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PHOTOGRAPHERS Eduardo Cesar and Léo Ramos Chaves

IMAGE DATABASE Valter Rodrigues

CONTRIBUTORS Danilo Albergaria, Evanildo da Silveira, Fabio Otubo Igor Zolnerkevic, Karina Toledo, Márcio Ferrari, Negreiros, Zansky and Zé Vicente

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PESQUISA FAPESP Rua Joaquim Antunes, nº 727, 10º andar, CEP 05415-012, Pinheiros, São Paulo-SP FAPESP Rua Pio XI, nº 1.500, CEP 05468-901, Alto da Lapa, São Paulo-SP

SECRETARIA DE DESENVOLVIMENTO ECONÔMICO, CIÊNCIA E TECNOLOGIA GOVERNO DO ESTADO DE SÃO PAULO

Identity and Zika in Latin America

Alexandra Ozorio de Almeida I EDITOR IN CHIEF

pioneering program that supports technology companies in Brazil celebrated its 20th year in 2017. The Technological Innovation in Small Businesses (PIPE) program, run by the São Paulo Research Foundation (FAPESP), has backed more than 1,700 projects and invested over R\$360 million in 1.100 small and medium-sized companies that want to convert scientific knowledge into new products and services. This international issue features a collection of reports from between May and August 2017, and the cover article (page 4) tells the story of PIPE, which was inspired by the US Small Business Innovation Research (SBIR) program.

It is only natural that Brazil, a world leader in sugarcane farming, devotes much of its scientific and technological research to the plant. In 2017, the Sugarcane Technology Center (CTC) in the state of São Paulo developed a transgenic sugarcane that is resistant to the crop's most damaging pest, the sugarcane borer (*page 53*). The variety was recently approved for use by CNTBIO, the national body responsible for assessing the biosafety of genetically modified organisms in Brazil.

As researchers from the human and social sciences have begun working more closely with computer scientists, a new interdisciplinary field, known as digital humanities, has emerged. The collaboration is a two-way street: for social scientists, huge databases of economic and social information, as well as the digitization of art and history collections, have broadened potential lines of research; computer scientists, mean-

while, are tackling the challenge of creating tools to meet the demands of the humanities. This new field also involves studying the role of digital technology in society. One of its most interesting characteristics, described in a report on page 60, is how researchers have incorporated tools and concepts from other fields into their activities.

Two articles published in the journal Nature describe the results found by two different research groups with separate resources working in parallel to monitor the evolution of the Zika virus genome (page 34). With the shared goals of understanding the recent epidemic, predicting future outbreaks, and developing methods of diagnosis, the research combined epidemiological and genetic data to show that Zika spread silently throughout the Americas for at least a year before it was considered a danger to public health. One of the studies used a mobile laboratory and portable genetic sequencing technology to search for clues about the path the virus has taken through Brazil since its suspected arrival in the country in February 2014.

Latin America is the theme of an interview with historian Maria Ligia Prado, who has been studying the region's history and interpretations of its development for almost five decades (page 10). She believes that the identity of Latin America, with which the region has grappled since independence, is a sensitive issue. The construction of an identity often disregards our differences and diversity, leading us to see the "other" as an enemy. For Prado, the remedy is a critical spirit.