

BIOGRAPHICAL SKETCH

Provide the following information for the key personnel and other significant contributors in the order listed on Form Page 2. Follow this format for each person. **DO NOT EXCEED FOUR PAGES.**

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|---|-----------------------------|
| NAME William L. Hasler | POSITION TITLE Professor |
| eRA COMMONS USER NAME (credential, e.g., agency login) whasler | |

| 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 |
| Massachusetts Institute of Technology, | MA | 1975- 1979 | |
| University of Pennsylvania School of Medicine, Philadelphia, Pennsylvania | MD | 1979-1983 | Gastroenterology |

A. Positions and Honors.

- 06/1983-06/1984 Internship, Department of Internal Medicine, University of Michigan Medical Center, Ann Arbor, Michigan
- 07/1984-06/1986 Residency, Department of Internal Medicine, University of Michigan Medical Center Ann Arbor, Michigan
- 07/1986-06/1989 Fellowship, Department of Internal Medicine, University of Michigan Medical Center, Ann Arbor, Michigan
- 07/1989-06/1990 Lecturer in Internal Medicine, University of Michigan Medical Center, Ann Arbor, Michigan
- 06/1990-08/1993 Instructor in Internal Medicine, University of Michigan Medical Center, Ann Arbor, Michigan
- 09/1993-08/1998 Assistant Professor in Internal Medicine, University of Michigan Medical Center, Ann Arbor, Michigan
- 09/1998-8/2007 Associate Professor in Internal Medicine, University of Michigan Medical Center, Ann Arbor, Michigan
- 09/2007-present Professor in Internal Medicine, University of Michigan Medical Center, Ann Arbor, Michigan

Honors and Awards

- 2008 Who's Who in America
- 2007 Alvarez Award in Electrogastrography
- 2005 Who's Who in Medical Science Education
- 2004 Best Doctors—International
- 2004 Alvarez Award in Electrogastrography
- 2003 America's Best Doctors
- 2003-2007 Treasurer, American Motility Society,
- 2002-2004 President, International Electrogastrography Society,
- 1996, 1998, 2002 Alvarez Award in Electrogastrography
- 1995 Election to Central Society for Clinical Research
- 1995 Alvarez Award in Electrogastrography
- 1993 Clinical Associate Physician Research Abstract Award
- 1992 General Clinical Research Centers Travel Award
- 1988 Glaxo Fellows Travel Award, Second Place
- 1987 American College of Gastroenterology Research Award
- 1978 Lambda Upsilon Chemistry Society, Massachusetts Institute of Technology

B. Selected peer-reviewed publications (in chronological order). Selected from 52 peer-reviewed publications

6. Soudah, H., Lu, Y., Hasler, W.L., Owyang, C. Cholecystokinin at physiologic levels evokes pancreatic enzyme secretion via a cholinergic pathway. *Am J Physiol* 1992; 263: G102-107.
7. Chey, W.D., Hasler, W.L., Bockenstedt, P.L. Case report: Angiodysplasia and Von Willebrand's disease type IIB treated with estrogen/progesterone therapy. *Am J Hematol* 1992; 41: 276-279.
8. Hasler, W.L., Soudah, H.C., Owyang, C. A somatostatin analogue inhibits afferent pathways mediating perception of rectal distention. *Gastroenterology* 1993; 104: 1390-1397.
9. Roberts, D.J., Hasler, W.L., Owyang, C. GABA mediation of the dual effects of somatostatin on guinea pig ileal myenteric cholinergic transmission. *Am J Physiol* 1993; 264: G953-G960.
10. Bologna, S.D., Hasler, W.L., Owyang, C. Down-regulation of motilin receptors on rabbit colon myocytes by chronic oral erythromycin. *J Pharm Exp Ther* 1993; 266: 852-856.
11. Hasler, W.L., Soudah, H.C., Owyang, C. Somatostatin analog inhibits afferent response to rectal distention in diarrhea-predominant irritable bowel patients. *J Pharm Exp Ther* 1994; 268: 1206-1211.
12. Hasler, W., Kurosawa, S., Takahashi, T., Gaginella, T., Owyang, C. Bradykinin acting on B2 receptors contracts colon circular muscle cells by IP₃ generation and adenylate cyclase inhibition. *J Pharm Exp Ther* 1995; 273: 344-350.
13. Hasler, W.L., Soudah, H.C., Dulai, G., Owyang, C. Mediation of hyperglycemia-evoked gastric slow wave dysrhythmias by endogenous prostaglandins. *Gastroenterology* 1995; 108: 727-736.
14. Sims, M.A., Hasler, W.L., Chey, W.D., Kim, M.S., Owyang, C. Hyperglycemia inhibits mechanoreceptor-mediated gastrocolonic responses and colonic peristaltic reflexes in healthy humans. *Gastroenterology* 1995; 108: 350-359.
15. Hasler, W.L., Kim, M.S., Chey, W.D., Stevenson, V., Stein, B., Owyang, C. Central cholinergic and α -adrenergic mediation of gastric slow wave dysrhythmias evoked during motion sickness. *Am J Physiol* 1995; 268: G539-G547.
16. Chey, W.D., Kim, M., Hasler, W.L., Owyang, C. Hyperglycemia alters perception of rectal distention and blunts the rectoanal inhibitory reflex in healthy volunteers. *Gastroenterology* 1995; 108: 1700-1708.
17. Chey, W.D., Beydoun, A., Roberts, D.J., Hasler, W.L., Owyang, C. Octreotide reduces perception of rectal electrical stimulation by spinal afferent inhibition. *Am J Physiol* 1995; 269: G821-G826.
18. Walsh, J.W., Hasler, W.L., Nugent, C.E., Owyang, C. Progesterone and estrogen are potential mediators of gastric slow wave dysrhythmias in the nausea of pregnancy. *Am J Physiol* 1996; 270: G506-G514.
19. Kohagen, K.R., Kim, M.S., McDonnell, W.M., Chey, W.D., Owyang, C., Hasler, W.L. Nicotine effects on prostaglandin-dependent gastric slow wave rhythmicity and antral motility in non-smokers and smokers. *Gastroenterology* 1996; 110: 3-11.
20. Hasler, W.L., Soudah, H.C., Owyang, C. Mechanisms by which octreotide ameliorates symptoms in the dumping syndrome. *J Pharm Exp Ther* 1996; 277: 1359-1365.
21. Kim, M.S., Chey, W.D., Owyang, C., Hasler, W.L. Role of vasopressin as a mediator of nausea and gastric slow wave dysrhythmias in motion sickness. *Am J Physiol* 1997; 272: G853-G862.
22. Chey, W.D., Fisher, L., Elta, G.H., Barnett, J.L., Nostrant, T.T., DelValle, J., Hasler, W.L., Scheiman, J.M. Bismuth subsalicylate instead of metronidazole with lansoprazole and clarithromycin for *Helicobacter pylori* infection: a randomized trial. *Am J Gastroenterol* 1997; 92: 1483-1486.
23. Camilleri, M., Hasler, W.L., Parkman, H.P., Quigley, E.M.M., Soffer, E. Measurement of gastroduodenal motility in the GI laboratory. *Gastroenterology* 1998; 115: 747-762.
24. Gorelick, A.B., Koshy, S.S., Hooper, F.G., Bennett, T.C., Chey, W.D., Hasler, W.L. Differential effects of amitriptyline on perception of somatic and visceral stimulation in healthy humans. *Am J Physiol* 1998; 275: G460-G466.
25. Ladabaum, U., Koshy S.S., Woods, M.L., Hooper, F.G., Owyang C., Hasler, W.L. Differential symptomatic and electrogastrographic effects of proximal and distal human gastric mechanoreceptor activation. *Am J Physiol* 1998; 275: G418-424.
26. Bjornsson, E.S., Chey, W.D., Ladabaum, U., Hooper, F.G., Woods, M.L., Owyang, C., Hasler, W.L. Differential 5-HT₃ mediation of the human gastrocolonic response and colonic peristaltic reflex. *Am J Physiol* 1998; 275: G498-G505.

27. Chey, W.D., Fisher, L., Barnett, J., DelValle, J., Elta, G.H., Hasler, W.L., Nostrant, T., Palaniappan, J., Scheiman, J. Low- versus high-dose azithromycin triple therapy for *Helicobacter pylori* infection. *Aliment Pharmacol Ther* 1998; 12: 1263-1267.
28. Jednak, M.A., Shadigian, E.M., Kim, M.S., Woods, M.L., Hooper, F.G., Owyang, C., Hasler, W.L. Proteins selectively reduce nausea and gastric slow wave dysrhythmic activity in first trimester pregnancy. *Am J Physiol* 1999; 277: G855-G861.
29. Ladabaum, U., Minoshima, S., Hasler, W.L., Cross, D., Chey, W.D., Owyang, C. Gastric distention correlates with activation of multiple cortical and subcortical regions. *Gastroenterology* 2001; 120: 369-376.
30. Ladabaum, U., Brown, M.B., Pan, W., Owyang, C., Hasler, W.L. Effects of nutrients and serotonin 5-HT₃ antagonism on responses to distal gastric distension in humans. *Am J Physiol* 2001; 280: G201-G208.
31. Quigley, E.M.M., Hasler, W.L., Parkman, H.P. AGA technical review on nausea and vomiting. *Gastroenterology* 2001; 120: 263-286.
32. Sun, W.M., Hasler, W.L., Lien, H.C., Montague, J., Owyang, C. Nizatidine enhances the gastrocolonic response and the colonic peristaltic reflex in humans. *J Pharmacol Exp Ther* 2001; 299: 159-163.
33. Bjornsson, E., Chey, W.D., Hooper, F., Woods, M., Owyang, C., Hasler, W.L. Impaired gastrocolonic response and peristaltic reflex in idiopathic constipation: role of 5-HT₃ pathways. *Am J Physiol* 2002; 283: G400-G407.
34. Parkman, H.P., Hasler, W.L., Barnett, J.L., Eaker, E.Y. Electrogastrography: a document prepared by the gastric section of the American Motility Society Clinical GI Motility Testing Task Force. *Neurogastroenterol Motil* 2003; 15: 89-102.
35. Hasler, W.L., Schoenfeld, P. Abdominal and pelvic surgery among patients with irritable bowel syndrome: a systematic review. *Aliment Pharmacol Ther* 2003; 17: 997-1005.
36. Lien, H.C., Sun, W.M., Chen Y.H., Kim, H., Hasler, W.L., Owyang, C. Effects of ginger on motion sickness and gastric slow wave dysrhythmias induced by circularvection. *Am J Physiol* 2003; 284: 481-G489.
37. Gonlachanvit, S., Chen, Y.H., Hasler, W.L., Sun, W.M., Owyang, C. Ginger reduces hyperglycemia-evoked gastric dysrhythmias in healthy humans: possible role of endogenous prostaglandins. *J Pharmacol Exp Ther* 2003; 307: 1098-1103.
38. Hasler, W.L., Chey, W.D. Nausea and vomiting. *Gastroenterology* 2003; 125: 1860-1867.
39. Hasler, W.L., Schoenfeld, P. Safety profile of tegaserod, a 5-HT₄ receptor agonist for constipation-predominant irritable bowel syndrome. *Drug Safety* 2004; 27: 619-631.
40. Coleski, R., Hasler, W.L. Directed endoscopic mucosal mapping of normal and dysrhythmic gastric slow waves in healthy humans. *Neurogastroenterol Motil* 2004; 16: 557-565.
41. Gonlachanvit, S., Coleski, R., Owyang, C., Hasler, W.L. Inhibitory actions of a high fiber diet on intestinal gas transit in healthy humans. *Gut* 2004; 53: 1577-1582.
42. Parkman, H.P., Hasler, W.L., Fisher, R.S. AGA technical review on the diagnosis and treatment of gastroparesis. *Gastroenterology* 2004; 127: 1592-1622.
43. Parkman, H.P., Hasler, W.L., Fisher, R.S. AGA medical position statement: diagnosis and treatment of gastroparesis. *Gastroenterology* 2004; 127: 1589-1591.
44. Parkman, H.P., Hasler, W.L., Fisher, R.S. American Gastroenterological Association Technical review on the diagnosis and treatment of gastroparesis. *Rev Gastroenterol Mexico* 2005; 70: 325-360.
45. Coleski, R., Gonlachanvit, S., Owyang, C., Hasler, W.L. Selective reversal of hyperglycemia-evoked gastric myoelectric dysrhythmias by nitrenergic stimulation in healthy humans. *J Pharmacol Exp Ther* 2005; 312: 103-111.
46. Abell, T.L., Bernstein, R.K., Cutts, T., Farrugia, G., Forster, J., Hasler, W.L., McCallum, R.W., Olden, K.W., Parkman, H.P., Parrish, C.R., Pasricha, P.J., Prather, C.M., Soffer, E.E., Twillman, R., Vinik, A.I. Treatment of gastroparesis: a multidisciplinary review—the American Motility Society Task Force on Gastroparesis. *Neurogastroenterol Motil* 2006; 18: 263-283.
47. Gonlachanvit, S., Coleski, R., Owyang, C., Hasler, W.L. Nutrient modulation of intestinal gas dynamics in healthy humans: dependence on caloric content and meal consistency. *Am J Physiol* 2006; 291: G389-G395.
48. Coleski, R., Owyang, C., Hasler, W.L. Modulation of intestinal gas dynamics in healthy human volunteers by the 5-HT₄ receptor agonist tegaserod. *Am J Gastroenterol* 2006; 101: 1858-1865.

49. Kuo, B., McCallum, R.W., Koch, K.L., Sitrin, M.D., Wo, J.M., Chey, W.D., Hasler, W.L., Lackner, J.M., Katz, L.A., Semler, J.R., Wilding, G.E., Parkman, H.P. Comparison of gastric emptying of a nondigestible capsule to a radiolabelled meal in healthy and gastroparetic subjects. *Aliment Pharmacol Ther* 2008; 27: 186-196.
50. Abell, T.L., Camilleri, M., Donohoe, K., Hasler, W.L., Lin, H.C., Maurer, A.H., McCallum, R.W., Nowak, T., Nusynowitz, M.L., Parkman, H.P., Shreve, P., Szarka, L.A., Snape, W.J., Ziessman, H.A. Consensus recommendations for gastric emptying scintigraphy: a joint report of the American Neurogastroenterology and Motility Society and the Society of Nuclear Medicine. *Am J Gastroenterol* 2008; 103: 753-763.
51. Abell, T.L., Camilleri, M., Donohoe, K., Hasler, W.L., Lin, H.C., Maurer, A.H., McCallum, R.W., Nowak, T., Nusynowitz, M.L., Parkman, H.P., Shreve, P., Szarka, L.A., Snape, W.J., Ziessman, H.A. Consensus recommendations for gastric emptying scintigraphy: a joint report of the American Neurogastroenterology and Motility Society and the Society of Nuclear Medicine. *J Nucl Med Technol* 2008; 36: 44-54.
52. Abell, T.L., Adams, K.A., Boles, R.G., Bousvaros, A., Chong, S.K., Fleisher, D.R., Hasler, W.L., Hyman, P.E., Issenman, R.M., Li, B.U., Linder, S.L., Mayer, E.A., McCallum, R.W., Olden, K., Parkman, H.P., Rudolph, C.D., Tache, Y., Tarbell, S., Vakil, N. Cyclic vomiting syndrome in adults. *Neurogastroenterol Motil* 2008 (In press).

C. Research Support
Ongoing Research Support

ACTIVE

| | | |
|----------------------------|------------------|--------------|
| 5 U01 DK073985 Halser (PI) | 4/1/06 – 3/31/11 | 3.6 calendar |
| NIH | \$269,574 | |

Visceral Afferent Dysfunction in Diabetic Gastropathy
 As part of the Gastroparesis Clinical Research Consortium, this study seeks to provide insight into symptom pathogenesis in diabetic gastropathy and will direct future research into therapies that correct visceral sensory rather than motor defects in this condition.

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| ARRA administrative supplement Hasler (PI) | 9/1/09-8/31/10 | 0 calendar |
| NIH 3 U01 DK073985 04S1 | \$64,725 | |

Visceral Afferent Dysfunction in Diabetic Gastropathy
 The aim of this administrative supplement is to provide funding to accelerate patient enrollment and maximize patient follow-up in the NIH GpCRC (gastroparesis registry) studies.

Completed Research Support

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| Industry Sponsored Support | 9/1/05-8/31/06 | |
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SmartPill Corp.
 A Comparison Trial of SmartPill Diagnostics, Inc. ACT GI Monitoring System with Scintigraphic Gastric Emptying Procedure for Determining Gastric Residence Time
 Role: William Hasler, MD

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| Bridging Support | 3/1/06-2/28/07 | |
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Office of the Vice President for Research
 Regulation of Intestinal Gas Dynamics by Colonic Motor Activity
 Role: Principal Investigator: William Hasler, MD

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| Industry Sponsored Support | 7/1/06-6/30/07 | |
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SmartPill Corp.
 Assessment of Whole Gut Transit Time Using the SmartPill Capsule
 Role: Principal Investigator: William Hasler, MD