

Róisín Owens
Associate Professor
Department of Bioelectronics

Centre Microélectronique de Provence, Ecole Nationale Supérieure des Mines de Saint Etienne, 880,
route de Mimet, 13541 Gardanne, FRANCE
Tél : +33 (0)4 42 61 66 45, Email: owens@emse.fr

EDUCATION

2014	Habilitation à diriger la recherche (HDR), Université Jean Monnet, France
1998-2002	Ph.D. in Biochemistry, University of Southampton, U.K. Characterization of the biochemical mechanisms of the BipA ribosomal GTPase in Enteropathogenic <i>E. coli</i> . Advisor: Professor C. D. O'Connor
1994-1998	B.A. Biochemistry, Trinity College Dublin, Ireland
1996-1997	Biochemistry at the Université Joseph Fourier (Grenoble, France), as an exchange student with the Erasmus program

PROFESSIONAL EXPERIENCE

2014	Sabbatical at the department of physics in the Aristotle University of Thessaloniki
2010	Associate Professor in Bioelectronics at the Centre Microélectronique de Provence in Gardanne (Ecole des Mines de St. Etienne)
2009-2010	Assistant Professor in Bioelectronics at the Centre Microélectronique de Provence in Gardanne (Ecole des Mines de St. Etienne)
2007-June 2009	Research Associate in Department of Biomedical Engineering, Cornell University with Professor Moonsoo Jin.
2005-May 2007	Staff Scientist at Agave BioSystems, Ithaca, New York.
2004-2005	Research Associate in Department of Microbiology and Immunology, Cornell University with Professor David Russell.
2002-2004	Postdoctoral Associate in Department of Microbiology and Immunology, Cornell University with Professor David Russell. Studied host pathogen interactions of <i>M. tuberculosis</i>
July-Sept. 1998	Intern at Charkit Chemical Corp. Connecticut, USA. July-Sept. 1997 Lab technician at Arran Chemical Co., Athlone, Ireland.
July-Sept. 1995	Lab technician at Henkel kGaA, Düsseldorf, Germany.

AWARDS/ PROFESSIONAL ACTIVITIES

- Highlighted in *Journal of Materials Chemistry B* as an emerging investigator in the field of materials for biology and medicine (2014)
- ERC Starting Grant (2011)
- Marie Curie Fellow (2010)
- Member of MRS (2008-2013)
- Member of American Society for Microbiology (ASM) (2002-2009)
- Pfizer Education scholarship in Whistler, British Columbia April (2005)
- European molecular biology organization (EMBO) short-term fellowship award (2002)
- Fisher Scientific Prize for an outstanding talk, University of Southampton (May 2001)
- Languages spoken: fluent English, Gaelic, French and German. Conversation level Greek.

RESEARCH

RESEARCH INTERESTS

My primary research interest centers on harnessing the power of engineering to study biological systems. I see myself playing a pivotal role in bridging the gap between biological scientists and engineers, to allow the development of interdisciplinary projects targeted towards using engineering and biology to solve countless challenging problems in medical diagnostics, therapeutics and devices.

RESEARCH GRANTS AWARDED

- ERC Proof of concept grant (2015-2016)
- Marie Curie IEF grant. "IN TIME" (2014-2016)
- NC3Rs Crack-it challenge, 'Nephrotox' (2014)
- Marie Curie IRSES grant. "Polymed" (2013-2016)
- Partenariat Hubert Curien-Ulysses; SMART "organic electronics for biofilm control (2013)
- France-Stanford fund; "Organic Electronic Devices for Immunosensing" (2012/2013)
- CNRS grant "The Interface between Conducting polymers and the Cancer matrix environment" (INTERCOM). (2012)
- ANRT-Cifre PhD grant. "To integrate proteins with organic electrochemical transistors for biosensing" (2012-2015)
- ERC Starting Grant. Proposal no.: 258966, entitled "Exploitation of Organic Electrochemical Transistors for Use in Biological Sensing (IONOSENSE) (2010-2015)
- Co-PI; Partners University Fund (2010-2013)
- Co-PI; MUSIC- ANR grant (2010-2013)
- Regional PhD grant (PACA and CDL Pharma) (2010-2013)
- Marie Curie International Re-integration Grant. Call FP7-PEOPLE-2009-RG. Proposal n°256367, entitled "Integration of living cells with organic transistors for the rapid detection of toxins and enteric pathogens (CELLTOX). (2010-2014)
- Co-PI on an NIH R21 grant number R21AI079532-01 entitled "Developing ICAM-1 for rhinovirus therapeutics" (2008).

TEACHING EXPERIENCE

- Participation in summer schools on organic bioelectronics in Poland, Italy, France and Greece
- Biomedical devices: basic biology and diagnostics to Masters II students of EMSE
- Supervisor of three undergraduate and one graduate student, as well as two Masters of Engineering students (2007-2009)
- Co-developed laboratory course for biomedical engineering students for a surface plasmon resonance practical class (Fall semester 2008)
- Supervisor of two graduate students and one undergraduate honor thesis student (2002-2005)
- Supervision of students during biochemistry laboratory classes (1998-2002)

SERVICE

- Principle Editor for Biomaterials, Materials Research Communications
- Member of the Advisory Board for Journal of Applied Polymer Science, Wiley
- Member of the International Advisory Panel for Materials Research Express, IOP publishing
- Member of Materials Research Society 'News editorial board'.
- Lead organiser of Symposium on Organic Bioelectronics at MRS in Boston, December, 2014

- Co-organiser of Symposium on **Bioelectronics, materials, devices and applications** at MRS in San Francisco, April, 2014
- Co-organiser of Symposium on **Integration of Biomaterials with Organic Electronics** at MRS in Boston, December, 2013
- Guest editor of special issue on **Organic electronics: novel applications in biomedicine** in *Biochimica Biophysica Acta General Subjects*
- Co-organiser of Symposium I: **Biological applications for organic electronic devices** at eMRS in Strasbourg, May 14-18, 2012
- SPIE, organizing committee of a symposium on **Organic Semiconductors in Sensors and Bioelectronics**, 2008 -2012, San Diego, CA.
- Thesis defence in Sweden at Karolinska Institute "regulation of eukaryotic cell physiology using organic bioelectronics" PhD student: Karl Svennersten; Advisor: Agneta Richter-Dahlfors. April 15, 2011

PUBLICATIONS

PAPERS *Google scholar H-index: 15, 717 citations*

1. M. Ramuz, K. Margita, J. Rivnay, P. Leleux, Adel Hama and **R.M. Owens** "Optimization of a planar all-polymer transistor for characterization of barrier tissue" *ChemPhysChem in press* (2015)
2. J. Rivnay, M. Ramuz, P. leleux, A. Hama, M. Huerta and **R.M. Owens**, "Organic electrochemical transistors for cell-based impedance sensing," *Appl Phys Lett in press* (2015).
3. L. Sandeau, C. Vuillaume, S. Contié, E. Grinerval, F. Belloni, H. Rigneault, R. M. Owens and M. Brennan Fournet, "Large area CMOS bio-pixel array for compact high sensitive multiplex biosensing" *Lab Chip*, 2015, Advance Article DOI: 10.1039/C4LC01025F
4. X. Strakosas, M. Bongo, **R.M. Owens**. "The organic electrochemical transistor for biological applications". *Journal of applied polymer science early online view Jan 7* (2015)
5. M. Ramuz, A. Hama, M. Huerta, J. Rivnay, P. Leleux, **R.M. Owens**. "Combined optical/electronic monitoring of epithelial cells *in vitro*. *Advanced Materials Early on line view* DOI: 10.1002/adma.201401706 (2014)
6. S. Tria, M. Ramuz, M. Huerta, P. Leleux, J. Rivnay, L. Jimison, A. Hama, G. G. Malliaras, **R.M. Owens**. "Dynamic detection of *Salmonella typhimurium* infection of polarized epithelia using organic transistors" *AHM 3 (7) 1053-60*. (2014)* *highlighted in Materials views* <http://www.materialsviews.com/integrating-electronics-with-cells-to-detect-bacteria/>
7. S.A. Tria, M. Ramuz, L.H. Jimison, A. Hama, and **R. M. Owens**. "Sensing of Barrier Tissue Disruption with an Organic Electrochemical Transistor". *Vis. Exp.*, e51102, doi:10.3791/51102 (2014).
8. V.F. Curto, S. Scheuermann, **R. M. Owens**, V. Ranganathan, D. R. MacFarlane, F. Benito-Lopez and D. Diamond. "Probing the specific ion effects of biocompatible hydrated choline ionic liquids on lactate oxidase biofunctionality in sensor applications". *Phys. Chem. Chem. Phys.* 16 (5), 1841-1849 (2014).
9. P. Leleux, C. Johnson, X. Strakosas, J. Rivnay, T. Hervé, **R.M. Owens** and G.G. Malliaras. "Ionic liquid gel-assisted electrodes for long-term cutaneous recordings". *Adv.Mat* DOI: 10.1002/adhm.201300614 (2014)
10. X. Strakosas, M. Sessolo, A. Hama, J. Rivnay, E. Stavrinidou, G.G. Malliaras, and **R.M. Owens**. "A facile biofunctionalisation route for solution processable conducting polymer devices". " *J. Mater. Chem. B advance article* DOI: 10.1039/C3TB21491E (2014)
11. J Rivnay, **R.M. Owens**, GG Malliaras. "The Rise of Organic Bioelectronics" *Chem. Mater.* 26 (1), 679-685 (2014)

12. **R.M. Owens.** "Organic electronics at the interface with biology: a biologist's perspective". *La Chimica & L'industria*. 5 (2013)
13. D. Khodagholy, J. Rivnay, M. Sessolo, M. Gurfinkel, P. Leleux, L.H. Jimison, E. Stavrinidou, T. Herve, S. Sanaur, **R.M. Owens**, and G.G. Malliaras, "High Transconductance Organic Electrochemical Transistors", *Nature Comm.*, 4 2133. (2013).
14. M. Bongo, O. Winther-Jensen, S. Himmelberger, X. Strakosas, M. Ramuz, A. Hama, E. Stavrinidou, G.G Malliaras, A. Salleo, B. Winther-Jensen, **R.M. Owens.** "PEDOT: Gelatin composites mediate brain endothelial cell adhesion" *J. Mater. Chem. B* 1(31), 3860-3867 (2013).
15. **R.M. Owens**, P. Kjall, A. Richter-Dahlfors and Fabio Cicoira "Organic electronics- novel applications in biomedicine" *Biochimica et Biophysica Acta* 1830 4283-4285, (2013).
16. S. A. Tria, L.H. Jimison, A. Hama, M. Bongo, and **R.M. Owens.** "Validation of the organic electrochemical transistor for *in vitro* toxicology". *Biochimica et Biophysica Acta*. 1830 (9) 4381-4390. (2013).
17. S. A. Tria, L.H. Jimison, A. Hama, M. Bongo, and **R.M. Owens.** "Sensing of EGTA Mediated Barrier Tissue Disruption with an Organic Transistor". *Biosensors* 3(1), 44-57 (2013).
18. L.H. Jimison, S. A. Tria, D. Khodagholy, M. Gurfinkel, E. Lanzarini, A. Hama, G. G. Malliaras, and **R. M. Owens.** "Measurement of Barrier Tissue Integrity with an Organic Electrochemical Transistor". *Adv Mater.* 24 (44), 5919-5923 (2012)
19. S. Kang, Chae Un Kim, X. Gu, **R.M. Owens**, S.J. van Rijn, V. Boonyaleepun, Y. Mao, T.A. Springer, M.M. Jin. "Complex Structure of Engineered Modular Domains: Defining Molecular Interaction between ICAM-1 and Integrin LFA-1". *PLOS ONE* , 2012 7 (8) e44124
20. L.H. Jimison, A. Hama, X. Strakosas, V. Armel, D. Khodagholy, E. Ismailova, G.G. Malliaras, B. Winther-Jensen, and **R.M. Owens.** "PEDOT:TOS with PEG : A biofunctional surface with improved electronic characteristics". *J. Mater. Chem.*, 2012, 22 (37), 19498 – 19505
21. D. Khodagholy, V.F. Curto, K. J. Fraser, M. Gurfinkel, R. Byrne, D. Diamond, G. G. Malliaras, F. Benito-Lopez, **R. M. Owens.** "Organic electrochemical transistor incorporating an ionogel as solid state electrolyte for lactate sensing". *JMC* 2012, Advance Article **DOI:** 10.1039/C2JM15716K
22. S.Y. Yang, F. Cicoira, R. Byrne, F. Benito-Lopez, D. Diamond, **R.M. Owens**, and G.G. Malliaras, "Electrochemical transistors with ionic liquids for enzymatic sensing", *ChemComm.* 46, 7972 (2010).
23. **Owens R.M.** and Malliaras, G.G. "Organic Electronics at the Interface with Biology". *MRS Bull* 35, 453 (2010).
24. **Owens R.M.**, Xiaoling Gu, Shin, M., Springer, T.A. and Jin, M.M. "Engineering of single Ig superfamily domain of ICAM-1 for native fold and function". *J. Biol. Chem.* 285, 15906 (2010).
25. Shim, N.Y., Bernards, D.A., Macaya, D.J., DeFranco, J.A., Nikolou, M., **Owens, R.M.** and Malliaras, G.G. "All-plastic electrochemical transistor for glucose sensing using a ferrocene mediator", *Sensors* 2009, 9, 9896-9902.
26. Parks, A.R, Li Z, Shi Q, **Owens, R.M.**, Jin, M.M., Peters, J.E. "Transposition into replicating DNA occurs through interaction with the processivity factor." *Cell.* 2009 Aug 21;138(4):685-95.
27. **Owens, R.M.**, Wang, C., You, J.A., Jiambutr, J., Xu, A.S.L., Marala, R.B. and Jin, M.M. "Real-time quantitation of viral replication and inhibitor potency using a label-free optical biosensor". *J Recept Signal Transduct Res*, 2009;29(3-4):195-201.
28. Yang, S.Y., DeFranco, J.A., Sylvester, Y.A., Gobert, T.J., Macaya, D.J., **Owens, R.M.** Malliaras, G.G. "Integration of a surface-directed microfluidic system with an organic electrochemical transistor array", *Lab Chip*, 2009 Mar 7;9 (5):704-8.
29. Macaya D.J., Nikolou, M., Takamatsu, S., Mabeck, J.T., **Owens, R.M.** and Malliaras, G.G. "Simple Glucose sensors with micromolar sensitivity based on organic electrochemical transistors". *Sensors and Actuators B* **123**(1), 374-378 (2007).
30. Hsu, F.F., Turk, J., **Owens, R.M.**, Rhoades, E. R., Russell, D.G. "Structural Characterization of Phosphatidyl-myoinositol Mannosides from *Mycobacterium bovis* Bacillus Calmette Guerin by Multiple-Stage Quadrupole Ion-Trap Mass Spectrometry with Electrospray Ionization. I. PIMs and Lyso-PIMs". *J. Am. Soc. Mass Spectrom.* **18**(3), 466-78 (2006).

31. Hsu, F.F., Turk, J., **Owens, R.M.**, Rhoades, E. R., Russell, D.G. "Structural Characterization of Phosphatidylinositol Mannosides from *Mycobacterium bovis* Bacillus Calmette Guerin by Multiple-Stage Quadrupole Ion-Trap Mass Spectrometry with Electrospray Ionization. II. triacyl- and tetraacyl-PIMs". *J. Am. Soc. Mass Spectrom.* **18**(3), 479-92 (2006).
32. **Owens, R.M.**, Hsu, F.F., Hestean, E., Giannakas, P., Sacchettini, J.C., McKinney, J.D., Hill, P.J., Belisle, J.T., Butcher, B.A., Pethe, K. and Russell, D.G. "*M. tuberculosis* Rv2252 encodes a lipid kinase involved in the biosynthesis of phosphatidylinositol mannosides (PIMs)". *Molecular Microbiology* **60** (5), 1152-63 (2006)
33. Russell, D.G., Purdy, G.E., **Owens, R.M.**, Rohde, K.H., and Yates, R.M. "*Mycobacterium tuberculosis* and the concept of the "4 minute phagosome". *ASM news* **71** (10), 559-563 (2005)
34. Purdy, G.E., **Owens, R.M.**, Bennett, L., Russell, D.G., and Butcher, B.A. "Kinetics of phosphatidylinositol 3-phosphate acquisition differ between IgG bead-containing phagosomes and *Mycobacteria tuberculosis* containing phagosomes". *Cellular Microbiology* **7** (11), 1627-34 (2005)
35. **Owens, RM**, Pritchard, G, Skipp, P, Hodey, M, Connell, S.R., Nierhaus, K.H. and O'Connor, C.D. "A dedicated translation factor controls the synthesis of the global regulator Fis". *The EMBO Journal* **23**, 3375–3385 (2004). *
36. **Owens, R.M.**, Grant, A., Davies, N., O'Connor, C.D. "Purification of the Lac Repressor With Polyhistidine-tagged Proteins in Immobilized Metal Affinity Chromatography". *Protein Expression and Purification* **21**, 352-360 (2001).

**This publication has been retracted due to the irreproducibility of data produced by the second author. The remainder of the data is considered to be sound and the paper is, according to the executive editor of EMBO, still citable*

BOOK CHAPTERS

- M. Sessolo, M. Ramuz, G.G. Malliaras and **R.M. Owens**. "Electronic methods for *in vitro* monitoring of cell-arrays", edited by Kris Iniewski and Sandro Carrara (2015 *in press*).
- L.H. Jimison, J. Rivnay, and **R.M. Owens**. "Conducting polymers to control and monitor cells" In: "Organic Electronics: Emerging Concepts and Technologies", pp 27-67. edited by Fabio Cicoira and Clara Santato (2013)
- D. Khodagholy, G.G. Malliaras, and **R.M. Owens**. "Polymer-Based Sensors" In: Matyjaszewski K and Möller M (eds.) Polymer Science: A Comprehensive Reference, vol. 8, pp. 101-128. Amsterdam: Elsevier BV. (2012)

INVITED ORAL PRESENTATIONS

- **R. M. Owens** (Mar2015) "Electronic methods for monitoring cells *in vitro*" BioEl, Kirchberg, Austria
- **R. M. Owens** (Feb2015) "Electronic methods for monitoring cells *in vitro*" FunMAT, Turku, Finland
- **R. M. Owens** (July2014) "Electronic methods for monitoring cells *in vitro*" International Conference on Synthetic Materials, Turku, Finland
- **R. M. Owens** (June 2014) "Electronic methods for monitoring cells *in vitro*" International Conference on Organic Electronics, Modena, Italy
- **R. M. Owens** (June 2014) "Electronic methods for monitoring cells *in vitro*" University of Bari, Italy
- **R. M. Owens** (June 2014) "Electrical measurement of 3D cultures" 3D cell culture conference, Gardanne, France
- **R. M. Owens** (April 2014) "Improving the biotic/abiotic interface" MRS Spring Meeting, San Francisco, USA

- **R. M. Owens** (April 2014) "Control and monitoring of mammalian cells with organic bioelectronics" Invited seminar, Aristotle University of Thessaloniki, Greece
- **R. M. Owens** (January 2014) "Electronic methods for monitoring cells *in vitro*" Invited seminar, University of Nice
- **R. M. Owens** (September 2013) "Electronic methods for monitoring cells *in vitro*" Invited seminar, University of Washington
- **R. M. Owens** (September 2013) "Electronic methods for monitoring cells *in vitro*" at European Conference of Molecular Electronics, London, UK
- **R. M. Owens** (July 2013) "Electronic methods for monitoring cells *in vitro*" NN13, Thessaloniki, Greece
- **R. M. Owens** (July 2013) "Electronic methods for monitoring cells *in vitro*" CMOSSET, Whistler, Canada
- **R. M. Owens** (June 2013) "Electronic methods for monitoring cells *in vitro*" Cornell-EMSE workshop, Porquerolles, France
- **R. M. Owens** (June 2013) "Organic bioelectronics" ICOE short course, Grenoble, France
- **R. M. Owens** (May 2013) "Organic bioelectronics" IKSS, Krutyn, Poland
- **R. M. Owens** (April 2013) "Organic electronics for control and monitor of cells" ERC Biomim, Grenoble
- **R. M. Owens** (January 2013). "The application of the Organic Electrochemical Transistor for biodiagnostics: integration with cells and enzymes" RME, Amsterdam, Netherlands
- **R. M. Owens** (December 2012). "Organic electronics at the interface with biology" Stanford University, USA.
- **R. M. Owens** (October 2012). "Organic electronics at the interface with biology" Quaderni Avogadro, Bologna, Italy.
- **R. M. Owens** (September 2012). "The application of the Organic Electrochemical Transistor for biodiagnostics: integration with cells and enzymes" ISFN2, DCU, Dublin, Ireland
- **R. M. Owens** (August 2012). "The application of the Organic Electrochemical Transistor for biodiagnostics: integration with cells and enzymes" SPIE, San Diego, USA
- **R. M. Owens** (July 2012). "The application of the Organic Electrochemical Transistor for biodiagnostics: integration with cells and enzymes" ISFOE, Bioelectronics symposium, Thessaloniki, Greece
- **R. M. Owens** (May 2012). "The application of the Organic Electrochemical Transistor for diagnostics" OBOE Spring Meeting, Sweden
- **R. M. Owens** (April 2012). "The application of the Organic Electrochemical Transistor for biodiagnostics: integration with cells and enzymes" MRS Spring Meeting, San Francisco, USA
- **R. M. Owens** (March 2012). "The application of the Organic Electrochemical Transistor for biodiagnostics: integration with cells and enzymes" Advances in Biosensors and Biodetection conference, Edinburgh, UK
- **R. M. Owens** (March 2012). "The application of the Organic Electrochemical Transistor for biodiagnostics: integration with cells and enzymes" University of Parma, Parma, Italy
- **R. M. Owens** (March 2012). "Organic BioElectronics" 2e rencontres electronique imprimé, Paris, France
- **R. M. Owens** (February 2012). "The application of the Organic Electrochemical Transistor for biodiagnostics: integration with cells and enzymes" Monash University, Melbourne, Australia
- **R. M. Owens** (June 2011). "Biosensors for detection of pathogenic organisms". Bioelectronics conference in Porquerolles, France
- **R. M. Owens** (April 2011). "Organic Electronics for Detection of Pathogenic Organisms". Karolinska Institute seminar series
- **R. M. Owens** (February 2011). "Biosensors for detection of pathogenic organisms". Seminar at Acreo, University of Linköping, Sweden
- **R. M. Owens** (2010). "Organic electronics for biological applications". Invited seminar at Université d'Artois, Lens, France.

- C.Wang, J. A. You, J. Jiambutr, A. S.L. Xu, R. B. Marala, M. M. Jin, M. Nikolou, G.G. Malliaras and **R. M. Owens** (2010). "Biosensors for Detection of Pathogenic Organisms". French-German workshop on nanoscience. Portquerolles, France
- C.Wang, J. A. You, J. Jiambutr, A. S.L. Xu, R. B. Marala, M. M. Jin, M. Nikolou, G.G. Malliaras and **R. M. Owens** (2010). "Biosensors for Detection of Pathogenic Organisms". 7th International conference on nanoscience and nanotechnologies. Halkidiki, Greece
- C.Wang, J. A. You, J. Jiambutr, A. S.L. Xu, R. B. Marala, M. M. Jin, M. Nikolou, G.G. Malliaras and **R. M. Owens** (2010). "Organic electrochemical transistor for the detection of pathogenic organisms". ESF exploratory workshop on organic electronics, Trento, Italy.
- C.Wang, J. A. You, J. Jiambutr, A. S.L. Xu, R. B. Marala, M. M. Jin, M. Nikolou, G.G. Malliaras and **R. M. Owens** (2010). "Biosensors for Detection of Pathogenic Organisms". MRS Spring Meeting, San Francisco, CA.
- **Owens, R.M.**, Xiaoling, G., Shin, M. and Jin, M. (2008). "Intercellular Adhesion Molecule-1: Binding to host and viral ligands, with implications for biotherapeutics". Biochemistry and Immunology Dept., Trinity College Dublin.
- **Owens, R.M.**, Xiaoling, G., Shin, M., Jiambutr, J. and Jin, M. (2008). "Intercellular Adhesion Molecule-1: Binding to host and viral ligands, with implications for biotherapeutics". J. A. Baker Institute Seminar series, Ithaca, NY.
- **Owens, R.M.**, Connell, S., Nierhaus K.H., and O'Connor, C.D. (2001). "The BipA global regulator associates with ribosomes". Oral presentation at the School of Biological Sciences Symposium, University of Southampton.

POSTER PRESENTATIONS

Owens, R.M., Gu X., Wang, C. Jiambutr, J., Shin M., Bator-Kelly, C., Xu A., Marala, R. and Jin, M. (2008). "Rhinovirus: Defining Molecular Interactions with an Engineered Host Receptor". Poster presented at the annual ASV meeting, Cornell University, Ithaca, NY.

Bednarski, D, Laratta, W, **Owens, R.M.** and Tabb, J. (2006) "Microsphere-based assays for Multiplexed Detection of Viral and Bacterial Antibodies". Poster presented at the Luminex xMap meeting in Dallas, TX

Owens, R.M., Butcher, B.A., and Russell, D.G. (2005) "Phosphorylation of sphingolipids by *M. tuberculosis* protein Rv2252". Poster presented at Keystone "tuberculosis: Integrating Host and Pathogen Biology" meeting in Whistler, B.C,

Purdy, G.E., **Owens R.M.**, and Russell, D.G. (2004) "Characterization of phosphorylated lipids in *M. tuberculosis*-containing phagosomes". Poster presented at the Euresco "Spatial and temporal dynamics of the endomembrane system" meeting in Spain.

Owens, R.M, Butcher, B.A., Pethe, K and Russell, D.G., (2004). "Phosphorylation of Macrophage lipids by *Mycobacterium tuberculosis*". Poster presented at ASM general meeting in New Orleans, LA.

Clark, S.W., Hyun, B.-R., **Owens, R.M.**, and Wise, F.W., (2003). "Semiconductor quantum dots for studies of sphingolipid metabolism". Poster presented by Stephen Clark at MRS symposium in Boston, MA.

Owens, R.M., Connell, S., Nierhaus K.H., and O'Connor, C.D. (2000). "The BipA global regulator associates with ribosomes". Poster presented at IUBMB conference in Birmingham, U.K.

EDITED WORK

“Organic Semiconductors in Sensor Applications”, Eds. D.A. Bernards, **R.M. Owens**, and G.G. Malliaras, Springer (2008).

Guest editor for *Biochimica Biophysica Acta General Subjects*. Special issue on biological applications for conducting polymer devices (2012-2013)