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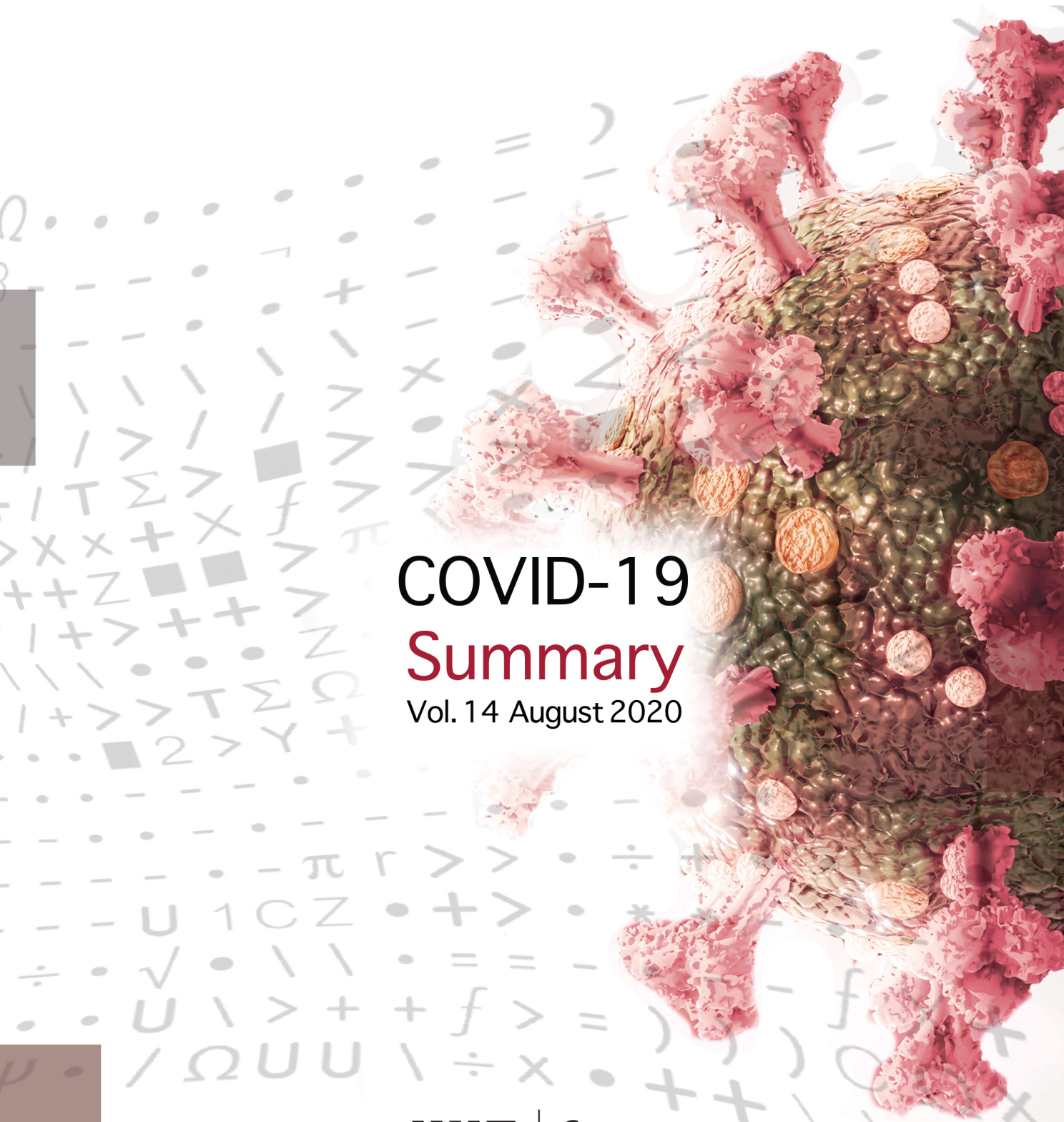
startupexchange.mit.edu



COVID-19 Summary

Vol. 14 August 2020

MIT Corporate Relations

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MIT ILP UPDATES // COVID-19 RELATED

This is a very brief collection of current resources and information from MIT's Industrial Liaison Program covering a range of issues related to COVID-19 and is offered to help us all navigate during this unprecedented and disruptive time.

NOTE: This brief, which was a weekly publication from March through June, will be issued once in July, once in August, then twice monthly beginning in September.

UPCOMING EVENTS

MIT ILP WEBINARS

See: https://ilp.mit.edu/search/event?f%5B0%5D=event_type_term%3A24

THURSDAY, 20 AUGUST, 10:00-11:15 AM: INNOVATIONS IN DIAGNOSTICS & DETECTION ON THE ROAD TO RE-DENSIFICATION

MIT Center for Collective Intelligence, Media Lab Community Biotechnology & Millipore Sigma. Live, virtual event will include audience Q&A
Speakers: http://www.cvent.com/events/innovations-in-diagnostics-and-detection-on-the-road-to-re-densification/speakers-fcdf605dfe834f1bb9c3ac3cf847bb71.aspx
http://www.cvent.com/events/innovations-in-diagnostics-and-detection-on-the-road-to-re-densification/event-summary-fcdf605dfe834f1bb9c3ac3cf847bb71.aspx

27 AUGUST, 12:00-1:00 PM: PRESERVING HEALTH IN THE BUILT ENVIRONMENT: MEETING THE NEEDS OF AN AGING POPULATION

Presented by MIT Professional Education, Harvard Medical School Executive Education, and MIT Center for Real Estate
https://mitcre.mit.edu/uncategorized/developing-health-centered-communities-the-next-revolution-in-real-estate

Register: https://event.on24.com/eventRegistration/EventLobbyServlet?target=reg20.jsp&partnerref=mit-cre&eventid=2530816&sessionid=1&key=D4CDED94198711612BD0ACB57AD4BB9B&regTag=1282606&sourcepage=register

TUESDAY, 15 SEPTEMBER, 11:00 AM – 12:45 PM: 2020 MIT STARTUP EXCHANGE WORKSHOP: SUSTAINABLE MATERIALS INNOVATION

MIT Startup Exchange, MIT Corporate Relations
Agenda: https://startupexchange.mit.edu/attend/2020-mit-startup-exchange-workshop-sustainable-materials-innovation
https://ilp.mit.edu/attend/2020-mit-startup-exchange-workshop-sustainable-materials-innovation

21, 22, & 29 SEPTEMBER: MIT SENSE.NANO SYMPOSIUM: THE BODY AT ALL SCALES

MIT Corporate Relations, SENSE.nano, MIT.nano
Day 1 / Sept 21, 1:00-5:00 pm – Sensing at the Level of Sub-cell, Cell, and Organs
Day 2 / Sept 22, 1:00-5:00 pm – Sensing at the Level of Body Systems and Populations
Day 3 / Sept 29, 1:00-4:00 pm – Startup Exchange and Future Impacts
Agenda: https://sense.mit.edu/2020-symposium-agenda
https://ilp.mit.edu/attend/2020-mit-sensenano-symposium-body-all-scales
Register: https://mit.zoom.us/webinar/register/WN_ohdUponeTimMKEwKVdmd3A

PROJECTS, INITIATIVES, RESEARCH

DATA / EPIDEMIOLOGY: QUANTIFY THE ROLE OF SOCIAL DISTANCING IN SHAPING THE COVID-19 CURVE: INCORPORATING ADAPTIVE BEHAVIOR AND PREFERENCE SHIFTS IN EPIDEMIOLOGICAL MODELS USING NOVEL BIG DATA IN 344 CHINESE CITIES

Siqi Zheng June 2020
https://mitcre.mit.edu/news/prof-siqi-zheng-awarded-covid-19-research-grant
https://news.mit.edu/2020/six-mit-receive-research-funding-address-covid-19#.XsaHGOA-JixY.twitter

Siqi Zheng, Samuel Tak Lee Professor of Real Estate Development and Entrepreneurship for DUSP and Faculty Director, Center for Real Estate; head, MIT Sustainable Urbanization Lab, http://siqizheng.mit.edu/ ; https://dusp.mit.edu/faculty/siqi-zheng ; https://mitcre.mit.edu/siqi-zheng

The research is in collaboration with Marc Lipsitch at Harvard, Eli Fenichel at Yale and Jude Bayham at Colorado State University, and Sustainable Urbanization Lab researchers, Juan Palacios Temprano and Jianghao Wang. The study will be carried out over the next 12 months. Zheng calls the funding “crucial” in research that will compare different regions and how people react to social and physical distancing during a pandemic and will examine various government policies aimed at controlling the spread of the virus.

IMMUNE RESPONSE: SEEING THE FOREST FOR THE TREES: PREDICTIVE IMMUNE MARKERS IN COVID-19 RESPONSE

August 2020, Ragon Institute of MGH, MIT and Harvard, http://www.ragoninstitute.org/seeing-the-forest-for-the-trees-predictive-immune-markers-in-covid-19-response/

Results of partnership between the Ragon Institute of MGH, MIT and Harvard and UW Medicine identify five markers of the humoral immune response that may be able to predict COVID-19 patient outcomes.

A recent study published in Immunity identifies five immune response markers which, collectively, were able to correctly classify both convalescent COVID-19 patients and those who did not survive the disease. The study, “Distinct early serological signatures track with SARS-CoV-2 survival,” was led by Ragon Group Leader Galit Alter, PhD, Professor of Medicine at Harvard Medical School, and Helen Chu, MD, Associate Professor of Medicine, Division of Allergy and Infectious Diseases, University of Washington School of Medicine.
Dr. Chu’s team, responsible for the enrollment, collection, and management of the clinical work in this study, collected samples hospitalized COVID-19 patients. Overall, this study used samples from a cohort of 22 individuals, 12 of whom recovered, and 10 of whom died.

Dr. Alter's team used her systems serology technique, an approach that relies on 60+ assays to create a detailed profile of the immune response, to compare the immune responses of those who had survived to those who had not.

"Any given feature tells only a small part of the story. By looking at the overall profile of the immune response, we can begin to truly understand how the immune system responds to COVID-19 and then use that knowledge to prevent the worst outcomes of this disease," said Alter.

The virus that causes COVID-19, SARS-CoV-2, has two main proteins that the humoral immune system, which is responsible for antibody production, responds to. They are the spike (S) protein and the nucleocapsid (N) protein.

"Most vaccine candidates in development are designed to elicit antibodies against spike antigen [protein], which is the response we observed with individuals who survived natural infection," Chu, who is also a UW Medicine physician, said. The N protein is produced at significantly higher levels in the virus than the S protein is, but previous studies have shown that an immune response to the N protein does not provide protection against coronaviruses related to SARS-CoV-2…

SARS-CoV-2-specific ELISA development
Roy V, Fischinger S, Atyeo C, Slein M, Loos C, Balazs A, Luedemann C, Astudillo MG, Yang D, Wesemann D, Charles R, Lafrate AJ, Feldman J, Hauser B, Caradonna T, Miller TE, Murali MR, Baden L, Nilles E, Ryan E, **Lauffenburger Douglas**, Beltran WG, Alter G, Alter G. J Immunol Methods. 2020 Aug 8: 112832. doi: 10.1016/j.jim.2020.112832 Online ahead of print https://pubmed.ncbi.nlm.nih.gov/32780998/

Critical to managing the spread of COVID-19 is the ability to diagnose infection and define the acquired immune response across the population. While genomic tests for the novel Several Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) detect the presence of viral RNA for a limited time frame, when the virus is shed in the upper respiratory tract, tests able to define exposure and infection beyond this short window of detectable viral replication are urgently needed. Following infection, antibodies are generated within days, providing a durable read-out and archive of exposure and infection. Several antibody tests have emerged to diagnose SARS-CoV-2. Here we report on a qualified quantitative ELISA assay that displays all the necessary characteristics for high-throughput sample analysis. Collectively, this test offers a quantitative opportunity to define both exposure and levels of immunity to SARS-CoV-2.

Dissecting the antibody-OME: past, present, and future
Loos C, **Lauffenburger Douglas A**, Alter G. Curr Opin Immunol. 2020 Aug 2; 65:89-96. doi: 10.1016/j.coi.2020.06.003,
Online ahead of print https://pubmed.ncbi.nlm.nih.gov/32755751/

Humoral immunity is key to protection for nearly all licensed vaccines. Yet, the design of vaccines has been more difficult for some of our most deadly killers (e.g. HIV, influenza, Dengue virus, etc.), likely due to our incomplete understanding of the precise immunological mechanisms associated with protection. Humoral immunity is governed both by B-cells and their bi-functional secreted antibodies, all of which have a unique capacity to evolve during an immune response.

Current OMIC technologies capture individual features of the humoral immune response, providing a glimpse into humoral components (Fab/Fc/B-cell-omic), but fail to provide a wholistic view of the humoral response as a collective functional arm. Here, we dissect current OMIC strategies reviewing experimental and computational approaches, that if integrated could provide a true systems-level view of the humoral immune response.

Douglas A Lauffenburger, Ford Professor of Biological Engineering, Chemical Engineering, and Biology, https://be.mit.edu/directory/douglas-a-lauffenburger ;
http://web.mit.edu/dallab/
http://www.ragoninstitute.org/portfolio-item/lauffenburger/
PubMed: https://pubmed.ncbi.nlm.nih.gov/?term=lauffenburger+d&sort=date&size=50

CHALLENGE—REIMAGINING FACE COVERINGS AND PPE

MIT Pandemic Response CoLab
https://cci.mit.edu/pandemic-response-supermind-activation/
https://www.pandemicresponsecolab.org/

https://www.pandemicresponsecolab.org/challenges/2020/reimagining-face-coverings-and-ppe
Details: https://www.pandemicresponsecolab.org/resources/2020/reimagining-face-coverings-and-ppe

Could your idea help save lives? Universal adoption and adequate supply of face coverings and personal protective equipment (PPE) is one the largest challenges facing communities today. The globe is contending with problems ranging from marginalized communities lacking access to essential PPE to misinformation campaigns regarding the relative effectiveness of our current options. These challenges underscore the need for holistic, innovative solutions.

How do we make masks one more of the everyday essentials in our life? How do we innovate PPE to protect a range of people from frontline workers to senior citizens? What existing technologies can we repurpose to make face coverings and PPE more robust? What actions can we take to sustain behavior change? These are just some of the many questions that solutions could answer. Solutions could touch on the accessibility, wearability, effectiveness, technologies employed, materials used, or even ways to change behaviors. You can pick one or you can mix and match.

Most promising solutions have the opportunity to network and plan with experts who are active in developing innovative technologies, designs, and adoption strategies. In addition, they will be invited to take part in a public webinar showcasing their ideas.

Submission: Now until September 21, 2020
Expert Review: September 21, 2020-October 1, 2020
Voting Period: October 1, 2020-October 15, 2020
Completed: October 16, 2020

SHASS: THE MEANING OF MASKS SERIES

https://shass.mit.edu/news/news-2020-pandemic-meanings-masks-series

The mask is a badge of honor

Eric Klopfer, Head, Comparative Media Studies/Writing; Director, MIT Education Arcade
https://shass.mit.edu/news/news-2020-pandemic-masks-cmsw-eric-klopfer

"In this pandemic era, what a mask really says is, 'I care about YOU.' That is an important and powerful message that we should champion and commend. We can also have fun with masks, but the key is the understanding that, during a pandemic, the mask is a badge of honor, indicating that you are protecting the health of others during a crisis."

A collective cry for justice

Graham Jones, Associate Professor of Anthropology; MacVicar Faculty Fellow
https://shass.mit.edu/news/news-2020-pandemic-masks-anthropology-graham-jones

"For me the iconic image of our times is of Black Lives Matter protestors of every race wearing masks emblazoned with the dying words of George Floyd: 'I can't breathe.' The use of the cloth mask as a substrate for a citational text situates the individual wearer as an actor in a broader social drama. Such protest masks are a creative, expressive way of subsuming one's identity within a social movement — and one's voice within a collective cry for justice."

The mask as 公德心

Emma Teng, T.T. and Wei Fong Chao Professor of Asian Civilizations; and director of MIT Global Languages

gongdexin (in Mandarin); kootokushin (in Japanese); kongdokshim (in Korean), and public spiritedness (in English)
https://shass.mit.edu/news/news-2020-pandemic-meanings-masks-history-emma-teng

"Norms in East Asian countries support the ethos that 'doing something for the community good is good for me also.' It would be unthinkable to discuss sacrificing older people to the pandemic using a cost-benefit analysis. It is also considered a social responsibility to do one's part in controlling the pandemic to ensure that schools remain open for the younger generation."

Masks can reveal new possibilities

Manduhai Buyandelger, Associate Professor of Anthropology
https://shass.mit.edu/news/news-2020-pandemic-meanings-masks-anthropologist-manduhai-buyandelger

"In shamanic rituals and in computer-mediated virtual reality, a mask conceals one identity to reveal new possibilities. Seen in this light, virus protection masks offer an opportunity to replace a visage of fear with a public expression of strength as a community."

The expressive power of masks
Sara Brown, Assistant Professor and Director of Design, MIT Theater Arts
Commentary *forthcoming*

"As we encourage masking, it's worth considering how we can harness the expressive power of masks. I'm interested in hearing from MIT students, for example, as to what affiliations or meanings they would want their masks to communicate. No matter what form it takes, wearing a mask during the pandemic shows that you care about protecting others."

PAPERS, ARTICLES, PRESENTATIONS, TALKS

MEDIA: 3Q WITH HEATHER HENDERSHOT ON MEDIA COVERAGE OF THE PANDEMIC: THE STARK DIFFERENCES ACROSS US MEDIA SOURCES

Heather Hendershot, Professor of Comparative Media Studies,
https://shass.mit.edu/news/news-2020-pandemic-hendershot-media-coverage
https://cmsw.mit.edu/profile/heather-hendershot/

"Here's what's key to understand: the transmission of inaccurate beliefs about the virus is not just about 'facts.' It's about emotion. Scientists naturally want to believe that facts properly presented will convince people, but that is often not the case. Media outlets offering inaccurate information are also stoking fear, hatred, and irrational responses."

"Should mainstream media outlets respond to outrageous statements from FOX about Covid-19? I would argue no. It is not the job of respectable and truthful (though imperfect) network news outlets to shoot down conspiracy theories. Indeed, the worst thing they could do would be to amplify those theories, by talking about them."

"My constant question as I consume news today: is this reporting or amplification?"

Full responses: https://shass.mit.edu/news/news-2020-pandemic-hendershot-media-coverage

"There are many reasons the U.S, response to the pandemic has faltered, but three recent studies have focused on conservative media's role in fostering confusion and complacency. The studies paint a picture of a media ecosystem that amplifies misinformation, entertains conspiracy theories, and discourages audiences from taking concrete steps to protect themselves and others." — Commentary in The Washington Post.

RESEARCH: TRAINING THE COVID-19 COHORT: ADAPTING AND PRESERVING SOCIAL SCIENCE RESEARCH

by Fotini Christia, Professor of Political Science, and J. Chappell Lawson, Associate Professor of Political Science
30 July 2020, items-Insights from the Social Sciences, https://items.ssrc.org/covid-19-and-the-social-sciences/social-research-and-insecurity/training-the-covid-19-cohort-adapting-and-preserving-social-science-research/

For “Covid-19 and the Social Sciences,” Fotini Christia and Chappell Lawson address changes in research and impacts of the pandemic on fieldwork. They trace the shifts in research focus that it has produced and find opportunities in newly broadened methodologies, but warn of the dangers of neglecting non-Covid research and the traditional fieldwork that still remain essential to social science. They further outline ways to support the “Covid-19 cohort”—graduate students whose research has been undermined or transformed by global pandemic—in order to keep from losing an entire generation of fieldwork-based scholars and scholarship.

The Covid-19 pandemic is forcing natural scientists to wrestle with how to keep laboratory research going and how best to do peer review. Social scientists and humanists are similarly having conversations about what Covid-19 means for social science research. In the short term, Covid-19 has disrupted the plans of graduate students and faculty members conducting fieldwork that cannot be readily transferred online. In the long run, the research norms and practices that emerge will affect social science more broadly. We see three crucial questions:

- How should we approach social science research related to Covid-19 itself?
- How can we adjust to the impact of Covid-19 on field work?
- How can we manage and mentor a cohort of scholars who could not do the conventional field work that is essential to their professional development?...

TRANSMISSION RISK / POLICY: CAUSAL IMPACT OF MASKS, POLICIES, BEHAVIOR ON EARLY COVID-19 PANDEMIC IN THE U.S.

Victor Chernozhukov, Hiroyuki Kasahara, Paul Schrimpf
13 July 2020 medRxiv preprint doi: https://doi.org/10.1101/2020.05.27.20115139
Related: http://news.mit.edu/2020/masks-mandates-impact-deaths-0805

Victor Chernozhukov, Professor, Department of Economics + Center for Statistics,
http://www.mit.edu/~vchern/

This paper evaluates the dynamic impact of various policies adopted by US states on the growth rates of confirmed Covid-19 cases and deaths as well as social distancing behavior measured by Google Mobility Reports, where we take into consideration people’s voluntarily behavioral response to new information of transmission risks. Our analysis finds that both policies and information on transmission risks are important determinants of Covid-19 cases and deaths and shows that a change in policies explains a large fraction of observed changes in social distancing behavior. Our counterfactual experiments suggest that nationally mandating face masks for employees on April 1st could have reduced the growth rate of cases and deaths by more than 10 percentage points in late April, and could have led to as much as 17 to 55 percent less deaths nationally by the end of May, which roughly translates into 17 to 55 thousand saved lives. Our estimates imply that removing non-essential business closures (while maintaining school closures, restrictions on movie theaters and restaurants) could have led to -20 to 60 percent more cases and deaths by the end of May. We also find that, without stay-at-home orders, cases would have been larger by 25 to 170 percent, which implies that 0.5 to 3.4 million more Americans could have been infected if stay-at-home orders had not been implemented.

Finally, not having implemented any policies could have led to at least a 7 fold increase with an uninformative upper bound in cases (and deaths) by the end of May in the US, with considerable uncertainty over the effects of school closures, which had little cross-sectional variation.

ECONOMICS: POLICY ESSAY—WILL COMPETITION BE ANOTHER COVID-19 CASUALTY?

Nancy L. Rose, July 2020, https://www.brookings.edu/wp-content/uploads/2020/07/Rose_LO_FINAL.pdf

Nancy Rose, Charles P. Kindleberger Professor of Applied Economics, http://economics.mit.edu/faculty/nrose

The immediate risks that COVID-19 poses to health and economic activity are clear. But similar to the way health-care professionals and scientists now recognize potential long- lasting health impacts in some individuals even after they appear to have recovered from an active infection, economists and policymakers should be considering economic impacts that could persist long after businesses have reopened and shelter-in-place orders have been lifted. This essay addresses one such concern: the state of competition in the economy.

The economic crisis arising from the pandemic is changing the business landscape and exacerbating prior concerns about the state of competition in the U.S. economy. Many firms are struggling financially, have filed for bankruptcy, or have shut down. But some large, well-positioned firms appear to have increased their market share, accelerating trends seen prior to the pandemic. Other firms are increasing cash reserves, ready to acquire competitors who are being damaged by revenue declines, excess leverage, and financial distress. With COVID-19 disruptions likely to reinforce the dominance of the largest firms in the economy, increase bankruptcies, and reduce new business entry today, tomorrow's product and labor markets may be less competitive and less productive than they were before the crisis. This outcome is even more likely if antitrust enforcers succumb to pressures to approve acquisitions of weaker competitors and immunize overly broad cooperative solutions to market challenges, particularly because cooperative behavior learned under antitrust exemptions can facilitate collusive behavior long after those exemptions are removed (e.g., Kamita 2010)…

CLIMATE CHANGE: FROM COVID TO CLIMATE—4 LESSONS THAT MAY MITIGATE GLOBAL WARMING

By Yossi Sheffi, MIT Center for Transportation & Logistics, 10 August 2020
https://medium.com/mitsupplychain/from-covid-to-climate-four-pandemic-lessons-that-may-mitigate-global-warming-23507188f614

Yossi Sheffi, Elisha Gray II Professor of Engineering Systems, Director of the Center for Transportation & Logistics, and the MIT Supply Chain Management Program, https://ctl.mit.edu/about/bio/yossi-sheffi

As I have argued many times, current efforts to combat climate change are well-intentioned but doomed to fail. They ignore the economic realities that make it difficult for consumers and businesses to support low-carbon consumption. (For more on these arguments, see my posts "Corporate Hot Air No Substitute for Real Action on Climate Change" and "Why We Need a New Manhattan Project to Combat Global Warming".)

Proponents of these efforts now maintain that the changes wrought by the COVID-19 pandemic give their approach to combatting climate change even more impetus. I believe that this view is misguided — but lessons from the pandemic could help the world forge an effective strategy for fighting climate change.

The line from coronavirus to climate

Policymakers, the media, think tanks, and academics are locked in a debate about the post-pandemic world….

The line is broken by economics

While laudable, these lofty aspirations miss the biggest obstacle to implementation — the COVID-19 pandemic is driving more poverty, higher unemployment levels, and mass business bankruptcies. This economic and social fallout will ensure that climate-related goals such as persuading consumers to buy "green" products are even less viable in a post-pandemic world than before the Coronavirus erupted…

SUPPLY CHAINS: HOW THE COVID-19 SUPPLY CHAIN SUCCEEDS WHEN IT FAILS

Ken Cottrill, 01 July 2020, https://medium.com/mitsupplychain/how-the-covid-19-supply-chain-succeeds-when-it-fails-5eb8635dcaaf

Ken Cottrill is Global Communications Consultant and Editorial Director at the MIT Center for Transportation & Logistics (MIT CTL) https://ctl.mit.edu/about/bio/ken-cottrill

Supply chains triumph when they complete deliveries satisfactorily — but not when the payload is the COVID-19 virus.

Framing the fight against the pandemic in supply chain terms makes it clear that to stop the spread of the virus, we must ensure that its supply chain fails. We can secure failure by using disruptors to prevent deliveries of the supply chain's deadly freight. But not disruptors such as adverse weather that derail product supply chains. These are special disruptors that include masks, quarantines, and social distancing.

Various conveyances to choose from

Our point of origin for the COVID-19 supply chain is an infected individual. He or she has an "inventory" of virus payloads waiting to be transported to multiple destinations — uninfected people. The payloads are packaged in droplets of moisture that are dispatched by the person's breath….

HOUSING / HEALTH DATA: STAY HOME, STAY HEALTHY? THAT DEPENDS ON THE HOME

Juan Palacios Temprano (MIT postdoc), Nils Kok, Piet Eichholtz, Erdal Aydin
July 1, 2020, https://mitcre.mit.edu/news/new-paper-the-impact-of-housing-conditions-on-health-outcomes ; https://www.sul.mit.edu/
Short version: http://maastrichtrealestate.com/upload/researches/PAEK_Short.pdf
Dowload paper via: http://maastrichtrealestate.com/research/on-the-economics-of-health-in-homes-1/

The paper explores the impact of housing conditions on occupant health using data from 25,000 German households over 25 years. The core of the study indicates that individuals exposed to poor housing conditions report worse mental and physical health, and experience an 11 percent increase in doctor visits, increasing to 20 percent for age groups over 64.

We investigate the relationship between housing conditions and health outcomes using a dataset that tracks 25,000 German households over 25 years. We document that individuals exposed to poor housing conditions report worse mental and physical health, and experience an 11 percent increase in doctor visits, increasing to 20 percent for age groups over 64. The analysis controls for individual, dwelling and temporal fixed effects, and is robust to changes in socio-economic status, lifestyle choices, and neighborhood conditions. As a robustness check, we use home renovations as major a trigger of changes in housing conditions. Restricting the analysis to tenants, whose renovations are paid by landlords, we document that home renovations significantly reduce doctor visits, corroborating the findings on home conditions and health outcomes.

WORK: HOW COVID-19'S 168-HOUR WORKWEEK IS CHANGING WORK IN RETIREMENT

Joseph Coughlin, 10 August 2020, Forbes
https://agelab.mit.edu/index.php/news/how-covid-19%E2%80%99s-168-hour-workweek-changing-work-retirement
https://www.forbes.com/sites/josephcoughlin/2020/08/09/how-covid-19s-168-hour-work-week-is-changing-work-in-retirement/#480a3f724502

AgeLab Director Joseph Coughlin writes in Forbes about how the exposure to working from home is making employees rethink how they will spend their retirement

"Despite the complaints of working at home, many COVID home workers are already sensing the retirement possibilities. Paul, a Philadelphia-based 60-year old accountant, notes that "working with a few of my favorite clients in retirement is feeling more possible than I would have imagined as little as a year ago." "Everything I need is online. I can easily chat with my clients or colleagues on video."

But Paul goes beyond the logistics of work to spotlight the lifestyle benefits of working from home and what that might mean for his retirement. He says, "I used to commute more than an hour from home to my office in center city – working from home I added almost three hours a day to my life….

… Working from home with 24/7 connectivity is the new norm for many people in today's COVID workplace. Not only do days and nights blur into each other, so do entire days of the week. The slang "blursday" has become popular now that it often takes some thought to recall if it is Sunday, or is it Monday, Thursday or TGIF? Answer – it's "blursday."

This new work pattern is no longer new. It has been ongoing for nearly six months and really does not show signs of ending anytime soon. Despite the downsides of working from home many are starting to see it through the lens of what retirement might look like.

If full-time work feels like a seeming 168-hour workweek, transitioning to a formal retirement schedule where employer and personal expectations are reduced, and might mean only being required to be available part-time, say a mere 40 hours a week, working in 'retirement' will feel like a break….

MIT-RELATED STARTUPS

MIT Startup Exchange: https://startupexchange.mit.edu/

DESIGN THAT MATTERS (DTM)

Redmond, WA, https://www.designthatmatters.org/

Design that Matters (DtM) collaborates with leading social entrepreneurs and hundreds of volunteers to solve problems in global health for the poor in developing countries.

Covid-19 Response: Design that Matters (DtM) typical focuses on medical devices for global health in low-resource settings. Given that all clinical settings are becoming low-resource settings, we have shifted to applying DtM's expertise in rapid prototyping and human-centered design to the domestic shortage of critical health supplies worldwide. This design has undergone testing and is recommended by the NIH for a clinical setting when fabricated as instructed. The DtM-v3.0 Face Shield protects frontline healthcare workers responding to COVID-19. This 3D-printed design addresses the short-term supply gap of PPE (personal protective equipment) while others solve the problems of domestic production and distribution of hospital-standard disposable face shields.
https://www.designthatmatters.org/covid-19

MIGHTIER

Boston, MA, https://www.mightier.com/

A platform to reach millions of kids.
We pair video games with clinically validated strategies to help kids build confidence and thrive. Emotional strength empowers kids to succeed in life. Our mission is to help millions of kids discover their emotional strength. We provide families a proven tool they can use in their home. We keep kids engaged with new games and content every month.

NIRMIDAS BIOTECH

Palo Alto, CA, https://www.nirmidas.com/
https://www.linkedin.com/company/nirmidas-biotech-inc-/

Combining chemistry, biology, bio-engineering, and optical imaging, we focus on red to near-infrared fluorescence enhancement technologies.

Commercialized applications for diagnostic and imaging in early disease diagnosis, prognosis monitoring, population screening, and therapeutics.

Covid-19: Rapid Test for COVID-19 IgM/IgG Antibody Detection Kit
Qualitative Detection of COVID-19 (SARS-CoV-2) IgM and IgG Antibodies in Human Serum, Plasma, and Whole Blood https://www.nirmidas.com/rapid-test-for-covid-19-sars-cov-2-igmigg-antibody-detection-kit

And,

Nirmidas Biotech Inc. announces the availability of pGOLD™ COVID-19 IgG/IgM or IgG/IgM/IgA Assay kits for simultaneous, multiplexed detection of IgG, IgM and IgA antibodies against COVID-19, each assay requiring only 1 micro-liter of patient sera, plasma or whole blood (fresh or from dried spots on blood cards). This assay is initially for research use only. It will be eligible for LDT tests in clinical labs upon implementations...
https://www.nirmidas.com/nirmidas-news/2020/4/6/nirmdas-has-developed-high-accuracy-pgold-microarray-based-high-throughput-elisa-like-covid-19-iggigmiga-assay-for-lab-use-service