

## **NSF Biographical Sketch**

Laura Marie Letellier, P.E.  
Lecturer, First-Year Engineering Program  
453 F. Paul Anderson Tower  
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### **(a) Professional Preparation**

Purdue University	West Lafayette, IN	Aeronautical and Astronautical Engineering	BSAAE 1977 with Distinction
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### **(b) Appointments**

*Lecturer, First-Year Engineering Program, University of Kentucky, 2016 – Present*  
*Medical Engineering Consultant, Specialist Staffing Services, Inc. (for Pfizer), 2014-2016*  
*Corporate Secretary and Treasurer, Lake-Cook Reporting, Ltd., 2012-2014*  
*Engineering Specialist and Manager II, Baxter Healthcare Corp., 2001-2012*  
*Duty Development Manager, Niku Corporation, 2000-2001*  
*Industry Consultant and Senior Software Dev., Geneer Software Dev. Partners, 1997-2000*  
*Engineering Manager, Emerson Electric Co. - Control Techniques Div., 1996-1997*  
*Principal Engineer, Cleveland Machine Controls, Inc., 1994-1996*  
*Principal Engineer, Mannesmann Rexroth Corp., Indramat Div., 1988-1993*  
*Senior Electrical Engineer, Rockwell International, Graphic Systems Div., 1986-1988*  
*Electrical Engineer, Holland Company, Railweld Division, 1985-1986*  
*Engineer, Letellier Engineering, 1983-1985 and 1993-1994*  
*Engineer, Letellier Material Handling Equipment Co., 1982-1983*  
*Nuclear Power Research Proj. Officer, Div. of Naval Reactors, US Dept. of Energy, 1977-1982*

### **(c) Products**

#### **(i) Most Closely Related**

- U.S. Patent 10,173,008, Thomas L. C. Simpson, Laura M. Letellier, James P. Martucci, and Gordon J. Wilkes, *System and method for communicating with a dialysis machine through a network*, pending, granted January 8, 2019
- U.S. Patent 8,775,196, Thomas L. C. Simpson, Laura M. Letellier, James P. Martucci, and Gordon J. Wilkes, *System and method for notification and escalation of medical data*, Baxter International, Inc., Deerfield, IL, granted July 8, 2014
- U.S. Patent 8,489,427, *Wireless medical data communication system and method*, Thomas L. C. Simpson, Laura M. Letellier, James P. Martucci, and Gordon J. Wilkes, Baxter International, Inc., Deerfield, IL, granted July 16, 2013
- U.S. Patent 8,234,128, James P. Martucci, Laura M. Letellier, Mark Notestine, and Gordon J. Wilkes, *System and method for verifying medical device operational parameters*, Baxter International, Inc., Deerfield, IL, granted July 31, 2012

## **(ii) Other Significant Products**

- U.S. Patent Application 20200023127, Thomas L. C. Simpson, Laura M. Letellier, James P. Martucci, and Gordon J. Wilkes, *Management of infusion data methods and apparatus*, pending, filed September 30, 2019
- U.S. Patent Application 20160095976, Thomas L. C. Simpson, Laura M. Letellier, James P. Martucci, and Gordon J. Wilkes, *Management of dialysis and infusion data methods and apparatus*, pending, filed October 2, 2015
- U.S. Patent Application 20150356255, Thomas L. C. Simpson, Laura M. Letellier, James P. Martucci, and Gordon J. Wilkes, *Electronic medication order transfer and processing methods and apparatus*, pending, filed August 20, 2015
- U.S. Patent Application 20050055244, Janet Mullan, Dan M. Mihai, James P. Martucci, Laura M. Letellier, and Gordon J. Wilkes, *Wireless medical communication system and method*, pending, Baxter International, Inc., Deerfield, IL, filed July 14, 2004
- U.S. Patent Application 20040176667, Dan M. Mihai, James P. Martucci, Laura M. Letellier, and Mark Notestine, *Method and system for medical device connectivity*, pending, Baxter International, Inc., Deerfield, IL, filed December 30, 2003
- U.S. Patent Application 20040172301, Dan M. Mihai, James P. Martucci, and Laura M. Letellier, *Remote multi-purpose user interface for a healthcare system*, pending, Baxter International, Inc., Deerfield, IL, filed December 30, 2003
- U.S. Patent Application 20040172300, Dan M. Mihai, James P. Martucci, Laura M. Letellier, and Mark Notestine, *Method and system for integrating data flows*, pending, Baxter International, Inc., Deerfield, IL, filed December 30, 2003
- U.S. Patent Application 20040167804, Thomas L. C. Simpson, Laura M. Letellier, James P. Martucci, and Gordon J. Wilkes, *Medical data communication notification and messaging system and method*, pending, Baxter International, Inc., Deerfield, IL, filed December 30, 2003

## **(d) Synergistic Activities**

Created and then led multiple continuing education classes for licensed professional engineers through the Illinois Society of Professional Engineers. Topics included nanotechnology, medical device design, and mentoring of recent engineering graduates. These classes were held one to two times a year from 2011 through 2015. This activity demonstrates transfer of knowledge to practicing engineers.

Created and then led a computer-based review course for recent engineering graduates who are pursuing professional licensure. Course covered ten fundamental engineering topics including statics, dynamics, mechanics of materials, electronic circuits, thermodynamics, and ethics. The course was released in 2014 and remained available through 2016. This activity demonstrates transfer of knowledge to early-career engineers.

Developed and then led the University of Kentucky's "Teaching Student Veterans" Faculty Learning Community (FLC). The mission of this FLC is to provide leadership in the teaching of university classes comprised of traditional students and military veterans for the benefit of all students and the faculty that teach them. To date, the primary work products of this FLC are policy recommendations and briefing for senior academic leaders to facilitate the above mission.