

**Roberto Alejandro Rabinovich Spinelli**

**Titulación académica**

MB ChB (equivalent) 1993

Internal Medicine Specialist 1997 – Buenos Aires, Argentina

Intensive Medicine Specialist 1999 – Buenos Aires, Argentina

MSc Universitat de Barcelona – Spain 2002

PhD Universitat de Barcelona, Spain 2005

Thesis Entitled: Peripheral Muscle Function and  
exercise training in Chronic Obstructive Pulmonary Disease

**Perfil profesional**

LAS in Respiratory Medicine at the Royal Infirmary of Edinburgh

(Since 1st March 2016)

Clinical Tutor Associate. The University of Edinburgh.

(From September 2012-August 2014)

Honorary Contract with NHS (since 2006)

Actual clinical work in general respiratory medicine and specialist clinic in COPD in an outpatient basis

Senior Postdoctoral Clinical Fellow (Post-Doctoral) The University of Edinburgh. ELEGI Laboratory, MRC/ University of Edinburgh Centre for Inflammation Research and Royal Infirmary of Edinburgh.

(Since 1st July 2006)

Consultant at Emergency Department

Hospital de la Santa Creu i Sant Pau

Barcelona, Spain.

(From March 2005-June 2006)

Pre-Hospital Emergency Medicine

Sistema d'Emergències Mediques de Barcelona

Barcelona, Spain.

(From March 2005-June 2006)

Intensive Care Unit Physician

Hospital Clínic i Provincial – Barcelona, Spain

(From April 2004 – February 2005)

Research Fellow – Respiratory Medicine Department - Instituto de Investigaciones Biomédicas (IDIBAPS), Hospital Clínic i Provincial – Barcelona, Spain. (From December 1998 – April 2004)

Clinical Fellow. Respiratory Department. Instituto de Investigaciones Médicas Dr. Alfredo Lanari  
(From June 1997 – December 1998)

Intensive Care Unit  
Sanatorio Trinidad San Isidro – San Isidro, Buenos Aires  
(From August 1997 - December 1998)

Intensive Care Unit  
Sanatorio Mitre de Buenos Aires - Capital Federal  
(From October 1995 - April 1996)

Internal Medicine, Medical Resident  
Instituto de Investigaciones Médicas Dr. Alfredo Lanari  
(From June 1994 – June 1997)

General Surgery, Medical Resident  
Hospital Juan A Fernandez  
Buenos Aires – Argentina  
(From August 1993 – March 1994)

General Surgery, Medical Resident  
Hospital General de Agudos Dr. Teodoro Álvarez  
Buenos Aires – Argentina  
(From June 1993 – August 1993)

#### **Docencia**

Honorary Professor  
Post-graduate Respiratory Physiotherapy course, Instituto Profesional en Terapias y Humanidades, Mexico  
(Since 2019)

Co-tutor year 4 MB CHB Respiratory Module, The University of Edinburgh, Medical school.  
(Since 2016)

Honorary Professor at the University of Valencia – Spain. Teaching at the Physiotherapy school on the Post-graduate Master (MSc): Functional Recovery in Physiotherapy.  
(Since 2017)

Honorary Professor at the University Ramon Llull, Blanquerna – Spain. Teaching at the Physiotherapy school on the Post-graduate Master (MSc ): Therapeutic Physical activity.  
(Since 2017)

Clinical tutor associate (CTA) at the University of Edinburgh  
(From September 2012 – August 2014)

Honorary Professor at the Universidad Autónoma de Madrid – Spain. Teaching at the Physiotherapy school (ONCE) on the Post-graduate Master (MSc): Cardio-Respiratory Physiotherapy.  
(Since 2010)

Also teaching post-graduated courses for the Physiotherapy College in Canarias – Spain.  
(Since 2010)

**Invited Speaker at Scientific Societies:**

European Respiratory Society  
British Thoracic Society  
Spanish Thoracic Society  
Mexican Thoracic Society  
Argentinian Respiratory Society  
Argentinian Society of Cardio-respiratory physiotherapy

**Investigación**

**GMC No:** 6153101 – Revalidation obtained on the 21/04/2014  
and 27/03/2019

**Colaboraciones y participación en proyectos:  
Research Grants y líneas de investigación**

Engineering and Physical Sciences Research Council	£89,924
Development of a physical activity enhancing intervention, using accelerometers, for patients with chronic respiratory conditions to measure physical activity and provide feedback to patients.	
The Dunhill Medical Trust	£210,272
Supporting older people with very severe chronic obstructive pulmonary disease (COPD) at the end of life: developing, piloting and refining a practical intervention	
European Respiratory Society	
Travel grant for the best abstract on COPD 2010	€1000
FIS (Fondo de Investigación Sanitaria)	€166,000
Assessment of Muscle loss in patients with Chronic Obstructive Pulmonary Disease with genomic and Proteomic techniques	
Innovative Medicine Initiative	€2,614,798
Physical activity as a crucial Patient Reported Outcome in COPD: PROactive	(50% in kind contributions)

Trevor Clay Memorial Grant	£15,000
Investigating the impact of pulmonary rehabilitation on skeletal muscle wasting and quality of life in acute exacerbations of COPD	
Chief Scientist Office (CSO)	£201,192
An investigation of the molecular signalling mechanisms in skeletal muscle wasting in COPD patients	
Fundació La Marató de TV3	€149,088
Comprehensive assessment and biopathology of advanced COPD	
ERS Short Term Reserach Fellow 2003	€7,000
Beca Ayudas a la Investigación SEPAR	€6,000
Trastornos Musculares en Pacientes con EPOC. Regulación Génica y Estrés Oxidativo.	
European Union – Health Telematics Program	€130,000
COPD Gene Scan,	
FIS (Fondo de Investigación Sanitaria)	€58,433
Efectos sistémicos en la enfermedad pulmonar obstructiva crónica. Papel del estrés oxidativo	
ERS Long Term Research Fellow 2000	€28,584
GRAND TOTAL £3,583,850	

### Publicaciones más relevantes

Progression of physical inactivity in COPD patients: the effect of time and climate conditions - a multicenter prospective cohort study.  
 Boutou AK, Raste Y, Demeyer H, Troosters T, Polkey MI, Vogiatzis I, Louvaris Z, Rabinovich RA, van der Molen T, Garcia-Aymerich J, Hopkinson NS.  
*Int J Chron Obstruct Pulmon Dis.* 2019 Sep;14:1979-1992. (PMID: 31564846)

The Relevance of Limb Muscle Dysfunction in Chronic Obstructive Pulmonary Disease: A Review For Clinicians.  
 Bui KL, Nyberg A, Rabinovich R, Saey D, Maltais F.  
*Clin Chest Med.* 2019 Jun;40(2):367-383. Review. (PMID:31078215)

ERS statement on respiratory muscle testing at rest and during exercise.  
 Laveneziana P, Albuquerque A, Aliverti A, Babb T, Barreiro E, Dres M, Dubé BP, Fauroux B, Gea J, Guenette JA, Hudson AL, Kabitz HJ, Laghi F, Langer D,

Systematic review (protocol) of clinical effectiveness and models of care of low-resource pulmonary rehabilitation.

Habib GMM, Rabinovich R, Divgi K, Ahmed S, Saha SK, Singh S, Uddin A, Pinnock H.  
NPJ Prim Care Respir Med. 2019 Apr 5;29(1):10. (PMID:30952884)

Smartphone-Based Physical Activity Telecoaching in Chronic Obstructive Pulmonary Disease:  
Mixed-Methods Study on Patient Experiences and Lessons for Implementation.

Loeckx M, Rabinovich RA, Demeyer H, Louvaris Z, Tanner R, Rubio N, Frei A, De Jong C,  
Gimeno-Santos E, Rodrigues FM, Buttery SC, Hopkinson NS, Büsching G, Strassmann A, Serra I,  
Vogiatzis I, Garcia-Aymerich J, Polkey MI, Troosters T.  
JMIR Mhealth Uhealth. 2018 Dec 21;6(12). (PMID:30578215)

Validation of the Incremental Shuttle Walk Test as a Clinical End Point in Bronchiectasis.  
Cartlidge MK, Smith MP, Bedi P, Donaldson S, Clarke A, Mantoani LC, Rabinovich RA, Rossi AG,  
Hill AT.

Chest. 2018 Dec;154(6):1321-1329. (PMID:30300653)

Role of accelerated aging in limb muscle wasting of patients with COPD.

Lakhdar R, McGuinness D, Drost EM, Shiels PG, Bastos R, MacNee W, Rabinovich RA.  
Int J Chron Obstruct Pulmon Dis. 2018 Jun 25;13:1987-1998. (PMID:29970961)

Can muscle protein metabolism be specifically targeted by nutritional support and exercise training in chronic obstructive pulmonary disease?

Lakhdar R, Rabinovich RA.  
J Thorac Dis. 2018 May;10(Suppl 12):S1377-S1389. (PMID:29928520)

Physical Activity in COPD. Significance, Prognosis, Measurement and Therapeutic Interventions.

Rabinovich RA.  
Arch Bronconeumol. 2018 Sep;54(9):449-450. doi: 10.1016/j.arbres.2018.01.011.  
(PMID:29503063)

An Improved Dynamic Model for the Respiratory Response to Exercise.

Serna LY, Mañanas MA, Hernández AM, Rabinovich RA.  
Front Physiol. 2018 Feb 7;9:69. (PMID:29467674)

Both moderate and severe exacerbations accelerate physical activity decline in COPD patients.  
Demeyer H, Costilla-Frias M, Louvaris Z, Gimeno-Santos E, Tabberer M, Rabinovich RA, de Jong C, Polkey MI, Hopkinson NS, Karlsson N, Serra I, Vogiatzis I, Troosters T, Garcia-Aymerich J; PROactive Consortium.

Eur Respir J. 2018 Jan 25;51(1). (PMID:29371385)

Translation to Spanish and Validation of the Specific Saint George's Questionnaire for Idiopathic Pulmonary Fibrosis.

Capparelli I, Fernandez M, Saadia Otero M, Steinberg J, Brassesco M, Campobasso A, Palacios S, Caro F, Alberti ML, Rabinovich RA, Paulin F.  
Arch Bronconeumol. 2017 Nov 1. (PMID:29102341)

Effectiveness of Smartphone Devices in Promoting Physical Activity and Exercise in Patients with Chronic Obstructive Pulmonary Disease: A Systematic Review.

Martínez-García MDM, Ruiz-Cárdenas JD, Rabinovich RA.

COPD. 2017 Oct;14(5):543-551. (PMID:28836871)

Physical activity in patients with COPD: the impact of comorbidities.

Mantoani LC, Dell'Era S, MacNee W, Rabinovich RA.

Expert Rev Respir Med. 2017 Sep;11(9):685-698. (PMID:28699821)

Heart Rate Recovery After 6-min Walking Test Predicts Acute Exacerbation in COPD.

Rodríguez DA, Kortianou EA, Alison JA, Casas A, Giavedoni S, Barberan-Garcia A, Arbillaga A, Vilaró J, Gimeno-Santos E, Vogiatzis I, Rabinovich R, Roca J.

Lung. 2017 Aug;195(4):463-467. (PMID:28624883)

2D-DIGE proteomic analysis of vastus lateralis from COPD patients with low and normal fat free mass index and healthy controls.

Lakhdar R, Drost EM, MacNee W, Bastos R, Rabinovich RA.

Respir Res. 2017 May 3;18(1):81. (PMID:28468631)

Home monitoring of breathing rate in people with chronic obstructive pulmonary disease: observational study of feasibility, acceptability, and change after exacerbation.

Rubio N, Parker RA, Drost EM, Pinnock H, Weir CJ, Hanley J, Mantoani LC, MacNee W, McKinstry B, Rabinovich RA.

Int J Chron Obstruct Pulmon Dis. 2017 Apr 20;12:1221-1231. (PMID:28458534)

Physical activity is increased by a 12-week semiautomated telecoaching programme in patients with COPD: a multicentre randomised controlled trial.

Demeyer H, Louvaris Z, Frei A, Rabinovich RA, de Jong C, Gimeno-Santos E, Loeckx M, Buttery SC, Rubio N, Van der Molen T, Hopkinson NS, Vogiatzis I, Puhan MA, Garcia-Aymerich J, Polkey MI, Troosters T; Mr Papp PROactive study group and the PROactive consortium.

Thorax. 2017 May;72(5):415-423. (PMID:28137918)

Application of Mixed Effects Limits of Agreement in the Presence of Multiple Sources of Variability: Exemplar from the Comparison of Several Devices to Measure Respiratory Rate in COPD Patients.

Parker RA, Weir CJ, Rubio N, Rabinovich R, Pinnock H, Hanley J, McCloughan L, Drost EM, Mantoani LC, MacNee W, McKinstry B.

PLoS One. 2016 Dec 14;11(12):e0168321. (PMID:27973556)

Age-dependent elastin degradation is enhanced in chronic obstructive pulmonary disease.

Huang JT, Bolton CE, Miller BE, Tal-Singer R, Rabinovich RA, Palmer CN, Thomson NC, MacNee W; Evaluation of COPD Longitudinally to Identify Predictive Surrogate Endpoints (ECLIPSE) Investigators.

Eur Respir J. 2016 Oct;48(4):1215-1218. (PMID:27587547)

Circulating desmosine levels do not predict emphysema progression but are associated with cardiovascular risk and mortality in COPD

Roberto A. Rabinovich, Bruce E. Miller, Karolina Wrobel, Kareshma Ranjit, Michelle C Williams, Ellen Drost, Lisa D. Edwards, David A. Lomas, Stephen I. Rennard, Alvar Agustí, Ruth Tal-Singer, Jørgen Vestbo, Emiel F.M. Wouters, Michelle John, Edwin J.R. van Beek, John T Murchison, Charlotte E Bolton, William MacNee and Jeffrey T.J. Huang; Evaluation of COPD Longitudinally to Identify Predictive Surrogate Endpoints (ECLIPSE) Investigators.

Eur Respir J. 2016 May;47(5):1365-73. (PMID:27009168)

Physical Activity Characteristics Across the GOLD Quadrants depend on the Questionnaire Used

Heleen Demeyer, Elena Gimeno-Santos, Miek Hornikx, Willem I de Boer, Niklas Karlsson, Corina De Jong, Roberto A Rabinovich, Thys Van der Molen, Wim Janssens, Judith Garcia-Aymerich, Thierry Troosters, Michael I Polkey, PROactive consortium PLoS One. 2016 Mar 14;11(3). (PMID:26974332)

Can Health Status Questionnaires be Used as a Measure of Physical Activity in COPD Patients?

Heleen Demeyer, Ivan Dueñas-Espín, Corina De Jongh, Zafeiris Louvaris, Miek Hornikx, Elena Gimeno-Santos, Matthias Loeckx, Ioannis Vogiatzis, Wim Janssens, Nicholas S Hopkinson, Roberto A Rabinovich, Niklas Karlsson, Judith Garcia-Aymerich, Thierry Troosters, on behalf of the PROactive consortium

Eur Respir J. 2016 May;47(5):1565-8. (PMID:26917609)

Structural and functional changes of peripheral muscles in chronic obstructive pulmonary disease patients.

Rabinovich RA, Vilaró J.

Curr Opin Pulm Med. 2010 Mar;16(2):123-33. (PMID:20071991)

Management of Chronic Obstructive Pulmonary Disease –A Review of the Latest Therapies

Roberto A Rabinovich, William MacNee

Eur Resp Dis. 2010 Jan; 6:44-8

Update in Chronic Obstructive Pulmonary Disease 2008

MacLay JD, Rabinovich RA, MacNee W

Am J Respir Crit Care Med Vol 179. pp 1–8, 2009. (PMID:19318543)

Training Depletes Muscle Glutathione in COPD Patients with Low Body Mass Index

Rabinovich RA, Esther Ardite, Ana Maria Mayer, Maite Figueras Polo, Jordi Vilaró, Josep M. Argilés, and Josep Roca

Respiration 2006;73(6):757-61. (PMID:16825756)

The SERPINE2 gene and chronic obstructive pulmonary disease.

Chappell S, Daly L, Morgan K, Baranes TG, Roca J, Rabinovich R, Millar A, Donnelly SC, Keatings V, MacNee W, Stolk J, Hiemstra PS, Miniati M, Monti S, O'Connor CM, Kalsheker N.  
*Am J Hum Genet.* 2006 Jul;79(1):184-6 author reply 186-7. (PMID:16358219)

The SERPINE2 gene and chronic obstructive pulmonary disease.

Chappell S, Daly L, Morgan K, Baranes TG, Roca J, Rabinovich R, Millar A, Donnelly SC, Keatings V, MacNee W, Stolk J, Hiemstra PS, Miniati M, Monti S, O'Connor CM, Kalsheker N.  
*Am J Hum Genet.* 2006 Jul;79(1):184-6. (PMID:16773582)

Systemic effects of cigarette smoke exposure in the guinea pig

Ardite E, Peinado VI, Rabinovich RA, Fernandez-Checa JC, Roca J, Barbera JA.  
*Respir Med.* 2006 Jul;100(7):1186-94. (PMID:16330198)

Cryptic haplotypes of SERPINA1 confer susceptibility to chronic obstructive pulmonary disease.

Chappell S, Daly L, Morgan K, Baranes TG, Roca J, Rabinovich R, Millar A, Donnelly SC, Keatings V, MacNee W, Stolk J, Hiemstra PS, Miniati M, Monti S, O'Connor CM, Kalsheker N.  
*Hum Mutat.* 2006 Jan;27(1):103-9. (PMID:16278826)

Encouraged six minutes walking test indicates maximum sustainable exercise in COPD patients  
Alejandro Casas, Jordi Vilaró, Rabinovich R, Ana María Mayer, Joan A Barbera, Robert Rodriguez-Roisin, Josep Roca  
*CHEST.* 2005 Jul;128(1):55-61. (PMID:16002916)

Modeling and evaluation of respiratory and muscle pattern during hypercapnic stimulus  
Mañas M, Hernandez A, Rabinovich RA, Benito S, Caminal P  
*Conf Proc IEEE Eng Med Biol Soc.* 2004;6:3913-6 (PMID:17271152)

Evaluation of exercise tolerance in COPD patients: the 6-minute walking test  
Rabinovich RA, Vilaró J, and Roca J  
*Arch Bronconeumol.* 2004 Feb;40(2):80-5. (PMID:14746731)

Increased tumour necrosis factor-alpha plasma Levels during Moderate Intensity Exercise in COPD Patients

Roberto A Rabinovich, Maite Figueras, Esther Ardite, Neus Carbó, Thierry Troosters, Xavier Filella, Joan Albert Barberà, José C. Fernandez- Checa, Josep M. Argilés, and, Josep Roca  
*Eur Respir J.* 2003 May;21(5):789-94. (PMID:12765422)

Pruebas simples de ejercicio para la valoración del paciente con EPOC

J Roca, R. Rabinovich, A. Casas

En: J.L. Viejo Bañuelos, editor. Actualización Terapéutica, 28 simposio de Neumología. 2002. p. 49-56

Physiological responses to six minute walking test in COPD patients

Thierry Troosters, Jordi Vilà, Roberto Rabinovich, Alejandro Casas, Joan Albert Barberà,  
Robert Rodriguez-Roisin and Josep Roca  
Eur Respir J. 2002 20(3) 564-569 (PMID:12358329)

Fluticasone propionate attenuates platelet-activating factor-induced gas exchange defects in  
mild asthma.

Acuña AA, Gabrijelcic J, Uribe EM, Rabinovich R, Roca J, Barbera JA, Chung KF, Rodriguez-Roisin  
R. Eur Respir J. 2002 May;19(5):872-8. (PMID:12030727)

Reduced muscle redox capacity after endurance training in patients with chronic obstructive  
pulmonary disease.

Rabinovich RA, Ardite E, Troosters T, Carbo N, Alonso J, Gonzalez de Suso JM, Vilà J, Barbera  
JA, Polo MF, Argiles JM, Fernandez-Checa JC, Roca J.  
Am J Respir Crit Care Med. 2001 Oct 1;164(7):1114-8. (PMID:11673195)

The role of peripheral muscles on exercise tolerance in patients with COPD  
Rabinovich R, Vilà J, Roca J.  
Arch Bronconeumol. 2001 Mar;37(3):135-41. Review. (PMID:11333539)

Posthyperventilation hypoxia  
Rabinovich RA, Roncoroni AJ.  
Medicina (B Aires). 1999;59(1):111-4. (PMID:10349135)

#### Otros méritos

Speaker or chairman at congresses  
Foreign work experience