

Date: Wed, 8 Dec 1999 15:25:33 -0500
From: richard_falkenrath@Harvard.Edu
To: msm@wjh.harvard.edu
Subject: Re:

Dear Matt,

I would edit the transcript slightly. something like this:

Rich

msm@wjh.harvard.edu on 12/08/99 01:51:12 PM

To: Richard Falkenrath/FS/KSG@KSG
cc:
Subject:

Dear Rich,

Yesterday I had an interesting conversation with a friend that, in brief, went something like this:

FRIEND: An important challenge is to keep the deviant or criminal few individuals, cults, nasty states, etc. (the small tail of the distribution) who conceivably might attempt to threaten or use BW against the US under surveillance, to thwart any overt BW preparations or threats on their part, and to avert or at least minimize the harmful effects of any actual use of such weapons.

MM: This is true. And the effort could benefit from practical technical input that in some respects appears so far to be lacking.

FRIEND: JUST AS important are measures to avert a turn to hostile applications of biotechnology over the longer term. THIS MAY WELL BE THE GREATEST CHALLENGE HUMANITY WILL HAVE TO CONFRONT IN THE NEXT CENTURY. HOWEVER, I'VE THOUGHT ABOUT THIS QUESTION A BIT, AND HAVE HAD TROUBLE FINDING A SET OF CONCRETE POLICY INITIATIVES TO THE QUESTION OF WHETHER (AND EXTENT TO WHICH) BIOTECHNOLOGY WILL BE TURNED TO HOSTILE APPLICATIONS IN THE COMING DECADES. International treaty regimes such as the CWC and a BWC Protocol are of dubious effectiveness MERIT US support, BUT WE SHOULD NOT OVERSELL THEIR LIKELY LONG-TERM EFFECTIVENESS AT REDUCING THE LONG-TERM PROBABILITY OF APPLIED BIOTECHNOLOGY FOR HOSTILE PURPOSES

MM: Here I think we do not agree.

The greater near-term threat may well be from the tail of the distribution. If

so, we can probably manage it. But over the longer term we see a historical pattern in which dominant technologies come to be intensively and generally exploited for hostile purposes. It is certain that biotechnology will become a dominating technology of the 21st century. Although our limited imaginations cloud our ability to predict just what new capabilities this might bring or how they might be exploited for hostile purposes by leading states or others, we are confronting here what could be a really major challenge to all societies. To assume otherwise is to take a big and, I believe, unnecessary risk.

(INTERRUPTING) FRIEND: EVEN FOR THE LONG-TERM THREAT, MY GREATEST WORRY IS OF AN ESCALATING SPIRAL THAT BEGINS WITH AN EFFECTIVE, SUCCESSFUL HOSTILE APPLICATION OF BIOTECHNOLOGY ORIGINATING IN THE TAIL.

The measures you are appropriately devoting your time to at present address the tail of the distribution but I do not think they deal with the longer-term problem. That is why I consider such measures "tactical"--no opprobrium intended.

(INTERRUPTING) FRIEND: I PREFER YOUR ALTERNATIVE PHRASING, WHICH WAS "LIMITED IN SPACE OR TIME" WHETHER INTENDED OR NOT, "TACTICAL" SUGGESTS A SMALL-MINDEDNESS ON THE PART OF THOSE WORKING ON IT. SIMILARLY, "STRATEGIC" SUGGESTS THE LARGE-MINDEDNESS OF THOSE WORKING ON OTHER THINGS. LET'S LEAVE THIS TERMINOLOGY TO THE WEST POINT GRADUATES.

I see the CWC and a strengthened BWC, particularly if these regimes receive more robust US support, as important strategic measures in the right direction for addressing the long-term threat.

FRIEND: I AGREE THEY TAKE US IN THE RIGHT DIRECTION, BUT I DO NOT BELIEVE THEY TAKE US FAR ENOUGH. I AM IN FAVOR OF MORE ROBUST US SUPPORT FOR THESE REGIMES, BUT THEIR RATE LIMITED FACTOR HERE IS NOT INSUFFICIENT INTELLECTUAL WORK BY PROFESSORS BUT POLITICS, IN WHICH THE INFLUENCE OF PROFESSORS DECLINES AS A FUNCTION OF THE POLICY IDEA'S AGE AND INSTITUTIONALIZATION.

DOMESTIC PREPAREDNESS IS A RELATIVELY NEW INITIATIVE, AND THERE ARE SUBSTANTIAL OPPORTUNITIES FOR A UNIVERSITY-BASED WORK FOCUSED ON IDEAS & RESEARCH, RATHER THAN POLITICS AND POLICY ADVOCACY, TO INFLUENCE THIS GROWING POLICY AREA FOR THE BETTER. THESE EFFORTS SHOULD NOT DETRACT FROM EFFORTS RELATED TO INTERNATIONAL REGIMES -- THEY SHOULD BE MUTUALLY REINFORCING, AND I AM VERY INTERESTED IN EXAMINING THE WAYS THIS CAN BE SO, PARTICULARLY AS REGARDS DISEASE SURVEILLANCE AND TREATMENT.

(International criminalization did not come up in the discussion--probably we both think it would be good to have--for both near-term/localized and long-term/global purposes.)

FRIEND: I find myself too much caught up with managing the immediate. Maybe we need a mechanism for occasional discussion of these and related matters.

MM: Yes, maybe.

FRIEND: OK, LET'S MEET AGAIN ON THIS AS SOON AS I RETURN FROM MY HONEYMOON. ARE YOU FREE FOR LUNCH ON TUESDAY, JANUARY 18?

Matthew Meselson
Department of Molecular and Cellular Biology