

Curriculum Vitae

Name Stefania REDOLFI

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Research ID: AAH-8446-2019

CURRENT PROFESSIONAL ACTIVITY

Associate Professor of Respiratory Diseases at the University of Cagliari

MD at the Complex Neurology Unit, led by Prof. Monica Puligheddu, at the Duilio Casula Polyclinic in Monserrato, Azienda Ospedaliero-Universitaria di Cagliari

QUALIFICATIONS

Research Activity

Principal investigator of single-center, national, and international multicenter research projects.

Supervision of medical theses in Medicine and Surgery, specializations in Respiratory Diseases, and PhD studies in Physiology, Pathophysiology, and Treatment of Sleep-Related Respiratory Disorders

Teaching Activity

Lecturer in Respiratory Diseases for students in Medicine, residents specializing in Respiratory Diseases, Cardiovascular Diseases, Endocrinology, Internal Medicine, Hematology, and university diplomas in Neurophysiology Techniques, Physiotherapy, and Preventive and Adaptive Motor Activities.

Clinical Activity

Diagnosis, treatment, and follow-up in inpatient and outpatient settings for specific sleep-related respiratory diseases in multi-pathological patients and conditions (e.g., cardiac, neurological, and metabolic diseases) affecting respiration during sleep. Interpretation of advanced polysomnographies for diagnostics and monitoring in non-invasive ventilation.

EDUCATIONAL QUALIFICATIONS

Date of Graduation **July 2021**

Degree **University Diploma**

Description **Multidisciplinary Approach to Obesity**

Institution **Sorbonne Université, Paris, France**

Type of Institution **Foreign University**

Graduation	22/11/2011
Degree	PhD
Grade	Très honorable
Thesis Title	Redistribution caudo-rostrale nocturne du liquide accumulé dans les membres inférieurs : nouvelle approche physiopathologique des apnées obstructives du sommeil et perspectives thérapeutiques.
Istitution	Université Paris IV, Sorbonne Universités, Paris, France - Physiology and Pathophysiology
Type of Istitution	Foreign University
Date of Graduation	21/11/2005
Degree	Specialization Diploma
Description	SPECIALIZATION IN RESPIRATORY DISEASES
Institution	University of Brescia - Piazza del Mercato, 15, Brescia, Italy
Data di conseguimento	20/03/2001
Titolo conseguito	Degree
Descrizione	Medicine and Surgery
Nome e indirizzo istituzione	University of Brescia - Piazza del Mercato, 15, Brescia, Italy
Date of Graduation	1994
Degree	Classical High School Diploma
Institution	Liceo Classico Paolo Sarpi, Bergamo, Italy
PROFESSIONAL EXPERIENCE	
Medical Pathway	<p>July 2008 - February 2010: MD in the Sleep Pathologies Service, Department R3S, Pitié-Salpêtrière University Hospital, Paris, France.</p> <p>March 2013 - June 30, 2021: MD in the Sleep Pathologies Service, Department R3S, Pitié-Salpêtrière University Hospital, Paris, France.</p> <p>October 2021 - June 2023: MD at the Complex Internal Medicine Unit, led by Prof. Angelo Scuteri, at the Duilio Casula Polyclinic in Monserrato, Azienda Ospedaliero-Universitaria di Cagliari.</p> <p>June 2023 - Present: MD at the Complex Neurology Unit, led by Prof. Monica Puligheddu, at the Duilio Casula Polyclinic in Monserrato, Azienda Ospedaliero-Universitaria di Cagliari.</p>
Scientific Pathway	April 2002 - April 2003: Research internship in respiratory neurophysiology at the Laboratory of Respiratory Pathophysiology

(Prof. Thomas Similowski), UPRES EA2397, Université Paris 6, Paris, France.

December 2005 - February 2007: Research fellow in the pathophysiology of sleep-related respiratory disorders at the Sleep Laboratory, First Medicine (Prof. Claudio Tantucci), Spedali Civili, Brescia, Italy.

March 2007 - June 2008: Research internship in sleep-related respiratory disorders at the Sleep Laboratory, Toronto Rehabilitation Institute (Prof. Thomas Douglas Bradley), University of Toronto, Canada.

July 2009 - October 2011: PhD in the pathophysiology of obstructive sleep apnea in the Sleep Pathologies Service (Dr. I. Arnulf), Department R3S, Pitié-Salpêtrière University Hospital, Paris, France, and Research Unit ER10, Université Paris 6, France.

November 2011 - February 2013: Post-doctorate in the pathophysiology and therapies for obstructive and central sleep apnea at the Sleep Laboratory, First Medicine (Prof. Claudio Tantucci), Spedali Civili, Brescia, Italy.

September 2013 - June 2021: Associate Professor in Respiratory Diseases with teaching activities in the Faculty of Medicine and research activities in Research Unit UMRS1158, Experimental and Clinical Respiratory Neurophysiology, INSERM, Sorbonne Université, Paris, France.

October 2021 - Present: Associate Professor of Respiratory Diseases at the University of Cagliari.

CONFERENCES AND ORGANIZATION

2014 - Present: Participation and organization of the French Society of Sleep Research and Medicine (SFRMS) conference, Pneumology Section.

2014 - 2021: Participation and organization of the French Language Pneumology Society (SPLF) conference, Sleep Pathologies Section.

2016 - 2021: Participation in the American Thoracic Society (ATS) conference, "Sleep and Respiratory Neurobiology" Section.

2021 - Present: Participation and organization of the Italian Sleep Medicine Academy (AIMS) conference, Pneumology Section.

2021 - Present: Participation and organization of the European Respiratory Society (ERS) conference, Group 04.02 - Clinical and Epidemiological Respiratory Sleep Medicine.

RESEARCH RESPONSIBILITIES

2010 - 2012: Principal Investigator in Italy for the international randomized multicenter study ADVENT-HF, exploring the effects of adaptive servo-ventilation (ASV) on survival and hospitalization

EDITORIAL RESPONSIBILITIES

HONORS AND AWARDS

rates in heart failure patients with sleep apnea (ClinicalTrials.gov Identifier: NCT01128816), funded by Canadian Institutes of Health Research (CIHR) and Philips Respironics. Directed by Prof. Thomas Douglas Bradley, University of Toronto, Canada.

2013 - 2021: Principal Investigator in France for the same ADVENT-HF study.

2018 - Present: Participation in drafting the "Recommendations for the Management of Central Sleep Apnea" as part of a group of French experts.

2014 - Present: Member of the editorial board of Sleep Medicine Review as a reviewer.

2014 - Present: Member of the editorial board of the European Respiratory Journal as a reviewer.

2014 - Present: Member of the editorial board of Thorax as a reviewer.

May 2008: ATS Award for Best Oral Presentation.

September 2009: CHEST Award.

March 2011: CHEST Italy Session Award.

PUBLICATIONS

1. Congiu P, Carta MG, Perra A, Cantone E, Lorrain S, Pintus E, Tusconi M, Cossu G, Redolfi S, Sancassiani F. Prevalence and Risk by Age and Sex of Sleep Dysregulation and Depressive Episodes in Bipolar and Depressive Disorders in a Community Survey in Sardinia, Italy. *J Clin Med.* 2024 Aug 18;13(16):4870.
2. Primavera D, Cantone E, Cannizzaro GM, Sanna C, Redolfi S. Are Depressive Symptoms in Obstructive Sleep Apnea Attributable to a Syndrome of Dysregulation of Rhythms and Hyperactivity (DYMERS)? *J Clin Med.* 2024 Jul 27;13(15):4396.
3. Maillart E, Redolfi S, Louapre C, Houot M, Chaugne E, Laveneziana P, Ungureanu A, Stankoff B, Arnulf I, Papeix C, Bodini B, Similowski T, Lubetzki C, Morélot-Panzini C. Clinical correlates of respiratory disorders in patients with severe multiple sclerosis: A cross-sectional cohort. *Mult Scler.* 2024 Mar 22:13524585241238840.
4. Bradley TD, Logan AG, Lorenzi Filho G, Kimoff RJ, Durán Cantolla J, Arzt M, Redolfi S, Parati G, Kasai T, Dunlap ME, Delgado D, Yatsu S, Bertolami A, Pedrosa R, Tomlinson G, Marin Trigo JM, Tantucci C, Floras JS; ADVENT-HF Investigators. Adaptive servo-ventilation for sleep-disordered breathing in patients with heart failure with reduced ejection fraction (ADVENT-HF): a multicentre, multinational, parallel-group, open-label, phase 3 randomised controlled trial. *Lancet Respir Med.* 2024 Feb;12(2):153-166.
5. Redolfi S, Straus C, Ninane V, Similowski T. Postural lung volume reduction, expiratory flow limitation, and orthopnoea in diaphragmatic weakness: Preliminary observations. *Pulmonology.* 2023 Sep 21:S2531-0437(23)00160-5.

6. Mwetty O, Joanny S, Rivals I, Perger E, Arnulf I, Redolfi S, Sevoz-Couche S. Screening of obstructive sleep apnea syndrome by the deep breathing technique. *J Clin Sleep Med*. 2023;19:293-302.
7. Dodet P, Sanapo F, Leu-Semenescu S, Coupaye M, Bellicha A, Arnulf I, Poitou C, Redolfi S. Sleep Disorders in Adults with Prader-Willi Syndrome: Review of the Literature and Clinical Recommendations Based on the Experience of the French Reference Centre. *J Clin Med*. 2022;11:1986.
8. Perger E, Aron-Wisnewsky J, Arnulf I, Oppert JM, Redolfi S. Diagnostic approach to sleep disordered-breathing among patients with grade III obesity. *Sleep Med*. 2021;82:18-22.
9. Jutant EM, Montani D, Sattler C, Günther S, Sitbon O, Garcia G, Arnulf I, Humbert M, Similowski T, Redolfi S. Hypoxemia during sleep and overnight rostral fluid shift in pulmonary arterial hypertension: a pilot study. *Pulm Circ*. 2021;11:2045894021996930.
10. Zeidan S, Redolfi S, Papeix C, Bodini B, Louapre C, Arnulf I, Maillart E. Unexpected REM sleep excess associated with a pontine lesion in multiple sclerosis. *J Clin Sleep Med*. 2021;17:1117-1119.
11. Jaffuel D, Rabec C, Philippe C, Mallet JP, Georges M, Redolfi S, Palot A, Suehs CM, Nogue E, Molinari N, Bourdin A. Patterns of adaptive servo-ventilation settings in a real-life multicenter study: pay attention to volume! : Adaptive servo-ventilation settings in real-life conditions. *Respir Res*. 2020;21:243.
12. Perger E, Blaise S, Vermorel C, Boge G, Pepin JL, Redolfi S, Bosson JL. Subjects with venous insufficiency have high risk of obstructive sleep apnea in relationship to fluid shift. *Sleep Med*. 2020;72:135-137.
13. Perger E, Badarani O, Philippe C, Rivals I, Arnulf I, Similowski T, Redolfi S. Evening sock marks as an adjunct to the clinical prediction of obstructive sleep apnea. *Sleep Breath*. 2019 Dec 8.
14. Ledard N, Artru E, Colmenarez Sayago P, Redolfi S, Golmard JL, Carrillo-Solano M, Arnulf I. Adrenergic reactions during N3 sleep arousals in sleepwalking and sleep terrors: The chicken or the egg? *J Sleep Res*. 2019 Nov 19:e12946.
15. Launois C, Nierat MC, Attali V, Raux M, Arnulf I, Similowski T, Redolfi S. Postural preinspiratory cortical activity, genioglossus activity and fluid shift in awake obstructive sleep apnoea patients. *Exp Physiol*. 2020;105:370-378.
16. Jaffuel D, Philippe C, Rabec C, Mallet JP, Georges M, Redolfi S, Palot A, Suehs CM, Nogue E, Molinari N, Bourdin A. What is the remaining status of adaptive servo-ventilation? The results of a real-life multicenter study (OTRLASV-study): Adaptive servo-ventilation in real-life conditions. *Respir Res*. 2019 Oct 29;20(1):235.

17. Redolfi S, Grassion L, Rivals I, Chavez M, Wattiez N, Arnulf I, Gonzalez-Bermejo J, Similowski T. Abnormal Activity of Neck Inspiratory Muscle During Sleep as a Prognostic Indicator in COPD. *Am J Respir Crit Care Med.* 2020;201:414-422.
18. Launois C, Perger E, Attali V, Nierat MC, Raux M, Arnulf I, Similowski T, Redolfi S. Postural respiratory-related cortical activation and rostral fluid shift in awake healthy humans. *Exp Physiol.* 2019 Jun;104(6):887-895.
19. Nierat MC, Raux M, Redolfi S, Gonzalez-Bermejo J, Biondi G, Straus C, Rivals I, Morélot-Panzini C, Similowski T. Neuroergonomic and psychometric evaluation of full-face crew oxygen masks respiratory tolerance: a proof-of-concept study. *J R Army Med Corps.* 2019 Oct;165(5):317-324.
20. Perger E, Lyons OD, Inami T, Smith S, Floras JS, Logan AG, Bradley TD; ADVENT-HF Investigators. Predictors of 1-year compliance with adaptive servoventilation in patients with heart failure and sleep disordered breathing: preliminary data from the ADVENT-HF trial. *Eur Respir J.* 2019 Feb 21;53(2).
21. Perger E, Jutant EM, Redolfi S. Targeting volume overload and overnight rostral fluid shift: A new perspective to treat sleep apnea. *Sleep Med Rev.* 2018 Dec;42:160-170.
22. Rekik S, Martin F, Dodet P, Redolfi S, Leu-Semenescu S, Corvol JC, Grabli D, Arnulf I. Stridor combined with other sleep breathing disorders in multiple system atrophy: a tailored treatment? *Sleep Med.* 2018; 42:53-60.
23. Ghergan A, Coupaye M, Leu-Semenescu S, Attali V, Oppert JM, Arnulf I, Poitou C, Redolfi S. Prevalence and Phenotype of Sleep Disorders in 60 Adults With Prader-Willi Syndrome. *Sleep.* 2017; 40(12).
24. Perger E, Inami T, Lyons OD, Alshaer H, Smith S, Floras JS, Logan AG, Arzt M, Duran Cantolla J, Delgado D, Fitzpatrick M, Fleetham J, Kasai T, Kimoff RJ, Leung RST, Lorenzi Filho G, Mayer P, Mielniczuk L, Morrison DL, Parati G, Parthasarathy S, Redolfi S, Ryan CM, Series F, Tomlinson GA, Woo A, Bradley TD; ADVENT-HF Investigators. Distinct Patterns of Hyperpnea During Cheyne-Stokes Respiration: Implication for Cardiac Function in Patients With Heart Failure. *J Clin Sleep Med.* 2017; 13:1235-1241.
25. Lyons OD, Floras JS, Logan AG, Beanlands R, Cantolla JD, Fitzpatrick M, Fleetham J, John Kimoff R, Leung RS, Lorenzi Filho G, Mayer P, Mielniczuk L, Morrison DL, Ryan CM, Series F, Tomlinson GA, Woo A, Arzt M, Parthasarathy S, Redolfi S, Kasai T, Parati G, Delgado DH, Bradley TD; ADVENT-HF Investigators. Design of the effect of adaptive servo-ventilation on survival and cardiovascular hospital admissions in patients with heart failure and sleep apnoea: the ADVENT-HF trial. *Eur J Heart Fail.* 2017; 19:579-587.
26. Raux M, Demoule A, Redolfi S, Morelot-Panzini C, Similowski T. Reduced Phrenic Motoneuron Recruitment during Sustained Inspiratory Threshold Loading Compared to Single-Breath Loading: A Twitch Interpolation Study. *Front Physiol.* 2016; 7:537.

27. Vizzardì E, Corda L, Sciatti E, Roca E, Redolfi S, Arici M, Pini L, Bonadei I, Metra M, Tantucci C. Echocardiographic evaluation in subjects with α 1-Antitrypsin deficiency. *Eur J Clin Invest*. 2015; 45:949-54.
28. Kasai T, Yumino D, Redolfi S, Su MC, Ruttanaumpawan P, Mak S, Newton GE, Floras JS, Bradley TD. Overnight Effects of Obstructive Sleep Apnea and Its Treatment on Stroke Volume in Patients With Heart Failure. *Can J Cardiol*. 2015; 31:832-8.
29. Redolfi S, Bettinzoli M, Venturoli N, Ravanelli M, Pedroni L, Taranto-Montemurro L, Arnulf I, Similowski T, Tantucci C. Attenuation of obstructive sleep apnea and overnight rostral fluid shift by physical activity. *Am J Respir Crit Care Med*. 2015; 191:856-8.
30. Bettinzoli M, Taranto-Montemurro L, Messineo L, Corda L, Redolfi S, Ferliga M, Tantucci C. Oronasal masks require higher levels of positive airway pressure than nasal masks to treat obstructive sleep apnea. *Sleep Breath*. 2014; 18:845-9.
31. Donzalez-Bermejo J, Morélot-Panzini C, Salachas F, Redolfi S, Straus C, Becquemin MH, Arnulf I, Pradat PF, Bruneteau G, Ignagni AR, Diop M, Onders R, Nelson T, Menegaux F, Meininger V, Similowski T. Diaphragm pacing improves sleep in patients with amyotrophic lateral sclerosis. *Amyotroph Lateral Scler*. 2012; 13:44-54.
32. Corda L, Novali M, Montemurro LT, La Piana GE, Redolfi S, Braghini A, Modena D, Pini L, Cantucci C. Predictors of nocturnal oxyhemoglobin desaturation in COPD. *Respir Physiol Neurobiol*. 2011; 179:192-7.
33. Redolfi S, Arnulf I, Pottier M, Lajou J, Koskas I, Bradley TD, Similowski T. Attenuation of obstructive sleep apnea by compression stockings in subjects with venous insufficiency. *Am J Respir Crit Care Med*. 2011; 184:1062-6.
34. Taranto Montemurro L, Bettinzoli M, Corda L, Redolfi S, Novali M, Braghini A, Tantucci C. Influence of upper airway size on volume exhaled under negative pressure during evaluation of upper airway collapsibility. *Sleep Breath*. 2012; 16:399-404.
35. Vernet C, Redolfi S, Attali V, Konofal E, Brion A, Frija-Orvoen E, Pottier M, Similowski T, Arnulf I. Residual sleepiness in obstructive sleep apnoea: phenotype and related symptoms. *Eur Respir J*. 2011; 38:98-105.
36. Redolfi S, Arnulf I, Pottier M, Bradley TD, Similowski T. Effects of venous compression of the legs on overnight rostral fluid shift and obstructive sleep apnea. *Respir Physiol Neurobiol*. 2011; 175:390-3.
37. Yumino D, Redolfi S, Ruttanaumpawan P, Su MC, Smith S, Newton GE, Mak S, Bradley TD. Nocturnal rostral fluid shift: a unifying concept for the pathogenesis of obstructive and central sleep apnea in men with heart failure. *Circulation*. 2010; 121:1598-605.

38. Redolfi S, Yumino D, Ruttanaumpawan P, Yau B, Su MC, Lam J, Bradley TD. Relationship between overnight rostral fluid shift and Obstructive Sleep Apnea in nonobese men. *Am J Respir Crit Care Med.* 2009; 179:241-6.
39. Su MC, Chiu KL, Ruttanaumpawan P, Shiota S, Yumino D, Redolfi S, Haight JS, Yau B, Lam J, Bradley TD. Difference in upper airway collapsibility during wakefulness between men and women in response to lower-body positive pressure. *Clin Sci (Lond).* 2009; 116:713-20.
40. Corda L, Redolfi S, Montemurro LT, La Piana GE, Bertella E, Tantucci C. Short- and long-term effects of CPAP on upper airway anatomy and collapsibility in OSAH. *Sleep Breath.* 2009; 13:187-93.
41. Donzel-Raynaud C, Redolfi S, Arnulf I, Similowski T, Straus C. Abnormal respiratory-related evoked potentials in untreated awake patients with severe obstructive sleep apnoea syndrome. *Clin Physiol Funct Imaging.* 2009; 29:10-7.
42. Su MC, Chiu KL, Ruttanaumpawan P, Shiota S, Yumino D, Redolfi S, Haight JS, Bradley TD. Lower body positive pressure increases upper airway collapsibility in healthy subjects. *Respir Physiol Neurobiol.* 2008; 161:306-12.
43. Corda L, Bertella E, La Piana GE, Boni E, Redolfi S, Tantucci C. Inhaled corticosteroids as additional treatment in alpha-1-antitrypsin-deficiency-related COPD. *Respiration.* 2008; 76:61-8.
44. Tantucci C, Donati P, Nicosia F, Bertella E, Redolfi S, De Vecchi M, Corda L, Grassi V, Zulli R. Inspiratory capacity predicts mortality in patients with chronic obstructive pulmonary disease. *Respir Med.* 2008; 102:613-9.
45. Banfi P, Redolfi S, Robert D. Home treatment of infection-related acute respiratory failure in kyphoscoliotic patients on long-term mechanical ventilation. *Respir Care.* 2007; 52:713-9.
46. Bottini P, Redolfi S, Dottorini ML, Tantucci C. Autonomic neuropathy increases the risk of obstructive sleep apnea in obese diabetics. *Respiration.* 2008; 75:265-71.
47. Redolfi S, Corda L, La Piana G, Spandrio S, Prometti P, Tantucci C. Long-term non-invasive ventilation increases chemosensitivity and leptin in obesity-hypoventilation syndrome. *Respir Med.* 2007; 101:1191-5.
48. Raux M, Straus C, Redolfi S, Morelot-Panzini C, Couturier A, Hug F, Similowski T. Electroencephalographic evidence for pre-motor cortex activation during inspiratory loading in humans. *J Physiol.* 2007; 578:569-78.
49. Ferretti A, Giampiccolo P, Redolfi S, Mondini S, Cirignotta F, Cavalli A, Tantucci C. Upper airway dynamics during negative expiratory pressure in apneic and non-apneic awake snorers. *Respir Res.* 2006; 7:54.

50. Redolfi S, Raux M, Donzel-Raynaud C, Morelot-Panzini C, Zelter M, Derenne JP, Similowski T, Straus C. Effects of upper airway anaesthesia on respiratory-related evoked potentials in humans. *Eur Respir J*. 2005; 26:1097-103.
51. Donzel-Raynaud C, Straus C, Bezzi M, Redolfi S, Raux M, Zelter M, Derenne JP, Similowski T. Upper airway afferents are sufficient to evoke the early components of respiratory-related cortical potentials in humans. *J Appl Physiol*. 2004; 97:1874-9.