Ch 2: Genomic Surveillance

Jeremy Farrar's/Wellcome's/ BGI Genomics's (China) role in the Genomics Revolution - brought to you by One Health.

- Andersen, Holmes, Rambaut,
- Genomic Surveillance - H3Africa
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Andersen, Holmes, Rambaut,

When *One Healthers* talk about amassing the planet's bio-data on a centralized system, the jewel in the crown is genomic surveillance capability. In plain terms: they're coming for your DNA.

(Update: It was instructive that Macron refused a Russian PCR test recently. Why?: *(W)e could not accept that they get their hands on the president's DNA.*)

Edward You, U.S. national counterintelligence officer for Emerging and Disruptive Technologies: *China is developing the world's largest bio database. Once they have access to your genetic data, it's not something you can change like a pin code.*

This is the *meeting of minds* - where THE Science & CCP-thought aligns. Ethics is placed on extended leave. Championing this bio-data grab are three pro-CCP co-authors from the notorious Proximal Origin paper.

Andersen, Holmes, Rambaut (2018): *We urge those working on infectious disease to focus funds and efforts on a much simpler and more cost-effective way to mitigate outbreaks — **proactive, real-time surveillance of human populations**. This will best be achieved through an established global network .. **such as the WHO**.*

Remember this is the same *established global network such as* WHO/One Health/EcoHealth Alliance/NIH, who, in the critical early days, told us:

- There is *no evidence of human-to-human transition*
- Covid is *not* an international emergency
- Don't close the borders with China
- Don't wear masks
- *China's commitment to transparency is .. impressive, and **beyond words*** (Tedros)

At the same time shutting down crucial advice from Taiwan, which i'd list, though it's simpler to:

re-read the above - make it the exact opposite.

This same closed-circle of One Health scientists, in league with the CCP, are acquiring the world's bio-data (none of which helped prevent or stop Covid). So one wonders, what exactly *are* you doing with it?

Andersen/Holmes/Rambaut (2016): *Given the development of portable sequencing technologies,* ***real-time viral genome sequencing*** *is now possible in clinics and diagnostic laboratories, including in resource-limited settings. ..* ***The need*** *for immediate analysis and the growth of* ***open sharing of sequence data means*** *the* ***challenge*** *in genomic studies may be moving from* ***data acquisition*** *to* ***analysis*** *and* ***interpretation****.*

Firstly, when our authors say *open-sharing*, they mean the public *openly sharing* their DNA data with CC-affiliated Globo-Orgs. Interestingly, their talking like that part is pretty much done. The challenge now is: how to wield this power-source

So why should we trust these people with our genomic data?

Andersen, Holmes, Rambaut-18): *Second,* ***ethical****,* ***rigorous*** *and standardized protocols for the collection of samples and data from patients* ***should be*** *established ...*

(You are the guys who concocted the Prox O pangolin/wet-market fraud. Purpose-wrote it to face-save Western-CCP collaborations ... maybe spare us the platitudes about ethics.)

... (by) .. a ***global consortium*** *involving the ministries of engaged countries to* ***facilitate*** *the* ***generation*** *and* ***sharing*** *of that information.*

So enforcing these mythical ethical standards will be a *global consortium.* In other words, an invisible Org partially run by the CCP, with help from like-minded actors - chosen from a carefully cultivated pool of western scientists.

Uyghur DNA collecting study: *The national physical examination (NPE) is a* ***free physical examination*** *provided by the Chinese government for* ***all Xinjiang people****. .. The data came from the physical examination data of Urumqi in 2018. .. This study was performed in accordance with the* ***principles*** *outlined in the* ***Declaration of Helsinki*** *and approved by the* ***Xinjiang Uygur Autonomous*** *Region CDC* ***ethical committee****.*

That'd be fine, right? They're using the *Helsinki* principles - with an *autonomous ethical committee* ...

Andersen, Holmes, Rambaut-18: *A helpful analogue is the approach used by the Human Heredity and Health in Africa (H3Africa) Initiative, which .. has used standard consent-form guidelines (the Helsinki ones?) for collecting DNA samples* ***from subjects****.*

As a potential *subject*, glad you guys brought H3Africa up. African countries (along with China) have become a frontier hub of DNA gathering activity due to corrupt/compliant/enthusiastic governments, a *"host of VIP's"*, and a centralized western media that knows how to butter bread. It's open-slather. Without restraint. That’s Kurtz territory.

Let’s take a closer look at what goes on there.

Genomic Surveillance - H3Africa

NIH (US): *H3Africa (Human Heredity & Health), announced in June 2010, is organized and supported by the National Institutes of Health* ***(NIH)*** *and the* ***Wellcome Trust****, a global* ***charity*** *based in London.*

So; a DNA collecting initiative in Africa, currently funded by:
NIH: Dr. Francis Collins - the *Godfather of Genomics*
Wellcome Trust: Sir Jeremy Farrar, Covid Cover-up Hero. Literally the knight who would ride to the rescue of the The Science Globo-Industry, by turning: *Caught in-bed-with-CCP-whilst-causing-Covid-Atrocity … (!!!)*
Into: Mega-money/power making bonanza

Our Celebrity Covid Actors didn't drop out of the sky. They were already big-game players with a Globo-agenda. Seated at the table with MSM, Bill Gates, CCP, & all the other Globo-Orgs, they are adept at utilizing that immense power to acquire the holy grail/goldmine of bio-data: personalized DNA (quick! whilst no-one's looking)

H3A is an early days case study in how it was done.

H3Africa website: *There is currently a* ***global effort*** (One Health) *to apply genomic science and* ***associated technologies*** (bio-AI - Kristian Andersen's specialty) *to further the understanding of health and disease in diverse populations.*

Every word of that is true. But. It *is* this *global effort* (run by you lot) *to apply Genomic Science* X AI that worries me.

There's a truck-load of *ethical* issues that need to be *worked through* before we catapult into some genomic surveillance wet-dream of CCP-aligned scientists.

Nature: *H3Africa researchers realized they needed to* ***revise research regulations*** *and procedures* ***for gaining the public's trust*** *.. rather than just collecting blood and leaving — the approach disparagingly referred to as* ***helicopter research****.*

Helicoptered off to the NIH/Wellcome Trust's personal *Cloud* Computers.

H3Africa website: *(T)here exists an* ***enormous opportunity*** *to* ***utilize*** *such approaches to* ***benefit African*** *populations and to* ***inform global health****.*

Lot more of the latter *approach utilization* than the former, apparently. *Global Health* Control was the *enormous opportunity*.

Farrar & Collins knew DNA was the currency of the future. It was a well-planned, audacious power grab. Utilizing a window in power/money to bag&tag: Global DNA

These guys couldn't give a flying fuck - especially a *helicopter* one - about *African populations,* which, in turn, don't trust western scientists, evidenced by the negligible take-up of the Covid vaccines (11%). .
If you really want to *benefit African populations and inform Global Health*, then reduce entrenched corruption. That's the upstream problem. In Africa, & the *First World* Countries that entrenched it.
(sidenote: The First World terminology is kinda ironic coz Africa *is* The First World. But that term got appropriated, being first coined by Demography Expert, Alfred *Sauvay* in 1952, who relegated it to Third place - in a three horse race.
Sauvy's savvy was proven by how his global thought frame came to be adopted by western academia, MSM, & politicians, in the newly crowned *First World*.)

Base-fact: Colonialism set that plunder-system up. African countries have long been seen as a resource to be funneled-up & nothing else - it's the *blood-diamonds* mentality. Farrar et al are perpetuating/exploiting this with their own blood-obtained diamonds.

The thinking is as simple as it is unethical:
Gobble the DNA up while it's there to be gobbled …
If we don't, someone else will … Could even be the Bio-Terrorists, haha!

H3Africa website: *H3Africa empowers African researchers, .. establishes and nurtures effective collaborations* (with NIH, Wellcome, & CCP)*, and generates* ***unique data*** *that* ***could be used*** *to*

improve both African and global health.

Could be. Could be used for a lot of things.

Nature, Feb 2020: *Last year, for example, the (Wellcome)Sanger Institute in Hinxton, UK, came under fire for licensing a gene chip based on African genome data to US biotechnology company Thermo Fisher, which was planning to manufacture the chip for a profit.* (Thermo Fisher - another *bad actor* we'll get around to later)

Springer: *Gene chips are postage stamp-sized glass wafers that contain half a million or more tiny cells. Each cell holds DNA from a different gene. This array makes it possible to carry out a very large number of genetic tests on a single sample of genomic DNA at one time.*

Nature: *This infuriated both the African researchers who had collaborated with the British team and the Ugandan study participants, who had not consented to the deal.*

The above only came to light after whistleblowers raised concerns. It may be the last truthful thing Nature published before ethics was purged by the owners due to the Covid cover-up.

Deepti Gurdasani: *It's great to see the silence around this being broken. Myself, and another whistleblower were dismissed after we raised concerns about this to senior management at @sangerinstitute and* ***@JeremyFarrar at @wellcometrust****. Eight more people were made redundant.*

If the silence was broken, it was a muffled breach … quickly repaired & re-silenced by Sir Jeremy.

Wellcome - China Kadoorie Bio-bank

by **dulan drift**, Sunday, **July 25**, 2021, 07:03

H3Africa is funded by NIH and Wellcome Trust.

Sir Jeremy has been Director of Wellcome Trust since 2013.

Wellcome website: *Jeremy is a member of the UK government's Scientific Advisory Group for Emergencies (SAGE), the UK Vaccine Taskforce and the Principles Group of the ACT-Accelerator hosted by the WHO, and he chairs the WHO R&D Blueprint Advisory Group.*

So very powerful - fundamentally connected with WHO and the One Health concept.

Stat: *Wellcome Trust (issues) grants from an endowment valued at about $26.5 billion. .. As a private funder of biomedical research, the Wellcome Trust is second in size only to the Bill and Melinda Gates Foundation.*

The Guardian: *(As) the world's third largest charitable foundation, dispensing around £700 million each year .. (and) the largest non-governmental funder of research within the UK system, Wellcome has an increasingly powerful voice in science policy.*

Farrar has spoke-personed this *increasingly powerful voice* to manifest Wellcome's vision regarding human genomic surveillance & other One Health initiatives.

Dr. Marie-Paule Kieny: *He's a visionary .. he is willing to take risks.*

Apart from H3Africa, Wellcome shares/bankrolls a risky vision with the China Kadoorie Biobank - a genomic collection 7-up style initiative in China.

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China Kadoorie Bio-bank

China Kadoorie Bio-bank website: *The CKB is being conducted jointly by* ***University of Oxford*** *(which is closely tied to Wellcome) .. and the Chinese Academy of Medical Sciences (CAMS).*

More interesting bed-fellows...

China Kadoorie Bio-bank: *The long-term continuation of the study is supported by the Wellcome Trust, with further support in China from the Chinese Natural Science Foundation and* ***Chinese Ministry of Science and Technology****.*

Chinese Ministry of Science and Technology - think about those words - in a Totalitarian regime - that extracts DNA from/organ harvests prisoners of conscience.

Of all you brainiacs with immense power, not one of you thought jumping into bed with the CCP to shape the future of humanity might be a bad idea?

China Kadoorie Bio-bank: *The information generated will advance our understanding of ..* ***aetiology*** *not only in China but also in other countries.*

Had to look *aetiology* up. It means *the study of root causes*. Cool - me too!

Keeping the Fire Burning: Yves Moreau

With Australian Aborigines, it was someone's job, a woman's job, to carry/nurture a smouldering stick when you moved camp - so you wouldn't have to do the friction trick every time.

If that stick was the embers of scientific spirit, then Richard Ebright/Simon Wain Hobson have kept the fire alive. They were warning, way back since the Anthrax-inspired funding boom, that reckless GoFx$ would cause … *a catastrophic pandemic.*

Then there's your DRASTIC collective - including @billybostickson - they smelled a rat with Covid - pursued it - *persisted.* That's the important bit.

Plus others - including non-scientists - normal people - more than *real* scientists - a sign that science-culture has lost its way?

But it *wasn't: the fairies that came along in the night*

It *was* netizens working hard/fast/for free.

Nor was it the guilty parties *coming clean* of their own volition.

Corruption never stops by itself. Ever

With Genomic Surveillance, **Yves Moreau** has been the *stick carrier.* He kept it going despite the efforts of Wellcome/Thermo Scientific/BGI/CCP to snuff it out. He has used that ember to shine a light on the truth.

Sadly, he's very much in the minority so far as *the scientific community* goes - which makes his work more valuable.

Let's take a look at what he reported...

Yves Moreau: (Dec 2019) In Xinjiang, police collected biometric information (including blood samples, finger-prints and eye scans) from nearly 19 million people in 2017, in a programme called

‘Physicals for All’. This was part of a suite of measures that are being used by the Chinese government to control the Uyghur ethnic group.

Other nations are building massive DNA databases or considering doing so. In 2015, Kuwait passed a law mandating DNA profiling of its entire population .. (while) Kenya passed a law that would have .. required all citizens to submit biometric information, including DNA profiles, to a national database.

Moreau gleaned some of his info from publications by DNA evangelists, such as Tim Schellberg, president of Gordon Thomas Honeywell - a law firm (!) connected to Thermo Fisher.

Schellberg cheerfully predicts: *the development of civil-DNA databases (for all) is inevitable*. (go.nature.com/337pjce (copy-paste it)).

Schellberg: *Significant Hurdles: Open and public parliamentary process, Culture of being influenced by opposition and protests.*

To leap these hurdles, he trumpets the following success stories:

Schellberg: *Missing Persons:* ***Chinese Ministry of Public Security’s aggressive DNA*** *missing person’s program is key reason for success.*

He also points out that whereas “fingerprints do not work for small children” - DNA collection does!

Facilitating this east-meets-west DNA-grab is Thermo Fisher Scientific.

Yves Moreau: *The deployment of DNA-surveillance infrastructure in Xinjiang, for example, was enabled by the Chinese government buying products from — and working with — the US company Thermo Fisher Scientific.*

The firm is currently the global leading supplier of DNA-profiling technology in law enforcement. Thermo Fisher Scientific researchers have worked with China’s Ministry of Justice, and with researchers at the People’s Public Security University of China, which falls directly under the Ministry of Public Security, to tailor the technology specifically for use in Tibetan and Uyghur populations.

Thermo Fisher Scientific, along with Wellcome, under Sir Jeremy Farrar, are serial offenders in the mis-use of collected DNA.

Genome Web: *In April 2018, four researchers sent a complaint to the Wellcome Trust, which provides Sanger's funding, about the institute's $2.2 million deal with Thermo Fisher Scientific to develop microarray chips based on African genetic data it had collected through a number of collaborations.*

Which is where lawyers come in handy. The whistleblowers were subsequently fired. Now it's onward and upward.

Thermo Fisher website: *Imagine what can happen when DNA testing takes only minutes, instead of days, weeks, or even months. The compact, easy-to-use Applied Biosystems RapidHIT ID System generates forensic DNA profiles in virtually any setting in as little as 90 minutes—and* ***no technical expertise is required****.*

Safer communities are within reach. Rapid DNA helps ***solve crimes*** *today and prevent victims tomorrow.*

Collecting DNA from duped subjects in Africa and using it for your own money-hungry purposes *is* a crime - against humanity.

As is supplying technology to a totalitarian regime to oppress Uyghurs and Tibetans.

You don't even need a compact, easy-to-use RapidHIT ID System to solve that crime - a modicum of uncorrupted political will should do the trick. Unfortunately, there's no device for injecting that yet.

Yves Moreau: *Restrictions .. are too weak. .. For example, US laws forbid the export of fingerprint-recognition technology to some users deemed problematic .. such as the Chinese police. But .. does not restrict the export of more-invasive DNA-profiling and facial-recognition technologies.*

All of us must beware a world in which our behavioural, financial and biometric data, including our DNA profiles, or even entire genome sequences, are available to corporations — and law enforcers and political parties. Without changes .. the use of DNA for state-level surveillance could become the norm.

BGI and the Digital Silk Road

BGI.com.global: **Our Simple Mission:**

To provide researchers and healthcare professionals with quality genomic data and genetic testing solutions, at rapid turnaround times with industry leading pricing.

BGI Genomics is the world's leading provider of genomic sequencing services and proteomic services, now serving customers in more than 100 countries. We provide (the following) .. with integrated genomic sequencing and proteomic services and solutions(:)

- academic institutions
- pharmaceutical companies
- health care providers
- and other organizations

Atlantic Council: *Beijing Genomics Institute (BGI) (is) a Chinese artificial intelligence (AI) company referred to as the **"Huawei of genomics"**.*

Gen News: (Feb 26, 2020) *The coveted last slot of this year's AGBT conference*, the premier genomics conference held in Florida every winter, promised to be a blockbuster with the title:*

First $100 genome sequencing enabled by new extreme throughput DNBSEQ platform.

Technology Review: (pay site): *(T)he Chinese gene giant BGI Group (announced) it will make genome sequencing cheaper than ever breaking the $100 barrier for the first time ever.*

(Woo-hoo! More genomic gold for the People's Republic of Totalitarianism/Western Scientists.)

Radoje Drmanac, CSO of MGI (owned by BGI): *It's not unthinkable that a $10 genome may be (possible). At future AGBTs, we'll hopefully present **even crazier** innovations and breakthroughs.*

CBS: *The financial stakes for dominating the global biotech sector — the industry that's bringing us the COVID vaccine — are staggering, estimated to be worth up to $4 trillion a year. For perspective, that's more than the valuation of Amazon and Apple combined.*

BGI - Radoje Drmanac

Gen News: *Radoje (Rade) Drmanac, CSO of MGI, was a co-founder of Complete Genomics, which ..launched in 2008 with its novel DNA NanoBalls (DNB) platform. .. (A)fter going public (it) was acquired by BGI for about $117 million in 2013. MGI (is) the company's next-gen subsidiary.*

Gen News: *What made (you) think of using an antibody?*

Radoje Drmanac: *It just hit me, like, why in the world are we trying to do this indirectly when* ***antibodies*** *can recognize the base?*

Gen News: *Drmanac says that it is very cheap, highly specific and there is no cross talk. Not doing this earlier, he explains, was "a simple mental block in our inventions."*

Technology Review: *The Shenzhen company says the low cost will be possible with* (Drmanac's) *"extreme" DNA sequencing system .. capable of decoding the genomes of 100 000 people per year.*

Radoje Drmanac: *(This) is not going from bad to good - it's going from excellent to extremely excellent.*

Gen News: *CoolMPS (MPS stands for massively parallel sequencing) is the first nucleobase-specific antibody-based sequencing chemistry.*

Wellcome - BGI - Digital China Health - CONVERGE

Jeremy Farrar, Director Wellcome Trust: *Understanding humanity's genetic code is not only going to be fundamental to the medicine of the future, it is an essential part of medicine today. .. The Wellcome Trust has invested more than £1 billion in genome research that has built this understanding .. (and) will further* ***exploit this knowledge*** *for medical advances that help patients, within a robust ethical framework that relies on their informed consent.*

Wellcome Genome Campus: *Congenica is a digital health company enabling genomic medicine with the world's leading clinical decision support platform for accelerated genomic data interpretation.*

Built on a foundation of clinical genomics expertise, we develop software .. and services that make the use of complex genomic data routine, ***accessible and ubiquitous****. Our headquarters are on the* ***Wellcome Genome Campus*** *in Cambridge, UK, however, our reach is global.*

Gryphon Scientific (p 64): *A partnership between UK genomics software company Congenica and* ***BGI Genomics*** *in 2017 to bring advanced drugs to China, through which Congenica* ***received funding from BGI*** *and access to genomic data from the Chinese population, and* ***BGI gained access*** *to Congenica's DNA analysis software Sapientia.*

Congenica/Wellcome (17 Sep 2018): *Congenica, the global diagnostic decision support platform provider, today announced it has entered into an agreement with a new strategic partner* ***Digital China Health Technologies*** *Cooperation Limited (DCHealth),* ***further extending*** *Congenica's commitment to the Chinese market.*

The new partnership will see Congenica develop a version of its Sapientia™ platform designed to enable clinicians and patients in China to benefit from the clinical genomics and ***personalised medicine revolution****.*

Dr David Atkins, CEO Congenica: *China is an* ***important market*** *for Congenica and this new relationship with DCHealth gives us greater insight into what the local market requires to accelerate the broader use of genomic medicine.*

Dr Andy Richards, Chairman Congenica: *Congenica is at the exciting scale up stage of its commercial development. .. (A)t the forefront of the fast-moving genomics market, Congenica has demonstrated how, with the **right investment and leadership**, the UK can build world-leading technology companies. .. (W)ith this additional commercial partnership in China, it is poised to become the leading clinical genomics services provider.*

Farrar/Koopmans/Nature **(Nov 6, 2019)**: *As well as potentially supporting diagnosis and surveillance, the fast-developing field of genomic epidemiology (and) ..(f)uture developments in predictive technology, machine learning and artificial intelligence will bring more opportunities to move towards 'precision public health'.*

Gryphon Scientific: *Precision medicine entails the use of genetic and other information to tailor the treatment of an illness to the individual, compared to classical medicine where treatment is by and large the same for all.*

Farrar/Koopmans/Nature: *(I)t will be a challenge to persuade countries to invest in a new surveillance system, for example, before its general effectiveness has been **demonstrated** at a country level.*

Nov 6, 2019 - interesting date to be promo-ing the need for a genomic *surveillance-system demonstration*.

Fortunately, your big-opportunity - for a demonstration - had already had it's

- *soft-bang* **-**

even as you spoke - it was quietly welling.

Wellcome: *Researchers at the Wellcome Trust Centre for Human Genetics have been pioneers in genetic discovery, leading the '**genetic revolution**' .. in both Genetic Discovery as well as Statistical Genetics. .. The Wellcome Trust Centre for Human Genetics remains poised to be at the forefront of the field*.

CONVERGE (Wellcome/BGI/Oxford)

Wellcome/BGI/Oxford paper (Feb 14, 2017):*11,670 whole-genome sequences representative of the Han Chinese population from the CONVERGE project*. (title)

Can you back-off with your CONVERGE everything? What if i don't want to be converged?

Abstract

The China, Oxford and Virginia Commonwealth University Experimental Research on Genetic Epidemiology (CONVERGE) project on Major Depressive Disorder (MDD) sequenced 11,670 female

Han Chinese at low-coverage (1.7X), providing the first large-scale whole genome sequencing resource representative of the largest ethnic group in the world.

So this is a personality-disorder based exploration. What could that be used for by a totalitarian regime i wonder?

Samples are collected from 58 hospitals from 23 provinces around China. We are able to call 22 million high quality single nucleotide polymorphisms (SNP) from the ***nuclear genome****, representing the largest SNP call set from an East Asian population to date.*

So when they talk about the biggest bank robberies - this is the biggest ever SNP hoist - *to date*.

We use these variants for imputation of genotypes across all samples, and this has allowed us to perform a successful genome wide association study (GWAS) on MDD. (MAD people)

The utility of these data can be extended to studies of genetic ancestry in the Han Chinese and evolutionary genetics when integrated with data from other populations.

Conflict of interest statement

The authors declare no competing financial interests.

by ***dulan drift****, Saturday,* ***July 31, 2021***

The Big DNA Grab

Gryphon Scientific, Feb 14, 2019: *Through investments and research partnerships with US institutions,* ***Chinese biotechnology companies*** *are .. amassing large collections of clinical and genetic data on US residents* (and everyone else).

Epoch Times: *China's state-funded* ***BGI****, for example,* ***bought*** *the U.S. sequencing company Complete Genomics, giving the Chinese company access to a DNA database that contained the private genetic information of large numbers of Americans.*

Gryphon Scientific: *At least 23 companies with a nexus to China are certified .. by the College of American Pathologists (CAP), giving them direct access to US medical and health data. .. Theoretically, access to private information on security-sensitive US persons creates a risk of blackmail and may reveal health conditions exploitable in a targeted attack.*

China has ***numerous laws*** *requiring or authorizing access to private-sector data by the central government.*

Reuters: *BGI says it stores and re-analyzes left-over blood samples and genetic data from ..* ***prenatal tests,*** *sold in at least 52 countries. The tests – branded NIFTY for* ***"Non-Invasive Fetal TrisomY"*** *– also capture genetic information about the mother.*

*One **BGI** study fused a military supercomputer to re-analyze NIFTY data and map the prevalence of viruses in Chinese women, look for indicators of mental illness in them, and single out **Tibetan and Uyghur** minorities to find links between their **genes and their characteristics**.*

(That's *taking the politics out* - by taking the genes out.)

Gryphon Scientific: *BGI has received state support, including a ten-year, $1.5 billion loan from **China Development Bank** in 2010, which enabled it to purchase 128 HiSeq 2000 sequencers* (from Illumina).

Wellcome*:* *More recently in a collaboration with **Illumina**, our WGS500 project, aimed to get a sense how whole genome sequencing could impact on clinical medicine.*

Illumina website:

7l0G52Qe8aXWHNGmkriX2yaCf7Nrd7FPQ9PzPazmzoJoGkV7mbmd6vFG

(*powering the heroes* (Wellcome/BGI) *working around the clock .. to conduct surveillance .. for years to come ...)*

Gryphon Scientific: *BGI is a world leader in sequencing, and has at times had the world's largest capacity (in terms of amount of DNA sequence produced), often vying for the top spot with US-based* ***Illumina****.*

Huanming Yang, Chairman and Co-Founder of BGI (2012): *BGI greatly welcomes this opportunity to partner with the* ***Bill & Melinda Gates Foundation*** *to bring the benefit of genomics research to our global society.*

Dark Daily: (2016): *BGI was among 70 organizations, including the Broad Institute of MIT, Harvard, the* ***Wellcome Trust****, and the National Institutes of Health, that* ***formed an alliance*** *"to improve how genomic and clinical data are managed and shared." .. (A) planning meeting drew experts from Amazon, Google and Microsoft.*

"*The industry participants responded* ***enthusiastically*** *to the idea of a global alliance," the group's whitepaper said.*

Gryphon Scientific: *Other top genomics companies in China include* ***WuXi*** *NextCODE, Novogene, and CloudHealth Genomics.(p108) WuXi NextCODE arose from the acquisition of US-based NextCODE* ***Health*** *by* ***WuXi PharmaTech****. The company provides an online database and platform for genomics data as well as sequencing services; further, it boasts the first sequencing facility in China to be accredited by the College of American Pathologists (CAP).*

Scripps Research: *Scripps Research Board of Directors ..* ***Ge Li****, PhD* ***(Columbia)*** *, Founder, Chairman and* ***CEO WuXi AppTec***

Kristian Andersen/Scripps (Prox O lead-author): *At the **Andersen Lab** at **Scripps Research** we try to understand .. how viruses emerge, spread, evolve. .. (by) using an integrated approach of computation, experimentation, genomics, and large-scale data.*

Andersen/Rambaut/Holmes/Nature: *We urge those working on infectious disease to focus funds and efforts on .. **proactive, real-time surveillance of human populations**.*

Prof. Lisa Ikemoto, law/ethics: *People are now being mined for their raw materials. It raises concerns about what it means to be human in this world.*

Reuters*:* *A research study conducted by a (Curtin) faculty member that helps Chinese facial recognition software better identify ethnic Uyghurs by the academic Wanquan Liu and co-authors at Chinese universities in 2018 .. had breached its ethics code.*

Wanquan Liu, Curtin Uni, Aus: *(F)ace recognition has great application potential in border control, customs check, and public security.*

Reuters: *The incident is the latest in a spate of controversies involving Chinese ethnic profiling research on Uyghurs .. under heavy surveillance by authorities in .. Xinjiang.*

China denies all accusations of mistreatment or discrimination in Xinjiang.

Ancestry Websites

Ancestry terms and conditions: *You grant royalty-free **worldwide sub-licensable transferable license** to host, transfer, process, analyze, distribute and **communicate your genetic information**.*

Prof. Lisa Ikemoto, law/ethics: Lisa Ikemoto: *We're so used to filling out, sort of, scrolling through these long documents online to upload the app or whatever it is and then just clicking the 'I agree' button at the end. .. (Y)ou're giving up all rights. (LAUGH) And any potential commercial interest in the use of your DNA by AncestryDNA.*

Gryphon Scientific (p115): *(T)he handling of the data is not covered by the Health Insurance Portability and Accountability Act (HIPAA) healthcare data protection law, raising concerns about privacy and data security.*

US Dept of Defense: *(S)ome direct-to-consumer genetic testing companies are encouraging DOD personnel to purchase genetic ancestry and health information through the offering of military discounts or other incentives. These DTC genetic tests are largely unregulated and could expose personal and genetic information and potentially create unintended security consequences.*

Epoch Times: *23 companies associated with China are currently accredited in the US to perform molecular diagnostics or other genetic testing, including whole genome sequencing. Each of these companies "has access to individual patients genetic data." Hospitals, clinics, and even some commercial DNA testing companies in the United States now **routinely send DNA samples to China** to be analyzed.*

Washington Post: *(WuXi AppTech) has helped finance an array of biotech start-ups, including the home DNA testing company 23andMe* (also part-owned by Google).

Bill Evanina, former Director US Counter Intelligence: *We know there's an investment in the Chinese company in 23andMe. What we don't know is, is there a data sharing agreement with that company or not?*

Tech Crunch: *DNA testing technology company 23andMe has raised just shy of $82.5 million in new funding ..from investors including Sequoia Capital* (a Chinese investment company - which also funds WuXi AppTech).

Anne Wojcicki (founder 23andMe, ex-wife of Erin Sergei, Google founder): *When we started the company we sat down with the leading **privacy experts**. And what they taught me was that, "Anne, privacy doesn't mean that your data's not shared anywhere." It means that we have choice.*

Forbes: *Wojcicki wants to leverage the exponentially plunging costs of genetic sequencing (down 99% in a decade) and 23andMe's massive DNA library (the world's largest genetic research database) to* ***fuel a "biotech machine"****.*

Richard Scheller, 23andMe's chief scientist: *I thought it was* ***genius*** *actually, that people were* ***paying us*** *to build the database.*

Patrick Chung, 23andMe board member: *Once you have* ***the data****, [the company] does actually become* ***the Google of personalized health care****.*

Recap:

BGI, a state-controlled China genomics company, is working hand-in-glove with Wellcome, directed by Jeremy Farrar, to gather global DNA data. Farrar sees this scramble for genomics supremacy as Wellcome's most important mission.

It was the desire to protect this core investment that potentially motivated Farrar to orchestrate the Covid cover-up. The key planks in the execution of this plan were the Proximal Origin paper and the Lancet Statement.