



## Filippo Patrucco

Date of birth

Nationality: Italian | Phone number:

Email address:

Address:

### WORK EXPERIENCE

15/05/2020 – CURRENT Novara, Italy

**PULMONOLOGIST AT RESPIRATORY DISEASES UNIT** AZIENDA OSPEDALIERA UNIVERSITARIA  
MAGGIORE DELLA CARITÀ

13/11/2017 – 14/05/2020 Vercelli, Italy

**PULMONOLOGIST AT RESPIRATORY DISEASES UNIT** AZIENDA SANITARIA LOCALE DI VERCELLI

### EDUCATION AND TRAINING

02/10/2022 – CURRENT

**SCIENTIFIC QUALIFICATION FOR ASSOCIATE PROFESSOR IN RESPIRATORY DISEASES, SETTORE  
CONCORSUALE 06/D1 - MED10 MIUR** Ministero Italiano dell'Università e della Ricerca

14/02/2022 – 15/10/2022 Ancona, Italy

**MASTER IN INTERVENTIONAL PULMONOLOGY** Università Politecnica delle Marche

**Address** Via Menicucci 6, Ancona, AOU Ospedali Riuniti, Via Conca 71, Torrette di Ancona, 60121, Ancona, Italy |

**Website** <https://www.univpm.it/> |

**Thesis** Adequacy of samples obtained by EBUS TBNA for molecular analyses in patients with suspected lung cancer

01/11/2018 – 24/02/2022 Novara, Italy

**PHD COURSE IN MEDICAL AND BIOLOGICAL SCIENCES** University of Piemonte Orientale

**Website** <https://www.uniupo.it/it/corsi/dottorato-di-ricerca>

07/08/2013 – 06/08/2017 Torino, Italy

**POSTGRADUATE DEGREE IN RESPIRATORY DISEASES** University of Torino

Vote 70/70 Lode

Thesis titled: "Efficacy of prevention of Cytomegalovirus disease in Lung Transplant Center of Turin",  
supervisor Prof. Caterina Bucca

08/11/2012 – 29/06/2013 Torino, Italy

**FELLOWSHIP ON RESEARCH AND TRAINING** University of Torino, Department of Clinical and  
Biological Sciences

Winner of a Fellowship on Research and Training titled "Relevance of bronchoscopy in the management of the lung transplanted patient" announced by University of Torino, Department of Clinical and Biological Sciences.

Hospital: San Luigi Gonzaga, Orbassano, Italy; AOU Città della Salute e della Scienza di Torino, Torino, Italy.

Vote 106/110

Thesis titled: "Electromagnetic Navigation Bronchoscopy and Rapid on Site Evaluation: diagnostic yield in solitary pulmonary nodules"

**LANGUAGE SKILLS**

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Mother tongue(s): **ITALIAN**

Other language(s):

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production	Spoken interaction	
<b>ENGLISH</b>	B2	B2	B2	B2	B2
<b>FRENCH</b>	A2	A2	A2	A2	A2

*Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user***ADDITIONAL INFORMATION**

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**PUBLICATIONS****Publications**See publication list below

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**NETWORKS AND MEMBERSHIPS****Memberships**

- Editorial Board Minerva Medica: pISSN 0026-4806, eISSN 1827-1669
- Editorial Board Technology in Cancer Research & Treatment: pISSN: 1533-0346, eISSN: 1533-0338
- University of Eastern Piedmont Aging Project editorial member
- Associazione Italiana Pneumologi Ospedalieri (AIPO)
- Associazione Italiana Pneumologi Ospedalieri (AIPO), section Piemonte Valle d'Aosta
- European Respiratory Society

**HONOURS AND AWARDS****Honours and awards**

- 2012 Winner of the National Prize "Maria Chiara Piciocchi De Miranda Foundation" for graduated medical students who discussed a thesis in oncologic field.
- 2016 Winner of Associazione Italiana Pneumologi Ospedalieri original projects selection with a study titled: "A new device for the microbiological sampling in the patients with pneumonia"
- October 2017 Winner of the International Prize "E\_factor 250 grant - Lung Category for European Cardio Thoracic Transplantation Association 2016 Barcelona" for the abstract "Analysis of comorbidities and infectious complications in lung transplantation: is a new "SELeCT" score a prognostic tool?"
- June 2020 Winner of the research project founded by Boehringer Ingelheim titled "Effects of anti-fibrotic drug nintedanib on human alveolar macrophages and blood monocytes in patients with Idiopathic Pulmonary Fibrosis (IPF) naïve for treatment"

**ORGANISATIONAL SKILLS****Organisational skills**

- Member of Associazione Italiana Pneumologi Ospedalieri, Piemonte Valle d'Aosta section, from October 2018 up to now
- Member of Associazione Italiana Pneumologi Ospedalieri, Piemonte Valle d'Aosta Interventional Pneumology section, from October 2018 up to now
- Associazione Italiana Pneumologi Ospedalieri (AIPO), Interventional Pulmonology Group Member, Lung Update Editor from November 2023 up to now

- Representative of post graduate course students from August 2013 to August 2017
- Representative of medicine course students from November 2008 to July 2011

## **COMMUNICATION AND INTERPERSONAL SKILLS**

**Communication and interpersonal skills** Good communication skills gained through my experience as speaker at national and international conferences in clinical and research fields

## **JOB-RELATED SKILLS**

### **Job-related skills**

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- Head of multidisciplinary group on Interstitial Lung Diseases of Maggiore della Carità Hospital, Novara (Italy)
- Bronchoscopy and Interventional Pulmonology: I and II level bronchoscopy, Fluoroscopic and ultrasound-guided Trans-thoracic needle aspiration, Electromagnetic Navigation Bronchoscopy, Rigid Bronchoscopy, Cryobiopsies, Thoracic Ultrasound
- Clinical Pulmonology: Pulmonary Physiopathology and functional evaluation, management of patients with interstitial lung diseases, pulmonary arterial hypertension, severe asthma, chronic obstructive pulmonary disease, lung transplanted patients, non-invasive mechanical ventilation
- Research fields: bronchoscopy and interventional pulmonology, interstitial lung diseases, thoracic oncology.

## **TEACHING EXPERIENCE**

### **Teaching Experience**

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- 2019 Emergency Medicine post-graduate course at Piemonte Orientale University
- 2021 Internal Medicine post-graduate course at Piemonte Orientale University
- 2021 Intensive Care Medicine post-graduate course at Piemonte Orientale University
- 2021 Anatomy course School of Medicine at Piemonte Orientale University
- 2021 Semeiotics course School of Medicine at Piemonte Orientale University
- 2022 Internal Medicine post-graduate course at Piemonte Orientale University
- 2022 Intensive Care Medicine post-graduate course at Piemonte Orientale University
- 2022 Semeiotics course School of Medicine at Piemonte Orientale University
- 2023 Emergency Medicine post-graduate course at Piemonte Orientale University
- 2023 Internal Medicine post-graduate course at Piemonte Orientale University
- 2023 Intensive Care Medicine post-graduate course at Piemonte Orientale University
- 2023 Semeiotics course School of Medicine at Piemonte Orientale University

## **PROJECTS**

### **Ongoing Research Projects**

- Monocyte and macrophages in patients affected by Idiopathic Pulmonary Fibrosis; in vitro studies to evaluate basal monocyte and macrophage oxidative stress production and after nintedanib stimulation. Cooperation with Pharmacology Laboratory of Eastern Piedmont University.
- Physical properties of lung tissue of patients affected by Idiopathic Pulmonary Fibrosis and other interstitial lung diseases: measurements of dielectric properties of lung tissue. Cooperation with Sensible Medical Innovations Inc. (United States).
- UPO COVID Team member: we conducted in cooperation with the University of Eastern Piedmont (UPO) COVID team several projects to evaluate with a multidisciplinary point of view several clinical and biochemical aspects of acute and follow-up SARS-CoV-2 infection.
- Member of the Project NODES, Ecosistema NODES - Nord Ovest Digitale e Sostenibile, founded by PNRR - MIUR, Università del Piemonte Orientale

Patrucco Filippo publication list, 27 November 2023.

- **Patrucco F**, Curtoni A, Sidoti F, Zanotto E, Bondi A, Albera C, Boffini M, Cavallo R, Costa C, Solidoro P. Herpes Virus Infection in Lung Transplantation: Diagnosis, Treatment and Prevention Strategies. *Viruses*. 2023 Nov 27;15(12):2326.
- **Patrucco F**, Gavelli F, Balbo PE. Environmental Impact of Bronchoscopy: Analysis of Waste Mass and Recyclability of Bronchoscopic Equipment and Consumables. *Respiration*. 2023 Sep 19:1-7.
- Apostolo D, Ferreira LL, Di Tizio A, Ruaro B, **Patrucco F**, Bellan M. A Review: The Potential Involvement of Growth Arrest-Specific 6 and Its Receptors in the Pathogenesis of Lung Damage and in Coronavirus Disease 2019. *Microorganisms*. 2023 Aug 8;11(8):2038.
- Fantin A, Castaldo N, Tirone C, Sartori G, Crisafulli E, **Patrucco F**, Vetrugno L, Patruno V. Endobronchial ultrasound: a pictorial essay. *Acta Biomed*. 2023 Aug 3;94(4):e2023113.
- **Patrucco F**, Albera C, Bellan M, Zava M, Gavelli F, Balbo PE, Solidoro P. Measure of lung dielectric properties in patients with Idiopathic Pulmonary Fibrosis: correlation with clinical, radiological and pulmonary functional parameters. *Respir Med*. 2023 Oct;217:107370.
- **Patrucco F**, Solidoro P, Gavelli F, Apostolo D, Bellan M. Idiopathic Pulmonary Fibrosis and Post-COVID-19 Lung Fibrosis: Links and Risks. *Microorganisms*. 2023 Mar 30;11(4):895.
- Apostolo D, D'Onghia D, Tonello S, Minisini R, Baricich A, Gramaglia C, **Patrucco F**, Zeppego P, Acquaviva A, Balbo PE, Castello LM, Cappellano G, Chiocchetti A, Gerevini C, Giordano M, Laaguid F, Manfredi M, Raineri D, Rigamonti C, Rolla R, Romano V, Confalonieri M, Savoia P, Zavattaro E, Pirisi M, Ruaro B, Sainaghi PP, Bellan M; No-More COVID Group. Decreased Gas6 and sAxI Plasma Levels Are Associated with Hair Loss in COVID-19 Survivors. *Int J Mol Sci*. 2023 Mar 26;24(7):6257.
- Mondoni M, Rinaldo RF, Solidoro P, Di Marco F, **Patrucco F**, Pavesi S, Baccelli A, Carlucci P, Radovanovic D, Santus P, Raimondi F, Vedovati S, Morlacchi LC, Blasi F, Sotgiu G, Centanni S. Interventional pulmonology techniques in lung transplantation. *Respir Med*. 2023 Mar 15;211:107212.
- **Patrucco F**, D'Alessio A, Brambilla M, Balbo PE. Combining three-dimensional fluoroscopy guide system with single-use bronchoscopes for diagnosis of peripheral lesions: First two cases. *Respirol Case Rep*. 2023 Mar 10;11(4):e01113.
- **Patrucco F**, Gavelli F, Fantin A, Solidoro P. Comment on: "Intravenous methylprednisolone pulses in hospitalized patients with severe COVID-19 pneumonia: a double-blind, randomized, placebo-controlled trial". *Gazzetta Medica Italiana - Archivio per le Scienze Mediche* 2022 December;181(12):1003-4
- **Patrucco F**, Gavelli F, Sainaghi PP, Mondoni M, Bellan M, Piora S, Gai Via V, Zava M, Avanzi GC, Vaschetto R, Balbo PE, Solidoro P. The role of bronchoalveolar lavage in diagnosis and prognosis of COVID-19 patients. *Minerva Respiratory Medicine* 2022 December;61(4):189-97
- **Patrucco F**, Gavelli F, Solidoro P. Transcriptome analysis on bronchoalveolar lavage in COVID-19 patients. *Minerva Biotechnology and Biomolecular Research* 2022 December;34(4):143-4
- Bellan M, Apostolo D, Albè A, Crevola M, Errica N, Ratano G, Tonello S, Minisini R, D'Onghia D, Baricich A, **Patrucco F**, Zeppego P, Gramaglia C, Balbo PE, Cappellano G, Casella S, Chiocchetti A, Clivati E, Giordano M, Manfredi M, Patti G, Pinato DJ, Puricelli C, Raineri D, Rolla R, Sainaghi PP, Pirisi M; No-More COVID study group. Determinants of long COVID among adults hospitalized for SARS-CoV-2 infection: A prospective cohort study. *Front Immunol*. 2022 Dec 19;13:1038227.
- Rizzi M, Tonello S, Morani F, Rizzi E, Casciaro GF, Martino E, Costanzo M, Zecca E, Croce A, Pedrinelli A, Vassia V, Landi R, Mallela VR, D'Onghia D, Minisini R, Bellan M, Castello LM, Gavelli F, Avanzi GC, **Patrucco F**, Pirisi M, Colangelo D, Sainaghi PP. CGRP Plasma Levels Correlate with the Clinical

- Evolution and Prognosis of Hospitalized Acute COVID-19 Patients. *Viruses*. 2022 Sep 26;14(10):2123.
- **Patrucco F**, Bellan M, Solidoro P. COVID-19: different waves and different outcomes. *Pol Arch Intern Med*. 2022 Oct 21;132(10):16352.
  - Perazzi M, Gallina E, Manfredi GF, **Patrucco F**, Acquaviva A, Colangelo D, Pirisi M, Bellan M. Vitamin D in Systemic Sclerosis: A Review. *Nutrients*. 2022 Sep 21;14(19):3908.
  - Solidoro P, **Patrucco F**, Albera C, Pennazio V, Guerrera F, Boffini M, Rinaldi M, Saad M, Cavallo R, Nicola S, Brussino L, Costa C. Keep on tailoring CMV management in lung transplantation: 24 versus 12-month CMV hyperimmune globulins regimen effects in combined universal prophylaxis. *Panminerva Med*. 2022 Dec;64(4):438-441.
  - Solidoro P, Albera C, Ribolla F, Bellocchia M, Brussino L, **Patrucco F**. Triple Therapy in COPD: Can We Welcome the Reduction in Cardiovascular Risk and Mortality? *Front Med (Lausanne)*. 2022 Mar 23;9:816843.
  - Zecca E, Rizzi M, Tonello S, Matino E, Costanzo M, Rizzi E, Casciaro GF, Manfredi GF, Acquaviva A, Gagliardi I, Calzaducca E, Mallela VR, D'Onghia D, Minisini R, Bellan M, Castello LM, Gavelli F, Avanzi GC, **Patrucco F**, Chiocchetti A, Pirisi M, Rigamonti C, Lilleri D, Sola D, Sainaghi PP. Ongoing Mycophenolate Treatment Impairs Anti-SARS-CoV-2 Vaccination Response in Patients Affected by Chronic Inflammatory Autoimmune Diseases or Liver Transplantation Recipients: Results of the RIVALSA Prospective Cohort. *Viruses*. 2022 Aug 12;14(8):1766.
  - Rizzi M, **Patrucco F**, Trevisan M, Faolotto G, Mercandino A, Strola C, et al. Baseline plasma SARS-CoV-2 RNA detection predicts an adverse COVID-19 evolution in moderate to severe hospitalized patients. *Panminerva Med*. 2022 Jun 17. doi: 10.23736/S0031-0808.22.04705-X. Epub ahead of print.
  - Solidoro P, Albera C, Ribolla F, Bellocchia M, Brussino L, **Patrucco F**. Triple Therapy in COPD: Can We Welcome the Reduction in Cardiovascular Risk and Mortality? *Front Med (Lausanne)*. 2022 Mar 23;9:816843.
  - Solidoro P, Nicola S, Ridolfi I, Canonica GW, Blasi F, Paggiaro P, Heffler E, Bagnasco D, **Patrucco F**, Ribolla F, Bucca C, Rolla G, Albera C, Brussino L. Biologics in Severe Eosinophilic Asthma: Three-Year Follow-Up in a SANI Single Center. *Biomedicines*. 2022; 10(2):200.
  - Gavelli F, Molinari L, Baldrighi M, Salmi L, Mearelli F, Fiotti N, **Patrucco F**, Airoidi C, Bellan M, Sainaghi PP, Di Somma S, Lupia E, Colonetti E, Muiesan ML, Biolo G, Avanzi GC, Castello LM. Are Baseline Levels of Gas6 and Soluble Mer Predictors of Mortality and Organ Damage in Patients with Sepsis? The Need-Speed Trial Database. *Biomedicines*. 2022; 10(2):198.
  - **Patrucco F**, Zeppego P, Baricich A, Gramaglia CM, Balbo PE, Falaschi Z, et al. Long-lasting consequences of Coronavirus disease 19 pneumonia: a systematic review. *Minerva Med*. 2021 Dec 3. doi: 10.23736/S0026-4806.21.07594-7. Epub ahead of print.
  - Salmi L, **Patrucco F**, Molinari L, Bellan M, Sainaghi PP, Castello LM. ADAM17 inhibition effects on Mer shedding. *Minerva Biotechnology and Biomolecular Research* 2021 December;33(4):187-95
  - Bellan M, Baricich A, **Patrucco F**, Zeppego P, Gramaglia C, Balbo PE, et al. Long-term sequelae are highly prevalent one year after hospitalization for severe COVID-19. *Sci Rep*. 2021 Nov 22;11(1):22666.
  - **Patrucco F**, Failla G, Ferrari G, Galasso T, Candoli P, Mondoni M, et al. Bronchoscopy during COVID-19 pandemic, ventilatory strategies and procedure measures. *Panminerva Med*. 2021 Oct 4. doi: 10.23736/S0031-0808.21.04533-X. Epub ahead of print.
  - **Patrucco F**, Gavelli F, Fagoonee S, Solidoro P, Undas A, Pellicano R. Current treatment challenges in the COVID-19 pandemic. *Pol Arch Intern Med*. 2021 Sep 30;131(9):854-861.

- **Patrucco F**, Daverio M, Airoidi C, Falaschi Z, Longo V, Gavelli F, et al. 4D Electromagnetic Navigation Bronchoscopy for the Sampling of Pulmonary Lesions: First European Real-Life Experience. *Lung*. 2021 Oct;199(5):493-500.
- **Patrucco F**, Airoidi C, Falaschi Z, Bellan M, Castello LM, Filippone F, et al. Mycotic infection prevalence among patients undergoing bronchoalveolar lavage with search of SARS-CoV-2 after two negative nasopharyngeal swabs. *J Breath Res*. 2021 Sep 13;15(4).
- Airoidi C, Calcagno A, Di Perri G, Valinotto R, Gallo L, Locana E, Trunfio M, **Patrucco F**, Vineis P, Faggiano F.. Seroprevalence of SARS-CoV-2 Among Workers in Northern Italy. *Ann Work Expo Health*. 2021 Aug 8;wxab062.
- Gavelli F, Gattoni E, Statti G, Azzolina D, Maggi E, **Patrucco F**, et al. High-flow nasal cannula in the treatment of acute carbon monoxide poisoning: a pilot study. *Minerva Respiratory Medicine* 2021 September;60(3):87-95
- Bonometti R, Bellan M, Sola D, Gibbin A, Gavelli F, **Patrucco F**, et al. Overlapping polyclonal lymphoproliferative disorders. *Natl Med J India*. 2020 Nov-Dec;33(6):344-346.
- Gramaglia C, Gambaro E, Bellan M, Balbo PE, Baricich A, Sainaghi PP, Pirisi M, Baldon G, Battistini S, Binda V, Feggi A, Gai M, Gattoni E, Jona A, Lorenzini L, Marangon D, Martelli M, Prosperini P, Zeppegno P; **NO-MORE COVID Group**. Mid-term Psychiatric Outcomes of Patients Recovered From COVID-19 From an Italian Cohort of Hospitalized Patients. *Front Psychiatry*. 2021 Jun 10;12:667385.
- Bellan M, Azzolina D, Hayden E, Gaidano G, Pirisi M, Acquaviva A, Aimaretti G, Aluffi Valletti P, Angilletta R, Arioli R, Avanzi GC, Avino G, Balbo PE, Baldon G, Baorda F, Barbero E, Baricich A, Barini M, Barone-Adesi F, Battistini S, Beltrame M, Bertoli M, Bertolin S, Bertolotti M, Betti M, Bobbio F, Boffano P, Boglione L, Borrè S, Brucoli M, Calzaducca E, Cammarata E, Cantaluppi V, Cantello R, Capponi A, Carriero A, Casciaro GF, Castello LM, Ceruti F, Chichino G, Chirico E, Cisari C, Cittone MG, Colombo C, Comi C, Croce E, Daffara T, Danna P, Della Corte F, De Vecchi S, Dianzani U, Di Benedetto D, Esposito E, Faggiano F, Falaschi Z, Ferrante D, Ferrero A, Gagliardi I, Galbiati A, Gallo S, Garavelli PL, Gardino CA, Garzaro M, Gastaldello ML, Gavelli F, Gennari A, Giacomini GM, Giacone I, Gai Via V, Giolitti F, Gironi LC, Gramaglia C, Grisafi L, Inserra I, Invernizzi M, Krengli M, Labella E, Landi IC, Landi R, Leone I, Lio V, Lorenzini L, Maconi A, Malerba M, Manfredi GF, Martelli M, Marzari L, Marzullo P, Mennuni M, Montabone C, Morosini U, Mussa M, Nerici I, Nuzzo A, Olivieri C, Padelli SA, Panella M, Parisini A, Paschè A, **Patrucco F**, Patti G, Pau A, Pedrinelli AR, Percivale I, Ragazzoni L, Re R, Rigamonti C, Rizzi E, Rognoni A, Roveta A, Salamina L, Santagostino M, Saraceno M, Savoia P, Sciarra M, Schimmenti A, Scotti L, Spinoni E, Smirne C, Tarantino V, Tillio PA, Tonello S, Vaschetto R, Vassia V, Zagaria D, Zavattaro E, Zeppegno P, Zottarelli F, Sainaghi PP. Simple Parameters from Complete Blood Count Predict In-Hospital Mortality in COVID-19. *Dis Markers*. 2021 May 13;2021:8863053.
- Bellan M, Giubertoni A, Piccinino C, Buffa M, Cromi D, Sola D, Pedrazzoli R, Gagliardi I, Calzaducca E, Zecca E, **Patrucco F**, Patti G, Sainaghi PP, Pirisi M. Cardiopulmonary Exercise Testing Is an Accurate Tool for the Diagnosis of Pulmonary Arterial Hypertension in Scleroderma Related Diseases. *Pharmaceuticals (Basel)*. 2021 Apr 8;14(4):342.
- Airoidi C, **Patrucco F**, Milano F, Alessi D, Sarro A, Rossi MA, et al. High Seroprevalence of SARS-CoV-2 among Healthcare Workers in a North Italy Hospital. *Int J Environ Res Public Health*. 2021 Mar 24;18(7):3343.
- Salmi L, Gavelli F, **Patrucco F**, Bellan M, Sainaghi PP, Avanzi GC, et al. Growth Arrest-Specific Gene 6 Administration Ameliorates Sepsis-Induced Organ Damage in Mice and Reduces ROS Formation In Vitro. *Cells*. 2021 Mar 9;10(3):602.
- **Patrucco F**, Allara E, Boffini M, Rinaldi M, Costa C, Albera C, et al. Twelve-month effects of everolimus on renal and lung function in lung transplantation: differences in chronic lung allograft dysfunction phenotypes. *Ther Adv Chronic Dis*. 2021 Feb 24;12:2040622321993441.