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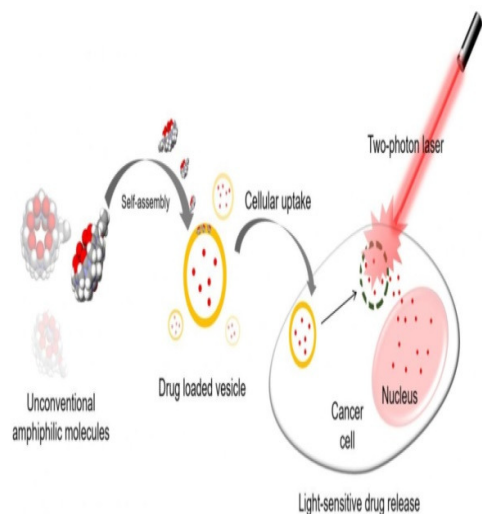
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PHARMAPEDIA

PSGCP E-News Letter

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'Body on a chip' could improve drug evaluation:



These chips could also be used to evaluate antibody drugs and other immunotherapies, which are difficult to test thoroughly in animals because they are designed to interact with the human immune system.

MIT engineers have developed new technology that could be used to evaluate new drugs and detect possible side effects before the drugs are tested in humans. Using a microfluidic platform that connects engineered tissues from up to 10 organs, the researchers can accurately replicate human organ interactions for weeks at a time, allowing them to measure the effects of drugs on different parts of the body.

Ref: <https://www.sciencedaily.com/releases/2018/03/180314092314.htm>

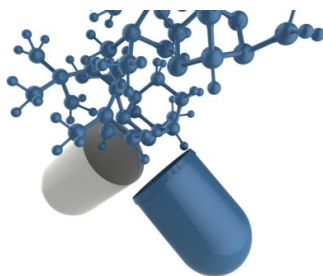
Novel technology for anticancer drug delivery on demand:

With the goal of minimizing the side effects of chemotherapy on healthy tissues, a team of researchers at the Center for Self-assembly and Complexity, within the Institute for Basic Science (IBS) have developed novel nanocontainers able to deliver anticancer drugs at precise timing and location. Published in *Angewandte Chemie International Edition*, the study combines uniquely designed molecules and light-dependent drug release, which may provide a new platform to enhance the effect of anticancer therapeutics.

Ref: <https://www.sciencedaily.com/releases/2018/03/180309095501.htm>

Carbon monoxide improves effectiveness of antibiotic that fights stomach infection:

Researchers paired carbon monoxide with the antibiotic metronidazole and found carbon monoxide enhanced the efficacy of the antibiotic against *H. pylori*, a type of bacteria that infects the stomach and causes peptic ulcers. The findings are published in the journal *Organic Letters*.



In this study, the researchers developed a prodrug system that releases three components: carbon monoxide, an antibiotic (metronidazole) and a fluorescent molecule used to monitor the release of carbon monoxide. A prodrug is the precursor of a drug and must undergo a chemical conversion before becoming an active pharmacological agent. This prodrug system has a three-reaction sequence and becomes active when placed in water, which sets the reaction in motion.

Ref: <https://www.sciencedaily.com/releases/2018/02/180221180525.htm>

Flare-responsive hydrogel developed to treat arthritis:

Researchers develop a better delivery system for anti-inflammatory therapies.

Bioengineers and physicians team up to develop a better delivery system for getting anti-inflammatory therapies to the sites where they are needed most.









BWH bioengineers have developed a hydrogel -- a soft, flexible material that can be loaded with drugs to treat arthritis and injected locally into an inflamed joint.

Instead of delivering the drug continuously at a steady rate, the hydrogel is designed to respond to increase disease activity during flares, releasing the drug when symptom worsen.

Ref : <https://www.sciencedaily.com/releases/2018/04/180403111109.htm>

BRAIN TEASER

Find the Brand name of the Four Medicines

| | |
|--|---|
| I)  + $\frac{?}{\cos} = \tan$ | II)  +  |
| III)  +  +  | IV)  + U +  |

The Beautiful old Pic



Antique Brass Microscope

Dosage form Update

DEXYCU- Dexamethasone intraocular suspension 0.9%. 0.005 ml dose in single dose vial for intraocular administration.

INDICATION: It is a long acting injectable corticosteroid formulation administered intraocularly into posterior chamber of the eye for the postoperative inflammation associated with cataract surgery.

Ref: <http://www.drug.com>

Interesting facts

Personalized glioblastoma cancer vaccine (DCVax-L) may increase long term survival in patients with deadly brain cancer.

\$ 3 billion worth of cancer drugs is thrown away every year, unused.

SMi London presents the launch of cell & gene therapy

Ref: www.worldpharmanews.com,

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