

**Antonio Peramo, Ph.D.**  
**University of South Florida, Physics Department.**  
**aperamo@mail.usf.edu**  
**813-5983258**

### **Education and Skills**

- \* Ph.D. in Applied Physics at the Physics Department of the University of South Florida, Tampa, Florida.
- \* M.S. in Chemistry. Research project in Electrochemistry at the Physical Chemistry Department of the Universidad de Barcelona, Spain.
- \* M.S. in European Union Law and Scientific Policy at the Real Instituto de Estudios Europeos de Zaragoza, Spain.
- \* B.S. in Chemistry. Universidad de Barcelona, Spain.
- \* B.S. in Physics at the Universidad Nacional de Educación a Distancia (UNED), Madrid, Spain.
- \* Languages: Spanish, English, French.
- \* Expertise in different computational environments and application and productivity oriented computer systems.

### **Visa Status**

F-1 with OPT. I need sponsorship for H1-B visa.

### **Professional Memberships**

American Cancer Society

### **Awards and Fellowships**

2004 Tharp Fellowship in Applied Physics, University of South Florida

**Dissertation title:** "Physical studies of glycosaminoglycans in relation to the adhesion properties of human cancer cells". A summary or abstract of the dissertation is available upon request.

### **Journal Publications**

*Deposition of patterned glycosaminoglycans on silanized glass surfaces (Langmuir, 22, 3228-3234, 2006).*

Peramo, A.; Albritton, A. Matthews. G

The major significance is that the glass substrates with the grafted sugars provide model surfaces to probe specific interactions between the cells and biopolymers. As indicated below, the substrates may be used in studies on cell adhesion and migration.

*Static adhesion of cancer cells to glass surfaces coated with glycosaminoglycans (In preparation to be sent to Journal of Cell Science)*

Peramo, A.; Meads, M.; Matthews, G.; Dalton, W.S.

The significance is the use of substrates containing molecular species of interest (sugars) to selectively study the interactions between cancer cells and the biopolymers. Also, this work includes a novel analysis of the adhesion of the number of cells versus the radius of gyration of the GAGs deposited on the substrates.

### **Peer-Reviewed Conference Proceedings**

*Glycosaminoglycan model glass substrates and cancer cell interactions*

Peramo, A.; Meads, M.; Wrigth, G.; Matthews, G.; Dalton, W.S.

Accepted at NanoScience and Technology Institute Nanotech 2006 Technical Conference – Cellular and Molecular Dynamics, Boston, May 7-11, 2006.

The observed adhesion of whole cancer cells indicates that may exist a functional dependence with the number of charges per dimer of the polyelectrolyte to which they are attaching and that

this dependence takes the form of a linear function that increases with the number of charges of the dimer.

### **Conference Abstracts and Presentations**

*Investigating the glycocalyx using atomic force microscopy*

Boren, R.; Rafi, A.; Farrell, J.; Peramo, A.; Matthews, G.

2006 APS March Meeting, Baltimore, March 13-17.

### **Talks and Seminars**

Antonio Peramo "*Polysaccharide Mediated Adhesion of Human Tumor Cells*". Invited talk, H. Lee Moffitt Cancer Center, Tampa, December 2005.

Antonio Peramo "*Polymer Physics of Glycosaminoglycans: Application to the Study of Adhesion Mechanisms of Human Cancer Cells*". Invited seminar, Pediatric and Developmental Pathology, UCLA School of Medicine, Los Angeles, March 2006.

### **Book Articles**

*Electrodeposition processes on a mercury modified electrode*

Peramo A., Sarret M., Muller, C.

Article in book "Miscellania Enric Cassasas"

Universitat Autònoma de Barcelona Publications, Barcelona, Spain. ISBN 84-7929-197-4