

## Curriculum vitae

### PERSONAL INFORMATION

**Complete name:** Romina Paola Bertinat  
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### ACADEMIC INFORMATION

2011-2014 Postdoctoral position at Universidad de Concepción, Concepción, Chile.  
2004-2010 PhD, Cellular and Molecular Biology, Universidad Austral de Chile, Valdivia, Chile.  
1997-2003 University studies, Biochemistry career, Universidad Austral de Chile, Valdivia, Chile.

### CURRENT PROJECT

Oct 2016-to date FONDECYT 11160854: "Phosphoenolpyruvate carboxykinase expression in pancreatic  $\alpha$ -cells modulates glucagon secretion, contributing to hyperglucagonemia during diabetes"

### STUDENTS

Aug 2018-Jul 2019 Ahilyn Escobar, Tecnología Médica, Universidad de Concepción.  
Aug 2017-Jul 2018 Marianne Negrón, Tecnología Médica, Universidad de Concepción.

### SCIENTIFIC ARTICLES (2015 to date)

Westermeier F, Holyoak T, Gatica R, Martínez F, Negrón M, Yáñez AJ, Nahmias D, Nualart F, Burbulis I, **Bertinat R (2020)**. Cytosolic phosphoenolpyruvate carboxykinase is expressed in  $\alpha$ -cells from human and murine pancreas. *J Cell Physiol.* 235(1):166–175.

Westermeier F, Holyoak T, Asenjo JL, Gatica R, Nualart F, Burbulis I, **Bertinat R (2019)**. Gluconeogenic Enzymes in  $\beta$ -Cells: Pharmacological Targets for Improving Insulin Secretion. *Trends Endocrinol Metab.* 30(8):520-531.

**Bertinat R**, Westermeier F, Gatica R, Nualart F (2018). Sodium tungstate: is it a safe option for a chronic disease setting as diabetes? *J Cell Physiol.* 234(1):51-60.

**Bertinat R**, Westermeier F, Silva P, Gatica R, Oliveira JM, Nualart F, Gomis R, Yáñez AJ (2018). The anti-diabetic agent sodium tungstate induces abnormal glycogen accumulation in renal proximal tubules from diabetic IRS2 knockout mice. *J Diabetes Res.* 2018:5697970.

Salazar K, Martínez F, Pérez-Martín M, Cifuentes M, Trigueros L, Ferrada L, Espinoza F, Saldivia N, **Bertinat R**, Forman K, Oviedo MJ, López-Gambero AJ, Bonansco C, Bongarzone ER, Nualart F (2018) SVCT2 Expression and Function in Reactive Astrocytes Is a Common Event in Different Brain Pathologies. *Mol Neurobiol.* 55(7):5439-5452.

**Bertinat R**, Nualart F, Slebe JC, Yáñez AJ (2017) Sodium tungstate mimics insulin effect on nuclear translocation of FBPase in rat liver. *PostDoc Journal.* 5(3):1-6. doi: org/10.14304/SURYA.JPR.V5N3.1.

**Bertinat R**, Westermeier F, Silva P, Shi J, Nualart F, Li X, Yáñez AJ (2017) Anti-diabetic agent sodium tungstate induces the secretion of pro- and anti-inflammatory cytokines by human kidney cells. *J Cell Physiol.* 232(2):355-362.

Silva-Álvarez C, Salazar K, Cisternas P, Martínez F, Liour S, Jara N, **Bertinat R**, Nualart F (2017) Apical polarization of SVCT2 in apical radial glial cells and progenitors during brain development. *Mol Neurobiol.* 54(7):5449-5467.

Forman K, Martínez F, Cifuentes M, **Bertinat R**, Salazar K, Nualart F (2017) Aging selectively modulates vitamin C transporter expression patterns in the kidney. *J Cell Physiol.* 232(9):2418-2426.

**Bertinat R**, Nualart F, Yáñez AJ (2016) SGLT2 inhibitors: glucotoxicity and tumorigenesis downstream the renal proximal tubule? *J Cell Physiol.* 231(8):1635-7.

Salazar K, Martínez M, Ulloa V, **Bertinat R**, Martínez M, Ramírez E, Jara N, Bongarzone ER, Nualart F (2016) SVCT2 overexpression in neuroblastoma cells induces cellular branching that is associated with ERK signaling. *Mol Neurobiol.* 53(10):6668-6679.

**Bertinat R**, Nualart F, Li X, Yáñez AJ, Gomis R (2015) Preclinical and Clinical Studies for Sodium Tungstate: Application in Humans. *J Clin Cell Immunol.* 6(1). pii: 285.

**Bertinat R**, Silva P, Mann E, Li X, Nualart F, Yáñez AJ (2015) In vivo sodium tungstate treatment prevents E-cadherin loss induced by diabetic serum in HK-2 cell line. *J Cell Physiol.* 230(10):2437-46.

Gatica R, **Bertinat R**, Silva P, Kairath P, Slebe F, Pardo F, Ramírez MJ, Slebe JC, Campistol JM, Nualart F, Caelles C, Yáñez AJ (2015) Over-expression of muscle glycogen synthase in human diabetic nephropathy. *Histochem Cell Biol.* 143(3):313-24. RG and RB contributed equally to this work.

### SCIENTIFIC MEETINGS AND DIFUSSION (2018 to date)

Martínez F, Westermeier F, Gatica R, Negrón M, Soto C, Nualart F, **Bertinat R**. Cytosolic phosphoenolpyruvate carboxykinase is expressed in  $\alpha$ -cells from human and murine pancreas. XXXIII Reunión Anual Sociedad de Biología Celular de Chile. Puerto Varas, Chile. 25-29 Noviembre 2019.

Escobar A, Martínez F, Westermeier F, Gatica R, Nualart F, **Bertinat R**. Mitochondrial phosphoenolpyruvate carboxykinase is expressed in PP- but not beta-cells from human pancreatic islets. LXIV Reunión Anual de la Sociedad Argentina de Investigación Clínica. Mar del Plata, Argentina. 13-16 Noviembre 2019.

Martínez F, Westermeier F, Gatica R, Nualart F, **Bertinat R**. The key gluconeogenic enzyme cytosolic phosphoenolpyruvate carboxykinase is expressed in pancreatic islets. LXIII Reunión Anual de la Sociedad Argentina de Investigación Clínica. Mar del Plata, Argentina. 14-17 Noviembre 2018.

Forman K, Martínez F, **Bertinat R**, Cifuentes M, Salazar K, Pajarito P, Nualart F. Vitamina C oxidada y sus acciones beneficiosas en el riñón envejecido. XV Congreso Argentino de Gerontología y Geriatria. Mar del Plata, Argentina. 23-25 Agosto 2018.

**Bertinat R**. El páncreas endocrino y la diabetes: Mucho más que la célula beta productora de insulina. Conferencias CMA: Biología celular con aplicaciones biomédicas. Universidad de Concepción, Concepción, Chile. 17-18 Abril 2018.