

# Toulouse Summer School in Quantitative Social Sciences

May 24 - June 9, 2021 - TOULOUSE

Economics + Social Sciences

# A program in economics and the social sciences

In pursuit of the common good, through excellence in new economic knowledge

The Toulouse Summer School in Quantitative Social Sciences at Toulouse School of Economics (TSE) and the Institute for Advanced Study in Toulouse (IAST) offers an interdisciplinary program in economics and the social sciences. The summer school is open to PhD students in economics and other disciplines.

Applicants should provide a CV, a copy of their most advanced degree, a proof of student status, a short cover letter and a recommendation letter (optional).

**Credits:** 6 ECTS credits for the whole program.

Fees: 275€ for the whole program.

Applications close on April 15, 2021

Location: Given uncertainties regarding travelling due to the COVID-19 crisis, the summer school will be entirely online through Zoom. All classes will be recorded and accessible to students who cannot attend morning or evening classes live due to time zone difference.

**Program:** 

**PART 1** - Economic and political institutions PART 2 - The evolution of human sociality

Online application platform: www.tse-fr.eu/toulouse-summer-school-quantitative-social-sciences

Contact: summerschool@tse-fr.eu

Organizers: Victor Gay (victor.gay@tse-fr.eu) and Jorge Peña (jorge.pena@iast.fr)



Waiver: We encourage PhD students in other disciplines than economics to apply. These students will have their fees waived.

but earlier applications are encouraged and may be given priority in the event of excess demand for places.



# Part 1 (May 24 - May 28, 2021)

# **Economic and political institutions** Horacio Larreguy, Mohamed Saleh, and Paul Seabright

# **Overview**

Economic and political institutions are fundamental determinants of development, inequality, and human well-being. In this course, we introduce students to recent conceptual, methodological, and data advances in the study of institutions in economic history, political economics, and political science. While the study of institutions has been central to political science since its inception, economics has seen a revival of interest in the impact of historical and political institutions on long-run development and inequality, and political scientists are paying more attention to political economy issues. Today, work on the research frontier often concerns the interaction of politics and the economy, historically and contemporaneously, and spans multiple disciplines. Methodological advances concern the analysis of natural and field experiments that may enable scholars to make stronger causal inferences by employing techniques such as difference-in-differences, instrumental variables, randomized control trials, and regression discontinuity. The introduction of "big data" (e.g., micro-level and large-scale administrative data, or social media data) makes it possible to study the origins and consequences of institutions in history and politics at the micro level, as well as the profound consequences of more modern institutions, such as social media, on politics. We consider these issues through the discussion of several substantive topics: institutions and development, democracy, and social media. The course will be complemented by a special lecture by Paul Seabright on "Economics and the Social Sciences - A Long History Together".

# Instructors



· Horacio Larreguy is Associate Professor of Government at Harvard University and a Visiting Researcher at the Institute for Advanced Study in Toulouse and Toulouse School of Economics. His research focuses on issues related to political economy of development. His work has been published, among others, in the AEJ: Applied Economics, American Journal of Political Science, the American Political Science Review, Econometrica, Journal of the European Economic Association and Review of Economics and Statistic. Email: hlarreguy@tse-eu.fr



• Mohamed Saleh is Professor of Economics at the Toulouse School of Economics and a member of the Institute for Advanced Study in Toulouse. His research focuses on economic history, political economy, and development economics. His research has been published in the Journal of Economic History and Explorations in Economic History, among others. Email: mohamed.saleh@tse-fr.eu



• Paul Seabright is Professor of Economics at the Toulouse School of Economics and Director of the Institute for Advanced Study in Toulouse. He has a Ph.D. from the University of Oxford and taught at the University of Cambridge before coming to Toulouse in 2000. He is the author of a number of books combining economics with an interdisciplinary perspective, including The Company of Strangers: A Natural History of Economic Life (2<sup>nd</sup> edition, Princeton UP 2010), which was shortlisted for the British Academy Book Prize.

Email: Paul.Seabright@tse-fr.eu

# Course structure, week 1

	Monday, May 24 <b>Mohamed Saleh</b>	Tuesday, May 25 Horacio Larreguy	Wednesday, May 26
9 am - 10.30 am	Institutions and economic development	Democracy and inequality	Migration Mohamed Saleh
10.30 am - 11 am	Break	Break	Break
11 am - 12.30 am	Institutions and economic development	Democracy and inequality	Migration Mohamed Saleh
12.30 am - 2 pm	Lunch	Lunch	Lunch, lecture Economics and the Social Sciences <b>Paul Seabright</b>
2 pm - 3.30 pm	Methods and data	Methods and data	Political selection Horacio Larreguy
3.30 pm - 4 pm	Break	Break	Break
4 pm - 5.30 pm	Methods and data	Methods and data	Political selection Horacio Larreguy

# Course structure, week 1

Thursday, May 27	Friday, May 28
<b>Mohamed Saleh</b>	Horacio Larreguy
Intergenerational mobility	Social media
and big data	and politics
Break	Break
Intergenerational mobility	Social media
and big data	and politics
Lunch	Lunch
Workshop: Big Data in	Workshop: Big Data in
Economic History	Economic History
Workshop: Big Data in	Workshop: Big Data in
Economic History	Economic History
Break	Break

# References

# Institutions and economic development (M. Saleh)

- McCloskey, D. (1976). Does the Past Have Useful Economics? Journal of Economic Literature, 14(2), 434–461.
- Clark, G. (2005). The Condition of the Working-Class in England, 1209–2004. Journal of Political Economy, 113(6), 1307–1340.
- Coase, R. H. (1960). The Problem of Social Cost. The Journal of Law and Economics, 3, 1-44.
- North, D. C., & Weingast, B. R. (1989). Constitutions and Commitment: The Evolution of Institutions Governing Public Choice in Seventeenth-Century England. The Journal of Economic History, 49(4), 803–832.
- North, D. C. (1997). Institutions. Journal of Economic Perspectives, 5(1), 97–112.
- La Porta, R., Lopez-de-Silanes, F., Shleifer A., & Vishny, R. (1998). Law and Finance. Journal of Political Economy, 106(6), 1113–1155.
- Sokoloff, K. L., & Engerman S. A. (2000). History Lessons: Institutions, Factor Endowments, and Paths of Development in the New World. Journal of Economic Perspectives, 14(3), 217–232.
- Acemoglu, D., & Robinson, J. A. (2000). Why Did the West Extend the Franchise? Democracy, Inequality, and Growth in Historical Perspective. The Quarterly Journal of Economics, 115(4), 1167–1199.
- Acemoglu, D., Johnson S., & Robinson J.A. (2001). The Colonial Origins of Comparative Development: An Empirical Investigation. American Economic Review, 91(5), 1369-1401.
- Banerjee, A., & Iyer, L. (2005). History, Institutions, and Economic Performance: The Legacy of Colonial Land Tenure Systems in India. American Economic Review, 95(4), 1190–1213.
- Nunn, N. (2008). The Long-Term Effects of Africa's Slave Trades. The Quarterly Journal of Economics, 123(1), 139–176.

## Methods and data (M. Saleh)

Difference-in-differences and applications in economic history. Randomized Control Trials (RCTs) and experiments in economic history.

- Economics, 129(2), 823-887.
- Juhasz, R. (2018). Temporary Protection and Technology Adoption: Evidence from the Napoleonic Blockade. American Economic Review, 108(11), 3339-3376.
- Dittmar, J. E. (2011). Information Technology and Economic Change: The Impact of the Printing Press. The Quarterly Journal of Economics, 126(3), 1133-1172.
- De La Sierra, R. S. (forthcoming). On the Origin of States: Stationary Bandits and Taxation in Eastern Congo. Journal of Political Economy.
- Giusti, G., Noussair, C. N., & Voth, H. J. (2013). Recreating the South Sea Bubble: Lessons from an Experiment in Financial History. Mimeo.

## **Democracy, redistribution, and inequality** (H. Larreguy)

- Acemoglu D. & Robinson J. A. (2008) Persistence of Power, Elites and Institutions. American Economic Review, 98(1), 267-93.
- Acemoglu D., Naidu S., Restrepo P., & Robinson J. A. (2014) Democracy, Redistribution and Inequality. In Handbook of Income Distribution, Volume 2, 1885–1966. Elsevier.
- and Ethnic Voting. Quarterly Journal of Political Studies 12(4). 437-477.
- Economy, 128(8), 2880-2924.

# **Evaluation**

Students will be evaluated based on written assignments which may be composed of material from the lectures, readings and/or from the twoday conference on Big Data in Economic History.

Students may also be asked to present material to the class.



Students will have the opportunity to attend the Big Data in Economic History Conference, held in the afternoons of Thursday, May 27, and Friday, May 28. More information is available at:

https://www.iast.fr/fr/conferences/2021-big-dataeconomic-history-conference

- Hornbeck, R. (2010). Barbed Wire: Property Rights and Agricultural Development. The Quarterly Journal of Economics, 125(2), 767–810. - Cantoni, D., & Yuchtman, N. (2014). Medieval Universities, Legal Institutions, and the Commercial Revolution. The Quarterly Journal of

- Hanlon, W. W. (2015). Necessity is the Mother of Invention: Input Supplies and Directed Technical Change. Econometrica, 83(1), 67–100.

- Adida C, Gottlieb J., Kramon E. & McClendon G. (2017) Reducing or Reinforcing In-Group Preferences? An Experiment on Information

 Baland J-M. & Robinson J. A. (2008) Land and Power: Theory and Application from Chile. American Economic Review, 98 (5), 1737-1765. - Bidwell K., Casey K. & Glennerster R. (2020) Debates: Voting and Expenditure Responses to Political Communication. Journal of Political



- Campante F. R. (2011) Redistribution in a Model of Voting and Campaign Contributions. Journal of Public Economics, 95(7-8), 646-656.
- of 1965. The Quarterly Journal of Economics, 129(1), 379–433.
- Chattopadhyay R. & Duflo E. (2004) Women as policy makers: Evidence from a randomized policy experiment in India. Econometrica 72(5), 1409-1443,
- Pande R. (2020) Can democracy work for the poor? Science 369(65086508), 1188-1192.
- Vicente P. C. (2014) Is Vote Buying Effective? Evidence from a Field Experiment in West Africa. The Economic Journal, 124(574), 356–387.

#### Methods and data (H. Larreguy)

Promise and pitfalls of regression discontinuity designs in political economy applications (e.g., close elections, population thresholds, borders). Field experiments, their advantages and limitations.

- De la Cuesta B. & Imai K. (2016) Misunderstandings about the Regression Discontinuity Design in the Study of Close Elections. Annual Review of Political Science, 19, 375–396.
- Journal of Economic Literature, 48: 424-455
- Solutions. American Journal of Political Science, 61(1), 210-229.
- for Estimating Electoral Effects: New Evidence from Over 40,000 Close Races. American Journal of Political Science, 59(1), 59–274.
- Humphreys M. & Weinstein J. (2009) Field Experiments and the Political Economy of Development. Annual Review of Political Science, 12:367-378.
- Economics, 119(3), 807-859,
- Marshall J. (2019) When Can Close Election RDDs Identify the Effects of Winning Politician Characteristics? Working paper.

#### Migration (M. Saleh)

- Abramitzky, R., Boustan, L. P., & Eriksson, K. (2012). Europe's Tired, Poor, Huddled Masses: Self-Selection and Economic Outcomes in the Age of Mass Migration. American Economic Review, 102(5), 1832–1856.
- Borjas, G. (1987). Self-Selection and the Earnings of Immigrants. American Economic Review, 77(4), 531-553.
- Abramitzky, R., Boustan, L. P., & Eriksson, K. (2014). A Nation of Immigrants: Assimilation and Economic Outcomes in the Age of Mass Migration. Journal of Political Economy, 122(3), 467–506.
- Studies.
- Abramitzky, R., Boustan, L. P., & Eriksson, K. (forthcoming). Do Immigrants Assimilate More Slowly Today than in the Past? American Economic Review: Insights.
- Studies.
- Business School BGIE Unit Working Paper 19-018.

### Special lecture on " Economics and the Social Sciences – A Long History Together"

Abstract: This lecture explores the historical contribution to economic thought of ideas that we would now consider to be part of biology, anthropology, political science, psychology and sociology. Although economics in the 20<sup>th</sup> century distanced itself from the methods and the subject matter of other social sciences, the recent opening out of economic analysis to these other disciplines represents a return to the roots of our subject, particularly as it was practised up to the 18t<sup>h</sup> century. The Adam Smith who wrote The Theory of Moral Sentiments was consistent with the Adam Smith who wrote The Wealth of Nations. Reflecting on this history is not just a matter of fidelity to the past; it can also help us to clarify how researchers with a training in each of these disciplines can collaborate in the project of building a coherent unified science of human behavior.

- Cascio E. U. & Washington E. (2013) Valuing the Vote: The Redistribution of Voting Rights and State Funds Following the Voting Rights Act

- Fujiwara T. (2015) Voting Technology, Political Responsiveness, and Infant Health: Evidence From Brazil. Econometrica, 83(2), 423-464.

- Deaton A. (2010) Instruments of development: Randomization in the tropics, and the search for the elusive keys to economic development.

- Eggers A. C., Freier R., Grembi V. & Nannicini T. (2018) Regression Discontinuity Designs Based on Population Thresholds: Pitfalls and

- Eggers A. C., Folke O., Fowler A., Hainmueller J., Hall, A. B. & Snyder J. M. (2015) On the Validity of the Regression Discontinuity Design

- Lee D. S., Moretti E. & Butler M. J. (2004) Do Voters Affect or Elect Policies? Evidence from the U. S. House. The Quarterly Journal of

• Fouka, V. (forthcoming). Backlash: The Unintended Effects of Language Prohibition in US schools after World War I. The Review of Economic

- Tabellini, M. (forthcoming). Gifts of the Immigrants, Woes of the Natives: Lessons from the Age of Mass Migration. The Review of Economic

- Fouka, V., Mazumder, S., & Tabellini, M. (2018). From Immigrants to Americans: Race and Assimilation during the Great Migration. Harvard

## Bureaucratic and Political selection (H. Larreguy)

- Ashraf N., Bandiera, O. Davenport E. & Lee S. S. (2020) Losing Prosociality in the Quest for Talent? Sorting, Selection, and Productivity in the delivery of Public Services. American Economic Review, 110(5), 1355-1394.
- Beaman L., Duflo E., Pande R. & Topalova P. (2012) Female Leadership Raises Aspirations and Educational Attainment for Girls: A Policy Experiment in India. *Science*, 335(6068), 582–586.
- Becher M. & Menendez Gonzalez I. (2019). Electoral Reform and Trade-offs in Democratic Representation. American Political Science Review, 113(3), 694–709.
- Besley T., Folke O., Persson T. & Rickne J. (2017) Gender Quotas and the Crisis of the Mediocre Man: Theory and Evidence from Sweden. American Economic Review, 107(8), 2204–2242.
- Chattopadhyay R. & Duflo E. (2004) Women as policy makers: Evidence from a randomized policy experiment in India. *Econometrica* 72(5), 1409-1443.
- Dal Bo E., Finan F. & Rossi M. (2013) Strengthening State Capabilities: The Role of Financial Incentives in the Call to Public Service. *The Quarterly Journal of Economics, 128(3): 1169-1218.*
- Galasso G. & Nannicini T. (2011) Competing on Good Politicians. American Political Science Review, 105(1), 79-99.
- Gagliarducci S. & Nannicini T. (2013) Do better paid politicians perform better? Disentangling incentives from selection. *Journal of the European Economic Association*, *11(2)*, 369–398.
- Kotakorpi K. & Poutvaara P. (2011) Pay for politicians and candidate selection: An empirical analysis. *Journal of Public Economics*, 95(7-8), 877-885.
- Pique R. (2019) Higher Pay, Worse Outcomes? The Impact of Mayoral Wages on Local Government Quality in Peru. *Journal of Public Economics*, 173, 1-20.

## Intergenerational mobility and big data (M. Saleh)

- Ferrie, J., & Long, J. (2008). A Tale of Two Labor Markets: Intergenerational Occupational Mobility in Britain and the U.S. Since 1850. NBER Working Paper 11253.
- Becker, G. S., & Tomes, N. (1979). An Equilibrium Theory of the Distribution of Income and Intergenerational Mobility. *Journal of Political Economy*, 87(6), 1153–1189.
- Solon, G. (2004). A Model of Intergenerational Mobility Variation over Time and Place. In Generational Income Mobility in North America and Europe. *Miles Corak (Ed.), Cambridge University Press, 38–47.*
- Feigenbaum, J. J. (2015). Intergenerational mobility during the great depression. Mimeo.
- Collins, W. J., & Wanamaker, M. H. (2017). Up from Slavery? African American Intergenerational Economic Mobility Since 1880. NBER Working Paper 23395.
- Olivetti, C., & Paserman, M. D. (2015). In the Name of the Son (and the Daughter): Intergenerational Mobility in the United States, 1850–1940. American Economic Review, 105(8), 2695–2724.

## Social Media and Politics (H. Larreguy)

- Allcott H., Braghieri L., Eichmeyer S. & Gentzkow M. (2020) The Welfare Effects of Social Media. American Economic Review, 110(3), 629–76.
- Allcott H. & Gentzkow M. (2017) Social Media and Fake News in the 2016 Election. Journal of Economic Perspectives, 31(2), 211–36.
- Bursztyn L., Rao A. Roth C., Yanagizawa-Drott D. (2020) Misinformation During a Pandemic. Working Paper.
- Campante F., Durante R. & Sobbrio F. (2017) Politics 2.0: The Multifaceted Effect of Broadband Internet on Political Participation. Journal of the European Economic Association, 16(4), 1094–1136.
- Enríquez J. R., Larreguy H., Marshall J. & Simpser A. (2020) Online Political Information: Facebook Ads, Electoral Saturation, and Electoral Accountability in Mexico. *Working Paper.*
- Fujiwara T., Müller K. & Schwarz C. (2020) The Effect of Social Media on Elections: Evidence from the United States. Working Paper.
- Liberini F., Redoano M., Russo A., Cuevas A. & Cuevas R. (2020) Politics in the Facebook Era: Evidence from the 2016 US Presidential Elections. *Working Paper.*
- Medina Serrano J. C., Hegelich S., Shahrezaye M. & Papakyriakopoulos O. (2018) Mapping Disinformation Campaigns across Platforms: The German General Election. *Working Paper.*
- Nyhan B. (2020) Facts and Myths about Misperceptions. Journal of Economic Perspectives, 34(3), 220–236.





# Part 2 (May 31 – June 9, 2020)

# The evolution of human sociality

Ingela Alger, Jorge Peña, and Jonathan Stieglitz

# **Overview**

Evolutionary theory provides a powerful organizing conceptual framework for understanding human social behavior that spans several academic disciplines (e.g., anthropology, biology, and economics), levels of explanation (e.g., proximate, ultimate, developmental, and phylogenetic) and levels of social organization (dyads, families, communities, and beyond). In so doing, this framework helps explain variation in human sociality across space and time.

This part of the summer school will provide an overview of evolutionary approaches to understanding human sociality from an interdisciplinary perspective, incorporating the most recent theoretical and empirical advances. The week comprises a first short course by Ingela Alger on evolution and family economics, a second course by Jonathan Stieglitz on human social evolution from an evolutionary anthropology perspective, and a third course by Jorge Peña on mathematical models of social evolution.



#### Instructors

• **Ingela Alger** is a CNRS Research Director in Economics at Toulouse School of Economics and the Institute for Advanced Study in Toulouse. She currently holds an ERC Advanced Grant (2019–2023). She uses theoretical models to examine how evolutionary forces may have shaped human preferences, both in family-related behaviors, and in strategic interactions, by asking: which preferences should one expect to see in a population in which preferences have been transmitted from generation to generation, and where preferences affect the ability of individuals to survive and transmit their preferences (biologically or culturally)?

Answers are sought by way of using simple evolutionary logic: those alive today had ancestors who were successful at surviving and reproducing; conditional on preferences being transmitted from old to young (through vertical or oblique transmission), our preferences should reflect this. Factors in the environment in which a population evolves may impact which behaviors lead to evolutionary success, and thus also which preferences are more successful than others. The overarching objective of this line of research is to understand which factors in our evolutionary past may thus have shaped our preferences as well as our family structures and intra-family behaviors.

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• Jonathan Stieglitz is Professor Anthropology at University of Toulouse 1 Capitole and a member of the Institute for Advanced Study in Toulouse. He is also co-director of the Tsimane Health and Life History Project (<u>http://tsimane.anth.ucsb.edu/index.html</u>), a joint health and anthropology project aimed at understanding human life course evolution.

Dr. Stieglitz's research aims to understand how ecological and social factors interact to influence human behavior. Specifically, his research addresses three questions: 1) Why do families form and function the way they do? 2) How does variability in family functioning affect well-being of household members? and 3) Why and how do social relationships (family and other) interact with local ecology to influence behavior over the life course? To address these questions Dr. Stieglitz uses principles from behavioral ecology and life history theory, which attempt to explain modern human variation as an adaptive response to trade-offs between investments in competing demands.

University of New Mexico Email: jonathan.stieglitz@iast.fr



• Jorge Peña is Assistant Professor at University Toulouse 1 Capitole and a member of the Institute for Advanced Study in Toulouse. His research focuses on social evolution theory and collective action problems from a theoretical and interdisciplinary perspective. His work has been published in The American Naturalist, Evolution, Games and Economic Behavior, Journal of Mathematical Economics, Journal of Theoretical Biology, PLOS Computational Biology, and Trends in Ecology and Evolution, among others. Originally trained as an engineer, he received his PhD in Applied Mathematics from the Faculty of Social and Political Sciences of the University of Lausanne, and has previously held postdoctoral research positions at the Faculty of Business and Economics of the University of Basel, at the Max Planck Institute for Evolutionary Biology, and at the GEOMAR Helmholtz Centre for Ocean Research Kiel.

Email: jorge.pena@iast.fr



Dr. Stieglitz received his PhD in Anthropology (concentration: Human Evolutionary Ecology) from the

	Monday, May 31
9 am - 9.30 am	Welcome coffee
9.30 am - 11 am	Intra-family resource sharing Ingela Alger
11 am - 11.30 am	Break
11.30 am - 1 pm	Marriage patterns Ingela Alger
1 pm - 2.30 pm	Lunch
2.30 pm - 4 pm	Subsistence, inequality and social organization in cross-cultural perspective <b>Jonathan Stieglitz</b>
4 pm - 4.30 pm	Break
4.30 pm - 6 pm	Evolution of Human Life Histories: Part 1 Jonathan Stieglitz

	Tuesday, June 1
9 am - 10.30 am	Evolution of Human Life Histories: Part 2 Jonathan Stieglitz
10.30 am - 10.45 am	Break
10.45 am - 12.15 pm	Evolution of sharing: Part 1 Jonathan Stieglitz
12.15 pm - 1.45 pm	Lunch
1.45 pm - 3.15 pm	Evolution of sharing: Part 2 Jonathan Stieglitz
3.15 pm - 3.30 pm	Break
3.30 pm - 5 pm	Divisions of labor and complementarity in human families: a bargaining approach
5 pm - 6.30 pm	Sexual conflict

	Monday, June 7
9.00 am - 10.30 am	Methods 1 Jorge Peña
10.30 am - 11.00 am	Break
11.00 am - 12.30 pm	Methods 2 Jorge Peña

	Wednesday, June 9
9.00 am - 10.30 am	Cultural group selection 1 Jorge Peña
10.30 am - 11.00 am	Break
11.00 am - 12.30 pm	Cultural group selection 2 Jorge Peña

	Wednesday, June 2
9 am - 10.30 am	Parent-offspring conflict Jonathan Stieglitz
10.30 am - 10.45 am	Break
10.45 am - 12.15 pm	Life history theory: Part 1 Jonathan Stieglitz
12.15 pm - 1.45 pm	Lunch
1.45 pm - 3.15 pm	Life history theory: part 2 Jonathan Stieglitz
3.15 pm - 3.30 pm	Break
3.30 pm - 5 pm	Workshop
5 pm - 6.30 pm	Workshop

	Thursday, June 3
9 am - 10.30 am	Demographic transition: Part 1 Jonathan Stieglitz
10.30 am - 10.45 am	Break
10.45 am - 12.15 pm	Demographic transition: Part 2 Jonathan Stieglitz
12.15 pm - 1.45 pm	Lunch
1.45 pm - 3.15 pm	Workshop
3.15 pm - 3.30 pm	Break
3.30 pm - 5 pm	Workshop
3.30 pm - 5 pm	Workshop



	Tuesday, June 8
9.00 am - 10.30 am	Indirect reciprocity 1 Jorge Peña
10.30 am - 11.00 am	Break
11.00 am - 12.30 pm	Indirect reciprocity 2 Jorge Peña

# **Evaluation**

Students will be evaluated based on written assignments which may be composed of material from the lectures, readings and/or from the twoday conference on Economics and Biology.

Students may also be asked to present material to the class.

# Workshop

Students will have the opportunity to attend the 8<sup>th</sup> Toulouse Economics and Biology Workshop on *"Fertility: causes and consequences"* held on Thursday May 11 and Wednesday, May 12. More information is available at:

<u>https://www.iast.fr/conferences/2021-8th-toulouse-economics-and-biology-workshop-fertility-causes-and-consequences</u>

# Evolutionary foundations of family-related behaviors and implications for economics – Ingela Alger

### Objectives

Ever since Gary Becker published his "Treatise on the Family", economists have increasingly recognized the importance of the family. Arguably, most important economic decisions (such as investment in human capital, labor supply, and migration decisions) are affected by an individual's family situation. While economists have proposed several models and methods to account for this (see, in particular, the literatures on the collective and the unitary approaches), this part of the course focuses on the complementary insights that evolutionary theory can bring to economics. It reviews the relevant theory for investigating the human family from an evolutionary perspective, and discusses some empirical evidence in light of this theory.

The format will consist of discussion-based lectures. Students will be given a set of papers to read ahead of time, together with a set of questions that will prepare them for the discussion.

# References

#### Intra-family resource sharing (parental care and informal risk sharing)

#### Survevs:

- Alger, I., & Cox, D. (2013). The Evolution of Altruistic Preferences: Mothers versus Fathers. Review of Economics of the Household, 11(3), 421–446.
- Alger, I., & Cox D. (2019). Evolution of the Family: Theory and Implications for Economics. Oxford Research Encyclopedia of Economics and Finance.
- Bergstrom, T. C. (1996). Economics in a Family Way. Journal of Economic Literature, 34(4), 1903–1934.
- Cox, D., & Fafchamps, M. (2008). Extended Family and Kinship Networks: Economic Insights and Evolutionary Directions. In Handbook of Development Economics, Schultz T. P., & Strauss J. A. North-Holland.
- Alger, I. & Weibull, J. W. (2010). Kinship, Incentives, and Evolution. American Economic Review, 100(4), 1725–1758.
- Baland, J. M., Guirkinger, C., & Mali, C. (2011). Pretending to Be Poor: Borrowing to Escape Forced Solidarity in Cameroon. Economic Development & Cultural Change, 60(1), 1–16.
- Duflo, E. (2003). Grandmothers and Granddaughters: Old-Age Pensions and Intrahousehold Allocation in South Africa. The World Bank Economic Review, 17(1), 1–25.
- Jakiela, P., & Ozier, O. (2016). Does Africa Need a Rotten Kin Theorem? Experimental Evidence from Village Economies. The Review of Economic Studies, 83(1), 231–268.
- Sarkisian, R. (2019). On altruism, Insurance, and Risk Sharing. TSE Working Paper.

Marriage patterns: (which conditions are expected to lead to monogamy, polygyny, polyandry, or serial monogamy?)

#### Surveys:

- Alger, I., & Cox D. (2019). Evolution of the Family: Theory and Implications for Economics. Oxford Research Encyclopedia of Economics and Finance

#### Papers:

- Bergstrom, T. C. (1994a). On the Economics of Polygyny. University of Michigan Working Paper 94–11.
- Bergstrom, T. C. (1994b). Primogeniture, Monogamy, and Reproductive Success in a Stratified Society. University of Michigan Working Paper 94-10.
- De la Croix, D., & Mariani, F. (2015). From Polygyny to Serial Monogamy: A Unified Theory of Marriage Institutions. The Review of Economic Studies, 82(2), 565-607.
- Edlund, L., J. Yi, H. Li, & Zhang, J. (2013). Sex Ratios and Crime: Evidence from China. Review of Economics and Statistics, 95(5), 1520–1534.
- Edlund, L. (2018). Cousin Marriage is Not Choice: Muslim Marriage and Underdevelopment. AEA Papers and Proceedings, 108, 353–357.
- Francesconi, M., Ghiglino, C., & Perry, M. (2016). An Evolutionary Theory of Monogamy. Journal of Economic Theory, 166, 605–628.
- Gould, E. D., Moav, O., & Simhon, A. (2008). The Mystery of Monogamy. American Economic Review, 98(1), 333-57.

# Course structure, part 2

# Human social evolution – Jonathan Stieglitz

# Objectives

Human social behavior has been shaped by evolutionary processes. This course reviews the relevant theory and primary approaches for investigating human social behavior from an evolutionary perspective. We will explore universal and variable features of human sociality across time and space, with a primary focus on subsistence-level populations but also including modern industrialized economies. Topics addressed will include cooperation, mating and parenting, life history theory and the demographic transition to low fertility.

The format will consist of lectures (morning) and workshops (afternoon). Workshops will include class discussions (for example, about how to design novel research) and individual and/or group projects.

# LECTURE TOPICS

- Human social organization: an overview
  Human life histories: diet, intelligence and sociality
- · Food sharing: conceptual models and empirical evidence · Marriage and the division of labor · Life history theory
- Demographic transition

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# Mathematical models of social evolution – Jorge Peña

### **Objectives**

Social evolution is a subfield of the evolutionary sciences concerned with the evolution (be it genetic or cultural) of social behaviors, that is, behaviors having fitness consequences for individuals other than the actor. Although most research in the evolutionary (human) sciences is empirical, predictions and intuitions behind underlying processes are often derived from mathematical models drawing upon population ecology, population genetics, and game theory. In this course, we introduce students to some of the most important ideas and models used in social evolution theory, and apply them to the general question of the evolution of large-scale human cooperation.

In particular, we will critically review influential models of indirect reciprocity and of cultural group selection. The format will consist of lectures in the mornings and assigned homework in the afternoons. In the lectures, the workings of particular models will be shown graphically using interactive online computational notebooks. Students will also be given a set of papers to read ahead of time to prepare for the lectures.

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