

PAULINE KAY LUND
Curriculum Vitae

Personal Information:

Name: Pauline Kay Lund

Date/Place of Birth: April 20, 1955, Wigan, Lancashire, England

Marital Status: Married: Mark Smith (February 25, 1980)
Children: Emma (June 23, 1985); Alice (December 15, 1987)

Visa Status: Permanent resident (Green card)

Education:

B.Sc. Hons.(First Class) University of Newcastle upon Tyne, England, 1975, Physiology

Ph.D. University of Newcastle upon Tyne, England, February, 1979, Gastrointestinal Endocrinology

Postdoctoral Training Molecular Endocrinology, Recombinant DNA Technology: Massachusetts General Hospital and Harvard Medical School, 1979-1982. Preceptor: Dr. Joel F. Habener

Employment History:

Sarah Graham Kenan Professor of Cell and Molecular Physiology	University of North Carolina at Chapel Hill	July 2007 - present
Professor of Cell and Molecular Physiology and Pediatrics (tenured)	University of North Carolina at Chapel Hill	July 1993 - present
Professor of Nutrition	University of North Carolina at Chapel Hill	July 1998 - present
Professor of Distinguished Teaching (Named Professor)	University of North Carolina at Chapel Hill	July 1995 - July 1998
Visiting Senior Research Fellow	Ludwig Institute for Cancer Research, Melbourne, Australia	July 1995 - July 1996
Associate Professor of Pediatrics (joint appointment)	University of North Carolina at Chapel Hill	November 1989
Associate Professor of Physiology (with tenure)	University of North Carolina at Chapel Hill	July, 1988
Assistant Professor of Physiology	University of North Carolina at Chapel Hill	March 1982
Instructor in Medicine	Harvard Medical School, Boston, Mass.	July 1981 - July 1982
Postdoctoral Research Fellow, Medicine	Harvard Medical School and Massachusetts General Hospital	September 1979 - July 1981
Instructor in Physiology	University of Newcastle upon Tyne, England	November 1977 - August 1979

Professional Societies:

American Association of University Women, 1979-present
Endocrine Society, 1982-present
Women in Endocrinology, 1990-present

Gastroenterology Research Group of America, 1994-present
 American Gastroenterology Association, 2000-present
 American Physiological Society, 2000-present
 American Association for Cancer Research 2006-present

Editorial Appointments:

Editor in Chief, American Journal of Physiology – Gastrointestinal and Liver 2009-present.
 Associate Editor, Gastroenterology 2001-2006.
 Editorial Board: Endocrinology 1998-2002.

Reviewer:

AJP - Gastrointestinal and Liver Physiology
 AJP - Endocrinology and Metabolism
 AJP - Cell Physiology
 Gastroenterology
 Gut
 Inflammatory Bowel Disease
 Endocrinology
 Molecular Endocrinology
 New England Journal of Medicine
 Nature
 Science

Other Appointments:

Member, Executive Committee for the UNC Microbiome Core Facility, 2009-present
 Member, AGA Institute Council - Hormones, Transmitters, Growth Factors & Their Receptors (H&R) Section Nominating Committee, 2009
 Member, NIH Review Panel, Human Microbiome Demonstration Projects, 2008
 Member, NIH NIDDK Special Emphasis Review Panel (review R01 applications of study section members), 2008
 Ad Hoc Member, NIH NIGMS, Minority Biomedical Research Support Genetics CCB Study Section, 2008
 Member, Committee on Research, American Gastroenterological Association, 2002-2005
 Member, American Gastroenterological Association Research Policy Committee, 2004-2005
 Member, American Gastroenterological Association Task Force on Graduate Student Development, 2004
 Member, American Gastroenterological Association Public Advocacy Group, 2003
 CCFA Study section member on RFA. Host: Microbial interactions and inflammatory bowel disease, 2003
 NIH-NIDDK: Intestinal Stem cell research RFA. Study section member, July 2001
 NIH study section reviewers reserve, 1993-present
 NIH Aging Systems and Geriatrics Study Section, October 2004-present (as needed basis)
 Crohn's and Colitis Foundation of America (CCFA) Special Study Section Member, 1998, 1999 (review of grants by regular study section members)
 NIH: Endocrinology Study Section, 1989-1993

Special Honors and Awards

2008: University Award for the Advancement of Women
2006: Distinguished Medical Faculty Award, UNC Medical Alumni Association
2002: Dean's Medical School Teaching Excellence Award
1998: Freshman Medical Class Teaching Award
1994: Kaiser Permanente Medical Teaching Award
 Hyman L. Battle Medical Teaching Award
 Freshman Medical Class Teaching Award
1993: Freshman Medical Class Teaching Award
1990: Ruth and Paul Hettleman Award for Scholarly Research
 Hyman L Battle Medical Teaching Award
 Freshman Medical Class Teaching Award
1985: University of North Carolina Junior Faculty Development Award

- 1982:** Juvenile Diabetes Foundation, Career Development Award
1979: Postdoctoral Fellowships awarded: *Fogarty Fellowship (NIH); *British Science Research Council Fellowship; *Rose Sidgewick Fellowship (British Federation of University Women and American Society for University Women; Harkness Fellowship; Kennedy Fellowship; Jane Coffin Childs Fellowship)
 * = awards accepted
1978: Hugo Johnson Memorial Award for short research visit to Goettingen, W. Germany (training in electron microscopy with Drs Cora and Werner Creutzfeldt).
1976: Hugo Johnson Memorial Award for short research visit to Aarhus, Denmark (training in immunohistochemistry and RIA with Drs Lars-Inge Larson and Jens Rehfeld).

Current Grant Support

ACTIVE

2-RO1-DK040247-17 (P.I. Lund) 05/01/89-06/30/11 3.6 calendar
 NIH/NIDDK \$242,049 (annual direct)
 Intestinal Adaptation-Role of Hormones and Growth Factors.

The specific aims of this project are:

1. Examine tumor growth and survival and IGF-I /insulin activation of beta-catenin pathways in WT and Apc^{Min/+} mice with 0, 1 or 2 functional IRS-1 genes, and cell lines with knockdown of IRS-1.
2. Examine EGF/IGF-I interactions on beta-catenin in primary IEC and model cell lines.
3. Examine tumor growth and survival, activation of STAT or beta-catenin and local IGF-I expression in Apc^{Min/+} mice with 0, 1 or 2 functional SOCS2 genes.
4. Examine effects of SOCS2 on EGFR activation and EGFR-induced STAT activation in cell lines and primary IEC, or tumors from SOCS2 null and WT mice with Apc^{Min/+} mutation or expressing a GH-transgene.

1-R21-DK080283-01 (P.I. Lund) 7/01/08 – 4/30/10 1.5 calendar
 NIH/NIDDK \$125,000 (annual direct)
 Mechanisms of intestinal failure in Post-Surgical inflammatory bowel disease.

The specific aims are as follows:

1. Analyze post-surgical inflammation and fibrosis in IL-10 null mice after ileo-cecal resection to define a new model of post-surgical IBD.
2. Analyze post-surgical inflammation and fibrosis in germ free IL-10 null mice after ileo-cecal resection to test the hypothesis that bacteria-independent damage associated pattern signals initiate or sustain post-surgical disease in genetically susceptible hosts.
3. Test the hypothesis that commensal microflora regulate post-ICR amplification of intestinal stem cells

No agency # (P.I. Lund) 12/01/09 – 11/30/11 .6 calendar
 N.C. Biotechnology Center \$150,000 (annual direct)
 Identification, isolation, molecular phenotyping and propagation of intestinal stem cell (ICS) as model systems for tissue regeneration and drug discovery
 In these proposed studies, we hypothesize that SOX9 and SOX4 (intestinal stem cell biomarkers) are new biomarkers and functional determinants of self-renewing, multi-potent ISC in normal and injured intestinal epithelium.

5-P30-DK034987-23 (P.I. Sandler) 12/1/96-11/30/09 .6 calendar
 NIH/NIDDK \$57,107 Gnotobiotic Core Facility
 Center for Gastrointestinal Biology and Disease
 The major goals of this project are to provide core facilities for research into gastrointestinal biology and disease.
 Dr. Lund is Co-Director of the Gnotobiotic Core Facility.

Innovation Awards 2008 – Basic Science Category 9/01/08-08/31/10 0 calendar
 University Cancer Research Fund (UCRF) – UNC-Chapel Hill \$87,750 annual direct
 Biochromoendoscopy for non-invasive, capsule-based detection and diagnosis of gastrointestinal cancer.

5-U54-CA119343-03 (P.I. Juliano) 9/30/05-8/31/10 .6 calendar
 NIH \$456,217 (annual direct, for Project 3)
 Carolina Center of Cancer Nanotechnology Excellence
 (Lund – Co Investigator on Project 3)
 Project 3 title: Carbon Nanotube Field Emission X-Ray for In-Vivo Cancer Detection
 and Treatment
 The major goal of Project 3 is to develop specific CNT x-ray technologies for cancer imaging and
 radiotherapy for humans and animal model research.

5-RO1-CA044684-17 (P.I. Sandler) 2/15/88-5/31/11 1.8 calendar
 NIH/NCI \$369,416 (annula direct)
 Inflammation, Obesity & Risk of Colorectal Adenoma

This proposed study will explore the central hypothesis that subclinical systemic or localelevated basal levels
 of circulating cytokines or adipokines (adipocyte specific cytokines) inflammation increases adenoma risk by
 reducing apoptosis in normal rectal mucosa, and increasing adenoma risk.

1-K01-DK080181-01 (P.I. Magness) 4/01/08 – 3/31/11 0 calendar
 NIH/NIDDK
 Intestinal Stem/Progenitor Cell Potency and Competence
 Role: Primary Mentor

3-RO1-DK047769-09A1S1 (P.I. Lund) 7/01/08 – 3/31/09 .6 calendar
 NIH/NIDDK \$63,272 (annual direct)
 Growth Factors and Inflammatory Bowel Disease (bridge funding)
 This proposal will test a central hypothesis that intestinal epithelial cell (IEC)-derived suppressor of cytokine
 signaling-3 (SOCS3) protects against crypt hyperplasia, dysplasia and neoplasia during chronic intestinal
 inflammation.

2-K12-GM000678-11 (P.I. Dykstra) 9/01/08 – 8/31/13 1.2 calendar
 NIH/NIGMS \$921,602 (annual direct)
 Seeding Postdoctoral Innovators in Research and Education (SPIRE)
 This project is an integrative postdoctoral fellowship program that combines research training, professional
 development and hands-on teaching experience. (to be funded 09/01/08)

PENDING

3-RO1-DK047769 (P.I. Lund) 7/01/09 – 6/30/14 2.4 calendar
 NIH/NIDDK \$250,000 annual direct
 Growth Factors and Inflammatory Bowel Disease
 This proposal will test a central hypothesis that intestinal epithelial cell (IEC)-derived suppressor of cytokine
 signaling-3 (SOCS3) protects against crypt hyperplasia, dysplasia and neoplasia during chronic intestinal
 inflammation.

1-RO1-DK083325-01 (P.I. Helmrath) 4/01/09 – 3/31/14 .6 calendar
 NIH/NIDDK \$250,000 annual direct
 Mechanisms of Intestinal Stem Cell Expansion Following Resection
 The aims outlined in this proposal will address the basic need to characterize the pool of intestinal stem cells
 (ISC) required to study potential adaptive mechanisms affecting these cells.

1-R01-GM088529-01 (P.I. Lund) 9/01/09-8/31/13 1.2 calendar
 NIH/NIGMS \$250,000 annual direct
 Gender, discipline and outcomes of institutional policies, programs and climate

This proposal will use a mixed methods (survey, methods of life history and pilot intervention' to test the hypothesis that there are gender and discipline specific differences in awareness, use and outcomes of institutional policies.

UNC Committees:

UNC-Chapel Hill

Co-PI and Academic Programs Committee SPIRE (Seeding Postdoctoral Innovators in Research and Education) post-doctoral training grant, 2004-present
 Member, UNC Strategic Planning Council for Information Technology, Jan 2002-present
 Advisory Committee for the Gastroenterology Training Grant, 1996-present
 Academic Programs Committee Program for Minority Achievement in Biomedical Science (PMABS), 2005-2006
 IMSD Award Preproposal Review Committee, October 2005
 Member, Task force on communication with the public and legislature on Facilities and Administrative Receipts, Jan-May 2002
 President, University of North Carolina Academy of Distinguished Teaching Scholars, Jan 2001-Dec 2002
 Hettleman Research Award Committee, 2000-2004
 Chair, Steering Committee for the UNC Academy of Distinguished Teaching Scholars, 1999-2001
 UNC Task Force on Priorities for Graduate and Professional Education, 1999
 Chair, UNC Chancellors Teaching Award Committee, 1998
 UNC Chancellors Teaching Award Committee, 1997 (Sub-committee Chair)

School of Medicine

Advisory Committee for the Center for Gastrointestinal Biology and Disease, 1992-present
 Chair, Working on Women in Science Initiative Steering Committee, 2007-present
 Advisory Committee to the Interdisciplinary Obesity Training Grant, 2007-present
 UNC Medical Science Lecture Committee, 1997-2005
 President, UNC Association of Professional Women in Medical Sciences, 2004-2007
 Salary Equity Task Force, 2003
 Committee to review the reappointment of the Dean of the School of Medicine, 2001
 Holderness Fellowship Board of Directors, 1998-2002
 UNC Medical School Committee on Promotion to Associate Professor or Tenure, 1997-2000

Other Administrative Activities:

Co-director: Gnotobiotic Core of the Center for Gastrointestinal Biology and Disease, Nov 2004-present
 Co-director: Molecular Histopathology Core of the Center for Gastrointestinal Biology and Disease, 1999-2004
 Director: Molecular biology and transgenic mouse core facility of the Center for Gastrointestinal Biology and Disease, The University of North Carolina at Chapel Hill, Nov 1989 - Dec 1999
 Associate Director: Center for Gastrointestinal Biology and Disease (CGIBD), University of North Carolina at Chapel Hill, Nov 1989 - Dec 1992

Member:

Center for Gastrointestinal Biology and Disease, 1992-present
 Lineberger Cancer Center, University of North Carolina, Chapel Hill. 1994-present
 Curriculum in Neurobiology, University of North Carolina, Chapel Hill. 1982-present
 Laboratories for Reproductive Biology, Department of Pediatrics, University of North Carolina, Chapel Hill, 1988-present
 Program in Molecular Biology, University of North Carolina, Chapel Hill. 1985-present
 Neurodevelopment Disorders Research Center, 2002-present
 Interdisciplinary Obesity Research Center 2005-present

Preceptor:

Gastroenterology Training Grant: P.I. Dr. R. Balfour Sartor, Department of Medicine, University of North Carolina, Chapel Hill.

Nutrition Training Grant: P.I. Dr. Steven Zeisel, Department of Nutrition, University of North Carolina, Chapel Hill.

Endocrinology Training Grant: P.I. Dr. A. Joseph D'Ercole, Department of Pediatrics, University of North Carolina, Chapel Hill.

Nutrition and Cancer Training Grant: P.I. Dr. Steven Zeisel and Dr. Marilie Gammon, Department of Epidemiology, University of North Carolina, Chapel Hill.

SPIRE Training Grant: P.I. Dr. Linda Dykshra, Department of Psychology, University of North Carolina, Chapel Hill.

Neurobiology Training Grant: P.I. Dr. Robert Rosenberg, Department of Otolaryngology and Curriculum in Neurobiology, University of North Carolina, Chapel Hill.

Interdisciplinary Obesity Post-doctoral Training Grant: P.I. Dr. Barry Popkin, Department of Nutrition, University of North Carolina, Chapel Hill.

Trauma Research Training Program: P.I. Jeff Frelinger, Department of Immunology, University of North Carolina, Chapel Hill.

Predocutorial Program in Translational Medicine: P.I. Dr. James Anderson, Department of Cell & Molecular Physiology, University of North Carolina, Chapel Hill.

Consultant:

Johns Hopkins University, October 2002- 2005

Saegis Pharmaceuticals, October 2002- 2005

Glaxo January 1989- December 30, 1990

Public Service:

'Careers in Science': Presentation for high school students on career options and training needs, 2000-2006

'The human brain': Hands on class for grade 1-8 to introduce neurobiology, 1991–2005

'Cell wars': Instructional class on basic immunology using a Cold Spring Harbor publication but adapting language to K- 8 level, 1995-2002

'Genomics': Hands on class introducing students (grade 7 and 8) to 'DNA profiling' as a means to introduce genomics, 2001-2006

Co-Chair: Committee on organizational and instructional effectiveness, Chapel Hill High School Improvement Plan, 2000

Teaching:

1. Course Director:

1. Physiology 833 Advanced Physiology and Experimental Medicine, 2008 - present
2. Physiology 840d (3 cr. hr.), Advanced Physiology (Endocrine and gastrointestinal system : Molecular mechanisms and mouse models of disease), 2006
3. Physiology 125 (3 cr..hr.), "Physiological Genomics: From systems to molecules and back," 2002-2004
4. Medical Physiology, 1990-1995
5. Physiology 200 (5 cr. hr.), Medical Physiology for Physiology graduate students, 1987
6. Physiology 202 (4 cr. h r.), Advanced Cellular Physiology, 1986-1988

7. Physiology 220 (1 cr. hr.), Seminars in Cellular Physiology, 1986
8. Assistant course director to Professor E. Perl for first year Medical Physiology course, 1985

2. Course Instructor

A. Medical Students

First Year Medical Physiology course:

2006-present	8 lectures in Renal Physiology, 1 small group in Renal Physiology Instructor Clinical Assessment Course
2000-2005	9 lectures in Renal Physiology, 2 small groups in Renal Physiology
1985-2004	Small group leader in Medical physiology, 9 small groups on all organ systems
1999	2 lectures in Endocrinology, 1 small group in Endocrinology 8 lectures in Renal Physiology, 2 small groups in Renal Physiology
1996-98	3 lectures in Respiratory Physiology, 1 small group in Endocrinology 6 lectures in Renal Physiology, 1 small group in Renal Physiology
1995-96	2 lectures in Respiratory Physiology, 1 small group in Respiratory Physiology 6 lectures in Renal Physiology, 1 small group in Renal Physiology 2 lectures in Cardiovascular Physiology
1993-94	6 lectures in Endocrinology, 1 small group in Endocrinology, 5 lectures in Renal Physiology, 1 small group in Renal Physiology
1987-92	5 lectures in Endocrinology, 5 lectures in Gastrointestinal secretion, 1 small group
1985-86	9 lectures in Endocrinology and 2 small group sessions
1982-83	4 lectures in Endocrinology

Second Year Gastrointestinal Pathophysiology courses:

1996-97	1 lecture in gastrointestinal secretion
1995-96	1 lecture in molecular basis of gastrointestinal growth
1982-94	2 lectures in gastrointestinal secretion

B. Graduate Students

2008	Physiology 833 – 6 sessions on Advanced Physiology and Experimental Medicine
2002-2004	Physiology 125 - 7 sessions on development and application of genetically manipulated mice to study the endocrinology of growth and neoplasia
1998-2001	Physiology 140 - 6 lectures/discussion in Gastrointestinal Physiology
1998-2001	Cell and Molecular Biology - 117 Seminar Leader
1994	Physiology 285 - Seminar course in Physiology for Physical Education and Sports Science graduate student, 1 session
1990-94	Physiology 240 - journal/seminar course on Physiology, 4 sessions
1987	Physiology 220 - seminar discussion in Cellular Physiology, 3 sessions.
1986	Micro 190 - Molecular neurobiology, 1 lecture
1986	Physiology 202 - seminar discussion in Advanced Cellular physiology, 9 sessions
1983	Physiology 203 - seminar discussion in Advanced Gastrointestinal Physiology, 9 sessions
1982-84	Physiology 140 - lectures in Endocrinology and Gastrointestinal Physiology

C. Undergraduate Students

2003-pres.	Biology 175 - Molecular Basis of Disease
1999-pres.	Neurobiology 121 - Molecular Basis of Memory Loss with Aging

3. Committees

Center for Women's Health Research Director Search Committee 2007
 Physiology Department Qualifying Examination Committee 2006
 Neurobiology Curriculum Comprehensive Examination Committee 2004-
 Physiology Department Graduate Committee, July 2000 - June 2002.
 Chair of Physiology Comprehensive Examination Committee, 1997, 2000 - 2002.
 Physiology Department Graduate Committee, 1985-1995
 Medical School Curriculum Review Committee 1992-1995

4. Student Research:

A. Preceptor, thesis advisor for research toward Ph.D. [* = successful external funding]

Brooks Scull Cell & Molecular Physiology 2007-
 Nicole Schwerbrock, Nutrition 2006- (Co-mentor with Melinda Beck)
 Kathryn Hamilton, Cell & Molecular Physiology 2006-
 Vicki Newton, Cell & Molecular Physiology 2005-
 Nicole Ramocki, Cell & Molecular Physiology 2002-2007 (**Graduate student impact award**)
 * Carmen Zuniga, Cell & Molecular Physiology 2001-2005. Graduated July 2005 (**Minority supplement recipient**).
 * Arianne Theiss, Cell & Molecular Physiology 2001-2005. Graduated July 2005 (**Graduate student impact award**)
 Holly Goebel, Cell & Molecular Physiology 1999-2001. Graduated (M.Sc) December 2001
 Yan Ling, Cell & Molecular Physiology 1998-2000. Graduated December 2000.
 * Dani Smith, Experimental Psychology 1997-2000. Graduated April 2000 (**NRSA recipient**)
 Kristen Williams, Cell & Molecular Physiology 1997-2001. Graduated December 2001 (**Howard Hughes Fellowship**)
 Megan Miller, Nutrition 1997-2002. Graduated May 2002
 * Kaye Stenvers, Neurobiology 1991-1996. Graduated May 1996 (**NRSA recipient**)
 Jessie. English-Hepler, Neurobiology 1985-1991. Graduated March 1991
 * Philip Brooks, Neurobiology 1985-1990. Graduated July 1990 (**NRSA recipient**)
 Catherine. Jin, Cell & Molecular Physiology, 1983-1989. Graduated July 1989
 Billie Moats-Staats, Biochemistry 1982-1987. Graduated July 1987
 Mary. Hynes, Neurobiology 1982-1987. Graduated, December, 1987

B. Member of thesis committee (last five years only)

Current

Ivana Semova (Cell & Molecular Physiology)
 Pamela Hesker (Genetics)
 Mahita Kadmiel (Cell & Molecular Physiology)
 Wengi Pan (Genetics)
 Melanie Weed (Genetics)
 Lucia Seminario Vidal (Cell & Molecular Physiology)
 Sushmita Jha (Cell & Molecular Physiology)
 Hsin-Yuan Cheng (Cell & Molecular Physiology)
 Maile Henson (Neurobiology)

Past (last five years only)

Alexia Smith (Nutrition)
 Stacy Foh (Neurobiology)
 Joshua Uronis (Genetics)
 Ming Yu (Oral Biology, Genetics)
 Erica Rinella (Genetics)
 David S. Paul (Nutrition)
 Julie Ledford (Genetics)
 Julie Rasmussen (Cell & Molecular Physiology)
 Gloria Haskell (Neurobiology)
 Samantha Gizerian Ervin (Neurobiology)
 Rebecca Haberman (Neurobiology)

C. Rotation students (last five years)

Lisa McCoig (BBSP)
 Gieira Jones (BBSP)
 Lauren Parker (IBMS)
 Leah Watson (IBMS)
 Kathryn Hamilton (Cell & Molecular Physiology)
 Vicki Newton (Cell & Molecular Physiology)
 Koji Yashiro (Cell & Molecular Physiology)
 Nicole Ramocki (Cell & Molecular Physiology)
 Carmen Zuniga (Cell & Molecular Physiology)
 Arianne Goodrich (Cell & Molecular Physiology)

Kassie Helms (Johns Hopkins, Psychology)
 Heather Nelson (Nutrition)
 Holly Goebel (Cell & Molecular Physiology)
 Dani Smith (Experimental Psychology)
 Kristen Williams (Cell & Molecular Physiology)
 Kim Barnett (Cell & Molecular Physiology)
 Megan Miller (Nutrition)
 Kristine Baerwald (Neurobiology)
 David Bucci (Neurobiology)

D. Preceptor for undergraduate research (since 1996) [* = successful external funding]

Bogho Odera Eluka 2005 (PMABS)
 Sukaina Ahmed 2004 –present (Nutrition)
 Mia Yang 2005 –present (Honors Biology)
 Kirby Tanner 2004-2005 (Honors Biology)
 * Leila Lackey 2004 (Johns Hopkins student, Summer Research, **(AGA fellow)**)
 Timica Campbell 2004 (Honors Biology)
 Katherine Kershaw, 2001-2005
 * Kelly Poore, 2000-2002 (Honors Chemistry, **CCFA fellow**)
 * Sundarkia Newman, 1999-2001 (Honors Chemistry **CCFA fellow**)
 Kimberley Clark, 1996-2000 (Psychology)
 C. Edward Lord, 1997-1999 (Honors Biology)
 Amanda Quick, 1996-1997 (Honors Biology)

E. Preceptor for medical student research (last 5 years)

Meaghan Hunt, Distinguished Scholar, August 2006 - June 2007 (**Pillsbury award for best poster at student research day**).

5. Research Fellows and Junior Faculty [* = successful external funding]

November 2008 – present	Andrea Azcarate-Peril, PhD, Assistant Professor, Cell & Molecular Physiology (Simmons Fellowship)
January 2009-present	Shengli Ding Ph.D. Postdoctoral fellow in Cell & Molecular Physiology
November 2008-present	Andrea Azcarate-Peril Ph.D Assistant Professor in Cell & Molecular Physiology; Simmons Scholar
July 2006 – present	*Christopher Dekaney, PhD, Assistant Professor in Surgery (Co-Mentor K01)
July 2006 – present	Aaron Garrison, MD, Post-doctoral fellow in Trauma Research (Co-mentor)
July 2006 – present	*Michael Helmuth, MD, Associate Professor in Pediatric Surgery (K08 Co-mentor)
July 2006 – present	*Scott Magness, PhD, Assistant Professor in Medicine (K01; AGA Research Scholar)
July 2006-December 2007	Michael Chi, PhD, Post-doctoral fellow in Interdisciplinary Obesity Research (IDOT Fellowship)
May 2006-present	Emily Wilson, PhD, SPIRE Post-doctoral fellow
2004-present	*Sandra Kim, MD Assistant Professor in Pediatrics, Gastroenterology (K08 Award Co-mentor)
2004-present	Howard Zhang, MD, Post-doctoral fellow in Gastroenterology
2004- June 2008	* Rachel Rigby, Ph.D., Post-doctoral fellow in Gastroenterology (CCFA Fellowship; GRG/AGA Abstract of the year award)
June 2001-2004	* Shira Fruchtman, Ph.D., Post-doctoral fellow in Gastroenterology (NRSA-NIH)
August 2000- 2004	Heather Wilkins, Ph.D., SPIRE Post-doctoral fellow
March 1999-July 2000	Songling Liu, MD, Post-doctoral fellow in Gastroenterology
January 1999-Present	* Temitope Keku, Ph.D., Research Assistant Professor (NIH Minority Investigator Awardee; K01 Awardee)
July 1996-2002	* Jolanta Pucilowska, MD, Research Instructor in Physiology (K08 Awardee)
October 1996-1999	Gina Pete, Ph.D., Carolina Minority Post-doctoral Fellow

October 1995-1998	* Ric Van Tol, Ph.D., Post-doctoral Fellow in Gastroenterology (CCFA fellowship)
April 1994-June 1996	Kinuko Ohneda, MD/Ph.D., Post-doctoral fellow in Physiology
January 1994- July 1996	Jolanta Pucilowska, MD, Post-doctoral fellow in Pediatric Endocrinology
July 1992-June 1994	Douglas Winesett, MD, Post-doctoral fellow in Pediatric Gastroenterology
July 1992-June 1993	Jill A. Cohen, MD, Post-doctoral fellow in Medicine
August 1991-December 1993	* Ellen Zimmermann, MD, Post-doctoral Fellow/Clinical Instructor in Medicine (KO8 awardee)
July 1989-June 1991	S. Selub, MD, Clinical Fellow in Gastroenterology
October 1988-July 1990	Kim Seroogy Ph.D., Post-doctoral Fellow in Physiology, Joint supervisor with Edward Perl
October 1988-January 1991	* D.B. Rountree, Ph.D., Fellow in Pediatric Endocrinology (CCFA fellowship)
May 1986-April 1987	M. Davenport, MD, Clinical Fellow in Pediatric Endocrinology
August 1985-July 1986	V.K.M. Han, MD, Clinical Fellow in Pediatric Endocrinology
August 1983 –July 1986	W Russell MD, Clinical Fellow in Pediatric Endocrinology

6. Visiting Professors:

April 2005, November 2005, March 2000, July 2006	Michael Helmraht, MD, Assistant Professor in Surgery, Baylor University, Visiting scientist
November 2002-June 2002	Rebecca Haberman Ph.D, Associate Scientist, John's Hopkins University, Visiting scientist
January 1998-June 1998.	Jenny Oldham, Ph.D., Scientific Research Officer, New Zealand Pastoral Agriculture Institute (AgResearch), Hamilton, New Zealand. Sabbatical
April 1997-July 1997	Corinna Britta Steeb, Ph.D., Instructor, Department of Zoology, University of Adelaide, Australia. Sabbatical
July 1995-June 1996	Lars Savendahl MD/Ph.D., Associate Professor, Department of Pediatrics, Umea University, Sweden. Sabbatical
July 1994-June 1995	Michael McBurney, Ph.D., Senior Lecturer, Department of Food Science and Nutrition, University of Alberta, Canada. Sabbatical.
August -September 1991	C. Vaillant, Ph.D., Senior Lecturer in Veterinary Preclinical Sciences, University of Liverpool, UK One month visit for training in <i>in situ</i> hybridization histochemistry.
September 1990-March 1991	Hermon Dowling MD, F.R.C.P., Sabbatical for training in molecular gastroenterology.
August 1987	Dr. Ling Chen, Training in <i>in situ</i> hybridization histochemistry.
February-December 1986	M. Rethelyi, MD, Visiting Professor, Second Department of Anatomy, Hungary, training in probe preparation and hybridization procedures for <i>in situ</i> hybridization histochemistry.
November 1986	S. Trippel, MD, Assistant Professor, Massachusetts General Hospital and Harvard Medical School. One week training in RNA extraction and hybridization procedures

- February-August 1985 J. Priestly, Ph.D., St. Thomas' Hospital Medical School, UK. Training in probe preparation and hybridization procedures for *in situ* hybridization histochemistry.
- April 1985 J. Walsh, MD, Professor, UCLA School of Medicine. One week training in RNA extraction and hybridization procedures.
- October 1984 C. Vaillant, Ph.D., Assistant Professor in Physiology, University of Liverpool, UK. One month visit for training in *in situ* hybridization histochemistry.

Publications:

Blair EL, Grund ER, **Lund PK**, Piercy, Reed JD, Sanders DJ. Comparison of vagal and meat stimulation on gastric acid secretion and serum gastrin. *J Physiol* 1977;266:157-172.

Blair EL, Gund ER, **Lund PK**, Sanders DJ. A possible origin of circulating gastrin Component IV in cats. *J Physiol* 1977;273:561-572.

Hirst BH, **Lund PK**, Reed JD, Sanders DJ, Shaw B, Taylor W. Effect of a combined oestrogen-progestin preparation on gastric acid and pepsin secretion, serum gastrin concentration and biliary secretion of bile acids, phospholipids and cholesterol in the cat. *Brit J Pharmacol* 1978;64:87-95.

Blair EL, Grund ER, **Lund PK**, Reed JD, Sanders DJ, Thompson MH, Venables CW. Gastrin Release. In: *Gut Hormones*. Bloom S, ed. Churchill Livingstone, 1978;pp:151-155.

Lund PK, Sanders DJ. Vagal regulation of gastrin and gastric acid secretion. In: *Gastrins and the Vagus*. Rehfeld JF and Amdrup E. eds. Academic Press, 1979;pp:157-169.

Blair EL, Hammill A, Jackson B, **Lund PK**, Nicholson E, Sanders DJ. The effect of stimulation by meat on gastrins in the pyloric antral mucosa of cats. *J Physiol* 1979;295:201-217.

Blair EL, Hirst BH, **Lund PK**, Reed JD, Sanders DJ, Shaw B. Gastric acid and pepsin stimulating activity of non-sulphated fragments of gastrin in the cat. *Digestion* 1980;20:190-200.

Hirst BH, Reed JD, **Lund PK**, Sanders DJ. Sensitivity of parietal cells to gastrin in the cat. Comparison with man and dog. *Digestion* 1980;20:300-306.

Lund PK, Goodman RH, Jacobs JW, Habener JF. Glucagon precursors identified by immunoprecipitation of products of cell-free translation of messenger RNA. *Diabetes* 1980;29:583-586.

Goodman RH, **Lund PK**, Jacobs JW, Habener JF. Pre-prosomatostatins: Products of cell-free translations of messenger RNAs from anglerfish islets. *J Biol Chem* 1980;255:6549-6552.

Goodman RH, Jacobs JW, Chin WW, **Lund PK**, Dee PC, Habener JF. Nucleotide sequence of a cloned structural gene coding for a precursor of pancreatic somatostatin. *Proc Natl Acad Sci USA* 1980;77:5869-5873.

Goodman RH, **Lund PK**, Barnett FH, Habener JF. Intestinal pre-prosomatostatin synthesis in the intestine demonstrated by identification of an mRNA coding for a precursor by cell-free translations and hybridization with a cloned islet cDNA. *J Biol Chem* 1981;256:1499-1501.

Habener JF, **Lund PK**, Jacobs JW, Dee PC, Goodman RH. Polyprotein precursors of regulatory peptides. In: *Peptides: Synthesis, Structure, Function*. Rich DH and Gross E eds. 1981;pp:457-469.

Jacobs HW, **Lund PK**, Goodman RH, Potts JT Jr, Bell NH, Habener JF. Biosynthetic precursor to calcitonin is a glycoprotein. *J Biol Chem* 1981;256:2803-2807.

Lund PK, Goodman RH, Habener JF. Intestinal glucagon mRNA identified by hybridization to a cloned islet cDNA encoding a precursor. *Biochem Biophys Res Commun* 1981;100:1659-1666.

Lund PK, Goodman RH, Habener JF. Pancreatic pre-proglucagons are encoded by two separate mRNAs. *J Biol Chem* 1981;256:6515-6518.

Habener JF, Goodman RH, Jacobs JW, **Lund PK**. Somatostatin, glucagon, and calcitonin: A molecular approach to biosynthesis in peripheral and neural tissues. In: *Molecular Genetics and Neuroscience: A New Hybrid*. Schmitt FO, Bloom FE, and Bird S eds. Raven Press, New York, 1982;pp:349-359.

Lund PK, Goodman RH, Dee PC, Habener JF. Pancreatic pre-proglucagon cDNA contains two glucagon-related coding sequences arranged in tandem. *Proc Natl Acad Sci USA* 1982;79:345-349.

Blair EL, Grund ER, **Lund PK**, Reed JD, Sanders DJ. Comparison of gastrin bioactivity and immunoreactivity of antral extracts from man, pig, and cat. *J Physiol* 1982;325:419-421.

Lund PK, Goodman RH, Montminy MR, Dee PC, Habener JF. Anglerfish Islet Pre-proglucagon II: Nucleotide and Corresponding Amino Acids Sequence of the cDNA. *J Biol Chem* 1983;258:3280-3284.

Heinrich G, Gros P, **Lund PK**, Bentley RC, Habener JF. Pre-proglucagon messenger RNA: Nucleotide and encoded amino acid sequences of the rat pancreatic cDNA. *Endocrinology* 1984;115:2176-2182.

Habener JF, Goodman RH, Jacobs JW, **Lund PK**. Somatostatin biosynthesis: Structure and processing of precursors deduced from recombinant cDNAs. *Serono Symposium International, Athens, Greece, June 1985*;pp:47-61.

Habener JF, Goodman RH, and **Lund PK**. Complementary DNAs encoding precursors of glucagon and somatostatin. In: *Biogenetics of Neurohormonal Peptides*. Hakanson R and Thorell J eds. Academic Press, San Diego, 1985;pp:47-61.

Lund PK, Moats-Staats BM, Simmons JG, D'Ercole AJ, Hoyt EC, Van Wyk JJ. Isolation and characterization of cDNAs encoding a human Ubiquitin precursor. *J Biol Chem* 1985;260:7609-7613.

Han VKM, Hynes MA, Jin C, Towle AC, Lauder J, **Lund PK**. Cellular localization of proglucagon/glucagon-like-peptide I messenger RNAs in rat brain. *J Neuroscience Res* 1986; 16:97-101.

Lund PK, Moats-Staats BM, Hynes MA, Simmons JG, Jansen M, D'Ercole AJ, Van Wyk JJ. Somatomedin-C/IGF-I and IGF-II mRNAs in rat fetal and adult tissues. *J Biol Chem* 1986;261:14539-14544.

Vaillant CR, **Lund PK**. The distribution of glucagon-like-peptide I in the canine and feline gastrointestinal tract and pancreas. *J Histochem Cytochem* 1986;34:1117-1121.

Han VKM, Snowert J, Towle AC, **Lund PK**, Lauder JM. Cellular localization of tyrosine hydroxylase mRNA and its regulation in rat adrenal medulla and brain by in situ hybridization with an oligodeoxyribonucleotide probe. *J Neuro Res* 1987;17:11-18.

Hynes MA, Van Wyk JJ, Brooks PJ, D'Ercole AJ, Jansen M, **Lund PK**. Effects of hypophysectomy and growth hormone replacement on somatomedin-C/IGF-I and IGF-II mRNAs in rat tissues. *Molecular Endocrinology* 1987;1:233-242.

Han VKM, D'Ercole AJ, **Lund PK**. Cellular localization of Somatomedin (Insulin Like Growth Factor) Messenger RNA in the Human Fetus. *Science* 1987;236:193-197.

Lund PK, Han VKM, D'Ercole AJ, Hynes MA, Van Wyk JJ. Somatomedin/insulin-like growth factors mRNAs as studied by in situ hybridization histochemistry. In: *Nordisk Insulin Symposium No. 1 Growth Hormone: Basic and Clinical Aspects*. Isaksson O and Hall K eds. Elsevier Academic Press, Amstrdam, 1987;pp:397-414.

Casella SJ, Smith EP, Van Wyk JJ, Joseph DR, Hynes MA, Hoyt EC, **Lund PK**. Isolation of rat testis cDNAs encoding an insulin-like growth factor I precursor. *DNA* 1987;6:325-330.

Han VKM, **Lund PK**, Lee DC, D'Ercole AJ. Expression of somatomedin/insulin-like growth factor messenger RNAs in the human fetus: Identification, characterization and tissue distribution. *J Clin Endocrinol Metab* 1988;66:422-429.

Hynes MA, Brooks PJ, Van Wyk JJ, **Lund PK**. Insulin like growth factor II messenger RNA is synthesized in the choroid plexus of the rat brain. *Molecular Endocrinol* 1988;2:47-54.

Jin CS, Han VKM, Simmons JG, Towle AC, Lauder JM, **Lund PK**. Distribution of glicentin, glucagon and GLP-I in rat brain: An immunocytochemical study. *J Comp Neurol* 1988;271:519-532.

Priestly J, Hynes MA, Han VKM, Rethelyi M, Perl ER, **Lund PK**. In situ hybridization using ³²P labelled oligodeoxyribonucleotides for the cellular localization of mRNA in neuronal and endocrine tissue. An analysis of procedural variables. *Histochemistry* 1988;89:467-479.

Davenport ML, D'Ercole AJ, Azizkhan JC, **Lund PK**. Somatomedin-C/insulin-like growth factor I (Sm-C/IGF-I) and insulin-like growth factor II (IGF-II) mRNAs during lung development in the rat. *Exp Lung Res* 1988;14:607-618.

Hoyt EC, Van Wyk JJ, **Lund PK**. Tissue and development specific regulation of a complex family of rat IGF-I mRNAs. *Molecular Endocrinol* 1988;2:1077-1086.

Van Wyk JJ, Casella SJ, Hynes MA, **Lund PK**. Indirect actions of growth hormone: In: *Human Growth Hormone. Progress and Challenges*. Underwood LE ed. Marcel Dekker, Inc., New York, 1988;pp:25-67.

Lund PK, Hynes MA, Moats-Staats BM, D'Ercole AJ. Synthesis of somatomedins/insulin-like growth factors in the fetus. In: *Advances in Research on Human Growth*. Grave GD and Cassorla FG eds. 1988.

Hynes MA, Jin CL, Ulshen MH, Simmons JG, **Lund PK**. Characterization, localization, and regulation of extrapancreatic proglucagon mRNAs. In: *Proceedings of the International Symposium on Glucagon and Related Peptides*. Osaka, Japan, Biomedical Research 9, Supplement 3, 1988;pp:147-155.

Rethelyi M, Metz CB, **Lund PK**. Distribution of neurons expressing calcitonin gene-related peptide mRNAs in the brain stem, spinal cord and dorsal root ganglia of rat and guinea pig. *Neuroscience* 1989;29:225-239.

Caldwell JD, Brooks PJ, Jirikowski GF, Barakat AS, **Lund PK**, Pederson CA. Estrogen alters oxytocin mRNA levels in the preoptic area. *J Neuroendocrinol* 1989;1:273-278.

Lund PK, Hoyt EC, Van Wyk JJ. The size of heterogeneity of rat IGF-I mRNAs is due primarily to differences in the length of 3' untranslated sequence. *Molecular Endocrinol* 1989;3:2054-2061.

Hynes MA, Brooks PJ, English J, Van Wyk JJ, **Lund PK**. Localization and regulation of IGF-I and IGF-II mRNA. In: *Advances in Growth Hormone and Growth Factor Research*. Muller EE, Cocchi D and Locatelli V eds. Pythagora Press, Roma-Milano and Springer Verlag, Berlin-Heidelberg, 1989;pp:103-119.

Van Wyk JJ, **Lund PK**. Autocrine and paracrine effects of the somatomedins/insulin-like growth factors. In: *Insulin and insulin-like growth factors in the central nervous system*. Le Roith D and Raizada MK eds. Plenum Press, 1990;pp:5-24.

Buchan AMJ, Curtis SB, **Lund PK**, Pederson RA. Effect of massive small bowel resection on component of peptidergic innervation of the rat small intestine. *Digestion* 1990;46:134-141.

Lund PK, Rountree, D, Selub SE, Ulshen MH. Molecular biology of gastrointestinal peptides and growth factors: Relevance for mucosal growth and adaptation. *Digestion* 1990;46(supp. 2):66-73.

Hepler JE, **Lund PK**. Molecular biology of the insulin-like growth factors: Relevance to the nervous system. *Molecular Neurobiology*. 1990;2:93-127.

Seroogy KB, Mohapatra NK, **Lund PK**, Rethelyi M, McGehee DS, Perl ER. Species-specific expression of cholecystokinin messenger RNA in rodent dorsal root ganglia. *Molecular Brain Research* 1990;7:171-176.

Jin SC, Hynes MA, **Lund PK**. Ontogeny of glucagon messenger RNA and encoded precursor in the rat intestine. *Regulatory Peptides* 1990;29:117-131.

Brooks PJ, **Lund PK**, Stumpf WE, Pederson CA. Oxytocin mRNA levels in the medial preoptic area are increased during lactation. *J Neuroendocrinol* 1990;2:621-626.

Hepler JE, Van Wyk JJ, **Lund PK**. Different half-lives of insulin-like growth factor I mRNAs that differ in length of 3' untranslated sequence. *Endocrinol* 1990; 127:1550-1552.

Priestley JV, Rethelyi M, **Lund PK**. Semi-quantitative analysis of somatostatin mRNA distribution in the rat central nervous system using *in-situ* hybridization. *J Chem Neuroanatomy* 1991;4:131-153.

Rethelyi M, Mohapatra NK, Metz CB, Petrusz P, **Lund PK**. Colchicine enhances mRNAs encoding the precursor of calcitonin gene-related peptide in brainstem motoneurons. *Neuroscience*. 1991;42:531-539.

Lund PK, Hoyt EC, Van Wyk JJ. Structural and functional characterization of IGF-I RNA 3' variants. In: *Molecular Biology of Insulin and the IGFs*. Le Roith D and Raizada MK eds. Plenum Press, 1991;pp:15-21.

Lund PK, Hepler JE, Hoyt EC, Simmons JG. Physiological relevance of IGF-I mRNA heterogeneity. In: *Modern Concepts of Insulin-like Growth Factors*. Spencer EM ed. 1991;pp:111-120.

Hoyt EC, Hepler JE, Van Wyk JJ, **Lund PK**. Structural characterization of exon 6 of the rat IGF-I gene. *DNA and Cell Biology* 1992;11:433-441.

Jin SLC, Hynes MA, Simmons JG, Lauder JM, **Lund PK**. Ontogeny of glucagon messenger RNA in the rat pancreas. *Histochemistry* 1992;97:431-438.

Rountree DB, Ulshen MH, Selub SE, Fuller CR, Bloom SR, Ghatei MA, **Lund PK**. Nutrient-independent increases in proglucagon and ornithine decarboxylase messenger RNAs after jejunoileal resection. *Gastroenterology* 1992;103:462-468.

Ulshen MH, Dowling RH, Fuller CR, Zimmermann E, **Lund PK**. Enhanced growth of small bowel in transgenic mice overexpressing bovine growth hormone. *Gastroenterology* 1993;104:973-980.

Zimmermann E, Sartor B, McCall RD, Pardo M, **Lund PK**. IGF-I and IL-1 beta in a rat model of granulomatous enterocolitis and hepatitis. *Gastroenterology* 1993;105:399-409.

Simmons JG, Van Wyk JJ, Hoyt EC, **Lund PK**. Multiple transcription sites in the rat IGF-I gene give rise to IGF-I mRNAs that encode different IGF-I precursors in cell-free systems. *Growth Factors*, 1993;9:205-221.

Lund PK. Nutritional Control of Genes Encoding Gastrointestinal Peptides. In: *Nutrition and Gene Expression*. Berdanier CD and Hargrove JL eds. 1993; pp:91-116.

Lund PK. Insulin like growth factor I: molecular biology and relevance to tissue specific expression and action. In: *Recent Progress in Hormone Research*. Academic Press Inc. 1994;49:pp:125-148.

Lund PK. Insulin-like growth factors. In: *Gut Peptides:Biochemistry and Physiology*. Dockray G and Walsh JH eds. Raven Press New York. 1994; pp:587-613.

Lund PK. Transcriptional and Post-Transcriptional Regulation of Protein Synthesis. In: *Growth Regulation*. 1994;4(1);pp:1-5.

Stenvers KL, Zimmermann EM, Gallagher M, and **Lund PK**. Expression of Insulin-like Growth Factor Binding Protein-4 and -5 mRNAs in Adult Rat Forebrain. *J Comparative Neurology* 1994;339:91-105.

Lund PK, Hoyt E, Simmons JG, Ulshen MH. Regulation of intestinal glucagon gene expression during adaptive growth of small intestine. *Digestion* 1994;54:371-373.

McCall RD, Haskill S, Zimmermann EM, **Lund PK**, Sartor RB. Tissue interleukin 1 and interleukin-1 receptor antagonist expression in enterocolitis in resistant and susceptible rats. *Gastroenterology* 1994;106:960-972.

Bennett E, Stenvers KL, **Lund PK**, Popko B. Cloning and characterization of a cDNA encoding a novel fatty acid binding protein from rat brain. *J Neurochem*. 1994;1616-1624.

Winesett DE, Ulshen MH, Hoyt EC, Mohapatra NK, Fuller CR, **Lund PK**. Regulation and localization of the insulin-like growth factor system in small bowel during altered nutrient status. *Am J Phys*. 1995;268:G631-G640.

Simmons JG, Hoyt EC, Westwick JK, Brenner DA, Pucilowska JB, **Lund PK**. Insulin-like growth factor-I (IGF-I) and epidermal growth factor (EGF) interact to regulate growth and gene expression in IEC-6 intestinal epithelial cells. *Mol Endocrinol*. 1995;9:1157-1165.

Ulshen MH, Hoyt EC, Fuller CF, Ghatei M, Bloom SR, **Lund PK** Increased ileal proglucagon expression after jejunectomy is not suppressed by inhibition of bowel growth. *Digestive Diseases and Sciences* 1996;41:677-683.

Hoyt EC, **Lund PK**, Winesett DE, Fuller CF, Ghatei MA, Bloom SR, Ulshen MH. Effects of fasting, refeeding and intraluminal triglyceride on proglucagon expression in jejunum and ileum. *Diabetes* 1996;45:434-439.

Lund PK, Zimmermann EM. Insulin-like growth factors and inflammatory disease. In: *Cytokines and Growth Factors in Gastroenterology*. Goodlad R and Wright N eds. Bailliere's Clinical Gastroenterology, London. 1996;10:pp.83-96

Stenvers KL, **Lund PK**, Gallagher M Increased expression of type 1 insulin-like growth factor I receptor messenger RNA in rat hippocampus is associated with aging and behavioural impairment *Neuroscience* 1996;72:505-518.

van Tol EAF, Petrusz P, **Lund PK**, Yamauchi M, Sartor RB Local production of corticotropin releasing hormone in experimental intestinal inflammation in rats. *Gut* 1996;39:385-92.

Ohneda K, Ulshen MH, Fuller CF, D'Ercole AJ, **Lund PK** Enhanced growth of small bowel in transgenic mice that overexpress human insulin-like growth factor I. *Gastroenterology* 1997;112:444-54.

Chen L, **Lund PK**, Burgess SB, Rudisch BE, McIlwain DL Growth hormone, IGF-I and motoneuron size *J Neurobiol* 1997;32:202-12.

Savendahl L, Underwood LE, Haldeman KM, **Lund PK** Fasting prevents experimental murine colitis produced by dextran sulfate sodium and decreases interleukin-1 and insulin-like growth factor -I messenger RNA *Endocrinology* 1997;138:734-40.

Lund PK. The alpha smooth muscle actin promoter: A useful tool to analyze autocrine and paracrine roles of mesenchymal cells in normal and diseased bowel. *Gut* 1998; 42:320-322.

Lund PK, Stenvers KL, Gallagher M. Insulin-like growth factors I: Regulation and interactions during aging-induced decline and impairment within the hippocampus. In: *IGFs In The Nervous System*. Muller and Eugenio E eds. 1998;47-59.

Lund PK Molecular Basis of Intestinal Adaptation. The Role of the IGF System. In: *Annals of the NY Academy of Science*. Reicken EO ed. 1998;859,18-37.

Zeeh JM, Mohapatra N, **Lund PK**, Eysselein VE, McRoberts JA. Differential expression and localization of IGF-I and IGF binding proteins in inflamed rat colon. *J. Receptor and Signal Transduction Research* 1998;18:265-280.

Simmons JG, Pucilowska J, **Lund PK**. Autocrine and paracrine actions of intestinal fibroblast-derived insulin-like growth factors (IGFs). *Am J Physiol*; 1999 (*Gastrointest Liver Physiol* 39);276:G817-G827.

van Tol EAF, Holt L, Kong FM, Rippe RR, Yamauchi M, Pucilowska J, **Lund PK**, Sartor RB. Bacterial cell wall polymers promote intestinal fibrosis by direct stimulation of myofibroblasts. *Am J Physiol* 1999 (*Gastrointest Liver Physiol* 40);277:G245-G255.

Pete, G, Fuller CR, Oldham JM, D'Ercole AJ, Kahn CR, **Lund PK**. Post-natal Growth Responses to IGF-I in IRS-1 Deficient Mice. *Endocrinology* 1999, 140:5478-5487.

Lund PK In: *Handbook of Physiology; Section 7 The Endocrine System, Volume V. Hormonal Control of Growth*. Kostyo JL and Goodman HM eds. Oxford University Press, New York, NY 1999;pp:537-571.

Lund PK. IGFs and the digestive tract. In: *The insulin-like growth factors system*. Roberts CT and Rosenfeld R eds. Humana Press. 1999;pp:517-544.

Pucilowska JB, Williams KL, **Lund PK**. Fibrosis and inflammatory bowel disease: Cellular mediators and animal models. *Am J. Physiol*. 2000.279, 9653-9659.

- Tsuzaki M, Brigman B, Yamamoto J, **Lund PK**, Simmons J. Insulin-like growth factor-I is expressed by avian flexor tendon cells. *J Orthopaedic Research*. 2000; 18:4:546-556
- Zimmermann EM, Li, L Pucilowska JB, Hoyt, EC, Lichtman S, **Lund PK**. Cell specific localization of insulin-like growth factor binding protein mRNAs in rat liver. *Am J Physiol (Liver Physiol)*, 2000; 278:G447-G457.
- Peterson C, Gillingham M, Carey HV, Mohapatra NK, **Lund PK**, Ney DM. IGF-I stimulates intestinal growth and localized expression of IGF binding protein 3 and 5 mRNAs in parentally fed rats. *J Parenteral and Enteral Nutrition* 2000; 24:288-295.
- Pucilowska JB, Mohapatra NK, McNaughton KK, Hoyt EC, Sartor RB, **Lund PK**. IGF-I and procollagen $\alpha 1(I)$ are co-expressed in a subset of mesenchymal cells in active CD. *Am J Physiol* 2000; 279:G1307-G1322.
- Williams KL, Fuller CR, Dieleman LA, DaCosta CM, Haldemann KM, Sartor RB, **Lund PK**. Enhanced survival and mucosal repair following dextran sodium sulfate-induced colitis in transgenic mice that overexpress growth hormone. *Gastroenterology* 2001; 120:925-937.
- Smith DR, Hoyt EC, Gallagher M, Scwhabe R. **Lund PK** Effect of age and cognitive status on basal level AP-1 activity in rat hippocampus. *Neurobiology of Aging* 2001; 22:773-786.
- Gillingham MB, Kritsch KR, Huss DJ, Murali SG, **Lund PK**, Ney D. Resection upregulates the IGF-I system of parenterally fed rats with jejunocolic anastomosis. *Am J Physiol* 2001; 281:G1158-1168.
- Nicolle M, Gonzalez J, Sugaya K, Bryan D, Lund PK, Gallagher M, McKinney M. Signatures of hippocampal oxidative stress in aged spatial learning-impaired rodents. *Neurosci* 2001; 107:415-431.
- Bizon JL, Han JS, Chun HJ, Pucilowska J, **Lund PK**, Gallagher M. Evaluation of hypothalamic-pituitary-adrenal axis function and hippocampal glucocorticoid receptor expression in behaviorally characterized young and aged rats. *Euro J Neuroscience* 2001; 14:1739-1751
- Lund PK**. Gender equity in biomedical science: Comments From a Lone Female Associate Editor. *Gastroenterology* 2001; 121:243-244.
- Lund PK** and Zuniga C. Intestinal fibrosis in human and experimental inflammatory bowel disease. *Current Opinions in Gastroenterology* 2001 17:318-323.
- Greenhalgh CJ, Miller ME, Hilton DJ, **Lund PK**. The suppressors of cytokine signaling (SOCS) proteins: negative regulators of cytokine signaling cascades: relevance to gastrointestinal function and disease. *Gastroenterology* 2002 123:2064-2081.
- Lund PK**. Physiological mouse genomics *Gastroenterology* 2002 123(2):405.
- Wilkins HR, Ohneda K, Keku TO, D'Ercole AJ, Fuller CR, Williams KL, **Lund PK**. Reduction of spontaneous and irradiation-induced apoptosis in the small intestinal mucosa of IGF-I transgenic mice. *Am J Physiol Gastrointest Liver Physiol*. 2002 283:G457-64.
- Ye P, **Lund P K**, D'Ercole AJD Deficient expression of insulin-receptor substrate -1 (IRS-1) fails to block insulin-like growth factor (IGF-I) stimulation of brain growth and myelination. *Brain Res Dev Brain Res*. 2002 136(2):111-21.
- Simmons JG, Pucilowska JB, Keku T, **Lund PK**. Insulin-like growth factor I and transforming growth factor beta have distinct effects on phenotype and proliferation of CCD 18Co intestinal myofibroblasts. *Am J Physiol* 2002 283:G809-818.
- Williams KL, Fuller CR, Fagin J, **Lund PK** Mesenchymal IGF-I overexpression: paracrine effects in the intestine, distinct from endocrine actions. *Am. J Physiol Gastrointest Liver Physiol* 2002 283:G875-G885.
- Martin C, Connelly A, Keku TO, Thomas S, Galanko J, Woosley JT, Schilebe B, **Lund PK**, Sandler RS NSAIDs, apoptosis, and colorectal adenomas. *Gastroenterology* 2002 123:1770-1777.

Lund PK. The Flexible Ph.D. Gastroenterology 2003 125:1301.

Connelly A, Satia-Abouta J, Martin C, Keku TO, Woosley JT, **Lund PK**, Sandler RS Vitamin C Intake and apoptosis in normal rectal epithelium. Cancer Epidemiology, Biomarkers & Prevention 2003; 12:559-565.

Gallagher M, Bizon JL, Hoyt, EC, Helm KA, **Lund PK** Effects of aging on the hippocampal formation in a naturally occurring animal model of mild cognitive impairment. Exp Gerontol 2003; 38(1-2):71-77.

Dahly E, Miller M, **Lund PK**, Ney D. Post receptor resistance to exogenous growth hormone exists in the jejunal mucosa of parenterally fed rats. J Nutr. 2004 Mar; 134(3):530-7.

McIlwain DL, Hoke VB, Kopchick JJ, Fuller CR, **Lund PK**. Differential inhibition of postnatal brain, spinal cord and body growth by a growth hormone antagonist. BMC Neuroscience 2004, 5:6.

Miller M, Michalyira C, Simmons J, Ney D, Haas D, Heath J, **Lund PK**. Suppressor of Cytokine Signaling-2: A Growth Hormone inducible inhibitor of intestinal epithelial cell proliferation. Gastroenterology 2004. 127:570-581.

Zimmerman E, **Lund PK** Fibrogenesis In: Kirsner's Inflammatory Bowel Disease Sixth edition eds. Sartor RB, Sandborn W. Saunders, New York, NY 2004; pp:219-229.

Theiss AL, Fruchtmann S, **Lund PK**. Growth factors in inflammatory bowel disease: the actions and interactions of growth hormone (GH) and insulin-like growth factor-I (IGF-I). Inflamm Bowel Dis. 2004, Nov; 10(6): 871-80.

Lund PK, Hoyt EC, Bizon J, Haberman R, Helm K, Gallagher, M. Transcriptional mechanisms of hippocampal aging. Exp Gerontol. 2004; 39(11-12): 1613-22.

Lund PK. The discovery of glucagon-like-peptide 1 (GLP-1). Regulatory Peptides 2005; 128(2): 93-6.

Liu S, Sanz S, **Lund PK**, Brenner D, Fuller R, Simmons J, Keku T, Prieto J, Castell-Cortazar I, Fagin J, Pucilowska J. Expression of Insulin-like Growth Factor I by activated hepatic stellate cells reduces fibrogenesis and enhances regeneration after liver injury. Gut 2005 54:134-141.

Helm KA, Haberman RP, Dean SL, Hoyt EC, Melcher T, **Lund PK** and Gallagher M. GABA-B receptor antagonist SGS742 improves spatial memory and reduces protein binding to the cAMP response element (CRE) in the hippocampus. J Neuropharmacology. 2005; 48(7):956-64.

Fruchtmann S, Simmons JG, Miller M, Greenhalgh CJ, Ney D, **Lund PK**. Suppressor of cytokine signaling-2 (SOCS2) modulates the fibrogenic actions of GH and IGF-I in intestinal mesenchymal cells. Am J Physiol Gastrointest Liver Physiol. 2005; 289(2):G342-50.

Theiss AL, Fuller CR, Simmons JG, Liu B, Sartor RB, **Lund PK**. Growth hormone reduces the severity of fibrosis associated with chronic intestinal inflammation. Gastroenterology 2005;129:204-219.

Theiss AL, Simmons JG, Jobin C, **Lund PK**. Tumor necrosis factor alpha increases collagen accumulation and proliferation in intestinal myofibroblasts via TNF receptor 2. J Biol Chem. 2005 280:36099-36109.

Keku TO, **Lund PK**, Galanko J, Simmons JG, Woosley JT, Sandler RS. Insulin resistance, apoptosis and colorectal adenoma risk. Cancer Epidemiol Biomarkers Prev. 2005;14(9):2076-81.

Michalyira CZ, Ramocki NM, Simmons JG, Scull BP, Tanner CK, McNaughton KK, Fuller CR, Woosley JT, Greenhalgh CJ, **Lund PK**. Haplotype insufficiency for SOCS2 enhances intestinal growth and promotes polyp formation in GH-transgenic mice. Endocrinology. 2006; 147(4):1632-41. **(Featured in Endocrine News)**

Michalyira CZ, Scull BP, McNaughton KK, Fuller CR, **Lund PK**. Suppressor of cytokine signaling-2 limits intestinal growth and enterotrophic actions of IGF-I in vivo. Am J Physiol, Gastrointest Liver Physiol. 2006; 291(3):G472-81.

Lund PK, Rigby RJ. SOCSing it to tumors: suppressors of cytokine signaling as tumor repressors. Gastroenterology 2006; 131:317-319.

Simmons JG, Wilkins H, Fuller CR, Miller M, D' Ercole AJ, Fagin James, **Lund PK**. Cell specific effects of insulin receptor substrate I (IRS-1) deficiency on normal and IGF-I mediated colon growth. *Am J Physiol* 2007;293 (5): G995-1003

Lund PK. What are the mechanisms of fibrosis in IBD ? In : Two hundred and fifty commonly asked questions in inflammatory bowel disease. Eds Fiocchi C, Katz J, Prantera C 2007 Negma-Lerad (France); In press.

Rigby RJ, Scull B, Simmons JG, Greenhalgh C, Alexander W, **Lund PK**. Suppressor of cytokine signaling (SOCS3) limits damage-induced crypt hyperproliferation and inflammation-associated tumorigenesis in the colon. *Oncogene* 2007 26:4833-41.

Dekaney CM, Fong JJ, Rigby RJ, **Lund PK**, Henning SJ, Helmrath MA. Expansion of intestinal stem cells associated with long-term adaptation following ileo-cecal resection in mice *Am J Physiol* 2007.293 (5):G1013-22

Ramocki NM, Wilkins HR, Magness ST, Lee GH, Simmons JG, Scull BP, McNaughton K, **Lund PK**. Insulin receptor substrate 1 deficiency promotes apoptosis of genetically damaged crypt stem cells and protects against APC^{Min/+} intestinal tumors. *Endocrinology* 2008.149 (1):261-7.

Zhang H, Morgan D, Cecil G, Burkholder A, Ramocki N, Scull B, **Lund PK**. Biochromoendoscopy: molecular imaging with capsule endoscopy for detection of polypoid lesions in the GI tract. *Gastrointestinal Endoscopy* 2008; 68(3):520-7. PMID:18499106.

Robertson K, Lu Y, Qing Su, MD, **Lund PK**, Liu JL. A general and islet cell-enriched overexpression of IGF-I results in normal islet cell growth, hypoglycemia and significant resistance to experimental diabetes. *Am J Physiol* 2008. 294(5):E928-38.

Keku TO, Sandler RS, Simmons JG, Galanko J, Woosley JT, Proffitt M, Omofoye O, McDoom M, **Lund PK**. Local IGFBP-3 expression, apoptosis and risk of colorectal adenomas. *Biomedical Central* 2008; 8(1):143.

Dekaney CM, von Allmen DC, Garrison AP, Rigby RJ, **Lund PK**, Henning SJ, Helmrath MA. Bacterial-Dependent Up-Regulation of Intestinal Bile Acid Binding Protein and Transport is FXR-Mediated Following Ileo-Cecal Resection. *Surgery* 2008; 144(2):174-81.

Garrison AP, Dekaney CM, VonAllmen DC, **Lund PK**, Henning SJ, Helmrath MA. Early but not late administration of glucagon-like peptide 2 following ileo-cecal resection augments putative intestinal stem cell expansion. *Am J Physiol*. 2009;296(3):G643-50.

Rigby RJ, Hunt MR, Scull BP, Helmrath MA, **Lund PK**. A new animal model of post-surgical inflammatory bowel disease and fibrosis: the effect of commensal microflora. *Gut* 2009. PMID: 19398439.

Presentations At National And International Conferences

Plenary lecture in molecular biology: The Fifth International Symposium on Gastrointestinal Hormones: 'Molecular biology of insulin-like growth factors', Vancouver, Canada, July 9, 1986.

The 30th Congress of the International Union of Physiological Sciences: Symposium on Regulation of GI Function: 'Messenger RNAs for regulatory peptides in the GI tract', Vancouver, Canada, July 17, 1986.

Gordon Research Conference on Peptide Growth Factors: 'Biosynthesis of insulin like growth factors in the fetus', Concord, NH, August 14, 1986.

Bayliss and Starling Society Symposium: 'Multiple regulatory steps in the biosynthesis of brain/gut peptides', Liverpool, England, September 29, 1986.

Carolina Conference on Molecular neurobiology, Chair and Speaker in session on growth factors and oncogenes: 'Insulin-like growth factors in the central nervous system', Quail Roost, NC, April 10, 1987.

Endocrine Society Symposium: 'Regulation of somatomedin/insulin-like growth factor mRNAs in non-hepatic tissues; Indianapolis, June 12, 1987.

Growth hormone: Basic and clinical aspects: 'Regulation and expression of genes for insulin-growth factors as studied with in situ hybridization', Stockholm, Sweden, July 1, 1987.

Congress on Advances in Growth Hormones and Growth Factor Research: 'Regulation and localization of insulin-like growth factor mRNAs', Milan, Italy, September 29, 1987.

International Symposium on Glucagon and Related Peptides 'Characterization, regulation and localization of extrapancreatic proglucagon mRNAs'. Osaka Japan, July, 1988.

International Congress of Endocrinology ' A complex family of insulin -like growth factor mRNAs' Kyoto Japan, July 1988.

International Conference on Enteric Biology ' Growth Factors during intestinal development and adaptation' Oxnard, California, October 1988.

Fourth International Symposium on Intestinal and Pancreatic Adaptation 'Molecular Biology of hormones and growth factors: Relevance to intestinal adaptation. West Berlin, West Germany, October 1989.

World Congress of Gastroenterology. 'Intestinal adaptation' Sydney, Australia, July, 1990.

Third International Symposium on Molecular and Cellular Biology of Insulin and IGFs. 'Structural and functional characterization of IGF-I mRNA 3' variants. Gainesville, Florida, October 1990.

2nd International Symposium on Insulin-like Growth Factors/Somatomedins "Physiological relevance of insulin-like growth factor I mRNA heterogeneity. San Francisco, California, January 1991.

Center for Gastrointestinal Biology and Disease: "Molecular and Cellular Basis of Inflammatory Bowel Disease." Chapel Hill, North Carolina, October 1992. Conference organizer, session chair and speaker on Insulin-like growth factors and inflammatory bowel disease.

Laurentian Hormone Conference, Puerto Rico, November 1992. Invited as speaker on "Insulin-like growth factors from molecular biology to physiology."

International Symposium on Glucagon-Like Peptide-1, Copenhagen, Denmark, May 1993. Invited speaker on "Regulation of intestinal glucagon gene expression during adaptive growth and nutritional perturbation."

Third International Symposium on Insulin-Like Growth Factors. Sydney, Australia. February, 1994. Invited speaker on "Transcriptional and post-transcriptional mechanisms."

International conference on Peptide Growth Factors in the GI Tract. Vail, CO. June 1994. Invited speaker on "IGF-I".

Tenth International Symposium on Gastrointestinal Hormones. Santa Barbara, Ca, August 1994. Invited speaker on "Growth Factors in IBD".

International Symposium on IGFs in the Central Nervous System Milan, Italy, May 1997 Invited speaker on "IGFs : Interegulation with other growth factors "

Meeting on Intestinal Plasticity in Health and Disease Berlin, October 1997 Invited speaker on "Molecular mechanisms of intestinal adaptation"

International Symposium on Inflammation, Tokyo, Japan, November 1997 Symposium on "Mechanisms of inflammation induced fibrosis". Invited speaker on "Insulin-like growth factors: IBD and fibrosis"

New Zealand Society for Endocrinology, Mount Maunganui, New Zealand, May 1999. Plenary Speaker. 'Genetically Manipulated Models as Tools to Study Growth Hormone and IGF-I Signal Transduction *In Vivo*.'

Banbury Conference on Mouse Phenotyping, Cold Spring Harbor August 2000, 'Growth, sex and heterozygotes'

Digestive Diseases Week, San Francisco, May 2002 (American Gastroenterology Association National meeting): Symposium on 'Growth hormone/IGF-I in intestinal adaptation and repair in short bowel syndrome and inflammatory bowel disease' Invited speaker for the basic science presentation. GH and IGF-I in adaptation and inflammation: new mechanisms and interactions for old trophic hormones.

International symposium on induction of fibrogenesis by intestinal and hepatic inflammation. Chapel Hill, North Carolina April 2002. Co-organizer with R. Balfour Sartor and David Brenner. Speaker on Insulin-like growth factor modulation of fibrosis: Suppressors and enhancers.

Digestive Disease Week New Orleans May, 2004, (American Gastroenterology Association National meeting): Symposium on Intestinal mucosal injury and repair, "Cell specific IGF-I signaling in intestine: relevance to intestinal injury and tumorigenesis"

International Symposium: The incretin concept today. Hannover, Germany May 2004, The discovery of the GLP-gene and peptide sequence: Who was first?

International Symposium on Neurobiology and Neuroendocrinology of Aging. Bregenz, Austria July 2004, Transcriptional mechanisms of hippocampal aging.

Diet Health and Digestive Disease Symposium. University of Manchester, October 2005, "Intestinal Growth, Bacteria and Obesity: The SOCS connection."

4th International Meeting on Inflammatory Bowel Diseases. Capri, Italy, April 2006, "Matrix and Mesenchymal Remodelling"

Experimental Biology 2007 Washington DC, April 2007, Symposium on Growth factors : proliferation and differentiation in the gastrointestinal system; " SOCS proteins and tropic effects of growth-hormone regulated JAK-STAT pathways in the intestine.

Endocrine Society 2007, Toronto Canada June 2007, Symposium on Tissue specific actions of insulin-like growth factors " IGF action in the gastrointestinal tract"

American Gastroenterology Association / British Society of Gastroenterology, London England September 2007, Meeting on 'Inflammation, repair, and fibrosis' "Mediators and suppressors of intestinal fibrosis."

Falk Forum on Diet, health and digestive disease Manchester England, September 2007. 'Good bacteria in health, disease and nutrient metabolism.'

Scholars in the Building Interdisciplinary Research Careers in Women's Health (BIRCWH). Women's Health Research Day. May 2008. "New Resources at UNC-CH."

American Gastroenterology Association Digestive Diseases Week. San Diego, CA, May 2008, Symposium on Intestine and Adipose Tissue; "Inflammatory Mediators Released from the Gut Wall and the Microbiome in the Development of Obesity."

IRACDA Conference. Chapel Hill, NC, June 2008. "Academic careers: roles, responsibilities, and responses."

First International Summit on Fibrotic Complications of Gastrointestinal Disease, Cleveland Clinic, Cleveland, Ohio. October 2009.

Invited Visiting Professorships (Last Five Years)

Manchester University, Faculty of Life Sciences, November 2006
Manchester University, Faculty of Life Sciences, October 2005
Flinders University, Department of Physiology, October 2004
Duke University, GI Division, September 2004
Ludwig Institute for Cancer Research, March 2004
Walter and Eliza Hall Research Institute, March 2004
University of Texas Medical Branch, GI Division, February 2004
Baylor University School of Medicine, GI Research Center, February 2004
University of Cincinnati, Division of Endocrinology and Metabolism, May 2003
Johns Hopkins University, GI Division, February 2003
Washington University School of Medicine, St. Louis, Digestive Diseases Center and Department of Pediatrics, Feb. 2003
Emory University, Division of Endocrinology and Metabolism, January 2002
University of Texas, Department of Biochemistry, San Antonio, January 2002
Case Western Reserve University, Division of Gastroenterology, December 2001
George Washington University, School of Medicine, Department of Physiology and Experimental Medicine, November 2001
Walter and Eliza Hall Research Institute, Melbourne, Australia, July 2001

Patents

Pending: "Capsule imaging devices, systems and methods for in vivo imaging applications"
PCT/US2006/018513

2006: "Treatment for aged-related cognitive decline and other conditions" PCT/US2005/034331