATI  
PERSONALI, INFORMATIVA E  
CONSENSO**

Il D.Lgs 30/06/2003, n. 196 "Codice in materia di protezione dei dati personali" regola il trattamento dei dati personali, con particolare riferimento alla riservatezza, all'identità personale e al diritto di protezione dei dati personali; l'interessato deve essere previamente informato del trattamento.

La norma in considerazione intende come "trattamento" qualunque operazione o complesso di operazioni concernenti la raccolta, la registrazione, l'organizzazione, la conservazione, la consultazione, l'elaborazione, la modifica, la selezione, l'estrazione, il raffronto, l'utilizzo, l'interconnessione, il blocco, la comunicazione, la diffusione, la cancellazione e la distruzione di dati, anche se non registrati in una banca dati.

In relazione a quanto riportato, autorizzo la Sapienza Università di Roma al trattamento dei dati contenuti nel presente *curriculum vitae*.

*The Undersigned hereby authorises the Sapienza Università di Roma to utilize and store the personal sensitive data contained in the attached Curriculum Vitae within the framework of the Data protection Act No. 196, dates 30 June 2003 as promulgated by the Italian Government.*

**Si, acconsento**

Roma, 21 settembre 2023