

CURRICULUM VITAE

J. Manuel Perez, PhD

Professional Experience:

- 5/1/15 - Present Associate Professor, Nanomedicine Research Center, Department of Neurosurgery, Cedar Sinai Medical Center, Los Angeles CA
- 2011 –3/21/15 Associate Professor, Nanoscience Technology Center, Chemistry Department, and Burnett School of Biomedical Science. University of Central Florida, Orlando, FL.
- 2005 – 2011 Assistant Professor, Nanoscience Technology Center, Chemistry Department, and Burnett School of Biomedical Science. University of Central Florida, Orlando, FL.
- 2003 – 2005 Instructor in Chemistry, Center for Molecular Imaging Research, MGH-Harvard Medical School, Boston MA.
- 2000 – 2003 Post-doctoral Fellow, Center for Molecular Imaging Research, MGH-Harvard Medical School, Boston MA.
Advisor: Ralph Weissleder, MD/PhD
- 1998 – 2000 Post-doctoral Fellow, Solid Phase Sciences Corp, Medford, MA.
Advisor: Irving Sucholeiki, PhD
- 1999 – 2000 Visiting Scientist, Department of Chemical Engineering, Tufts University, Medford, MA.

Research Interest:

- Cancer imaging, diagnostics and nanotherapeutics for prostate and breast cancer treatment
- Development of novel nanoparticle platforms to interrogate biological systems and discover new biological interactions
- Design of novel activatable imaging probes
- Pathogen and toxin detection using nanoparticle platforms
- Design new nanoparticles technologies using iron oxide, cerium oxide and hyperbranched polymeric nanoparticles among others

Education:

- Ph.D. (Chemistry) Boston University, Boston, MA, May 1998.
Dissertation: "*Identification of the phosphorylation sites on human tyrosinase and modulation of enzymatic activity using synthetic phosphopeptides.*"
Advisor: Professor Richard A. Laursen
- M.S. (Chemistry) Univ. of Puerto Rico, Mayaguez, PR, May 1990
- B.S. (Chemistry) Univ. of Puerto Rico, Mayaguez, PR, May 1986

Awards and Honors

- NCI-Career Development Award (KO1) (2003-2008)
- Outstanding Presentation, AACR Conference on *The Role of Telomeres and Telomerase in Cancer*, San Francisco, CA. (2004)
- Magnetic Microsphere Society Travel Award (*4th International Conference on the Scientific and Clinical Application of Magnetic Carriers, Tallahassee Fl.*) (2002)
- AACR Minority Scholar in Cancer Research Travel Award (*Molecular Imaging in Cancer; Linking Biology, Function and Clinical Application*) (2002)
- NCI-Postdoctoral Grant Supplement Recipient (2001-2003)
- NIH Molecular Biophysics Training Predoctoral Fellow (1994-1997)

Current Funding

- PI: R01: Polymeric nanoparticles with imaging capability for therapeutic peptide delivery
Agency: NIBIB/NIH
Grant #: 1R01EB019288-01A1
Amount: \$1,328,880 (Multi-PI, \$694,934.50 w/split)
Beginning/End Date: 9/30/2014 – 5/31/2018

Past Funding:

- PI: R01: An integrated NMR/magnetic nanosensor system for the detection of bacteria and toxins
Agency: NIGMS/NIH
Total value of Award: \$1,071,354
Perez's credit: \$910,650.9
Period: 9/01/08 – 08/31/13
- PI: R01: An integrated NMR/magnetic nanosensor system for the detection of bacteria and toxins (*Minority Supplement for student support; Oscar Santiesteban*)
Agency: NIGMS/NIH
Total value of Award: \$67, 867
Perez's credit: \$67, 867
Period: 5/01/09 – 08/31/11
- PI: Novel Fluorescent labeled polymer coated cerium oxide nanoparticles for effective antioxidant activity
Agency: The Henry M. Jackson Foundation for the Advancement of Military Medicine
Total value of Award: \$50,000
Perez's credit: \$ 50,000
Period: 6/1/10 – 12/31/10
- PI: K01: Development of magnetic sensors for MRI cancer imaging
Agency: NCI/NIH
Total value of Award: 763,155
Perez's credit: 763,155
Period: 07/01/03 – 04/30/09

- PI: Hand-held MENTOR for biological threat material detection and identification
Agency: Menon and Associates
Total value of Award: \$10,000
Perez's credit: \$10,000
Period: 01/27/06 – 06/30/06

Professional Affiliations

- American Association for Cancer Research (2002-Present)
- American Chemical Society (1998-Present)
- American Association for the Advancement of Science (1995-Present)

Teaching Activities

2005 - Present	University of Central Florida, Orlando Fl. BCH 4054 Biochemistry II (Undergraduate) PCB 4174 Foundation of Bio-Imaging Sciences (Undergraduate) IDS 5127 Foundation of Bio-Imaging Sciences (Graduate) BSC 3424 Nanobiotechnology (Graduate)
1996-98	Science Instructor, Roxbury Community College, Boston MA.

Student and Post Doctoral Fellow

Current

1. Orielyz Flores (Chemistry, PhD student)
2. Alexandra Smith (Chemistry, PhD student)
3. Chris Downlatram (Biomedical Sciences, undergrad student)
4. Carlos Delgado (Biomedical Sciences, undergrad student)
5. Carlos Dohse (Biomedical Sciences, undergrad student)

Previous

26. Nicolas Ghanem (Chemistry, MS Student)
25. Aziz Al'khafaji (Biomedical Sciences, undergrad student)
24. Oscar Santiesteban (Chemistry, PhD student)
23. Santimukul Santra, PhD (Post-Doctoral Fellow)

22. David Lehmkuhl, (Biomedical Sciences, undergrad student)
21. Sam Jativa, (Biomedical Sciences, undergrad student)
20. Chase Flaum, (Biomedical Sciences, undergrad student)
19. Everett Sutherland (Biomedical Sciences, undergrad student)
18. David DeLaPena, (Biomedical Sciences undergrad student)
17. Charalambos Kaittanis, PhD (Biomedical Science, PhD student)
16. Alex Noll, (Biomedical Sciences undergrad student)
15. Neil Gakhar (Biomedical Sciences undergrad student)
14. Phillip Whitman (Biomedical Sciences undergrad student)
13. Kimberly Lewis (Biomolecular Sciences, MS student)
12. Atul Asati, PhD (Chemistry, PhD Student)

11. Bart Black (Forensic Sciences, Biochemistry Track, undergrad)
10. David Kimble (Mol.Bio and Microbiology undergrad student)
9. Annette Threatte (Mol.Bio and Microbiology undergrad student)
8. Dendrik Abraham (Mol.Bio and Microbiology undergrad student)
7. Rob Easton (Mol.Bio and Microbiology undergrad student)
6. Jason Hollman (Mol.Bio and Microbiology undergrad student)
5. Julie Place (Mol.Bio and Microbiology undergrad student)
4. Rachel Poore (Mol.Bio and Microbiology undergrad student)
3. Salman Bawany (Mol.Bio and Microbiology undergrad student)
2. Benjamin Hudson (Mol.Bio and Microbiology undergrad student)
1. Sudip Nath, PhD (Post-doctoral Fellow)

Awards given to my students under my mentorship

- Orielyz Flores, UCF-Chem. Dept. Outstanding Graduate Presentation 2012
- Oscar Santiesteban, Best Poster Award, *Particles 2010*, 2010
- Oscar Santiesteban, Best Poster Award, *3rd Annual NanoFlorida Symposium*, 2010
- A. Asati, Best Poster Award, *2nd Annual NanoFlorida Symposium*, 2009
- A. Asati, *American Vacuum Society's Graduate Research Excellence Award* 2009
- A. Asati, *2009 AAPS National Biotechnology Graduate Symposium Award by Ellie Lilly*
- C. Kaitannis, American Foundation of Aging Research Fellowship, 2009

Committee Service at UCF

2012-2013	Biomedical Sciences Program Graduate Admission Committee
2011-2013	NSTC Tenure and Promotion Committee
2011-2013	NSTC Faculty Search Committee
2010-2011	Physics Department NanoBio Faculty Search
2009-2010	UCF Graduate Student Mentoring Task Force
2008-Present	NSTC Instrument Committee
2008-2009	NSTC-AMPAC Director Search Committee
2007	Associate Director Search Committee
2006-2007	UCF Research Week Programming Committee
2006-Present	Chemistry Department Biochemistry Committee
2006-Present	NSTC Seminar Committee (Chair from 2006-08)
2005-2006	NSTC New Faculty Hiring Committee
2006-Present	Member in various student dissertation committees

Grant Application Reviewer for the following agencies

- NIH NANO Study Section/Ad hoc Reviewer (20011-Present)
- NIH, GO/Challenge Grant (2009)
- US. ARMY Medical Research & Material Command (USAMRMC) (2009)
- Swiss National Science Foundation (2009)
- US Civilian Research Foundation, Cooperative Grant Program (2005)
- NIH, SBIR Program in Nanotechnology (2004, 2003)
- NSF (2004, 2007)
- US Army Research Office (2003)

Reviewer for the Following International Journals

Nature Nanotechnology
Nature Communications
Nanomedicine
Angewandte Chemie International Edition in English
Journal of the American Chemical Society
International Journal of Nanotechnology
Langmuir
ChemBioChem
Small
NanoLetters
ACS Nano
PLOS One
Analytical Chemistry
Molecular Imaging
Chemistry of Materials

Patents:

1. L. Josephson, R. Weissleder, J.M. Perez. "Magnetic Nanoparticle Conjugates and Methods of Use," U.S. Patent Appl. 2003/0092029.
2. J. M. Perez, A. Asati, S. Nath "Facile Synthesis of Dextran Coated Ceria Nanoparticles for Biomedical Applications" U.S. Patent Appl. 11/965,343.
3. J. M. Perez, A. Asati, C. Kaittanis, S. Nath. "Dextran Nanoceria facilitates pH dependent selective cytoprotection". U.S. Patent Appl. 60/949,953.
4. J. M. Perez, C. Kaittanis, S. Nath. "Polysaccharide-coated gold and iron oxide nanoparticles for the assessment of antimicrobial susceptibility". U.S. patent Appl. 60/982,529.
5. J. M. Perez, C. Kaittanis, S. Nath. "One-step, nanoparticle mediated bacterial detection with magnetic relaxation". U.S. patent Appl. 60/949, 961.
6. J. M. Perez, S. Nath "Facile synthesis of highly magnetic polymer coated iron oxide particles for sensing applications". U.S. patent Appl. 60/949,945.
7. J. M. Perez, Santra, S. "Synthesis of hyperbranched amphiphilic polyester and theranostic nanoparticles thereof." U.S. patent Appl. 12/417,017
8. J. M. Perez, Santra, S. "Multimodal, Multifunctional Polymer Coated Nanoparticles" U.S. patent Appl. 12/416,993.
9. J. M. Perez, *et.al.* "Oxidase Activity of Polymeric Coated Cerium oxide nanoparticles" U.S. patent pending #61/160,744
10. J. M. Perez, *et.al.* "A Cerium oxide nanoparticle based device for the detection of reactive oxygen species and monitoring chronic inflammation" U.S. patent pending #61/250,750
11. J. M. Perez, *et.al.* "Surface-Charge-Dependent Cell Localization and Cytotoxicity of Cerium Oxide Nanoparticles" U.S. patent pending" U.S. patent pending #61/366,697
12. J. M. Perez, *et.al.* "Cerium oxide nanoparticle-based device for the detection of reactive oxygen species and monitoring of chronic inflammation" U.S. patent pending (*waiting number to be assigned*)

Publications:

46. Kaittanis, C., Shaffer, T. M., Ogirala, A., Santra, S., Perez, J. M., Chiosis, G., Li, Y., Josephson, L., Grimm, J. Environment-responsive nanophores for therapy and treatment monitoring via molecular MRI quenching, *Nature Comm.* 2014, DOI: 10.1038/ncomms4384.
45. Lee MW, Bassiouni R, Sparrow NA, Iketani A, Boohaker, RJ, Moskowitz C, Vishnubhotla P, Khaled AS, Oyer J, Copik A, Fernandez-Valle C, Perez JM and Khaled, AR. "The CT20 Peptide Causes Detachment and Death of Metastatic Breast Cancer Cells by Promoting Mitochondrial Aggregation and Cytoskeletal Disruption, *Cell Death & Disease* 2014, 5, e1249; doi:10.1038/cddis.2014.225.
44. Wang, W., Ji, X., Na, H.B., Safi, M., Smith, A., Palui, G., Perez, J. M., Mattoussi, H. Design of a multi-dopamine-modified polymer ligand optimally suited for interfacing magnetic nanoparticles with biological systems, *Langmuir* 2014, 30, 6197-6208.
43. Santiesteban, O.J., Kaittanis, C., Perez, J. M. "Identification of toxin inhibitors using a magnetic nanosensor-based assay", *Small* 2014, 10, 1202-1211.
42. Wang, Q., Perez, J.M., Webster, T.J. Inhibited growth of *Pseudomonas aeruginosa* by dextran- and polyacrylic acid-coated ceria nanoparticles, *Inter. J. of Nanomedicine* 2013, 8 3395-3399.
41. Likun Yang, Gobalakrishnan Sundaresan, Minghao Sun, Purnima Jose, David Hoffman, Philip Reed McDonagh, Narottam Lamichhane, Cathy S. Cutler, J. Manuel Perez and Jamal Zweit, Intrinsically radiolabeled multifunctional cerium oxide nanoparticles for in vivo studies, *J. Mater Chem. B* 2013, 1, 1421-1431.
40. Santra, S., Jativa, S.D., Kaittanis C., Santiesteban, Normand, G. Grimm, J., Perez, J.M. Gadolinium-Encapsulating Iron Oxide Nanoprobe as Activatable NMR/MRI Contrast Agent, *ACS Nano*, 2012, 8, 7281-7294.
39. Asati, A., Lehmkuhl, D., Diaz, D., Perez, J.M. Nanoceria Facilitates the Synthesis of Poly(o-phenylenediamine) with pH-Tunable Morphology, Conductivity, and Photoluminescent Properties, *Langmuir* 2012,28, 13066-13071.
38. Boohaker, R.J., Zhang, G., Lee, M.W., Nemecek, K.N., Santra, S., Perez, J.M., Khaled, A.R. Rational development of a cytotoxic peptide to trigger cell death, *Mol. Pharmaceutics* 2012, 9, 2080-2093.
37. Kaittanis, C., Boukhriss, H., Santra S., Naser, S. A., Perez, J.M. Rapid and sensitive detection of an intracellular pathogen in human peripheral leukocytes with hybridizing magnetic relaxation nanosensors, *PLOS One*, 2012, 7(4): e35326. doi:10.1371/journal.pone.0035326.
36. Santiesteban, O.J., Kaittanis, C, Santra S., Perez, J.M. Assessment of molecular interactions through magnetic relaxation, *Angew. Chem. In Ed.* 2012, 51, 6728-6732.
35. Kaittanis, C, Santra S., Asati, A., Perez, J.M. A cerium oxide nanoparticle-based device for the detection of chronic inflammation via optical and magnetic resonance imaging, *Nanoscale* 2012, 4, 2117.
34. Santra, S., Kaittanis C., Santiesteban, O.J., Perez J.M. Cell-Specific, Activatable, and Theranostic Prodrug for Dual-Targeted Cancer Imaging and Therapy, *J. Am. Chem. Soc.* 2011, 133, 16680-16688.
33. Santra, S., Perez J.M. Selective N-Alkylation of β -Alanine Facilitates the Synthesis of a Poly(amino acid)-Based Theranostic Nanoagent, *Biomacromolecules* 2011, 12, 3917-3927.
32. Kaittanis, C, Santra S., Santiesteban, O.J., Henderson, T., Perez, J.M. The assembly state between magnetic nanosensors and their targets orchestrates their magnetic relaxation response, *J. Am. Chem. Soc.* 2011,133, 3668-3676.

31. Asati, A., Kaittanis, C., Santra S., Perez, J.M. pH-tunable oxidase-like activity of cerium oxide nanoparticles achieving sensitive fluorogenic detection of cancer biomarkers at neutral pH, *Anal. Chem.* 2011, 83, 2547-2553.
30. Kaittanis, C, Banerjee, T., Santra S., Santiesteban, O.J., Teter, K., Perez, J.M. Identification of molecular mimicry based ligands for cholera diagnostics using magnetic relaxation, *Bioconj. Chem.* 2011, 22, 307-314.
29. Asati, A., Santra S., Kaittanis, C, Perez, J.M. Surface-Charge-Dependent Cell Localization and Cytotoxicity of Cerium Oxide Nanoparticles, *ACS Nano* 2010, 4, 5321-5331.
28. Santra, S., Kaittanis C., Perez J.M. Cytochrome c Encapsulating Theranostic Nanoparticles: A Novel Bifunctional System for targeted delivery of therapeutic membrane-impermeable proteins to tumors and imaging of cancer therapy, *Mol. Pharmaceutics* 2010, 7, 1209-1222.
27. Santra, S., Kaittanis C., Perez J.M. Aliphatic hyperbranched polyester: A new building block in the construction of multifunctional nanoparticles and nanocomposites, *Langmuir* 2010, 26, 5364-5373.
26. Kaittanis C., Santra, S., Perez J.M. Role of Nanoparticle Valency in the Nondestructive Magnetic-Relaxation-Mediated Detection and Magnetic Isolation of Cells in Complex Media, *J. Am. Chem. Soc.* 2009, 131, 12780-12791.
25. Ma, L., Hong, Y., Ma, Z., Kaittanis, C., Perez, J. M. Su, M. Multiplexed highly sensitive detections of cancer biomarkers in thermal space using encapsulated phase change nanoparticles, *Appl. Phys. Lett.* 2009, 95, 043701.
24. Banerjee, S., Kar, S., Perez, J. M., Santra, S. Quantum Dot-Based OFF/ON Probe for Detection of Glutathione, *J. Phys. Chem. C.* 2009, 113, 9659-9663.
23. Santra, S., Kaittanis C., Grimm J. and Perez J.M. Drug/Dye-Loaded, Multifunctional Iron Oxide Nanoparticles for Combined Targeted Cancer Therapy and Dual Optical/MR-Imaging, *Small* 2009, 5, 1862-1868.
22. Nath, S., Kaittanis, C., Ramachandran V., Dalal. N.S., Perez, J.M. Synthesis, magnetic characterization and sensing applications of novel dextran-coated iron oxide nanorods, *Chem. Mat.* 2009, 21, 1761-1767.
21. Asati, A., Santra S., Kaittanis, C, Nath S. Perez, J.M. Oxidase-like activity of polymer-coated cerium oxide nanoparticles, *Angew.Chem.Int.Ed.* 2009, 48, 2308-2312.
20. Kaittanis, C., Nath, S., Perez J.M. Rapid nanoparticle-mediated monitoring of bacterial metabolic activity and assessment of antimicrobial susceptibility in blood with magnetic relaxation, *PLOS One* 2008, 3(9), e3253.
19. Perez J.M. Grimm, J, Josephson, L, Weissleder, R. Integrated nanosensors to determine levels and functional activity of human telomerase, *Neoplasia* 2008, 10, 1066-1072.
18. Perez, J.M., Asati, A., Nath, S., Kaittanis, A. *Synthesis of biocompatible dextran-coated nanoceria with pH-dependent antioxidant properties*, *Small* 2008, 4, 552-556.
17. Nath, S., Kaittanis, C., Tinkham, A., Perez J.M. Dextran coated gold nanoparticles for the assessment of antimicrobial susceptibility, *Anal. Chem* 2008, 80, 1033-1038
16. Kaittanis, C., Saleh, A. N., Perez J.M. One-step, nanoparticle-mediated Bacterial Detection with Magnetic Relaxation, *NanoLetters* 2007, 7, 380-383.
15. Rabin, O*, Perez, J.M*, Grimm, J., Wojtkiewicz, G., Weissleder, R. An X-ray computed tomography imaging agent based on long-circulating bismuth sulphide nanoparticles, *Nature Mat.* 2006, 5, 118-122.

14. McCarthy, J.R.*, Perez, J.M.*, Bruckner C, Weissleder, R. Polymeric Nanoparticle Preparation that Erradicate Tumors, *NanoLetters* 2005, 5, 2552-2556.

* Contributed equally

13. Tsorkas, A., Newton, G., Perez, J.M., Basilion, J.P., Weissleder, R. Detection of Peroxidase/H₂O₂-Mediated Oxidation with Enhanced Yellow Fluorescent Protein, *Anal. Chem.* 2005, 77, 2862-2867.
12. Perez, J.M., Simeone, F.J., Tsourkas, A., Josephson, L, Weissleder, R. Peroxidase substrate nanosensors for MR imaging, *NanoLetters*, 2004, 4, 119-122.
11. Grimm, J., Perez, J.M., Josephson, L; Weissleder, R. Novel nanosensor for rapid analysis of telomerase activity, *Cancer Research* 2004; 64, 639-643.
10. Perez, J.M., Simeone, F.J., Josephson, L; Weissleder, R. Viral-induced self-assembly of magnetic nanoparticles allows the detection of viral particles in biological media, *J. Amer. Chem. Soc.*, 2003; 125:10192-10193.
9. Perez, J.M., Josephson, L, O'Loughin, T., Hogemann, D., Weissleder, R. Magnetic relaxation switches capable of sensing molecular interactions, *Nature Biotech.*, 2002; 20:816-820.
8. Perez, J.M., O'Loughin, T., Simeone, F.J., Weissleder, R., Josephson, L. DNA-based Magnetic Nanoparticle Assembly Acts as Magnetic relaxation Nanoswitch Allowing Screening of DNA Cleaving Agents, *J. Amer. Chem. Soc.*, 2002; 124:2856-2857.
7. Perez, J.M., Josephson, L, Weissleder, R. Magnetic Nanosensors for DNA Analysis, *Eur. Cells and Mater.*, 2002, 3 (suppl. 2):181-182.
6. Josephson, L*, Perez, J. M*, Weissleder, R. Magnetic Nanosensors for the Detection of Oligonucleotide Sequences, *Angew. Chem., Int. Ed.*, 2001; 40 (17), 3204-3206.
5. Sucholeiki, I. Perez, J.M., Owens PD. New polyoxyalkylamine -Grafted Paramagnetic Support For Solid-Phase Synthesis & Bioapplications. *Tetrahedron. Lett.* 2001, 42, 3279-3282.
4. Perez J.M., Wilhem EJ, Sucholeiki J. The use of power ultrasound coupled with magnetic separation for the solid phase synthesis of compound libraries. *Biorg. Med. Chem. Lett*, 2000; 10:171-174.
3. Sucholeiki I, Perez J.M. New high loading paramagnetic support for solid phase organic chemistry. *Tetrahedron Lett.*, 1999, 40:3531-3534.
2. Park HY, Perez J.M., Laursen R, Hara M, Gilchrest BA. Protein kinase C- β activates tyrosinase by phosphorylating serine residues in its cytoplasmic domain. *J. Biol. Chem.* 1999; 274:16470-16478.
1. Sinha ND, Davis P, Usman N, Perez J.M., Hodge R, Kremsky J, Casale R. Labile exocyclic amine protection of nucleosides in DNA, RNA and oligonucleotide analog synthesis facilitating N-deacylation, minimizing depurination and chain degradation. *Biochimie* 1993; 75:13-23.

Review Articles:

5. Boohaker, R.J., Lee, M.W., Vishnubhotla, P., Perez, JM, Khaled, A.R. The Use of Therapeutic Peptides to Target and to Kill Cancer Cells, *Curr Med Chem.* 2012, 19(22), 3794-3804
4. Radwan, F.Y., **Perez, J. M.**, Haque, A. Apoptosis and immune restoration effects of ganoderic acid define a new prospective for complementary treatment of cancer, *J. Clin. Cell Immunol.* 2011, S3, <http://dx.doi.org/10.4172/2155-9899.S3-004>

3. Kaitannis, C., Santra, S., **Perez, J. M.** Emerging nanotechnology-based strategies for the diagnosis of infectious diseases, *Adv. Drug Delivery Rev* 2010; 62: 408-423.
2. **Perez, J.M.**, Iron oxide nanoparticles : Hidden Talent. *Nature Nanotech.* 2007; 2: 535, - 536.
1. **Perez, J.M.**, Josephson, L., Weissleder, R., Use of Magnetic Nanoparticles as Nanosensors to Probe for Molecular Interactions. *ChemBioChem* 2004; 5: 261-264.

Book Chapters:

5. **Perez, J.M.**, Kaitannis, C. Magnetic nanosensors for probing molecular interactions, In *Nanoparticles in Biomedical Imaging: Emerging Technologies and Applications*, 2008, (Bulte and Modo; ed.), Springer, New York, N.Y., 183-197.
4. Use of a new high loading paramagnetic support for solid phase organic chemistry, In *SolidPhase Synthesis And Combinatorial Libraries (Proceedings of the 6th International Symposium)*, 2001 (Epton R.; ed.), Mayflower Scientific Ltd, Birmingham, 185-188.
3. **Perez, J.M.**, Sucholeiki I. Use of a new high loading paramagnetic support for solid phase organic chemistry, In *SolidPhase Synthesis And Combinatorial Libraries (Proceedings of the 6th International Symposium)*, 2001 (Epton R.; ed.), Mayflower Scientific Ltd, Birmingham, 185-188.
2. Sucholeiki, I. **Perez, J.M.**, Owens PD. Use of magnetic separation coupled with power ultrasound for high-throughput solid phase organic synthesis, In *High-Throughput Synthesis: Principle and Practice*, 2001 (Sucholeiki, I.; ed.), Marcel Dekker, Inc., New York,N.Y., 347-360.
1. **Perez, J.M.** Methods of Analysis to determine the progress of a chemical reaction on Solid Support, In *High-Throughput Synthesis: Principle and Practice*, 2001(Sucholeiki, I.; ed.), Marcel Dekker, Inc., New York, N.Y. 27-39.

Book Review:

Review of the Book; "Methods in Molecular Biology, Vol 300: Protein Nanotechnology Protocols, Instrumentation, and Applications. Edited by Tuan Vo-Dinh" on *ChemBioChem* 2005, 6, 2337.

Presentations:

41. University of Miami, Department of Chemistry, Miami, Fl (November 2013), **Invited Talk**
40. 2nd Nanomedicine for Imaging and Treatment Conference, Cedar-Sinai Hospital, Los Angeles, CA (March, 2013), **Invited Talk**
39. Florida State University, Department of Chemistry, Tallahassee, Fl (February 2013), **Invited Talk**
38. 2012 NSTI Nanotech, *Nanoparticles in Imaging Technologies* , Santa Clara, CA (June 2012), **Symposium Chair**
37. 2011 NSTI Nanotech, *Nanoparticles in Imaging Technologies* , Boston, MA (June 2011), **Symposium Chair**
36. Massachusetts General Hospital, Center for Systems Biology, Boston , MA (June 2011), **Invited Talk**

35. 2010 NSTI Nanotech, *Nanoparticles in Imaging Technologies*, Anaheim, CA (June 2010), **Invited Talk and Symposium Chair**
34. Society for Nuclear Medicine, 2010 Annual Meeting, Salt Lake City, UT (June 2010), **Invited Talk**
33. *Particle 2010, Medical/Biochemical Diagnostic, Pharmaceutical and Drug Delivery Applications of particle Technology (International Conference)*, Orlando FL (May 2010) **Invited Talk**
32. NIH/NCI/CRCHD 2010 Professional Development Workshop. *The Ladder to Success: Steps to New Heights*, Rockville, MD (April 2010), **Invited Talk**
31. NIH/NIGMS *Workshop for Postdocs Transitioning to Independent Positions*, Bethesda MD (March 2010), **Invited Talk**
30. Nanoelectronic Devices for Defense and Security Conference, *Biosensing Devices Section*. Ft Lauderdale, FL (Sept 2009), **Accepted Abstract (Talk)**
29. Center for Molecular Imaging, Department of Radiology, Virginia Commonwealth University, School of Medicine (Sept 2009), **Invited**
28. NanoFlorida 2009, Nanobiotechnology and Nanomedicine Section (Sep 2009), **Invited Talk and Section Chair**
27. Memorial Sloan-Kettering Cancer Center, Molecular Pharmacology & Chemistry Dept., NYC (Aug 2009), **Invited**
26. Fall 2009 American Chemical Society National Meeting, *Division of Biochemical Technology, Emerging Technologies in Nanobiotechnology Section* (August 2009), **Accepted Abstract (Talk)**
25. 2009 NSTI Nanotech, *Nanotechnology for Cancer Prevention, Diagnostics and Treatment Section*, Houston TX (May 2009), **Accepted Abstract (Talk) and Section Chair**
24. 2009 NSTI Nanotech, *Biosensors & Diagnostics*, Houston TX (May 2009), **Accepted Abstract (Talk)**
23. Burnham Institute of Biomedical Research, Lake Nona, FL (July 2009), **Invited**
22. MD Anderson Cancer Center, Orlando, FL (March 2009), **Invited**
21. ARMY's Edgewood's Chemical Biological Center, Edgewood, MD (August 2008), **Invited**
20. Department of Material Science and Engineering, Massachusetts Institute of Technology, Cambridge, MA (June 2008), **Invited**
19. 2008 NSTI Nanotech, Cancer Diagnosis, Imaging and Treatment, Boston MA (June 2008), **Invited, Section Chair**
18. 2008 NSTI Nanotech, *Biosensor Section*, Boston MA (June 2008), **Accepted Abstract (Talk)**
17. 2008 NSTI Nanotech, *Nanomaterials for Biology and Medicine Section*, Boston MA (June 2008), **Accepted Abstract (Talk)**
16. *Particle 2008, Particle Synthesis, Characterization, and Particle-Based Advanced Materials (International Conference)*, Orlando FL (May 2008) **Invited, Section Chair**
15. Navy Research Laboratory, Washington, DC (May 2008), **Invited**

14. 10th Annual Conference, Force Health Protection, Louisville, KY (Aug 2007)
2007 NSTI Nanotech., Santa Clara CA (May 2007)
13. Chemistry Department, Florida Atlantic University, (March 2007), **Invited**
12. *The Fine Particle Society, 2006 International Conference*, San Diego CA (Dec 2006) **Invited, Section Chair**
11. *Particle 2006, Medical/Biomedical Diagnostics, Pharmaceutical, and drug delivery Applications of Particle Technology (International Conference)*, Orlando FL (May 2006) **Invited, Section Chair**
10. *American Chemical Society, Florida Section, FAME, Biochemistry Section*, Orlando FL (May 2006) **Invited**
9. *2006 Annual Joint Symposium, Florida Chapter of the American Vacuum Society*, Orlando FL (March 2006) **Invited**
8. *XXIII National Congress of Biomedical Research*, Universidad Autonoma de Nuevo Leon, Monterrey, Mexico (October 2005) **Invited**
7. *USA Department of Defense Nanotechnology Workshop*, Washignton DC (September, 2005) **Invited**
6. *American Association for Cancer Research Conference on The Role of Telomeres and Telomerase in Cancer*, San Francisco, CA (November 2004) **Accepted Abstract (Poster)**
5. *NanoBio Convergence 2004*, Cambridge MA (March 2004) **Invited**
4. *First Annual Meeting of The Society for Molecular Imaging*, Boston, MA (Aug 2002) **Accepted Abstract (Talk)**
3. *Fourth International Conference on the Scientific and Clinical Applications of Magnetic Carriers*, Tallahassee, FL (May 2002) **Accepted Abstract (Poster &Talk)**
2. *220th Meeting of the American Chemical Society National Meeting*, Washignton DC (Aug. 2000), **Accepted Abstract (Talk)**
1. *Topics in Combinatorial Chemistry*, CSIC and University of Barcelona, Barcelona, Spain (May 2000) Angel Messeguer and Fernando Albericio (Organizers) **Invited**

Student Presentations:

14. *The assembly state between magnetic nanosensors and their targets orchestrates their magnetic relaxation response*, Nanotech 2011 NSTI Conference, Boston, MA (**Talk**)
13. *Identification of molecular mimicry based ligands for cholera diagnostics using magnetic relaxation*, Nanotech 2011 NSTI Conference, Boston, MA (**Talk**)
12. *Biodegradable hyperbranched polyester: a new building block in the construction of multifunctional nanoparticles and nanocomposites for targeted cancer therapy and imaging*, 239th ACS National Meeting, San Francisco, CA, 2010 (**Talk**)
11. *Polymer coated cerium oxide nanoparticles as antioxidant and its oxidase like activity*, 7th AAPS National Biotechnology Conference, Seattle, WA, 2009 (**Talk and Poster**)
10. *pH modulated enzymatic behavior of cerium oxide nanoparticles and its potential application in cellular ELISA*, NanoFlorida 2009, Orlando, FL (**Poster**)

9. *Identification of bacterial drug resistance in blood using iron oxide nanoparticles*, Nanotech 2009 NSTI Conference, Houston, TX (**Talk**)
8. *One-step, nanoparticle-mediated bacterial detection with magnetic relaxation*, Particles 2008, Orlando, FL (**Poster**)
7. *Unique pH-dependent free radical scavenging activity of dextran coated cerium oxide nanoparticles*, 236th ACS National Meeting, Washington, DC, 2008 (**Poster**)
6. *Synthesis of biocompatible dextran coated nanoceria with pH-dependent antioxidant properties*, Research Forum, Research Week University of Central Florida, Orlando, Fl, 2008 (**Poster**)
5. *Dextran coated-nanoceria with pH-dependent antioxidant property*, NanoFlorida 2008, Orlando, Fl (**Poster**)
4. *One-step, nanoparticle-mediated bacterial detection with magnetic relaxation*, NanoFlorida 2008, Orlando, FL (**Poster**)
3. *Nanodiagnosics for bacterial pathogenesis identification*, Burnett School of Biomedical Sciences (UCF), Orlando, FL, 2007 (**Talk**)
2. *One-step, nanoparticle-mediated bacterial detection with magnetic relaxation*, Graduate Research Forum (UCF), Orlando, FL, 2007 (**Talk**)
1. *Magnetic nanoparticles in diagnostics*, Department of Electrical Engineering , University of Cyprus, Nicosia, Cyprus, 2006 (**Talk**)