

## Biographical Sketch for Max Fontus

### Contact Information:

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### (a) Professional Preparation

Essex County College	Newark, NJ	Chemistry	A.S., 1996
Penn State University	University Park, PA	Mathematics	B.S. 1999
Indiana University	Bloomington, IN	Mathematics	M.A. 2001
Indiana University	Bloomington, IN	Physical Chemistry	Ph.D. 2007

### (b) Appointments

Assistant Director, UMA	Prairie View A&M University	2017 - Present
Assistant Professor (Tenure-Track)	Prairie View A&M University	2010-2017
Assistant Professor (Non-Tenure)	Prairie View A&M University	2007-2010

### (c) Publications

Brekke, G.D., **Fontus, M.**, & Giraud, J.M.B. (2019). Fighting with Infinity: A Proposal for the Addition of New Terminology. In M. Shelley & V. Akerson (Eds.), *Proceedings of IConSES 2019-- International Conference on Social and Education Sciences* (pp. 32-44). Monument, CO, USA: ISTES Organization.

Brekke, G., **Fontus, M.**, and Giraud, J. (2017) Fighting With Infinity: A Proposal for the Addition of New Terminology. *Novembertagung 2017*.

McGowen, T., and **Fontus, M.** (2017) Proposing Drug Target(s) to Combat Trypanosoma Infection. *PURSUE Undergraduate Research Journal*, Vol. 1, Issue 1, p. 25 – 39.

**Fontus, M.** (2016). GENERAL CHEMISTRY 2: Chem 1033. Austin, TX: Sentia Publishing

**Fontus, M.** (2015). GENERAL CHEMISTRY 2: Chem 1043. Austin, TX: Sentia Publishing

**Fontus, M.**, and Ortoleva, P. (2012). Electrophysiological-metabolic modeling of microbes: Applications in microbes and environmental analysis. In A. Navid (Ed.), *Microbial systems biology: Methods and protocols* (pp. 411-431). New York: Humana Press

Abdeljawad, F., **Fontus, M.** and Haataja, M. (2011) Ductility of bulk metallic glasses composites: microstructural effects. *Appl. Phys. Let.* 98, 031909-1 – 031909-3

**Fontus, M.** and Ortoleva, P. (2011) Electrometabolomics modeling of microbes: Applications in fuel cells and environment analysis. *Journal of Biotech Research* 3:37- 50.

Daniels, Dennis, Wyatt, W, & **Fontus, M.** (2010). A Texas response to the Sullivan Commission: The undergraduate medical academy model. *Journal of the National Medical Association*, 102(1), 61-64.

Abdeljawad, F., **Fontus, M.** and Haataja, M. (2010) Dendritic microstructure effects on bulk metallic bulk metallic glasses (BMG) composites. Accepted for the “Bulk Metallic Glasses VIII” 2011

Symposium.

Ortoleva, P., Adhangale, P., Cheluvaraja, S., **Fontus, M.**, & Shreif, Z. (2009). Deriving principles of microbiology by multiscaling laws of molecular physics. *IEEE Engineering In Medicine and Biology Mag* 28(2), 70-79.

Ortoleva, P., Berry, E., Brun, Y., Fan, J., Fontus, M., Hubbard, K., Jaqaman, K., Jarymowycz, L., Navid, A., Sayyed-Ahmad, A., Shreif, Z., Stanley, F., Tuncay K, Weitzke E, & Wu, L.C. (2003). The karyote physico-chemical genomic, proteomic, metabolic cell modeling system. *OMICS: A Journal of Integrative Biology*, 7, 269–283.

#### **(d) Synergistic Activities**

- Co-PI of funded HBCU-UP proposal with Tyrone Tanner and Hermond Douglas whereby stem teacher curricula will be integrated with Cultural Responsive and Communities of Practice concepts in order to better prepare these teachers to educate black and brown students.
- Co-PI of CDC proposal recommended for funding with Dennis Daniels, Sheryl Jefferson, Kathleen Straker, Quyen Huynh, Ola Riley, and Gail Brekke whereby a program would be developed to increase the number of underrepresented minorities prepared to enter the health professions especially in the area of public health.
- Collaboration with Tyrone Tanner, Douglas Hermond, and Patricia Smith from the School of Education at Prairie View A&M University within the cadre of MSP proposal to NSF
- Collaboration with Princeton Assistant Professor Mikko for ten weeks this summer within QEM – Quality Education for Minorities – HBCU-up Leadership Institute (LDI). The collaboration resulted in a publication whereby the ductility of bulk metallic glass was assessed theoretically upon of the introduction of microstructures within the monolithic matrix of the glass.
- Collaboration with Martin Jarrold in the CRC NSF-funded project: Nanoscale Assembly of Biomolecular Complexes project at Indiana University
- Co-PI of NSF Proposal with Cherese Winstead from Delaware State University. Proposal was submitted to BMAT: Electrometabolomic Modeling in Microbial Fuel Cells using Modified Chitosan as a Source of Alternative Proton Exchange Membranes”
- Co-Pi of USDA-NIFA MSP Proposal with Dr. Heather Simmons from Texas A&M University titled: “Enhancing Diversity and Training the 21<sup>st</sup> Century Food and Agricultural Scientist through a Multi-Institutional Career Development Program”