

## SELONGER - A NEW PLATFORM AND USAGE OF NOVEL FORMS OF FERTILITY RELATED PROTEINS SUCH AS LEPTIN AND OTHER THERAPEUTIC PROTEINS, AND A NOVEL TECHNOLOGY FOR DISCOVERY.

Shemesh, Ronen

### Abstract Body

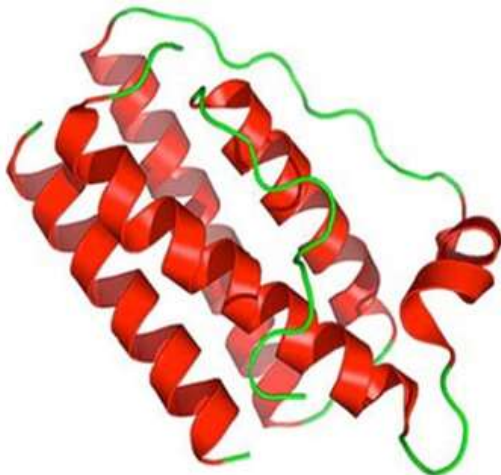
**SeLonger:** is a new tool for discovery of novel variants and forms of proteins that were not identified by conventional ways, such as splicing and PTM. This novel technology might be useful to discover new therapeutic proteins, targets, diagnostic markers and even completely novel proteins encoded by specific genes. One of the project's main interest is the discovery of novel protein forms that might be relevant and/or connected to the fertility processes, such as fertilization, ovulation, implantation and others, and help in Assisted Reproductive Technologies (ART) such as IVF, IUI etc...

**Technology:** We are utilizing a novel mechanism of molecular biology that is based on a unique pattern of protein translation. This mechanism is fully established, but was only demonstrated by a very small group of specific proteins. We believe that the novel mechanism is more widespread within the Human and non-Human proteome, and thus might serve as a platform to discover, validate and generate functional forms and variants of known and established proteins, some of which with known therapeutic and diagnostic roles. The most characterized and evaluated candidate, discovered by this technology is Leptin. We call the novel, longer form of the protein "LEPTHIN".

**Technology Scope:** We believe that the same technology that was utilized to predict and discover the new form of Leptin, could also be utilized for discovering novel functional forms of other therapeutic proteins, among which are Leptin, b-FSH, VEGF, ErythroPoietin (EPO), Annexin and TGFb1 as well as discover novel proteins and protein active forms as biomarkers for early detection and treatment of many conditions, such as Cancer, Metabolic disorders, Cardiovascular etc...

**Fertility:** Literature indicates Leptin in the seminal fluid has a role in motility of sperm and acrosome activity. The novel form of Leptin might have a more prominent effect on fertilization potential of sperm, and we have a reason to believe that the novel forms we discovered of bFSH, Leptin and others will have a great potential in ART and fertility treatments at all levels.

### Abstract image



*Leptin - Elongated  
Therapeutics*