




CV Template of KATRD International Conference 2021

Name	Bartolome Celli			
First Name	Bartolome	Last Name	Celli	
Country	USA			
Organization	Harvard Medical School			
Current Position	Professor			

Educational Background

INSTITUTION AND LOCATION	DEGREE	Completion Date	FIELD OF STUDY
LaSalle College, Caracas, Venezuela	B.S.	1964	B.Sc.
Universidad Central de Venezuela	M.D.	1971	Medicine
St. Vincent Hospital, Worcester, MA	Intern	1971-1972	Medicine
St. Vincent Hospital, Worcester, MA	Jr. Medical Resident	1972-1973	Medicine
Boston City Hospital, Boston University Hospital, Boston, MA	Sr. Medical Resident	1973-1974	Medicine
Boston City Hospital, Boston University Hospital, Boston, MA	Clinical Fellow	1974-1975	Pulmonary
Boston City Hospital, Boston University School of Medicine, Boston, MA	Chief Med. Resident	1975-1976	Medicine
Boston University Medical Center, Boston, MA	Research Fellow	1976-1977	Pulmonary

Professional Experiences

1976-1977	Instructor in Medicine. Boston University School of Medicine. Boston.
1977-1982	Instructor en el Servicio de Neumonología, Universidad Central De Venezuela
1978-1982	Chief, Pulmonary Services, Hospital Coromoto, Maracaibo Venezuela
1982-1989	Medical Director, Pulmonary Function Laboratory/Respiratory Therapy Department Boston City Hospital, Boston MA
1987-1989	Director, Pulmonary Function Laboratory, Boston VA Medical Center, Boston MA
1989-1994	Chief Pulmonary Section, Boston VA Medical Center, Boston, MA
1994-2009	Chief, Pulmonary/Critical Care, St. Elizabeth's Medical Center, Boston, MA
1994-Present	Attending Physician, VENCOR and then Kindred Hospital, Boston, MA
1994-1995	Associate Professor of Medicine, Tufts University School of Medicine, Boston, MA
1995	Professor of Medicine, Tufts University School of Medicine, Boston, MA
2009-2012	Lecturer in Medicine, Harvard Medical School, Boston, MA
2009-	Staff Physician, Pulmonary and Critical Care, Brigham and Women's Hospital, Boston, MA
2010-	Adjunct Senior Scientist, Lovelace Respiratory Research Institute, Albuquerque NM
2012-	Professor of Medicine. Harvard Medical School



Professional Organizations

1975-Present	Member, American Thoracic Society
1976-Present	Member, American College of Chest Physicians
1996-2002	ALA/ATS Scientific Advisory Council, American Thoracic Society
1997-2002	Scientific Advisor, Blue Cross Blue Shield Lung Volume Reduction Surgery Project
1997-1999	President, New England Chapter, American College of Chest Physicians
1998-2002	Elected Member, Clinical Faculty Appointments and Promotions Committee, Tufts University School of Medicine
1998-2002	Director, COPD Assembly, Asociacion Latinoamericana del Torax, ALAT
2000-2002	President, Massachusetts Thoracic Society
2000-2002	Chairman Clinical Assembly, American Thoracic Society
2001-2005	ATS Representative, WHO-NIH Global Obstructive Lung Disease initiative
2002-Present	ATS/ERS Co-Chairman, Committee for "Standards for the Diagnosis and Treatment of COPD
2003-2009	Committee on Committees, Tufts University School of Medicine
2012-Present	Executive Committee, WHO-NIH Global Obstructive Lung Disease Initiative
2014-Present	Board of Directors. GOLD initiative

Main Scientific Publications

Complete List of Published Work:

<https://www.ncbi.nlm.nih.gov/pubmed/?term=celli+b>

Contribution to Science

1. I have planned and completed studies on respiratory muscles and control of breathing that defined the interaction between upper extremity unsupported exercise and the respiratory muscles of the shoulder girdle. These studies established the concept of thoraco-abdominal dyssynchrony is a mechanism for the generation of dyspnea during arm exercise in COPD. These pioneer studies prompted interest and subsequent studies that formalized the use of upper extremity exercise in the rehabilitation of patients with COPD. I have continued to work in pulmonary rehabilitation and outcomes.

Celli BR, Rassulo J, and Make B: Dyssynchronous breathing during arm but not leg exercise in patients with chronic airflow obstruction. *N Engl J Med* 1986; 314:1485-90.

Criner G, **Celli B**: Effect of unsupported arm exercise on ventilatory muscle recruitment in patients with severe chronic airflow obstruction. *Am Rev Respir Dis* 1988;138:856-861.

Martinez F, Couser J, **Celli BR**: Respiratory response to arm elevation in patients with chronic airflow obstruction. *Am Rev Respir Dis* 1991;143:476-480

Couser J, Martinez F, **Celli B**: Pulmonary rehabilitation which includes arm exercise reduces metabolic and ventilatory requirements for simple arm elevation. *Chest* 1993;103:37-41.

Güell MR, Cejudo P, Ortega F, Puy MC, Rodríguez-Trigo G, Pijoan JI, Martínez-Indart L, Gorostiza A, Bdeir K, **Celli B**, Galdiz JB. Benefits of long-term pulmonary rehabilitation



maintenance program in patients with severe chronic obstructive pulmonary disease. three-year follow-up.

Am J Respir Crit Care Med. 2017 Mar 1;195(5):622-629. doi: 10.1164/rccm.201603-0602OC. PMID: 27611807

2. I investigated the mechanisms responsible for dyspnea, the response to systemic exercise in patients with COPD and the effect of intra-thoracic pressures on heart function. We evaluated central drive as well as neuro-mechanical response to that drive in hypercapnic and eucapnic patients. We determined that central drive was preserved, but there was different mechanical output with the intrathoracic inspiratory pressure providing an increased afterload to patients with severe COPD. Because we thought that respiratory muscle fatigue was playing a role in chronic respiratory failure, I directed two trials of non-invasive ventilation (negative pressure and positive pressure) on clinically meaningful COPD outcomes. Finally, I participated in a landmark study that has helped define the natural course of COPD

Breslin EH, Garrouste BC, Carrieri VK, **Celli BR**. Correlations between dyspnea, diaphragm and sternomastoid recruitment during inspiratory resistance breathing in normal subjects. Chest 1990; 98:298-302.

Montes de Oca M, Rassulo J, **Celli B**. Respiratory muscle function and cardiopulmonary response to exercise in severe COPD. Am J Respir Crit Care Med 1996;154: 1284-1289.

Celli BR, Montes de Oca M, Mendez R., Stetz J. Lung reduction surgery in severe COPD decreases central drive and ventilatory response to CO₂. Chest 1997; 112:902-906.

Celli BR, Lee H, Criner GJ, Bermudez M, Rassulo J, Gilmartin M, Miller G, Make B: Controlled trial of external negative pressure ventilation in patients with severe chronic airflow obstruction. Am Rev Respir Dis 1989;140:1251-1256.

Lange P, **Celli B**, Agustí A, Boje Jensen G, Divo M, Faner R, Guerra S, Marott JL, Martinez FD, Martinez-Cambor P, Meek P, Owen CA, Petersen H, Pinto-Plata V, Schnohr P, Sood A, Soriano JB, Tesfaigzi Y, Vestbo J. Lung-Function Trajectories Leading to Chronic Obstructive Pulmonary Disease. N Engl J Med. 2015 Jul 9;373(2):111-22. doi: 10.1056/NEJMoa1411532.

3. I directed a series of studies to determine the relevance of static hyperinflation not just on lung mechanics (well-known for many years) but as an independent predictor of survival. The concept of the inspiratory fraction provided by the IC/TLC was first expressed from work in our lab. I have kept this within a framework of attempting to dissect the course of COPD

Martinez F, Couser J, **Celli BR**: Factors that determine ventilatory muscle recruitment in patients with chronic airflow obstruction. Am Rev Respir Dis 1990;142:276-282.

Martinez F, Montes de Oca M, Whyte R, Stetz J, Gay S, and **Celli B**. Lung-volume Reduction improves dyspnea, dynamic hyperinflation and respiratory muscle function. Am J Respir Crit Care Med 1997; 155: 2018-2023.

Marin J, Carrizo S., Gascon M, Sanchez A, Gallego B., **Celli, B**. Inspiratory capacity, dynamic hyperinflation, breathlessness and exercise performance during the 6 minute walk test in chronic obstructive pulmonary disease. Am J Respir Crit Care Med 2001; 163:1395-1400.

Celli B, ZuWallack R, Wang S, Kesten S. Improvement of inspiratory capacity and hyperinflation with tiotropium in COPD patients with severe hyperinflation. Chest. 2003 Nov;124(5):1743-8

Casanova C, Cote C, de Torres JP, Aguirre-Jaime A, Marin JM, Pinto-Plata V, **Celli BR**. Inspiratory-to-total lung capacity ratio predicts mortality in patients with chronic obstructive pulmonary disease. Am J Respir Crit Care Med. 2005 Mar 15;171:591-7.



4. Over time, the laboratory I direct has concentrated on more basic biological processes attempting to relate them to outcomes. Thus we have explored tissue micro-arrays for gene expression in emphysema versus mild COPD, serum proteomics and metabolomics in relation to clinically relevant outcomes in patients with COPD and smokers at risk for COPD.
- Spira A, Beane J, Pinto-Plata V, Kadar A, Liu G, Shah V, **Celli B**, Brody JS. Gene expression profiling of human lung tissue from smokers with severe emphysema. *Am J Respir Cell Mol Biol* 2004; 31:601-610.
- Pinto-Plata VM, Mullerova H, Toso JF, Feudjo-Tepie M, Soriano JB, Vessey RS, Celli BR C-reactive protein in patients with COPD, control smokers, and nonsmokers. *Thorax*. 2006 ; 61:23-28.
- de Torres JP, Cordoba-Lanus E, Lopez-Aguilar C, Muros de Fuentes M, Montejo de Garcini A, Aguirre-Jaime A, Celli BR, Casanova C. C-reactive protein levels and clinically important predictive outcomes in stable COPD patients. *Eur Respir J*. 2006;27:902-7.
- Pinto-Plata V, Toso J, Lee K, Park D, Bilello J, Mullerova H, De Souza MM, Vessey R, **Celli B**. Profiling serum biomarkers in patients with COPD: associations with clinical parameters. *Thorax* 2007;62:595-601.
- Celli BR**, Locantore N, Yates J, Tal-Singer R, Miller BE, Bakke P, Calverley P, Coxson H, Crim C, Edwards LD, Lomas DA, Duvoix A, Macnee W, Rennard S, Silverman E, Vestbo J, Wouters E, Agusti AA; for the ECLIPSE investigators. Inflammatory biomarkers improve clinical prediction of mortality in chronic obstructive pulmonary disease. *Amer J Respir Crit Care Med* 2012;15:1065-72.
- Polverino F, Laucho-Contreras ME, Petersen H, Bijol V, Sholl LM, Choi ME, Divo M, Pinto-Plata V, Chetta A, Tesfaigzi Y, **Celli BR**, Owen CA. A pilot study linking endothelial injury in lungs and kidneys in chronic obstructive pulmonary disease. *Am J Respir Crit Care Med*. 2017 Jun 1;195(11):1464-1476. doi: 10.1164/rccm.201609-1765OC. PMID: 28085500
5. Further, joined by excellent trainees and knowing that there is a lack of long observational cohorts of patients with COPD, we felt necessary that we organize such a study. The end-result has been the BODE cohort, where we have produced a significant body of novel clinical findings that have helped develop the field of COPD. The findings include the description of the BODE index as a predictor of mortality raising the concept of multidimensional compromise in COPD. In addition, the heterogeneity of COPD progression, the value of the 6-minute walk test distance and recently the relationship between co-morbidities such as lung cancer and COPD.
- Celli BR**, Cote CG, Marin JM, Casanova C, Montes de Oca M, Mendez RA, Pinto Plata V, Cabral HJ. The body mass index, airflow obstruction, dyspnea and exercise capacity index in chronic obstructive pulmonary disease. *N Engl J Med*. 2004;350:1005-12.
- Pinto-Plata VM, Cote C, Cabral H, Taylor J, **Celli BR**. The 6 –minute walk distance: change over time and value as a predictor of survival in severe COPD. *Eur Respir J*. 2004 (1):28-33.
- de Torres JP, Marin JM, Casanova C, Cote C, Carrizo S, Cordoba-Lanus E, Baz-Davilla R, Zulueta JJ, Aguirre-Jamie A, Saetta M, Cosio MG, **Celli BR**. Lung cancer in patients with COPD: Incidence and predicting factors. *Am J Respir Crit Care Med* 2011;184:913-9.
- de Torres JP, Casanova C, Marin JM, Pinto-Plata V, Divo M, Zulueta JJ, Berto J, Zagaceta J, Sanchez-Salcedo P, Cabrera C, Carrizo S, Cote C, **Celli BR**. Prognostic evaluation of COPD patients: GOLD 2011 versus BODE and the COPD comorbidity index COTE. *Thorax*. 2014 Sep;69(9):799-804. doi: 10.1136/thoraxjnl-2014-205770. Epub 2014 Jun 26. PMID:24969641
- Divo MJ, Casanova C, Marin JM, Pinto-Plata VM, de-Torres JP, Zulueta JJ, Cabrera C, Zagaceta J, Sanchez-Salcedo P, Berto J, Davila RB, Alcaide AB, Cote C, **Celli BR**; COPD Comorbidities network. BODE Collaborative Group. *Eur Respir J*. 2015 Sep;46(3):640-50.