THE HARVARD UNIVERSITY

LEMANN
BRAZIL
RESEARCH FUND

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THE HARVARD UNIVERSITY LEMANN BRAZIL RESEARCH FUND

The Lemann Brazil Research Fund is made possible by a generous gift from the Lemann Foundation. The Office of the Vice Provost for Research administers the Fund together with the Office of the Vice Provost for International Affairs, in collaboration with the David Rockefeller Center for Latin American Studies and the Brazil Studies Program.

FUNDING PRIORITIES

The Fund is intended to foster collaboration between scholars and to support research projects focused on current issues facing Brazil. Proposals are sought for research projects that address education management and administration, social science and its applications, public administration and policy, technological advances in education, and evidence-based research. Consideration will also be given to projects that propose collaboration between Harvard faculty and Brazilian academics in the life sciences, physical sciences and engineering, and basic and applied sciences.

ELIGIBILITY AND REVIEW CRITERIA

Proposals will be evaluated on the basis of academic merit, feasibility, and their anticipated advancement of the objectives of the Fund and must meet at least one of the following three criteria:

1. Include collaboration with Brazilian academics
2. Be undertaken in Brazil in whole or in part
3. Focus on Brazil

Applications are invited from individuals who hold a faculty appointment at a Harvard School and who have principal investigator rights at that School. Harvard Medical School faculty must hold a faculty appointment with PI rights in one of HMS’s basic or social science departments. Faculty may request support for postdoctoral scholars and graduate students from Brazil and for Harvard postdocs, graduate students, and undergraduates.

AVAILABLE FUNDING

Applicants may request up to $150,000 payable over one or two years, as specified by the applicant in his or her proposal. Grants are nonrenewable, but there are no limits on the number of times an individual may apply for funding. It is anticipated that 5–10 grants will be awarded each year.

ABOUT JORGE PAULO LEMANN AB ’61 AND THE LEMANN FOUNDATION

Global entrepreneur and financier Jorge Paulo Lemann regards education as Brazil’s most important challenge. He received a bachelor’s degree in economics from Harvard College in 1961. He is the founder and chair of the Lemann Foundation, a not-for-profit family organization founded in 2002. The foundation works to ensure that all Brazilian children have high-quality public education and to create a network of talented people dedicated to solving the main Brazilian social problems.

www.fundacaolemann.org.br
Opportunities to globally source inputs, two mechanisms to more competition in final goods markets as well as opportunities. The arrival of foreign imports exposes firms home markets for imports presents both challenges and markets offers greater revenue potential, but opening from merely two to 15 percent. Gaining access to foreign across countries, trade with China increased substantially their choices. While Brazil's trade is relatively diversified firms’ increased exposure to imports from China reshaped firms. Importing firms increase their profit margin and employ fewer workers with more competition leading to opposite results. Finally, we find negative effects of firm-level imports on innovation. While outsourcing inputs and innovation seem to increase productivity, there is a risk that this may have negative consequences for innovation in the long run.

The Lemann Foundation was instrumental in enabling the international collaboration between myself (PI based in the Harvard T.H. Chan School of Public Health) and Alexandre Chiavegatto Filho from the University of São Paulo. We were able to leverage our findings from the Lemann award to receive new funding to apply machine learning to other health problems in Brazil, using the technical knowledge acquired from the study, and hope to continue this partnership for the next few years.
neighborhood: each pair included a high-performing school (HPS) and a low-performing school (LPS). Contrary to official expectations, pairs were found not to serve comparable populations. Instead, evidence suggests considerable selection into schools within neighborhoods: HPS students had more educated mothers, more household assets, and more books at home. Even though we could not address the directionality of relations, we found literacy achievement to be strongly correlated with students’ and parents’ well-being and sense of community belonging. Results highlight the dynamic processes through which disadvantages accumulate for children in poverty.

What are teachers’ perspectives? Interviews and classroom observations indicate that teachers are aware of the complexity involved in literacy development and of the large numbers of struggling readers in their classes. Yet, teachers are not equipped with relevant instructional practices and would welcome tools to support their students’ literacies.

Our now strong relationships across national borders have led to continuous collaborative work focused on testing an educational intervention informed by these findings. I have high hopes for what we can continue to achieve together as we work hard to address urgent problems of practice through multidisciplinary, multisectoral, and transnational research in education.

With the support of a grant from the Lemann Brazil Research Fund, I, along with my Brazilian co-director, Eduardo Góes Neves, University of São Paulo, carried out archaeological research in the state of Acre from mid-June to mid-July, 2018. The object of our investigation was a large “ring village,” known locally as Sol de Campinas, located east of Rio Branco. One of the most striking features of the landscape in Acre is an extraordinary number of ancient earthworks, including roads, ditches, a variety of geometrical earthen constructions (e.g., squares, circles, etc.), and ring villages. The latter are artificial constructions composed of multiple mounds (some as high as six meters) around a central plaza-like area. Archaeological ring villages are thought to be ancestral to the circular villages found in many indigenous (e.g., Gê and Bororo) south-central Amazonian societies of pre-European contact times. With the help of six undergraduate students from the U.S., along with students from the Universidade Federal do Acre, we excavated several mounds at Sol de Campinas, discovering rich deposits of ceramics, stone, and bone, as well as collecting carbon samples for dating. We continue studying the excavated materials today, and we have joined with colleagues in writing a comprehensive review article on ring villages of the southern Amazon, which is now in press in the major archaeology journal Latin American Antiquity.

With funding from the Lemann Foundation, our Learning for All project examines midadolescents’ literacy and patterns of educational inequality in São Paulo’s public schools. Together with my colleagues Felipe Barrera-Osorio and Sarah Dryden-Peterson and in partnership with Beatriz Cardoso and Nicole Paulet from Laboratório de Educação, this project collected quantitative and qualitative data from 2,461 students (grades 4, 6, 8), 982 parents, and 41 teachers from 10 municipal public schools in low-resource communities and was driven by the following questions:

Why do so many adolescents struggle with literacy? We developed and validated the Avaliação da Linguagem Acadêmica, to our knowledge the first test to assess midadolescents’ school-relevant Portuguese skills. After administering a comprehensive literacy assessment battery, results revealed that the school-relevant language, found ubiquitously in texts across content areas (e.g., logical connectives), poses major challenges to large proportions of students. Findings call for research-based pedagogies that promote text discussion to strategically expand midadolescents’ language proficiencies.

Why do some low-resource public schools achieve better literacy outcomes? We sampled five pairs of schools in the same neighborhood: each pair included a high-performing school (HPS) and a low-performing school (LPS). Contrary to official expectations, pairs were found not to serve comparable populations. Instead, evidence suggests considerable selection into schools within neighborhoods: HPS students had more educated mothers, more household assets, and more books at home. Even though we could not address the directionality of relations, we found literacy achievement to be strongly correlated with students’ and parents’ well-being and sense of community belonging. Results highlight the dynamic processes through which disadvantages accumulate for children in poverty.

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CÍNTIA SALGADO
“EARLY LITERACY PREDICTION AND READING INTERVENTION FOR PRESCHOOLERS FROM LOW-INCOME FAMILIES IN NATAL, RIO GRANDE DO NORTE, BRAZIL”
with Gigi Luk and Meredith Rowe

This project contributed enormously to my professional and academic growth of the researcher and to my group at the Federal University of Rio Grande do Norte, thanks to the possibility of trading experiences and learnings with world-renowned researchers in the area. … Our results in the first year show that the children improved their capacity to recognize letters and vocabulary, and in the second year they were able to acquire literacy. … The positive impact of this partnership culminated in the municipal secretary of education asking us to continue and expand the research through the fifth grade. … The project enabled by this funding completely changed my world view on academic life.

JOÃO TONINI
“PRIORITIZING BIODIVERSITY OF BIRDS AND BUTTERFLIES IN CERRADO HABITATS OF BRAZIL USING GEOGRAPHIC AND PHYLOGENETIC INFORMATION SYSTEMS”
with Scott V. Edwards

The project gave me the opportunity to work in one of the top universities in the world … to develop interdisciplinary projects using cutting-edge technologies, which has broadened my scientific interests and improved my analytical skillset. … Our project focuses on using bioinformatic techniques applied to species geographic distribution and evolutionary relationships to prioritize species and areas for conservation across the Brazilian biomes of Cerrado and Caatinga. Since conservation funds are limited, by prioritizing the most imperiled biodiversity in these biomes we hope to be able to safeguard species that are at the brink of extinction.
**2016 AWARD WINNERS**

**LAURA ALFARO**
Warren Alpert Professor of Business Administration, Harvard Business School

“GLOBALIZATION AND ORGANIZATIONAL CHANGE: EVIDENCE FROM BRAZIL”

CO-INVESTIGATORS: Maggie X. Chen (George Washington University); Andrea Lucchesi (University of São Paulo); Naercio A. Menezes Filho (University of São Paulo; Insper); Monika Schnitzer (University of Munich)

COLLABORATORS: Alison Oliveira (University of São Paulo; Insper); Leandro Justino Pereira Veloso (Universidade Federal do Rio de Janeiro)

**MARCIA CASTRO**
Andelot Professor of Demography, Chair of the Department of Global Health and Population, Harvard T.H. Chan School of Public Health

“ESTIMATION OF THE SOCIAL AND ECONOMIC BURDENS OF DENGUE AND ZIKA VIRUS IN BRAZIL: A PUBLIC POLICY TOOL”

CO-INVESTIGATORS: Mary E. Wilson (Harvard T.H. Chan School of Public Health); Monica Viegas Andrade (Federal University of Minas Gerais); Cláudio José Struchiner (State University of Rio de Janeiro; Oswaldo Cruz Foundation)

COLLABORATORS: Sarah F. McGough (Harvard T.H. Chan School of Public Health); Benjamin MacCormack-Gelles (Harvard T.H. Chan School of Public Health); Lucas Resende de Carvalho (Federal University of Minas Gerais); Julia Almeida Calazans (Federal University of Minas Gerais)

**SCOTT V. EDWARDS**
Alexander Agassiz Professor of Zoology and Curator of Ornithology in the Museum of Comparative Zoology, Faculty of Arts and Sciences

“PRIORITIZING BIODIVERSITY OF BIRDS AND BUTTERFLIES IN CERRADO HABITATS OF BRAZIL USING GEOGRAPHIC AND PHYLOGENETIC INFORMATION SYSTEMS”

CO-INVESTIGATORS: Naomi Pierce (Faculty of Arts and Sciences); Cristina Miyaki (University of São Paulo)

**ICHIRO KAWACHI**
John L. Loeb and Frances Lehman Loeb Professor of Social Epidemiology, Harvard T.H. Chan School of Public Health

“MACHINE LEARNING TO ESTIMATE LIFE EXPECTANCY BY RACE IN BRAZIL: CHALLENGES FOR A MULTI-RACIAL FUTURE”

CO-INVESTIGATOR: Alexandre Dias Porto Chiavegatto Filho (University of São Paulo)

**DANA CHARLES MCCOY**
Assistant Professor of Education, Harvard Graduate School of Education

“ASSESSING THE IMPACT OF SOCIO-EMOTIONAL LEARNING PROGRAMMING IN BRAZIL”

CO-INVESTIGATORS: Vladimir Poncek (Fundação Getúlio Vargas); Cristina Campos de Xavier Pinto (Fundação Getúlio Vargas)

COLLABORATOR: Ana Luiza Raggio Colagrossi (Instituto Vila Educação)

**GAUTAM RAO**
Assistant Professor of Economics, Faculty of Arts and Sciences

“FROM RESEARCH TO POLICY: IMPROVING MUNICIPAL POLICYMAKING IN BRAZIL”

CO-INVESTIGATORS: Jonas Hjort (Columbia University); Diana Moreira (Faculty of Arts and Sciences)

**PAOLA UCCELLI**
Professor of Education, Harvard Graduate School of Education

“LEARNING FOR ALL PROJECT”

CO-INVESTIGATORS: Felipe Barrera-Osorio (Harvard Graduate School of Education); Sarah Dryden-Peterson (Harvard Graduate School of Education)

COLLABORATOR: Beatriz Cardoso (Laboratório de Educação, Brazil)

**EMMERICH DAVIES**
Assistant Professor of Education, Harvard Graduate School of Education

“TEACHER INCENTIVES AND SOCIALIZATION”

CO-INVESTIGATORS: Fernando Luiz Abrucio (Fundação Getúlio Vargas); Leslie Finger (Faculty of Arts and Sciences)

**GIGI LUK**
Associate Professor of Education, Harvard Graduate School of Education

“EARLY LITERACY PREDICTION AND READING INTERVENTION FOR PRESCHOOLERS FROM LOW-INCOME FAMILIES IN NATAL, RIO GRANDE DO NORTE, BRAZIL”

CO-INVESTIGATORS: Cíntia Alves Salgado Azoni (Federal University of Rio Grande do Norte); Nadine Gaab (Boston Children’s Hospital); Charles Haynes (Massachusetts General Hospital)

**DANA CHARLES MCCOY**
Assistant Professor of Education, Harvard Graduate School of Education

“ASSESSING THE IMPACT OF SOCIO-EMOTIONAL LEARNING PROGRAMMING IN BRAZIL: A FOLLOW-UP STUDY”

CO-INVESTIGATORS: Vladimir Poncek (Fundação Getúlio Vargas); Cristina Campos de Xavier Pinto (Fundação Getúlio Vargas)

COLLABORATOR: Ana Luiza Raggio Colagrossi (Instituto Vila Educação)

**NICOLAS MENZIES**
Assistant Professor of Global Health, Harvard T.H. Chan School of Public Health

“IDENTIFYING APPROACHES TO REDUCE DISPARITIES IN TB DIAGNOSIS AND CARE IN BRAZIL”

CO-INVESTIGATORS: Daniele Maria Pelssari (University of São Paulo), Patrícia Bartholomay Oliveira (Ministério da Saúde); Ethel Maciel (Universidade Federal do Espírito Santo); Carolina Maia Martins Sales (Universidade Federal do Espírito Santo); Theodore Cohen (Yale University); Marcia Castro (Harvard T.H. Chan School of Public Health)

COLLABORATORS: Adelmo Bertolde (Universidade Federal do Espírito Santo); Denise Araraki (Ministério da Saúde); Mauro Sanchez (Federal University of Brasilia)

**KATHERINE K. MERSETH**
Adjunct Lecturer on Education, Harvard Graduate School of Education

“TEACHING TEACHERS TO TEACH: INVESTIGATING PEDAGOGIES AND PRACTICES TO IMPROVE TEACHER EDUCATION IN BRAZIL”

CO-INVESTIGATOR: Gabriela Miranda Moriconi (Carlos Chagas Foundation)

**GARY URTON**
Dumbarton Oaks Professor of Pre-Columbian Studies, Faculty of Arts and Sciences

“THE BLACK EARTH AND RADIAL VILLAGES OF ACRE, BRAZIL: EXPLORATIONS OF A CONTINENT-WIDE LANDSCAPE PARADIGM”

CO-INVESTIGATOR: Eduardo Goes Neves (University of São Paulo)

*Meredith Rowe, Saul Zaentz Professor of Early Learning and Development, assumed the role of PI on this project as of 2018.*
2018 AWARD WINNERS

FLAVIO CALMON
Assistant Professor of Electrical Engineering, Harvard John A. Paulson School of Engineering and Applied Sciences

“BRIDGING ELECTRICAL ENGINEERING AND MACHINE LEARNING EDUCATION IN BRAZIL”

COLLABORATOR: Jose Cândido Silveira Santos Filho
(Universidade Estadual de Campinas)

STEPHANIE M. JONES
Gerald S. Lesser Professor in Early Childhood Development, Harvard Graduate School of Education

“SEL KERNELS FOR BRAZIL ECE: A LOW-COST, BRIDGING ELECTRICAL ENGINEERING AND MACHINE EARLY INSTITUTIONALIZATION INTERVENTION”

JOHN A. PAULSON SCHOOL OF ENGINEERING AND APPLIED SCIENCES

2019 AWARD WINNERS

FLAVIO CALMON
Assistant Professor of Electrical Engineering, Harvard John A. Paulson School of Engineering and Applied Sciences

“PREPARING BRAZILIAN ENGINEERING STUDENTS FOR THE DATA-DRIVEN ECONOMY”

COLLABORATOR: Jose Cândido Silveira Santos Filho
(Universidade Estadual de Campinas)

MICHELA CARLANA
Assistant Professor of Public Policy, Harvard Kennedy School

“TACKLING STEREOTYPES TO ENCOURAGE BRAZILIAN MATH TALENT”

CO-INVESTIGATORS: Raissa Fabregas (University of Texas at Austin); Diana Moreira (University of California, Davis) Collaborator: Felipe C. R. Lima (University of São Paulo)

FLAVIO CALMON
Assistant Professor of Economics, Faculty of Arts and Sciences

“OVERCOMING BARRIERS TO ADOPTION OF EFFECTIVE MUNICIPAL POLICIES”

CO-INVESTIGATORS: Jonas Hjort (Columbia University); Diana Moreira (University of California, Davis); Juan Francisco Santini (Pontifical Catholic University of Rio de Janeiro)

MEREDITH L. ROWE
Saul Zaentz Professor of Early Learning and Development, Harvard Graduate School of Education

“PARENT-CHILD INTERACTION AND CHILD LANGUAGE DEVELOPMENT IN LOW-INCOME FAMILIES IN BRAZIL”

CO-INVESTIGATOR: Guilherme Vanoni Polanczyk (University of São Paulo)

CATHERINE SNOW
Patricia Albreg Graham Professor of Education, Harvard Graduate School of Education

“IMPROVING LITERACY OUTCOMES IN BRAZIL BY EXPANDING TEACHERS’ INSTRUCTIONAL REPERTOIRES”

CO-INVESTIGATOR: Renan de Almeida Sargiani (University of São Paulo)

ELIZABETH SPELKE
Marshall L. Berkman Professor of Psychology, Faculty of Arts and Sciences

“A PRESCHOOL INTERVENTION IN BRAZIL TO ENHANCE POOR CHILDREN’S SCHOOL READINESS”

CO-INVESTIGATORS: Chrissie Ferreira de Carvalho (Universidade Católica de Salvador); Nara Cortes Andrade (Universidade Católica de Salvador); Jose Neander Silva Abreu (Federal University of Bahia)

JUDY LIEBERMAN
Professor of Pediatrics, Harvard Medical School

“IDENTIFYING T CELL EPITOPES IN PLASMODIUM VIVAX”

CO-INVESTIGATOR: Caroline Junqueira (Instituto Rene Rachou/Fundação Oswaldo Cruz)

DANA CHARLES MCCOY
Assistant Professor of Education, Harvard Graduate School of Education

“TESTING THE IMPACT OF A LOW-COST, EVIDENCE-BASED, AND SCALABLE APPROACH TO SOCIAL AND EMOTIONAL LEARNING (SEL) IN BRAZILIAN EARLY CHILDHOOD SETTINGS”

CO-INVESTIGATORS: Stephanie Jones (Harvard Graduate School of Education); Alexandra Brentani (University of São Paulo)

CHARLES NELSON
Professor of Pediatrics and Psychology, Harvard Medical School

“EARLY INSTITUTIONALIZATION INTERVENTION IMPACT PROJECT”

CO-INVESTIGATORS: Nathan A. Fox (University of Maryland); Charles H. Zeanah (Tulane University School of Medicine)

COLLABORATOR: Edson Amaro Jr. (PENSI Institute)

CO-INVESTIGATORS: Beatriz Cardoso (Laboratório de Educação); Daniel Domingues dos Santos (University of São Paulo, Ribeirão Preto)

COLLABORATOR: Raquel da Hora Barbosa (Universidade Federal Fluminense)
MARCIA CASTRO
Andelot Professor of Demography, Harvard T.H. Chan School of Public Health

“ASSESSMENT OF PUBLIC ACCEPTANCE OF A HYPOTHETICAL Dengue VACCINE AND THE POTENTIAL IMPACT ON INDIVIDUAL VECTOR-CONTROL BEHAVIOR”

CO-INVESTIGATORS: Marcia Maria Tavares Machado (Federal University of Ceará); Antonio Silva Lima Neto (Fortaleza Municipal Health Secretariat)

COLLABORATORS: Luciano de Paula Camilo (University of Brasilia); Juan Pablo Aguilar Ticona (Institute of Collective Health, Federal University of Bahia); Sana Haider (Harvard T.H. Chan School of Public Health)

JERRY MITROVICA
Frank B. Baird, Jr. Professor of Science, Faculty of Arts and Sciences

“SEA LEVEL CHANGE IN BRAZIL: ANALYZING THE PAST, PROJECTING THE FUTURE, AND TRAINING FUTURE GENERATIONS OF BRAZILIAN SCIENTISTS IN THE USE OF SEA LEVEL MODELING TOOLS”

CO-INVESTIGATOR: Rodolfo José Angulo (Universidade Federal do Paraná)

DAVID MORENO MATEOS
Assistant Professor of Landscape Architecture, Harvard University Graduate School of Design

“ESTIMATING THE RECOVERY OF TREES’ EVOLUTIONARY POTENTIAL FROM PRE-COLUMBIAN AGRICULTURE TO IMPROVE TROPICAL FOREST RESTORATION”

CO-INVESTIGATOR: Charles Clement (Instituto Nacional de Pesquisas da Amazônia)

COLLABORATORS: Doriane Picanço-Rodrigues (Universidade Federal do Amazonas); Maria Imaculada Zucchi (Agência Paulista de Tecnologia dos Agronegócios)

STEPHANIE PIERCE
Thomas D. Cabot Associate Professor of Organismic and Evolutionary Biology, Faculty of Arts and Sciences

“UTILIZING BRAZIL’S FOSSIL RECORD TO ILLUMINATE EARTH’S GREATEST MASS EXTINCTION AND ITS LINK TO MODERN CLIMATE CHANGE”

CO-INVESTIGATOR: Felipe L. Pinheiro (Universidade Federal do Pampa)

COLLABORATORS: Tiago R. Simões (Faculty of Arts and Sciences); Paulo M. Nascimento (Canal do Pirulla)

MEREDITH ROWE
Professor of Education, Harvard Graduate School of Education

“The Development, Implementation, and Evaluation of an Early Language Development Parenting Program for Social Assistance Community Centers in Brazil”

CO-INVESTIGATORS: Flávio Cunha (Rio University); Guilherme Irffi (Federal University of Ceará)

JESSE SNEDEKER
Professor of Psychology, Faculty of Arts and Sciences

“AN EVIDENCE GAME-BASED INTERVENTION TO ENHANCE SOCIAL-EMOTIONAL SKILLS IN CONTEXT OF ADVERSITY IN BRAZIL: A COMPREHENSIVE APPROACH FOR TYPICAL CHILDREN AND CHILDREN WITH AUTISM”

CO-INVESTIGATOR: Elizabeth Spelke (Faculty of Arts and Sciences)

COLLABORATORS: Chrissie Ferreira de Carvalho (Universidade Federal de Santa Catarina); Nara Côrtes Andrade (Universidade Católica do Salvador)