

Curriculum Vitae

Part 1: General Information

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Education

1970	B.Sc Honours	Medicine and Physiology	Kings College, London University
1973	MB. BS	Medicine and Surgery	Kings College Hospital, London University
1975	MRCP	Post-Graduate Medicine	Royal College of Physicians of UK
1980	MD (PhD Equivalent)	Doctorate Thesis in Medicine	London University

Postdoctoral Training

1974	House Physician	Medicine	Kings College Hospital, London
1974	House Surgeon	Surgery	Bromley Hospital, Kent, England
1975	Senior House Officer	Medicine	Charing Cross Hospital, London
1975-6	Medical Registrar	Medicine	King's College Hospital, London
1976-7	Medical Registrar	Medicine	The London Hospital, London
1977-9 / 1981-2	Medical Research Council Lecturer	Medicine (Dame Sheila Sherlock)	Royal Free Hospital, London
1980-1	Solomon A. Berson Research Fellow	Rosalyn S. Yalow, Nobel Laureate Med & Physiol, 1977	VAMC Bronx, USA
1982	Locum Senior Registrar	Medicine	St. George's Hospital, London

Licensure and Certification

1974	Medical Licensure, General Medical Council, United Kingdom
1975	Member, Royal College of Physicians of United Kingdom
1973	ECFMG Certification
1985	New York State Medical Licensure
1989	Diplomate in Internal Medicine, American Board of Internal Medicine
1990	Diplomate in Gastroenterology, American Board of Internal Medicine
2007	Massachusetts Medical Licensure
2008	Diplomate in Transplant Hepatology, American Board of Internal Medicine

Faculty Academic Positions

1986-1989	Assistant Professor	Health Sciences Center Brooklyn, State University of New York
1990-2003	Associate Professor	Health Sciences Center Stony Brook, State University of New York
2003-2004	Assistant Professor	Weill Medical College Cornell University

2004-2007	Associate Professor	Weill Medical College Cornell University
2007–curr	Lecturer in Medicine	Harvard Medical School, Boston

Appointment at Hospitals/ Affiliated Institutions

1982-1985	Clinical Assistant	GI-Hepatology, Northwick Park Hospital, England
1986-1989	Attending Physician	GI-Hepatology, SUNY Health Sciences Center, Brooklyn
1990-2003	Attending Physician	GI-Hepatology, SUNY Health Sciences Center Stony Brook
1990-2003	Chief, GI Section	GI-Hepatology, Veterans Administration Medical Center, Northport NY
2003-2004	Assistant Attending Physician	GI-Hepatology, New York Presbyterian Hospital, NY
2004-2007	Associate Attending Physician	GI-Hepatology, New York Presbyterian Hospital, NY
2007-current	Hepatologist/Transplant Hepatologist	GI-Hepatology, Beth Israel Deaconess Medical Center, Boston, MA

Other Professional Positions

1982-1985	Director of Medical Affairs, Janssen Pharnaceutical Ltd UK
1985-1986	Consultant, Janssen Pharmaceutical Ltd UK
1992-current	Founder and Director, Findadoc.com Inc
2003-	Scientific Advisory Board – ad hoc, Roche Pharmaceutical
2003-	Scientific Advisory Board – ad hoc, Schering Plough Corporation
2003-	Scientific Advisory Board – ad hoc, Glend
2003-	Scientific Advisory Board – ad hoc, Johnson and Johnson

Major Administrative Leadership Positions

1990-2003	Chief – GI Division, VAMC Northport, NY
1992-2000	Director – GI Fellowship Program, SUNY Health Sciences Center, Stony Brook
2007-current	Co-Director. Liver Tumor Center, Beth Israel Deaconess Medical Center

Committee Service

1997–2000	Institutional Review Board, VAMC Northport
2001-2003	Admissions Committee, SUNY HSC Stony Brook
2002	Hepatitis C Strategic Planning, Nassau County Department of Health, NY
2000 – 2003	Veterans Council on Hepatitis C, American Liver Foundation
2004 – 2008	VA Cooperative Study CS# 535 Data Safety Monitoring Board, Veterans Administration Research

Professional Societies

1973	British Medical Association
1976 -	Royal Society of Medicine
1978-	British Society of Gastroenterology
1987 -	New York Academy of Science
1991 -	American Association for the Advancement of Science
1993 -	American Society for Gastrointestinal Endoscopy
1995 -	American Gastroenterological Association
1998 -	American Association for the Study of Liver Disease

Grant Review Activities: National and International

2000-2002	SBRI Scientific Review Group, Permanent Member, National Institutes of Health
2003-2004	NIAID Special Emphasis Panel, National Institutes of Health
2003	Ad Hoc member ZA11 PRJ-A (S1), National Institutes of Health
2004	Ad hoc member ZA11-LW-M-M1, National Institutes of Health
2005	RFA-A1-05-030 Partnerships for Hepatitis C vaccine development 6, Ad hoc Member, National Institutes of Health
2006 -2007	NIAID AIDS Research Review Committee, National Institutes of Health
2006	Ad hoc member
2007	Ad hoc member
2008	NIAAA Special Emphasis Panel – Role of Mitochondria ZAA1 JJ (17), Ad hoc member, National Institutes of Health

2009 NIH Challenge Grant (RC1) Recovery Act 2009 ZRG1 HDM A 58 R

Editorial Activities

2009 Editor-in-Chief *Hepatic Medicine: Evidence and Research*
Dove Medical Press, Auckland, New Zealand

2000-3 Medical Editor Newsletter, American Liver Foundation Vietnam
Veterans Council

Ad hoc Reviewer

Gastroenterology
Digestive Disease and Sciences
J Lab Clin Med
Scand J Gastroenterology
GUT
Mayo Clinic Proceedings
J Clinical Gastroenterology
Transplantation
Clinical Immunology
British Medical Journal
European Journal of Hematology
Journal of Hepatology

British Medical Journal - Point of Care Peer Reviewer

Honors and Prizes

1978--1982	Medical Research Council Fellowship	Medical Research Council. Medical Research
1980-1981	Solomon A Berson Fellowship	Berson Foundation. Basic science research
1980-1981	Kings Fund Award	Kings Fund. Research Travel Abroad
1982	Legg Award	Royal Free Hospital London. MD Thesis work

Part II: Research, Teaching and Clinical Contributions

Report of Funded and Unfunded Projects

- 1988-90 American Foundation for AIDS Research Principal Investigator
 AIDS Gastropathy: Pathogenesis and Significance.
 The major goal of this study was to determine the effect of HIV infection on parietal cell function and of the HIV associated hypochlorhydria on drug absorption and bacterial overgrowth.
- 1989-90 Institutional NIH grant #RR05726 to HSC Principal Investigator
 Brooklyn
 Calcium Channel Blockade and Experimental Pancreatitis
 The major goal of the study was to determine in dose responsive fashion, the protective effect of CCBs on diet induced pancreatitis in mice
- 1991-92 Institutional NIH grant #RR05726 to Principal Investigator
 HSC Stony Brook
 Endoscopically placed pancreatic stents in the management of pancreatic duct strictures
 The major goal of the study was to determine in effect of pancreatic stents placed across main duct strictures on pain, exocrine and endocrine function
- 1992-1994 Schering Plough Corporation Investigator Principal Investigator
 Initiated Study
 Maintenance therapy of Chronic Hepatitis C with recombinant Interferon alfa
 The major goal of this study was to determine the effect of maintenance doses of interferon on chronic HCV disease progression
- 1994-1996 Schering Plough Corporation Investigator Principal Investigator
 Initiated Study
 Interferon alpha and nitric oxide in chronic hepatitis C virus liver disease
- 1998 Schering Plough Corporation and Chiron Principal Investigator
 Corporation- Investigator initiated study
 Branched DNA technology and TMA technology in HCV measurement.
 The aim of this study was to determine and compare the assay performance of bDNA, TMA and PCR for the measurement of HCV RNA in serum
- 2002-3 Roche Pharmaceutical Investigator Principal Investigator
 Initiated study. Greenberg Foundation
 Controlled Therapy Interruption for the treatment of resistant Chronic Hepatitis C virus infection

The aim of the study was to use the strategy first developed in HIV disease (Structured Therapy Interruption) to boost host immune response to HCV

2003-7 Greenberg Foundation; GCRC Weill Medical Principal Investigator
College Cornell University; Center for the
Study of Hepatitis C

The role of B cells in Hepatitis C virus clearance from serum

The major goal of this project was to determine the role of B cells in the control of HCV viral load by comparing HCV levels and clearance in the presence and absence of rituximab, a CD20 mAb that depletes peripheral blood B cells

2009 Bristol Myer Squibb Investigator Initiated Principal Investigator
Controlled Therapy Interruption combined with a prime boost strategy with HBIg to induce long term protective Immunity in Chronic Hepatitis B Virus Infection.
Using auto-vaccination and other strategies to stimulate augmented host responses and induce protective immunity

2009 Biotest Investigator Initiated Principal Investigator
Controlled Therapy Interruption: Use of Nabi-HBIg as prime boost to induce long term protective Immunity in Chronic Hepatitis B Virus Infection.
Using auto-vaccination and HBIg to stimulate augmented host responses and induce protective immunity. Supplement grant to Bristol Myer Squibb

Report of Local Teaching and Training

I have only recently moved to BIDMC from Cornell, where I was actively involved in the teaching of medical students, residents and fellows. I was similarly involved during my time at SUNY HSC Stony Brook and VA Medical Center, Northport, NY

Teaching of Students in Courses

1990 – 2003 Patho-physiology of Pancreatico-Biliary Disease – SUNY HSC Stony Brook

2nd Year Medical Students Tutor 2hour session per annum

2004 – 2007 Pancreas and Biliary Disorders – Weill Cornell Medical College

2nd Year Medical Students Tutor 2hour session per annum

Formal Teaching of Residents, Clinical Fellows and Research Fellows

1990 – 2003 Hepatitis A to E

Medical Residents SUNY HSC Stony Brook 1 hour lecture

2004 – 2007	Noon Conference- Hepatitis	
Medical Residents	Weill Cornell Medical College	1 hour lecture

Clinical Supervisory and Training Responsibilities

1990-2003	Internal Medicine- medical students 3 rd and 4 th years Clinical Preceptor	SUNY HSC Stony Brook/ VAMC Northport	Five sessions per week – four weeks a year
2003-2007	GI Hepatology – Cluster sessions. Medical students, residents and fellows	Weill Cornell Medical College	Four half sessions per week – three weeks a year
2007-2008	Attending teaching rounds-students, residents and fellows – Hepatology	Beth Israel Deaconess Medical Center	Seven hours a week – six weeks a year
2008	Attending SIRS firm – residents and students only	Beth Israel Deaconess Medical Center	Four half sessions per week for one month

Formally Supervised Trainees

1988-89 Sary O. Beidas, MD Currently Medical Officer, FDA
Published several manuscripts and abstracts, two in Ann Intern Med

1988 Winston Tom, MD Currently Private Practice, GI
Published several abstracts and two manuscripts in Ann Int Med

1988 – 1996 Magdy ElSakr, MD Currently Private Practice
Published several abstracts and three manuscripts in Ann Int Med; Dig Dis Sci. ACG
Investigator's award

1988 Neelam Gupta, MD Currently Private Practice
Published manuscript in Ann Int Med

1994 Kiram Bhat, MD Chief, GI Division
Published manuscript in J Lab Clin Med

1996 S. Ahuja, MD Currently Private Practice

Published manuscript in Dig Dis Sci

1996-8 Published manuscripts in J AIDS and Dig Dis Sci	<u>D. Sorbi, MD</u>	Director GI Endoscopy Mayo Clinic
1991-1993 Published manuscript in J AIDS as well as several abstracts	<u>D. Shen, MD</u>	Currently Private Practice
2000-2003 Published three manuscripts in Dig Dis Sci	<u>Vito Mazzoccoli, MD</u>	Currently Private Practice
2005 Published manuscript in J Med Virology	<u>Amy Lin, MD</u>	Fellowship in Gastroenterology

Formal Teaching of Peers

1999-2003 Annual Update:Chronic Hepatitis C Virus	Stony Brook, NY Hepatitis C virus Dynamics	Four annual updates SUNY Stony Brook CME Department Roche/ Schering support
2007 / GI Faculty and Fellows Rounds	University of Rochester, NY Treatment of Chronic Hepatitis B	1 / No support
2008/ GI Research	BIDMC/ Role of B cells in the control of chronic Hepatitis C viremia	1 / No support
2008/ Hepatology Rounds	BIDMC/ Controlling chronic Hepatitis C viremia	1 / No support

Local Invited Presentation (2002 to present)

2002. Virology Dept. Rockefeller Univ. NY	HCV dynamics	Grand Rounds
2003. Dept of Medicine, Beth Israel Hospital NY	HCV dynamics, molecular evolution and host gene expression	Grand Rounds

2003. Dept of Medicine, Cabrini Hospital, NY	Hepatitis C Virus	GI Grand Rounds
2004. GI Division Weill Cornell Medical Ctr	HCV dynamics and molecular evolution	GI Grand Rounds
2008 / Dept of Medicine Winchester Hospital	Update in the medical management of liver transplantation	Grand Rounds
2008/ Dept. of Medicine Merrimack Valley Hospital	Management of Advanced Liver Disease	Grand Rounds / None

Report of Regional, National and International Invited Teaching and Presentations

<u>Year(s)/ Location</u>	<u>Title of Presentation Title or Course name</u>	<u>Type of presentation / Sponsor/ Source of compensation</u>
Regional		
2005/ Hospital for Special Surgery, NY	Role of B cells in control of chronic HCV viremia	Grand Rounds
2005/ New York University	New Insights into HCV dynamics, molecular evolution and pathogenesis	GI Grand Rounds
2006/ Mount Sinai Hospital, NY	Hepatitis C virus: Basic science and Treatment options	GI Grand rounds
2006/ St Lukes- Roosevelt Columbia Hospital	Hepatitis C virus: Basic science and Treatment options	GI Grand Rounds
2007/ SUNY HSC Brooklyn, NY	Hepatitis C virus	Medicine Grand Rounds

National

2006/ Strong Memorial Hospital, University of Rochester, NY	Role of B cells in the control of chronic HCV viremia	GI Grand Rounds
2007/ Yale New Haven Hospital	Role of B cells in the control of chronic HCV viremia	GI Grand Rounds
2007/ Infectious Diseases in minority populations	Washington, DC	American Society for Biochemistry and Molecular Biology. Annual Meeting
2005/ Hepatitis C Virus	New Orleans/	American Association of Pharmacists Annual Meeting

International

2004/ HCV Immunology	Rockefeller/Cornell New York	International symposium on HCV immunology
1992/AIDS gastropathy	Amsterdam	International Symposium of AIDS Research
1993/ AIDS gastropathy	Florence, Italy	International Symposiu on AIDS research

Report of Clinical Activities and Innovations

New York State xxxxxxx Issue date: November 1, 1985. Current Expiration date 07/31/2009

DEA number BL xxxxxxx Expiration date 03/31/2010

Diplomat American Board of Internal Medicine - Sept. 13, 1989. Number 110492

Diplomat ABIM – Gastroenterology - November 5, 1991 and 2001

Diplomat ABIM – Transplant Hepatology - 2008

Malpractice Insurance Yes

Massachusetts State License xxxxxxxx Exp date Aug 25 2010

Practice Activities

- Internal Medicine
- Gastroenterology
- Hepatology
- Transplant Hepatology

<u>Type of Activity</u>	<u>Setting of Practice</u>	<u>Name and Location of Practice</u>	<u>Level of Activity</u>
Ambulatory Care	Outpatient Clinic	Liver Center, BIDMC	One session per week
Ambulatory Care	Outpatient Clinic	Transplant Institute, BIDMC	Two sessions per week
Endoscopy Procedures	Outpatient Clinic	Endoscopy Unit, BIDMC	One session per week
Inpatient Care Hepatology	Inpatient Liver Bx and Paracenteses	Wards, BIDMC Day Care Unit, BIDMC	12 weeks per year
Procedures			One session per week
Liver Tumor Center	Outpatient Clinic and Conference	Clouse Conference Room	One session and one conference/wk

Clinical Innovations

- Description of AIDS Gastropathy: Identified failure of acid secretory activity in patients with AIDS. This has a direct impact on the ability to absorb acid soluble drugs such as ketoconazole (see refs. Annals Internal Med 1988)
- Described Controlled Therapy Interruption – Suppression of Hepatitis C virus replication with antiviral therapy with brief periods of interruption. The former allows host immunity to recover; the latter induces a secondary host response that is significantly more robust (see ref J. Med Virol. 2008)

Report of Education of Patients and Service to the Community

<u>Year(s)</u>	<u>Role</u>	<u>Organization or Institution</u>
2002	Committee Member: Participated in the development of strategies to track and combat Hepatitis C virus in Suffolk County, NY	Nassau County Department of Health Hepatitis C Strategic Planning
2000 – 2003	Committee Member – helped to formulate plans for education, and management of HCV infected veterans	American Liver Foundation - Veterans Council on Hepatitis C

Educational Material for Patients and the Lay Community

<u>Year(s)</u>	<u>Title(s)</u>	<u>Type of Contribution</u>	<u>Publication</u>
2000–03	Newsletters and Brochures by ALF for distribution within VAMCs	Sub-editor	Brochures, pamphlets, newsletters
2008	Bowdoin Community Hospital	Hepatitis C in the Community lecture	N/A
2009	Asian American Medical Students	Liver Cancer screening Lecture	N/A

Recognition

<u>Year</u>	<u>Name of award recognition</u>	<u>Organization conferring recognition</u>
1992	Listing in Who's Who in America – Science and engineering	Who's Who
2003	Recognized for Services to Department of Medicine, VAMC Northport	VAMC, Northport

REPORT of SCHOLARSHIP

PUBLICATIONS

Peer-reviewed publications in print or other media

1. **G. Lake-Bakaar**, S. McKavanagh, M. Redshaw, T. Wood, J.A. Summerfield and E. Elias. Serum immunoreactive trypsin concentration after a Lundh meal: its value in the diagnosis of pancreatic disease. *Journal of Clinical Pathology*, (1979) 32, 1003-1008.
2. **G. Lake-Bakaar**, S. McKavanagh, J.A. Summerfield. Urinary immunoreactive trypsin excretion: a non-invasive screening test for pancreatic cancer. *Lancet* (1979) ii, 878-880.
3. **G. Lake-Bakaar**, S. McKavanagh, B. Gatus, J.A. Summerfield. The relative values of serum immunoreactive trypsin concentration and total amylase activity in the diagnosis of mumps, chronic renal failure and pancreatic disease. *Scand. J. Gastroent.*, (1980) 15, 97-101.
4. **G. Lake-Bakaar**, S. McKavanagh, C.E. Rubio and J.A. Summerfield. Measurement of trypsin concentration in duodenal juice by radioimmunoassay. *Gut*, (1980) 21, 402-407.
5. **G. Lake-Bakaar**, C.E. Rubio, S. McKavanagh, B.J. Potter and J.A. Summerfield. Metabolism of 125 I-labelled trypsin in man: evidence for recirculation. *Gut* (1980) 21, 580-586.
6. **G. Lake-Bakaar**, C.E. Rubio, J.A. Summerfield and S. McKavanagh. Decay of 75 Se-methionine labelled proteins in duodenal juice: evidence for a recirculation of digestive enzymes in man. *Hepato-Gastroenterology* (1980) 27, 484-8.
7. Lindsay Webb, G. Smith-Laing, **G. Lake-Bakaar**, S. McKavanagh, Sheila Sherlock. Pancreatic hypofunction in extrahepatic portal venous obstruction. *Gut* (1980) 21, 227-231.
8. **G. Lake-Bakaar**, S. Tovoli, H. Lee, E. Straus and R.S. Yalow. Recovery of secretin in small intestinal lumen perfusates in the rabbit. *Horm. Metab. Res.* (1981) 13, 682-5.

9. **G. Lake-Bakaar**, G. Smith-Laing and J.A. Summerfield. Origin of circulating serum immunoreactive trypsin: evidence for intestinal reabsorption. *Dig. Dis. Sci.* (1982) 27, 143-147.
10. **G. Lake-Bakaar**, S. Tovoli, R.S. Yalow. The effects of bile salts on the radioimmunoassay of hormonal peptides. *J. Lab. Clin. Med.* (1982) 99, 740-5.
11. O. Epstein, R.W.G. Chapman, **G. Lake-Bakaar**, S. Rosalski, R. Dick, S. Sherlock. The pancreas in primary biliary cirrhosis and primary sclerosing cholangitis. *Gastroenterology* (1982) 83, 1177-82.
12. **G. Lake-Bakaar**, P.J. Scheuer, and S. Sherlock. Hepatic reactions associated with ketoconazole in the United Kingdom. *British Medical Journal* (1987) 294, 419-422.
13. **G. Lake-Bakaar**, J. Dooley. Biliary immunoreactive trypsin in man. *Hepato-Gastroenterology* (1987) 34, 103-105.
- 14.. **G. Lake-Bakaar**, E. Quadros, S. Beidas, M. Elsagr, W. Tom, D.E. Wilson, H.P. Dincsoy, E.W. Straus. AIDS gastropathy: gastric secretory failure and parietal cell antibodies in patients with acquired immune deficiency syndrome. *Annals of Internal Medicine* (1988) 109, 502-4.
15. **G. Lake-Bakaar**, W. Tom, N. Gupta, D. Lake-Bakaar, S. Beidas, M. Elsagr, E.W. Straus. AIDS gastropathy: reversible ketoconazole malabsorption. *Annals of Internal. Med.* (1988) 109, 471-3
16. **G.Lake-Bakaar**, S.Beidas. The Effect of Alcohol and of Aids on hepatic inflammation due to chronic hepatitis B infection: A retrospective study (ital). *Alcologia* (1989) 1 (2),107-110
17. **G. Lake-Bakaar**. Hypothyroidism and Functional Bowel Disease. *The American Journal of Medicine* (1990) 88, 312-313
18. **G. Lake-Bakaar** and S.Beidas. Route of access of secretin into rabbit duodenal lumen during acid perfusion. *Pancreas* (1991) 6, 673-8.

19. Govindarajan S, Valinluck B, **Lake-Bakaar G**. Evaluation of a commercial anti-delta EIA kit for detection of antibodies to hepatitis delta virus. *American Journal of Clinical Pathology* 1991; 95:240-1
20. DeRodriguez C.V, Fuhrer J, **Lake-Bakaar G**. Cytomegalovirus colitis in patients with acquired immunodeficiency syndrome. *Journal of the Royal Society of Medicine* 1994; 87:203-5
21. **Lake-Bakaar G**, Bhat K, Govindarajan S. The effect of HIV disease on serum markers of Hepatitis delta infection in intravenous drug abusers. *Journal of Laboratory and Clinical Medicine* 1994; 124:564-8
22. **Lake-Bakaar G**, Lyubsky S. Dose-dependent effect of continuous subcutaneous verapamil infusion on experimental acute pancreatitis in mice. *Dig. Dig. Sci.* 1996; 40(11):2349-2355
23. **Lake-Bakaar G**, Hagag N, Lyubsky S, Ahuja J, Elsagr M, Craddock B, Steigbigel R. Parietal cell structure and function in HIV disease. *Dig Dis Sci* 1996; 41(7):1396-1408
24. **Lake-Bakaar G**, Grimson R. Alcohol abuse and stage of HIV disease in intravenous drug abusers. *J Roy Soc Med* 1996; 89: 389-92
25. Sorbi D, Shen D and **Lake-Bakaar G**. Influence of HIV disease on serum anti-HCV antibody titers: a study of intravenous drug users. *J Acquir Immune Defic Syndr Hum Retrovirol.* 1996; 13(3): 295-6
26. **G. Lake-Bakaar**, Sorbi D, Mazzoccoli V. Nitric oxide and chronic HCV and HIV infections. *Dig Dis Sci* 2001; 46: 1072-6
27. **G. Lake-Bakaar**, V.Mazzoccoli and K. Dickman. Differential effects of nucleoside analogs on oxidative phosphorylation in human pancreatic cells. *Dig Dis Sci* 2001; 46: 1853-63
28. **G. Lake-Bakaar**, Lynda Ruffini and V. Mazzoccoli. Digital Image Analysis of the Distribution of Proliferating Cell Nuclear Antigen and Hepatitis C Virus NS3 antigen in Hepatitis C virus related chronic hepatitis, cirrhosis and Hepatocellular carcinoma. *Dig Dis Sci* 2002; 47(7): 1644-1648
29. **G. Lake-Bakaar**, Lynda Ruffini, and P. Kuzmic. The effect of Ribavirin and Amantadine on Early Hepatitis C Virus RNA rebound and Clearance in serum during daily high dose Interferon. *Dig Dis Sci* 2003; 48(1): 126-139

30. **Gerond Lake-Bakaar**, Lynn Dustin, Jane McKeating, Kimberley Newton, Victoria Freeman¹ and Simon D. Frost. Hepatitis C Virus and alanine aminotransferase kinetics following b-lymphocyte depletion with rituximab: evidence for a significant role of humoral immunity in the control of viremia in chronic HCV liver disease. *Blood* 2007; 109(2): 845-6
31. Edgar D. Charles, Rashidah M. Green, Svetlana Marukian, Andrew H. Talal, **Gerond V. Lake-Bakaar**, Ira M. Jacobson, Charles M. Rice, Lynn B. Dustin. Clonal Expansion of Immunoglobulin M+CD27+B Cells in HCV-associated mixed cryoglobulinemia. *Blood* 2008; 111: 1344-1356
32. Thomas Kuntzen, Joerg Timm, Andrew Berical, Niall Lennon, Bongshin Lee, Sarah Young, David Heckerman, Aaron Berlin, Jonathan Carlson, Laura Reyor, Marianna Kleyman, Cory M. McMahon, Kurt LaButti, Christopher Birch, Julian Schulze zur Wiesch, Tim Ledlie, Georg M. Lauer, Toby Bloom, The Broad Genome Sequencing Platform, Raymond T. Chung, Florian Bihl*, Andreas Cerny, Ulrich Spengler, Zhimin Liu, Arthur Y. Kim, Yanming Xing, Arne Schneidewind, Margaret A. Madey, Jaquelyn F. Fleckenstein, Vicki M. Park, Caronline A. Riely, Bruce Birren, Bruce D. Walker, **Gerond V. Lake-Bakaar**, Eric S. Daar, Ira M. Jacobson, Edward D. Gomperts, Brian R. Edlin, Sharyne M. Donfield, Andrew H. Talal, Tony Marion, Matthew R. Henn, Todd M. Allen. Naturally occurring drug resistance mutations to hepatitis C virus protease and polymerase inhibitors in treatment naïve patients. *Hepatology* 2008; 48(6): 1769-78
33. **Lake-Bakaar, G.** The effect of Controlled Therapy Interruption in chronic HCV infection : enhanced host immune response? A hypothesis. *Journal of Clinical Virology* 2009; 44(2): 149-51
34. Bruce R. Bacon, Mitchell L. Shiffman, Flavia Mendes, Reem Ghalib, Tarek Hassanein, Giuseppe Morelli, Shobha Joshi, Kenneth Rothstein, Paul Kwo, and Norman Gitlin. Retreating Chronic Hepatitis C with daily interferon Alfacon-1/Ribavirin after non-response to pegylated interferon/Ribavirin: Direct Results*. *Hepatology* 2009; 49 (6): 1836-1846 (* member of the DIRECT 001 and DIRECT 002 study investigators group cited on page 1845 of the manuscript).

Non-peer reviewed scientific or medical publications/materials in print or other media

Books/ Textbooks for the medical or scientific community

1. Nausea and Vomiting: Mechanisms and Treatment. Editors CJ Davies, **G. Lake-Bakaar** and D. Grahame-Smith. Publishers Springer-Verlag, Berlin, Heidelberg, New York, Tokyo, 1986. Editor

Reviews, chapters, monographs and editorials.

1. **G. Lake-Bakaar.** Alcohol and the Pancreas. British Medical Bulletin (1982) 35, 57-62.
2. **G. Lake-Bakaar.** Gastrointestinal Complications of alcoholism. Contemp Issues Clin Biochem (1984) 1, 227-239.
3. **G. Lake-Bakaar.** Drugs in the treatment of gut motility disorders. In 'Gastric and Gastroduodenal Motility'. Eds. Akkermans, Johnson and Read. Surgical Science Vol. 4, Preger Scientific, New York 1984; Chapter 20: Drugs and Gut Motility.
4. **G. Lake-Bakaar.** Treatment and Prevention of Hepatic Encephalopathy. Hospital Therapy (1986) 11, 79-95.
5. Brand D, Ells P, **Lake-Bakaar G.** Gastrointestinal Disease. In "Cecil Review of General Internal Medicine". Eds. J. Allen D. Cooper, Jr and Peter G. Pappas. Fifth Edition. W.B. Saunders Co.1992
6. **G. Lake-Bakaar.** Candida infection of the Oropharynx and Gastrointestinal tract: Pathogenesis, Presentation and Treatment. Practical Gastroenterology 1992; 16(5):10-19
7. **Lake-Bakaar G,** EISakr M. Gastric acidity in people with HIV. Internal Medicine 1992; 13(10): 67-73
8. **G. Lake-Bakaar.** The Stomach in HIV Disease. In Gastrointestinal Pharmacology and Therapeutics. Chapter 25; pp 287-294. Editors: G.Friedman, ED Jacobson, RW McCallum. Lippincott-Raven Publishers (Philadelphia and New York) ISBN 0-397-51625-8 . 1997
9. **G. Lake-Bakaar.** Antimicrobial therapy for AIDS Effects of the GI Tract and Biliary tree. In: Current Clinical Topics in Gastrointestinal Pharmacology. Editors: J. Lewis and A Dubois. Blackwell Science, Inc. USA .1997 Chapter 3; pp 51- 77.
10. **G. Lake-Bakaar.** Current and Future Therapy for Chronic Hepatitis C Virus Liver Disease. Current Drug Targets – Infectious Diseases 2003,

3, 97-113

11. N.J. Schamberg and **G.V. Lake-Bakaar**. Hepatitis C Virus-related mixed Cryoglobulinemia: Pathogenesis, Clinical Manifestations and New Therapies. *Gastroenterology and Hepatology* 2007; 3(9) ; 695-703

Case Reports

1. Gil Weitzman, Neil J Schamberg and **Gerond Lake-Bakaar**. Shunting Alone may not Induce Porto-systemic Encephalopathy (PSE) in the absence of Liver Disease: Case Report of Acute Brittle TIPS-induced PSE. *Digestive Diseases and Sciences*. 2007 Nov;52(11):3270-4.
2. Amy Lin, Jaydeep Kadam, Henry Bodenheimer, John Leonard, Maureen Joyce and **Gerond Lake-Bakaar**. Concomitant Diffuse B-cell Lymphoma and Hepatocellular Carcinoma in chronic Hepatitis C Virus Liver Disease. A study of two cases. *Journal of Medical Virology* 2008; 80: 1350-53.
3. Amy Lin, Anupama Thadareddy, Michael Goldstein and **Gerond Lake-Bakaar**. Immune suppression leading to Hepatitis C virus re-emergence after Sustained Virological Response. *Journal of Medical Virology*. 2008 Oct;80(10):1720-2.
4. **G. Lake-Bakaar**. Polyarteritis nodosa presenting with bilateral nerve deafness. *Journal of the Royal Society of Medicine*. (1978) 71, 144-7.
5. Douglas Weinstein, **Gerond Lake-Bakaar**. Strongyloides stercoralis Infection Presenting with Severe Malabsorption and Arthritis in an Immune Competent Host. *Internet Journal of Rheumatology* 2006; 2: 2
6. Concha L, Carlson H.E, Heiman A, **Lake-Bakaar G**, Paal A. Interferon-induced hypopituitarism. *American Journal of Medicine* 2003; 114:161-163

Letters to the Editor

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NARRATIVE REPORT

I have worked extensively in both clinical and laboratory research. I served as Medical Research Council lecturer to Dame Sheila Sherlock (1977-1982) and as Solomon A. Berson Fellow (1980-81) with Rosalyn Yalow (Nobel laureate in Medicine and Physiology 1977). I worked in the Pharmaceutical industry from 1982 to 1985 as Director of Medical Affairs to Janssen Pharmaceutica, a subsidiary of Johnson & Johnson, a Fortune 500 company with a renowned reputation for its training in business and management skills. In 1992, I founded and currently help manage a website www.findadoc.com and I am current with newly emerging social networking technology on the web. As Chief of Gastroenterology and Head of the Hepato-Biliary program at VA Medical Center Northport from January 1990 to March 2003, and concomitantly as Director of the GI fellowship program at Health Sciences Center, State University of Stony Brook, I have long experience in the practice and teaching of clinical gastroenterology. This includes advanced techniques such as Endoscopic Retrograde Cholangio-Pancreatography and teaching medical students, residents and fellows.

More recently, from 2003 to 2007, I had the opportunity at the Center for the Study of Hepatitis C, to combine clinical research in the Division of GI-Hepatology at Weill Cornell Medical College with high quality basic science research in HCV virology in the Charles M. Rice laboratory at Rockefeller University. This broad experience at the highest level in clinical medicine, basic science and applied science within the pharmaceutical industry has afforded me a unique perspective in academic medicine.

My broad experience in academic medicine has allowed me to think across boundary lines, across disciplines and approach dogma with skepticism. Our first description of AIDS gastropathy is offered as an example. At the peak of the AIDS epidemic, it became clear that candida infection of the esophagus in patients with AIDS frequently failed to respond to ketoconazole, a potent antifungal agent. At the time, it was felt that ketoconazole-resistant candida might be prevalent in HIV infected patients. We questioned this, given the well-known antifungal potency of the drug. Knowledge that the drug was highly insoluble in the absence of acid led us to seek and establish hypochlorhydria in patients with HIV infection and led us to demonstrate significant improvement in ketoconazole bio-absorption when the drug was given with dilute hydrochloric acid.

As co-Director of an evolving Liver Tumor Center, we are bringing together a multi-disciplinary group of hepato-biliary and transplant surgeons, diagnostic and intervention radiologists, medical and radiation oncologists as well as hepatologists and transplant hepatologist to rapidly evaluate and establish optimal therapy for neoplasms of the liver. This approach is crucial given the universally fatal outcome of advanced liver cancer. Rapid advances in imaging techniques has begun to identify these lesions at earlier and earlier stages, transforming management outcomes and cure rates when patients are provided rapid access to the system. Establishing a 1-877-LIVER-90 number is helping to provide this early access.

My current research interests center on chronic hepatitis C liver disease. To show that B cells, and not just CD4 and CD8 cells, play a role in controlling viremia, we studied plasma levels of virus before and after B cell elimination with rituximab, a monoclonal antibody directed against B cells. This approach, to determine the role of an entity by creating a knock-out model for that entity is well established in basic science research and in animal models. However, for the human model, the approach has to be far more creative and involve clinical indications that are *a priori* safe and beneficial to the patient. We are also focused on the development of methods for harnessing secondary host immune response to control chronic viremia. The secondary host response is significantly more potent than the primary response. The addition of Hepatitis B or Hepatitis C immunoglobulin prior to the second and subsequent treatment interruptions in chronic HBV or HCV infection respectively, simulates prime-boosting and offers significant potential for immune control. The original idea of structured therapy interruption in HIV, using drugs to control viremia and restore immune responsive was unsuccessful. We have argued that this is due to early loss of CD4 cells in HIV that does not allow

development of effective secondary responses.

In my current position as Hepatologist, Transplant Hepatologist and Co-Director of a Liver Tumor center, I have been involved in teaching second year medical students in their introduction to clinical medicine and third and fourth year students on the SIRS rotation. I am actively involved in teaching residents and fellows on rounds and conferences.

I recently accepted the role of Editor in Chief to the new title Hepatic Medicine: Evidence and Research. This journal will focus on innovation, seeking answers to the myriad questions that arise in the every day practice of medicine.

I remain deeply committed to education and teaching. It is my hope that the unique perspective that I bring to academic medicine will help me to provide answers to complex, but highly relevant problems in liver disease pathophysiology and management.