OSVALDO CONTRERAS Curriculum Vitae

Post-Doctoral Research Fellow o.contreras@victorchang.edu.au

Developmental and Regenerative Biology Division +61 (0)450510991

Victor Chang Cardiac Research Institute, Darlinghurst, NSW, 2010, Sydney

Conjoint Lecturer (Level B), Faculty of Medicine and Health, UNSW Sydney, Australia

W: <https://sites.google.com/view/osvaldocontreras>

ORCID: https://orcid.org/0000-0002-8722-9371

Twitter: [@Osvaldoics](https://twitter.com/osvaldoics)

Postdoctoral Fellow Osvaldo Contreras is a cell biologist and a biomedical researcher studying tissue regeneration and homeostasis loss in mammals with a focus on the stromal and stem cell compartments. He graduated from Pontificia Universidad Católica de Chile in 2012 where studied the developmental role of the Wnt-PCP pathway and Syndecan-4 in neural tube closure and cochlear development under Prof. Juan Larrain's supervision. After completing his MSc degree, he received his PhD in cell and molecular biology in 2019. His PhD focused on tissue-resident fibro-adipogenic progenitor cell fate, plasticity, and heterogeneity in muscle regeneration and heart repair in Prof. Enrique Brandan's Lab at Pontificia Universidad Católica de Chile with the co-supervision of Prof. Fabio Rossi at the University of British Columbia, Vancouver, Canada. Since his PhD, Osvaldo has focused on comprehending myopathies and myogenic and fibroblast fate determination and differentiation in the context of fibro-fatty deposition, centering on three major signalling pathways: PDGF, TGF-B, and Wnt signalling, and their cross-talk. As a Postdoctoral Scientist, Dr Contreras works on stem cell-based strategies for improving our understanding of heart development and repair under the supervision of Prof. Richard Harvey at the Victor Chang Cardiac Research Institute and holds a Conjoint Lecturer position at UNSW Sydney, Faculty of Medicine and Health. Osvaldo has successfully obtained >140,000 USD in Governmental fellowships and awards as an early-career researcher and secured a substantial number of national and international collaborators and research networks. He has published 21 peer-reviewed articles with over 610 citations and *H*-index of 14. Osvaldo is committed to advancing his field and serves as Guest Editor (Front. Cell Dev. Biol.) and reviewer of several leading international cell and molecular biology journals and international grants and fellowships. His research and leadership are recognised by his membership in different scientific societies and prizes, including the Hermann Niemeyer Medal for the best PhD student in Biochemistry and Molecular Biology from the Chilean Society for Biochemistry and Molecular Biology in 2016, the Excellence of Doctoral Thesis 2019 prize, the 2022 Miltenyi Research Award, Inaugural Rising Star Award from the Australian Society for Stem Cell Research and Humberto Maturana Romesín Prize from the Chilean Biological Society also in 2022. As an ECR, Dr Contreras is committed to promoting and advocating research and science culture and diversity and equity, being a member of the Postdoctoral Development Committee and Diversity Committee. He was recently selected as an eLife Community Ambassador and co-Chair founder of the IUBMB Trainee Initiative for promoting scientific activities and research culture internationally. Osvaldo career goals are to become a research group leader and advance our knowledge of the mechanisms regulating cellular plasticity, heterogeneity, and behaviour of cell types and translate that knowledge into efficient medical applications and human wellbeing.

**ACADEMIC RECORDS AND QUALIFICATIONS**

Doctor of Philosophy in Biological Sciences mention Cell and Molecular Biology, *Maximum Distinction* 2014-2019

Thesis title: Role of mesenchymal fibro/adipogenic progenitors in homeostasis and disease: from signaling to fibrosis

Departamento de Biología Celular y Molecular and Center for Aging and Regeneration (CARE-ChileUC)

Facultad de Ciencias Biológicas, Pontificia Universidad Católica de Chile

Supervisor: Prof. Enrique Brandan, PUC, Chile; Co-supervisor: Prof. Fabio Rossi, University of British Columbia, Canada

Master of Biological Sciences, mention Cell and Molecular Biology, *Maximum Distinction* 2014-2015

Departamento de Biología Celular y Molecular and Center for Aging and Regeneration (CARE-ChileUC)

Facultad de Ciencias Biológicas, Pontificia Universidad Católica de Chile, Supervisor: Prof. Enrique Brandan

Bachelor of Biological Sciences, ranked 1st, *Double Distinction* 2008–2012

Facultad de Ciencias Biológicas, Pontificia Universidad Católica de Chile

**RESEARCH EXPERIENCE AND TRAINING**

Conjoint Lecturer (Level B), Faculty of Medicine and Health, University of New South Wales, Sydney Jan. 2021-Present

Postdoctoral Scientist at Prof. Richard Harvey’s Laboratory Mar. 2020–Present

NSW Health Cardiovascular Disease Senior Scientist Grant 2018/19 -2020/21

“[Using patient-specific induced pluripotent stem cells to dissect molecular causation of hypoplastic left heart.](https://www.medicalresearch.nsw.gov.au/projects/dissecting-molecular-causation-of-hypoplastic-left-heart/)”

CI Richard P. Harvey. 750,000 AUSD

Developmental and Regenerative Biology Division, Victor Chang Cardiac Research Institute, Sydney, Australia

Postdoctoral Scientist at Prof. Enrique Brandan’s Laboratory May 2019–Oct. 2019

Departamento de Biología Celular y Molecular, Facultad de Ciencias Biológicas, Pontificia Universidad Católica de Chile

Visiting Scientist (Co-Op) and Graduate Research Assistant at Prof. Fabio Rossi’s Laboratory 2018

Biomedical Research Centre, The University of British Columbia, Vancouver, Canada

Ph.D. Student 2014-2018

* “Participation of mesenchymal progenitors in the initiation of skeletal muscle fibrosis: Effect of TGFβ/CTGF/PDGF and co-factors on fibroblasts’ ability to modulate myogenesis."

CI Prof. Enrique Brandan. USD 350,000; Fondecyt Regular N°1150106, funding dates: 2015–2019

Research Assistant at Prof. Enrique Brandan’s Laboratory 2013-2014

* “Reduced Reck levels improve the muscle cell therapy and diminish the fibrosis associated to the dystrophic muscle.” CI Jaime Gutiérrez, PhD. USD 45,000; Fondecyt de Inicio Nº 11110010

Departamento de Biología Celular y Molecular, Facultad de Ciencias Biológicas, Pontificia Universidad Católica de Chile

Undergraduate Researcher, Bachelor of Biological Sciences 2011-2012

* “Function of Syndecan-4 and Beta-1 Integrin in Wnt signaling and early vertebrate development.”
* CI Juan Larrain USD 350,000, Fondecyt Regular N° 1100471, Millennium Nucleus in Regenerative Biology

**GRANTS**

Victor Chang Cardiac Research Institute Outstanding EMCR Grant Oct. 2022

Application Title: Modelling the Human Cardiomyocyte Cell Cycle Using Novel Single-Cell Multiplexed Protein Maps Category: 1, Funding Awarded: $38,105 AUD

**FELLOWSHIPS, HONOURS, AND AWARDS**

Travel Grant, Biochemical Society (UK) USD 600 Nov 2022

Travel Award for the ASSCR-AGCTS Joint Scientific Meeting USD 750 Oct. 2022

Australasian Society for Stem Cell Research & National Stem Cell Foundation of Australia

Inaugural Rising Star Award, Australasian Society for Stem Cell Research (ASSCR) USD 4000 Oct. 2022

School of Clinical Medicine 2022 Research Travel Award USD 1500 Oct. 2022

UNSW Medicine & Health, St Vincent’s Healthcare Clinical Campus, UNSW Sydney

Humberto Maturana Romesín Prize and Travel Grant, USD 1000 Oct. 2022

Chilean Biological Society

Rising Star Award at St Vincent’s Campus Research Symposium Sep. 2022

Australian Miltenyi Research Excellence Award USD 3400 Sep. 2022

Milenyi Biotec

Nominated for Falling Walls Science Breakthroughs of the Year 2022 June 2022

Postdoc Award Highly Commended, Paul Korner Seminar Series Dec 2021

Victor Chang Cardiac Research Institute, Sydney, Australia

[The FEBS Journal Poster of the Day Award,](https://febs.onlinelibrary.wiley.com/hub/journal/17424658/features/the-febs-journal-poster-prize-) 45th FEBS Virtual Congress, Ljubljana USD 60 July 2021

PDGF-PDGFR network modulates myogenic progenitor fate, migration, and proliferation

[IUBMB MilliporeSigma Virtual Meeting Fellowship](https://iubmb.org/congratulations-osvaldo-contreras/), to attend the 45th FEBS Congress USD 300 Mar. 2021

International Union of Biochemistry and Molecular Biology (IUBMB)

Elected Junior Reviewer of Journal of Molecular and Cellular Cardiology (JMCC) Jan. 2021-Present

Conjoint Lecturer, Faculty of Medicine and Health, University of New South Wales, Sydney, Australia Jan. 2021-Present

People’s Choice Award-[Art of the Heart](https://www.victorchang.edu.au/news/art-of-the-heart-2020), IMAGINE: 3D reconstruction of hiPSC derived cardiomyocytes Dec. 2020

Victor Chang Cardiac Research Institute, Sydney, Australia

Pan Pacific Connective Tissue Societies Symposium Conference Attendance Award USD 250 Oct. 2020

Matrix Biology & Matrix Biology Plus Journals

Doctoral Prize “Excellence of Doctoral Thesis 2019”, for the best Ph.D. thesis in Biology and Health Sciences Jan. 2020

Vicerrectoría de Investigación, Pontificia Universidad Católica de Chile USD 800

Fellowship for International Doctoral Thesis USD 5,000 Jan. 2018

Vicerrectoría de Investigación, Pontificia Universidad Católica de Chile

Operational expenses to support the completion of the Doctoral Thesis, CONICYT USD 4,000 2017

Hermann Niemeyer Medal, for the best PhD. Student in Biochemistry and Molecular Biology USD 1,000 Sep. 2016

Chilean Society for Biochemistry and Molecular Biology

Support for presentation in International Congresses, to attend the Myogenesis GRC Italy USD 2,000 2015

Vicerrectoría de Investigación, Pontificia Universidad Católica de Chile

Best Image in Cell Biology, First Prize USD 1,000 Oct. 2014

Chilean Society for Cell Biology (SBCCh)

National Doctoral Fellowship, Beca de Doctorado Nacional Folio 21140378 USD 60,000 2014-2018

Comisión Nacional de Ciencia y Tecnología (CONICYT), Chile

Excellence Award for Doctoral Studies UC, Best Ph.D. Student USD 18,000 2014-2018

Vicerrectoría de Investigación, Pontificia Universidad Católica de Chile

Award for Academic Excellence, awarded to the best student to enter the Doctorate USD 1,500 2014

Facultad de Ciencias Biológicas, Pontificia Universidad Católica de Chile

Undergraduate Student Excellence Fellowship of Honor, Best Undergraduate Student USD 2,500 2010

Pontificia Universidad Católica de Chile

LIST OF PUBLICATIONS IN PEER-REVIEWED JOURNALS

I have co-authored 21 publications in peer-reviewed journals, 10 of these as the first and seven as corresponding or co-corresponding authors. 59% of my publications are international collaborations, 53% publications in top 10% most cited worldwide and 44% publications in top 10% journals (SciVal). My work has been cited 616 times and I have an *H*-index of 14 ([Google Scholar](https://scholar.google.cl/citations?user=4DxwE-sAAAAJ&hl=es)).

Field-Weighted Citation Impact (FWCI, SciVal) = 2.76 (2017 to >2021), meaning 176% more cited than the world average

Profiles in [Scopus](https://www.scopus.com/authid/detail.uri?authorId=55781096700) & [ORCID.](https://orcid.org/0000-0002-8722-9371) Journal impact factor (JIF, Scopus) based on the year of publication

1. Hif-1a suppresses ROS-induced proliferation of cardiac fibroblasts following myocardial infarction

Janbandhu, V., Tallapragada, V., Patrick, R., Li, Y., Abegunawardena, D., Humphreys, D.T., Martin, E.M.M.A., Ward, A.O., **Contreras, O.**, Farbehi, F., Yao, E., Du, Y., Dunwoodie, S.L, Bursac, N., Harvey, R.P. (2022) Cell Stem Cell 29, 1–17. <https://doi.org/10.1016/j.stem.2021.10.009> FWCI: 9.87 18 Citations JIF: 24.633

2. Origins, potency, and heterogeneity of skeletal muscle fibro-adipogenic progenitors—time for new definitions

**Contreras, O.#**, Rossi, F.M.V., and Theret, M#. (2021) Skeletal Muscle 11, 16 <https://doi.org/10.1186/s13395-021-00265-6>

#Corresponding authors. Invited Review FWCI: 2.19 23 Citations JIF: 5.063

3. In vitro assessment of anti-fibrotic activity does not predict in vivo efficacy in murine models of Duchenne muscular dystrophy

Theret, M., Low, M., Rempel, L., Li, F. F., Tung, L. W., **Contreras, O.**, Chang, C., Wu, A., Soliman, H., Rossi, F. M. V., (2021) Life Sciences 279: 119482. <https://doi.org/10.1016/j.lfs.2021.119482.n> FWCI: 2.19 9 Citations JIF: 6.78

4. PDGF-PDGFR network differentially regulates the fate, migration, proliferation, and cell cycle progression of myogenic cells

**Contreras, O.#**, Córdova-Casanova, A., Brandan, E. (2021). Cellular Signalling 84: 110036.

<https://doi.org/10.1016/j.cellsig.2021.110036> #Corresponding author FWCI: 1.77 17 Citations JIF: 4.85

5. Evolving Roles of Muscle-Resident Fibro-Adipogenic Progenitors in Health, Regeneration, Neuromuscular Disorders, and Aging

Theret, M.#, Rossi, F. M. V., **Contreras, O.#** (2021). Frontiers in Physiology 12 | doi: 10.3389/fphys.2021.673404 <https://doi.org/10.3389/fphys.2021.673404> #Corresponding authors Invited Review FWCI: 3.8 34 Citations JIF: 4.755

6. TGF-β-driven downregulation of the transcription factor TCF7L2 affects Wnt/β-catenin signaling in PDGFRα+ fibroblasts

**Contreras, O.#**, Soliman, H., Theret, M., Rossi, F. M. V,. and Brandan, E.**#** (2020).Journal of Cell Science, 133(12), jcs242297. <https://doi.org/10.1242/jcs.242297> #Corresponding authors FWCI: 1.72 25 Citations JIF: 6.032

This article was selected as Research Highlight by the Journal Editorial Office:

“[Crosstalk between Wnt and TGF-β regulates fibrosis](https://jcs.biologists.org/content/133/12/e1204)”

7. Cross-talk between TGF-β and PDGFRα signaling pathways regulates the fate of stromal fibro-adipogenic progenitors

**Contreras, O.#**, Cruz-Soca, M., Theret, M., Soliman, H., Tung L., W., Groppa, E., Rossi, F. M., Brandan, E.# (2019). Journal of Cell Science, 132, 232157. [doi: 10.1242/jcs.232157](https://jcs.biologists.org/content/132/19/jcs232157) #Corresponding authors FWCI: 2.53 63 Citations JIF: 6.032

This article has an associated First-Person interview with me:

<https://jcs.biologists.org/content/132/19/jcs238485>

8. Adherent muscle connective tissue fibroblasts are phenotypically and biochemically equivalent to stromal fibro/adipogenic progenitors

**Contreras, O.**, Rossi, F. M., and Brandan, E. (2019). Matrix Biology Plus, 2, 100006. https://doi.org/https://doi.org/10.1016/j.mbplus.2019.04.[003](https://doi.org/https:/doi.org/10.1016/j.mbplus.2019.04.003) FWCI: 1.5 28 Citations JIF: 4.143

9. Denervation-induced skeletal muscle fibrosis is mediated by CTGF/CCN2 independently of TGF-β

Rebolledo, D. L., González, D., Faundez-Contreras, J., **Contreras, O.**, Vio, C. P., Murphy-Ullrich, J. E., … Brandan, E. (2019). Matrix Biology. <https://doi.org/10.1016/J.MATBIO.2019.01.002> FWCI: 2.7 42 Citations JIF: 8.563

10. Nilotinib impairs skeletal myogenesis by increasing myoblast proliferation

**Contreras, O.**, Villarreal, M., and Brandan, E. (2018). Skeletal Muscle, 8(1).

<https://doi.org/10.1186/s13395-018-0150-5> FWCI: 1.18 28 Citations JIF: 4.712

11. Expression of CTGF/CCN2 in response to LPA is stimulated by fibrotic extracellular matrix via the integrin/FAK axis

Riquelme-Guzmán, C.\*, **Contreras, O.\***, and Brandan, E. (2018). American Journal of Physiology-Cell Physiology, 314(4). <https://doi.org/10.1152/ajpcell.00013.2017> \*Both authors contributed equally. FWCI: 0.93 22 Citations JIF: 3.663

12. ALS skeletal muscle shows enhanced TGF-β signaling, fibrosis and induction of fibro/adipogenic progenitor markers Gonzalez, D., **Contreras, O.**, Rebolledo, D. L., Espinoza, J. P., Van Zundert, B., and Brandan, E. (2017). PLoS ONE, 12(5). <https://doi.org/10.1371/journal.pone.0177649> FWCI: 2.06 96 Citations JIF: 3.328

13. Connective tissue cells expressing fibro/adipogenic progenitor markers increase under chronic damage: relevance in fibroblast-myofibroblast differentiation and skeletal muscle fibrosis

**Contreras, O.**, Rebolledo, D. L., Oyarzún, J. E., Olguín, H. C., and Brandan, E. (2016). Cell and Tissue Research, 364(3).

<https://doi.org/10.1007/s00441-015-2343-0> FWCI: 5.56 117 Citations JIF: 4.588

14. RECK-mediated β1-integrin regulation by TGF-β1 is critical for wound contraction in mice

Gutiérrez, J., Droppelmann, C. A., **Contreras, O.**, Takahashi, C., and Brandan, E. (2015). PLoS ONE, 10(8). <https://doi.org/10.1371/journal.pone.0135005> FWCI: 0.96 19 Citations JIF: 3.811

15. Transforming growth factor type-β inhibits Mas receptor expression in fibroblasts but not in myoblasts or differentiated myotubes; Relevance to fibrosis associated to muscular dystrophies

Cofre, C., Acuña, M. J., **Contreras, O.**, Morales, M. G., Riquelme, C., Cabello-Verrugio, C., and Brandan, E. (2015). BioFactors, 41(2). <https://doi.org/10.1002/biof.1208> FWCI: 0.44 9 Citations JIF: 5.064

16. Syndecan 4 interacts genetically with Vangl2 to regulate neural tube closure and planar cell polarity

Escobedo, N., **Contreras, O.**, Muñoz, R., Farías, M., Carrasco, H., Hill, C., Tran, U., Pryor, S.E., Wessely, O., Copp, A.J., Larraín, J. (2013). Development, 140(14). <https://doi.org/10.1242/dev.091173> FWCI: 1.23 48 Citations JIF: 6.961

COMMENTARIES AND EDITORIALS

1. Cardiac fibroblast heterogeneity and dynamics through the lens of single-cell dual ‘omics

Harvey, R.P., Patrick, R., Janbandhu, V., and **Contreras, O.** (2022) Cardiovascular Research, Vol 118(6).

<https://doi.org/10.1093/cvr/cvac037> Invited Editorial JIF: 13.08

2. Single-cell revolution unveils the mysteries of the regenerative mammalian digit tip

Riquelme-Guzmán, C., and **Contreras, O.#** (2020). Developmental Biology.<https://doi.org/10.1016/j.ydbio.2020.02.002>

#Corresponding author 4 Citations JIF: 3.096

3. Hic1 deletion unleashes quiescent connective tissue stem cells and impairs skeletal muscle regeneration

**Contreras, O.** (2020). Journal of Cell Communication and Signaling, 14.<https://doi.org/10.1007/s12079-019-00545-3> 5 Citations JIF: 5.782

4. First person – Osvaldo Contreras. **Contreras, O.** Journal of Cell Science 1 October 2019; 132 (19): jcs238485 <https://doi.org/10.1242/jcs.238485> JIF: 6.032

5. Fibro/adipogenic progenitors safeguard themselves: a novel mechanism to reduce fibrosis is discovered

**Contreras, O.**, and Brandan, E. (2017). Journal of Cell Communication and Signaling, 11(1) <https://doi.org/10.1007/s12079-016-0372-4> 6 Citations JIF: 2.022

**PRE-PRINTS**

1. Temporal transcriptomic dynamics of the ATX-LPAR-PLPP axis during skeletal muscle regeneration at single cell resolution. **Contreras, O.#** (2022) bioRxiv <https://doi.org/10.1101/2022.07.02.498539> #Corresponding author

2. Targeting fibrosis in the Duchenne Muscular Dystrophy mice model: an uphill battle

Theret, M., Low, M., Rempel, L., Li, F. F., Tung, L. W., **Contreras, O.**, Chang, C. K., Wu, A., Soliman, H., Rossi, F. M. V. (2021) bioRxiv <https://www.biorxiv.org/content/10.1101/2021.01.20.427485v1>

3. TGF-β-driven downregulation of the Wnt/β-Catenin transcription factor TCF7L2/TCF4 in PDGFRα+ fibroblasts **Contreras, O.#**, Soliman H., Theret M., Rossi F. M., Brandan, E.# (2020) bioRxiv <https://doi.org/10.1101/2020.01.05.895334> #Corresponding authors

**EDITORIAL ROLES AND PEER REVIEW ACTIVITIES**

Frontiers Topic Editor, Guest Associate Editor in Molecular and Cellular Pathology Sep. 2021-Present

Frontiers in Cell and Developmental Biology, JIF: 6.684

Research topic: [Cell Plasticity in Cardiovascular Development, Regeneration, and Disease](https://www.frontiersin.org/research-topics/26292/cell-plasticity-in-cardiovascular-development-regeneration-and-disease)

Journal peer review 2019-Present

1. Frontiers in Cell and Developmental Biology, Swiss Federal Institute of Technology in Lausanne (EPFL), Switzerland
2. Frontiers in Physiology, Swiss Federal Institute of Technology in Lausanne (EPFL), Switzerland
3. Nature Communications, Nature Publishing group
4. Journal of Cachexia, Sarcopenia and Muscle, John Wiley & Sons
5. FASEB Journal, Federation of American Societies for Experimental Biology, John Wiley & Sons
6. Open Biology, The Royal Society Publishing
7. Protein & Cell, Springer, and Higher Education Press
8. iScience, CellPress, Elsevier
9. Journal of Molecular and Cellular Cardiology (JMCC), appointed as Junior Reviewer by Editor Prof. Jennifer Davis
10. Current Opinion in Pharmacology, Elsevier, Appointed as a Reviewer by Dr Gustavo Duque
11. STAR Protocols, CellPress, Elsevier
12. Journal of Visualized Experiments (JoVE)
13. Cellular Signalling, Elsevier, Appointed as a Reviewer by Co-Editor Prof. Andrea Babelova
14. Frontiers in Cardiovascular Medicine, Swiss Federal Institute of Technology in Lausanne (EPFL), Switzerland
15. Clinical Science, Portland Press, Biochemical Society, London, UK
16. Journal of Biological Chemistry (JBC), American Society for Biochemistry and Molecular Biology, appointed as Early Career Reviewer
17. Cells, Member of the [Reviewer Board](https://www.mdpi.com/journal/cells/submission_reviewers), MDPI, Basel, Switzerland
18. Ageing Research Reviews, Elsevier
19. International Journal of Molecular Sciences, MDPI, Basel, Switzerland
20. Genes, MDPI, Basel, Switzerland
21. Biomedicines, MDPI, Basel, Switzerland
22. Journal of Cell Communication and Signaling, Springer Nature, Switzerland
23. Biochimie, Société Française de Biochimie et Biologie Moléculaire, Elsevier
24. Biology, MDPI, Basel, Switzerland
25. Biomolecules, MDPI, Basel, Switzerland
26. Experimental Gerontology, Elsevier, Netherlands
27. Life Science Alliance, EMBO Press

Peer reviewer – contributor to [Reactome](https://reactome.org/about/news/176-version-81-released) (Version 81 Released on 14 June 2022; Signal Transduction June 2022

(Transcriptional activity of SMAD2/SMAD3:SMAD4 heterotrimer)

**PREPRINT PEER-REVIEW INITIATIVES**

PreLighter Aug. 2020-Present

I am part of the carefully selected group of ECRs called PreLights community from The Company of Biologists, UK. I work on selecting novel and exciting preprints from several preprint servers and write easy-to-digest highlights about them for the broad scientific community. PreLights Profile: <https://prelights.biologists.com/profiles/osvaldo-contreras/>

I have highlighted 5 BioRxiv preprints and written PreLights about these works since 2020 as author or co-author:

1. [Fibroblasts: an enigmatic, diverse, and plastic cell type that can determine the fate of heart failure](https://prelights.biologists.com/highlights/a-transcriptional-switch-governing-fibroblast-plasticity-underlies-reversibility-of-chronic-heart-disease/) Published in *Nature*

2. [Human skeletal muscle fibro-adipogenic remodeling and degeneration in type 2 diabetes](https://prelights.biologists.com/highlights/human-skeletal-muscle-cd90-fibro-adipogenic-progenitors-are-associated-with-muscle-degeneration-in-type-2-diabetic-patients/) Published in *Cell Metabolism*

3. [‘In the eye of the (Cytokine) Storm’: COVID-19 inflammation and heart function in 3D-engineered cardiac tissues](https://prelights.biologists.com/highlights/bromodomain-inhibition-blocks-inflammation-induced-cardiac-dysfunction-and-sars-cov2-infection-in-pre-clinical-models/) Published in *Cell*

4. [Coronary blood vessels from distinct origins converge to equivalent states during mouse and human development](https://prelights.biologists.com/highlights/coronary-blood-vessels-from-distinct-origins-converge-to-equivalent-states-during-mouse-and-human-development/)

5. [Light-sheet illumination of the organoid family tree with LSTree](https://prelights.biologists.com/highlights/multiscale-light-sheet-organoid-imaging-framework/)

ASAPbio Preprint Reviewer Recruitment Network, Member July 2021

**INTERNATIONAL GRANT AND EXPERT REVIEWER**

Expert Reviewer, grant reviewer for the French Muscular Dystrophy Association (AFM-Téléthon) May 2022

Expert Reviewer, reviewed two grants for the French National Research Agency (ANR) June 2021

Application Reviewer, reviewed ten applications for the Summer Vacation Studentships, Biochemical Society May 2021

PhD. Thesis External Reviewer, Reviewed Ph.D. Thesis by Dr. Alessandro Palma on Myo-REG portal Dec. 2019

Data integration and modeling of skeletal muscle regeneration

Invited by Prof. Francesco Cecconi, Ph.D., Professor of Developmental Biology, University of Rome Tor Vergata

**TEACHING / CURRICULUM**

Lecturer Associate Professor, Undergraduate level (Third academic year) 5/08/19 – 31/12/19

“Molecular Genetics” and “Laboratory of Molecular Genetics,” School of Biotechnology, Universidad Santo Tomás, Chile

PhD Teaching Assistant, Ph.D level 01/03/19 – 30/07/19

Course “Cell & Molecular Biology”, Facultad de Ciencias Biológicas, Pontificia Universidad Católica de Chile

Adjunct Instructor, Undergraduate level 01/03/13 – 30/12/13

“Cell Biology”, “Laboratory of Biochemistry I”, and “Cellular Biochemistry”, Facultad de Ciencias Biológicas, Pontificia Universidad Católica de Chile

Undergraduate Teaching Assistant, Undergraduate level 01/03/09 – 30/12/17

Courses: “Cell Biology,” “Molecular Genetics,” “Biochemistry and Molecular Genetics,” “Laboratory of Biochemistry and Cell Biology,” “Physiology,” and “Biophysics.” Facultad de Ciencias Biológicas, Pontificia Universidad Católica de Chile

**RESEARCH MENTORSHIP AND SUPERVISION**

Mentoring and ECR training

As a Pre-Doctoral and Post-doctoral Scholar, I have been the primary supervisor of two Ph.D. students, five research assistants/associates, and four undergraduate students. I have mentored junior and senior members of different international Labs on experimental approaches, techniques, presenting scientific data, and scientific writing for conference abstracts, papers, and grants/scholarships.

Mentor of the Biomedicine Winter School for 20 selected South American Ph.D. applicants July 2017

Facultad de Ciencias Biológicas, Pontificia Universidad Católica de Chile

Scientific Assistant - Antarctic School Fair (FAE) for Instituto Nacional Public School, Volunteer activity Sep.–Dec. 2017

Comisión Nacional de Ciencia y Tecnología (CONICYT), EXPLORA

**COMMITTEES AND ADVISORY BOARDS**

Organizing NSW State Committee Oct. 2022

The Australia and New Zealand Society for Cell and Developmental Biology

Co-Chair IUBMB Trainee Initiative, Founder member Jan. 2022

International Union of Biochemistry and Molecular Biology (IUBMB), Australia and Oceania region (FAOBMB)

Interviewed at TrendsTalk Trends in Biochemical Sciences, CellPress

A first-generation scientist from South America to an international early-career leader <https://doi.org/10.1016/j.tibs.2022.04.002> May 2022

eLife Community Ambassador Jan. 2022

eLife Sciences Publications Ltd., UK

Advisor Community, Member Jan. 2021–Present

Faculty Opinions and Sciwheel

Postdoctoral Development Committee (PDDC), Member of the board Jan. 2021–Present

St. Vincent’s precinct, involving four major research institutes and centers: VCCRI, AMR, GIMR, TKCC

Biochemical Society and Portland Press Early-Career Researcher Taskforce, Member Dec. 2020–Present

The Biochemical Society & Portland Press

Diversity Committee, Founder Member Oct. 2020–Present

The Victor Chang Cardiac Research Institute, NSW, Sydney, Australia

Committee of Representatives for Ph.D. Students, Member of the board Mar. 2015–Dec. 2016

Facultad de Ciencias Biológicas, Pontificia Universidad Católica de Chile

Vice-President of Undergraduate Students Council Mar. 2009–April 2010

Facultad de Ciencias Biológicas, Pontificia Universidad Católica de Chile

**PROFESSIONAL AFFILIATIONS AND NETWORKS**

Member, Chilean Biological Society, Chile Oct. 2022–Present

Member, Biochemical Society, UK Aug. 2021–Present

Member, Australasian Society for Stem Cell Research (ASSCR) Mar. 2021–Present

Member, Queensland Cardiovascular Research Network (QCVRN) Jan. 2021–Present

Adjunct Member, Chilean Society for Cell Biology (SBCCh) Nov. 2020–Present

Member, Chilean Society for Biochemistry and Molecular Biology (SBBMCh) Oct. 2020–Present

Member, International Society for Matrix Biology (ISMB) Oct. 2020–Present

Affiliated Member, Chilean Society of Physiological Sciences June 2020–Present

Affiliated Member, Latin American Association of Physiological Sciences June 2020–Present

**RESEARCH AND EDUCATION LEADERSHIP**

Organizer and co-host of the webinar titled “Graduate School Roadmap” Aug. 2022

International Union of Biochemistry and Molecular Biology Trainee Initiative, FAOBMB region

Co-Host National Stem Cell Conversations, The Australasian Society for Stem Cell Research (ASSCR) July 2022–Present

Organizer and host PDDC Educational Seminar Resume-Curriculum Vitae, Drs. Stuart Fraser and Alex Ward July 2022

Organizer and host Diversity Committee Seminar, Dr. Joachim Goedhart talk about colour deficiency Feb. 2022

Co-host [WntTalks](https://wnttalks.wordpress.com/), Prof. David Virshup talk Oct. 2021

Chair and Organizer PDDC Educational Seminar, Dr. Alejandro Montenegro, Editor Current Protocols July 2021

Co-Chair Cardiac Biology Session, 13th ANZSCDB Victoria State Conference (Virtual) Aug. 2021

Australia and New Zealand Society for Cell and Developmental Biology

Chair and Organizer PDDC Educational Seminar, Dr. Helen Robertson, community manager PreLights July 2021

Contributor to [FocalPlane](https://focalplane.biologists.com/), where microscopy meets biology Oct. 2020–Present

Expositor for 1000 Scientists, 1000 Classrooms - 1000 Científicos 1000 Aulas 2014–2019

Scientific Lectures and Exhibitions to Low-income Public Schools, Volunteer activity

Application Assistant for the National Doctoral Fellowship (CONICYT)

Universidad del Desarrollo, Vicerrectoría de Investigación Nov.–Dec. 2019, 2020

Pontificia Universidad Católica de Chile, Vicerrectoría de Investigación Nov. 2014–2019

**INVITED TALKS AND SEMINARS**

Pablo Guzmán Memorial Symposium, EMBO Practical Course: Developmental Biology Jan. 2023

CIMARQ-UNAB-Quintay, Chile

External Seminar Nov. 2022

Department of Anatomy and Physiology, University of Melbourne

Stromal cells, stem cells, and their cross-regulation: a regenerative perspective Aug. 2022

Host: Nigel Turner PhD, Group Leader, Victor Chang Cardiac Research Institute

Open House Virtual Doctorados UC July 2022

Graduate School, Vicerrectoría de Investigación, Pontificia Universidad Católica de Chile

Exploring the expression and function of TCF/LEF transcription factors in fibro-adipogenic progenitors Apr. 2022

The University of Aberdeen, UK. Host: Brendan Gabriel PhD

New frontiers for muscle-resident fibro-adipogenic progenitors in health, regeneration, disease Apr. 2022

...and cell-based food?

Vow, cultured meat food, Sydney, Australia

Emerging roles of tissue-resident fibro-adipogenic progenitors in health, regeneration, and disease Mar. 2022

Institut de Biologie du Developpement de Marseille, France, invited/hosted by Drs Françoise Helmbacher & Robert Kelly

Emerging roles of muscle-resident fibro-adipogenic progenitors in health, regeneration, and disease Nov. 2021

Garvan Institute. Host: Andrew Philp PhD, Group Leader Mitochondrial Metabolism and Ageing Laboratory,

Open House Virtual Doctorados UC Sep. 2021

Graduate School, Vicerrectoría de Investigación, Pontificia Universidad Católica de Chile

Modelling Hypoplastic Left Heart Syndrome Using Human Induced Pluripotent Stem Cells July 2021

Paul Korner Seminar, Victor Chang Cardiac Research Institute, Sydney, Australia

Role of the Wnt Transcription Factor TCF7L2 in Mesenchymal Progenitor Cells Nov. 2018

Facultad de Ciencias Biológicas, Pontificia Universidad Católica de Chile

Hacen Ciencia Quienes la Aman, those who love science do science Sep. 2016

Prof. Hermann Niemeyer Talk, XXXIX Annual Meeting Sociedad de Bioquímica y Biología Molecular de Chile

**CONFERENCES, MEETINGS, AND WORKSHOPS**

International Conferences and Symposiums

1. Modelling the human cardiomyocyte cell cycle using a novel thymidine analogue. Osvaldo Contreras. 5th Annual Victorian Muscle Network Symposium. 28th October 2022. University of Victoria, Melbourne, Australia. Speaker selected from abstract, 15-min talk.
2. A hitchhiker’s guide to detect and evaluate DNA synthesis using optimised in-house EdU and F-ara-EdU assays. Postdoctoral Development Committee Symposium, St Vincent's Campus Research. In-person meeting, August 25th, 2022. Selected long talk from abstract.
3. Modelling human cardiomyocyte cell cycle using multiparametric flow cytometry. Osvaldo Contreras. Sydney Cardiovascular Symposium “Remodelling and regeneration”, 9-10 December 2021. Speaker selected from abstract, 5-min flash talk.
4. Modelling Hypoplastic Left Heart Using Human Induced Pluripotent Stem Cells Reveals Prevailing Disease Processes and Candidate Genetic Mutations. Osvaldo Contreras. Chilean Society for Cell Biology “2021 Colloquium Series in Cell Biology: Young Investigators”, November 29 – December 1, 2021. Speaker selected from abstract, 15-min talk.
5. Exploring the Expression and Function of Tcf/Lef Transcription Factors in Tissue-Resident Fibroblasts. Osvaldo Contreras. Australia and New Zealand Society for Cell and Developmental Biology (ANZSCDB) NSW Virtual Meeting Cellular Mechanisms of Development and Regeneration, November 23, 2021. Speaker selected from abstract, 5-min talk.
6. Modelling Human Cardiomyocyte Cell Cycle Using Multiparametric Flow Cytometry. Osvaldo Contreras, Chris Thekkedam, Richard P Harvey. 43rd Annual Meeting Sydney Australasian Cytometry Society Virtual, Nov. 7th-10th. Speaker selected from abstract, 3-min short talk.
7. Exploring the expression and function of TCF/LEF transcription factors in muscle-resident fibro-adipogenic progenitors. Osvaldo Contreras. 4th Annual Victorian Muscle Network Symposium. October 29th, 2021. Speaker selected from abstract, 15-min talk.
8. Functional investigations of a novel long non-coding RNA neighboring the cardiac transcriptional regulator Nkx2-5. Nicholas J. Murray, Alexander Ward, Ann-Kristin Altekoester, Vikram Tallapragada, Ralph Patrick, David Humphreys, Osvaldo Contreras, Yen Tran, Vaibhao Janbandhu, Gonzalo del Monte Nieto, Hananeh Fonoundi, Scott Kesteven, Michael Feneley, Charles Cox, Adam Hill, Dirk Van Helden, Stefan Seemann, Nicole Schonrock, Richard Harvey. The St. Vincent’s Research Symposium & Researcher Development Program, Virtual Meeting. Selected 5-minutes flash-talk. October 14th, 2021.
9. PDGF-PDGFR network modulates myogenic progenitor fate, migration, and proliferation. O. Contreras, A. Córdova-Casanova, E. Brandan. FEBS Open Bio 11 (Suppl. 1) (2021) 103–507 DOI: 10.1002/2211-5463.13205. Poster presented at the Virtual 45th FEBS Congress from 3rd to 8th July 2021 (originally planned to be held in Ljubljana, Slovenia). Abstract published: O. Contreras, A. Córdova-Casanova, E. Brandan. (2021). PDGF-PDGFR network modulates myogenic progenitor fate, migration, and proliferation. FEBS Open Bio, 11: P-06.4-30\*. doi:10.1002/2211-5463.13205
10. PDGF-PDGFR network differentially modulates skeletal muscle myogenic cell fate, migration, and proliferation. Contreras, O. The Australasian Society for Stem Cell Research, ASSCR NSW ECR Symposium. May 15th, 2021. Speaker selected from abstract, 7-min talk.
11. PDGF/PDGFR signalling modulates the activation, differentiation, and migration of skeletal muscle myoblasts. Contreras, O. Pan Pacific Connective Tissue Societies Symposium 2020, virtual meeting. November 24-26, 2020. Speaker selected from abstract, 3-minutes fire talk, hosted by Matrix Biology Society of Australia and New Zealand and Australasian Wound & Tissue Repair Society.
12. PDGF-BB/PDGF receptor signaling modulates the activation, differentiation, and migration of myoblasts. Contreras, O. PDDC Symposium, St Vincent's Campus Research, Virtual Meeting, October 15th, 2020. Speaker selected from abstract, 3-min short-talk.
13. PDGF signalling modulates the activation and proliferation of myoblasts. Contreras, O., Adriana Córdova-Casanova, Enrique Brandan. 3rd Annual Victorian Muscle Network symposium. Abstract selected as a short-talk abstract.
14. Functional characterization of a novel long non-coding transcript neighboring the key cardiac regulator Nkx2-5. Nicholas Murray, Ann-Kristin Altekoester, Vikram Tallapragada, Ralph Patrick, David Humphreys, Alexander Ward, Osvaldo Contreras, Gonzalo del Monte Nieto, Hananeh Fonoundi, Scott Kesteven, Michael Feneley, Charles Cox, Adam Hill, Dirk Van Helden, Stefan Seemann, Nicole Schonrock, Richard Harvey. St Vincent's Campus Research Symposium, Virtual Meeting. Selected 3-minutes short-talk. October 1st, 2020.
15. CRISPR and Beyond: Perturbations at Scale to Understand Genomes virtual conference. Wellcome Genome Campus Advanced Courses and Scientific Conferences. 22-25 September 2020. Attendee.
16. PDGFRα expression is down-regulated by TGF-β signaling in Mesenchymal Progenitor Cells. Contreras, O., Theret, M., Cruz-Soca, M., Johnston, G., Groppa, E., Rossi, F. M., Brandan, E. Virtual Regenerative Medicine Symposium, Vancouver, Canada. October 2018. Poster presentation.
17. Early denervation-induced fibrosis is modulated by CTGF but not for TGF-β: role of HIF-1α and LPA. Rebolledo, D., Córdova, A., Valle, R., Contreras, O., Murphy-Ullrich, J., Walkinshaw, G., Lipson, K., Brandan, E. New Directions in Biology and Disease of Skeletal Muscle Disease, June 2018, New Orleans, LA, USA. Poster presentation.
18. The tyrosine kinase inhibitor nilotinib impairs skeletal muscle differentiation by increasing myoblast proliferation: involvement of p38, ERK and AKT signaling pathways. Contreras, O., Villarreal, M., Brandan, E. 4th Ottawa International Conference on Neuromuscular Disease & Biology. September 2017, Ottawa, Canada. Poster presentation.
19. Denervation-induced fibrosis is modulated by CTGF and HIF-1α. Rebolledo, D., González, D., Contreras, O., Walkinshaw, G., Lipson, K., Brandan, E. New Directions in Biology and Disease of Skeletal Muscle Disease, June 2016, Orlando, Florida, USA. Poster presentation.
20. Tcf4 transcription factor is down-regulated by TGF-1. Contreras, O., Brandan, E. Myogenesis Gordon Research Conference (GRC) and Gordon Research Seminar (GRS), June 2015, Lucca, Italy. Poster presentation and speaker selected from abstract for a 1-minute short talk.
21. Muscle connective tissue fibroblasts and mesenchymal progenitors correspond to the same cell type and are increased in skeletal muscle dystrophy, denervation, and chronic damage. Contreras, O., Rebolledo, D., Oyarzún, J. E., and Brandan, E. Muscular Dystrophy Association (MDA) Scientific Congress, March 2015, Washington D.C., USA. Poster presentation.
22. Role of Syndecan-4 in mouse development. Escobedo, N., Farías, M., Carrasco, H., Contreras, O., Tran, U., Wessely, O.,Copp, A., and Larraín, J. Society for Developmental Biology 70th Annual Meeting, July 2011, Chicago, Illinois, USA. Poster presentation published as:

Escobedo N; Farias M; Carrasco H; Contreras O; Tran U; Wessely O; Copp A; Larrain J, 2011, 'Role of Syndecan-4 in mouse development', Developmental Biology, vol. 356, pp. 176 - 177, <http://dx.doi.org/10.1016/j.ydbio.2011.05.654>

Chilean Conferences

1. Contreras, O., Theret, M., Soliman, H., Johnston, G., Groppa, E., Rossi, F. M., Brandan, E. The Wnt-effector Tcf7l2 Modulates Mesenchymal Progenitors Cell Fate. XXXII Annual meeting Sociedad de Biología Celular de Chile (SBCCh), Puerto Varas, Chile. October 2018. Poster presentation.
2. Contreras, O., Villarreal, M., Brandan, E. Nilotinib impairs skeletal muscle differentiation by promoting cell proliferation. XXXI Annual meeting Sociedad de Biología Celular de Chile (SBCCh), Puerto Varas, Chile. October 2017. Poster presentation.
3. Contreras, O., and Brandan, E. Tcf4 (Tcf7L2) transcription factor is a master regulator of mesenchymal cell differentiation: TGF- regulates its stability by a Ubiquitin-Proteasome System. XXX Annual meeting Sociedad de Biología Celular de Chile (SBCCh), Puerto Varas, Chile. October 2016. Poster presentation.
4. Rebolledo, D., Gonzalez, D., Contreras, O., Walkinshaw, G., Lipson, K., Brandan, E. Denervation-induced fibrosis is modulated by CTGF and HIF-1α. XXX Annual meeting Sociedad de Biología Celular de Chile (SBCCh), Puerto Varas, Chile. October 2016. Selected talk. Rebolledo, D. as the presenter.
5. Contreras, O., Brandan, E. Platelet-derived Growth Factor Receptor alpha (PDGFRα) Participates on Skeletal Muscle Cell Fate and Negatively Regulates Myogenesis. EMBO workshop: Actualizations in membrane trafficking in health and disease. La Serena, Chile. September 2016. Poster presentation.
6. Contreras, O., Brandan, E. Tcf4 transcription factor is down-regulated by TGF- in progenitor mesenchymal cells. Oral presentation. XXIX Annual meeting Sociedad de Biología Celular de Chile (SBCCH), Puerto Varas, Chile. October 2015. Speaker selected from abstract, 15-min talk.
7. Contreras, O., Brandan, E. Tcf4 (Tcf7l2) expression is directly regulated by TGF-beta signaling: Implications for skeletal muscle biology. XXVIII Annual meeting of “Sociedad de Biología Celular de Chile (SBCCH),” Puerto Varas, Chile. October 2014. Poster presentation.
8. Contreras, O., Takahashi, C., Brandan, E., Gutiérrez, J. The expression of RECK, a novel modulator of extracellular matrix integrity, is regulated by TGF-β: possible clues for proper tissue remodeling. Sociedad de Biología Celular de Chile (SBCCH) XXVII Annual meeting, Puerto Varas, Chile. October 2013. Poster presentation.
9. Contreras, O., Larraín, J. Sindecán-4 interactúa, a través de Vangl2, con la vía de señalización Wnt/PCP. XXIX Annual meeting Asociación Nacional de Estudiantes de Bioquímica (ANEB), Valdivia, Chile. August 2012. Selected 10-min talk, 3rd place.
10. Escobedo, N., Farías, M., Contreras, O., Carrasco, H., Tran, U., Wessely, O., Copp, A., Larraín, J. Role of syndecan-4 in Wnt/Planar Cell Polarity During Mouse Development. Sociedad de Biología Celular de Chile (SBCCh), XXV Annual meeting, Puerto Varas, Chile. October 2012. Selected 15-min talk. Escobedo, N. as the presenter.

**OUTREACH AND MEDIA**

* Inteviewed at TrendsTalk (Trends in Biochemical Sciences, CellPress) where four members of the IUBMB Trainee Initiative committee share their passions and perspectives for supporting trainees throughout the globe: <https://doi.org/10.1016/j.tibs.2022.04.002> Published:May 03, 2022
* Launch of the IUBMB Trainee Initiative that I co-Chair:

1. <https://iubmb.org/about/committees/iubmb-trainee-initiative/>
2. <https://thebumblingbiochemist.com/365-days-of-science/introducing-iubmb-trainee-initiative/>

* Recent interview and testimony of my past, present and future academic work:

1. <https://doctorados.uc.cl/noticia/siempre-me-encanto-el-funcionamiento-del-cuerpo-humano-particularmente-del-corazon/> Released 22nd Dec. 2021

* Media coverage of our 2021 paper about role of Hif-1a in cardiac fibroblasts and myocardial ischaemia published in Cell Stem Cell, CellPress, Elsevier:

1. <https://www.victorchang.edu.au/news/heartattack-discovery>
2. <https://www.eurekalert.org/news-releases/934232>
3. <https://medicalxpress.com/news/2021-11-body-defensive-reaction-heart.html>
4. <https://ipscell.com/2021/11/weekly-reads-r01-grant-trends-dppa4-adult-human-neurogenesis-debate/?utm_source=rss&utm_medium=rss&utm_campaign=weekly-reads-r01-grant-trends-dppa4-adult-human-neurogenesis-debate>
5. Article featured in Australian Biochemist magazine. Highlighted as a ‘Publication with Impact.’ <https://www.asbmb.org.au/Magazine/2022/April/Apr%202022%20AB%20High%20Res.pdf?fbclid=IwAR3WqqLtlEhvDXPyI4-wlIHx9r71fU5Z99X_MknRapoiPLRDI1KQkiY22J8>

* Publication of the week by Science in Vancouver by STEMCELLTECHNOLOGIES: “Evolving Roles of Muscle-Resident Fibro-Adipogenic Progenitors in Health, Regeneration, Neuromuscular Disorders, and Aging. Theret, M.#, Rossi, F. M. V., Contreras, O.# (2021). Frontiers in Physiology 12 | doi: 10.3389/fphys.2021.673404 <https://scienceinvancouver.com/wp-content/uploads/sites/1/2021/05/Volume-5.16-min.pdf>
* Recent interviews of our work on fibroblasts and the cross-talk between WNT and TGF-b signaling in fibrosis:

1. Interview and synopsis about our work on fibroblasts, published July 29th, 2020. Title: “Prestigiosa revista científica destaca investigación chilena sobre fibroblastos: células causantes de fibrosis” [Fibroblastos: células causantes de fibrosis](https://www.google.com/url?q=https%3A%2F%2Fbiologia.uc.cl%2Fprestigiosa-revista-cientifica-destaca-investigacion-chilena-sobre-fibroblastos-celulas-causantes-de-fibrosis%2F&sa=D&sntz=1&usg=AFQjCNF-9YrCn-zLxyCTVkJfdMeWuJ1HGg) Facultad de Ciencias Biológicas, Pontificia Universidad Católica de Chile.
2. “[Estudio de investigadores de Centro UC CARE Chile en prestigiosa revista científica](http://www.google.com/url?q=http%3A%2F%2Fwww.carechile.cl%2Festudio-de-investigadores-de-centro-uc-care-chile-en-prestigiosa-revista-cientifica%2F&sa=D&sntz=1&usg=AFQjCNEBYGATgrrAyfWkVUsvuXHEFvlA4A)”. Center for Aging and Regeneration (Centro UC CARE Chile).

Duna News, Radio Duna:

1. <https://www.duna.cl/programa/aire-fresco/2020/09/15/enrique-brandan-y-estudio-sobre-fibrosis-lo-que-se-descubra-para-una-se-podria-aplicar-para-otras-enfermedades/>
2. <https://www.duna.cl/podcasts/el-destacado-estudio-chileno-sobre-la-aparicion-de-la-fibrosis/>
3. <http://www.carechile.cl/enrique-brandan-destaco-en-radio-duna-importancia-de-estudios-sobre-la-fibrosis/>

* Prize "Excellence in Doctoral Thesis 2019":

1. <http://www.bio.uc.cl/estudiante-fcb-recibe-premio-excelencia-en-tesis-doctoral/>
2. <https://www.uc.cl/noticias/165-nuevos-doctores-se-graduaron-en-la-pontificia-universidad-catolica-de-chile/>

* Visit of Dr. Fabio Rossi and his family to our University in Chile:

1. <http://biologia.uc.cl/es/bionoticias/36-es/bionoticias-postgrado/1604-dr-fabio-rossi-visita-la-fcb-y-comparte-con-estudiantes-de-postgrado>

* Interview about my scholarship and internship at the University of British Columbia, Laboratory of Prof. Fabio Rossi:

1. <https://biologia.uc.cl/osvaldo-contreras-mi-mejor-experiencia-cientifica-y-personal-fue-en-mi-pasantia-doctoral-en-canada/>

* First-Person interview from Journal of Cell Science (Company of Biologists, UK) involving to our work: “Cross-talk between TGF-β and PDGFRα signaling pathways regulates the fate of stromal fibro–adipogenic progenitors”:

1. First Person interview: <https://jcs.biologists.org/content/132/19/jcs238485>
2. <http://biologia.uc.cl/es/investigacion/bionoticias-investigacion/1709-prestigiosa-revista-internacional-nuevamente-destaca-a-un-investigador-de-la-fcb>

* Winner of the Hermann Niemeyer Medal, Chilean Society for Biochemistry and Molecular Biology:

1. <http://doctorados.uc.cl/es/ver-mas-noticias/175-doctorando-uc-recibe-prestigioso-premio-en-bioquimica>
2. <https://issuu.com/visionuniversitaria/docs/vu258/3>

**REFERENCES**

Professor Richard P. Harvey, AM Ph.D. FAA FAHMS FRS (Postdoc supervisor, 2020-present)

r.harvey@victorchang.edu.au

Deputy Director and Head, Developmental and Regenerative Biology Division

Victor Chang Cardiac Research Institute, Darlinghurst NSW 2010, Australia

Professor Enrique Brandan, PhD (PhD supervisor 2014-2019)

[ebrandan@bio.puc.cl](mailto:ebrandan@bio.puc.cl)

Full Professor, Department of Cell and Molecular Biology, Faculty of Biological Sciences, Pontificia Universidad Católica de Chile. Fundación Ciencia & Vida.

Professor Fabio Rossi, M.D., PhD (PhD co-supervisor, 2018-2019, ongoing collaborator)

[fabio@brc.ubc.ca](mailto:fabio@brc.ubc.ca)

Director, The Biomedical Research Centre, UBC, Director of Research, School of Biomedical Engineering,

Scientific Director, BC Regenerative Medicine Initiative

Professor Juan Larraín, PhD (Undergraduate supervisor 2011-2012)

[jlarrain@bio.puc.cl](mailto:jlarrain@bio.puc.cl)

Full Professor, Department of Cell and Molecular Biology, Faculty of Biological Sciences, Pontificia Universidad Católica de Chile, Vice-President for Academic Affairs, P. Universidad Católica de Chile