Guest Commentary

Biodefense crossing the line

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Last February, on Monday the ninth, Lieutenant Colonel George W. Korch, Jr, Ph.D., United States Army, speaking in his capacity as Deputy Director of the National Biodefense Analysis and Countermeasures Center (NBACC), Fort Detrick, Maryland, addressed the 2004 Department of Defense Pest Management Workshop, meeting in Florida at the Jacksonville Naval Air Station. He spoke in the Main Ballroom of the River Cove Officers' Club. As of this writing the workshop's full schedule[1] still shows a hypertext link to his remarks, but the link is no longer active. While it was active, as late as April, a copy of his remarks, presented as computer slides, could be downloaded to any computer, anywhere. It can still be found, unofficially.[2]

NBACC is to contain four separate centers, buildings for each of which are being built adjacent to the US Army Medical Research Institute of Infectious Diseases (USAMRIID). One of the four centers, the Biothreat Characterization Center, according to Dr. Korch's slides, will carry out studies in some sixteen different subject areas, among which will be these:

- genetic engineering;
- susceptibility to current therapeutics;
- host-range studies;
- environmental stability;
- aerosol animal-model development;
- aerosol dynamics;
- novel packaging;
- novel delivery of threat;
- bioregulators and immunomodulators; and
- "Red Teaming," which is to say duplication of threat scenarios.

Task areas for biothreat-agent (BTA) analysis and technical-threat assessment were summarized as "Acquire, Grow, Modify, Store, Stabilize, Package, Disperse." Classical, emerging, and genetically engineered pathogens are to be characterized for their BTA potential. Aerobiology, aerosol physics, and environmental stability will be studied in wet-laboratory and computer-laboratory settings. "Computational modeling of feasibility, methods, and scale of production" will be undertaken, and "Red Team" operational scenarios and capabilities will be assessed. BTA use and countermeasure effectiveness will be studied "across the spectrum of potential attack scenarios" through "[h]igh-fidelity modeling and simulation." And so forth.[3]

The rapidity of elaboration of American biodefense programs, their ambition and administrative aggressiveness, and the degree to which they push against the prohibitions of the Biological Weapons Convention (BWC), are startling.

The production and stockpiling of biological-weapons agents are not the only criteria by which an offensive biological weapons (BW) program is defined. They are only such a program's most obvious terminal expressions. Taken together, many of the activities detailed above — most particularly the "Store, Stabilize, Package, Disperse" sequence and the "Computational modeling of feasibility, methods, and scale of production" item — may constitute *development* in the guise of threat assessment, and they certainly will be interpreted

that way. Development is prohibited by the Biological Weapons Convention.

How would these activities differ from their counterparts in the pre-1969 US BW program except for production and stockpiling this time not being envisioned?[4] In recent remarks elsewhere, Dr. Korch noted that one NBACC objective, creation of genetically engineered agents, might raise BWC compliance questions. Yet other NBACC objectives could prove even more problematic.

On April 28, 2004, at the conclusion of a year's review, the Bush administration disclosed details of the new National Biodefense Directive.[5] Among them, reportedly, was that "the US intelligence community is under orders to carry out studies examining the types of genetically engineered 'bugs' terrorists could be working on to mount an attack."[6] Surely, the "intelligence community" is the least appropriate place in the US government to "carry out" such work — and the most likely to lack adequate oversight. And does a program of this design bear any relation to the realistic level of threat presented by non-state actor "bioterrorists"?[7] Recently declassified documents demonstrate that the US intelligence community possesses evidence demonstrating that interested terrorist groups — *al Qaeda* among them — still have no capability to work with classical BW agents and certainly cannot engineer agents genetically.

What will be the effect of NBACC's work program on the worldwide evolution of BW over the next twenty or thirty years? Work on bioregulators and immunomodulators in the former Soviet offensive BW program during the 1980s is in retrospect realized to have been among the most dangerous and reprehensible of its numerous nefarious activities, despite having never approached weaponization, staying "safely" at research-and-development stages. Other than context — a preposterously huge offensive BW program — was work on bioregulators and immunomodulators qualitatively different from the work now to be carried out in the United States?

Will all the work in the categories listed above be classified, carried out under conditions of secrecy, or will it be open, generating peer-reviewed publications? The present US administration, if it was willing to scuttle attempts to finalize a verification protocol for the Biological Weapons Convention so as to shield the US biodefense program as constituted around 2001 and 2002, seems unlikely to welcome or even tolerate scrutiny of a program orders of magnitude larger and much closer to treaty breach. Yet circumstances are confounded still further. Some argue that a biodefense program can be legitimate *only* if it is transparent. That may be so, but if results to be sought as above were openly to be published then information plausibly facilitating BW efforts elsewhere would be disseminated.

Alternatively, if the US program proceeds in secret, what will be the reaction of other countries — including Russia and China? Will the twelve-year American-British effort to open major BW-capable facilities of the Russian Ministry of Defense be made more likely or *less* likely to succeed? Finally, will rivals steer currently legitimate biodefense programs down the new American path, but even more deeply in shadow?

References

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5. "Biodefense for the 21st Century," Office of the President, April 2004; "HHS Fact Sheet. Biodefense Preparedness. Public Health Emergency Preparedness. Transforming America's Capacity to Respond," News Release, US Department of Health and Human Services, April 28, 2004; "Fact Sheet: Bush Signs Biodefense Presidential Directive," US Department of State, April 28, 2004.

6. John Mintz, "Bioterrorism Procedures Are Outlined. Bush Directive Specifies Agency Responsibilities," *Washington Post*, April 29, 2004

7. Milton Leitenberg, "Biological weapons and bioterrorism in the first years of the twenty-first century," *Politics and the Life Sciences*, September 2002, 21:2, pp. 3-27.