The file named [20020400 nextgen bioweapons (Secured).pdf](http://chasegalleryconnect.org/FNC_C/Data/History/Current%20History/2022%20Notable/Ukraine%2C%20Russian%20%27Special%20Military%20Operation%27/20020400%20nextgen%20bioweapons%20%28Secured%29.pdf) is not classified and can be downloaded and then be read by Adobe's Acrobat Reader. However it's been made resistant to text extraction.
Therefore I made the table below so that one can find certain assertions by author and my corresponding observations.

As with Computer Security, and Kinetic Warfare, there is for Biowarfare the tendency to speak publicly as if there were a 'defensive' (good) version and an 'offensive' version (bad).

RMA Revolution in Military Affairs

|  |  |  |  |
| --- | --- | --- | --- |
| Asserted by Author | Page |  | Observation -FNC |
| NEXT GENERATION BIOWEAPONS: THE TECHNOLOGY OF GENETIC ENGINEERING APPLIED TO BIOWARFARE AND BIOTERRORISM … |  |  | Title of a 30 page Air Force document with 150 reference notes. Dated April 2002.  |
|  |  |  | Over the centuries BOTH Russia and the USA have arguably spent more money on biowarfare than on nuclear weapons! |
| Mikhail Gorbachev had ordered the termination of biological offensive programs in 1990, and …research on new forms of plague had secretly continued.14 | 5 | IMG\_2013 |  |
| Alibekov became the third defector from the Russian BW program. …tularemia bomblet… | 5 | IMG\_2013 |  |
| Genetically engineered pathogens | 11 | IMG\_2019 |  |
| The future of this "black biology" is the subject of the remainder of this paper. | 11 | IMG\_2019 | That would be pages 11 thru 28, the most / only part of this paper relevant to the Russian initiation of war with Ukraine in March of 2022. |
| **Emerging Infectious Diseases** | 12 | IMG\_2020 |  |
| **Natural versus Biologically engineered Pathogens** | 13 | IMG\_2021 |  |
| Countries that maintain various levels of offensive biological warfare capabilities or research facilities. This list includes Russia, China, Iraq, Iran, North Korea, Syria, Libya, India, and Pakistan. | 14 | IMG\_2023 |  |
| **V. Six Ways Science Can Improve Biodefense** | 23 | IMG\_2032 | 1. Understating the human genome
2. Boosting the immune system
3. Understanding viral and Bacterial genomes
4. Bio-agent detection and identification equipment
5. New vaccines
6. New antibiotics and antiviral drugs
 |
| **1) Understanding the human genome**.117 | 23 | IMG\_2032 | "The Human Genome Project will have a profound influence on the pace of molecular biology research …" |
| **2) Boosting the immune system.** 121 | 24 |  |  |
| **3) Understanding viral and Bacterial genomes.** 132 | 24 |  | Bacteria may also be modified to produce bioregulators against pathogen. |
| **4) Rapid/accurate bio-agent detection and identification techniques and equipment** 124 | 24 |  | ….made from recombinant DNA (genes inserted into DNA sequences) technology that reverses the resistance of some bacteria to some widely used antibiotics. |
| **5) New vaccines.** | 25 |  |  |
| **6) New antibiotics and antiviral drugs.** | 25 |  |  |
| **VI. Conclusions** | 27 |  |  |
| **Biotechnology is the ultimate double-edged sword. Once knowledge is attained, there is no going back.136** | 27 |  |  |
| **As is the case with most powerful technologies, they can be employed for good or evil. 137** | 27 |  |  |
| **We mustproceed with caution when developing new life-forms. 138** | 27 |  |  |
| **There are those who say:……… that the third World War – God forbid – will be biological. 150** |  |  |  |