

## BIOGRAPHICAL SKETCH

Provide the following information for the key personnel and other significant contributors in the order listed on Form Page 2.  
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NAME Willemijntje Alexandra Hoogerwerf	POSITION TITLE Assistant Professor of Medicine		
eRA COMMONS USER NAME (credential, e.g., agency login) wahooger			
EDUCATION/TRAINING <i>(Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)</i>			
INSTITUTION AND LOCATION	DEGREE <i>(if applicable)</i>	YEAR(s)	FIELD OF STUDY
Erasmus University Rotterdam, The Netherlands	M.D.	1985-1992	Medicine

### A. Positions and Honors.

#### Positions

1992 - 1994 Research Fellowship, Gastroenterology, Johns Hopkins Hospital, Baltimore, MD  
 1994 - 1997 Residency Internal Medicine, Johns Hopkins Bayview Medical Center, Baltimore, MD  
 1997 - 2000 Clinical Fellowship, Gastroenterology, University of Texas Medical Branch, Galveston, TX  
 07/2000 – 09/2006 Assistant Professor of Medicine, University of Texas Medical Branch, Galveston, TX  
 10/2006 – current Assistant Professor of Medicine, University of Michigan, Ann Arbor, MI  
 10/2006 – current Staff Physician, VA Ann Arbor Healthcare System

#### Memberships

2003 - present Member American Motility Society  
 2000 - present Member Society for Neuroscience  
 1999 - present Member Texas Society for Gastroenterology & Endoscopy  
 1998 - present Member American College of Physicians  
 1998 - present Member American Gastroenterological Association  
 1998 - present Member of the American Society for Gastrointestinal Endoscopy

#### Honors

1992 Cum Laude graduation from Medical School (highest honor in The Netherlands)  
 1996 Lawlor resident award. Awarded by the American College of Gastroenterology for the best scientific paper by a resident.  
 2001 6<sup>th</sup> Annual Young Investigator Award. Awarded by the American Functional Brain-Gut Research Group for outstanding basic science in the field of functional bowel disorders.  
 2005 Emerging Leaders in Gastroenterology Program, Sweden. Selected by the Steering Committee of the Emerging Leaders Program; Winner of scientific presentation contest.

### B. Selected peer-reviewed publications (in chronological order).

1. Hoogerwerf WA, Hawkins AL, Perlman E, Griffin CA. Chromosome Analysis of Nine Osteosarcomas Genes, Chromosomes & Cancer 9:88–92, 1994.
2. Hoogerwerf WA, Tsao SC, Devuyst O, Levine SA, Yun CH, Yip JW, Cohen ME, Wilson PD, Lazenby AJ, Tse CM, Donowitz M. NHE2 and NHE3 are Human and Rabbit Intestinal Brush Border Proteins. American Journal of Physiology 33 (1): G29-41, 1996.
3. Khurana S, Kreydiyyeh S, Arazon A, Hoogerwerf WA, Rhee SG, Donowitz M, Cohen ME. Asymmetric signal transduction in polarized ileal Na(+) absorbing cells. Biochemical Journal 313:509-18, 1996. [PMCID: 1216936]
4. Hoogerwerf WA, Pasricha PJ, Kalloo AN, Schuster MM. Pain- The overlooked symptom in gastroparesis. American Journal of Gastroenterology 94:1029-1033, 1999.

5. Hoogerwerf WA, Zou L, Shenoy M, Sun D, Micci MA, Lee Hellmich H, Xiao SY, Winston JH, Pasricha PJ. The proteinase-activated receptor 2 is involved in nociception. *The Journal of Neuroscience* 21(22); 9036-9042, 2001.
6. Hoogerwerf WA, Lee Hellmich H, Micci MA, Zou L, Winston JH, Pasricha PJ. Molecular cloning of the rat proteinase-activated receptor 4. *BMC Molecular Biology* 3:2, 2002. [PMCID: 88883]
7. Hoogerwerf WA, Shenoy M, Winston JH, Xiao SY, He Z, Pasricha PJ. Trypsin mediates nociception via the proteinase-activated receptor 2 - A potentially novel role in pancreatic pain. *Gastroenterology* 127; 883-891, 2004.
8. Hoogerwerf WA, Gondesens K, Xiao SY, Winston JH, Willis WD, Pasricha PJ. The role of mast cells in the pathogenesis of pain in chronic pancreatitis. *BMC Gastroenterology* 5:8, 2005. [PMCID: 554992]
9. Hoogerwerf WA. Prokineticin 1 inhibits spontaneous giant contractions in the murine proximal colon through nitric oxide release. *Neurogastroenterol Motil* 18(6):455-63, 2006.
10. Hoogerwerf WA, Hellmich HL, Cornelissen G, Halberg F, Shahinian VB, Bostwick J, Savidge TC, Cassone VM. Clock gene expression in the murine gastrointestinal tract: endogenous rhythmicity and effects of a feeding regimen. *Gastroenterology* 133:1250-1260, 2007.
11. Olah A, Jozsa R, Csernus V, Sandor J, Muller A, Zeman M, Hoogerwerf WA, Cornélissen G, Halberg F. Stress, geomagnetic disturbance, infradian and circadian sampling for circulating corticosterone and models of human depression? *Neurotox Res.* 13(2):85-96, 2008. [PMCID: 2593857]
12. Hoogerwerf WA, Sinha M, Conesa A, Luxon BA, Shahinian VB, Cornélissen G, Halberg F, Bostwick J, Timm J, Cassone VM. Transcriptional Profiling of mRNA Expression in the Mouse Distal Colon. *Gastroenterology* 135(6):2019-29, 2008.
13. Hoogerwerf WA. Role of biological rhythms in gastrointestinal health and disease. Review. *Reviews in Endocrine and Metabolic Disorders* DOI 10.1007/s11154-009-9119-3

### C. Research Support

#### Ongoing Research Support

1R21DK074477-01 Hoogerwerf (PI) 05/01/07 – 09/30/10  
NIH/NIDDK

“Role of clock genes in colonic motility”

The specific aim of this grant is to determine whether clock genes may play a role in the regulation of colonic motility

Role: PI

University of Michigan Peptide Center Hoogerwerf (PI) 09/01/08- 08/31/10  
Pilot/Feasibility Grant

“Circadian changes in physiological parameters of colonic motility”

The specific aim of this grant is to determine whether the intestinal tissue response to acetylcholine varies over the time of day

Role: PI

#### **Completed Research Support**

Pilot/feasibility grant Hoogerwerf (PI) 02/15/08-02/14/09  
VA VERAM

“Role of melatonin in colonic motility”

The specific aim of this grant is to determine whether melatonin mediates colonic motility and if so, whether the response to melatonin varies with the time of day

Role: PI

Pilot/Feasibility Grant Hoogerwerf (PI) 03/2005 – 03/2006  
Gulf Coast Digestive Disease Center

“The role of prokineticin in gastrointestinal motility”

The specific aim of this grant was to determine whether prokineticin mediates colonic motility.