UNIVERSITÀ DEGLI STUDI FIRENZE

Area Affari Generali e Legali
Centrale Acquisti

DECRETO DIRIGENZIALE

G006_2025 procedura telematica aperta ex art. 71 D.lgs. 36/2023 per l'affidamento della fornitura di una piattaforma strumentale per il sequenziamento di campioni inclusi servizi di manutenzione/garanzia per 72 mesi (12 mesi + ulteriori 60 mesi) da destinare all'allestimento del laboratorio del Dipartimento di Scienze Biomediche Sperimentali e Cliniche "Mario Serio" aggiudicato in base al criterio dell'offerta economicamente più vantaggiosa, ai sensi dell'art. 108 comma 2 lettera c del D.lgs. 36/2023. CUI F01279680480202400040. Importo a base di gara: € 510.000,00 oltre iva di legge; oneri per la sicurezza da interferenze non soggetti a ribasso: € 0,00. CPV 38432000-2 - progetto: 58515_DIPECC_23_27 CIG B78081B429 - CUP B13C22004460001 finanziato dal MUR- RUP: Dott.ssa Barbara Napolitano.. DECRETO DI NOMINA COMMISSIONE GIUDICATRICE EX ART. 93 D.LGS. 36/2023.

*Il Dirigente,*

VISTO il d.lgs. n. 36/2023 recante *"Codice dei contratti pubblici"* e relativi allegati;
VISTO lo Statuto dell'Università degli Studi di Firenze;
VISTO il Regolamento di Amministrazione, Finanza e Contabilità dell'Università degli Studi di Firenze;
VISTO il d.lgs. 165/2001 e ss.mm.ii.;
VISTA la normativa vigente in materia di anticorruzione e trasparenza, il Piano Triennale per la Prevenzione della Corruzione e della Trasparenza dell'Università degli Studi di Firenze e il Decreto rettorale del 8 febbraio 2016, n. 98 - Codice di comportamento dell'Università degli Studi di Firenze;
RICHIAMATA la Decisione di contrarre Rep. n. 1327/2025 Prot. n. 142412 del 01/07/2025, pubblicata all'Albo n. 8358/2025 Prot. 142426 del 01/07/2025, con cui è stata indetta la procedura in oggetto da aggiudicare con il criterio dell'offerta economicamente più vantaggiosa, ai sensi dell'art. 108 del d.lgs. 36/2023;

DATO ATTO che:

- in data 03/07/2025 è stata pubblicata sul sistema telematico START la procedura ID 016427/2025, in oggetto, con scadenza per la presentazione delle offerte al 28/08/2025 ore 12:00;
- alla scadenza del termine risultava presentata solo una candidatura;

RICHIAMATI il verbale di gara rep. n. 31/2025 prot. n. 0222749 del 01/09/2025, relativo alla fase di apertura e valutazione della busta amministrativa;

RILEVATA la necessità di provvedere alla nomina della commissione tecnica preposta all'esame dell'offerta, da costituirsi con un numero di n. 3 componenti esperti nella materia oggetto del contratto;

VALUTATA la qualificazione, anche mediante esame degli allegati *curricula*, dei seguenti soggetti ai fini della nomina a componente della Commissione Giudicatrice:

- Dott.ssa Letizia De Chiara, afferente al Dipartimento di Scienze Biomediche, Sperimentali e Cliniche 'Mario Serio' (Presidente);
- Prof.ssa Francesca Becherucci, afferente al Dipartimento di Scienze Biomediche, Sperimentali e Cliniche 'Mario Serio' (commissario);
- Prof. Matteo Benelli, afferente al Dipartimento di Scienze Biomediche, Sperimentali e Cliniche 'Mario Serio' (commissario);

RITENUTO OPPORTUNO nominare segretario verbalizzante la Dott.ssa Donatella Alfieri - Funzionario Amministrativo - e segretario supplente la Dott.ssa Maria Concetta Di Leonardo - entrambe afferenti alla Centrale Acquisti, Università degli Studi di Firenze;

RICEVUTA la disponibilità dei suddetti allo svolgimento dell'incarico;

ACQUISITE le dichiarazioni (conservate agli atti) dei nominandi commissari da cui risulta, con riferimento all'operatore economico che ha rimesso offerta, che non sussistono cause di conflitto d'interesse e di incompatibilità ai sensi della normativa vigente;

RITENUTO di dare attuazione alle disposizioni legislative di cui all'art. 28 co.2 del d.lgs. 36/2023, mediante pubblicazione del presente provvedimento e dei curricula allegati prodotti dai membri della Commissione Giudicatrice, sul profilo del committente Unifi, nella sezione Amministrazione Trasparente - Bandi di gara e contratti, nonché sull'Albo on line della stazione appaltante;

DATO ATTO che tutti gli atti della presente procedura di gara, oltre che sul sistema telematico START e sul profilo committente, sono disponibili anche presso l'Ufficio Centrale Acquisti dell'Università degli Studi di Firenze, via Capponi n.7, primo piano;
ciò premesso,

DECRETA

a) la nomina, ai fini della valutazione dell'offerta presentata, relativa all'affidamento della fornitura in oggetto, della seguente Commissione Giudicatrice, ai sensi dell'art. 93 d.lgs. 36/2023:
   - Dott.ssa Letizia De Chiara, afferente al Dipartimento di Scienze Biomediche, Sperimentali e Cliniche 'Mario Serio' (Presidente);
   - Prof.ssa Francesca Becherucci, afferente al Dipartimento di Scienze Biomediche, Sperimentali e Cliniche 'Mario Serio' (commissario);
   - Prof. Matteo Benelli, afferente al Dipartimento di Scienze Biomediche, Sperimentali e Cliniche 'Mario Serio' (commissario);
   - di dare atto che le attività di segretario verbalizzante saranno svolte dalla Dott.ssa Donatella Alfieri - Funzionario Amministrativo, afferente alla Centrale Acquisti;
   - Segretario supplente: Dott.ssa Maria Concetta Di Leonardo - Università degli Studi di Firenze, afferente alla Centrale Acquisti, Università di Firenze;

b) di stabilire che nessun compenso è dovuto per l'attività di cui al presente Decreto;

c) di procedere alla pubblicazione del presente provvedimento e relativi curricula sul profilo del committente nella sezione bandi di gara, nonché sull'Albo on line della stazione appaltante, ai sensi e per gli effetti dell'art. 28 co.2 del d.lgs. 36/2023.

Il Dirigente
Dott. Massimo Benedetti

Allegati:
1. Curricula Commissari

Firmato digitalmente da: MASSIMO BENEDETTI
Data: 12/09/2025 11:45:52 CEST

## ***PERSONAL INFORMATION***

De Chiara Letizia
0000-0002-8548-2031
https://www.researchgate.net/profile/Letizia_De_Chiara

## ***EDUCATION***

2024 **National Scientific Qualification as Associate Professor,** granted by the MIUR after examination by a committee of full professors in the specific field, currently employed at Italian Universities: 2024 (valid until 2034): Qualification in Medical Technical Sciences (MED26A)

27/01/2014 **Doctor in Philosophy**, Doctoral School in Life and Health Sciences, specialising in Molecular Biotechnology. Molecular Biotechnology Centre (MBC), Department of Molecular Biotechnology and Health Science, University of Turin, Italy. *Potential application in regenerative medicine of stem cells derived from testis*. PI: Prof. Fiorella Altruda.

2013 State exam for biology qualification (Abilitazione alla professione di Biologo).

15/07/2009 **MSc in Cell and Molecular Biology**, Faculty of Mathematics, Physics and Natural Sciences, University of Florence, Italy. Grade: ***110/110 Magna cum laude.*** Supervisor: Prof. Annarosa Arcangeli.

15/11/2007 **BSc in Biology**, Faculty of Mathematics, Physics and Natural Sciences, University of Florence, Italy. Grade: ***110/110 Magna cum laude.*** Supervisor: Prof. David Caramelli.

## ***CURRENT POSITION***

20/12/2022- **Researcher (RTDA)**. University of Florence, Viale Pieraccini 6, 50139, Florence Italy.

## ***PREVIOUS POSITIONS***

2021-2022 **Postdoctoral Fellow**. University of Florence, Viale Pieraccini 6, 50139, Florence Italy. *Polyploid cells in AKI and CKD progression.* PI: Prof. Paola Romagnani.

2021-2022 **L'Oreal-Unesco for women in science founded Postdoctoral Fellow,** University of Florence, Viale Pieraccini 6, 50139, Florence Italy. *Polyploid cells as a tool to prevent chronic kidney disease progression.* PI: Prof. Paola Romagnani.

2019-2021 **Marie Sklodowska-Curie founded Postdoctoral Fellow,** University of Florence, Viale Pieraccini 6, 50139, Florence Italy. *Role of endocycle in Acute Kidney Injury Response and Chronic Kidney Disease development.* PI: Prof. Paola Romagnani.

2017-2019 **Postdoctoral Fellow,** Meyer Children's University Hospital, Viale Pieraccini 24, 50139, Florence Italy. *Exploring human renal progenitor cells for personalized medicine.* PI: Prof. Paola Romagnani.

2016-2017 **Associate Postdoctoral Research Fellow**, Weill Cornell Medical College - The Seandel Lab - New York, 1300 York Avenue, 10065 New York. *De novo mutations in paternal age effect diseases.* PI: Prof. Marco Seandel.

2014-2016 **Postdoctoral Research Fellow Level 1**, Conway Institute of Biomolecular and Biomedical Research, University College Dublin (UCD), Belfield, Dublin 4, Ireland. *Investigating TGFβ signalling during Diabetic Nephropathy.* PI: Prof. John Crean.

## ***AWARDED GRANTS***

2024-26 **Awarded a grant by the Italian Ministry of Education, University and Research (MIUR)** as part of the Excellence department with a focus on gender medicine and single cell RNA-seq (60000 Euro).

2023-25 **Awarded a Cariplo and Telethon Joint Call for Applications grant 2022** (84000Euro).

2022-25 **Awarded a Young Researchers - MSCA grant** by the MIUR. NextGeneration EU program (300000 Euro).

## ***FELLOWSHIPS AND AWARDS***

*07/05/2024* **Invited presentation for the UCD Conway research seminar series,** Dublin Ireland. Title: "Kidney tubule polyploidization: the missing link between acute injury and chronic disease".

*2023* **Invited speaker** to the Italy Single Cell & Spatial Discovery Symposium 2023, 24 October Milano

*2023* **Invited speaker** to the Italian Society of Nephrology (SIN), 4-7 October 2023 Torino, Italy.

*2023* **Invited speaker** to the 3rd International Symposium on Microgenomics 2023 - June 28 (Workshop), June 29-30 (Symposium), Florence, Italy (https://microgenomics.symposium.inrae.fr/invited-speakers2/letizia-de-chiara)

*2022* **Invited speaker to the World Conference of Nephrology 2023**, March 30 – April 02, Bangkok, Thailand

*2022* **Invited to moderate** at the congress of the Italian Society of Nephrology (SIN), 5-8 October 2022 Rimini, Italy.

*2022* **Selected as an Emerging Leader** by the International Society of Nephrology (https://www.theisn.org/in-action/grants/emerging-leaders/#2022-cohort)

*2022* **Invited speaker to the World Conference of Nephrology 2022**, February 24-27, Kuala Lumpur, Malaysia.

*2021* Awarded a **Veronesi Postdoctoral Fellowship** to investigate the role of polyploid cells in kidney cancer. Declined to accept a fixed term contract from the University of Florence

*2021* Invited to moderate at the congress of the Italian Society of Nephrology (SIN), 6-9 October 2021 Rimini, Italy.

*2021* **Winner of an International Society of Nephrology-Kidney International Editorial Fellowship** 2021-2023.

*2021* **Winner of a L'Oreal-Unesco for women in science award** to investigate the role of polyploid cells in CKD progression in kidney biopsies

*2021* Winner of a travel grant to present at the 58th ERA-EDTA, 5-8 June 2021, Berlin, Germany.

*2021* Awarded a grant for the contest "Idea for excellent science" from the University of Florence to support young investigator applying for ERC starting grant.

*2020* **Awarded a young investigator abstract award from the American Physiological Society** as part of the Kidney Week-reimagined

*2020* Winner of a virtual access grant to participate to the early meeting "Advances in Research Conference: Single-Cell Biology" as part of the American Society of Nephrology (ASN) Kidney Week-reimagined.

*2020* Winner of a virtual access grant to present at the 57th ERAEDTA fully virtual congress, 6-9 June 2020 Milan, Italy.

*2019* **Awarded the Marie Sklodowska-Curie Actions Fellowship** H2020-MSCA-IF-EF-RI-2018 (Reintegration Panel). Title of the project: *ROAR: Role of endocycle in Acute Kidney Injury Response and Chronic Kidney Disease Development.*

*2019* 3rd classified presentation at "la ricerca in tre minuti"- La notte dei ricercatori (BRIGHT) 2019. Winner of a travel grant for congress participation.

*2018* **Awarded the Marie Sklodowska-Curie Actions *Seal of Excellence*** for the application "Role of Endocycle and Hypertrophy in the Response to Acute Kidney Injury".

*2013* Winner of a prize for best PhD project at the ABCD joint National PhD meeting, Pesaro, October 2013.

*2012* Awarded a mobility fellowship from the CIB (Consorzio Interuniversitario di Biotecnologie) to join Prof. vanPelt's lab in AMC, Amsterdam as a visiting student.

## ***ATTERNDED WORKSHOPS AND TRAININGS***

*2022* Harvard Catalyst-Introduction to Implementation Research: Designing & Evaluating Interventions.

*2021* Introduction to R for Biologists. University of Cambridge.

*2016* Cambridge Advanced Certificate (CAE). The Arena School of English, 67 Harcourt Street, Dublin 2, Ireland. Grade C2.

*2016* Building Research Leaders. UCD Research Skills and Career Development programme, University College Dublin, Belfield 4, Dublin, Ireland..

*2015* LAST (Laboratory Animal Science and Training) Certificate for Rodents, Category A, B and C in line with the Directive 2010/63 EU. Trinity College Dublin, Dublin, Ireland.

## ***SUPERVISION***

*2024-* Supervisor of 1 PostDoc, University of Florence.

*2021-2024* Supervisor of 1 PhD student in Bioinformatics, University of Florence

*2018-2022* Supervisor of 6 Biotechnology Master Students, University of Florence.

*2016-2017* Supervisor of a summer Internship student (Merna Hussein, Medical Student Research Award from Weill Cornell Qatar) and co-supervisor of a PhD rotation student, Weill Cornell Medical College NYC.

*2014-2015* Supervisor of a Biotechnology Master and 2 Pharmacology undergraduate students, UCD.

*2014-2018* Co-supervisor of a PhD student, University of Turin (Elvira Smeralda Famulari).

## ***TEACHING***

*2023* Technical Sciences and laboratory medicine. Biomedical Laboratory Technician, UNIFI

*2023* Single cell and spatial omics. Master Degree in Advanced Molecular Sciences, UNIFI

*2017-2018* Series of lectures to the 2nd year students of Medical and Pharmaceutical Biotechnology, UNIFI, focused on *"the biology of spermatogonial stem cells"* and *"potential application of stem cells in regenerative medicine"*.

*2015* Cell-to-Cell Communication tutorials to 2nd year medical students, UCD.

*2014-2015* Series of lectures to 3rd year Pharmacology students in stem cell biology and renal regeneration, UCD.

*2011-2013* Tutorial activity to 2nd year obstetric and nurse students in Cellular Biology at the University of Turin.

## ***ORGANIZATION OF SCIENTIFIC MEETINGS***

*April 2018* **Scientific committee of the 30th Meeting of the European Renal Cell Study Group (ERCSG) 2018**. 19-22 April 2018, Artimino, Prato, Italy. https://www.ercsg2018.org/node/9

## ***CONFERENCE PAPERS***

*Selected conference oral presentations*

*2022* **Kidney tubule polyploidization drives chronic kidney disease after acute kidney injury.** The 34th Meeting of the European Renal Cell Study Group (ERCSG) 2022, 7-10 April 2022, Cyprus.

*2021* **Kidney Tubule Polyploidization Is an Evolutionary Conserved Mechanism Required to Survive AKI**. The American Society of Nephrology (ASN) annual meeting-Kidney Week, fully virtual congress, 4-7 November 2021 San Diego, USA.

*2021* **Kidney Tubule Polyploidization Drives CKD Progression After AKI**. Basic Research Forum for Emerging Kidney Scientists, fully virtual congress, 21 October 2020 Denver, USA.

*2021* **Tubular epithelial cell polyploidy is essential to survive AKI but contributes to CKD progression**. The 58th ERA-EDTA (European Renal Association-European Dialysis and Transplant Association) fully virtual congress, 6-9 June 2020 Milan, Italy.

*2020* **Tubular epithelial cell polyploidization is required to survive AKI but it contributes to CKD development**. Basic Research Forum for Emerging Kidney Scientists, fully virtual congress, 21 October 2020 Denver, USA.

*2020* **Tubular epithelial cell polyploidization is required to survive AKI but it contributes to CKD development**. The 57th ERA-EDTA (European Renal Association-European Dialysis and Transplant Association) fully virtual congress, 6-9 June 2020 Milan, Italy.

*2019* **Polyploidization is essential to survive AKI but it contributes to CKD development.** The American Society of Nephrology (ASN) annual meeting-Kidney Week 2019, 7-10 November 2019, Washington D.C., USA.

*2019* **Endocycle is essential to survive Acute Kidney Injury but it contributes to Chronic Kidney Disease development.** The 31th Meeting of the European Renal Cell Study Group (ERCSG) 2019, 28-31 March 2019, Korinthia, Greece.

*2018* **Investigating the endocycle-mediated response in human renal tubular epithelial cells.** The 30th Meeting of the European Renal Cell Study Group (ERCSG) 2018, 19-22 April 2018, Artimino, Prato, Italy.

*2015* **miR302 regulates SNAI1 expression to control mesangial cell plasticity.** Matrix Biology Ireland Meeting, Dublin 2-4 December 2015.

*2015* **Role of miR302 in Diabetic Nephropathy**. The 27th Meeting of the European Renal Cell Study Group (ERCSG) 2015, 26 February – 1th March 2015, co. Louth Ireland.

*2014* **The Polycomb repressor complex and Smad3 constitute a switch enhancing complex that interprets TGFβ signaling to control cell fate in diabetic microvascular complications**

The annual meeting of the American Society of Nephrology, "Kidney Week", Philadelphia 11-16 November 2014.

*2012* **Murine Germline-cell Derived Pluripotent Stem Cells differentiated into tubular-like renal epithelial cells can protect from renal ischemia/reperfusion injury.** ABCD congress "Stem cell, development and regenerative medicine", Turin 4-6 May 2012. Winner of a fellowship for best oral presentation.

*Selected conference poster presentations*

*2022* **scRNA-seq analysis of polyploid tubular epithelial cells reveals a specific hypertrophy program triggered in response to AKI**. The American Society of Nephrology (ASN) annual meeting-Kidney Week, 3-6 November 2021 Orlando, USA.

*2021* **Yap1 controls polyploidization in kidney tubular epithelial cells.** Annual meeting of the American Society for Cell Biology. ASCB-EMBO. 1-10 December 2021. Fully virtual.

*2019* **Endoreplication is essential to survive Acute Kidney Injury but it contributes to Chronic Kidney Disease development.** Molecular mechanisms of tissue injury, repair and fibrosis. EMBO-FEBS lecture course. 23-31 May 2019 Spetses Island, Greece.

*2015* **Targeting the Polycomb Repressor Complex chromatin remodeling machinery for therapeutic benefit in Diabetic Nephropathy.** The annual meeting of the American Society of Nephrology, "Kidney Week", San Diego 3-8 November 2015.

*2015* **EZH2 and Smad3 form a switch enhancing complex that interprets TGFβ signaling to control cell fate during differentiation.** The "International Society for Stem Cells Research" ISSCR meeting 2015, Stockholm 23-28 June 2015.

*2013* **Renal tubular-like cells generated from Germline cell-derived pluripotent stem cells protect kidney from ischemic injury.** The "International Society for Stem Cells Research" ISSCR meeting 2013, Boston 12-15 June 2013.

*2011* **Murine Germline-cell Derived Pluripotent Stem Cells differentiated into tubular-like renal epithelial cells can protect from renal ischemia/reperfusion injury.** "Stem cells in development and disease", Berlin, 11-14 September 2011.

## ***EDITORIAL BOARD***

*2022-present* **Associate Editor for Journal of Nephrology (JNEP)**
*2023-present* **Associate Editor for Nephrology dialysis transplantation (NDT)**
*2023-present* **Consulting Editor for Kidney International (KI)**

## ***REVIEWING ACTIVITIES***

*2020-present* Review Editor for Frontiers in Renal Pharmacology
*2020-present* Reviewer for Journal of the American Society of Nephrology (JASN)
*2019-present* Review Editor for Frontiers Molecular Biosciences
*2018-present* Reviewer for Nephrology dialysis transplantation (NDT)
*2018-present* Reviewer for Journal of Clinical Medicine (JCM)

## ***MEMBERSHIP OF SCIENTIFIC SOCIETIES***

*2020-present* Member of European Renal Association (ERA-EDTA)
*2020-present* Member of the International Society of Nephrology (ISN)
*2019-present* Junior Member of the Federation of European Biochemical Societies (FEBS)
*2014-present* Member of the American Society of Nephrology (ASN)
*2013-present* Junior Member of International Society for the Stem Cells Research (ISSCR)
*2012-present* Member of the Italian association for cell biology and differentiation (ABCD)

## ***MAJOR COLLABORATIONS***

*Prof. Godson* Investigating transcriptomic profile of endocycling cells in human kidney biopsies. University College Dublin, School of Medicine, Conway Institute Belfield Dublin 4.

*Prof. Villa, MD* Developing new prognostic markers to stratify patients at risk of developing chronic kidney disease (CKD) following acute kidney injury (AKI), University of Florence.

*Prof. Pecci, MD* Investigating the role of MYH9 in tubular cell polyploidization. University of Pavia.

*Prof. Yuen, MD* Yap1 in tubular cell polyploidization. St. Michael's Hospital Keenan Research Centre for Biomedical Science, Unity Health Toronto.

## ***LIST OF PUBLICATIONS***

1) Raglianti V*, Angelotti ML*, **De Chiara L***, Allinovi M, Cirillo L, Montero AM, Cruzado JM, Melica ME, Antonelli G, Conte C, Peired AJ, Lasagni L, Lange-Sperandio B, Anders HJ, Becherucci F, Lazzeri E, Mazzinghi B, Romagnani P. *Anti-slit Antibodies against Podocin and Kirrel1 in Pediatric and Adult Podocytopathies*. J Am Soc Nephrol. 2025 Jan 30. doi: 10.1681/ASN.0000000642. Online ahead of print.
2) Sandal S, Onu U, Fung W, Pippias M, Smyth B, **De Chiara L**, Bajpai D, Bilchut WH, Hafiz E, Kelly DM, Bagasha P, Jha V, Ethier I. *Assessing the role of education level on climate change belief, concern and action: a multinational survey of healthcare professionals in nephrology.* J Nephrol. 2025 Jan 29. doi: 10.1007/s40620-024-02195-0. Online ahead of print.
3) Raglianti V, Angelotti ML, Cirillo L, Ravaglia F, Landini S, Palazzo V, Melica ME, Antonelli G, Conte C, Buti E, Errichiello C, **De Chiara L**, Peired AJ, Lasagni L, Buccoliero AM, Allinovi M, Montero AM, Cruzado JM, Bruschi M, Ghiggeri GM, Angeletti A, Anders HJ, Lazzeri E, Mazzinghi B, Becherucci F, Romagnani P. *Anti-slit diaphragm antibodies on kidney biopsy identify pediatric patients with steroid-resistant nephrotic syndrome responsive to second-line immunosuppressants.* Kidney Int. 2024 Dec;106(6):1124-1134. doi: 10.1016/j.kint.2024.09.006. Epub 2024 Oct 3.
**4)** Zhao D, Han C, Mammadova-Bach E, Watanabe-Kusunoki K, Bandeira Honda TS, Li Y, Li C, Li Q, Long H, Lyubenov L, Shi C, Santovito D, Weber C, Boor P, Droste P, Parikh S, Shapiro J, **De Chiara L**, Carangelo G, Romagnani P, Klussmann S, Hoehlig K, Vater A, Anders HJ. *Inhibition of complement factor C5a or C5aR for cholesterol crystal embolism-related vascular thrombosis with microvascular injury and its consequences.* Kidney Int. 2024 Nov;106(5):819-825. doi: 10.1016/j.kint.2024.07.020. Epub 2024 Aug 12.
5) Sandal S, Ethier I, Onu U, Fung W, Bajpai D, Bilchut WH, Bagasha P, **De Chiara L**, Hafiz E, Smyth B, Kelly D, Pippias M, Jha V. *Climate Change, Kidney Health, and Environmentally Sustainable Kidney Care: A Multinational Survey of Health Care Professionals.* J Am Soc Nephrol. 2024 Aug 1;35(8):1084-1094. doi: 10.1681/ASN.0000000000000402. Epub 2024 May 20.
6) Pippias M, Alfano G, Kelly DM, Soler MJ, **De Chiara L**, Olanrewaju TO, Arruebo S, Bello AK, Caskey FJ, Damster S, Donner JA, Jha V, Johnson DW, Levin A, Malik C, Nangaku M, Okpechi IG, Tonelli M, Ye F, Coppo R, Lightstone L; Regional Board and ISN-GKHA Team Authors. *Capacity for the management of kidney failure in the International Society of Nephrology Western Europe region: report from the 2023 ISN Global Kidney Health Atlas (ISN-GKHA).* Kidney Int Suppl (2011). 2024 Apr;13(1):136-151. doi: 10.1016/j.kisu.2024.01.008. Epub 2024 Apr 8.
**7) De Chiara L**, Ronco P, Rovin BH. *Green nephrology: an editor's journey.* J Nephrol. 2024 Jan;37(1):3-5. doi: 10.1007/s40620-024-01890-2.
**8) De Chiara L**, Lazzeri E, Romagnani P. *Polyploid tubular cells: a shortcut to stress adaptation*. Kidney Int. 2024 Apr;105(4):709-716. doi: 10.1016/j.kint.2023.10.036. Epub 2024 Jan 9.
9) Cirillo L, **De Chiara L**, Innocenti S, Errichiello C, Romagnani P, Becherucci F. *Chronic kidney disease in children: an update*. Clin Kidney J. 2023 Apr 24;16(10):1600-1611. doi: 10.1093/ckj/sfad097. eCollection 2023 Oct.
10) Kunte SC, Marschner JA, Klaus M, Honda T, Li C, Motrapu M, Walz C, Angelotti ML, Antonelli G, Melica ME, **De Chiara L**, Semeraro R, Nelson PJ, Anders HJ. *No NLRP3 inflammasome activity in kidney epithelial cells, not even when the NLRP3-A350V Muckle-Wells variant is expressed in podocytes of diabetic mice.* Front Immunol. 2023 Aug 23;14:1230050. doi: 10.3389/fimmu.2023.1230050. eCollection 2023.
**11) De Chiara L**, Semeraro R, Mazzinghi B, Landini S, Molli A, Antonelli G, Angelotti ML, Melica ME, Maggi L, Conte C, Peired AJ, Cirillo L, Raglianti V, Magi A, Annunziato F, Romagnani P, Lazzeri E. *Polyploid tubular cells initiate a TGF-β1 controlled loop that sustains polyploidization and fibrosis after acute kidney injury.* Am J Physiol Cell Physiol. 2023 Oct 1;325(4):C849-C861. doi: 10.1152/ajpcell.00081.2023. Epub 2023 Aug 29.
12) Melica ME, Angelotti ML, Antonelli G, Peired AJ, Conte C, **De Chiara L**, Mazzinghi B, Lazzeri E, Lasagni L, Romagnani P. *Preparation of Human Kidney Progenitor Cultures and Their Differentiation into Podocytes*. Bio Protoc. 2023 Aug 20;13(16):e4757. doi: 10.21769/BioProtoc.4757. eCollection 2023 Aug 20.

13) 2022 International Society of Nephrology Emerging Leaders. *Green nephrology: a series of mini reviews on minimizing the environmental impact of kidney health care*. Kidney Int. 2023 Jul;104(1):7-11. doi: 10.1016/j.kint.2023.03.038
14) Xia Y, **De Chiara L**, Drummond IA. *Tubuloid as an alternative model of ADPKD.* Kidney Int. 2023 Sep;104(3):409-411. doi: 10.1016/j.kint.2023.03.021. Epub 2023 Apr 5.
15) Becherucci F., Landini S., Palazzo V., Cirillo L., Raglianti V., Lugli G., Tiberi L., Dirupo E., Bellelli S., Mazzierli T., Lomi J., Ravaglia F., Sansavini G., Allinovi M., Giannese D., Somma C., Spatoliatore G., Vergani D., Artuso R., Rosati A., Cirami C., Dattolo PC., Campolo G., **De Chiara L.**, Papi L., Vaglio A., Lazzeri E., Anders H.J., Mazzinghi B., Romagnani P. *A Clinical Workflow for Cost-Saving High-Rate Diagnosis of Genetic Kidney Diseases.* J Am Soc Nephrol. 2023 Jan 17. doi: 10.1681/ASN.0000000000000076.
16) **De Chiara L** and Romagnani P. *Polyploid tubular cells and chronic kidney disease.* Kidney International doi: 10.1016/j.kint.2022.08.017.
17) **De Chiara L.,** Conte C., Semeraro R., Diaz-Bulnes P., Angelotti ML., Mazzinghi B., Molli A., Antonelli G., Landini S., Melica ME., Peired AJ., Maggi L., Donati M., La Regina G., Allinovi M., Ravaglia F., Guasti D,. Bani D., Cirillo L., Becherucci F., Guzzi F., Magi A., Annunziato F., Lasagni L., Anders HJ., Lazzeri E., Romagnani P. *Tubular cell polyploidy protects from lethal acute kidney injury but promotes consequent chronic kidney disease.* Nature Communications. doi: 10.1038/s41467-022-33110-5.
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20) **De Chiara L.,** Xia Y. *Modelling AKI in vitro: taking organoids to the next level.* Kidney Int. doi: 10.1016/j.kint.2022.05.023.
21) Ravaglia F., Melica ME., Angelotti ML., **De Chiara L.**, Romagnani P., Lasagni L. *The Pathology Lesion Patterns of Podocytopathies: How and why?* Front Cell Dev Biol. doi: 10.3389/fcell.2022.838272.
22) **De Chiara L**., Lugli G., Villa G., Raglianti V., Husain-Syed F., Ravaglia F., Romagnani P., Lazzeri E. *Molecular Mechanisms and Biomarkers Associated with Chemotherapy-Induced AK*I. Int J Mol Sci. doi: 10.3390/ijms23052638.
23) Gnemmi V., Li Q., Ma Q., **De Chiara L.**, Carangelo G., Li C., Molina-Van den Bosch M., Romagnani P., Anders HJ., Steiger S. *Asymptomatic Hyperuricemia Promotes Recovery from Ischemic Organ Injury by Modulating the Phenotype of Macrophages.* Cells. doi: 10.3390/cells11040626.
24) **De Chiara L.**, Conte C., Antonelli G. and Lazzeri E. *Tubular cell cycle response upon AKI: revising old and new paradigms to identify novel targets for CKD prevention*. International Journal of Molecular Sciences. doi:10.3390/ijms222011093.
25) Peired A.J., Antonelli G., Angelotti M.L., Allinovi M., Guzzi F., Sisti A., Semeraro R., Conte C., Mazzinghi B., Nardi S, Melica M.E., **De Chiara L.**, Lazzeri E., Lasagni L., Lottini T., Landini S., Giglio S., Mari A., Di Maida F., Antonelli A., Porpiglia F., Schiavina R., Ficarra V., Facchiano D., Gacci M., Serni S., Carini M., Netto G.J., Roperto R.M., Magi A., Christiansen C.F., Rotondi M., Liapis H., Anders H.J., Minervini A., Raspollini M.R., Romagnani P. *Acute kidney injury promotes development of papillary renal cell adenoma and carcinoma from renal progenitor cells.* Science Translational Medicine 2020. doi: 10.1126/scitranslmed.aaw6003.
26) Peired A.J., Mazzinghi B., **De Chiara L.**, Guzzi F., Lasagni L., Romagnani P., Lazzeri E. *Bioengineering*
*strategies for nephrologists: kidney was not built in a day.* Expert Opin Biol Ther 2020. doi:10.1080/14712598.2020.1709439.
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29) **De Chiara L.**, Famulari E., Fagoonee S., Van Daleen S., Buttiglieri. S, Revelli A., Tolosano E., Silengo L., vanPelt A.M.M. and Altruda F. *Characterization of human mesenchymal stem cells isolated from testis.* Stem Cells Int. 2018 Sep 3; 2018:4910304. doi: 10.1155/2018/4910304.
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32) **De Chiara L**., Andrews D., Watson A., Oliviero G., Cagney G and Crean J. miR302 regulates SNAI1 expression to control mesangial cell plasticity. Scientific Reports. Sci Rep. 2017 Feb 14;7:42407. doi: 10.1038/srep42407.
33) Yamada M., **De Chiara L**. and Seandel M. Spermatogonial Stem Cells: Implications for Genetic Disorders and Prevention. Stem Cells Dev. 2016 Sep 5.
34) **De Chiara L**. and Crean J. Emerging transcriptional mechanisms in the regulation of epithelial to mesenchymal transition and cellular plasticity in the kidney. J Clin Med. 2016 Jan 12;5(1). IF. 4.964
35) **De Chiara L**., Fagoonee S., Ranghino A., Bruno S., Camussi G., Tolosano E., Silengo L. and Altruda F. Renal cells from spermatogonial germline stem cells protect against kidney injury. JASN, February 2014 vol. 25 no. 2 316-328.
36) Fagoonee S., Hobbs R., **De Chiara L**., Cantarella D., Piro RM., Tolosano E., Medico E., Provero P., Pandolfi PP., Silengo L. and Altruda F., Generation of functional hepatocytes from mouse germline cells derived pluripotent stem cells in vitro, Stem Cells Dev., 2010 Aug.; 19 (8): 1183-94.

# FRANCESCA BECHERUCCI
CURRICULUM VITAE

## PERSONAL DETAILS


| | |
|---|---|
| Institution | University of Florence, Florence (Italy); Meyer Children's Hospital IRCCS, Florence (Italy) |
| Email address | francesca.becherucci@meyer.it; francesca.becherucci@unifi.it |
| Nationality | Italian |
| Languages | Italian (mother tongue), English, French |


## EDUCATION

March 2024 — **Master in Rare Diseases**
*University of Florence, Tuscany Region (Italy)*

June 2022 — **Master in Medical Genetics**
*University of Siena (Siena)*

Feb 2019 — **PhD in Clinical Sciences (*curriculum* Clinical and Experimental Medicine)**
*Department of Biomedical, Experimental and Clinical Sciences "Mario Serio", School of Human Health Sciences, University of Florence (Italy)*
Final thesis entitled "Next-generation sequencing for diagnosis and personalized management of inherited nephropathies".
Department of Biochemical, Experimental and Clinical Sciences "Mario Serio", University of Florence, Florence (Italy).
Finals: Achieved.

June 2016 — **Postgraduate Specialisation in Nephrology**
*School of Human Health Sciences, University of Florence (Italy)*
Final thesis entitled "Next-generation sequencing and functional analysis of patient's urine-derived renal progenitor cells to unravel the diagnosis of refractory lupus nephritis: an example of personalized medicine"
Original title: "Next-generation sequencing e analisi funzionale in cellule progenitrici renali isolate dalle urine per la diagnosi di un caso di nefrite lupica refrattaria: un esempio di medicina personalizzata"
Paediatric Nephrology and Dialysis Unit, Meyer Children's Hospital, Florence (Italy).
Finals: 70/70 *cum laude*.

Oct 2010 — **MD Degree in Medicine and Surgery**
*Faculty of Medicine and Surgery, University of Florence (Italy)*
Final thesis entitled "Notch activation regulates the balance between glomerular

damage and regeneration and determines the progression toward glomerulosclerosis".
Original title: "L'attivazione di Notch regola l'equilibrio tra danno e rigenerazione glomerulare e determina la progressione verso la glomerulosclerosi".
Laboratory of cellular and molecular Nephrology, Department of Clinical Physiopathology
Finals: 110/110 *cum laude* with academic honors.

Sept 2004 **Bachelor of Science degree in Biotechnology**
*Faculty of Medicine and Surgery, University of Florence (Italy)*
Final thesis entitled "Homing of adult stem cells in damaged tissues"
Original title: "Meccanismi di homing della cellula staminale adulta nel tessuto lesionato".
Excellence Center for Research, Transfer and High Education "DENOthe"
Finals: 110/110 *cum laude* with academic honors.

## CURRENT POSITION

Since July 2024 **Coordinator of the Laboratory of Nephrogenetics**
*Meyer Children's Hospital IRCCS, Florence (Italy)*

Since Sept 2022 **Researcher**
*Department of Biomedical, Experimental and Clinical Sciences "Mario Serio", University of Florence Florence (Italy)*

Since Jan 2020 **Consultant in Pediatric Nephrology**
*Pediatric Nephrology and Dialysis Unit, Meyer Children's Hospital IRCCS, Florence (Italy)*

Since 2017 **Substitute representative of the Healthcare Provider Nephrology and Dialysis Unit of Meyer Children's Hospital in the board of the European Reference Network (ERN) for rare and complex kidney diseases ERKNet**
*Pediatric Nephrology and Dialysis Unit, Meyer Children's Hospital IRCCS, Florence (Italy)*
HCP representative: Prof. Paola Romagnani.
Network coordinator: Prof. Franz Schaefer.

Since 2017 **Member of the workgroups "Autosomal dominant dysplasias", "Congenital anomalies of kidney and urinary tract and ciliopathies" and "Thrombotic microangiopathies" European Reference Network**
*(ERN) for rare and complex kidney diseases ERKNet*

**WORK EXPERIENCE**

Jan- Dec 2019 **Research fellowship on rare kidney diseases**
*Department of Biomedical, Experimental and Clinical Sciences "Mario Serio", University of Florence*
Florence (Italy)

2017- 2018 **Consultant in Pediatric Nephrology**
*Meyer Children's Hospital*
Florence (Italy)

2016- 2017 **On-duty Doctor (out-of-hours) in Internal Medicine Department**
*Casa di Cura Villa Donatello, Casa di Cura Valdisieve Hospital, Casa di Cura Maria Teresa Hospital, Casa di Cura Villa delle Terme*
Florence (Italy)

July 2016 **On-duty Doctor at out-of-hours at drop-in emergency point**
*Local Health Authority n.10*
Florence (Italy)

2016- 2017 **Volunteer Attendant**
*Nephrology and Dialysis Unit Firenze II, Santa Maria Annunziata Hospital*
Florence (Italy)
Clinical training in patient assistance and management in Nephrology, Dialysis and Transplantation

2016- 2017 **Volunteer Attendant**
*Radiology Unit, Santa Maria Annunziata Hospital*
Florence (Italy)
Ultrasonography training

2011- 2016 **Temporary replacement of several General Practitioners and Paediatricians**
Florence (Italy)
Doctor providing healthcare assistance to the local adult and paediatric population

2011- 2016 **Postgraduate Specializing Program in Nephrology**
*School of Human Health Sciences*, *University of Florence (Italy)*
Director: Prof. Paola Romagnani

Work experience during the Program:

Sept 2015-Jun 2016
**Laboratory of cellular and molecular Nephrology (Director Prof. Paola Romagnani), Excellence Center for Research, Transfer and High Education "DENOthe" (Director: Prof. Enrico Maggi), University of Florence (Italy)**
Study of the role of renal stem cells in the regeneration of podocytes and tubular cells and in glomerular diseases. Study of the role of genetic mutations assessed by

next-generation sequencing in the pathogenesis of nephrotic syndrome and other genetic renal disorders.

May 2015-Sept 2015
**Paediatric Nephrology and Dialysis Unit, Meyer Children's Hospital, Florence (Italy)**
Director: Prof. Paola Romagnani
Tutor: Prof. Paola Romagnani
Clinical training in patient assistance and management in Paediatric Nephrology, Dialysis and Transplantation. Clinical research.

Jan 2014-Apr 2015
**Laboratory of cellular and molecular Nephrology (Director Prof. Paola Romagnani), Excellence Center for Research, Transfer and High Education "DENOthe" (Director: Prof. Enrico Maggi).**
Study of the role of renal stem cells in the regeneration of podocytes and tubular cells and in glomerular diseases. Study of the role of genetic mutations assessed by next-generation sequencing in the pathogenesis of nephrotic syndrome and other genetic renal disorders.

Oct 2013-Dec 2013
**Emergency Room Department, Careggi Hospital, Florence (Italy)**
Director: Dr. Stefano Grifoni.
Tutor: Dr. Piero Francesco Ticali
Clinical training in patient assistance and management in ER.

Mar-Sept 2013
**Immunology Department, Careggi Hospital, Florence (Italy)**
Director: Prof. Enrico Maggi
Tutor: Dr. Ilaria Cecioni
Clinical training in patient assistance and management in Internal Medicine and Immunology.

Sept 2012-Mar 2013
**Laboratory of cellular and molecular Nephrology (Director Prof. Paola Romagnani), Excellence Center for Research, Transfer and High Education "DENOthe" (Director: Prof. Enrico Maggi), University of Florence (Italy)**
Study of the role of renal stem cells in the regeneration of podocytes and tubular cells and in glomerular diseases.

Jun 2011-Aug 2012
**Paediatric Nephrology and Dialysis Unit, Meyer Children's Hospital, Florence (Italy).**
Director: Prof. Paola Romagnani
Tutor: Prof. Paola Romagnani
Clinical training in patient assistance and management in Paediatric Nephrology, Dialysis and Transplantation. Clinical research.

2014- 2016 **Volunteer Attendant (in addition to Specializing Program)**
*Emergency Room Department, Careggi Hospital, Florence (Italy)*
Director: Dr. Stefano Grifoni
Tutor Dr. Piero Francesco Ticali
Clinical training in patient assistance and management in ER.

Nov 2011 **Humanitarian Mission in Ethiopia (region of Gurage), in collaboration with the onlus association "Engera - African People Caring"**
Doctor providing clinical assistance to the local population.

July 2011 **On-duty Doctor at out-of-hours at drop-in emergency point**
*Local Health Authority n.10*
Florence (Italy)

**COURSES**

2020 **Educational course "*HMX- Genetic testing and sequencing technologies*"**
Harvard Medical School
Online course

2019 **Educational course "*HMX Fundamentals in Genetics*"**
Harvard Medical School
Online course

June 2019 **Summer School "*Modern Methods in Biostatistics and Epidemiology*"**
Biostatepi Cison di Valmarino (Italy)

2017- 2018 **Theoretical and practical course "*Ultrasonography in Nephrology*"**
Italian Society of Ultrasound in Medicine and Biology (SIUMB)
Naples (Italy)

Dec 2017 **Educational course "*Management of Polycystic Kidney Diseases from Childhood to Adulthood*"**
**ERA-EDTA**
Leuven (Belgium)

Oct 2016 **Educational course "*Improving the care of patients with ADPKD*"**
ERA-EDTA
Bruxelles (Belgium)

Sept 2016 **"Eco-FAST" training course**
Rome (Italy)

Nov 2015 **Educational Program "*Women's Renal Health Across the Decades*"**
Kidney Week 2015, American Society of Nephrology
San Diego, CA (USA)

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|---|---|
| Nov 2014 | **Educational Program "*Diagnosis and Management of Disorders of Acid-Base, Fluid, and Electrolyte Balance: Challenging Issues for the Clinician*"**<br>Kidney Week 2014, American Society of Nephrology<br>Philadelphia, PA (USA) |
| Aug-Sept 2011 | **Training course on "*ICT&Life Sciences – New frontiers for Life Sciences through the use of computer technology*"**<br>Pisa, (Italy)<br>Theoretical and practical course on the role of ICT in Life Sciences |
| May-June 2010 | **International course "*Medical development in Europe and EU 2010*"**<br>Held at:<br>Faculty of Medicine and Surgery, University of Florence (Italy)<br>Karolinska Institutet, Stockholm (Sweden)<br>Kaunas University of Medicine, Kaunas (Lithuania)<br>European Economic and Social Committee, Bruxelles (Belgium)<br>Theoretical and practical course on the organization and management of healthcare systems, MD education and training across Europe |
| July 2008 | **International course "*Florence Campus Abroad 2008: Management of Healthcare Organizations in the US*"**<br>New York, NY (USA)<br>Organized by the Faculty of Medicine and Surgery of the University of Florence in collaboration with the New York University - Wagner Graduate School of New York (USA)<br>Theoretical and practical course on comparative healthcare systems organization and management in Italy and the United States |
| 2003-2004 | **Advanced course in *"Technical Analysis and Genomics Laboratory (Genolab)"***<br>University of Florence, Florence (Italy)<br>Theoretical and practical course on laboratory techniques and genetic analysis (Genetic Engineering, Bioinformatics, DNA sequencing, quantitative PCR, Microarrays, ICT Office, Human Resource Management) |

## SKILLS

### Clinical

Experience in Nephrology, Paediatric Nephrology, Genetics, Internal Medicine, Emergency Medicine, General Medicine, Paediatrics. Strong interest in Genetics.
Excellent communication ability with patients and family/caregivers.
Extensive experience in collaborating with medical and non-medical staff in establishing working groups.
Experience in kidney ultrasound and kidney biopsy.

### Laboratory

Microscopy (immunofluorescence, light microscopy, confocal microscopy, multiphoton microscopy), Basic molecular biology (PCR, RT-PCR, real-time PCR, TaqMan Low Density Array), Cell biology (mammalian

and bacterial cell culture, clonogenic assay), Protein techniques (protein production and purification, ELISA).

**Clinical research**
Clinical data collection and analysis, clinical database management, statistical analysis.

**Accreditation**
Experience in local and international accreditation programs and procedures. Member of the network "Quality and security" of Meyer Children's Hospital for the local accreditation program.
Member of the working group "Quality, Security and Education - QSE" and "Patient and family rights/education - PFR/PFE" for the international accreditation program "Joint Commission International" of Meyer Children's Hospital of Florence

**Computer**
Windows and Mac OS, Microsoft Office package, biological and statistical software (LAS AF, Origin), Photo editing software (Adobe Photoshop).

**Languages**
Italian (mother tongue), English (full professional proficiency), French (basic knowledge)

## PUBLICATIONS

Cirillo L, Mazzierli T, Bettiol A, La Tessa A, Moscato M, Innocenti S, Buti E, Errichiello C, Materassi M, Olianti C, Masieri L**, Becherucci F**. Early identification of CKD in patients with solitary functioning kidney. Nephrol Dial Transplant. 2025; gfaf063. Epub ahead of print.

Gimpel C, Fieuws S, Hofstetter J, Pitcher D, Vanmeerbeek L, Haeberle S, Dachy A, Massella L, Seeman T, Ranchin B, Allard L, Bacchetta J, Bayrakci US, **Becherucci F**, Perez-Beltran V, Besouw M, Bialkevich H, Boyer O, Canpolat N, Chauveau D, Çiçek N, Conlon PJ, Devuyst O, Dossier C, Fila M, Flögelová H, Godron-Dubrasquet A, Gokce I, Nguyen-Tang EG, González-Rodríguez JD, Guffens A, Grandaliano G, Heidet L, Jankauskiene A, Levart TK, Knebelmann B, König JC, La Scola C, Leone VF, Leroy V, Litwin M, Lucchetti L, Lungu AC, Marzuillo P, Mastrangelo A, Miklaszewska M, Montini G, Nobili F, Obrycki L, Papizh S, Paripović A, Paripović D, Peruzzi L, Raes A, Saygili S, Spasojević B, Simon T, Szczepańska M, Trepiccione F, Varda NM, Westland R, Yüksel S, Zaluska-Lesniewska I, Tenebaum J, Mustafa R, Mallett AJ, Guay-Woodford LM, Gale DP, Böckenhauer D, Liebau MC, Schaefer F, Mekahli D; RaDaR Disease Group and the ERKReg and the ADPedKD Collaborators. Insights from ADPedKD, ERKReg and RaDaR registries provide a multi-national perspective on the presentation of childhood autosomal dominant polycystic kidney disease in high- and middle-income countries. Kidney Int. 2025; S0085-2538(25)00253-4. Epub ahead of print.

Raglianti V, Angelotti ML, De Chiara L, Allinovi M, Cirillo L, Montero AM, Cruzado JM, Melica ME, Antonelli G, Conte C, Peired AJ, Lasagni L, Lange-Sperandio B, Anders HJ, **Becherucci F**, Lazzeri E, Mazzinghi B, Romagnani P. Anti-slit Antibodies against Podocin and Kirrel1 in Pediatric and Adult Podocytopathies. J Am Soc Nephrol. 2025. doi: 10.1681/ASN.0000000642. Online ahead of print.

Daenen M, Hureaux M, Ashton E, **Becherucci F**, Barry I, Benz M, Bjerre A, Buckton A, Caswell R, Duff-Farrier C, Hayward S, Mcallister J, Moczulska A, Palazzo V, Platt C, Prajapati H, Saleem M, Schlingmann

KP, Telma F, Zaniew M, Emma F, Bockenhauer D. A novel, dominant disease mechanism of distal renal tubular acidosis with specific variants in ATP6V1B1. Nephrol Dial Transplant. 2025 :gfaf016. doi: 10.1093/ndt/gfaf016. Epub ahead of print.

Raglianti V, Angelotti ML, Cirillo L, Ravaglia F, Landini S, Palazzo V, Melica ME, Antonelli G, Conte C, Buti E, Errichiello C, De Chiara L, Peired AJ, Lasagni L, Buccoliero AM, Allinovi M, Montero AM, Cruzado JM, Bruschi M, Ghiggeri GM, Angeletti A, Anders HJ, Lazzeri E, Mazzinghi B, **Becherucci F**, Romagnani P. Anti-slit diaphragm antibodies on kidney biopsy identify pediatric patients with steroid-resistant nephrotic syndrome responsive to second-line immunosuppressants. Kidney Int. 2024;106(6):1124-1134.

Buffin-Meyer B, Richard J, Guigonis V, Weber S, König J, Heidet L, Moussaoui N, Vu JP, Faguer S, Casemayou A, Prakash R, Baudouin V, Hogan J, Alexandrou D, Bockenhauer D, Bacchetta J, Ranchin B, Pruhova S, Zieg J, Lahoche A, Okorn C, Antal-Kónya V, Morin D, **Becherucci F**, Habbig S, Liebau MC, Mauras M, Nijenhuis T, Llanas B, Mekahli D, Thumfart J, Tönshoff B, Massella L, Eckart P, Cloarec S, Cruz A, Patzer L, Roussey G, Vrillon I, Dunand O, Bessenay L, Taroni F, Zaniew M, Louillet F, Bergmann C, Schaefer F, van Eerde AM, Schanstra JP, Decramer S; HNF1B variant study group. Renal and Extrarenal Phenotypes in Patients With HNF1B Variants and Chromosome 17q12 Microdeletions. Kidney Int Rep. 2024;9(8):2514-2526.

Allinovi M, Farella I, Giacalone M, Lugli G, Cirillo L, Parri N, **Becherucci F**. Lung Ultrasound to Evaluate Fluid Status and Optimize Early Volume-Expansion Therapy in Children with Shiga Toxin-Producing Escherichia Coli-Haemolytic Uremic Syndrome: A Pilot Study. J Clin Med. 2024; 13(11):3024.

Taroni F, Peruzzi L, Longo G, **Becherucci F**, Malgieri G, D'Alessandro MM, Montini G. Lumasiran treatment in pediatric patients with PH1: real-world data within a compassionate use program in Italy. Clin Kidney J. 2024;17(5):sfae090.

Cirillo L, Innocenti S, **Becherucci F**. Global epidemiology of kidney cancer. Nephrol Dial Transplant. 2024; 39(6):920-928.

Cirillo L, **Becherucci F**. The evolving role of first-tier exome sequencing in medical diagnostics. Nephrol Dial Transplant. 2024;39(4):560-563.

Cirillo L, Noris A, Odone L, Giordano F, **Becherucci F**. Clostridium septicum infection complicating Hemolytic-Uremic Syndrome: a case report and review of the literature. J Nephrol. 2024;37(1):181-186.

Cirillo L, De Chiara L, Innocenti S, Errichiello C, Romagnani P, **Becherucci F**. Chronic kidney disease in children: an update. Clin Kidney J. 2023;16(10):1600-1611.

Morello W, Baskin E, Jankauskiene A, Yalcinkaya F, Zurowska A, Puccio G, Serafinelli J, La Manna A, Krzemień G, Pennesi M, La Scola C, **Becherucci F**, Brugnara M, Yuksel S, Mekahli D, Chimenz R, De Palma D, Zucchetta P, Vajauskas D, Drozdz D, Szczepanska M, Caliskan S, Lombet J, Minoli DG, Guarino S, Gulleroglu K, Ruzgiene D, Szmigielska A, Barbi E, Ozcakar ZB, Kranz A, Pasini A, Materassi M, De Rechter S, Ariceta G, Weber LT, Marzuillo P, Alberici I, Taranta-Janusz K, Caldas Afonso A, Tkaczyk M, Català M, Cabrera Sevilla JE, Mehls O, Schaefer F, Montini G; PREDICT Study Group. Antibiotic

Prophylaxis in Infants with Grade III, IV, or V Vesicoureteral Reflux.. N Engl J Med. 2023;389(11):987-997.

Cirillo L, **Becherucci F**, Windpessl M. Kidney stones and thiazide diuretics: revisiting old assumptions in light of the NOSTONE trial. Clin Kidney J. 2023;16(9):1372-1374.

**Becherucci F**, Landini S, Palazzo V, Cirillo L, Raglianti V, Lugli G, Tiberi L, Dirupo E, Bellelli S, Mazzierli T, Lomi J, Ravaglia F, Sansavini G, Allinovi M, Giannese D, Somma C, Spatoliatore G, Vergani D, Artuso R, Rosati A, Cirami C, Dattolo PC, Campolo G, De Chiara L, Papi L, Vaglio A, Lazzeri E, Anders HJ, Mazzinghi B, Romagnani P. A clinical workflow for cost-saving high-rate diagnosis of genetic kidney diseases. J Am Soc Nephrol. 2023;34(4):706-720.

Alletto A, Attaianese F, Montemaggi A, **Becherucci F**, Romagnani P, Trapani S. Haemolytic Uremic Syndrome: A Study Cohort over 10-Year Period in a Paediatric Tertiary Centre Hospital. Nephron. 2022;147(6):337-350.

Cirillo L, **Becherucci F**. Genetic Testing in Nephrology: Show Your Pedigree! Kidney360. 2022;3(12):2148-2152.

Mazzierli T, Cirillo L, Palazzo V, Ravaglia F, **Becherucci F**. Clinical features suggesting renal hypouricemia as the cause of acute kidney injury: a case report and review of the literature. J Nephrol. 2022;3(12):2148-2152.

Cirillo L, Lugli G, Raglianti V, Ravaglia F, Buti E, Landini S, **Becherucci F**. Defining diagnostic trajectories in patients with podocytopathies. Clin Kidney J. 2022;15(11):2006-2019.

De Chiara L, Conte C, Semeraro R, Diaz-Bulnes P, Angelotti ML, Mazzinghi B, Molli A, Antonelli G, Landini S, Melica ME, Peired AJ, Maggi L, Donati M, La Regina G, Allinovi M, Ravaglia F, Guasti D, Bani D, Cirillo L, **Becherucci F**, Guzzi F, Magi A, Annunziato F, Lasagni L, Anders HJ, Lazzeri E, Romagnani P. Tubular cell polyploidy protects from lethal acute kidney injury but promotes consequent chronic kidney disease. Nat Commun. 2022;13(1):5805.

Palazzo V, Raglianti V, Landini S, Cirillo L, Errichiello C, Buti E, Artuso R, Tiberi L, Vergani D, Dirupo E, Romagnani P, Mazzinghi B, **Becherucci F**. Clinical and Genetic Characterization of Patients with Bartter and Gitelman Syndrome. Int J Mol Sci. 2022;23(10):5641.

Cirillo L, Citera F, Mazzierli T, **Becherucci F**, Terlizzi V, Lodi L, Buti E, Romagnani P. Response to Third Dose of Vaccine Against SARS-CoV-2 in Adolescent and Young Adult Kidney Transplant Recipients. Transplantation. 2022;106(8):e386-e387.

Cirillo L, Ravaglia F, Errichiello C, Anders HJ, Romagnani P, **Becherucci F**. Expectations in children with glomerular diseases from SGLT2 inhibitors. Pediatr Nephrol. 2022; 37(12):2997-3008.

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## BOOK CHAPTERS

Marzuillo P, Capone V, **Becherucci F**, Maringhini S. "CAKUT: epidemiology, genetics, clinical aspect and prognosis". Original title: "CAKUT: aspetti essenziali di epidemiologia, genetica, clinica e prognosi." In "Manuale di nefro-urologia pediatrica". Edefonti A, Massella L, Montini G, Verrina E. Società Editrice Esculapio, 2024.

**Becherucci F**, Lava S. "Acute and chronic acidosis and alkalosis". Original title: "Le acidosi e le alcalosi acute e croniche." In "Manuale di nefro-urologia pediatrica". Edefonti A, Massella L, Montini G, Verrina E. Società Editrice Esculapio, 2024.

Allinovi M, **Becherucci F**, Romagnani P. "Polycystic kidney disease and hereditary disorders". Original title: "Il rene policistico e le malattie ereditarie". In "Manuale di Nefrologia" II edizione. Garibotto G, Pontremoli R. Edizioni Minerva Medica; 2017.

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## INVITED PRESENTATIONS

Nov 2024 — **Lecture**
*Common Grounds*
Bologna, Italy (15 November)
Presentation: "ADTKD diagnosis and therapeutic perspectives"
Original title: "ADTKD diagnosi e prospettive terapeutiche"

June 2024 — **Lecture**
*Educational course "Who does what in kidney transplantation: il dialogo fra nefrologie e il centro trapianti"*
Bologna, Italy (7 June)
Presentation: "The role of genetics in kidney transplantation waiting list"
Original title: "Il ruolo della genetica nella lista d'attesa per il trapianto renale"

Oct 2023 — **Educational course "Principles of genetics for nephrologists"**
*64th Annual Meeting of the Italian Society of Nephrology*
Turin, Italy (4 October)
Presentation: "Genetic kidney diseases causing chronic kidney disease: Clinical and technological workflow"
Original title: "Malattie renali genetiche nella malattia renale cronica: workflow diagnostico e tecnologico"

Oct 2023 **Round Table "Living kidney donor"**
*46th Annual Meeting of the Italian Society of Organ Transplantation*
Rome, Italy (8 October)
Presentation: "Genetic testing in living donor kidney transplantation"
Original title: "Il test genetico nel donatore di rene da vivente"

May 2023 **Lecture**
*Educational course "How to improve the accuracy of the diagnosis in kidney donor transplantation"*
Florence, Italy (11 May)
Presentation: "Prevalence of genetic kidney diseases in children and adults: how to improve diagnosis"
Original title: "Prevalenza delle malattie genetiche in pazienti pediatrici e adulti: come migliorare la diagnosi"

Oct 2022 **Round Table "Genetics in nephrology"**
*63rd Annual Meeting of the Italian Society of Nephrology*
Rimini, Italy (6 October)
Presentation: "The role of genetics in the diagnosis of glomerulonephritis"
Original title: "Il ruolo della genetica nella diagnosi delle glomerulonefriti"

Sept 2022 **Lecture**
*36th Annual Meeting of the Italian Society of Pediatric Nephrology*
Florence, Italy (22 September)
Presentation: "Expectations in children with kidney disease from SGLT2-inhibitors"
Original title: "Quali aspettative dall'uso degli SGLT2 inibitori nelle nefropatie pediatriche?"

May 2022 **Round Table "Genetics plus X"**
*59th European Renal Association*
Paris, France (20 May)
Presentation: "Reverse phenotyping in steroid-resistant nephrotic syndrome"

May 2022 **Round Table "Personalized medicine"**
*59th European Renal Association*
Paris, France (20 May)
Presentation: "Personalised diagnosis and CKD prediction in genetic tubular disorders"

Dec 2019 **Round Table "Kidney diseases in adolescence"**
*19th Annual Meeting of nephro-urology network*
Florence, Italy (7 December)
Presentation: "Congenital anomalies of the kidney and urinary tract"
Original title: "La anomalie congenite del rene e delle vie urinarie"

Sept 2019 **Round Table "Distal renal tubular acidosis"**
*1° Incontro Nazionale sull'Acidosi Tubulare Renale Distale*
Padua, Italy (21 September)

Presentation: “Personalized diagnosis and CKD prediction in distal renal tubular acidosis”
Original title: "Diagnosi personalizzata e predizione dello sviluppo di malattia renale cronica nell’acidosi tubulare distale"

June 2019 **Round Table “Inherited kidney diseases”**
*56th ERA-EDTA Congress*
Budapest, Hungary (13-16 June)
"Personalized diagnosis and CKD prediction in genetic tubular disorders”

May 2019 **Round Table "Pediatria futura"**
*75th Annual Meeting of Società Italiana di Pediatria (SIP)*
Bologna, Italy (30 May)
Presentation: “Renal cystic diseases: genetics changed the diagnosis”
Original title: "Malattie cistiche renali: la genetica ha rivoluzionato la diagnostica"

Apr 2019 **Round Table “Le malattie rare”**
*La nefrologia fra presente e future: rapporti con le altre discipline e confini operativi*
Florence, Italy (9 April)
Presentation: “Rare diseases in children”
Original title: “Le malattie rare in pediatria”

Nov 2017 **Round Table “Nuove prospettive per la diagnostica delle glomerulopatie”.**
*Giornate Nefrologiche Fiorentine*
Florence, Italy (16-17 November)
Presentation: “Genetics of glomerulopathies between present and future”
Original title: “La genetica delle glomerulopatie fra presente e futuro”

Oct 2017 **Round Table “Rare renal diseases”**
33rd *Annual Meeting of Società Italiana di Nefrologia Pediatrica (SINePe)*
Marsala, Italy (19-21 October)
Presentation: “Inherited tubulopathies”
Original title “le tubulopatie ereditarie”

Sept 2013 **Round Table “Malattie genetiche e rene”**
*54th Annual Meeting of Società Italiana Nefrologia (SIN)*
Florence, Italy (25-28 September)
Presentation: “Steroid-resistant focal segmental sclerosis”
Original title: “Sclerosi focale segmentale steroido-resistente”

Oct 2011 **Round Table “Consulenza nefrologica. Dal caso clinico all’approfondimento nefrologico: l’acidosi metabolica”**
*27th Annual Meeting of Società Italiana di Nefrologia Pediatrica (SINePe)*
Naples, Italy (27-29 October)
Presentation: “Nephrologic Consultancy. From clinic to in-depth analysis: metabolic acidosis”
Original title: “Consulenza nefrologica. Dal caso clinico all’approfondimento nefrologico: l’acidosi metabolica”

Oct 2010 **Round Table**
*51st Annual Meeting of Società Italiana di Nefrologia (SIN)*
Rimini, Italy (6-9 October).
"Mechanisms of glomerular regeneration"
Original title: "Meccanismi di rigenerazione glomerulare"

## PARTICIPATION TO MEETINGS

May 2018 **Oral communication**
*55th Annual Meeting of the European Renal Association- European Dialysis and Transplantation Association (ERA-EDTA)*
Copenaghen, Denmark (24-27 May)
"Whole-exome sequencing for personalized management of idiopathic nephrotic syndrome"

Apr 2018 **Oral communication**
*30th Annual Meeting of the European Renal Cells Study Group (ERCSG)*
Artimino (Prato), Italy (19-22 April)
"61.3% diagnostic rate in steroid-resistant nephortic syndrome by exome sequencng and analysis of 277 genes"

June 2017 **Oral communication**
*54th Annual Meeting of the European Renal Association- European Dialysis and Transplantation Association (ERA-EDTA)*
Madrid, Spain (3-6 June)
"Genetic and clinical characterization of a large cohort of patients with distal renal tubular acidosis"

Nov 2017 **Poster**
*50th Annual Meeting of the American Society of Nephrology (ASN)*
New Orleans (LA), USA (1-6 November)
"Primary genetic mechanism with secondary focal segmental glomerulosclerosis is the prevalent cause of early-onset proteinuria resistant to treatment"

Nov 2016 **Poster**
*International Meeting "The kidney in genetic and rare diseases"*
Naples, Italy (27-30 November)
"Next-generation sequencing and functional analysis of patient urine renal progenitor derived podocytes to unravel the diagnosis of refractory lupus nephritis"

Oct 2016 **Oral communication**
*57th Annual Meeting of Società Italiana Nefrologia (SIN)*
Milan, Italy (12-15 October)
"Next-generation sequencing and functional analysis of patient-specific podocytes derived from renal progenitors for the diagnosis of a case of refractory lupus nephritis"

Original title "Next-generation sequencing e analisi funzionale in podociti paziente specifici derivato dai progenitori renali per la diagnosi di un caso di nefrite lupica refrattaria"

Apr 2016 **Oral communication**
*28th Annual Meeting of the European Renal Cells Study Group (ERCSG)*
Montvillargenne (Chantilly), France (21-24 April)
"A genetic cause of refractory lupus nephritis diagnosed by next generation sequencing and functional analysis of patient-derived podocytes"

Oct 2015 **Oral communication**
*31tst Annual Meeting of Società Italiana di Nefrologia Pediatrica (SINePe)*
Vieste, Italy (1-3 October)
"WT1 and coenzyme Q10 deficiency: the dangerous liaisons"
Original title: "WT1 e deficit di coenzima Q10: le relazioni pericolose"

Oct 2015 **Poster presentation**
*31tst Annual Meeting of Società Italiana di Nefrologia Pediatrica (SINePe)*
Vieste, Italy (1-3 October)
"Hypokaliemic metabolic alcalosis: a case of pseudo-Bartter syndrome in a patient with cystic fibrosis"
Original title: "Alcalosi metabolica ipokaliemica: un caso di pseudo-Bartter syndrome in corso di fibrosi cistica"

Oct 2014 **Oral communication**
*30th Annual Meeting of Società Italiana di Nefrologia Pediatrica (SINePe)*
Padua, Italy (15-17 October)
"Heterogeneous genetic alterations in sporadic nephrotic syndrome associate with resistance to immunosuppression"
Original title: "Alterazioni genetiche eterogenee si associano a resistenza al trattamento con immunosoppressori nei casi sporadici di sindrome nefrosica"

Oct 2014 **Poster presentation**
*30th Annual Meeting of Società Italiana di Nefrologia Pediatrica (SINePe)*
Padua, Italy (15-17 October)
"Genetic diagnosis beyond polycystic kidney disease: clinical and molecular characterization of a new case of 17q12 microdeletion"
Original title: "La diagnosi molecolare oltre il rene policistico autosomico recessivo: un caso clinico di cisti renali associate alla delezione 17q12"

Oct 2013 **Oral communication**
*29th Annual Meeting of Società Italiana di Nefrologia Pediatrica (SINePe)*
Matera, Italy (17-19 October)
"Genetic screening through next generation sequencing predicts response to treatment in children with sporadic nephrotic syndrome"
Original title "Lo screening genetico con Next generation sequencing predice la risposta al trattamento dei casi sporadici di sindrome nefrosica ad insorgenza in età pediatrica"

July 2013 **Oral communication**
*1st Annual Meeting "Accademia delle Idee", Società Italiana di Nefrologia (SIN)*
Ariano Irpino, Italy (4-6 luglio)
"Next generation sequencing for the diagnosis of sporadic steroid-resistant nephrotic syndrome in children"
Original title: "Next generation sequencing per la diagnosi di casi sporadici di sindrome nefrosica steroido-resistente in età pediatrica"

Oct 2012 **Oral communication**
*28th Annual Meeting of Società Italiana di Nefrologia Pediatrica (SINePe)*
Milan, Italy (24-26 October)
"Genetic screening through next generation sequencing in children with sporadic steroid-resistant nephrotic syndrome identifies a high prevalence of genetic alterations"
Original title: "Lo screening di casi sporadici di sindrome nefrosica steroido-resistente in età pediatrica mediante Next generation sequencing consente di identificare un'elevata prevalenza di alterazioni genetiche"

Oct 2012 **Poster presentation**
*28th Annual Meeting of Società Italiana di Nefrologia Pediatrica (SINePe)*
Milan, Italy (24-26 October)
"A case of steroid-resistant nephrotic syndrome with mutation of the ITGA3 gene"
Original title: "Un caso di sindrome nefrosica steroido-resistente con mutazione del gene dell'integrina α3"

Oct 2012 **Poster presentation**
*28th Annual Meeting of Società Italiana di Nefrologia Pediatrica (SINePe)*
Milan, Italy (24-26 October)
"A case of steroid-resistant nephrotic syndrome with mutation of the MYO1E gene"
Original title: "Un caso di sindrome nefrosica steroido-resistente con mutazione del gene MYO1E"

Dec 2009 **Poster presentation**
*41st Annual Meeting "Corso di Aggiornamento in Nefrologia e Metodiche Dialitiche"*
Milan, Italy (5-8 December)
"Notch activation regulates the balance between injury and regeneration in glomerular disorders"

Oct 2009 **Oral communication**
*50th Annual Meeting of Società Italiana di Nefrologia (SIN)*
Bologna, Italy (7-10 October)
"Analysis of the mechanisms that regulate the growth and the differentiation of renal progenitor cells"

Oct 2008 **Oral communication**
*49th Annual Meeting of Società italiana di Nefologia (SIN)*
Rimini, Italy (8-11 October)

"Renal stem cells of the Bowman's capsule represent podocyte progenitors, regenerate glomerular damage and reduce proteinuria in a model of in vivo nephrotic syndrome"
Original title: "Le cellule staminali renali localizzate nella capsula di Bowman rappresentano progenitori podocitari, rigenerano il danno glomerulare e riducono la proteinuria in un modello di sindrome nefrosica in vivo"

**RESEARCH PROJECTS**

"A Study to Learn More About How Well the Study Treatment Finerenone Works, How Safe it is, How it Moves Into, Through, and Out of the Body, and the Effects it Has on the Body When Taken With an ACE Inhibitor or Angiotensin Receptor Blocker in Children With Chronic Kidney Disease and Proteinuria (FIONA)". Randomizaed clinical trial. *Principal Investigator*.

"Implementation and economic evaluation of a personalized diagnostic workflow for patients with podocytopathies (I-Pod)". Bando di Ateneo per il finanziamento di progetti competitivi biennali per Ricercatori a Tempo Determinato (RTD) dell'Università degli Studi di Firenze 2023-24. *Principal Investigator*.

"Studio delle patologie glomerulari e tubulari mediante lo studio del ruolo dei progenitori renali e della risposta poliploide delle cellule tubulari: analisi su biopsie renali (BIO-KIDNEY). *Clinical Investigator.*

"Validation, implementation, and cost-analysis of a strategy for personalized diagnosis of rare kidney diseases (KIDNEY-PNRR)". PNRR 2022. Clinical Investigator. "Implementation of personalised management in nephrotic syndrome (PERNEPH)". Era-PerMed 2021. *Clinical Investigator*.

"Messa a punto di un algoritmo per la diagnosi personalizzata delle malattie renali rare - NIKE". Bando Salute 2018.
*Clinical Investigator*

"Whole-exome sequencing for personalized management of idiopathic nephrotic syndrome". Bando di ricerca SIN Adotta un progetto 2019. Funded by Società Italiana di Nefrologia.
*Principal investigator.*

"Impatto del sovraccarico idrico clinico e subclinico sul sistema cardiovascolare nel bambino con insufficienza renale". Multicenter observational study.
*Sub-investigator.*

"RENal prOgenItoRs as tools to understand kidney pathophysiology and treat renal disorders (RENOIR)". ERC Consolidator Grant 2014-Horizon 2020 to Paola Romagnani (2015-2020).
*Clinical Investigator*.

"Messa a punto di una strategia innovativa di medicina personalizzata per la diagnosi e la terapia delle malattie renali nei bambini (SMART)". Bando "Fas Salute 2014" Regione Toscana (2016-2018). Funded by Tuscany Region.
*Clinical Investigator*.

"A phase 3, open-label, multicenter study of ALXN1210 in children and adolescents with atypical hemolitic-uremic syndrome (aHUS)". Funded by Alexion Pharmaceuticals.
*Sub-investigator.*

"Predict: antibiotic Prophylaxis and REnal Damage In Congenital abnormalities of the kidney and urinary Tract".
*Sub-investigator.*

## TEACHING ACTIVITIES

Lecturer of Nephrology at Postgraduate Specialisation in Nephrology, School of Human Health Sciences, University of Florence (Italy)

Lecturer of Nephrology at Medical School, School of Human Health Sciences, University of Florence (Italy)

Lecturer of Nephrology at II level Master in Paediatric Urology, School of Human Health Sciences, University of Florence (Italy) Supervision of graduating students at University of Florence.

## ORGANITAZION OF MEETINGS

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| Oct 2022 | **63rd Meeting of the Italian Society of Nephrology**<br>Rimini (Italy), 5-8 October<br>Member of the Scientific Committee |
| Sept 2022 | **36th Meeting of the Italian Society of Pediatric Nephrology**<br>Florence (Italy), 21-24 September<br>Member of the Scientific Committee |
| Apr 2018 | **30th Annual Meeting of the European Renal Cells Study Group (ERCSG)**<br>**Artimino (Prato), Italy (19-22 April)**<br>Member of the Scientific Committee. |
| June 2016 | **International Meeting "Renal Progenitors and Kidney Regeneration"**<br>**Florence (Italy), 10-12 June**<br>Member of the Scientific Committee and collaborator in the organization and management of the Meeting. |

## PARTICIPATION IN INTERNATIONAL WORKING GROUPS

Substitutive Member of the Board of the European Reference Network (ERN) "ERKNet" for rare renal diseases representing the Healthcare Provider (HCP) "Meyer Children's Hospital - Nephrology and Dialysis Unit".

Member of the working group "Autosomal dominant dysplasias" of the European Reference Network (ERN) "ERKNet" for rare renal diseases.

Member of the working group "Congenital abnormalities of kidney and urinary tract and ciliopathies" of the European Reference Network (ERN) "ERKNet" for rare renal diseases.

Member of the working group "Thombotic microangiopathies" of the European Reference Network (ERN) "ERKNet" for rare renal diseases.

## EDITORIAL AND REVIEWER ACTIVITY

Theme editor of "Nephrology, Dialysis and Transplantation"
Member of the editorial board of "American Journal of Kidney Diseases"
Member of the editorial board of "Pediatric Nephrology"
Member of the editorial board of "Journal of Nephrology".
Member of the editorial board of "Giornale Italiano di Nefrologia".
Abstract reviewer for the Annual Meeting of the American Society of Nephrology 2018.
Abstract reviewer for the Annual Meeting of the Società Italiana di Nefrologia 2022, 2019, 2016.
Reviewer for the international journals Plos One, Americal Journal of Kidney Disease, Journal of Nephrology, Giornale Italiano di Nefrologia, Kidney and Blood Pressure Research, Kidney International Reports, Scientific Reports, Translational Cancer Research, Journal of American Society of Nephrology.

## MEMBERSHIP OF NATIONAL AND INTERNATIONAL SOCIETIES

American Society of Nephrology (ASN)
European Renal Association (ERA)
European Society of Pediatric Nephrology (ESPN)
Young Nephrology Platform (YNP)
Società Italiana di Nefrologia (SIN)
Società Italiana di Nefrologia Pediatrica (SINePe)
Academy of Ideas - Società Italiana di Nefrologia

## HONORS AND AWARDS

2019 Awarded **"2019 Best oral communication"** during the 60th Annual Meeting of Società Italiana di Nefrologia (SIN) in Rimini, Italy (2-5 October).

2016 Awarded "**2016 ERA-EDTA National Grant for Italy**" for the best oral communication during the 57th Annual Meeting of Società Italiana di Nefologia (SIN) in Milan, Italy (12-15October).

2016 Awarded **Travel support** to attend the International Meeting "Improving the care of patients with ADPKD" in Brussels (Belgium) (1-2 December).

2015 Awarded **Travel support** to attend the Early Program "Women's Renal Health Across the Decades" of the **2015 Kidney Week of the American Society of Nephrology** in San Diego, CA (USA) (2-8 November).

2014 Awarded **Travel support** to attend the Early Program "Diagnosis and Management of Disorders of Acid-Base, Fluid, and Electrolyte Balance: Challenging Issues for the Clinician" of the **2014 Kidney Week of the American Society of Nephrology** in Philadelphia, PA (USA) (11-17 November).

2011 Awarded both the **"Prof. Franco Tinacci"** award and the **"Brave. Il coraggio della conoscenza"** award for the best graduation thesis with a thesis entitled "Notch activation regulates the balance between glomerular damage and regeneration and determines the progression toward glomerulosclerosis".

2008 Awarded "**2008 ERA-EDTA National Grant for Italy**" for the best oral communication in the section "Nephrology" during the 49th Annual Meeting of Società Italiana di Nefologia (SIN) in Rimini, Italy (8-11 October).

**30/04/2025**

FORMATO EUROPEO
PER IL CURRICULUM
VITAE

## INFORMAZIONI PERSONALI


| | |
|---|---|
| **Nome** | **MATTEO BENELLI** |
| **Indirizzo** | **Dipartimento di Scienze Biomediche Sperimentali e Cliniche "Mario Serio"**<br>**Università degli Studi di Firenze** |
| **Telefono** |  |
| **E-mail** | **matteo.benelli@unifi.it** |
| **Nazionalità** | Italiana |
| **Data di nascita** |  |


## ESPERIENZA LAVORATIVA

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|---|---|
| • Date (da – a) | Marzo 2024 – oggi |
| • Nome e indirizzo del datore di lavoro | Università degli Studi di Firenze, Piazza San Marco, 4, 50121, Firenze |
| • Tipo di azienda o settore | Istruzione e Ricerca |
| • Tipo di impiego | **Professore Associato (BIOS-07/A)** |
| • Principali mansioni e responsabilità | |

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|---|---|
| • Date (da – a) | Gennaio 2017 – Febbraio 2024 |
| • Nome e indirizzo del datore di lavoro | Azienda USL Toscana Centro, Piazza Santa Maria Nuova, 1, 50121, Firenze |
| • Tipo di azienda o settore | Sanità e Ricerca |
| • Tipo di impiego | **Coordinatore del team di Bioinformatica (Group Leader) (tempo indeterminato da Giugno 2021)** |
| • Principali mansioni e responsabilità | Coordinamento e supervisione del gruppo di ricerca in bioinformatca e cancer omics presso la SOC Oncologia Medica del Nuovo Ospedale S.Stefano di Prato |

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|---|---|
| • Date (da – a) | Febbraio 2015 – Dicembre 2016 |
| • Nome e indirizzo del datore di lavoro | Università degli Studi di Trento, via Calepina, 14, 38122 Trento |
| • Tipo di azienda o settore | Ricerca |
| • Tipo di impiego | **Assegnista di Ricerca presso Dipartimento di Biologia Cellulare, Computazionale e Integrata (CIBIO)** |
| • Principali mansioni e responsabilità | Post-doc presso il laboratorio di Computational and Functional Oncology del CIBIO (PI: Prof. Francesca Demichelis) |

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|---|---|
| • Date (da – a) | Luglio 2012 – Gennaio 2015 |
| • Nome e indirizzo del datore di lavoro | Azienda Ospedaliera-Universitaria Careggi, Largo Brambilla, 3, 50134 Firenze |
| • Tipo di azienda o settore | Sanità e Ricerca |
| • Tipo di impiego | **Bioinformatico Principale presso SOD Diagnostica Genetica** |
| • Principali mansioni e responsabilità | Supervisione e coordinamento del gruppo di bioinformatica della SOD Diagnostica Genetica (dir. Dr. Francesca Torricelli) |

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|---|---|
| • Date (da – a) | Maggio 2012 – Luglio 2012 |
| • Nome e indirizzo del datore di lavoro | Università di Bologna, Via Zamboni, 33, 40126 Bologna |
| • Tipo di azienda o settore | Ricerca |
| • Tipo di impiego | **Contratto di ricerca (CoCoCo) presso UO Genetica Medica dell'Azienda Ospedaliero-Universitaria S. Orsola, Bologna** |
| • Principali mansioni e responsabilità | Contratto di ricerca per analisi dati NGS all'interno del progetto FP7 CHERISH (responsabile Prof. Giovanni Romeo) presso la UO Genetica Medica (dir. Prof. Marco Seri) |

## ISTRUZIONE E FORMAZIONE

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|---|---|
| • Date (da – a) | Novembre 2016 – Dicembre 2019 |
| • Nome e tipo di istituto di istruzione o formazione | Università degli Studi di Firenze, P.zza S. Marco 4, 50121 Firenze |
| • Qualifica conseguita | **Specializzazione in Fisica Medica**<br>Titolo della tesi: Development of a new software for comprehensive analysis of radiomics data<br>Relatore: Prof. Stefania Pallotta |
| • Voto conseguito | 70/70 |

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|---|---|
| • Date (da – a) | Gennaio 2009 – Marzo 2012 |
| • Nome e tipo di istituto di istruzione o formazione | Università degli Studi di Firenze, P.zza S. Marco 4, 50121 Firenze |
| • Qualifica conseguita | **Dottorato di Ricerca in Dinamica Non Lineare e Sistemi Complessi - Dipartimento di Sistemi e Informatica**<br>Titolo della tesi: Bioinformatics for the identification of structural variations in the human genome<br>Relatore: Prof. Roberto Livi |
| • Giudizio | Ottimo |

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|---|---|
| • Date (da – a) | Settembre 2005 – Aprile 2008 |
| • Nome e tipo di istituto di istruzione o formazione | Università degli Studi di Firenze, Piazza S. Marco 4, 50121 Firenze |
| • Qualifica conseguita | **Laurea Specialistica in Scienze Fisiche e Astrofisiche (20/S)**<br>Titolo della tesi: Studio dell'emissione non evaporativa in collisioni fra nuclei pesanti alle energie di Fermi<br>Relatore: Prof. Andrea Stefanini |
| • Voto conseguito | 110/110 |

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|---|---|
| • Date (da – a) | Settembre 2002 – Dicembre 2005 |
| • Nome e tipo di istituto di istruzione o formazione | Università degli Studi di Firenze, Piazza S. Marco, 4, 50121 Firenze |
| • Qualifica conseguita | **Laurea in Fisica (25)**<br>Titolo della tesi: Studio dell'emissione radiativa di una sveglia da tavolo<br>Relatore: Prof. Andrea Stefanini |
| • Voto conseguito | 97/110 |

## ESPERIENZA DIDATTICA (CORSI UNIVERSITARI E DI FORMAZIONE)

| | |
|---|---|
| 2018-2023 | Docente al IV-VIII corsi di formazione annuale "Tumori gastrointestinali: dalla pratica clinica alla biologia", Prato |
| 2023 | Docente al corso "Gestione delle neoplasie polmonari in Azienda USL Toscana Centro – attualità e prospettive future", Prato |
| 2021 | Docente al Master di II livello in Biomedicina Computazionale, Università degli Studi di Firenze, Firenze |
| 2020-2022 | Docente al Master di I livello in Management e controllo dei Sistemi Informativi nel laboratorio Biomedico |
| 2019 | Seminario su invito per la Scuola di Specializzazione in Fisica Medica dell'Università di Milano, Dipartimento di Fisica, Milano |
| 2018 | Docente al corso di formazione "NGS e varianti geniche" organizzato da Scuola Medica Ospedaliera di Roma, Roma |
| 2017 | Docente al corso "Focus on Breast Cancer, Azienda USL Toscana Centro, Prato/Firenze |
| 2017 | Docente al corso di formazione "Geni e Test genetici: dal laboratorio alle applicazioni cliniche" organizzato da Scuola Medica Ospedaliera di Roma, Roma |
| 2016 | Docente (18 ore frontali) del corso di Biologia Computazionale all'interno della Laurea Triennale in Scienze e Tecnologie Biomolecolari dell'Università di Trento |
| 2014 | Docente al corso di formazione "L' A B C della genetica per il cardiologo" organizzato da Società Italiana Cardiologia. Roma, LXXV congresso nazionale Società Italiana Cardiologia. |
| 2011–2015 | Coordinatore scientifico e docente al corso periodico di Alta Formazione "Elementi di Bioinformatica per l'analisi di dati NGS", Azienda Ospedaliera, Azienda Ospedaliera Universitaria di Careggi (9 edizioni e >100 partecipanti) |
| 2013 | Docente al corso di perfezionamento in "Nuove tecnologie in medicina molecolare", Università di Padova |
| 2013 | Docente al corso "Bioinformatic analysis of NGS data in consanguineous families", Sultan Qaboos University, Oman |
| 2012 | Docente al corso avanzato "Citogenetica costituzionale: il cariotipo molecolare perché, quando e come", EO Galliera, Genova |

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| 2009 | Docente nel corso di formazione in “Metodi bioinformatici per l’analisi di tecnologie microarray“, Congresso Nazionale della Società Italiana di Genetica Umana (SIGU), Torino |

## SUPERVISIONE DI STUDENTI E POST-DOC

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|---|---|
| 2017 - 2024 | SOC Oncologia Medica di Prato, Nuovo Ospedale S.Stefano di Prato:<br>• 2 post-doctoral fellow del gruppo di Bioinformatica<br>• 1 studente di dottorato dal programma di dottorato in “Genetics, Oncology and Clinical Medicine” (GenOMeC), Università degli Studi Siena<br>• 1 studente di dottorato dal dottorato in “Biomolecular Sciences” dell’Università degli Studi di Trento<br>• 1 studente del Master di II livello in “Bioinformatics and Data Science”, Università degli Studi di Siena”<br>• 1 borsista post-laurea in radiomica |
| 2015-2017 | Dipartimento CIBIO, Università degli Studi di Trento:<br>• 2 borsisti post-laurea in bioinformatics and cancer omics<br>• 1 studente di Laurea Triennale in Scienze e Tecnologie Biomolecolari dell’Università degli Studi di Trento |
| 2016-2019 | External supervisor di 1 studente di dottorato dal programma di dottorato in “Biomedical Science and Biotechnology”, Università degli Studi di Udine e CRO di Aviano |
| 2012-2015 | 2 borsisti post-laurea in bioinformatica presso la SOD Diagnostica Genetica, Azienda Ospedaliera-Universitaria di Careggi, Firenze |

## RELATORE SU INVITO O SELEZIONATO

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| 2024 | Relatore su invito alla conferenza “Tackling the implementation gap for the uptake of NGS and advanced molecular diagnostics into healthcare systems: The Role of Pathology and Medical Laboratories” organizzata da European Alliance for Personalised Medicine (EAPM)<br>Titolo dell’intervento: AURORA (Aiming to understand the molecular aberrations in metastatic breast cancer) |
| 2024 | Relatore su invito al congresso PRATO (Perspectives and Research AdvancemenTs in Oncology) – Breast Cancer, Prato<br>Titolo dell’intervento: “Dissecting molecular landscape of metastatic breast cancer: the AURORA-EU initiative” |
| 2023 | Relatore su invito al 25° Meeting annuale dell’Italian Sarcoma Group (ISG), Bologna.<br>Titolo dell’intervento: “How to use Big Data” |
| 2022 | Relatore su invito con seminario dal titolo “Computational molecular and imaging omics to accelerate translational research in oncology”, IFOM, Milano |
| 2022 | Relatore su invito al 24° Meeting annuale dell’Italian Sarcoma Group (ISG), Bologna.<br>Titolo dell’intervento: “Role of radiomics and its application to sarcomas” |
| 2021 | Relatore su invito con seminario dal titolo “The analysis of radiomic datasets with RadAR, a new package for R”, workshop “Artificial Intelligence applied to Medical Physics” organizzato da Associazione Italiana di Fisica Medica (AIFM), Online |
| 2020 | Relatore su invito al 106° Congresso Nazionale della Società Italiana di Fisica (SIF), Online.<br>Titolo dell’intervento: “Bioinformatics for cancer omics data” |
| 2019 | Selezionato come relatore al Workshop “International day of Medical Physics”, Matera. Titolo dell’intervento: “Comprehensive statistical analysis of radiomics data by RadAR, a new package for R” |
| 2019 | Relatore su invito al Breast Cancer Research Foundation (BCRF) Founder’s Fund retreat. New York, US. Titolo dell’intervento: “New techniques: single-cell transcriptomics” |
| 2019 | Relatore su invito al workshop “Mediterranean Workshop on Medical Physics”, Agrigento. Titolo |

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| | dell'intervento: "Omics in oncology" |
| 2018-2019 | Relatore su invito a Bio-rad user meeting, Palermo, Ferrara e Bari. Titolo dell'intervento: "Single-cell transcriptome profiling of breast cancer cell lines to investigate mechanisms of resistance to CDK4/6 inhibitors" |
| 2019 | Relatore su invito con seminario dal titolo "Role of DNA-methylation alterations in cancer", Dipartimento di Scienze Mediche e Chirurgiche – DIMEC, Università di Bologna, Bologna |
| 2017 | Relatore su invito al simposio "How Big Data could support better diagnosis and treatment outcomes for Prostate Cancer", CNR di Sesto Fiorentino. Titolo dell'intervento: "Cancer genomics" |
| 2016 | Relatore su invito con seminario dal titolo "Role of DNA-methylation in prostate cancer development and progression", Centro di Riferimento Oncologico (CRO) di Aviano |
| 2016 | Relatore su invito al workshop "The genomics revolution: from big data to personalized medicine", Firenze. Titolo dell'intervento: "Role of DNA-methylation in tumorigenesis and cancer progression" |
| 2014 | Invitato come esperto al workshop CASyM "Clinical needs in oncology and cardiovascular diseases as drivers for a Systems Medicine approach", Genova |
| 2013 | Selezionato come relatore al Congresso Annuale della Società Italiana di Bioinformatica (BITS), Udine. Titolo dell'intervento: "EricScript to identify gene fusions in paired-end RNA-seq data" |

## Attività e Incarichi Scientifici

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| 2021 - oggi | **Co-Principal Investigator e coordinatore della Data Analysis Committee del progetto AURORA (NCT02102165) coordinato da Breast International Group (BIG) (BE)** |
| 2011 - oggi | **Revisore per riviste scientifiche internazionali** come Bioinformatics, Briefings in Bioinformatics, Cancer Research, Clinical Epigenetics, Genome Medicine, Molecular Cancer Research, npj Breast Cancer, Nucleic Acids Research |

## Abilitazione Scientifica Nazionale (ASN)

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| 2021 | Abilitazione Scientifica Nazionale alle funzioni di professore universitario di Seconda Fascia nel Settore Concorsuale 06/A2 - PATOLOGIA GENERALE E PATOLOGIA CLINICA |
| 2021 | Abilitazione Scientifica Nazionale alle funzioni di professore universitario di Seconda Fascia nel Settore Concorsuale 02/D1 - FISICA APPLICATA, DIDATTICA E STORIA DELLA FISICA |
| 2019 | Abilitazione Scientifica Nazionale alle funzioni di professore universitario di Seconda Fascia nel Settore Concorsuale 05/I1 – GENETICA |
| 2019 | Abilitazione Scientifica Nazionale alle funzioni di professore universitario di Seconda Fascia nel Settore Concorsuale 05/E2 - BIOLOGIA MOLECOLARE |

## Altre esperienze professionali

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| 2019 - 2023 | Consulente per Novartis per analisi bioinformatiche dei dati molecolari generati all'interno dello studio clinico BioItaLEE (CLEE011AIT01) |

## Attività di Divulgazione e Disseminazione Scientifica

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|---|---|
| 2015 – oggi | Socio della Associazione Culturale Caffè-Scienza APS per la divulgazione e comunicazione scientifica |
| 2023 | Relatore all'interno del progetto Scienza Attiva con intervento dal titolo "Le innovazioni nella ricerca oncologica. Dal paziente alla ricerca molecolare: gli scenari della ricerca traslazionale e bioinformatica" organizzato da Liceo Scientifico N. Copernico, Prato |
| 2023 | Testimonial e relatore per il progetto "Incontri con la ricerca" organizzato da Fondazione AIRC per la ricerca sul Cancro e dalla Scuola Secondaria di I grado "D. Zipoli" di Prato, Prato |
| 2021 | Partecipazione alla trasmissione "Azienda USL Toscana Centro Informa" dal titolo "Oncologia: progetti per la prevenzione" presso l'emittente TV Prato, Prato |
| 2019 | Partecipazione alla trasmissione "Risorse" dal titolo "Ricerca in medicina" presso l'emittente RTV38, Figline Incisa Valdarno |
| 2019 | Relatore per il Caffè-Scienza "Big Data: cosa sono, quanti sono, dove sono. Come i dati stanno rivoluzionando la medicina personalizzata", Officina Giovani, Prato |
| 2016 | Relatore per l'evento "Il ruolo strategico della ricerca universitaria e dell'alta formazione per il futuro del Paese" organizzato da Università di Trento, evento parte dell'iniziativa "Primavera delle Università Italiane" organizzato da CRUI, Dipartimento di Economia e Management, Trento |

## ATTIVITÀ DI RICERCA

Il mio lavoro di ricerca si è incentrato inizialmente sullo sviluppo di algoritmi per l'identificazione di varianti strutturali da tecnologie molecolari ad alta produttività, come microarray e NGS. Durante il dottorato di ricerca in Dinamica Non lineare e Sistemi Complessi presso l'Università di Firenze, ho sviluppato EricScript (Benelli et al., Bioinformatics 2012), che è stato successivamente utilizzato con successo per eseguire la caratterizzazione pan-cancer delle fusioni geniche da parte del consorzio TCGA (Gao et al., 2018).

Nel 2015 sono entrato a far parte del Laboratorio di Oncologia Computazionale e Funzionale (PI: Francesca Demichelis) presso il Dipartimento CIBIO dell'Università di Trento come post-doc, dove ho lavorato sull'analisi e l'interpretazione dei dati genomici ed epigenetici in cancro alla prostata primario e metastatico. In particolare, mi sono occupato sulla caratterizzazione molecolare di tumori alla prostata resistenti alla castrazione (CRPC) non dipendenti dal recettore degli androgeni (CRPC-NE), focalizzandomi sull'analisi della metilazione del DNA (Beltran*, Prandi*, Mosquera, Benelli et al. Nature Medicine, 2016). Ho collaborato alla identificazione del ruolo chiave di N-Myc nel guidare il fenotipo dei CRPC-NE e alla sua interazione con il modificatore epigenetico EZH2 (Dardenne*, Beltran*, Benelli et al. Cancer Cell, 2016). In collaborazione con il gruppo di C. L. Sawyer del MSKCC, abbiamo dimostrato che CRPC può sfuggire all'azione dei farmaci attraverso la plasticità del lineage mediante l'attivazione del fattore di trascrizione SOX2 (Mu, Zhang, Benelli et al., Science, 2017).

Nel 2017, mi sono trasferito presso l'Ospedale di Prato (Italia) per unirmi al team del Dr. Angelo Di Leo, leader internazionale nel campo della ricerca clinica e traslazionale sul cancro al seno, con l'obiettivo di creare un nuovo gruppo di ricerca incentrato sulle cancer omics e loro applicazioni in ambito traslazionale. Il mio laboratorio lavora sulla caratterizzazione e lo sviluppo di biomarcatori molecolari e di imaging prognostici e predittivi attraverso l'integrazione di vari approcci, tra cui strategie computazionali, analitiche e sperimentali. Lavoriamo anche sullo sviluppo di metodi per l'analisi dei diversi dati omics, come la metilazione del DNA (PAMES, Benelli et al. Bioinformatics 2018; Rocker-meth, Benelli et al., Comms Bio 2021) e l'RNA-seq a singola cellula (ddSeeker, Romagnoli et al., BMC Genomics, 2018). Attualmente, il mio laboratorio include 7 membri tra post-doc computazionali, dottorandi e biologi molecolari in collaborazione con la SOS Ricerca Traslazionale (dir. Luca Malorni).

Nel 2019 ho conseguito la specializzazione in Fisica Medica. Frequentando la scuola, ho avuto l'opportunità di lavorare su metodi computazionali per l'analisi quantitativa delle immagini mediche. Il mio lavoro ha portato allo sviluppo di uno strumento computazionale, RadAR, per eseguire analisi complete di set di dati radiomici ad alta dimensionalità (Benelli et al., Cancer Research 2020). Da allora, in collaborazione con fisici medici e radiologi ho lavorato su numerosi progetti volti a valutare il ruolo della radiomica in oncologia.

All'interno di un progetto di ricerca finanziato dal Ministero della Salute Italiano, il mio team si è occupato dello svillupo di assays e metodi computazionali per l'analisi della metilazione del DNA in campioni di biopsia liquida da pazienti affetti da cancro al seno metastatico al fine di stimare il carico tumorale e sottotipo in circolazione (Romagnoli et al., Brief Bioinformatics, 2023; Paoli et al., submitted).

Dal 2021, sono co-Principal Investigator del programma europeo multicentrico AURORA (promosso dal Breast International Group [BIG], NCT02102165), che ha lo scopo di identificare nuovi target molecolari di tumore mammario metastatico tramite la profilazione multi-omics di coppie di tumore primitivo e biopsia metastatica provenienti da >1000 pazienti arruolati in più di 60 ospedali da 11 nazioni. I risultati dei primi 379 pazienti inclusi nel programma AURORA sono stati pubblicati su Cancer Discovery (Aftimos et al., 2021). Svolgo inoltre il ruolo di coordinatore della Data Analysis Committee (DAC) dello studio, che attualmente comprende 17 bioinformatici provenienti da 8 istituti di ricerca europei.

Nel 2023, ho ricevuto un Investigator Grant dalla Fondazione AIRC per la Ricerca sul Cancro per indagare l'uso combinato di radiomica e biopsia liquida nella gestione dei pazienti affetti da cancro metastatico e per affrontare questioni tecniche aperte in entrambi gli approcci.

Dal 2024 ricopro il ruolo di Professore Associato in Biochimica (BIOS-07/A) presso l'Università degli Studi di Firenze.

Da quando ricopro una posizione indipendente (ultimi 5 anni) sono stato finanziato dal Ministero della Salute italiano, dall'Associazione Italiana per la Ricerca sul Cancro (AIRC), dalla Fondazione CR Firenze e dal Breast International Group (BIG).

## GRANTS (PRINCIPAL INVESTIGATOR E COLLABORATORE)

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|---|---|
| 2022 –2027 | **Principal Investigator** del progetto di ricerca "INIT: Integrative analysis of multi-omics molecular and imaging data to improve diagnosis and treatment of cancer"<br>Ente Finanziatore: Fondazione AIRC per la ricerca sul cancro ETS<br>Bando: Investigator Grant 2022 |
| 2022 – 2027 | **Collaboratore** al progetto di ricerca "Gastric cancer in the age of precision oncology: new opportunities to improve treatment"<br>Principal Investigator: Prof. Silvia Giordano (Università degli Studi di Torino)<br>Ente Finanziatore: Fondazione AIRC per la ricerca sul cancro ETS<br>Bando: Investigator Grant 2022 |
| 2020 - 2024 | **Collaboratore** al progetto di ricerca "Temozolomide and irinotecan regimen as liquid biopsy-guided non-cross resistant sequential adjuvant treatment of patients with MGMT methylated, microsatellite stable colorectal cancer failing to achieve seroreversion after a standard adjuvant strategy"<br>Principal Investigator: Dr. Filippo Pietrantonio (Istituto Nazionale dei Tumori, Milano)<br>Ente Finanziatore: Ministero della Salute<br>Bando: Ricerca Finalizzata 2019 – Sezione Giovani Ricercatori |
| 2021-2024 | **Principal Investigator** del progetto "Consolidamento della Unità di Bioinformatica di Prato"<br>Ente Finanziatore: Fondazione CR Firenze |
| 2020 - 2023 | **Principal Investigator** del progetto "Analysis of data generated within the AURORA project and coordination of the Data Analysis Committee"<br>Ente Finanziatore: Breast International Group (BIG) |
| 2019 - 2024 | **Principal Investigator** del progetto di ricerca "Non-invasive assessment of tumor burden and heterogeneity in metastatic breast cancer patients using minimal DNA methylation signatures (MiMeSis)"<br>Ente Finanziatore: Ministero della Salute<br>Bando: Ricerca Finalizzata 2018– Sezione Giovani Ricercatori |

2018-2021

**Collaboratore** al progetto “Targeting non-coding RNA regulated Lineage Plasticity to Overcome Antiandrogen Resistance in Advanced Prostate Cancer”
Principal Investigator: Dr. Ping Mu (UT Southwestern Medical Center, Dallas, TX, US)
Ente Finanziatore: U.S. Department of Defense (DoD)

2017-2020

**Principal Investigator** del progetto “Start-up della Unità di Bioinformatica di Prato”
Ente Finanziatore: Fondazione CR Firenze

**PUBBLICAZIONI SCIENTIFICHE**

Co-autore di 88 pubblicazioni su riviste scientifiche internazionali, tra cui Bioinformatics, Briefings in Bioinformatics, Cancer Discovery, Cancer Research, Clinical Cancer Research, Cancer Cell, Genome Biology, JCI, Nature Communications, Nature Medicine, Nucleic Acids Research, PNAS, Science, Science Translational Medicine.

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| H-index (Scopus, 03/09/2024) | 34 |
| Numero di citazioni (Scopus, 03/09/2025) | 6,766 |
| Last/Co-last/co-corresponding author | 9 |
| First/co-first author: | 7 |
| Subject areas: | Medicine, Biochemistry & Molecular Biology, Mathematical & Computational Biology |

Per la lista delle pubblicazioni fare riferimento allo specifico allegato.

*Consapevole che, ai sensi degli articoli 47 e 76 del D.P.R. n. 445 del 28.12.2000, la falsità degli atti e l’uso di atti falsi sono puniti ai sensi del codice penale e delle leggi speciali, le informazioni nello stesso riportate, rispondono a verità”*

*Autorizzo il trattamento dei dati personali contenuti nel mio curriculum vitae in base art. 13 del D. Lgs. 196/2003.*

Firenze, 03/09/2025

Firma

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