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**Licensing  
Opportunities**

- Exclusive
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Development  
Partnerships  
(PDP)

Lehigh Case # 080207-01

## *Spermicidal and Microbicidal Actions of Fluorous Surfactants*

### **Overview**

Numerous spermicidal products are already marketed, including stand-alone contraceptive foams, gels, films or creams, along with combined products including condoms coated with spermicidal lubricants, sponges, etc. Most such products contain nonoxynol-9 (N-9) or similar compounds in substantial concentrations (3.5% in gels or creams). While widely used, these products have limited efficacy, and may be deleterious to normal tissues - some reports show increased rates of microbial infection, and lack of protection against HIV transmission.

This invention consists of new chemical compounds or combinations of compounds that kill human sperm cells and/or inhibit microbial infectivity and are safer than traditional agents for use in contact with human tissues and/or other mammalian cells.

### **Applications and Advantages**

Fluorous surfactants have lower CMC values than comparable non-fluorous homologs, and permit renaturation of proteins following exposure. These compounds may act alone or in synergy with each other, with N-9, or with non-fluorous compounds to enable gentler treatment conditions that lessen damage to surrounding tissues while disabling sperm and/or microorganisms. Potential applications for these compounds include:

- Spermicide
- Contraceptive
- Birth Control
- Microbicide

### **Status and Intellectual Property**

A U.S. provisional patent application has been filed.

### **Lehigh ExpertNet**

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