Curriculum vitae | Sala Stefano, PhD

Nationality:	Belgian
Address:	2160 South First Avenue, 60153 Maywood (Chicago), USA
E-mail:	ssala@luc.edu
Place/date of birth:	Brugge (Belgium), 8 March 1989
Languages:	Dutch, English, Italian, French

Education and Professional Experience

2023-	**Research Assistant Professor** Department of Cell and Molecular Physiology, Loyola University Chicago (IL), USA (Advisor: Prof. Dr. Patrick Oakes)
2019-2023	**Postdoctoral Research Associate** Department of Cell and Molecular Physiology, Loyola University Chicago (IL), USA (Advisor: Prof. Dr. Patrick Oakes)
2018-2019	**Postdoctoral Research Associate** Department of Physics and Astronomy, University of Rochester (NY), USA (Advisor: Prof. Dr. Patrick Oakes)
2012-2017	**Doctor in Health Sciences (FWO PhD fellowship)** Department of Biochemistry, University of Ghent, Belgium (Advisor: Prof. Dr. Christophe Ampe)
2010-2012	**Master's in Biomedical Sciences** University of Ghent, Belgium (graduated with greatest distinction)
2007-2010	**Bachelor's in Biomedical Sciences** University of Ghent, Belgium (graduated with great distinction)

Ongoing Research Funding and Support

03/2024-02/2024	**RFC New Investigator Award** (LU217477) Role: PI Title: Mechanical signaling in the heart via abLIM-1 phosphorylation
07/2023-06/2028	**NIH NIDCD RO1** (DC021176) Role: Personnel (*PI: Jung-Bum Shin*) Title: Mechanosensor proteins in hair cell repair

Completed Research Funding and Support

10/2012-09/2016	**Fonds Wetenschappelijk Onderzoek Vlaanderen PhD fellowship** (11H5313N) Role: PI Title: Structure-function study of the focal adhesion protein and tumor suppressor testin: determination of module-specific interactomes and expansion of its conformational repertoire

Honors and Awards

2024	Cardiovascular Research Institute Loyola University Chicago **travel award**
2022	EMBO/EMBL mechanobiology in development and disease **symposium fellowship** (Heidelberg, Germany)
2018	**Finalist** of the Steadman family postdoctoral interdisciplinary research competition (Rochester, USA)
2016	**Poster prize** at the BSCDB cell adhesion and communication meeting (Ghent, Belgium)
2015	**Young investigator presentation prize** at the ECF meeting (Postojna, Slovenia)
2012	**Joël Vandekerckhove award for the best master thesis in biomedical sciences** (Ghent, Belgium)

Professional Activities and Memberships

2024-	Member, Biochemical Society
2022-	Co-director of the Cardiac SURPH Summer Research Program for undergraduate students at Loyola University Chicago
2021-2023	Member, American Heart Association
2018-	Member, American Society for Cell Biology

Teaching Experience

Year	Institution	Course title	Lectures (hours per lecture)
2024	Loyola University Chicago, Department of Cell and Molecular Physiology	Biophysical Methods	Cell mechanics: mechanosensation (2)
2022	Loyola University Chicago, Department of Cell and Molecular Physiology	Methods/techniques in physiological research	1. Cell transfections (3) 2. Viruses as tools (3)
2021	Loyola University Chicago, Department of Cell and Molecular Physiology	Methods/techniques in physiological research	1. Cell transfections (3) 2. Viruses as tools (3)

Trainees

Year	Name	Degree	Institution
2024	Kehan Wu	Research assistant	Loyola University Chicago
2023	Alyssa Luz-Ricca/ Henry De Hoyos	Graduate students	University of Virginia
2023	Hiral Patel	Research assistant	Loyola University Chicago
2021	Sasha Demeulenaere	Undergraduate student (summer rotation)	Loyola University Chicago
2019	Virdjinija Vuchkovska	Graduate student	Loyola University Chicago

Publications

Published (*equal contributions)

1. Schmitt M*, Colen J*, **Sala S**, Devany J, Seetharaman S, Caillier A, Gardel ML, Oakes PW, Vitelli V (2024). Machine learning interpretable models of cell mechanics from protein images. ***Cell.*** 187(2):1-14
2. Wagner EL, Im JS, **Sala S**, Nakahata MI, Imbery TE, Li S, Chen D, Noy Y, Archer DW, Xu W, Hashisaki G, Avraham KB, Oakes PW, Shin JB (2023). Repair of noise-induced damage to stereocilia F-actin cores is facilitated by XIRP2 and is mediated by a novel mechanosensor domain. ***eLife***. 12:e72681
3. **Sala S**, Oakes PW (2023). LIM domain proteins. ***Current Biology***. 33(9):339-341
4. Seetharaman S*, **Sala S*,** Gardel ML, Oakes PW (2023). Quantifying strain sensing protein recruitment during stress fiber repair. ***Methods in Molecular Biology.*** *2600*:169-182
5. **Sala S**, Oakes PW (2021). Stress fiber strain recognition by the LIM protein testin is cryptic and mediated by RhoA. ***Molecular Biology of the Cell***. 32(18):1758-1771
6. **Sala S**, Ampe C (2018). An emerging link between LIM domain proteins and nuclear receptors. ***Cellular and Molecular Life Sciences***. 75(11):1959-1971
7. **Sala S**, Catillon M, Hadzic E, Schaffner-Reckinger E, Van Troys M, Ampe C (2017). The PET and LIM1-2 domains of testin contribute to intramolecular and homodimeric interactions. ***PlosOne***. 12(5):e0177879
8. **Sala S**, Van Troys M, Medves S, Catillon M, Timmerman E, Staes A, Schaffner-Reckinger E, Gevaert K, Ampe C (2017). Expanding the interactome of TES by exploiting TES modules with different subcellular localizations. ***Journal of Proteome Research***. 16(5):2054-2071

In Preparation

1. Wu K, Patel H, Wu H, **Sala S**, Beach JR. Non-muscle Myosin 2 can incorporate into established filaments without an assembly competence domain.
2. **Sala S***, Caillier A*, Oakes PW. Regulation of Mechanosensing.
3. Bennett M, Demeulenaere S, Wu H, Patel H, **Sala S**, Longtine L, Oakes PW, Beach JR. Smooth muscle myosin 2 filaments dynamically assemble and stabilize during induced contractility. Biorxiv
4. Patel HP, Cuevas A, Wu H, Quintanilla M, **Sala S**, Patel V, Bennett M, Rotty JD, Bear JE, Oakes PW, Beach JR. Tyrosine phosphorylation of non-muscle myosin heavy chain tail modulates assembly.

Google Scholar: scholar.google.com, **ORCID ID record:** 0000-0003-3675-6849

Posters

Chicago Cytoskeleton meeting in Chicago, USA (2024); *Cell Bio ASCB/EMBO meeting* in Boston, USA (2023); *Chicago Cytoskeleton meeting* in Chicago, USA (2023); *Cell Bio ASCB/EMBO meeting* in Washington DC, USA (2022); *EMBL/EMBO mechanobiology in development and disease symposium* in Heidelberg, Germany (2022); *Cell Bio virtual ASCB/EMBO meeting* (2020); *ASCB/EMBO meeting* in Washington DC, USA (2019); *CNY Cytoskeleton meeting* in Syracuse, USA (2019); *ASCB/EMBO meeting* in San Diego, USA (2018); *BSCDB cell adhesion and communication meeting* in Ghent, Belgium (2016); *ECF meeting* in Cambridge, United Kingdom (2016); *ECF meeting* in Postojna, Slovenia (2015); *ECF meeting* in Fribourg, Switzerland (2013).

Talks

2024	*European cytoskeletal forum meeting in Birmingham, UK* Mechanosensitive LIM proteins recognize strained actin at cell-ECM and cell-cell contacts
2022	*Cell Bio ASCB/EMBO meeting in Washington DC, USA* Dissecting the recruitment kinetics of mechanosensitive proteins to stress fiber strain sites
2020	*Cell Bio virtual ASCB/EMBO meeting* The LIM domain protein testin recognizes local strain in the actin cytoskeleton
2017	*Beatson institute in Glasgow, Scotland* Structure-function study of the focal adhesion protein and tumour suppressor testin: determination of module-specific interactomes and expansion of its conformational repertoire
2015	*Cytoskeleton in intracellular trafficking and cell migration course in Paris (Institut Curie) France* The tumour suppressor Testin: effects on cancer cell migration and identification of domain specific interaction partners
2015	*University of Luxembourg, Luxembourg* The tumour suppressor Testin: identification of domain specific interactions reveals novel interaction partners and a dimer function
2015	*European cytoskeletal forum meeting in Postojna, Slovenia* The tumour suppressor Testin: identification of domain specific interactions reveals novel interaction partners and a dimer function