



*Curriculum Vitae*

# ***Dr. Italo F. Cuneo***

[Physicochemical & Environmental Plant Physiology]

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*Presently, I hold the position of an Associate Professor within the PUCV Department of Agriculture and Food Sciences. My primary research objectives revolve around gaining insights into the fundamental mechanisms that regulate plant behavior within a dynamically changing environment. Currently, my specific focus lies in examining the soil-root interface, delving into the biophysics and mechanics governing the behavior of intricate porous materials exposed to various stressors, including drought, salt, and mechanical deformation. Given the challenging landscape ahead for agriculture, my research program is dedicated to furnishing valuable information tailored for growers situated in arid and semi-arid regions, aiding them in their decision-making processes. Additionally, I am concurrently serving as the Director of Graduate Studies at the university.*

## **Education**

**Ph.D. 2017**

**University of California, Davis.**

Dissertation: *Physiological and Anatomical Responses of Grapevine Roots to Drought Stress and Recovery after Re-watering.*

Supervisor: Dr. Andrew J. McElrone

**M. Sc. 2012**

**Pontificia Universidad Católica de Valparaíso, Chile.**

Thesis: *Effect of climatic and anthocyanin variables on zoning of Pinot Noir wine in Casablanca valley.*

Supervisor: Prof. Dr. Jorge Saavedra T.

**B. Sc. 2010**

**Pontificia Universidad Católica de Valparaíso, Chile.**

Agricultural Engineer.

## **Academic Experience**

**2023 -**

**Associate Professor (Tenured)**, Pontificia Universidad Católica de Valparaíso, Chile.

**2017 - 2022**

**Assistant Professor**, Pontificia Universidad Católica de Valparaíso, Chile.

**2010 - 2017**

**Instructor**, Pontificia Universidad Católica de Valparaíso, Chile.

**2015**

**Graduate Research Assistant**, University of California, Davis.

**2007 - 2009**

**Undergraduate Research and Teaching Assistant**, Pontificia Universidad Católica de Valparaíso, Chile.

### **Administration Experience**

- 2023 -** **Member of the Board of Directors**, La Palma Experimental Station, Pontificia Universidad Católica de Valparaíso, Chile.
- 2023 -** **GOP – CINDA Member**, Centro Interuniversitario de Desarrollo, Chile.
- 2023 -** **Graduate Studies CRUCH Comission Member**, Consejo de Rectores de Chile.
- 2022 -** **Director of Graduate Studies**, Vicerrectoría Académica, Pontificia Universidad Católica de Valparaíso, Chile.
- 2022** **Secretary of the Faculty**, Pontificia Universidad Católica de Valparaíso, Chile.
- 2016 - 2017** **Executive Director**, Redes Chilenas de Investigación (ReCh), Chile.
- 2015 - 2016** **Vice President**, ChileUCD, USA.

### **Academic awards and honors**

- 2021** Associate Editor Frontiers of Plant Science
- 2020** Teaching Excellence PUCV award
- 2019** Distinguished Researcher PUCV award
- 2016** Katherine Esau Graduate Fellowship
- 2016** The Horace O. Lanza Scholarship
- 2016** The David E. Gallo award
- 2016** Henry A. Jastro Research Award
- 2013** Becas Chile. Full scholarship for doctoral studies.
- 2010** PUCV Scholarship for M. Sc. Studies.

2010

Labrador award, awarded by the Faculty of the School of Agronomy (PUCV).

### **Research - Publications**

30. Dorochesi F, Barrientos-Sanhueza C, Díaz-Barrera Á, **Cuneo IF** (2023) Enhancing Soil Resilience: Bacterial Alginate Hydrogel vs. Algal Alginate in Mitigating Agricultural Challenges. *Gels* 9(12), 988.

29. Heller-Fuenzalida F, **Cuneo IF**, Kuhn N, Peña-Neira A, Cáceres-Mella A (2023) Rootstock Effect Influences the Phenolic and Sensory Characteristics of Syrah Grapes and Wines in a Mediterranean Climate. *Agronomy* 13, 10.

28. Barrientos-Sanhueza C, Hormazabal-Pavat V, **Cuneo IF** (2023) Extreme drought enhances *Opuntia ficus-indica* fine root cells elasticity preventing permanent damage. *Theor. Exp. Plant Physiol.* <https://doi.org/10.1007/s40626-023-00278-0>

27. Tamayo M, Sepúlveda L, Ponce-Guequen E, Saavedra P, Pedreschi R, Cáceres-Mella A, Alvaro JE, **Cuneo IF** (2023) Hydric Behavior: Insights into Primary Metabolites in Leaves and Roots of Cabernet Sauvignon and Grenache Grapevine Varieties under Drought Stress. *Horticulturae* 9, 566.

26. Aris G, **Cuneo IF**, Pastenes C, Cáceres-Mella A (2022) Anthocyanin Composition in Cabernet Sauvignon Grape Skins: Effect of Regulated Deficit Irrigation in a Warm Climate. *Horticulturae* 8(9), 796.

25. Knipfer T, **Cuneo IF** (2022) Plant water relations for Sustainable Agriculture. *Frontiers in Plant Science* DOI 10.3389/fpls.2022.979804.

24. Peirano-Bolelli P, Heller-Fuenzalida F, **Cuneo IF**, Peña-Neira A, Cáceres-Mella A (2022) Changes in the Composition of Flavonols and Organic Acids during Ripening for Three cv. Sauvignon Blanc Clones Grown in a Cool-Climate Valley. *Agronomy* 12: 1357.

23. Beyer CP, Barrientos-Sanhueza C, Ponce E, Pedreschi R, **Cuneo IF**, Alvaro JE (2022) Differential hydraulic properties and primary metabolism in fine roots of avocado trees rootstocks. *Plants* 11: 1059.

22. Barrientos-Sanhueza C, Cargnino-Cisternas D, Diaz-Barrera A, **Cuneo IF** (2022) Bacterial Alginate-Based Hydrogel Reduces Hydro-Mechanical Soil-Related Problems in Agriculture Facing Climate Change. *Polymers* 14:922.

21. Salgado E, Livellara N, Chaigneau E, Varas F, **Cuneo IF** (2021) Hourly Relationship between Reference Evapotranspiration and Shoot Shrinkage in Walnut Trees and Pomegranate under Deficit Irrigation. *Plants* 11(1):31.

20. Barrientos-Sanhueza C, Mondaca P, Tamayo M, Álvaro JE, Diaz A, **Cuneo IF** (2021) Enhancing the mechanical and hydraulic properties of coarse quartz sand using a water-soluble hydrogel based on bacterial alginate for novel application in agricultural contexts. **Soil Science Society of America Journal** 85: 1880-1893.
19. Whitney C, Fernandez E, Schiffers K, **Cuneo IF**, Luedeling E (2021) Forecasting yield in temperate fruit trees from winter chill accumulation. **Acta Horticulturae** 1327. 10.17660/ActaHortic.2021.1327.53
18. Beyer CP, **Cuneo IF**, Alvaro JE, Pedreschi R (2021) Confronting the differential physiology of 'Hass' avocado grafted onto two different rootstocks in a controlled environment. **Acta Horticulturae** 1327. 10.17660/ActaHortic.2021.1327.16
17. Lindh V, Uarrota V, Zulueta C, Álvaro JE, Valdenegro M, **Cuneo IF**, Mery D, Pedreschi R (2021) Image analysis reveals that lenticel damage does not result in black spot development but enhances dehydration in *Persea americana* Mill. cv. Hass during prolonged storage. **Agronomy** 11: 1699.
16. Reingwartz I, Uretsky J, **Cuneo IF**, Knipfer T, Reyes C, Walker MA, McElrone A (2021) Inherent and Stress-Induced Responses of Fine Root Morphology and Anatomy in Commercial Grapevine Rootstocks with contrasting Drought resistance. **Plants** 10, 1121.
15. Rojas G, Fernandez E, Whitney C, Luedeling E, **Cuneo IF** (2021) Adapting sweet cherry orchards to extreme weather events – Decision Analysis in support of farmers' investments in central Chile. **Agricultural Systems** 187: 103031.
14. Beyer CP, **Cuneo IF**, Álvaro JE, Pedreschi R (2021) Evaluation of aerial and root plant growth behavior, water and nutrient use efficiency and carbohydrate dynamics for Hass avocado grown in a soilless and protected growing system. **Scientia Horticulturae** 277. 109830.
13. **Cuneo IF**, Barrios-Masias F, Knipfer T, Uretsky J, Reyes C, Lenain P, Brodersen C, Walker MA, McElrone A (2021) Differences in grapevine rootstock sensitivity and recovery from drought are linked to fine root cortical lacunae and root tip function. **New Phytologist** 229: 272-283.
12. Fernandez E, **Cuneo IF**, Whitney C, Luedeling E (2020) Prospects of decreasing winter chill for deciduous fruit production in Chile throughout the 21st century. **Climatic Change** 159: 423-439.
11. Alvarado L, Saa S, **Cuneo IF**, Pedreschi R, Morales J, Larach A, Barros W, Besoain X (2020) A comparison of immediate and short-term defensive responses to *Phytophthora* species infection in both susceptible and resistant walnut rootstocks. **Plant Disease** 104: 921-929.
10. Morales J, Besoain X, **Cuneo IF**, Larach A, Alvarado L, Cáceres-Mella A, Saa S (2019) Impact of nitrogen fertilization on *Phytophthora cinnamomi* root related damage in *Juglans regia* saplings. **HortScience** 54 (12): 2188-2194.

9. Fernandez E, **Cuneo IF**, Luedeling E, Alvarado L, Farías D, Saa S (2019) Starch and hexoses concentrations as physiological markers in dormancy progression of sweet cherry twigs. *Trees* 33: 1187-1201.
8. McElrone AJ, Mason JM, Knipfer T, Albuquerque C, Brodersen CR, **Cuneo IF** (2018) Changes in xylem conducting capacity and water storage across species: how can variable air content of xylem cells affect sap flow? *Acta Horticulturae*. DOI: 10.17660/ActaHortic.2018.1222.2
7. Knipfer T, Barrios-Masias F, **Cuneo IF**, Bouda M, Albuquerque P, Brodersen C, Kluepfel DA, McElrone AJ (2018) Variations in xylem embolism susceptibility under drought between intact saplings of three walnut species. *Tree Physiology* 38: 1180 – 1192.
6. Caceres-Mella A, Ribalta-Pizarro C, Villalobos-González L, **Cuneo IF**, Pastenes C (2018) Controlled water deficit modifies the phenolic composition and sensory properties in Cabernet Sauvignon wines. *Scientia Horticulturae* 237: 105-111.
5. **Cuneo IF**, T Knipfer, P Mandal, C Brodersen & A McElrone (2018) Water uptake can occur through woody portions of roots and facilitates localized embolism repair in grapevine. *New Phytologist* 218: 506-516
4. Knipfer T, **Cuneo IF**, Earles JM, Reyes C, Brodersen C, McElrone AJ (2017) Storage compartments for capillary water rarely refill in an intact woody plant. *Plant Physiology* 175: 1649-1660.
3. **Cuneo IF**, Knipfer T, Brodersen CR, McElrone AJ (2016). Mechanical failure of fine root cortical cells initiates plant hydraulic decline during drought. *Plant Physiology* 172 (3): 1669-1678.
2. Knipfer T, **Cuneo IF**, Brodersen CR, McElrone AJ (2016) In-situ visualization of the dynamics in xylem embolism formation and removal in the absence of root pressure: A study on excised grapevine stems. *Plant Physiology* 171 (2): 1024-1036.
1. **Cuneo IF**, Salgado E, Castro M, Cordoba A, Saavedra J (2013) Effects of climate and anthocyanin variables on the zoning of Pinot Noir wine from the Casablanca Valley. *Journal of Wine Research* 24(4): 264-277.

### **Research - Projects**

**2023-2025 PI FONDEF IDeA - ANID ID23I10033.** “Desarrollo y evaluación de un hidrogel bacteriano súper absorbente para mitigar los efectos de la sequía en la agricultura de zonas semiáridas (DEHMIS)”. (US\$ 248,000)

**2023-2027 CO-I FONDECYT REGULAR - ANID 1231075.** “Production, characterization, and evaluation of bacterial alginate as a hydrogel for agricultural applications facing climate

change”.

**2022-2026 PI FONDECYT REGULAR - ANID 1220235.** “Unravelling the biophysical modulations of the soil-mucilage-root interface in response to drought and its impact on stomatal responses in different crop species (SoMuRo)”. (US\$ 260,000)

**2023-2026 CO-I ECOS-ANID ECOS220012.** “Time-lapse Imagery with a Differential stereoscope for Evapotranspiration measurements”

**2021-2024 CO-I ECOS-ANID C21E01.** “Hydrogels based on the biowaste chitin nanofibers to save water in Chilean agriculture (NanoBioGel)”

**2022-2025 Sponsor POSTDOC ANID.** “Arbuscular mycorrhizal fungi as part of microbial terroir in vineyards: Effect on grapevine volatile metabolome and wine aroma”.

**2021 CO-I DI-PUCV.** “Production and characterization of bacterial alginates: evaluation of their use in agriculture”.

**2020 – CO-I DI-PUCV.** “Núcleo de Investigación en Agricultura Protegida y Cambio Climático”.

**2018-2021 PI FONDECYT INICIACION - CONICYT 11180102.** “Understanding how drought stress affects water uptake capacity at different developmental zones along the length of grapevine fine roots”. (US\$ 133,821)

**2019-2023 CO-I FONDECYT REGULAR - CONICYT 1190816.** “Rootstocks/scion hydraulic interaction: unraveling the contribution of root apoplastic, symplastic and transcellular water transport pathways on scion physiological performance”. (US\$ 258,336)

**2017-2020 CO-I BMBF** “Phenological and Social Impacts of Temperature Increase - A Case Study of Two countries (PASIT)”. (US\$ 1,409,946)

**2018 PI DI-PUCV** “Understanding how abiotic stressors such as drought affect water uptake capacity at different zones along the length of grapevine fine roots”. (US\$ 2,800)

### **Research - Scientific Conferences, meetings, and abstracts**

Neserke-Molina E, Barrientos-Sanhueza C, **Cuneo IF** (2023) Pressure-volume curves reveal the mechanics behind root resistance to drought stress in *Opuntia ficus-indica*. XVIReBiVe.

Neserke-Molina E, Barrientos-Sanhueza, Zurita-Silva A, Knipfer T, McElrone AJ, **Cuneo IF** (2023) Deciphering root resilience of grapevine native to the Atacama Desert of Chile. XVIReBiVe.

Barrientos-Sanhueza C, **Cuneo IF** (2022) Grapevine rootstocks selected from hyper arid environments of Chile: a new technology to confront saline and hypersaline environments. XVRReBiVe.

Barrientos-Sanhueza C, **Cuneo IF** (2022) Biomechanics of *Opuntia ficus-indica* roots exposed to extreme drought. XVRReBiVe.

**Cuneo IF** (2021) The vulnerable pipeline: drought stress responses in the SPAC in different fruit crops. Simposio Internacional "Fruticultura y Cambio Climático en Zonas Templadas – Adaptación y Mitigación". Virtual.

Beyer C, Barrientos-Sanhueza C, Ponce E, Pedreschi R, **Cuneo IF**, Álvaro JE (2021) Diferencias de portainjertos en aguacate: Metabolismo y conductividad hidráulica de las raíces Rootstock differences in Avocado trees: Root metabolism and hydraulic conductivity. VII Congreso Internacional de Ingeniería Agroindustrial. "Agroindustria y Sostenibilidad", CIIA 2021, Medellín, Colombia.

Schiffers K, Whitney C, Fernandez E, **Cuneo IF**, Luedeling E (2021) Forecasting yield in temperate fruit trees from winter chill accumulation. 4th International Symposium on Horticulture in Europe (SHE). Virtual.

Beyer C, **Cuneo IF**, Álvaro JE, Pedreschi R (2021) Confronting the differential physiology of avocado Hass grafted onto two different rootstocks in a controlled environment. 4th International Symposium on Horticulture in Europe (SHE). Virtual.

Rojas G, Fernandez E, Whitney C, Luedeling E, **Cuneo IF** (2020) Embracing Uncertainty in Complex Systems -Assessing Alternatives to Face Climate Change Impacts in Mediterranean Climate Orchards. Tropentag 2020 - Food and nutrition security and its resilience to global crises.

**Cuneo IF** (2020) Control de la interfaz suelo-raíz en la respuesta hidráulica en plantas sometidas a sequía. Coloquio Sociedad Biología Vegetal de Chile.

**Cuneo IF**, Knipfer T, Barrios-Masias F, Reyes C, Brodersen C, McElrone A (2018) Highly Complex Porous Pipes: Biophysics and Physiology of Fine Roots Water Uptake Under Drought. XIIIReBiVe.

Knipfer T, **Cuneo IF**, Reingwartz I, Reyes C, McElrone A (2018) Root water uptake and long-distance transport under drought: Novel insights into intact plants using X-ray computed microtomography. EGU General Assembly Conference Abstracts 20: 172.

Baird G, Alvarado L, Luedeling E, Fernandez E, **Cuneo IF**, Bambach N, Farías D, Saa S (2018) Modeling bud dormancy and burst as a continuum: ongoing study in cherry trees in Chile. State of the art in tree dormancy – a blueprint for future research and modelling, Bonn, Germany.

Knipfer T, **Cuneo IF**, Reingwartz I, Reyes C, McElrone AJ (2018) Root water uptake and



long-distance transport under drought: Novel insights into intact plants using X-ray computed microtomography. European Geosciences Union General Assembly, Vienna, Austria.

Berry ZC, Venturas MD, Smith D, Knipfer T, McElrone A, Brodersen C, Choat B, Jacobsen AL, Hacke U, Pratt RB, Miller ML, Domec JC, McCulloh K, **Cuneo IF**, Albuquerque C, Johnson D (2017) A comparison of micro-CT imaging and excised segment methods to measure xylem embolism using a relatively long-veined species, *Castanea dentata*. Ecological Society of America Meeting: Linking biodiversity, material cycling and ecosystem services in a changing world, Portland, USA.

McElrone AJ, Knipfer T, Albuquerque C, Brodersen CR, **Cuneo IF**, Mason JM (2017) Dynamics changes in tissue water storage and conducting capacity in a variety of woody species and plant organs: implications for the interpretation of water relations parameters from sap flow sensor data. X International Workshop on Sap Flow, California, USA.

**Cuneo IF** (2016) Roots: the fascinating hidden half. IV Coloquio: Recuperando Chile a través del conocimiento – Un modelo a ensamblar, Montreal, Canada.

Montecino D, **Cuneo IF** (2015) Is it ethical to feed 9 billion humans? Current and future impacts of agriculture and farming in the environment and animal populations. Chile – California Conference (C3): Envisioning the future, creating it together, California, USA.

**Cuneo IF**, Knipfer T, McElrone AJ (2014) In vivo visualization of root traits related to drought tolerance in grapevine rootstocks: utilization of neutron radiography and high-resolution computed tomography. Chile-UCD Conference: 50 Years of Cooperation, Academic and Scientific Exchanges, California, USA.

## **Teaching**

### **AGR 258-01 PLANT PHYSIOLOGY**

This is a core course offered to second year students in the horticulture and Agronomy track. The course is a theoretical / hands-on lab experience where the students learn key mechanisms related to 1) plant-water relations; 2) photosynthesis; and 3) growth and development.

### **DCA021-01 BIOSTATISTICS – EXPERIMENT DESIGN AND DATA ANALYSIS**

The course is offered for graduate students of the PhD program “Doctorado en Ciencias Agroalimentarias” and the MSc program. This course covers basic topics of experiment design and data analysis using R, under a frequentist philosophy.

### **DCA026-01 BAYESIAN STATISTICS AND MACHINE LEARNING**

The course is offered for graduate students of the PhD program “Doctorado en Ciencias Agroalimentarias” and the MSc program. This course covers advanced topics in statistics, specifically Bayesian and machine learning approaches.

## **DCA 017-01 BIOPHYSICAL & ENVIRONMENTAL PLANT PHYSIOLOGY**

The course is offered for graduate students of the PhD program “Doctorado en Ciencias Agroalimentarias”. This course covers advanced topics of plant physiology, anatomy and biophysics in relation to a changing environment.

## **AGR 1503/517 VITICULTURE**

The course is part of a series of courses offered in senior year in the minor of Pomology. This is a theoretical-practical class that focuses on the cultivation of table grapes, delivering knowledge from basic concepts of the Vitis species to applied managements specific to table grape production. The course covers topics such as: the structure of the grapevine: vegetative and reproductive morphology and anatomy; developmental physiology: vegetative growth, flowering and fruiting; field management: canopy management, irrigation and nutrition; soil requirements; pests and diseases of the vine; theory, principles, and practices of pruning; plant materials and the certification process; and frost protection. Additionally, this course covers important related topics such as table grape market, new cultivated varieties, and new trends in table grape production. The course is taught together with Agronomists/Viticulturists Vicente Valdivieso, Dragomir Ljubetic, and Alvaro Azancot; include 2 field trips and is offered every year during the first semester (fall).

## **AGR 1563 VITICULTURE II (Grapevine Growth and Physiology)**

The course is part of a series of courses offered in senior year in the minor of Viticulture and Enology. This class is well-focused on wine-grapes and most of the discussion at theoretical level is based on the needs of the wine industry. In general, the course covers the impact of physiological variables such as photosynthesis, mineral nutrition, and water relations on fruit ripening and composition. The theoretical knowledge is translated into specific vineyard practices. For this reason, the course has an important hands-on dimension where the students constantly interact with the PUCV vineyard located in the experimental station. On top of this, the course requires 1-2 field trips.

### **Teaching – Advising – Examination committees**

#### **UNDERGRAD ADVISING**

Since June, 2017 I have guided 22 senior undergrad students in their final projects.

#### **UNDERGRAD EXAMINATION COMMITTEES**

Since June, 2017 I have been part of 36 examination committees.

#### **GRADUATE ADVISING**

Currently guiding 5 MSc theses and 2 PhD dissertation.

## GRADUATE EXAMINATION COMMITTEES

Since June, 2017 I have been part of 3 MSc examination committee.

### **Outreach – Technical notes and extension talks - presentations**

**Cuneo IF** (2022) Portainjertos de vid, ciencia y técnica. Conferencia RedAgrícola, ICA – Perú (15/06/2021)

**Cuneo IF** (2022) Portainjertos de palto, ciencia y técnica. Conferencia RedAgrícola, ICA – Perú (16/06/2021)

**Cuneo IF** (2021) Shining a spotlight on avocado rootstocks. Conferencia RedAgrícola, Trujillo – Perú (2021)

**Cuneo IF** (2020) Portainjertos de vid: la raíz del problema es también la raíz de la solución. Conferencia Uva de Mesa RedAgrícola, ICA – Perú (26/08/2020)

**Cuneo IF** (2020) Confrontando la sequía: Respuesta fisiológica en raíces finas de portainjertos contrastantes de vid. Red Agrícola. (Junio, 2020).

Rojas G, Fernández E, **Cuneo IF** (2020) Adaptación de los huertos de cerezo a eventos meteorológicos riesgosos. Red Agrícola. (Julio, 2020).

Fernández E, **Cuneo IF** (2019) El silencioso impacto del cambio climático en los frutales de hoja caduca. Red Agrícola. (Noviembre, 2019).

**Cuneo IF**, Tamayo M (2019) “Lo esencial es invisible a los ojos”: Raíces, elección de portainjerto y calidad de plantas de vid. Red Agrícola. (Julio, 2019).

**Cuneo IF** (2018) (Nuevos) portainjertos de vid: La Re-ingeniería parte en la raíz. Seminario UVANOVA “Desde la Reingeniería a la Revolución en la Uva de Mesa”, Gran salón Casa de Piedra, Chile (10/08/2018)

**Cuneo IF** (2018) Portainjertos de vid: la caja negra. Simposio “Nuevas variedades de uva de mesa”. Organizado por Chilfresh, Hacienda Santa Martina – Lo Barnechea, Chile (31/07/2018)

**Cuneo IF** (2018) Fisiología de la vid en zonas tropicales. (03/07/2018)

### **Outreach – “Mil científicos mil aulas” – Explora Conicyt**

**Cuneo IF** (2018) “Lo esencial es invisible para los ojos”: las raíces y su crítica importancia en el funcionamiento de árboles y el ambiente que nos rodea. **Escuela Presidente Eduardo Frei Montalva.** (06/09/2018)

**Cuneo IF** (2018) “Lo esencial es invisible para los ojos”: las raíces y su crítica importancia en el funcionamiento de árboles y el ambiente que nos rodea. **Escuela Libre Meraki**. (22/08/2018)

**Cuneo IF** (2018) “Lo esencial es invisible para los ojos”: las raíces y su crítica importancia en el funcionamiento de árboles y el ambiente que nos rodea. **Escuela Básica Gastón Ossa Saint Marie**. (31/89/2018)

### **Outreach – Letters to the Editor**

**Cuneo IF** (2020) Fango en la carrera académica. *El Mostrador* (13/12/2020)

**Cuneo IF**, Besoain X, Celis JL, Pedreschi R, Cáceres A, Valdenegro M, Huenchuleo C (2019) Intensificación Ecológica. *El Mostrador* (10/09/2019).

Abarca C, **Cuneo IF**, Milla-Moreno E, Paredes D, Undurraga C (2017) Modificación al decreto 664 Becas Chile: Un año, un decreto, una comunidad en angustia. *El Mostrador* (11/05/2017).

Abarca C, **Cuneo IF**, Paredes D, Undurraga C (2017) Becas Conicyt en el extranjero. *El mostrador* (15/05/20147).

**Cuneo IF**, Milla-Moreno E, Núñez-Parra A, Undurraga C, Valiente F (2016) Golazo en contra de la Ciencia y Tecnología. *El Mostrador* (10/12/2016).

Fuentes-González C, **Cuneo IF** (2016) Inmovilidad del Mineduc. *La Tercera* (29/08/2016).

### **Outreach – Press Release**

Araos, R (2018) El atractivo de los nuevos portainjertos en uva de mesa. *El Mercurio Campo* (20/08/2018).

Cruz, C (2018) Experto en portainjertos: “La clave está en la raíz, antes que la variedad”. UVANOVA (<http://www.uvanova.cl/articulos/experto-en-portainjertos-la-clave-esta-en-la-raiz-antes-que-la-variedad/>; 03/08/2018).

Godoy-Ortiz, L (2018) Vinos de Calidad, respetando la tierra. *La Segunda* (21/02/2018).

**Cuneo IF**, Milla-Moreno E, Lagos A (2017) Dieciocho propuestas de Redes Chilenas de Investigadores (ReCh) a los candidatos/as presidenciales. *Redes Chilenas* ([www.redeschilenas.cl](http://www.redeschilenas.cl); 08/05/2017)

Leighton P (2017) Conicyt mejora beneficios para sus becarios en el extranjero. *El*

Mercurio (22/05/2017).

Leighton P (2016) Investigadores chilenos se unen para canalizar inquietudes y propuestas. El Mercurio (08/12/2016).

López MJ (2016) Por donde becas, pagas. Revista Capital (23/12/2016).

Jaque JM (2016) La diáspora científica. La Tercera (11/09/2016).

**Outreach – Radio interview**

López E, **Cuneo IF** (2018) “Abriendo surcos, se escucha el agro”. Radio Cosmos (13/07/2018).