



# FLORIDA STATE UNIVERSITY

The FSU Office of Research and the FSU Research Foundation are pleased to recognize the following Principal Investigators and their research groups for having a patent application filed during the 2005 Fiscal Year.

## PATENT APPLICATIONS

### **Farrukh Alvi** (Mechanical Engineering)

- *Microjet-based Control System for Cavity Flows*
  - U.S. Patent Application Filed 6/1/2005

### **Henry Bass** (Biological Sciences)

- *Materials and Methods for Cytogenic Mapping*
  - U.S. Patent Application No.11/009,979 filed 12/10/2004

### **Steven Beu** (MagLab)

- *High Resolution Fourier Transform Ion Cyclotron Resonance Mass Spectrometry Method and Apparatus*
  - U.S. Patent Application No. 11/051,092 filed 2/4/2005

### **Michael Blaber** (Medicine)

- *Engineering Human Acidic Fibroblast Growth Factors and Associated Methods*
  - U.S. Patent Application No.11/001,804 filed 12/2/2004

### **Michael Burmester** (Computer Science)

- *A Method of Inserting Digital Fingerprints into Electronic Documents which is Resistant to Manipulations*
  - U.S. Patent Application No. 10/998,299 filed 11/26/2004

### **Debra Fadool** (Biological Sciences)

- *Method of Detecting An Odor by the Use of Kv1.3 Null Mice*
  - U.S. Patent Application No. 11/076,626 filed 3/10/2005

### **Andrey Gavrilin** (MagLab)

- *Multi-layer, Lighter-than-air Vacuum Balloon Able to Withstand Atmospheric Pressure with a Reasonable Safety Factor*
  - U.S. Patent Application No. 11/127,613 filed 5/12/2005

### **Yousef Haik** (Mechanical Engineering)

- *Immunoassay Kit Using Magnetic Nanoparticles*
  - U.S. Patent Application No. 11/073,431 filed 3/4/2005
- *Self Controlled Magnetic Hyperthermia*
  - U.S. Patent Application No 11/125,488 filed 5/10/2005

### **Robert Holton**

- *7 patent applications for Taxol Analogs*
  - U.S. Patent Applications Nos
    - 10/951,285 filed 9/27/2004
    - 11/057,703 filed 2/14/2005
    - 11/063,626 filed 2/23/2005
    - 11/067,882 filed 2/28/2005
    - 11/068,166 filed 2/28/2005
    - 11/071,912 filed 3/4/2005
    - 11/148,833 filed 6/9/2005

### **Chin Yen King** (Biological Sciences)

- *Protein-only Transmission of Three Yeast Prion Strains*
  - U.S. Patent Application No 11/083,055 filed 3/17/2005

### **Teng Ma** (Chemical Engineering)

- *Bioreactor for Cell Culture*
  - U.S. Patent Application No 10/918,657 filed 8/12/2004
- *Bioreactor for Cell Culture*
  - U.S. Patent Application No 11/093,956 filed 3/30/2005

### **William D. Markiewicz** (MagLab)

- *Quench Protection of High Temperature Superconducting Magnets*
  - U.S. Patent Application No 11/146,621 filed 6/7/2005

### **Kenneth Roux** (Biological Sciences)

- *3 patent applications for Cashew Nut Polypeptide*
  - U.S. Patent Application Nos
    - 10/529,602 filed 3/30/2005
    - 11/096,911 filed 4/1/2005
    - 11/096,910 filed 4/1/2005

### **Joseph Schlenoff** (Chemistry and Biochemistry)

- *Controlled Transport through Multiple Reversible Interaction Point Membranes*
  - U.S. Patent Application No 11/085,926 filed 3/22/2005
- *Apparatus for Capillary Electrophoresis and Associated Methods*
  - U.S. Patent Application No 10/933,179 filed 9/2/2004
- *Thin Films for Controlled Protein Interaction*
  - U.S. Patent Application No 11/063,952 filed 2/23/2005
- *Films for Controlled Cell Growth and Adhesion*
  - U.S. Patent Application No 11/130,972 filed 5/17/2005
- *Variable Charge Films for Controlling Microfluidic Flow*
  - U.S. Patent Application No 11/010,770 filed 3/2/2005

### **Martin Schwartz** (Chemistry and Biochemistry)

- *Substituted Heterocyclic Mercaptosulfide Inhibitors*
  - PCT/US2004/031847 filed 9/29/2004

### **Chiang Shih** (Mechanical Engineering)

- *System for Control of Compression Dynamic Stall Using Distributed Microjet Blowing*
  - U.S. Patent Application No 10/963,973 filed 10/12/2004

### **Xin Yuan** (Computer Science)

- *Fair Round Robin O(1) Complexity Scheduler that is Proportional and Worst-Case Fair*
  - U.S. Patent Application No 11/027,283 filed 12/31/2004