

[Home](#) / [People](#) / [Primary Faculty](#) / Johannes (Hans) van Oostrom, Ph.D.

## HANS VAN OOSTROM, PH.D.



Hans van Oostrom, Ph.D.

Assoc. Professor & Assoc. Chair

Primary Faculty

**Topics:** Human physiologic simulation to enhance non-invasive patient monitoring and education

**Email:** [oostrom@ufl.edu](mailto:oostrom@ufl.edu)

**Address:** 1275 Center Drive, Biomedical Sciences Building JG44, Gainesville, FL 32611

**Office Phone:** (352) 273-9315

**Office Fax:** (352) 273-9221

**Home Page:** [Physiologic Simulation Lab](#)

### Education:

M.S., Electrical Engineering, Eindhoven University of Technology, 1988

Ph.D., Electrical Engineering, Eindhoven University of Technology, 1993

Postdoctoral Fellow, Anesthesiology, University of Florida, 1994-1998

### Research Summary:

Dr. van Oostrom's research is focused on the mathematical modeling of human physiology for the purpose of medical education and improving physiological measurements both invasive and non-invasive.

### Selected Publications:

[Google Scholar Citation Link](#)

Lansdorp B, van Putten M, de Keijzer A, Pickkers P, van Oostrom JH. [A Mathematical Model for the Prediction of Fluid Responsiveness](#). Cardiovascular Engineering and Technology. 4(1). 53-62. 2013.

Peterson M, Schwab W, McCutcheon K, van Oostrom JH, Gravenstein N, Caruso L: [Effects of elevating the head of bed on interface pressure in volunteers](#). Implications for pressure ulcer formation. Crit Care Med 36: 3038-3042, 2008.

Krueger C, van Oostrom JH, Shuster J. [A longitudinal description of heart rate variability in 28-34-week-old preterm infants](#). Biol Res Nurs. 11(3):261-8. Jan 2010

van Oostrom JH, Kentgens S, Beneken JEW, Gravenstein JS: [An integrated coronary circulation teaching model](#). J Clin Monit Comput 20:235-242, 2006.

Meka VV, van Oostrom JH: [A bellows-less lung system for the Human Patient Simulator](#). Med Biol Comput Eng 42:413-418, 2004.



J. Crayton Pruitt Family  
Department of  
Biomedical Engineering

J. Crayton Pruitt Family  
Department of Biomedical Engineering  
University of Florida  
1275 Center Drive  
Biomedical Sciences Building JG-56  
P.O. Box 116131  
Gainesville, FL 32611-6131  
P. 352-273-9222 | F. 352-273-9221

**Main**

- [Home](#)
- [About BME](#)
- [People](#)
- [Research](#)
- [Calendar](#)
- [Contact Us](#)
- [Resources](#)

[Privacy Policy](#) | [Social Security Number Privacy](#)

**Academics**

- [Undergraduate](#)
- [Combined Degrees](#)
- [Graduate](#)
- [Student Resources](#)
- [Undergraduate](#)

**Research Areas**

- [Neural Engineering](#)
- [Imaging & Medical Physics](#)
- [Biomaterials & Regenerative Medicine](#)
- [Biomedical Informatics & Modeling](#)

