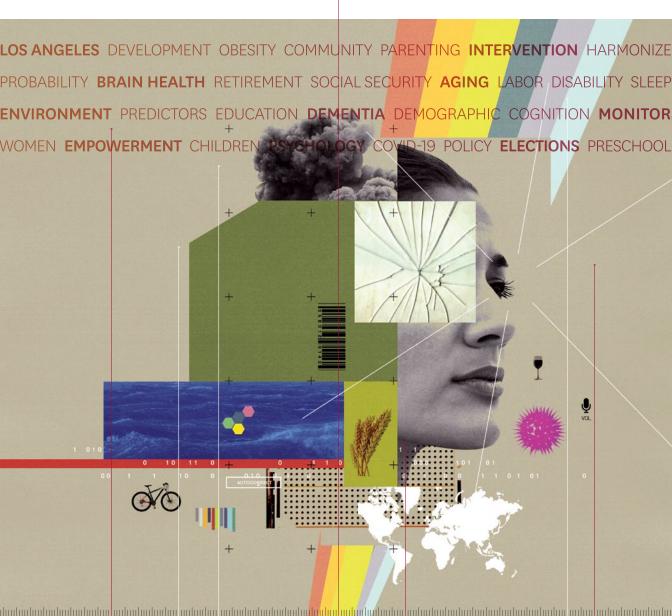
mindful research • human impact







Executive Director, Arie Kapteyn

CESR WAS ONCE A START-UP

WE OPENED OUR DOORS IN 2013, meaning we're well past the days when our center could be described as a promising newcomer to the fields of social science and economic research. Now, CESR is a mature institution, having proven itself through exemplary work—work that gets results, as our primary aim has always been to improve social welfare by informing and influencing decision-making in the public and private sectors. But looking back is not really in our DNA. Instead, we'd rather face forward, where new opportunities abound. With the prospects of groundbreaking research, CESR is ready to expand our portfolio so we can seize the moment. We can't sit still—won't sit still—because there are just too many possibilities. Sprinkled throughout this brochure, we share some of CESR's recent findings in the form of factoids—a fun way to show off one of our great strengths: bringing together experts in a breadth of disciplines so they can work together in tackling difficult societal problems.

At CESR, we're immensely proud of our past, and just as excited for the future. In the present, this brochure stands as a milestone, letting the world know from where we've come and where we're going.



CESR MAKES A DIFFERENCE

AT USC DORNSIFE'S Center for Economic and Social Research, we address financial and health disparities, social inequality and the needs of children, families, and elders.

These are not trivial matters, yet despite their complexities our data-driven research has changed lives for the better. We study the brain and genetics, and a range of health risks. We're also finding potential methods to slow diseases. We examine new ways of teaching, with our rewards coming when school districts adopt methods we've shown to be successful. Consumers lower their debt and save for retirement thanks to encouraging nudges we've developed.

As a result, CESR's work is receiving national attention from policymakers and the media, plus other academics. Our faculty fills conference panels, just as our papers fill journals.

Even more, we're growing, with exciting new centers and programs joining those that have been maturing since our start-up in 2013.

The world never sits still, so neither does CESR. People always are changing, as we do in response. All the while, though, what's never wavered is our mission: to improve social welfare by informing and influencing decision-making in the public and private sectors.

CESR's execution of this mission, we firmly believe, has made all the difference.





WHO WE ARE

BECAUSE CESR MUST LOOK FOR KNOWLEDGE in many different directions—data collection, economics, psychology, to name a few we bring together experts from many disparate fields to get the work done.

CESR leverages the advantages of being part of the University of Southern California—a world-class institution that fuses artistic creativity with scientific discovery.

Our partnerships within USC include the Institute for Creative Technologies, Keck School of Medicine, Leonard Davis School of Gerontology, Spatial Sciences Institute, Rossier School of Education, Information Sciences Institute, Leonard D. Schaeffer Center for Health Policy and Economics, Sol Price School of Public Policy, and several departments within the Dana and David Dornsife College of Letters, Arts and Sciences.

Our collaborations also extend worldwide, as we continue combining new technologies with profound social insights to help people shift their behavior to more positive actions—no matter where they live.

in several large-scale longitudinal surveys and other projects around the world.

NubiS includes all the traditional modes of data collection like self-administered, face-to-face, and telephone interviewing. NubiS also can collect continuous information from smartphones, tablets,

monitoring system that includes temperature checks.

Among the applications for NubiS:

» Allows clinicians to rate respondents on six domains of cognitive and functional performance applicable to Alzheimer's disease and related dementias.

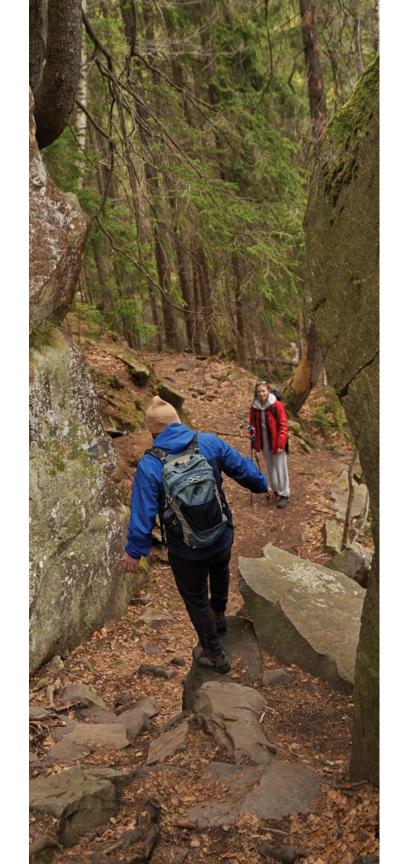
- » Modules to repeatedly assess participants over time, including the collection of saliva for cortisol (stress).
- » Mind Your Money: a community-based randomized controlled trial of a mobile financial capability intervention among
- » miVacunaLA: an evidence-based digital outreach program designed to inform and empower Latino families when deciding to vaccinate their children against COVID.

UNDER ONE ROOF

CESR'S DEDICATED CENTERS & PROGRAMS FOSTER GLOBAL RESEARCH EFFORTS.

- » How much do your genes determine your health, your attitudes and behaviors, your future? The Behavioral and Health **Genomics Center** is building and applying tools that allow researchers to more efficiently use genetic data to answer those important questions and more. A distinguishing feature of the Center is an emphasis on using very large datasets to conduct social-science genomics research. This emphasis arises from a recognition that for behavioral phenotypes, virtually any genetic variant has a very small association—thus, very large samples are a must to produce robust and replicable findings.
- » Consumer finance, for many, is impenetrable if not intimidating. CESR's Behavioral Economics Studio (BEST), partnering with financial institutions and federal agencies, combines elements of psychology and economics to learn what motivates people to make good financial choices and the nudges needed to get them to act. These insights have markedly improved outcomes in numerous areas, including retirement savings and debt reduction. The results are a win for consumers, who improve their financial wellbeing; a win for the government, banks, and credit unions, who want people

- to manage their money wisely; and a win for academia, which benefits from BEST's gains in knowledge.
- » The **Brain Health Observatory** is challenging the old saying that if the brain was simple enough to understand, we'd be too simple to understand it. The Observatory collects data and conducts research on disorders like dementia, multiple sclerosis, schizophrenia, and addiction, as well as assessing the technology used to treat these. In addition, the Observatory studies countries' healthsystem preparedness for memory care, and the economic burdens of such illnesses. Much of the Observatory's recent work has examined the potential impacts due to an Alzheimer's disease treatment.
- » Pedagogy—the science of teaching—is the focus of CESR's Center for Applied Research in Education (CARE). The work of CARE increases understanding of how educational policies affect students, teachers, and schools, and whether interventions are effective, for whom, and under what conditions. CARE also oversees the education module of the Understanding America Study. Over the last few years, CARE research has looked at the effectiveness of student-centered curriculum and instruction. civics education, and the impact of wholeschool reform models and out-of-school time programs on students' academic and



FINANCE

Short educational interventions can reduce adults' susceptibility to financial fraud.

Financial empowerment can draw Indian women into the labor force and liberalize conservative gender norms around women and work.

Financial literacy has significant predictive power for future financial outcomes.

Older adults are entering retirement age with larger debt burdens.

WORKING OUT

Americans think they are as physically active as Europeans, but they aren't even close.

Fitbits make wearers 7% more active.



Collecting data for Watts Neighborhood Health Study

- non-academic outcomes. CARE's partners include educators, school districts, state and federal education agencies, and charitable foundations.
- » The Program for Children and Families studies the influences of family-level factors, neighborhoods and communities, and policy environment on the wellbeing of children and families. For example, the Program wants a deeper understanding of the link between place and health: Why are people in some places healthier than others? Does place affect families of varying socioeconomic groups differently? Researchers in this program are also studying the nexus between housing and health. The Watts Neighborhood Health Study is tracking how a \$1 billion investment in the Jordan Downs Public Housing Redevelopment is affecting residents' health and wellbeing.

» Much of CESR's work depends upon, at the core, people being questioned about their health, attitude, finances, romances, then answering honestly and accurately. Yet despite the widespread use and importance of self-reporting, valid collection is a complex endeavor that is not fully understood. The Center for Self-Report Science (CSS) probes the reliability of data collected, both now and in decades past, to maximize the precision of information. Beyond building better surveys, CSS also studies the self-reporting of pain, such as who feels more of it and how medical patients can best track theirs.

» With increasing life expectancy and

- survivability of many acute conditions, the burden of complex chronic diseases is growing—but research is sparse as this field is not conducive to spectacular breakthroughs, such as in oncology and cardiology. At the Center for Improving Chronic Illness Care (CICIC), researchers analyze the quality of care for such patients and investigate approaches to improve it. Work has been conducted on conditions like chronic wounds, dementia, addiction. and schizophrenia as well as palliative care. Additionally, CICIC has been examining the possibilities for moving medicine outside of boundaries of facilities, as developments like telehealth could be a boon for the housebound chronically ill.
- » The Center for the Study of Health Inequality (CSHI) is motivated by the notion that the start of someone's life can be characterized by two "lotteries" in which a person has no say: one's genes (nature) and

- the socio-economic environment provided by the family into which one is born (nurture). CSHI's research is contributing to a better understanding of the origins of inequality, the nature of genetic makeup, and the interplay between genes and environments. Essential to this new knowledge is the success of CSHI in integrating genetic data into economic analyses.
- » Do you work to live or live to work? The Health and Labor Economics (HALE) Center examines the complex interplay between our wellbeing, our jobs, and the greater economy. HALE's research has addressed how health affects work capacity and labor supply, as well as how job demands and working conditions affect labor supply, compensation, and health. HALE personnel also collaborate with other institutions on the American Working Conditions Survey, one of the most in-depth looks at conditions in U.S. workplaces.
- » The Interplay of Genes and Environments in Multiple Studies (IGEMS) consortium is a worldwide collaboration involving more than 15 twin studies of adulthood and aging that is housed at CESR, giving scholars access to a large and rich data archive. The aims are to understand why early-life adversity, and social factors such as isolation and loneliness, are associated with diverse outcomes on matters of mortality, health, and cognition, particularly later in life. IGEMS researchers have tackled questions such as the extent to which risk of late-life dementia is inherited, and how access to resources may alter one's genetic propensity towards aging and dementia.
- » CESR's global work is a point of pride, and rightfully so—but because we're located in one of the world's most important cities, it's also essential to look locally. LABarometer conducts surveys on social conditions and attitudes affecting Los Angeles County, with an eye to informing academic research, the public, and policymakers. The center's signature effort is a longitudinal study of randomly selected county households, with a focus on four key issues: livability, affordability, mobility, and sustainability. The first survey was fielded in 2019, and ever since, LABarometer has guided local governments and service providers on an array of issues, from homelessness and public transportation to food insecurity, climate resilience, and COVID.
- » Improving older adults' lives is a goal of CESR's Program on Global Aging, Health, and Policy. Through data collection, processing, and analyses of populationrepresentative data on seniors, we can better understand variations across countries and time in individual health and retirement status and behaviors. A recent emphasis are the interactions between cognitive impairment/dementia, education, pensions and additional long-term care systems and policies, air pollution, climate, and other physical and natural environments. The Program also is responsible for the Gateway to Global Aging Data, a platform for population survey data on aging around the world.

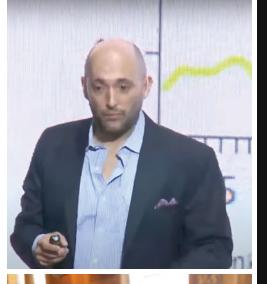
MILLION INDIA
AGES 60+ ARE
LIVING WITH
DEMENTIA

8%

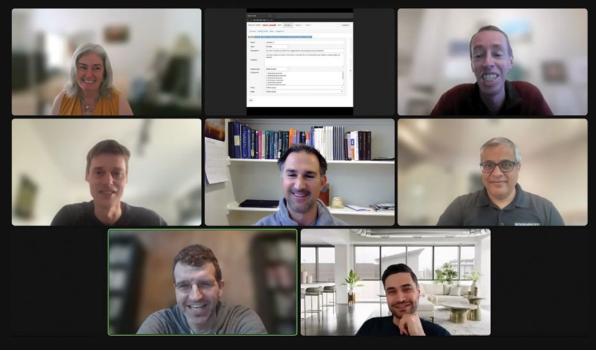
OF AMERICANS
OVER 65 WITH
MILD COGNITIVE
IMPAIRMENT
ARE FORMALLY
DIAGNOSED

IS THE ESTIMATED
DEMENTIA
PREVALENCE IN
INDIA FOR
ADULTS AGES 60+





















LOOKING AT COVID FROM ALL ANGLES

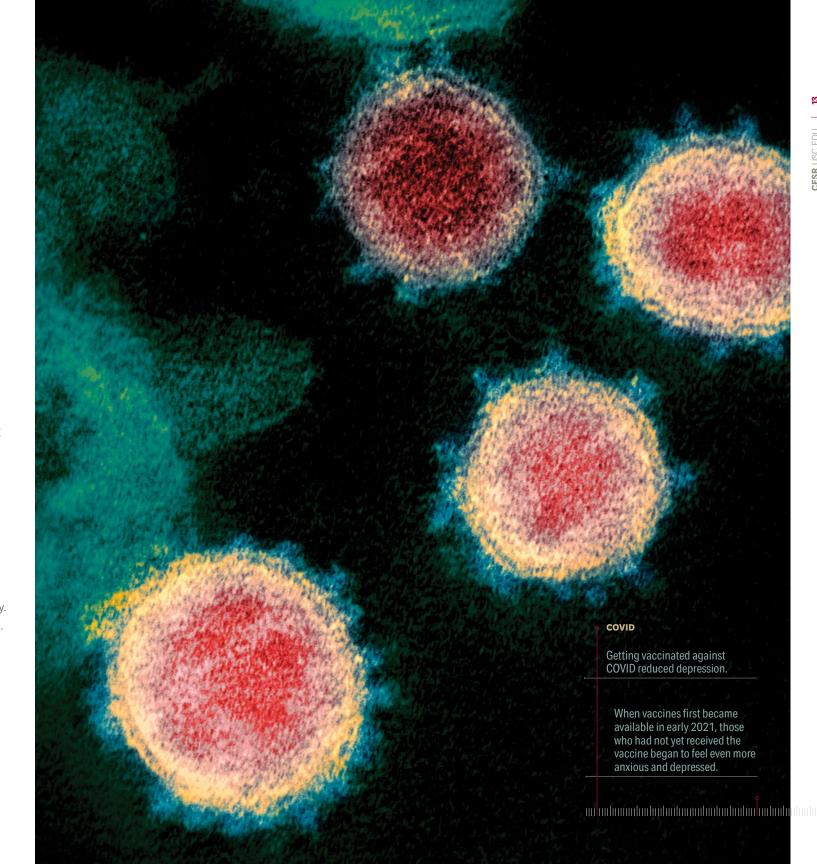
FROM THE MOMENT CESR OPENED, our researchers have looked to current events for topics of study: elections, the gyrations of a global economy, climate change's widespread fallout. But no breaking news so directly seized our attention as did 2020's worldwide COVID pandemic.

Every aspect of society was affected by the virus, from business shutdowns to disruptions in learning, in addition to, of course, the mounting death toll.

CESR scientists delivered timely research and tracked public sentiment. The Understanding America Study (UAS) measured the pandemic's effects on classroom learning, mental health, vaccine perception, eating disorders, and many other issues.

The UAS showed:

- » Women carried a heavier childcare load than men during the crisis, even while working.
- » A "pandemic misery" index showed 80% of the participants experienced hardships the prior year.
- » Coronavirus-related job losses had an outsized impact on Blacks and Latinos.
- » In 2020, displacement pressures were pervasive in Los Angeles County. One-third of the moves by renters that year were due to displacement.
- » Early on, L.A. County residents reported substantially higher rates of anxiety than the rest of the country.
- » Americans' financial situations improved largely due to government stimulus payments.
- » When offered, parents chose not to enroll their children in COVIDrecovery interventions—and when they were not offered, parents didn't particularly care.



OBESITY

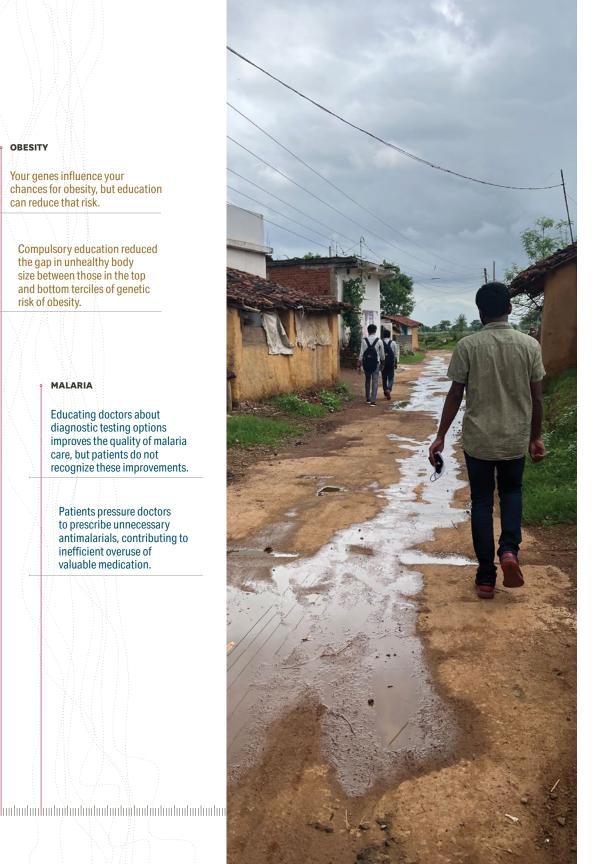
Your genes influence your chances for obesity, but education can reduce that risk.

Compulsory education reduced the gap in unhealthy body size between those in the top and bottom terciles of genetic risk of obesity.

MALARIA

Educating doctors about diagnostic testing options improves the quality of malaria care, but patients do not recognize these improvements.

Patients pressure doctors to prescribe unnecessary antimalarials, contributing to inefficient overuse of valuable medication.



FROM OUR RESEARCH, KNOWLEDGE

CESR'S IMPRESSIVE ROSTER of researchers comes from many different fields of study, empowering us to look at complex topics from multiple angles. Here are just a few examples:

Aging

- » The estimated dementia prevalence in India for adults aged 60 and older is 7.4%, meaning about 8.8 million elderly Indians are Immigration living with the disease.
- » Only 8% of Americans over age 65 suffering from mild cognitive impairment, the stage at which Alzheimer's disease is ideally treated, have been formally diagnosed.
- » The Tsimane indigenous people of the Bolivian Amazon experience less brain atrophy than Americans and Europeans.

Education

- » A genetic predictor of educational attainment explains about 15% of its variation in groups with European ancestries.
- » The reputation of a university is correlated with its graduates' earning growth.
- » Though Americans widely support teaching K-12 students about slavery and racial inequality, most don't want books with LGBTQ themes made available in schools.

Finances

- » Prize-linked incentive programs may face selection issues and not improve financial behavior.
- » There is a gender gap in financial literacy among people between the ages of 40-65, with women faring worse.

- » Mexican high-school dropouts who qualified for the 1986 amnesty earned only 2-3% more than those who did not qualify, and there was little difference in where they worked or the types of jobs they had, though their bettereducated counterparts got better jobs.
- » Immigrants to the United States and their children are part of an unfortunate American tradition: ignorance of financial matters, including retirement planning.

Locally

- » Half of Los Angeles County residents avoided going outdoors at some point between July 2020 and July 2021 because of air quality concerns from wildfires—up from 30% in the previous year.
- » About 1 in 3 Angelenos postponed or went without necessary medical care in 2020 because the cost was too high.



OF THE <u>IM</u>MIGRANT ADVANTAGE FOR DIABETES CAN BE EXPLAINED BY UNDIAGNOSED DISEASE

OF LOS ANGELES

AVOIDED GOING

OUTDOORS

DURING THE

WILDFIRES

BETWEEN JULY

2020 & JULY 2021

COUNTY RESIDENTS











Obesity

- associated with 43% lower odds of new
- » Using the natural experiment of periodic

- role in older people deciding to stay in the workplace.
- » There is a strong correlation between women leaving their jobs and their spouses suffering a health shock. Men, however, do not follow the same pattern.

- » High self-control in kindergarten was onset obesity over the subsequent 8 years.
- relocations in the military, families moving to a place with higher rates of obesity increased their likelihood of developing it.

Working

- » Being open to experiences plays a significant

AGING

Subtle mistakes in answering

dementia up to 10 years later.

Response times to online

survey questions detect mild cognitive impairment.

questionnaires foreshadow



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