

## Jorge Ivan Rodriguez-Devora

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### Professional Preparation

Technological Institute of Ciudad Juarez, Mexico Electrical/mechanical BS, 2005

University of Texas at El Paso, Mechanical Engineering MS, 2010

University of Texas at El Paso, Materials Science and Engineering PhD, 2013

### Appointments

|            |   |
|------------|---|
| Since 2014 | Research Assistant Professor, Clemson University                            |
| 2013-2014  | Postdoctoral fellow, Clemson University                                     |
| 2009-2013  | Research/Teaching assistant, University of Texas at El Paso                 |
| 2008-2010  | Product Development Engineer, Inteva Products, Ciudad Juárez, MX            |
| 2005-2008  | Product Development Engineer, Delphi Automotive Systems, Ciudad Juárez, MX  |
| 2005       | Manufacturing Intern, Schlumberger, Houston, TX                             |
| 2004-2005  | Assistant Product Engineer, Delphi Automotive Systems, Ciudad Juárez, MX    |
| 2003-2004  | Construction Supervisor, Federal Electricity Commission, Ciudad Juárez, Méx |

### Five Related Publications

- Estrada, E., Vazquez, F. J., Rodriguez, J. I., & Parks, D. R. (2011). U.S. Patent Application 13/030,030 URL
- **Rodriguez-Dévora, J;** Zhang, B; Reyna, D; Shi, Z; Xu, T. (2012) “High Throughput Miniature Drug Screening Platform Using Bioprinting Technology”. *Biofabrication* 4(3): 035001 PMID: 22728820
- **Rodriguez-Dévora, J;** Ambure, S; Shi, Z; Sun, W; Xu, T. (2012) “Physically facilitating drug delivery systems”. *Therapeutic delivery*, 3(1), 125-139 PMID: 22485192
- **Rodriguez-Dévora, J;** Shi, Z; Xu, T. (2011) “Direct Assembling Methodologies for High-Throughput Bioscreening”. *Biotechnology Journal*. PMID: 22021162
- Bhuyan, MK; **Rodriguez-Devora, J;** Fraser, K; Tseng, B. (2014) “Silicon Substrate as a Novel Cell Culture Device for Myoblast Cells”. *Journal of Biomedical Science* 21:47 doi: 10.1186/1423-0127-21-47. PMID: 24885347

### Five Other Significant Publications

- Xu, T; Reyna-Soriano, D; **Rodriguez-Dévora, J;** Bhuyan, M.; Boland, T. (2014) “Organ printing”. Book chapter in “Biomaterials and Regenerative Medicine”. Editor: Peter Ma. Cambridge publishing ISBN: 9781107012097

- Xu, T; **Rodriguez-Dévora, J**; Reyna-Soriano, D; Bhuyan, M; Zhu, L; Wang, K; Yuan. (2013)“Principles of Bioprinting Technology”. Book chapter (6) in “Regenerative Medicine Applications in Organ Transplantation”. Orlando, Giuseppe, ed. Academic Press.
- Xu, T; **Rodriguez-Dévora, J**; Reyna-Soriano, D; Bhuyan, M; Zhu, L; Wang, K; Yuan, Y; Orlando, G; Ross, C. (2013). “Bioprinting for constructing microvascular systems for organs”. Book chapter in “Rapid Prototyping of Biomaterials”. Woodhead Publishing ISBN 0 85709 599
- Reyna, D, **Rodriguez-Dévora, J**; Bhuyan, M; Boland, T. (2013) “Inkjet Bioprinting of Solid Peroxide Microparticles for Constructing Oxygen-Generating Scaffolds”. NIP & Digital Fabrication Conference, 2013 International Conference on Digital Printing Technologies. Pages 1-252. , pp. 240-243(4).
- Bhuyan, M., Ambure, S., Reyna, D., **Rodriguez-Dévora, J.**, & Xu, T. (2013). “Targeted Drug Delivery System using Photovoltaic Devices”. International Journal of Drug Delivery, 4(3).

### **Synergistic Activities**

- Creative Inquiry (CI) Initiative. Freshmen/Senior Design and Mentoring Experiences in Bioengineering.
- Project Lead The Way (PLTW) Outreach activities with high school students from Oconee and Pickens school district. ~ 45 student from South Carolina State.
- SC Life Project and Life Sciences Outreach. Adventures in Bioengineering Design. ~15 students from Hanahan High School from Hanahan, SC.
- Collaboration with Mexican government and universities to establish a program where Clemson University students can travel to areas of limited resources to learn and experience the medical needs that requires the design of sustainable products. This program add to the current efforts made in the CI - Designing Medical Technology for the Developing World

**Postdoctoral Mentor:** Delphine Dean, Clemson University

**Ph.D. Thesis Advisor:** Thomas Boland, University of Texas at El Paso

**Collaborators:** Thomas Boland (University of Texas at El Paso), Tao Xu (Tsinghua University), Bill Tseng (University of Texas at El Paso), Jeremy Mercuri (Clemson University), John DesJardins (Clemson University), Delphine Dean (Clemson University)