



# Fabrizio Buffolo

**Nazionalità:** Italiana **Data di nascita:** 30/04/1989 **Sesso:** Maschile

**Numero di telefono:** (+39) 3496906718 **Indirizzo e-mail:** [fabrizio.buffolo@gmail.com](mailto:fabrizio.buffolo@gmail.com)

**Abitazione:** Via Genova 20, 10126 Torino (Italia)

## ESPERIENZA LAVORATIVA

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### Specialist in Internal Medicine

*Città della Salute e della Scienza di Torino - Molinette - Department of Internal Medicine* [ 01/07/2022 – Attuale ]

Città: Torino

Paese: Italia

### Specialist in Internal Medicine

*ASLTO4 - Chivasso Hospital - Department of Internal Medicine* [ 11/11/2020 – 30/06/2022 ]

Città: Chivasso (TO)

Paese: Italia

## ISTRUZIONE E FORMAZIONE

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### PhD in Doctoral School in Life and Health Sciences

*University of Torino - Department of Medical Sciences* [ 10/2020 – Attuale ]

Città: Torino

Paese: Italia

Sito web: <https://dott-fisiopatologia.campusnet.unito.it/do/home.pl>

### Research fellowship

*Harvard Medical School - Brigham and Women's Hospital - CICS* [ 01/2018 – 12/2018 ]

Città: Boston

Paese: Stati Uniti

Sito web: <https://cics.bwh.harvard.edu/>

### Specialist in Internal Medicine

*University of Torino* [ 10/2015 – 10/2020 ]

Città: Torino

Paese: Italia

Sito web: [www.unito.it](http://www.unito.it)

Voto finale: 70/70 cum laude and publication recommended

Tesi: "Multi-omic study of extracellular vesicles from human cardiovascular tissue"

### M.D. degree

*University of Torino* [ 10/2008 – 07/2014 ]

Città: Torino

Paese: Italia

Sito web: [www.unito.it](http://www.unito.it)

Voto finale: 110/100 cum laude, honors and publication recommended

Tesi: Study of Na<sup>+</sup>/K<sup>+</sup> ATPase mutations in Primary Aldosteronism

## **Graduated from Scientific Lyceum**

*Scientific Lyceum Norberto Bobbio* [ 09/2003 – 08/2008 ]

Città: Carignano

Paese: Italia

Voto finale: 100/100

## **ACLS Provider Course**

*American Heart Association* [ 06/05/2019 – 07/05/2019 ]

Città: Torino

Paese: Italia

## **ATLS course for Doctors**

*American College of Surgeons* [ 16/01/2020 – 17/01/2020 ]

Città: Torino

Paese: Italia

## **PUBBLICAZIONI**

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### **Effectiveness of blood pressure educational and evaluation program for the improvement of measurement accuracy among nurses**

[2013]

Rabbia F, Testa E, Rabbia S, Praticò S, Colasanto C, Montersino F, Berra E, Covella M, Fulcheri C, Di Monaco S, **Buffolo F**, Totaro S, Veglio F. *High Blood Press Cardiovasc Prev.* 2013 Jun;20(2):77-80. doi: 10.1007/s40292-013-0012-5. Epub 2013 May 8. PMID: 23653174

### **Somatic ATP1A1, ATP2B3, and KCNJ5 mutations in aldosterone-producing adenomas.**

[2014]

Williams TA, Monticone S, Schack VR, Stindl J, Burrello J, **Buffolo F**, Annaratone L, Castellano I, Beuschlein F, Reincke M, Lucatello B, Ronconi V, Fallo F, Bernini G, Maccario M, Giacchetti G, Veglio F, Warth R, Vilsen B, Mulatero P. *Hypertension.* 2014 Jan;63(1):188-95. doi: 10.1161/HYPERTENSIONAHA.113.01733. Epub 2013 Sep 30. PMID: 24082052

### **Issues in the Diagnosis and Treatment of Primary Aldosteronism.**

[2016]

Burrello J, Monticone S, **Buffolo F**, Tetti M, Giraudo G, Schiavone D, Veglio F, Mulatero P. *High Blood Press Cardiovasc Prev.* 2016 Jun;23(2):73-82. doi: 10.1007/s40292-015-0084-5. Epub 2015 Apr 9. PMID: 25854140

### **Renin and aldosterone measurements in the management of arterial hypertension.**

[2015]

Viola A, Monticone S, Burrello J, **Buffolo F**, Lucchiari M, Rabbia F, Williams TA, Veglio F, Mengozzi G, Mulatero P. *Horm Metab Res.* 2015 Jun;47(6):418-26. doi: 10.1055/s-0035-1548868. Epub 2015 May 8. PMID: 25993253

### **Diagnostic accuracy of aldosterone and renin measurement by chemiluminescent immunoassay and radioimmunoassay in primary aldosteronism.**

[2016]

Burrello J, Monticone S, **Buffolo F**, Lucchiari M, Tetti M, Rabbia F, Mengozzi G, Williams TA, Veglio F, Mulatero P. *J Hypertens.* 2016 May;34(5):920-7. doi: 10.1097/HJH.0000000000000880. PMID: 27031933

### **Hyperaldosteronism: How to Discriminate Among Different Disease Forms?**

[2016]

Crudo V, Monticone S, Burrello J, **Buffolo F**, Tetti M, Veglio F, Mulatero P. *High Blood Press Cardiovasc Prev.* 2016 Sep;23(3):203-8. doi: 10.1007/s40292-016-0151-6. Epub 2016 May 2. PMID: 27136934

## **Prevalence and Clinical Manifestations of Primary Aldosteronism Encountered in Primary Care Practice.**

[2017]

Monticone S, Burrello J, Tizzani D, Bertello C, Viola A, **Buffolo F**, Gabetti L, Mengozzi G, Williams TA, Rabbia F, Veglio F, Mulatero P. *J Am Coll Cardiol*. 2017 Apr 11;69(14):1811-1820. doi: 10.1016/j.jacc.2017.01.052.PMID: 28385310

## **Subtype Diagnosis of Primary Aldosteronism: Is Adrenal Vein Sampling Always Necessary?**

[2017]

**Buffolo F**, Monticone S, Williams TA, Rossato D, Burrello J, Tetti M, Veglio F, Mulatero P. *Int J Mol Sci*. 2017 Apr 17;18(4):848. doi: 10.3390/ijms18040848.PMID: 28420172

## **Familial hyperaldosteronism type III.**

[2017]

Monticone S, Tetti M, Burrello J, **Buffolo F**, De Giovanni R, Veglio F, Williams TA, Mulatero P. *J Hum Hypertens*. 2017 Dec;31(12):776-781. doi: 10.1038/jhh.2017.34. Epub 2017 Apr 27.PMID: 28447626

## **Is There a Role for Genomics in the Management of Hypertension?**

[2017]

Burrello J, Monticone S, **Buffolo F**, Tetti M, Veglio F, Williams TA, Mulatero P. *Int J Mol Sci*. 2017 May 26;18(6):1131. doi: 10.3390/ijms18061131.PMID: 28587112

## **Is Primary Aldosteronism Still Largely Unrecognized?**

[2017]

**Buffolo F**, Monticone S, Burrello J, Tetti M, Veglio F, Williams TA, Mulatero P. *Horm Metab Res*. 2017 Dec;49(12):908-914. doi: 10.1055/s-0043-119755. Epub 2017 Nov 16.PMID: 29145688

## **A Case of Adrenal Vein Sampling in Primary Aldosteronism With Homolateral Suppression.**

[2017]

Viola A, Monticone S, Rossato D, Versace K, Castellano I, Burrello J, **Buffolo F**, Veglio F, Mulatero P. *J Endocr Soc*. 2017 Mar 17;1(5):401-406. doi: 10.1210/js.2016-1105. eCollection 2017 May 1.PMID: 29264494

## **GENETICS IN ENDOCRINOLOGY: The expanding genetic horizon of primary aldosteronism.**

[2018]

Monticone S, **Buffolo F**, Tetti M, Veglio F, Pasini B, Mulatero P. *Eur J Endocrinol*. 2018 Mar;178(3):R101-R111. doi: 10.1530/EJE-17-0946. Epub 2018 Jan 18.PMID: 29348113

## **Primary aldosteronism in the primary care setting.**

[2018]

**Buffolo F**, Monticone S, Tetti M, Mulatero P. *Curr Opin Endocrinol Diabetes Obes*. 2018 Jun;25(3):155-159. doi: 10.1097/MED.0000000000000408.PMID: 29629943

## **Engineering a 3D-Bioprinted Model of Human Heart Valve Disease Using Nanoindentation-Based Biomechanics.**

[2018]

van der Valk DC, van der Ven CFT, Blaser MC, Grolman JM, Wu PJ, Fenton OS, Lee LH, Tibbitt MW, Andresen JL, Wen JR, Ha AH, **Buffolo F**, van Mil A, Bouten CVC, Body SC, Mooney DJ, Sluijter JPG, Aikawa M, Hjortnaes J, Langer R, Aikawa E. *Nanomaterials (Basel)*. 2018 May 3;8(5):296. doi: 10.3390/nano8050296.PMID: 29751516

## **Diagnostic approach to low-renin hypertension.**

[2018]

Monticone S, Losano I, Tetti M, **Buffolo F**, Veglio F, Mulatero P. *Clin Endocrinol (Oxf)*. 2018 Oct;89(4):385-396. doi: 10.1111/cen.13741. Epub 2018 Jun 6.PMID: 29758100

## **PDGF enhances the protective effect of adipose stem cell-derived extracellular vesicles in a model of acute hindlimb ischemia.**

[2018]

Lopatina T, Favaro E, Grange C, Cedrino M, Ranghino A, Occhipinti S, Fallo S, **Buffolo F**, Gaykalova DA, Zanone MM, Romagnoli R, Camussi G. *Sci Rep*. 2018 Dec 4;8(1):17458. doi: 10.1038/s41598-018-36143-3. PMID: 30514962

## **Primary Aldosteronism and Obstructive Sleep Apnea: A Cross-Sectional Multi-Ethnic Study.**

[2019]

**Buffolo F**, Li Q, Monticone S, Heinrich DA, Mattei A, Pieroni J, Mei M, Yang S, Hu YH, Yang MC, Sabbadin C, Pizzolo F, Giacchetti G, Fallo F, Veglio F, Reincke M, Wu VC, Mulatero P. *Hypertension*. 2019 Dec;74(6):1532-1540. doi: 10.1161/HYPERTENSIONAHA.119.13833. Epub 2019 Nov 4. PMID: 31679423

## **Renal damage in primary aldosteronism: a systematic review and meta-analysis.**

[2020]

Monticone S, Sconfienza E, D'Ascenzo F, **Buffolo F**, Satoh F, Sechi LA, Veglio F, Mulatero P. *J Hypertens*. 2020 Jan; 38(1):3-12. doi: 10.1097/HJH.0000000000002216. PMID: 31385870

## **Renin-Angiotensin-Aldosterone System Triple-A Analysis for the Screening of Primary Aldosteronism.**

[2020]

Burrello J, **Buffolo F**, Domenig O, Tetti M, Pecori A, Monticone S, Poglitsch M, Mulatero P. *Hypertension*. 2020 Jan; 75(1):163-172. doi: 10.1161/HYPERTENSIONAHA.119.13772. Epub 2019 Nov 25. PMID: 31760886

## **Prevalence of Hypokalemia and Primary Aldosteronism in 5100 Patients Referred to a Tertiary Hypertension Unit.**

[2020]

Burrello J, Monticone S, Losano I, Cavaglià G, **Buffolo F**, Tetti M, Covella M, Rabbia F, Veglio F, Pasini B, Williams TA, Mulatero P. *Hypertension*. 2020 Apr;75(4):1025-1033. doi: 10.1161/HYPERTENSIONAHA.119.14063. Epub 2020 Mar 2. PMID: 32114853

## **Chest swelling in a patient from West Africa.**

[2020]

Elia F, **Buffolo F**, Aprà F. *Intern Emerg Med*. 2020 Jun;15(4):717-718. doi: 10.1007/s11739-020-02296-1. Epub 2020 Mar 6. PMID: 32140922

## **The spectrum of low-renin hypertension.**

[2020]

**Buffolo F**, Monticone S, Pecori A, Pieroni J, Losano I, Cavaglià G, Tetti M, Veglio F, Mulatero P. *Best Pract Res Clin Endocrinol Metab*. 2020 May;34(3):101399. doi: 10.1016/j.beem.2020.101399. Epub 2020 Feb 25. PMID: 32147420

## **Primary Aldosteronism and Obstructive Sleep Apnea: Casual Association or Pathophysiological Link?**

[2020]

Pecori A, **Buffolo F**, Pieroni J, Forestiero V, Sconfienza E, Veglio F, Mulatero P, Monticone S. *Horm Metab Res*. 2020 Jun;52(6):366-372. doi: 10.1055/a-1133-7255. Epub 2020 Mar 27. PMID: 32219799

## **Annexin A1-dependent tethering promotes extracellular vesicle aggregation revealed with single-extracellular vesicle analysis.**

[2020]

Rogers MA, **Buffolo F**, Schlotter F, Atkins SK, Lee LH, Halu A, Blaser MC, Tsolaki E, Higashi H, Luther K, Daaboul G, Bouten CVC, Body SC, Singh SA, Bertazzo S, Libby P, Aikawa M, Aikawa E. *Sci Adv*. 2020 Sep 16;6(38):eabb1244. doi: 10.1126/sciadv.abb1244. Print 2020 Sep. PMID: 32938681

## **Use of Steroid Profiling Combined With Machine Learning for Identification and Subtype Classification in Primary Aldosteronism.**

[2020]

Eisenhofer G, Durán C, Cannistraci CV, Peitzsch M, Williams TA, Riester A, Burrello J, **Buffolo F**, Prejbisz A, Beuschlein F, Januszewicz A, Mulatero P, Lenders JWM, Reincke M. *JAMA Netw Open*. 2020 Sep 1;3(9):e2016209. doi: 10.1001/jamanetworkopen.2020.16209.PMID: 32990741

## **Quality of life in primary aldosteronism: A prospective observational study.**

[2021]

**Buffolo F**, Cavaglià G, Burrello J, Amongero M, Tetti M, Pecori A, Sconfienza E, Veglio F, Mulatero P, Monticone S. *Eur J Clin Invest*. 2021 Mar;51(3):e13419. doi: 10.1111/eci.13419. Epub 2020 Oct 14.PMID: 32997795

## **Development of a Prediction Score to Avoid Confirmatory Testing in Patients With Suspected Primary Aldosteronism.**

[2021]

Burrello J, Amongero M, **Buffolo F**, Sconfienza E, Forestiero V, Burrello A, Adolf C, Handgriff L, Reincke M, Veglio F, Williams TA, Monticone S, Mulatero P. *J Clin Endocrinol Metab*. 2021 Mar 25;106(4):e1708-e1716. doi: 10.1210/clinem/dgaa974.PMID: 33377974

## **Nanoanalytical analysis of bisphosphonate-driven alterations of microcalcifications using a 3D hydrogel system and in vivo mouse model.**

[2021]

Ruiz JL, Hutcheson JD, Cardoso L, Bakhshian Nik A, Condado de Abreu A, Pham T, **Buffolo F**, Busatto S, Federici S, Ridolfi A, Aikawa M, Bertazzo S, Bergese P, Weinbaum S, Aikawa E. *Proc Natl Acad Sci U S A*. 2021 Apr 6;118(14):e1811725118. doi: 10.1073/pnas.1811725118.PMID: 33795519

## **Mineralocorticoid Receptor Antagonist Effect on Aldosterone to Renin Ratio in Patients With Primary Aldosteronism.**

[2021]

Pecori A, **Buffolo F**, Burrello J, Mengozzi G, Rumbolo F, Avataneo V, D'Avolio A, Rabbia F, Bertello C, Veglio F, Mulatero P, Monticone S. *J Clin Endocrinol Metab*. 2021 Aug 18;106(9):e3655-e3664. doi: 10.1210/clinem/dgab290.PMID: 33942084

## **Assessment of Anti-Hypertensive Drug Adherence by Serial Aldosterone-To-Renin Ratio Measurement.**

[2021]

**Buffolo F**, Sconfienza E, Burrello J, Losano I, Mengozzi G, Priolo G, Avataneo V, D'Avolio A, Veglio F, Rabbia F, Mulatero P, Monticone S. *Front Pharmacol*. 2021 May 10;12:668843. doi: 10.3389/fphar.2021.668843. eCollection 2021.PMID: 34040531

## **Clinical Score and Machine Learning-Based Model to Predict Diagnosis of Primary Aldosteronism in Arterial Hypertension.**

[2021]

**Buffolo F**, Burrello J, Burrello A, Heinrich D, Adolf C, Müller LM, Chen R, Forestiero V, Sconfienza E, Tetti M, Veglio F, Williams TA, Mulatero P, Monticone S. *Hypertension*. 2021 Nov;78(5):1595-1604. doi: 10.1161/HYPERTENSIONAHA.121.17444. Epub 2021 Sep 7.PMID: 34488439

## **Role of Extracellular Vesicles in the Pathogenesis of Vascular Damage.**

[2022]

**Buffolo F**, Monticone S, Camussi G, Aikawa E. *Hypertension*. 2022 May;79(5):863-873. doi: 10.1161/HYPERTENSIONAHA.121.17957. Epub 2022 Feb 11.PMID: 35144490

## **Aldosterone as a Mediator of Cardiovascular Damage.**

[2022]

**Buffolo F**, Tetti M, Mulatero P, Monticone S. *Hypertension*. 2022 Sep;79(9):1899-1911. doi: 10.1161/HYPERTENSIONAHA.122.17964. Epub 2022 Jun 29. PMID: 35766038

## **Convalescent or standard plasma versus standard of care in the treatment of COVID-19 patients with respiratory impairment: short and long-term effects. A three-arm randomized controlled clinical trial.**

[2022]

Manzini PM, Ciccone G, De Rosa FG, Cavallo R, Ghisetti V, D'Antico S, Galassi C, Saccona F, Castiglione A, Birocco N, Francisci T, Hu H, Pecoraro C, Danielle F, Labanca L, Bordiga AM, Lorenzi M, Camisasca G, Giachino O, Pagliarino M, Ottone P, Scuvera ITD, Guaschino R, Freilone R, Berti P, Pittaluga F, Avolio M, Costa C, Raso S, Nucci A, Milan M, Baffa A, Russo A, Tornello A, Maddalena L, Delios G, Marletto FP, De Micheli AG, Mattei A, Baldassano S, Canta F, Russo ML, Bergamo D, Vitale F, Liccardi MM, Chinaglia A, Calcagno A, Converso M, Aldieri C, Libanore V, Blangetti I, Benedetti V, Mitola B, Scozzari G; PLACO COVID Study Group. *BMC Infect Dis*. 2022 Nov 22;22(1):879. doi: 10.1186/s12879-022-07716-5. PMID: 36418984

## **Prevalence of Cortisol Cosecretion in Patients With Primary Aldosteronism: Role of Metanephrine in Adrenal Vein Sampling.**

[2023]

**Buffolo F**, Pieroni J, Ponzetto F, Forestiero V, Rossato D, Fonio P, Nonnato A, Settanni F, Mulatero P, Mengozzi G, Monticone S. *J Clin Endocrinol Metab*. 2023 Aug 18;108(9):e720-e725. doi: 10.1210/clinem/dgad179. PMID: 36974473

## **Multiomics of Tissue Extracellular Vesicles Identifies Unique Modulators of Atherosclerosis and Calcific Aortic Valve Stenosis.**

[2023]

Blaser MC, **Buffolo F**, Halu A, Turner ME, Schlotter F, Higashi H, Pantano L, Clift CL, Saddic LA, Atkins SK, Rogers MA, Pham T, Vromman A, Shvartz E, Sukhova GK, Monticone S, Camussi G, Robson SC, Body SC, Muehlschlegel JD, Singh SA, Aikawa M, Aikawa E. *Circulation*. 2023 Aug 22;148(8):661-678. doi: 10.1161/CIRCULATIONAHA.122.063402. Epub 2023 Jul 10. PMID: 37427430

## **Circulating extracellular vesicles derived from tumor endothelial cells hijack the local and systemic anti-tumor immune response: Role of mTOR/G-CSF pathway.**

[2023]

Koni M, Lopatina T, Grange C, Sarcinella A, Cedrino M, Bruno S, **Buffolo F**, Femminò S, Camussi G, Brizzi MF. *Pharmacol Res*. 2023 Sep;195:106871. doi: 10.1016/j.phrs.2023.106871. Epub 2023 Jul 26. PMID: 37506784

## **CONFERENZE E SEMINARI**

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### **Congresso interregionale SIIA – Piemonte Liguria e Valle d'Aosta**

[Torino, 2016]

Oral presentation: "Ipertensione e iperaldosteronismo iporeninamico"

### **X Giornate Piemontesi dei Giovani Internisti**

[Torino, 2017]

Oral presentation: "Paziente iperteso: pensiamo all'iperaldosteronismo"

### **Novità e updates sulla prevenzione e cure della malattia cardiovascolare**

[Rimini, 2019]

Oral presentation: "Revisione sistematica e metanalisi del danno d'organo renale nell'iperaldosteronismo primitivo"

## **Congresso interregionale SIIA – Piemonte Liguria e Valle d’Aosta**

[ Torino, 2019 ]

Oral presentation: “Iperaldosteronismo primitivo ed sindrome delle apnee notturne: associazione non casuale”

## **Progress in Primary Aldosteronism 6**

[ Munich - Germany, 2019 ]

Oral presentation: “Obstructive Sleep Apnea and Primary Aldosteronism: a multicenter cross-sectional study”

## **ESH/ISH Joint Meeting**

[ Digital, 2021 ]

Oral presentation: “Obstructive Sleep Apnea and Primary Aldosteronism

A multicenter cross-sectional study”

## **31st ESH European Meeting on Hypertension and Cardiovascular Protection**

[ Athens - Greece, 2022 ]

Oral presentation: "Development of clinical scoring system and machine learning-based model to predict diagnosis of primary aldosteronism in patients with hypertension"

## **MEMBRO DI SOCIETÀ SCIENTIFICHE**

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**Società Italiana di Ipertensione Arteriosa (SIIA)**

**Società Italiana per le Vescicole Extracellulari (EVITA)**

## **MEMBRO DELL'EDITORIAL BOARD DI RIVISTE SCIENTIFICHE**

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**Frontiers in Cardiovascular Medicine**

[ 20/05/2020 – Attuale ]

Review Editor in Heart Valve Disease

## **REVISORE DI RIVISTE SCIENTIFICHE**

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**Reviewer**

Langebeck’s Archive of Surgery; Journal of Extracellular Vesicles; Endocrinology, Diabetes & Metabolism Case Report; Endocrine Connections; Hormone and Metabolic Research; International Journal of Endocrinology; Journal Endocrinological Investigation; Journal of Human Hypertension; Journal of Hypertension; Pharmacogenomics; Endocrine; Frontiers in Endocrinology; American Journal of Medicine; Hypertension; Acta Diabetologica; Clinical Epigenetics; Journal of Diabetes Research; PLoS One; Therapeutics advances in Endocrinology and Metabolism; Frontiers in Oncology; International Immunopharmacology

## **ONORIFICENZE E RICONOSCIMENTI**

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**the 60-MCQ test of ESH Summer school 2019**

European Society of Hypertension (ESH) [ 20/09/2018 ]

**2nd position** in the the 60-MCQ test of ESH Summer school 2019

**Best Oral Presentations - Spring Meeting Giovani Ricercatori SIIA, SIMI, SISA - 2019**

SIIA, SIMI, SISA [ 03/2019 ]

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*Autorizzo il trattamento dei miei dati personali presenti nel CV ai sensi dell’art. 13 d. lgs. 30 giugno 2003 n. 196 - “Codice in materia di protezione dei dati personali” e dell’art. 13 GDPR 679/16 - “Regolamento europeo sulla protezione dei dati personali”.*

Torino, 02/10/2023