

Department of Economics, University of Southern California
3620 S. Vermont Avenue, Los Angeles - CA 90089
Ph: (213)-740-8842 - Fax: (213)-740-8543
brocas@usc.edu - <https://isabellebrocas.org>

Nationality: French, US.

Current Position

Department of Economics, UNIVERSITY OF SOUTHERN CALIFORNIA.
Professor, 2015-present.

Other Affiliations

Center for **Economic Policy Research (CEPR)**, London.
Research Fellow “Industrial Organization”, 2009-present (Research Affiliate 2000-2009).

Theoretical **REsearch in Neuroeconomic Decision-making (TREND)**.
Co-Director.

Los Angeles **Behavioral Economics Laboratory (LABEL)**.
Co-Director.

Neuroscience **Graduate Program (NGP)**, University of Southern California.
Member, 2016-present.

Visiting Fellow at the **Institute for Advanced Study in Toulouse (IAST)**, 2024-present.

Research Interests

Neuroeconomic Theory and Behavioral Economics,
Experimental Economics,
Industrial Organization, Auction Theory and Contract Theory.

Education

UNIVERSITY OF TOULOUSE, Toulouse, France.

1997- Ph.D in Economics. Supervisor: Pr. Jean-Jacques Laffont.
Thesis title: “Information, Regulation and Research and Development”.

1995- Diplôme Européen d’Etudes Quantitatives Approfondies.

1994- DEA D’Economie Mathématique et Econométrie (Master degree in Mathematical Economics & Econometrics).

1994- Magistère d’Economiste Statisticien (Master degree in Economics & Statistics).

1993- Maîtrise d’Econométrie (Bachelor degree in Econometrics).

Past Academic Appointments

Department of Economics, UNIVERSITY OF SOUTHERN CALIFORNIA.
Associate Professor, 2010-2015.

Department of Economics, UNIVERSITY OF SOUTHERN CALIFORNIA.
Assistant Professor, 2003-2010.

ECARES, FREE UNIVERSITY OF BRUSSELS.
Post-doctoral Researcher, 1997-2002.

Languages: French, English, and Spanish.

Courses Created and Teaching Experience

UNIVERSITY OF SOUTHERN CALIFORNIA, Department of Economics, Los Angeles, USA.
“Industrial Organization”, “Economic Policy Issues”, “Experimental Economics” and
“Behavioral economics”, “Neuro-Economics” (BA),
“Industrial Organization” and “Contracts, Organizations and Institutions” (MA)
“Auction Theory”, “Contract Theory”, “Experimental Economics”, “Behavioral economics”,
“Experimental Methods I ”, “Experimental Methods II”,
“Economics and Psychology” and “Advanced Neuro-Economics” (Ph.D.)

COLUMBIA UNIVERSITY, Department of Economics, New York, USA.
“Industrial Organization” and “Economics of Uncertainty and Information” (BA).

COLUMBIA UNIVERSITY, Graduate School of Business, New York, USA.
“Managerial Economics” (MBA).

FREE UNIVERSITY OF BRUSSELS, Brussels, Belgium.
“Economics of R&D”, “Auction Theory”, and “Advanced Microeconomics” (Ph.D.)

NEW ECONOMIC SCHOOL, Moscow, Russia.
“Regulation and Contract Theory” (Ph.D.)

Professional Activities

Member of the Editorial Board of the *American Economic Journal: Microeconomics*,
2023 - present.

Co-organizer of the Los Angeles Experiments (LAX) conference 2023, USC; 2024, Caltech
Board member of TeensLab, Universidad Loyola

Co-editor of the special issue “The evolution of choice and reasoning from childhood
to adulthood” at the *Journal of Behavioral and Experimental Economics*, 2022 - present.

Co-editor of the special issue “Understanding Cognition and Decision Making by Children”
at the *Journal of Economic Behavior and Organization*, 2018-2020

Director of the Institute for Economic Policy Research (IEPR),
University of Southern California, 2016-2021.

Co-editor of the *Journal of Economics and Management Strategy*, 2010-2020.

Member: Society for Neuroeconomics, American Economic Society, Economic Science
Association, Committee for the Status of Women in the Economics Profession.

Co-organizer of the Conference

“Understanding cognition and decision making by children”, LABEL, IEPR, USC, 3/4 May 2018.

Co-organizer of the Conference

“Understanding cognition and decision making by children”, LABEL, IEPR, USC, 4/5 May 2017.

Co-organizer of the Conference

“Understanding cognition and decision making by children”, LABEL, IEPR, USC, 30/31 April 2016.

Co-organizer of the Conference

“Experimental Economics”, LABEL, IEPR, USC, 30/31 May 2014.

Organizer of the Inauguration of the Los Angeles Behavioral Economics Laboratory (LABEL), 9 November 2012.

Co-organizer of the Conference

“Experimental Economics”, LABEL, IEPR, USC, 18/19 May 2012.

Co-organizer and head of the scientific committee of the Conference

“New Challenges for Economic Decision-making: Biology, Neuroscience and Economic Models”, TREND, IEPR, USC, 19/20 May 2011.

Co-organizer and head of the scientific committee of the Conference

“Neuroeconomics and the Law” USC, 14/15 May 2008.

Research advisor in the “Public Economics” Program for the Economics Education and Research Consortium, Russia (EERC), 1999-2002.

Committee program member and chairman of the second CEPR-ECARES Conference

“Psychology and Economics” Brussels, 8/10 June 2001.

Committee program member and chairman of the first CEPR-ECARES Conference

“Psychology and Economics” Brussels, 9/11 June 2000.

Referee reports for all major Economics journals.

Fellowships, Grants and Awards

Elected *Economic Theory Fellow of the Society for the Advancement of Economic Theory*, 2023-present.

National Science Foundation grant SES 2315770, “The evolution of collective decision-making from childhood to adulthood: markets, networks and institutions”, PI (J. Carrillo), 2023-2026.

National Science Foundation grant SES 1851915, “Developmental game theory and decision-making”, PI (J. Carrillo), 2019-2023.

National Institute on Drug Abuse award R21 DA042272-01A1, “Neuroeconomics of sugars: Glucose vs. fructose effects on reward signaling”, Co-I (M. Monterosso, K. Page) 2017-2019.

National Institute on Aging, award 1R21AG046917-01A1, “A neuroeconomic study of

choice consistency in aging”, PI (J. Monterosso, M. Mather, J. Carrillo), 2015-2018.
National Science Foundation grant SES 1425062, ”Attentional lookups as a measure of reasoning and motivation”, PI (J. Carrillo), 2014-2018.
Microsoft Corporation research grant, 2013-2014.
Zumberge Interdisciplinary Grant, USC, 2011.
Federal Communications Commission, Media Ownership Study, 2010-2011.
Lusk Center for Real Estate award, 2009-2010, 2011-2012.
Microsoft Corporation research grant, 2008-2009.
College Faculty Development awards, USC, 2007-2008, 2008-2009 and 2009-2010.
Van Ommeslaghe Foundation fellowship, 2000.
European Commission, TMR Network fellowship FMBI-CT 972479, 1999-2000.
European Commission, TMR Marie Curie fellowship BICT 972479, 1997-1999.
French Ministry of Research, doctoral scholarship, 1994-1997.

Publications

Publications in Scientific Journals

1. “Academic achievement helps coordination on mutually advantageous outcomes”,
Proceedings of the National Academy of Sciences, 122 (14) e2420306122 (with J. Carrillo).
2. “Why do children pass in the centipede game? Cognitive limitations v. risk calculations”,
Games and Economic Behavior, forthcoming, (with J. Carrillo).
3. “Dynamic coordination in efficient and fair outcomes: a developmental perspective”,
Economic Theory , forthcoming (with J. Carrillo).
4. “The neural correlates of value representation: from single items to bundles”,
Human Brain Mapping, 44(4), 1476-1495, 2023. (with K. Zyuzin, D. Combs J. Melrose,
N. Kodaverdian, C. Leather, J. Carrillo and J. Monterosso).
5. “Adverse Selection and Contingent Reasoning in Preadolescents and Teenagers”,
Games and Economic Behavior, 133, 331-351, 2022. (with J. Carrillo).
6. “The development of randomization and deceptive behavior in mixed strategy games”,
Quantitative Economics, 13(2), 825-862, 2022. (with J. Carrillo).
7. “Value computation and modulation: a neuroeconomic theory of self-control as
constrained optimization”,
Journal of Economic Theory, 198, 105366, 2021 (with J. Carrillo).

8. “Self-serving, altruistic and spiteful lying in the schoolyard”.
Journal of Economic Behavior and Organization, 187, 159-175, 2021 (with J. Carrillo).
9. “Steps of reasoning in children and adolescents”,
Journal of Political Economy, 129 (7), 2067-2111, 2021 (with J. Carrillo).
10. “Shaming as an incentive mechanism against stealing: behavioral and physiological evidence”,
Journal of Public Economics, 194, 104351, 2021 (with J. Carrillo and M. Montgomery).
11. “Young children use commodities as an indirect medium of exchange”,
Games and Economic Behavior, 125, 48-61, 2021 (with J. Carrillo).
12. “The development of social strategic ignorance and other regarding behavior from childhood to adulthood”,
Journal of Behavioral and Experimental Economics, 85, 101524, 2020 (with J. Carrillo).
13. “Studying decision-making in children: challenges and opportunities”,
Journal of Economic Behavior and Organization, 179, 777-783, 2020 (with J. Carrillo).
14. “The evolution of choice and learning in the two-person beauty contest game from kindergarten to adulthood”,
Games and Economic Behavior, 120, 132-143, 2020 (with J. Carrillo).
15. “Iterative dominance in young children: experimental evidence in simple two-person games”
Journal of Economic Behavior and Organization, 179, 623-637, 2020 (with J. Carrillo).
16. “The development of consistent decision-making across economic domains”,
Games and Economic Behavior, **116**, 217-240, 2019 (with J. Carrillo, D. Combs and N. Kodaverdian).
17. “Consistency in Simple vs. Complex Choices over the Life Cycle”,
Journal of Economic Behavior and Organization, **157**, 580-601, 2019 (with J. Carrillo, D. Combs and N. Kodaverdian).
18. “Risk Aversion in a Dynamic Asset Allocation Experiment”,
Journal of Financial and Quantitative Analysis, 54(5), 2209-2232, 2019 (with J. Carrillo, A. Giga and F. Zapatero).
19. “Heuristic to Bayesian: the Evolution of Reasoning from Childhood to Adulthood”,
Journal of Economic Behavior and Organization, **159**, 305-322, 2019 (with J. Barash, J. Carrillo and N. Kodaverdian).
20. “A Neuroeconomic Theory of (Dis)honesty”,
Journal of Economic Psychology, **71**, 4-12, 2019 (with J. Carrillo).

21. “A Neuroeconomic Theory of Mental Time Travel”,
Frontiers in Neuroscience, section Perception Science, **12**, 2018 (with J. Carrillo).
22. “The Path to Equilibrium in Sequential and Simultaneous Games: a Mousetracking Study”,
Journal of Economic Theory, **178**, 246-274, 2018 (with J. Carrillo and A. Sachdeva).
23. “How long is a minute?”,
Games and Economic Behavior, **111**, 305-322, 2018 (with J. Carrillo and J. Tarraso).
24. “The Determinants of Strategic Thinking in Preschool Children”,
PLOS One, **13(5)**, 2018 (with J. Carrillo).
25. “Sequential Auctions with Capacity Constraints: an Experimental Investigation”
Games, **9(1)**, 15, 2018 (with J. Carrillo and F.J. Otamendi).
26. “Self awareness in time perception”,
Journal of Economic Behavior and Organization, **148**, 1-19, 2018 (with J. Carrillo and J. Tarraso).
27. “Stress induces contextual blindness in lotteries and coordination games”,
Frontiers in Behavioral Neuroscience, **11**, 2017 (with, J. Carrillo and R. Kendall).
28. “Second-price common value auctions with uncertainty, private and public information: experimental evidence”,
Journal of Behavioral and Experimental Economics, **67**, 28-40, 2017 (with J. Carrillo and M. Castro).
29. “A Neuroeconomic Theory of Memory Retrieval”,
Journal of Economic Behavior and Organization, **130**, 198-205, 2016 (with J. Carrillo).
30. “The nature of information and its effect on bidding behavior: laboratory evidence in a first-price common value auction”,
Journal of Economic Behavior and Organization, **109**, 26-40, 2015 (with J. Carrillo and M. Castro).
31. “Imperfect Choice or Imperfect Attention? Understanding Strategic Thinking in Private Information Games”,
Review of Economic Studies, **81**, 944-970, 2014 (with C. Camerer, J. Carrillo and S. Wang).
32. “Resource allocation in the brain”,
Review of Economic Studies, **81(2)**, 501-534, 2014. (with R. Alonso and J. Carrillo).
33. “Countervailing incentives in allocation mechanisms with type-dependent externalities”,
Journal of Mathematical Economics, **50**, 22-33, 2014.

34. “Dual-process theories of decision-making: a selective survey”,
Journal of Economic Psychology, **41**, 45-54, 2014 (with J. Carrillo) .
35. “Selling an asset to a competitor”.
European Economic Review, **57**, 39-62, 2013.
36. “Optimal allocation mechanisms with type-dependent negative externalities”,
Theory and Decision, **75(3)**, 359-387, 2013.
37. “The neurobiology of opinions: can judges and juries be impartial?”,
Southern California Law Review, **86**, 421-448, 2013 (with J. Carrillo).
38. “Information processing and decision-making: evidence from the brain sciences
and implications for Economics”,
Journal of Economic Behavior and Organization, **83(3)**, 292-310, 2012.
39. “From perception to action: an economic model of brain processes”,
Games and Economic Behavior, **75(1)**, 81-103, 2012 (with J. Carrillo).
40. “Information gatekeepers: theory and experimental evidence”,
Economic Theory, **51(3)**, 649-676, 2012 (with J. Carrillo and T. Palfrey).
41. “Dynamic inconsistency and choice”,
Theory and Decision, **71(3)**, 343-364, 2011.
42. “Information acquisition and choice under uncertainty”,
Journal of Economics and Management Strategy, **18(2)**, 423-455, 2009 (with J. Carrillo).
43. “Theories of the mind”,
American Economic Review, Papers and Proceedings, **98(2)**, 175-80, 2008 (with J. Carrillo).
44. “The brain as a hierarchical organization”,
American Economic Review, **98(4)**, 1312-1346, 2008 (with J. Carrillo).
45. “Optimal choice of characteristics for a non-excludable good”,
RAND Journal of Economics, **39(1)**, 283-304, 2008.
46. “Influence through ignorance”,
RAND Journal of Economics, **38(4)**, 931-947, 2007 (with J. Carrillo).
47. “Designing auctions in R&D: optimal licensing of an innovation”,
Topics in Economic Analysis & Policy, **6(1)**, Article 11, 2006.
48. “Regulation under asymmetric information in water utilities”,
American Economic Review, Papers and Proceedings, **96(2)**, 62-66, 2006 (with K. Chan and
I. Perrigne).
49. “Multi-stage contracting with applications to R&D and insurance policies”
Journal of Public Economic Theory, **7(2)**, 317-346, 2005.

50. “A theory of haste” (lead article),
Journal of Economic Behavior and Organization, **56(1)**, 1-23, 2005 (with J. Carrillo).
51. “Entrepreneurial boldness and excessive investment”,
Journal of Economics and Management Strategy, **13**, 321-50, 2004 (with J. Carrillo).
52. “Optimal regulation of cooperative R&D under incomplete information”,
Journal of Industrial Economics, **52(1)**, 81-119, 2004.
53. “Do the ‘three-point victory’ and ‘golden goal’ rules make soccer more exciting?”,
Journal of Sports Economics, **5**, 169-185, 2004 (with J. Carrillo). Reviewed in *The New Scientist*, April 13, 2002)
54. “Endogenous entry in auctions with negative externalities”,
Theory and Decision, **54(2)**, 125-149, 2003.
55. “Vertical integration and incentives to innovate” (lead article),
International Journal of Industrial Organization, **21(4)**, 457-488, 2003.
56. “Les enjeux de la réglementation de la recherche et développement”,
Revue d’Economie Politique, **113(1)**, 125-148, 2003.
57. “Rush and procrastination under hyperbolic discounting and interdependent activities”,
Journal of Risk and Uncertainty, **22(2)**, 141-164, 2001 (with J. Carrillo).
58. “The value of information when preferences are dynamically inconsistent”,
European Economic Review, **44**, 1104-1115, 2000 (with J. Carrillo).

Contributions to Collective Volumes

- “Information and self-control”, in I. Brocas and J. Carrillo eds, *The Psychology of Economic Decisions. Vol. 1: Rationality and Well-being*, 2003, *Oxford University Press*.
- “Commitment devices under self-control problems: a review”, with J. Carrillo and M. Dewatripont, in I. Brocas and J. Carrillo eds, *The Psychology of Economic Decisions. Vol. 2: Reasons and Choices*, 2004, *Oxford University Press*.

Volumes Edited

- *The Psychology of Economic Decisions. Vol. 1: Rationality and Well-being*, with Juan Carrillo, 2003, *Oxford University Press*.
(reviewed in the *Journal of Socio-Economics*, 32, 711-720 (2003); *Economica*, 71, 321-322 (May 2004); the *Journal of Economic Psychology*, 26, 151-154, (2005); *Journal of Economic Behavior and Organization*, 58, 444-447, (2005).)
- *The Psychology of Economic Decisions. Vol. 2: Reasons and Choices*, with Juan Carrillo, 2004, *Oxford University Press*.

Book

- Workbook to Accompany “Political Economics: explaining Economic Policy” (by T. Persson and G. Tabellini), with Micael Castanheira, Ronny Razin and David Stromberg, 2000, *MIT Press*.

Other Publications

- “Neuroeconomic Theory: Using Neuroscience to Understand the Bounds of Rationality”, with J. Carrillo, 2010, *VoxEU.org*.
- “A Study of Speculation: Do Economic Players Choose Based on Accurate Predictions of Others Decisions”, with C.F. Camerer, J. Carrillo and S.W. Wang, 2010, Research Brief, *LUSK Center for Real Estate, USC*.
- “A Theoretical Analysis of the Impact of Local Market Structure on the Range of Viewpoints Supplied”, with J. Carrillo and S. Wilkie, 2011, *FCC Media Study No. 9*.
- “Disciplining behavioral theories through brain-based models of decision-making”, with J. Carrillo, in P.H. Crowley and T.R. Zentall eds, *Comparative Decision Making*, 2013, *Oxford University Press*.
- “Strategic thinking in children and adolescents is determined by underlying network abilities”, with J. Carrillo, 2017, *VoxEU.org*.
- “What does it mean to choose rationally?”, with J. Carrillo, 2020, *Frontiers for Young Minds*.

Completed working papers

- “Local Signals, Global Stakes: Groups with Aligned Interests Struggle to Coordinate when Information is Noisy and Shared Locally”, with J. Carrillo.
- “How Well Do You Know Your Child? Cross-Rater Assessments of Socio-Emotional Health Using First- and Second-Order Parental Beliefs”, with A. Boussein, G. Menta and E. Proto.
- “Young children build consensus in networks with local information”, with J. Carrillo and U. Rios.
- “Value computation in social and strategic contexts: evidence and theory”, with J.B González and D. Hermsillo Gutiérrez.
- “The development of rationality in games with hidden information”, with A. Alfonso, P. Brañas Garza, J. Carrillo, J.B. González, M.J. Vázquez.
- “Developmental Meritocracy”, with P. Brañas Garza and J. Carrillo.
- “Skewness seeking in a Dynamic Portfolio Choice”, with J. Carrillo, A. Giga and F. Zapatero.

Revision date: April 2025.