

Curriculum Vitae
Nuria Coll-Bonfill, Ph.D.
Post-Doctoral Researcher

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EDUCATION

2017-Present	Postdoctoral Fellow Biochemistry and Molecular Biology	Saint Louis University, Saint Louis, Missouri
2012-2016	Ph.D., Medicine	Institut d'Investigacions Biomèdiques August Pi i Sunyer. Hospital Clínic de Barcelona. Universitat de Barcelona. Barcelona, Spain
2009-2010	M.A., Molecular Biotechnology	Universitat de Barcelona. Barcelona, Spain
2004-2009	B.S., Clinical Biological Sciences	Universitat de Barcelona, Spain.

PROFESSIONAL EXPERIENCE

2017-Present	Postdoctoral Fellow	Laboratory of Susana Gonzalo, Ph.D. Department of Biochemistry and Molecular Biology, Saint Louis University, Saint Louis, Missouri Fellowship from: - American Heart Association (AHA)
2019-Present	Midwest Communication director	Society of Spanish Scientists in USA (ECUSA). Social media presence, event advertising and post-event reports.
2019-Present	E-visibility program co-director	Society of Spanish Scientists in USA (ECUSA). Video and podcasts release from Spanish Scientist in USA

2012-2016	Graduate Student	<p>Department of Pulmonary Medicine, Institut d'Investigacions Biomèdiques August Pi i Sunyer. Hospital Clínic de Barcelona. Universitat de Barcelona. Barcelona, Spain</p> <p>-RNA biology Department. Professor Gunter Meister. University of Regensburg, Regensburg, Germany.</p> <p>- Brigham and Women's Hospital, New Research Building: Bradley Maron MD and Prof Joseph Loscalzo. Boston, MA (USA)</p>
2010 – 2012	Undergraduate Research Assistant	<p>Laboratory of Joan Albert Barbera, Ph.D. Department of Pulmonary Medicine, Institut d'Investigacions Biomèdiques August Pi i Sunyer. Hospital Clínic de Barcelona. Universitat de Barcelona. Barcelona, Spain.</p>
2007-2009	Undergraduate Research Assistant	<p>Molecular Virology Laboratory. Dr Luis Galipienso Torregrossa. Institut de Recerca i Tecnologia Alimentàries Cabriels, Spain</p>

HONORS and AWARDS

- 2020 - American Heart Association (AHA) Postdoctoral Fellowship (American Heart Association)
- 2016 - Summa Cum Laude Thesis (Universitat de Barcelona)
- 2014 - International PhD student program (Biomedical Research Networking Center for Respiratory Diseases (CIBERES))
- 2010 - 1st Award best poster presentation in the 2^o Molecular Biotechnology Meeting. Universitat Politècnica de Valencia. Valencia. Spain

PEER-REVIEWED PUBLISHED ARTICLES

1. **Coll-Bonfill N, Cancado de Faria R, Bhoopatiraju S, Gonzalo S. Calcitriol Prevents RAD51 Loss and cGAS-STING-IFN Response Triggered by Progerin. Proteomics. 2019 Dec 13:e1800406. Original research**

2. Gonzalo S, **Coll-Bonfill N**. **Genomic instability and innate immune response to self-DNA in Progeria.** *Geroscience*. 2019 Jun;41(3):255-266

Review article

3. **Coll-Bonfill N***, Musri MM*, Maron BA, Peinado VI, Rhui-Sheng W, Altirriba J, Blanco I, Oldham W, Tura-Ceide O, García-Lucio J, de la Cruz-Thea B, Meister G, Loscalzo J and Barberà JA: **MicroRNA expression of pulmonary arteries in vascular remodelling associated to COPD.** *American Journal of Respiratory Cell and Molecular Biology*

Original Research

4. García-Lucio J, Peinado VI, de Jover L, Del Pozo R, Blanco I, Bonjoch C, **Coll-Bonfill N**, Paul T, Tura-Ceide O, Barberà JA. **Imbalance between endothelial damage and repair capacity in chronic obstructive pulmonary disease.** *PLoS One*. 2018 Apr 19;13(4):e0195724.

Original Research

5. Graziano S, Kreienkamp R, **Coll-Bonfill N**, Gonzalo S. **Causes and consequences of genomic instability in laminopathies: replication stress and interferón response.** *Nucleus*. 2018 Apr 11:1-44.

Review article

6. **Coll-Bonfill N***, Kreienkamp R*, Graziano S*, Bedia-Diaz G, Cybulla E, Vindigni A, Dorsett D, Kubben N, Batista LFZ, Gonzalo S. **A Cell-Intrinsic Interferon-like Response links Replication Stress to Cellular Aging Caused by Progerin.** *Cell Rep*. 2018 Feb 20;22(8):2006-2015.

Original Research

7. Tura-Ceide O, Lobo B, Paul T, Puig-Pey R, **Coll-Bonfill N**, García-Lucio J, Smolders V, Blanco I, Barberà JA, Peinado VI. **Cigarette smoke challenges bone marrow mesenchymal stem cell capacities in guinea pig.** *Respir Res*. 2017 Mar 23;18(1):50.

Original Research

8. **Coll-Bonfill N**, Peinado VI, Párrizas M, Evers M, Engelmann JC, García-Lucio J, Tura-Ceide O, Gunter Meister, Barberà JA and Musri MM. **Slug is increased in vascular remodeling and induce Smooth Muscle Cell proliferative phenotype.** *PLoS One*. 2016 Aug 25;11(8):e0162117.

Original Research

9. **Coll-Bonfill N**, de la Cruz Thea B, Pisano MV, Musri MM. **Noncoding RNAs in smooth muscle cell homeostasis: implications in phenotypic switch and vascular disorders.** *Pflugers Arch*. 2016 Jun;468(6):1071-87.

Review article

10. Jéssica García-Lucio, Olga Tura-Ceide, Roberto del Pozo, Isabel Blanco, Sandra Pizarro, Elisabet Ferrer, Marta Díez, **Núria Coll-Bonfill**, Lucilla Piccari, Víctor I. Peinado, Joan Albert Barberà, **Effect of targeted therapy on circulating progenitor cells in precapillary pulmonary hypertension**. *International Journal of Cardiology* 228 (2017) 238–243.

Original Research

11. García-Lucio J, Argemi G, Tura-Ceide O, Díez M, Paul T, Bonjoch C, **Coll-Bonfill N**, Blanco I, Barberà JA, Musri MM, Peinado VI. **Gene expression profile of angiogenic factors in pulmonary arteries in COPD: Relationship with vascular remodeling**. *Am J Physiol Lung Cell Mol Physiol*. 2016 Jan 22.

Original Research

12. Weissmann N, Lobo B, Pichl A, Parajuli N, Seimetz M, Puig-Pey R, Ferrer E, Peinado VI, Domínguez-Fandos D, Fysikopoulos A, Stasch JP, Ghofrani HA, **Coll-Bonfill N**, Frey R, Schermuly RT, García-Lucio J, Blanco I, Bednorz M, Tura-Ceide O, Tadele E, Brandes RP, Grimminger J, Klepetko W, Jaksch P, Rodríguez-Roisin R, Seeger W, Grimminger F, Barberà JA. **Stimulation of soluble guanylate cyclase prevents cigarette smoke-induced pulmonary hypertension and emphysema**. *Am J Respir Crit Care Med*. 2014 Apr 16.

Original research

13. Martínez C, **Coll-Bonfill N**, Aramburu J, Pallás V, Aparicio F, Galapienso L. **Two basic (hydrophilic) regions in the movement protein of *Parietaria mottle virus* have RNA binding activity and are required for cell-to-cell transport**. *Virus Res*. 2014 May 12;184:54-61.

Original Research

14. **Coll-Bonfill N**, Musri MM, Peinado Ivo V, Barberà JA, Tura-Ceide O. **Transdifferentiation of endothelial cells to smooth muscle cells play an important role in vascular remodelling**. *AJ Stem Cells* 2013 Nov 01;1(1):5.

Review

MEETINGS AND CONFERENCES

SELECTED PODIUM PRESENTATIONS

- Musri MM, **Coll-Bonfill N**, Altirriba J, Peinado VI and Barberà JA MicroRNAs are deregulated in pulmonary arteries from COPD patients. **Eur Respir J 2012; 40: Suppl. 56, 4556**
- **Coll-Bonfill N**, Peinado VI, Garcia J, Domínguez-Fandos D, Lobo B, Puig-Pey R, Barberà JA, Musri MM. Slug can contribute to the phenotypic modulation of smooth muscle cells. **Eur Respir J 2012; 40: Suppl. 56, 831s:A4557**
- **Coll-Bonfill N**, Barba A, Aramburu J, Galapienso L. Nuevos conocimientos sobre la

epidemiología de la enfermedad originada por el virus del moteado de la parietaria (PMoV) en cultivos de tomate: estrategias de control. XVIII Jornada de protección vegetal del Instituto de Estudios Catalanes, **2008**

SELECTED 1st author POSTER PRESENTATIONS

- **Coll-Bonfill N**, Musri MM, Strieder N, Garcia-Lucio J, Blanco I, Del pozo R, Bonjoch C, Peinado VI, Barbera JA. Analysis of miRNA profile in circulating microparticles of patients with pulmonary arterial hypertension. **European Respiratory Journal 2015 46: PA587**
- **Coll-Bonfill N**, Peinado VI, Strieder N, Garcia-Lucio J, Blanco I, Del Pozo R, Bonjoch C, Melina MM, Barbera JA. Disregulated MiRNA Expression In Pulmonary Arterial Hypertension. **Am J Respir Crit Care Med 191;2015:A4825**
- **Coll- Bonfill N**, Peinado VI, Garcia J, Domínguez-Fandos D, Lobo B, Puig-Pey R, Barberà JA, Musri MM .The transcription factor *slug* is increased in pulmonary artery endothelial cells of COPD patients. **Eur Respir J 2013;42:Suppl. 57, 1100s: P5163**
- **Coll- Bonfill N**, Peinado VI, Garcia J, Domínguez-Fandos D, Lobo B, Puig-Pey R, Barberà JA, Musri MM. Factores reguladores de los cambios fenotípicos de células musculares lisas de la arteria pulmonar.**2012**

SYMPOSIUMS and SCIENTIFIC WORKSHOPS

- **2019 Coll-Bonfill N**, Simona Graziano and Susana Gonzalo. Mechanisms underlying replication stress in progerin-expressing cells. 21st Annual Midwest DNA repair Symposium. Saint Louis, MO (US)
- **2018 Coll-Bonfill N**, Simona Graziano and Susana Gonzalo. Mechanisms underlying replication stress in progerin-expressing cells. The Progeria Research Foundation 9th International Scientific Workshop. "Many Pathways, one Goal". Progeria Research Foundation. Cambridge, MA (US)
- **2018** Graziano S, **Coll-Bonfill N**, Vindigni A and Gonzalo S. Lamins are essential for the stability of replication forks during replication stress. Breast Cancer Research Program Forum. Washington University in Saint Louis, Siteman Cancer Center and Barnes Jewish Hospital. Saint Louis, MO (US)
- **2016 TGF-beta family in fibrosis and cancer**. IT-LIVER Consortium (ITN- Marie Curie action). Barcelona, Spain
- **2015 Coll-Bonfill N**, Musri MM, Peinado VI, Strieder N, Garcia-Lucio J, Blanco I, Chamorro N, Bonjoch C, Barbera JA. Disregulated miRNA expression in pulmonary arterial hypertension. **Pulmonary Hypertension: Next Generation, London, UK**

- **2015 Coll-Bonfill N**, Musri MM, Altirriba J, Peinado VI and Barberà JA. MicroRNAs are dysregulated in pulmonary arteries from COPD patients. 8th Training Session Biomedical Research Networking Center for Respiratory Diseases (CIBERES), Valladolid, Spain
- **2012 Coll-Bonfill N**, Peinado VI, Garcia J, Domínguez-Fandos D, Lobo B, Puig-Pey R, Barberà JA, Musri MM. Slug puede contribuir al cambio fenotípico de la célula muscular lisa. 5th Training Session Biomedical Research Networking Center for Respiratory Diseases (CIBERES), Mallorca, Spain
- **2008** 3rd International Conference on cell therapy and regenerative medicine. Barcelona, Spain

MENTORING

- 2016-Present - Supervising the graduate students intradepartmental rotations (Graduate Core Programme in Saint Louis University)
- 2016-Present - Supervising MD and undergrad students (Saint Louis University)

LEADERSHIP AND COMMUNITY INVOLVEMENT

- 2020 - Women Leading Women. Leadership workshop
- 2019 - Present - 500 Women Scientist. Volunteering for different science events for public engagement in Saint Louis Science Center
- 2018
- Title: American Physician scientist association (APSA) Midwest regional meeting
 - Role: Poster session judge
 - Institution: APSA and Saint Louis University

RESEARCH AND DEVELOPMENT RELATED ACTIVITIES (R&D)

- 2019 - SLU-I-CORPs programme. Learning start-up methodology and how move forward in the commercialization of intellectual properties.

MEDIA COVERAGE

2020. Rosa Badia. Special VIP guest. Tot és comedia (SER Catalunya)

2020. Víctor-M Amela. Investigo para curar la Progeria el envejecimiento prematuro. La Contra de La Vanguardia (Grupo Godó)

2019. Josep Cuní. La Progèria. Aquí amb Josep Cuní (SER Catalunya)

2019. Xavier Bundó. Així és la Progèria: la malaltia rara que envelleix prematurament els nens. Via Lliure (RAC1)

2019. Joaquim Miró. Una investigadora catalana fa avenços en la lluita contra la Progèria. Exterior.cat (Comunicació21)

SERVICE

International:	- <i>Scientific Reports Reviewer</i>	2020
	- <i>American Journal of Physiology-Lung Cellular and Molecular Physiology Reviewer</i>	2019
National (USA):	- <i>AHA Professional Member</i>	2019-Present
	- <i>ECUSA full member</i>	2019-Present
Local (Saint Louis, Missouri)	- <i>500 Women Scientists, Active member in St. Louis Pod</i>	2019-Present