

DOCTORADO EN CIENCIAS AGROALIMENTARIAS

**Andrés Córdova Suárez**

**Publicaciones (2016- presente)**

1. Astudillo, C., **Córdova, A.**, Oyanedel-Craver, V., Soto, C., Valencia, P., Henríquez, P., Jiménez, R. 2020. Prediction of the Limiting Flux and Its Correlation with the Reynolds Number during the Microfiltration of Skim Milk Using an Improved Model. *Foods*, 9: 1621. Q2.
2. **Córdova A**, Astudillo-Castro C, Ruby-Figueroa R, Valencia P, Soto C. 2020. Recent advances and perspectives of ultrasound assisted membrane food processing. *Food Research International* 133: 109163. Q1.
3. Vera C, Guerrero C, Aburto C, **Córdova A**, Illanes A. 2020. Conventional and non-conventional applications of  $\beta$ -galactosidasas. *Biochimia et Biophysica Acta: Proteins and Proteomics*: 1868: 140271. Q2.
4. Santibañez L, **Córdova A**, Astudillo C, Illanes A. 2019. Effect of the lactose hydrolysis on galacto-oligosaccharides mixtures subjected to nanofiltration: a detailed fractionation analysis. *Separation and Purification Technology*, 222: 342-353.Q1.
5. **Córdova A**, Saavedra J, Mondaca V, Vidal J, Astudillo-Castro C. 2019. Quality assessment and multivariate calibration of 5-HMF during a concentration process for clarified apple juice. *Food Control* 95: 106-111. Q1.
6. Henriquez M, Loewe V, Saavedra J, **Córdova A**, Lutz M. 2018. Effect of the type of packaging on the oxidative stability of pine nuts grown in Chile. *CyTA Journal of Food* 16: 255-262.Q3.
7. Saavedra J, **Córdova A**, Navarro R, Díaz-Calderón P, Astudillo-Castro C, Toledo L, Enrione J, Gálvez L. 2017. Industrial avocado waste: Functional compounds preservation by convective drying process. *Journal of Food Engineering* 198:81-90. Q1.
8. **Córdova A**, Astudillo, C, Santibañez C, Cassano A, Ruby R, Illanes A. 2017. Purification of galacto-oligosaccharides (GOS) by three-stage serial nanofiltration units under critical transmembrane pressure conditions. *Chemical Engineering Research and Design* 117: 488-499. Q2.
9. Vera C, **Córdova A**, Aburto C, Guerrero C, Suárez S, Illanes A. 2016. Synthesis and Purification of galacto-oligosaccharides: state of art. *World Journal of Microbiology and Biotechnology* 32:197. Q3.
10. **Córdova A**, Astudillo C, Vera C, Guerrero C, Illanes A. 2016. Performance of an ultrafiltration membrane bioreactor (UF-MBR) as a processing strategy for the synthesis of galacto-oligosaccharides at high substrate concentrations. *Journal of Biotechnology* 223: 26-35. Q2.

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11. **Córdova A**, Astudillo C, Vera C, Guerrero C, Illanes A. 2016. Assessment of the fouling mechanisms of an ultrafiltration membrane bioreactor during synthesis of galacto-oligosaccharides: effect of the operational variables. *Desalination* 393: 79-89. Q1.
12. **Córdova A**, Astudillo C, Giorno L, Guerrero C, Illanes A, Cassano A. 2016. Nanofiltration potential for the purification of highly concentrated enzymatically produced oligosaccharides. *Food and Bioproducts Processing* 98 :50-61. Q2.

### Proyectos con financiamiento externo (2016-presente)

1. Hydrocolloid based edible coatings as strategy to produce healthier French fries options.  
Financiamiento: FONDECYT  
Rol: Co-investigador.  
Duración: 2021-2024  
Año adjudicación: 2021
2. Novel Enzyme Membrane Bioreactors (MBR) for the synthesis of prebiotic oligosaccherides.  
Financiamiento: FONDECYT  
Rol: Investigador responsable  
Duración: 2020-2023  
Año adjudicación: 2020
3. Producción enzimática de jarabe lactofruetosado y su potencial de aplicación en alimentos.  
Financiamiento: PUCV  
Rol: Co-investigador  
Duración: 2019-2020  
Año adjudicación: 2019
4. Diseño, construcción y validación de un reactor prototipo UV LED a escala laboratorio para inactivación microbiana y estabilización de vinos.  
Financiamiento: FONDEF ID181/10146 CONICIT  
Rol: Postdoctorado  
Duración: 2019-2021  
Año adjudicación: 2018
5. Ultrafiltration membrane bioreactors (UF-MBR) assisted by ultrasound as strategy to improve the quality of Apple juice concentrates and upgrade pomaces: process modeling under a multivariate approach.  
Financiamiento: FONDECYT Postdoctorado 3170133  
Rol: Investigador responsable  
Duración: 2017-2020  
Año adjudicación: 2017