

# Science@watch

New developments from the LSU AgCenter

## Cell Research Shows Promise for Cancer and Contraception Applications

**L**SU AgCenter researchers Drs. Fred Enright and William Hansel have invented a method of specifically inhibiting cells that holds promise for long-term contraception or sterilization and for inhibiting or killing malignant and non-malignant, hormone-dependent tumors.

### Ligand/Lytic Peptides Methods of Use

In the past, compositions used for sterilization were based on natural or synthetic steroidal hormones to “fool” the female reproductive system into a false pregnancy. These hormones must be administered repeatedly to have the desired effect and can produce potentially dangerous side effects. The unique aspect of this method is that it allows a much broader range of activity and there is no danger to the cells and no unfavorable immune response.

For this treatment to be effective in either sterilization or uncontrolled cell division suppression, the body must readily absorb the composition. To accomplish this, the researchers linked the ligand/peptide complex to vitamin B12, which is readily absorbed by the intestine.

Other uses for this invention include treating autoimmune diseases for which the antigen or epitope responsible for the disease is known or certain abnormal cells (virally infected cells such as HIV -infected cells) that display surface

receptors that are not found on normal cells. In the case of virally infected cells, those cells could be destroyed before the cells’ completion of the viral mutation cycle, resulting in the release of incomplete, non-infectious viral particles.



*Xenografts from MDA-MB-435S breast cancer cells in female intact nude mice with and without treatment with Hecate-bCG.*



for information

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