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nucleotides. adding  
new letters to



What really interests me is the forefront of cell biology - molecular biology and genetic engineering. From what I know these areas of science offer the leading most advanced and therefore promising methodology in biological science. I found Molecular Biology Of The Gene by Levine, Watson, Baker and Introduction into Cell Biology by Chentsov both fun and important in understanding some of the new concepts of modern biology. Namely the recent synthesis and successful introduction of the X and Y nucleotides. Adding new letters to the genetic alphabet will make up for entirely new types of proteins. This will definitely expand the usage of synthesized biological proteins in medicine and well beyond. For example, for biotech, computer industry, even textile. This technology will enable us to project proteins with properties well beyond existing ones and address burning issues such as longevity and survivability of humans and other biological entities.

When it comes to related disciplines, I've recognized the following subjects as important for my future as a researcher and therefore studying them in greater depth: I'm a student of advanced mathematics and programming courses (currently studying Python, Pascal, beginning C++ next year ), advanced chemistry classes. In addition, I've been attending bioengineering courses at Moscow State University, where students get to know the latest trends in biology. show\_chart ???????? ?? ?????: To compliment my area of interest I would require a classical arsenal of biochemical, biophysical and molbio tools: 1) eucariotic cell cultures. These are needed to test out newly produced proteins on living cells of higher organisms. 2) procariotic cell cultures to mass-produce desired protein products and to work out the kinks

before introducing to eucariotic cells. 3) classical molbio tools: RNA/DNA polymerase, methods of DNA interference: using of plasmids, fages - which are basic requirements for any biological researcher.

Finally, I'm good at cooperating and teamwork, but I've tried working in a science team. I'd like to gain that experince as well. Although not expecting too much, I would greatly appreciate gaining valuable practical experience in any of these methodological areas.