Victor Funes-Leal

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Contact Information

Department of Agricultural and Consumer Economics
University of Illinois at Urbana-Champaign
1301 W Gregory Dr., 414 Mumford Hall
Urbana, IL 61801

+1 217-721-4202
victorf2@illinois.edu
https://victorefunes.github.io/

Education

University of Illinois at Urbana-Champaign, Urbana, IL

Ph.D., Agricultural and Consumer Economics, Expected graduation date: May 2024

University of Illinois at Urbana-Champaign, Urbana, IL

M.A., Applied Statistics, 2023

National University of La Plata, La Plata, Argentina

M.A., Economics, 2015

Economics, National University of Tucumán, Tucumán, Argentina

B.A. (Licenciado), Economics, 2006

Fields of Research Interest

Primary: Production Economics, Applied Econometrics
Secondary: Agricultural Economics, Development Economics

Job Market Paper

"Information Provision and Network Externalities: The Impact of Genomic Testing on the Dairy Industry" *with Jared Hutchins*

Working Papers

"The Price of Fame: The Effect of Award-Winning Pedigrees on the Price of Livestock Genetics" *with Jared Hutchins*

"Measuring Flood Resilience using Remote Sensors"

Publications

Gatti, Nicolás, Funes-Leal Victor and Amaro, Ignacio. 2023. **"Economic Value of Brangus Cattle Traits in Argentina"**, Forthcoming in *Agribusiness: an International Journal*

Alejo, Javier and Funes-Leal, Víctor. 2021. **"Ecuaciones de Mincer de parejas bajo un esquema de selección bivariado" (Mincer Equations for Couples under a Bivariate Selection Model)**, *Revista de Análisis Económico* 36(1): 3-23

Grants and Fellowships

University of Illinois at Urbana-Champaign

ACE Department Travel Grant	2022 and 2023
Global Food Security Graduate Fellowship	2022
Marilyn Downsing Fellowship	2019
Henry Fellowship	2018

Universidad Nacional de La Plata

MA in Economics Fellowship	2014

Conference Presentations

"Information Provision and Network Externalities: The Impact of Genomic Testing on the Dairy Industry" — March 2024, Fort Collins, CO
NC1034 Annual Meeting

"Economic Value of Expected Progeny Differences (EPDs) : of Angus and Brangus cattle breeds in Argentina" — July 2023, Washington, DC
Poster presented at the AAEA Annual Meeting

"Economic Value of Expected Progeny Differences (EPDs) : of Angus and Brangus cattle breeds in Argentina" — July 2023, Buenos Aires, Argentina
Poster presented at the 27^{th} Annual Meeting of the International Consortium for Applied Bioeconomic Research

"The Price of Fame: The Effect of Award-Winning Pedigrees on the Price of Livestock Genetics" — August 2022, Anaheim, CA
Poster presented at the AAEA Annual Meeting

Teaching Experience

University of Illinois at Urbana-Champaign

Applied Econometrics — Fall 2023
Teaching Assistant

Spreadsheet Models and Applications
Teaching Assistant — Spring 2020

Environmental and Development Economics
Teaching Assistant — Fall 2019-Fall 2020

National University of the Northeast — 2017-2018

Mathematics for Economists
Lecturer — Spring 2017- Spring 2018

Introductory Statistics
Lecturer — Fall 2017

National University of the La Plata — 2015

Impact evaluation of Public Policies
Teaching Assistant — Spring 2015

Professional Experience

Research Assistant — May 2021 - Present
Department of Agricultural and Consumer Economics
University of Illinois at Urbana - Champaign
Supervisor: Jared Hutchins

Consultant — January 2015 to December 2015
The World Bank
Remote Supervisors: Ezequiel Molina and Christophe Rockmore

Research Assistant — December 2013 to December 2014
Center for Distributive, Labor and Social Studies (CEDLAS)
La Plata, Argentina
Supervisor: Leonardo Gasparini and María Laura Alzúa

Economic Analyst — April 2008 to December 2012
Fundación del Tucuman
Tucumán, Argentina

Research Assistant — March 2005 to December 2006
Universidad Nacional de Tucumán
Tucumán, Argentina

Presentations at Academic Seminars and Conferences

2023 American Association of Agricultural and Applied Economics Annual Meeting, Washington, DC
2023 International Consortium for Applied Bioeconomic Research Annual Meeting, Buenos Aires (Argentina)
2022 American Association of Agricultural and Applied Economics Annual Meeting, Camarillo, CA
2015 Argentinean Association of Economics Annual Meeting, Salta (Argentina)
2014 Argentinean Association of Economics Annual Meeting, Buenos Aires (Argentina)

Departmental and Professional Services

Referee services: American Association for Agricultural Economics (2022, 2023 and 2024), Argentinean Agricultural Economics Review (2023)
Member of the Graduate Students Organization from the Agricultural and Consumer Economics Department (2021)

Computer Programs

Python, Stata, R, LaTeX, Git (Advanced)
Matlab, ArcGIS, SQL, Unix Shell (Intermediate)

Personal information

Citizenship: Argentina
Languages: Spanish (Native), English (Advanced)

References

Jared Hutchins (Advisor)
Assistant Professor — 217-300-6781
Agricultural and Consumer Economics — jhtchns2@illinois.edu
University of Illinois at Urbana-Champaign

Mary Arends-Kuenning
Associate Professor — 217-333-0753
Agricultural and Consumer Economics — marends@illinois.edu
University of Illinois at Urbana-Champaign

Nicolás Gatti
Research Economist
National Institute of Agricultural Technology (Argentina) — gatti.nicolas@inta.gob.ar

Nicholas Paulson (Teaching)
Professor — 217-333-1812
Agricultural and Consumer Economics — npaulson@illinois.edu
University of Illinois at Urbana-Champaign

Abstracts

"Information Provision and Network Externalities: The Impact of Genomic Testing on the Dairy Industry' *with Jared Hutchins*

We use differences-in-differences with a matched control group method to estimate the long-term impacts of genomic selection for dairy cattle genetics in the American market. Genomic selection is an application of big data that uses the entire genome of an animal to test for the presence of a set of traits. Unlike pre-existing technologies that require several years of data from a bull's daughters, an animal can be tested as soon as it is born, allowing breeders to identify the "best" animals much faster. Using a data set of all bulls marketed in the US from 2000 to 2020, we find that genomic selection significantly increased genetic gains for all measured traits, particularly milk production, protein, and fat yields, but also increased levels of inbreeding depression, a

reduction in the performance of animals whose parents have a high degree of relatedness, as a consequence of genetics companies breeding more animals from established lines to respond to an increased demand towards such lines. Our estimation shows that the increased inbreeding rate of American bulls caused a loss of between 3.6 to 6.7 billion dollars to the entire industry from 2011 to 2019. Solving this externality will require either a mechanism to internalize the harmful effects, such as paying a much higher price for more inbred sires, or a collective action mechanism to select which lines will be bred in the next generation.

"The Price of Fame: The Effect of Award-Winning Pedigrees on the Price of Livestock Genetics" *with Jared Hutchins*

We estimate the impact of winning an award at a cattle show on the price of cattle genetics and that of their relatives. Dairy farmers choose from various dairy bulls for breeding. These bulls possess genetic traits that reflect their productivity, resiliency to disease, and physical characteristics. Another relevant attribute of dairy bulls is their pedigree prestige, which dairy farmers can use as a proxy for quality. We test the importance of pedigree prestige in determining dairy bull prices by examining the winners and runners-up of "Premier Sire" at the annual World Dairy Expo. Using an event study framework, we find that bulls that win Premiere Sire experience a 10% in their price compared to the second-place winner. This impact is also transmitted to their relatives, meaning the effects of prestige spillover into their genetic network.

"Measuring Flood Resilience using Remote Sensors"

What are the effects of floods on reporting likelihood and observable outcomes? I examine this question in the context of a Randomized Control Trial aimed at adopting a specific new technology for small-scale farmers in Bihar, India. I study two effects: first, to what extent adaptation to a regular rainfall pattern (the South Asian Monsoon) makes farmers under-report the impact of floods/heavy rainfall. To do so, I use inundation maps from satellite-measured floodwater to compare observed and reported floods. Second, given that I can determine which households live near flooded areas, I measure their impact on food security outcomes. On the one hand, there is significant evidence in favor of under-reporting bias, but I also find little evidence of impacts on food security outcomes.

Gatti, Nicolás, Funes-Leal Victor and Amaro, Ignacio. 2023. **"Economic Value of Brangus Cattle Traits in Argentina"**, Revision requested, *Agribuisness: an International Journal*

Starting in the early 2000s, a boom in demand for agricultural commodities displaced cattle ranching out of the most productive areas of the Pampas' prairie. The crossbreeds between Angus and Hereford with Brahman, i.e., Brangus and Braford, have been successfully adopted across Argentina. However, little is known about the specific bulls' traits that drive the demand for cattle genetic selection outside the Pampas. Obtaining the economic value of traits would help to identify the demand for adapting livestock production to different ecosystems while preserving the meat quality of Angus and Hereford cattle. We estimated hedonic price models using Brangus bull sales data from two cattle breeding ranches in the north of Cordoba province. Cattle ranchers prefer observed traits such as weight, coat color, and age, while genetic indicators such

as Expected Progeny Differences (EPDs) have secondary importance. We argue that stronger preferences for read-coated bulls, as opposed to black-coated bulls, could be associated with the demand for reducing heat stress; the lack of association between EPDs and prices may be related to unobservable variables such as ranchers' characteristics and that the value of genetics is implicit in the studs' reputation.

Alejo, Javier and Funes-Leal, Víctor. 2021. **"Ecuaciones de Mincer de parejas bajo un esquema de selección bivariado" (Mincer Equations for Couples under a Bivariate Selection Model)**, *Revista de Análisis Económico* 36(1): 3-23

This working paper explores the effect of joint labor decisions on the study of wage regression models. The estimation of Mincer equations suffers from numerous sources of bias, including the sample selection problem generated by the fact that agents' decisions to work are not independent of their wage levels. Most of the papers correct for this bias using a model of individual labor participation. However, recent trends in the labor market show greater participation of women in the labor force and seem to indicate that the joint decision of the spouses is increasingly relevant in determining the selection mechanism. A bivariate version of Heckman's method is an interesting alternative to solve this problem. Although the estimates align with the previous literature, the results indicate that the couple's joint decision is a relevant factor in the selection bias.