INTER-SPECEIS EMBRYO EMPLANTATION:

A way to increase the number of endangered species by the embryo emplantation in the female individual of the other species of gene similarity:-

Now a days ,the birth of a test-tube baby is common in practice . Inter- individual organ implantation and cloning of animals; is also common. There are many endangered species of wild animals, which have been reduced to 50 to 100 in number and the number is still reducing rapidly. We observe that ,the size , external physiology , habits and directly gene of the spotted deer(Axis axis), swamp deer(Rucervus duavucelli) , dancing deer or shanghai deer(Rucervus eldii eldii,) is very similar to that of the reindeers (Rangifer tarandus) .

Spotted deer , reindeer and swamp deer

Similarly, the gene of the wild hog is very similar to the domesticated pig , the wild dog has the similar gene ,that of the domesticated dogs. The gene of the golden hair monkey of Dudhawa national park of U.P. is similar to common makak monkeys and the gene of giant red squirrel is similar to the gene of common squirrel and so on.We can produce large number of endangered species by implanting embryo of endangered species in to the female of those species ,which are large in number and have similar gene.

More than thousands embryo can be developed, by artificial fertilization in test tubes, by taking per mille liter sperm and ovum from pure species of male and female duets of endangered species of wild animals. Some promoters like Hyloronidase enzyme and Neuraminidase enzyme which are helpful in artificial fertilization can be utilized. The embryo can be developed in culture medium to some extent and then it can be implanted in to the uterus of the female of those species which are easily available in large number .Before the embryo emplantation ,thousands of female individual will be prepared for the pregnancy in view of hormone level etc. More over some medicines will be also required to give them to reduce the activity of immuning system to some extent. We know that the embryo gets half genes from mother and half from the father. This means ,certainly some proteins or gene in the baby are different

from the mother but no antibody of those different protein is formed in the body of the mother during the pregnancy. This means , during pregnancy the immuning system of the mother is ready to tolerate the formation of some new proteins brought by the baby. We think that the immuning system of mother stay ready to accept the formation of new proteins during the pregnancy. Usually , when new protein is generated with sufficient concentration, internally in the body of an individual ,no antibodies are formed . If the concentration is very feeble , the antibodies can be formed. But when we inject some protein from outside, the production of antibodies begins. (We think that , this is very probable answer of why cancer cell or tumors are long lived and no antibodies are formed against the tumor cells ,though the tumor cells are being formed either in irregular pattern ,or at least some new proteins are being produced by them .Perhaps the immuning system get betrayed by the internal antigens ,which are understood the normal part of the body.)

If some antibody of embryo`s protein is being formed in small extent ,it cannot harm the embryo till the first birth. Thus interspecies fertilization is possible or not , the interspecies embryo implantation is certainly possible. The example of mules, linger and liger provides support for the interspecies embryo emplantation. This way, we can increase the number of many kinds of endangered species of deers including Kashmir musk deer (Moschus cupreus),monkeys , fox , wild dogs, wild hogs, squirrels etc.

More than 34 species of reindeer are found in all over the world. In Canada ,Russia ,Finland and other European countries ,the reindeers are tamed . The reindeers can be also domesticated in Himalayan region of Kashmir , Himanchal, Uttaranchal ,Nepal , Sikkim , and other hilly region of northeastern states. About 50 reindeers per acre can be tamed in walnut gardens , after growing bomboo fence around the garden or by protecting them with the wire fence. The reindeers are fed on lichens like reindeer moss (Cladonia rangifera) , green grass , green pine leaves etc. But in adverse circumstances , the reindeer can survive on dry pine leaves , dry grass and on the bark of the trees. We think that the reindeer should survive on paddy straw also.For the drinking water to the reindeers , water shed policy of rain water harvesting can be utilized . More than 50 reindeers can be tamed in per acre garden ,if there is proper management of feed and drinking water for the reindeers.This will yield minimum about 1,000 Kg reindeer meat annually or earning of about 1 lakh rupees annually. Rendering of reindeer at large scale will result in to the production of meat ,leather, fur , wool and deer` horn etc. That will reduce the tendency of poaching of wild deers. If only 1% reindeers are being set free in to the wild as governmental tax , these reindeers will be easy feed for the secondary and tertiary consumers like hyena , tiger , leopard and snow leopard of the ecosystem. The number of the snow leopard can be increased by the reindeer domestication . The reindeers can stay on the high mountain area in even during the winter season and snow fall , when other wild animals come down to the lower hill regions in this season. The snow leopard which are almost starving in this season ,can survive on these reindeers. Being an easy prey to the predators , the reindeers will save ,other species of wild deers and primary consumers.

Some times a tumor is removed off by the surgery , but their roots remains intact, which generate again in to another tumor .It is difficult to abolish the cancer cells from the roots. Our team is working on the point to cure this type of cancer by injecting dead cancer cell in to the patient. The cancer cell will be got from the tumors of the same patient ,either by the removed tumors or by the tissue culture of the tumor cells by animal tissue culture method developed by NASA. Then the tissues of the tumor will be separated in to unit cells by the help of some enzymes and then it will be pasteurized in to dead cancer cells. Then a dilute solution will be prepared. This solution will be injected in to patient frequently .When dead cancer cell will be injected from outside of the body ,the immuning system of the patient will recognize them as antigen. Consequently the antibody of the cancer cell will , begun to produce. The anti bodies and the WBC of the immuning system will attack on the root of the tumor cells and also on those tumor cells which are in early stage . Some medicines which activate the human immuning system ,will be given to the patients in order to enhance the formation of antibodies . If this project succeed , we shall be one step ahead to combat with cancer. Main problem of this method is ,the cancer cell are very much similar to the healthy cells ,the immuning system may damage the healthy cells also. The only Experiments will determine the fate of this project.

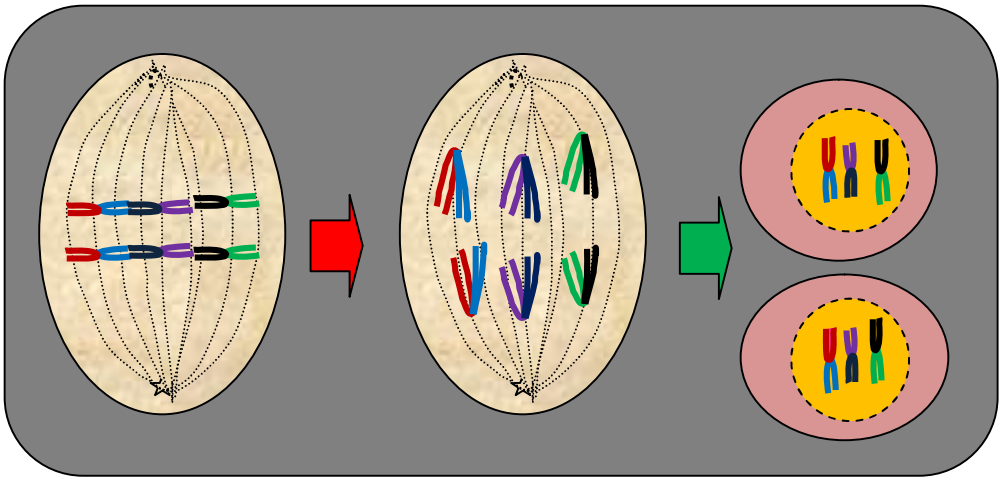
In similar way our team has a project to combat with AIDS . First we shall recognize, some of the surface proteins or some important proteins like reverse transcriptase enzyme of the AIDS virus or those proteins like Haemaglutinin or Neurominidase enzymes of the viruses ,which come out side of the virus to penetrate the cell memberane of the host cell . The amino acid sequence of these proteins will be elaborated.This will provide possible nucleotide sequence of mRNA or RNA or DNA. Then the actual RNA or DNA of surface proteins will be recognized and separated . The DNA strand or gene of these surface proteins can be also found by reverse transcription of mRNA, found in the infected target cells or host cells. (The technique of finding DNA strand or gene of a protein from reverse transcription of mRNA by reverse transcriptase enzyme and its polymerization in polymerase chain reaction machine ,can be utilized to recognize the genes of the proteins. A cell having unique work produces certain proteins in large amount and hence high concentration of their mRNA. These mRNA can be isolated and converted in to gene of the required proteins by reverse transcripson.). This gene of surface proteins (or some important proteins) will be added to the main DNA of some bacteria like E.coli. The bacteria will produce these surface proteins in large quantity.The dilute solution of these surface proteins of the AIDS virus will be injected frequently in to the AIDS patients as vaccine.The immuning system will recognize the external surface proteins of the AIDS virus as antigen which is entering from the outside of the body. The immuning system of the patients will , begun to produce antibody of the surface proteins of the virus. The antibodies will precipitate the virus and will draw them in to the liver for decomposition. A vaccine can be prepared by manufacturing some surface proteins of the AIDS virus by the help of bacteria . If we succeed ,the AIDS will be no longer a fatal disease.

We are also working on the basic principles of meiosis and mitosis assuming that .

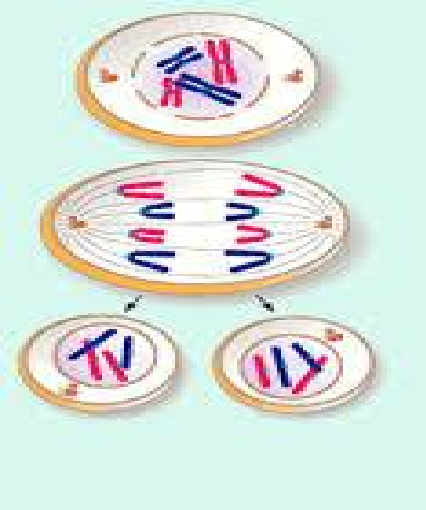
(a) in mitosis the whole number of chromosomal pairs double and identical chromosomal pairs align on the spindle fibers in meta phase and get separated for the two new diploid nuclei. (b) while in meiosis

two homologes chromosomes arrange on spindle fiber and get separated for the two haploid nuclei . There are 2^{23} possible combinations of 23 chromosomes in human haploid cells; therefore the two children of the same parents differ, because there are 2^{46} combinations of chromosomes are possible in daughter cell of the same parents . So we assume that there should be no crossing over and formation of chasma in pachytene stage of prophase of cell division in meiosis. Crossing over of chromosomes is dangerous because it may cause mutation and cancer or production of unwanted proteins. Imagine, what will happen when crossing over occurs at the middle of the globin protein .The structure of the hemoglobin will changed ,and it will not work properly. Change of only one amino acid (Glutamic acid $\rightarrow$Valine at position 6) in β chain of globin protein, causes sickle cell anaemia. What will happen, if crossing over occurs at the middle of the chain of globin protein`s DNA? If amino acid sequence is being changed in middle of an enzyme that will be spoiled. We think that viral DNA does not combine with the host DNA and stay free in the nucleus of host cell, where it replicates and transcripts. ……And the plasmid containing bacterial infection is, the one of the main reason, for the cancer**.**

Mitosis-



Meiosis—



Thus we can conclude that chemical structure of chromosomes remains conserved during cell division . In other words chromosomes remains intact during meiosis, Only their combination changes. An individual`s diploid cell consist , 50% chromosomes from his father and 50% chromosomes from his mother, but it is not certain that he would contain exactly 25% chromosomes from his grandfather and 25% chromosomes from his grandmother, and similarly from his maternal grandparents. It may vary from 0% to 50%. For example, if a person possesses (6/46)x100%=13.044% chromosomes from his grandfather , he will must consist (17/46)x100%=36.96% chromosomes from his grandmother, similarly that person possesses (8/46)x100%=19.39% chromosomes from his maternal grandfather , he will must consist (15/46)x100%=30.6%chromosomes from his maternal grandmother.

Thus a person can possess (1/46)x100%=2.174%,(2/46)x100%=4.348%, (3/46)x100%=6.322%,(4/46)x100% ……..etc. or integral multiple of it up to 50%, chromosomes from his grandparents. This can be verified experimentally by DNA fingerprinting. (Percentage of the chromosomes from ,grandparents is quantized in an individual. Ha , ha ,ha, ha ……..). This theory of meiosis, explains perfectly the Mendel's theory. Two homologes chromosomes come from father and mother each. If there are genes of opposite characteristic in homologes chromosomes ,one gene becomes recessive while other gene situated on other homologes chromosome becomes dominant. If both homologes chromosomes consist genes of similar characteristic, the characteristic appears in phenotype.

If an individual diploid cell consist only two pairs of chromosomes (4chromosomes) viz aa^m, bb^m, there

are two possible ways of taking either a or a^m from the first pair of chromosomes for the haploid cell in meiosis. Similarly we can select either b or b^m from the second pair. Thus there are 2x2=4 combinations of haploid cell viz ab ,ab^m, a^mb, $a^m b^m$ .whether m stand for chromosomes from mother.

This explains why, the phenotype of mango and other fruit crops changes, if the tree is planted by the seedling, even after self pollination, because combination of chromosomes changes during meiosis and fertilization.