

## CURRICULUM VITAE

**Name:** David Barry Sacks  
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**Place of Birth:** Cape Town, South Africa

### Education:

1976      MB ChB, University of Cape Town

### Postdoctoral Training:

#### Internships and Residencies:

1977 (Jan-Dec)      Rotating Internship, Groote Schuur Hospital, Cape Town, South Africa  
1980 (Jan)-1981      Resident in Chemical Pathology, Groote Schuur Hospital, Cape Town, South Africa  
1981-1982      Resident in Internal Medicine, Georgetown Medical School/D.C. General Hospital, Washington, DC  
1982-1985      Resident in Internal Medicine, Veterans Administration Hospital/Georgetown University and Washington Hospital Center, Washington, DC  
1985-1987      Resident in Clinical Pathology, Washington University School of Medicine, St. Louis, Missouri

#### Fellowships:

1986-1987      Chief Fellow in Clinical Chemistry, Washington University School of Medicine  
1987-1988      Postdoctoral Fellow in Clinical Chemistry, Washington University School of Medicine, St. Louis, Missouri

### Licensure and Certification:

1981-      Massachusetts  
1984-1988      Virginia  
1985-      California  
1986-1990      Missouri  
  
1984      American Board of Internal Medicine  
1989      American Board of Pathology (Clinical Pathology)

**Academic Appointments:**

- 1988-1989 Instructor in Pathology and Medicine, Washington University School of Medicine, St Louis, MO
- 1989-1995 Assistant Professor of Pathology, Harvard Medical School, Boston, MA
- 1995- Associate Professor of Pathology, Harvard Medical School, Boston, MA
- 2001-2002 Senior Visiting Fellow, Department of Neurochemistry, University College London, London, England

**Hospital Appointments:**

- 1988-1989 Assistant Pathologist, Barnes Hospital, St. Louis, Missouri
- 1989- Staff Pathologist, Brigham & Women's Hospital, Boston, Massachusetts
- 1991- Director, Clinical Pathology Training Program, Brigham and Women's Hospital

**Hospital and Health Care Organization Service Responsibilities:**

- 1989- Medical Director, Clinical Chemistry Laboratory, Brigham and Women's Hospital
- 1997- Medical Director, Clinical Laboratories, Brookside Medical Center, Boston, MA
- 1998- Medical Director, Point-of-Care Testing, Brigham and Women's Hospital

**Major Committee Assignments:**

**Medical School:**

- 1995-1996 Chemistry and Biology of the Cell Clinical Focus Group, Harvard Medical School
- 2002- Pathology Teaching Committee, Harvard Medical School

**National/International:**

- 1993-1994 Program and Finance Committee, Academy of Clinical Laboratory Physicians and Scientists
- 1993-1997 Membership Committee, American Association for Clinical Chemistry
- 1994-1996 Publications Committee, Academy of Clinical Laboratory Physicians and Scientists
- 1995-2001 Director, Young Investigator Program, Academy of Clinical Laboratory Physicians and Scientists
- 1996-2002 Council on Education and Research, American Society of Clinical Pathologists
- 1996-1999 Executive Council, Academy of Clinical Laboratory Physicians and Scientists
- 1998-2003 National Contributing Editor, Resident In-Service Examination, American Society of Clinical Pathologists
- 1999-2000 Continuing Medical Education Advisory Committee, American Association for Clinical Chemistry
- 1999-2002 Chairman, Standards of Laboratory Practice for Diabetes Mellitus, National Academy of Clinical Biochemistry
- 1999-2002 National Glycohemoglobin Standardization Program Steering Committee
- 1999-2004 Education and Scientific Affairs Committee, National Academy of Clinical Biochemistry
- 1999-2005 Chemistry Resource Committee, College of American Pathologists
  
- 1999- Executive Council, Academy of Clinical Laboratory Physicians and Scientists

- 2000-2001 NGSP Ad Hoc Expert Committee on Glycohemoglobin Testing  
2000- Advisor, Area Committee on Clinical Chemistry and Toxicology, NCCLS  
2000-2002 Chairman, Committee to Revise Document C30-A Portable Glucose Meters, National Committee for Clinical Laboratory Standards (NCCLS)  
2001- NGSP Clinical Advisory Committee  
2002- Organizing Committee, Evidence Based Practice for POCT, National Academy of Clinical Biochemistry  
2003- Chairman, National Glycohemoglobin Standardization Program Steering Committee  
2003- International Federation for Clinical Chemistry (IFCC) Working Group on HbA1c Standardisation  
2004-2005 Chair, Program and Finance Committee, Academy of Clinical Laboratory Physicians and Scientists  
2004-2005 Technical Expert Panel on Impaired Glucose Tolerance, Agency for Health Care Quality Research  
2004- ADA Work Group on Insulin Assay Standardization  
2004- IFCC Task Force of the Global Campaign of Diabetes Mellitus  
2004- International Working Group of the HbA1c Assay  
2005- Task Force on AACC Collaboration with Clinical Societies  
2005-2006 President, Academy of Clinical Laboratory Physicians and Scientists  
2006- Chair, Nominating and Awards Committee, Academy of Clinical Laboratory Physicians and Scientists

**Hospital:**

- 1990-1995 Medical Technologist Education Committee, Brigham & Women's Hospital  
1992-1994 Safety Committee Chairperson, Brigham & Women's Hospital  
1992- Pathology Graduate Education Committee, Brigham & Women's Hospital  
1993-2000 Clinical Pathology Research Committee, Brigham & Women's Hospital  
1994- Pathology Resident Recruitment Committee, Brigham & Women's Hospital  
2000- Chairman, Clinical Pathology Research Committee, Brigham & Women's Hospital  
2002- Chairman, Point of Care Testing Advisory Committee, Brigham & Women's Hospital  
2004- Diabetes Steering Committee, Brigham and Women's and Faulkner Hospitals

**Memberships, Offices and Committee Assignments in Professional Societies:**

- 1985-1988 Member, American College of Physicians  
1985- American Medical Association  
1986- American Association for Clinical Chemistry  
1986- American Diabetes Association  
1988- Fellow, American College of Physicians  
1988- American Federation for Clinical Research  
1988- American Society for Biochemistry and Molecular Biology  
1989- Academy of Clinical Laboratory Physicians & Scientists  
1990- Fellow, American Society of Clinical Pathologists  
1990- American Society for Investigative Pathology  
1993- Endocrine Society  
1998- Fellow, College of American Pathologists  
1999- Fellow, National Academy of Clinical Biochemistry

**Editorial Boards:**

1995-2004	Editorial Board:	<i>Clinical Chemistry</i>
1998-	Editorial Board:	<i>American Journal of Clinical Pathology</i>
2001-2004	Editorial Board:	<i>Laboratory Medicine</i>
2003-	Editorial Board:	<i>Clinical Proteomics</i>
2004-	Editorial Advisory Panel:	<i>Biochemical Journal</i>
2004-	Editorial Board:	<i>American Journal of Pathology</i>
2004-	Editorial Board:	<i>The Clinical Biochemist Reviews</i>
2005-	Editorial Board	<i>Journal of Biological Chemistry</i>
2005-	Associate Editor:	<i>Clinical Chemistry</i>
1990-	Ad hoc reviewer:	<i>American Journal of Cardiology</i> <i>American Journal of Kidney Diseases</i> <i>American Journal of Medicine</i> <i>American Journal of Physiology</i> <i>Arthritis and Rheumatism</i> <i>Biochemical Journal</i> <i>Biochemistry</i> <i>Biochimica et Biophysica Acta</i> <i>BioTechniques</i> <i>Circulation</i> <i>Clinica Chimica Acta</i> <i>Clinical Chemistry and Laboratory Medicine</i> <i>Diabetes</i> <i>Diabetic Medicine</i> <i>Endocrinology</i> <i>Experimental Cell Research</i> <i>FEBS Letters</i> <i>Hybridoma</i> <i>Journal of the American Medical Association</i> <i>Journal of Cell Biology</i> <i>Journal of Cell Science</i> <i>Journal of Biological Chemistry</i> <i>Journal of Clinical Investigation</i> <i>Laboratory Medicine</i> <i>Metabolism</i> <i>Molecular and Cellular Biology</i> <i>Molecular Biology of the Cell</i> <i>Neoplasia</i> <i>Protein Science</i>

**Study Sections:**

1993, 1995	Ad hoc reviewer:	William Beaumont Hospital Research Institute
1996-	Ad hoc reviewer:	The Wellcome Trust
1997, 1998	Ad hoc reviewer:	Veterans Administration
1999-	Ad hoc reviewer:	Human Frontier Science Program
2001-	Ad hoc reviewer:	National Science Foundation

2002-2004	Member:	National Institutes of Health, Special Emphasis Panel, Molecular, Developmental and Cellular Neurosciences 2 (MDCN-2)
2006-	Member:	Integration Panel, Breast Cancer Research Program, Department of Defense

**Awards and Honors:**

1987	Young Investigator Award (with distinction), Academy of Clinical Laboratory Physicians and Scientists
1988	International Diabetes Federation Travel Grant
1991	International Congress of Biochemistry Travel Grant
1996	International Congress of Clinical Chemistry Bursary
1998	Fellow, Royal College of Pathologists
1998	Lilian B. Ladenson and Oree M. Carroll Visiting Professor, Washington University School of Medicine
2003	Royal College of Pathologists of Australasia Visiting Professor
2004	Nominee, Harvard Medical School Prize for Excellence in Teaching (Years 1 & 2)
2005	Outstanding Contributions to Clinical Chemistry in a Selected Area of Research, American Association for Clinical Chemistry
2006	Norman P. Kubasik Lectureship Award, American Association for Clinical Chemistry

**Research Funding:**

PAST:

1987-92	Physician Scientist Award, National Institutes of Health (PI) Phosphorylation of the glucose transporter by insulin
1992-95	R01, National Institutes of Health (PI) Casein kinase II and calmodulin in insulin action
1995-97	Diabetes Action Research and Education Foundation (PI) Characterization of the interaction between calmodulin and insulin receptor substrate-1
1997	Milton Fund (PI) Calmodulin in growth factor signalling
1998-99	Shannon Award, National Institutes of Health (PI) Calmodulin in neoplastic transformation of breast tissue
1998-2001	U.S. Army Breast Cancer Research Program (PI) The role of calmodulin in neoplastic transformation of breast tissue
1998 <sub>(Jan)</sub> -2001 <sub>(Dec)</sub>	American Diabetes Association (PI) Calcium-modulated binding of calmodulin to IRS-1

- 2001-2002      Research Travel Grant, Burroughs Wellcome Fund (PI)  
Role of IQGAP1 and calmodulin in regulating the function of the  
Rho GTPases
- 2002-2005      U.S. Army Breast Cancer Research Program (PI)  
The role of Ca<sup>2+</sup> and calmodulin in estrogen receptor function and  
tamoxifen resistance

CURRENT:

- 1999-2009      R01, National Institutes of Health (PI)  
Calmodulin in neoplastic transformation of breast tissue
- 2002-2007      R01, National Institutes of Health (PI)  
Calmodulin and estrogen receptor function
- 2003-2006      Susan G. Komen Breast Cancer Foundation (PI)  
Dissection of the role of calcium and calmodulin in estrogen  
receptor function and tamoxifen resistance
- 2005-2007      R21, National Institutes of Health (PI)  
IQGAP1 in microbial pathogenesis

## Report of Teaching

### 1. Local Contributions

#### University of Cape Town

1980-1981     **Chemical Pathology Tutor**  
50 medical students  
200 hours/year

#### Georgetown Medical School

1981-1985     **Internal Medicine Tutor**  
4-6 medical students  
50 hours/year

#### Washington University School of Medicine

1985-1989     **Clinical Chemistry**  
20-25 medical students  
14 hours/year

#### Brigham and Women's Hospital

1989-           **Clinical Chemistry**  
1-2 residents  
150 hours/year

1990-           **Anatomic Pathology Elective (3rd and 4th year students)**  
2-4 students  
40 hours/year

1994-           **Clinical Pathology Elective (3rd and the 4th year students)**  
1-4 students  
120 hours/year

#### Children's Hospital

1994-           **Clinical Chemistry**  
1 fellow  
15-20 hours/year

#### Harvard Medical School

1992-1997     **Introduction to Laboratory Medicine**  
40-45 students  
12 hours/year

1996-           **Immunology, Microbiology and Infectious Disease**  
40 medical students  
148 hours/year

1997-           **Pathology**  
150 medical students  
5 hours/year

Massachusetts Institute of Technology

1993-           **Introduction to Laboratory Medicine**  
40 medical students  
8 hours/year

**Leadership Roles:**

1991-        Director, Clinical Pathology Training Program – established and direct the program  
1994-        Director, Clinical Laboratory Medicine Elective - established and direct the course

**Research Trainees:**

1991           Naimin Wei, M.D., Ph.D.  
                Currently Pathologist in practice, Cumberland, MD

1992           Milenko Tanasijevic, M.D.  
                Currently Associate Professor of Pathology, Harvard Medical School, Boston, MA

1993-1997     John Joyal, Ph.D.  
                Currently Director of Biology, Molecular Insight Pharmaceuticals, Cambridge, MA

1996-1997     Hidayatullah Munshi, M.D.  
                Currently Assistant Professor of Medicine, Northwestern University, Chicago, IL

1997-1998     Yen-Dong Ho, M.D.  
                Currently Fellow in Cardiology, Stanford University, Stanford, CA

2000-2002     Michael Briggs, Ph.D.  
                Currently Applications Scientist, Corning Life Sciences, Kennebunk, ME

2000-2003     Jennifer Mataraza, Ph.D.  
                Currently Scientist, Organon Research Center USA, Boston, MA

**Summer Research Students:**

1992           Matthew Trudeau  
1993, 1994     Sophie Currier  
1996           Ben Scott  
1997           Hampton Rutland



1998	Sanjiv Pasala
1999	Jarrood Leist
2000	Mark Andrews
2002	Elizabeth Sullivan
2003	Sabine Klischies
2004	Saiama Waqar
2004	Angela Lam
2005	Laura Lenth
2005	Angela Lam
2006	Angela Lam
2006	Elena Kazamia

**Invited Presentations:**

- 1988 Pathology Grand Rounds, University of Minnesota, Minneapolis, MN.  
"Insulin-Stimulated Phosphorylation of Calmodulin"
- 1990 Division of Endocrinology, Brigham and Women's Hospital, Boston, MA.  
Invited Speaker: "Insulin-Stimulated Phosphorylation of Calmodulin"
- 1991 Pathology Grand Rounds, University of Alabama at Birmingham, Birmingham, AL.  
"Intersection at Calmodulin of the Casein Kinase II and Insulin Receptor Signalling Pathways"
- 1992 Annual Scientific Session of the Ontario Society of Clinical Chemists, Toronto, Ontario, Canada.  
Invited speaker: "The Mechanism of Insulin Action"
- Medical Grand Rounds, McMaster University, Hamilton, Ontario, Canada.  
"Recent Advances in the Diagnosis and Treatment of Diabetes Mellitus"
- 1993 Pannonian Conference of World Hungarian Medical Academy, Komarno, Hungary.  
Invited speaker: "The Mechanism of Insulin Action" and  
"Current Concepts of Membrane Signal Transduction"
- 1994 University of Massachusetts Cancer Center, Worcester, MA.  
Invited Speaker: "Phosphocalmodulin: A Mediator of Insulin Action?"
- Boston Biomedical Research Institute, Boston, MA.  
Invited Speaker: "Phosphocalmodulin: A Mediator of Insulin Action?"
- Medical Grand Rounds, University of Southern California, Los Angeles, CA.  
Invited speaker: "Markers of Myocardial Damage"
- Pathology Grand Rounds, University of Utah, Salt Lake City, UT.  
Invited speaker: "Markers of Myocardial Damage"
- American Association for Clinical Chemistry, Rocky Mountain Section Annual Meeting,  
Denver, CO.  
Invited speaker: "Markers of Myocardial Damage"
- New England Clinical Ligand Assay Society, Boston, MA.  
Invited speaker: "Markers of Myocardial Damage"
- American College of Cardiology Annual Meeting  
Invited speaker: Workshop "Cardiac Troponin T for the Diagnosis of Myocardial Injury"
- American Association for Clinical Chemistry.  
Invited speaker: Workshop "Markers of Myocardial Injury"
- Johannesburg, Pretoria, Durban and Cape Town, South Africa.  
Invited speaker: "New Serum Markers of Myocardial Injury"

- 1995 Boston University, Boston, MA  
Washington Hospital Center, Washington, DC  
University of Tennessee, Memphis, TN  
University of Michigan, Detroit, MI  
Baystate Medical Center, Boston, MA  
Veterans Administration Hospital, Boston, MA  
University of California at Davis, Sacramento, CA  
Lahey Clinic, Burlington, MA  
Grand Rounds: "Serum Cardiac Markers"
- Clinical Laboratory Management Association, Utah Chapter Annual Seminar,  
Salt Lake City, UT.  
Invited speaker: "Serum Cardiac Markers"
- Clinical Laboratory Science Society of Central New England Annual Meeting,  
Marlborough, MA.  
Invited speaker: "Serum Cardiac Markers"
- American College of Cardiology Annual Meeting  
Invited speaker: "Ischemic Heart Disease: Biochemical Markers in Risk and Outcomes  
Assessment"
- Department of Biochemistry, Rice University, Houston, TX.  
Invited speaker: "Phosphocalmodulin: A Mediator of Insulin Action?"
- American Society for Clinical Pathology Fall Meeting, New Orleans, LA.  
Invited speaker: Basic Research Symposium, "Pathogenesis of Type II Diabetes Mellitus"
- 1996 Department of Pathology, University of Cape Town, South Africa.  
Invited speaker: "Phosphocalmodulin: A Mediator of Insulin Action?"
- Brigham and Women's Hospital, Boston, MA.  
Pathology Research Conference; "Phosphorylation of Calmodulin: An Important Regulatory  
Mechanism?"
- American Society of Clinical Pathologists Teleconference  
"Glycated Proteins in the Management of Diabetes Mellitus"
- University of Tennessee, Critical Care Symposium, Nashville, TN.  
Invited speaker: "Serum Cardiac Markers"
- Cardiology Division, Brigham and Women's Hospital, Boston, MA.  
Cardiovascular Grand Rounds: "Current Limitations of Serum Markers of Myocardial Necrosis"
- Grand Rounds; "Cardiac Troponin T: A Sensitive Marker of Myocardial Injury"; at 6 hospitals.
- Research Institute of Molecular Pathology, University of Vienna, Austria.  
Invited speaker: "Integration of Calmodulin in the Insulin Signalling Pathway"

World Series of Cardiology, Akron, OH.  
Invited speaker: "Serum Cardiac Markers"

American Association for Clinical Chemistry Annual Meeting, Chicago, IL.  
Workshop "Serum Markers for the Detection of Myocardial Infarction and Monitoring of Reperfusion"

American Association for Clinical Chemistry, New York Section.  
Invited speaker: "Biochemical Markers of Coronary Disease"

1997 National Conference on Diabetes Research, NIH, Bethesda, MD.  
Invited speaker: "Characterization of the Interaction Between Calmodulin and Insulin Receptor Substrate-1"

Department of Biochemistry, University of Kansas, KS.  
Invited speaker: "Phosphocalmodulin: A Mediator of Insulin Action?"

Department of Biochemistry, University of Cape Town, South Africa.  
Invited speaker: "Calmodulin is a Central Regulatory Component of Diverse Signalling Pathways"

Annual Meeting of the Canadian Society of Laboratory Technologists, Charlottetown, PEI, Canada.  
Invited speaker: "The Role of the Laboratory in the Diagnosis and Management of Diabetes Mellitus" and "Glycated Proteins"

American Association for Clinical Chemistry Annual Meeting, Atlanta, GA.  
Workshop "Serum Markers for the Detection of Myocardial Infarction and Monitoring of Reperfusion"

American Society for Clinical Pathology Fall Meeting, Philadelphia, PA.  
Workshop "Serum Markers for the Diagnosis of Myocardial Infarction"

Harvard Medical School Course, Thrombosis and Thromboembolism: New Strategies for Improved Patient Care, Boston, MA.  
Invited speaker: "Acute Coronary Ischemia: Troponin I and T"

1998 Medical Research Laboratories, Cincinnati, OH.  
Invited speaker: "Pathogenesis of Type 2 Diabetes Mellitus and its Impact on the Clinical Laboratory"

Association of Clinical Biochemists Annual Meeting, Glasgow, Scotland.  
Invited speaker: "Cardiac Markers - An Evidence-Based Approach"

Academy of Clinical Laboratory Physicians and Scientists Annual Meeting, Boston, MA.  
Invited speaker: "Calmodulin is a Central Regulatory Component of Diverse Signalling Pathways"

Academy of Clinical Laboratory Physicians and Scientists Annual Meeting, Boston, MA.  
Chair: "Hormones/Cytokines/Cell Signalling"

- American Association for Clinical Chemistry Annual Meeting, Chicago, IL.  
Workshop "Serum Markers for the Diagnosis of Myocardial Infarction and Detection of Reperfusion"
- National Academy of Clinical Biochemistry - Standards of Laboratory Practice, Chicago, IL.  
Invited Panel Member: "Guidelines and Recommendations for the Use of Cardiac Markers for Diagnosis and Rule-Out of Patients with Acute Coronary Syndromes"
- American Society for Clinical Pathology Fall Meeting, Washington, DC.  
Workshop "Serum Markers for the Diagnosis of Myocardial Infarction"
- Visiting Professor, Division of Laboratory Medicine, Washington University, St. Louis, MO.  
"Calmodulin is a Central Regulatory Component of Diverse Signalling Pathways"
- 1999 Division of Physical Biochemistry, National Institute for Medical Research, London, England.  
Invited speaker: "IQGAP1 Couples  $Ca^{2+}$ /Calmodulin to Cdc42 and E-Cadherin Function"
- Ischemic Heart Disease: New Diagnostic Approaches, Groningen, The Netherlands.  
Invited speaker: "Current Status and Future Trends of Cardiac Markers"
- Division de Biochimie Clinique, University of Geneva, Switzerland.  
Invited speaker: "Calmodulin Modulates Cdc42 and E-Cadherin Function via IQGAP1"
- Institute of Molecular Pathology, University of Vienna, Austria.  
Invited speaker: "IQGAP1 Couples  $Ca^{2+}$ /Calmodulin to Cdc42 and E-Cadherin Function"
- American Society of Clinical Pathologists Weekend of Pathology, New York, NY.  
Workshop "Serum Markers for the Diagnosis of Myocardial Infarction"
- American Association for Clinical Chemistry Annual Meeting, New Orleans, LA.  
Workshop "Serum Markers for the Detection of Myocardial Infarction and Monitoring of Reperfusion"
- American Society for Clinical Pathology Fall Meeting, New Orleans, LA.  
Symposium "Breakthroughs in Pathology 1999: Molecular Pathology for the Millenium"  
(Chair)
- Department of Medicine, Tohoku University, Sendai, Japan.  
Invited speaker: "IQGAP1 Couples  $Ca^{2+}$ /Calmodulin to Cdc42 and E-Cadherin Function"
- 2000 Department of Pathology and Laboratory Medicine, Boston University School of Medicine, Boston, MA.  
Invited speaker: "IQGAP1 Couples  $Ca^{2+}$ /Calmodulin to Cdc42 and E-Cadherin Function"
- American Society for Biochemistry and Molecular Biology Annual Meeting, Boston, MA.  
Invited speaker: "E-cadherin-mediated Cell-Cell Attachment Activates Cdc42"
- Section de Recherche, Institut Curie, Paris, France.  
Invited speaker: "Calmodulin Regulates Cdc42 and E-Cadherin Function via IQGAP1"

24<sup>th</sup> World Congress of Medical Technology, Vancouver, Canada.  
Invited speaker: "Biochemical Markers of Coronary Artery Disease"

24<sup>th</sup> World Congress of Medical Technology, Vancouver, Canada.  
Invited speaker: "Diabetes Mellitus: A Clinical Pathologist's Approach"

American Association for Clinical Chemistry Annual Meeting, San Francisco, CA.  
Workshop "Markers for the Detection of Myocardial Damage and Risk Stratification in Acute Coronary Syndrome Patients"

American Association for Clinical Chemistry Annual Meeting, San Francisco, CA.  
Edutrak "Guidelines and Recommendations for Laboratory Analysis in the Diagnosis and Management of Diabetes Mellitus" (Chair)

Institute for International Research Symposium, New Technologies and Developments in Non-invasive Delivery Techniques for Diabetes, McLean, VA.  
Invited speaker: "Glycohemoglobin (Hb A<sub>1c</sub>) Assay Variability: Impact on Diagnosis and Treatment of Diabetes"

Athena Society Meeting, Spetses, Greece.  
Invited speaker: "Ethical and Political Problems in Gene Testing and Therapy"

American Society of Clinical Pathologists Annual Meeting, San Diego, CA.  
Roundtable "The Role of Laboratory Testing in Diabetes"

American Society for Clinical Pathology Annual Meeting, San Diego, CA.  
Workshop "Serum Markers for the Diagnosis of Myocardial Infarction"

Division of Laboratory Systems, Centers for Disease Control, Atlanta, GA.  
Invited speaker: "The Role of the Clinical Laboratory in Diabetes Mellitus: An Evidence-Based Assessment"

Department of Pathology, University of Alabama at Birmingham, Birmingham, AL.  
Invited speaker: "Calmodulin Modulates Cdc42 and E-Cadherin Function via IQGAP1"

Department of Physiology, University College of London, London, England.  
Invited speaker: "IQGAP1 Couples Ca<sup>2+</sup>/Calmodulin to Cdc42 and E-Cadherin Function"

2001 3<sup>rd</sup> Hb A<sub>1c</sub> International Symposium, Marrakech, Morocco.  
Invited speaker: "DCCT and UKPDS: Has the Evidence Affected Daily Clinical Practice?"

American Association for Clinical Chemistry, Southern California Section Meeting, Los Angeles, CA.  
Invited speaker: "The Use of Biochemical Markers for Risk Stratification in Acute Coronary Syndromes"

Department of Biochemistry, University of Washington, Seattle, WA.  
Invited speaker: "Calmodulin is a Novel Regulator of the Estrogen Receptor"

Department of Pathology and Laboratory Medicine, University of Rochester, Rochester, NY.  
Invited speaker: "Integration of Cell Signalling by the Scaffolding Protein IQGAP1"

Department of Physical and Structural Chemistry, GlaxoSmithKline, King of Prussia, PA.  
Invited speaker: "Calmodulin is a Novel Regulator of the Estrogen Receptor"

American Association for Clinical Chemistry Annual Meeting, Chicago, IL.  
Workshop "Markers for the Detection of Myocardial Damage and Risk Stratification in Acute Coronary Syndrome Patients"

American Society for Clinical Pathology/College of American Pathologists Annual Meeting, Philadelphia, PA.  
Invited speaker: "The Laboratory, A Life Saver – Critical Issues in Cardiac Disease"

Department of Biochemistry, University of Cambridge, Cambridge, England.  
Invited speaker: "Novel Regulators of Cdc42 Function"

2002 Division of Biomedical Sciences, Imperial College of Science, Technology and Medicine, London, England.  
Invited speaker: "Novel Regulators of Cdc42 Function"

Faculte de Medicine, Universite Libre Bruxelles, Brussels, Belgium.  
Invited speaker: "Breast Cancer and Calmodulin"

Department of Physical Biochemistry, National Institute for Medical Research, London, England.  
Invited speaker: "Novel Regulators of Cdc42 Function"

Department of Structural Biology, Wellcome Trust Centre for Human Genetics, University of Oxford, Oxford, England.  
Invited speaker: "Integration of Signalling Pathways by the Scaffolding Protein IQGAP1"

Department of Cell Biology and Immunology, Wellcome Trust Biocentre, University of Dundee, Dundee, Scotland.  
Invited speaker: "Integration of Signalling Pathways by the Scaffolding Protein IQGAP1"

Ludwig Institute for Cancer Research, University College Medical School, London, England.  
Invited speaker: "The Role of IQGAP1 in Cdc42 Function"

Institute of Molecular and Cell Biology, National University of Singapore, Singapore.  
Invited speaker: "The Role of IQGAP1 in Cdc42 Function"

Boston Biomedical Research Institute, Boston, MA.  
Invited speaker: "Integration of Signalling Pathways by the Scaffolding Protein IQGAP1"

American Society for Clinical Pathology, Annual Meeting, Washington, DC.  
Workshop: "Serum Markers for the Diagnosis of Myocardial Infarction"

American Society for Clinical Pathology, Annual Meeting, Washington, DC.  
Roundtable: "The Role of Laboratory Testing in Diabetes"

International Congress of Clinical Chemistry and Laboratory Medicine Satellite Meeting,  
Mie, Japan.

Invited speaker: "Clinical Practice Recommendations Based on the DCCT"

Institute of Glycobiology, Tokai University, Kanagawa, Japan.

Invited speaker: "The Biology of Glycated Proteins and Application to Patient Management"

Department of Molecular Biology, Yokohama City University School of Medicine,  
Yokohama, Japan.

Invited speaker: "IQGAP1 Integrates Diverse Signalling Pathways"

Institute for Molecular and Cellular Regulation, Gunma University, Maebashi, Japan.

Invited speaker: "Calmodulin is a Novel Regulator of Estrogen Receptor Function"

Department of Cell Pharmacology, Nagoya University, Nagoya, Japan.

Invited speaker: "Integration of Signalling Pathways by the Scaffolding Protein IQGAP1"

Department of Pathology, University of Virginia, Charlottesville, VA.

Invited speaker: "Integration of Signalling Pathways by the Scaffolding Protein IQGAP1"

Department of Pathology and Laboratory Medicine, Fifth Annual Fall Symposium, University of  
Louisville, Louisville, KY.

Invited speaker: "Diabetes: A Laboratory Perspective"

2003 American Association for Clinical Chemistry and Centers for Disease Control and Prevention,  
Laboratory Testing for Cardiac Disease: Options and Answers, Chicago, IL.

Invited speaker: "Diabetes as a Risk Factor for Cardiovascular Disease"

Department of Biochemistry and Molecular Biology, University of Calgary, Calgary, Canada.

Invited speaker: "Integration of Calmodulin and Cdc42 Signalling Pathways by the Scaffolding  
Protein IQGAP1"

Department of Physiology, University College London, London, UK.

Invited Speaker: "IQGAP1: A Fundamental Regulator of  $Ca^{2+}$ /Calmodulin Signalling and  
Cytoskeletal Architecture"

Athena Society, Third Meeting, Samos, Greece.

Invited Speaker: "Laboratory Testing for Chronic Disease in 5-10 Years: Diabetes"

Athena Society, Third Meeting, Samos, Greece.

Chair: "Training for the Next 5-10 Years"

Department of Pathology, Princess Alexandra Hospital, University of Queensland, Brisbane,  
Australia.

Invited Speaker: "Guidelines for Laboratory Analysis in Diabetes Mellitus"

Royal Brisbane Hospital, University of Queensland, Brisbane, Australia

Invited Speaker: "Diabetes Mellitus: A Laboratory Perspective"



Institute for Molecular Bioscience and School for Biomedical Sciences, University of Queensland, Brisbane, Australia.

Invited Speaker: "IQGAP1: A Fundamental Regulator of Ca<sup>2+</sup>/Calmodulin Signalling and Cytoskeletal Architecture"

Division of Endocrinology, Department of Medicine, University of Queensland, Brisbane, Australia.

Invited Speaker: "IQGAP1: A Fundamental Regulator of Ca<sup>2+</sup>/Calmodulin Signalling and Cytoskeletal Architecture"

Melbourne University and Australian Association of Clinical Biochemists, Melbourne, Australia.

Invited Speaker: "Diabetes Mellitus 2003: Role of the Laboratory"

The Alfred Hospital, Monash University, Melbourne, Australia.

Invited Speaker: "IQGAP1: A Fundamental Regulator of Ca<sup>2+</sup>/Calmodulin Signalling and Cytoskeletal Architecture"

Royal College of Pathologists of Australasia, Sydney, Australia.

Invited Speaker: "Diabetes Mellitus 2003: Diagnosis and Monitoring"

Division of Endocrinology, Prince Alfred Hospital, University of Sydney, Sydney, Australia.

Invited Speaker: "HbA1c: Issues and Controversies"

Sonic and Mayne Health Laboratories, Sydney, Australia.

Invited Speaker: "HbA1c: Glycated Proteins in the Management of Diabetes"

Royal College of Pathologists of Australasia Scientific Meeting, Perth, Australia.

Invited Speaker: "Diabetes Mellitus 2003: A Laboratory Perspective"

Department of Medicine, Grand Rounds, Royal Perth Hospital, University of Western Australia, Perth, Australia.

Invited Speaker: "Diabetes Mellitus 2003: A Laboratory Perspective"

Western Australian Institute of Medical Research, University of Western Australia, Perth, Australia.

Invited Speaker: "Integration of Signalling Pathways by the Scaffolding Protein IQGAP1"

Royal College of Pathologists and Association of Clinical Biochemists Symposium, London, UK.

Invited Speaker: "From Evidence to Guidelines: Management of Patients with Diabetes"

2004 Committee on International HbA1c Standardisation, London, UK.

Invited Speaker: "The Role of NGSP in HbA1c Standardization"

Variant Users Meeting, Manchester, UK.

Invited Speaker: "Diabetes Management: The Role of HbA1c"

The Cell Motility Club, University College London, London, UK.

Invited Speaker: "Role of IQGAP1 in Cell Migration"

Annual Meeting of the American Diabetes Association, Orlando, FL.

Invited Speaker: "Past, Present and Future of the National Glycohemoglobin Standardization Program"

American Association for Clinical Chemistry Annual Meeting, Los Angeles, CA.

Moderator: "The Metabolic Syndrome: Concepts and Issues"

Montreal Proteomics Network, McGill University, Montreal, Canada.

Invited Speaker: "IQGAP Proteins are Integral Components of Cytoskeletal Regulation"

Department of Pathology, Vanderbilt University, Nashville, TN.

Grand Rounds: "The Scaffolding Protein IQGAP1 Integrates Diverse Signalling Pathways"

Pennsylvania Muscle Institute, University of Pennsylvania, Philadelphia, PA.

Invited Speaker: "The Scaffolding Protein IQGAP1 Integrates Diverse Signalling Pathways"

2005 Institute of Infectious Disease and Molecular Medicine, University of Cape Town, South Africa.

Invited Speaker: "The Scaffolding Protein IQGAP1 Integrates Diverse Signalling Pathways"

Institute of Molecular and Cell Biology, National University of Singapore, Singapore.

Invited Speaker: "Discrete Signalling Pathways Modulate the Cytoskeleton Via IQGAP1"

14<sup>th</sup> Novo Nordisk Diabetes Update, Kuala Lumpur, Malaysia.

Invited Speaker: "Diabetes Practice: What to Look for in Laboratory Services and Standards?"

Department of Pathology, University of North Carolina at Chapel Hill, Chapel Hill, NC.

Grand Rounds: "IQGAP1 is an Integral Component of Cytoskeletal Regulation"

Division of Endocrinology, Children's Hospital Boston, Boston, MA.

Invited Speaker: "Glycated Hemoglobin in the Management of Patients with Diabetes: From Chaos to Harmony"

16<sup>th</sup> IFCC-FESCC European Congress of Clinical Chemistry and Laboratory Medicine, Glasgow, Scotland.

Invited Speaker: "Laboratory Guidelines and Clinical Trials: A Focus on the Role of the Laboratory"

Salk Institute for Biological Studies, La Jolla, CA.

Invited Speaker: "The Scaffolding Protein IQGAP1 Integrates Diverse Signalling Pathways"

American Association for Clinical Chemistry Annual Meeting, Orlando, FL.

Workshop: "Global Harmonization of Hemoglobin A<sub>1c</sub>"

4<sup>th</sup> Minkowski Advanced Postgraduate Course in Clinical Diabetes (EASD), Kaunas, Lithuania.

Invited Speaker: "What Should We Measure? FPG, Postprandial Blood Glucose or Glycated Haemoglobin?"

4<sup>th</sup> Minkowski Advanced Postgraduate Course in Clinical Diabetes (EASD), Kaunas, Lithuania.

Workshop: "Monitoring Diabetes"

IV<sup>th</sup> International Symposium on Haemoglobin, Berlin, Germany.

Invited Speaker: "Haemoglobin A1c in Monitoring and Outcome"

2006 American Diabetes Association Annual Meeting, Washington, D.C.

Invited Speaker: "The A1c Test is Changing: Implications for World-Wide Clinical Practice"

American Association for Clinical Chemistry Annual Meeting, Chicago, IL.

Invited Speaker: "Glycated Hemoglobin Standardization (The NGSP/IFCC Dilemma)"

American Association for Clinical Chemistry Annual Meeting, Chicago, IL.

Workshop Moderator and Invited Speaker: "The Clinical Utility of A1c Testing for the Diabetic Patient"

BioScience 2006, The Biochemical Society Annual Meeting, Glasgow, Scotland.

Invited Speaker: "The Role of Scaffold Proteins in MEK/ERK Signalling"

Department of Biochemistry, University of Geneva, Geneva, Switzerland.

Invited Speaker: "IQGAP1 is a Scaffold for Mitogen-Activated Protein Kinase Signalling"

**Original Reports:**

1. Sacks DB, Berman MC. Hypophosphatemia in acute pancreatitis. *S Afr Med J* 1985; 68:87-90.
2. Sacks DB, McDonald JM. Insulin-stimulated phosphorylation of calmodulin by rat liver insulin receptor preparations. *J Biol Chem* 1988; 263:2377-2383.
3. Wong ECC, Sacks DB, Laurino JP, McDonald JM. Characteristics of calmodulin phosphorylation by the insulin receptor kinase. *Endocrinology* 1988; 123:1830-1836.
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5. Sacks DB, Glenn KC, McDonald JM. The carboxyl terminal segment of the c-Ki-ras 2 gene product mediates insulin-stimulated phosphorylation of calmodulin and stimulates insulin-independent autophosphorylation of the insulin receptor. *Biochem Biophys Res Commun* 1989; 161:399-405.
6. Sacks DB, Fujita-Yamaguchi Y, Gale RD, McDonald JM. Tyrosine-specific phosphorylation of calmodulin by the insulin receptor kinase purified from human placenta. *Biochem J* 1989; 263:803-812.
7. Fujita-Yamaguchi Y, Sacks DB, McDonald JM, Sahal D, Kathuria S. Effect of basic polycations and proteins on purified insulin receptor. Insulin-independent activation of the insulin receptor tyrosine-specific protein kinase by poly(L-lysine). *Biochem J* 1989; 263:813-822.
8. Sacks DB, Lim MM, Valdes R Jr, Kessler G. Radial partition fluorescent immunoassay of thyrotropin: analytic evaluation and clinical correlation. *Am J Clin Pathol* 1990; 93:84-90.
9. Sacks DB, Lim MM, Parvin CA, Kessler G. Interference in an automated radial partition fluorescent immunoassay of thyrotropin associated with liver-function abnormalities. *Clin Chem* 1990; 36:1343-1345.
10. Sacks DB, Porter SE, Ladenson JH, McDonald JM. Monoclonal antibody to calmodulin: Development, characterization and comparison with polyclonal anti-calmodulin antibodies. *Anal Biochem* 1991; 194:369-377.
11. Sacks DB, Davis HW, Sheehan EL, Williams JP, Garcia JGN, McDonald JM. Phosphorylation by casein kinase II alters the biological activity of calmodulin. *Biochem J* 1992; 283:21-24.
12. Sacks DB, Davis HW, Crimmins DL, McDonald JM. Insulin-stimulated phosphorylation of calmodulin. *Biochem J* 1992; 286:211-216.
13. Sacks DB, McDonald JM. Effects of cationic polypeptides on the activity and substrate interaction of casein kinase II: A study with calmodulin. *Arch Biochem Biophys* 1992; 299:275-280.
14. Sacks DB, Davis HW, Crimmins DL, Persechini A, McDonald JM. Casein kinase II-catalysed phosphorylation of calmodulin is altered by amino acid deletions in the central helix of calmodulin. *Biochem Biophys Res Commun* 1992; 188:754-759.

15. Reddy GP, Reed WC, Sheehan EL, Sacks DB. Calmodulin-specific monoclonal antibodies inhibit DNA replication in mammalian cells. *Biochemistry* 1992; 31:10426-10430.
16. Tanasijevic MJ, Myers MG Jr, Thoma RS, Crimmins DL, White MF, Sacks DB. Phosphorylation of the insulin receptor substrate IRS-1 by casein kinase II. *J Biol Chem* 1993; 268:18157-18166.
17. Sugawara A, Yen PM, Apriletti JW, Ribeiro RCJ, Sacks DB, Baxter JD, Chin WW. Phosphorylation selectively increases triiodothyronine receptor homodimer binding to DNA. *J Biol Chem* 1994; 269:433-437.
18. Hardy RW, McDonald JM, Remsen E, d'Avignon A, Sacks DB. The interaction of calmodulin and polylysine as studied by <sup>1</sup>H NMR spectroscopy and sedimentation equilibrium centrifugation. *Biochem Biophys Res Commun* 1994; 198:309-317.
19. Sacks DB. Alteration of calmodulin-protein interactions by a monoclonal antibody to calmodulin. *Biochim Biophys Acta* 1994; 1206:120-128.
20. Williams JP, Jo H, Sacks DB, Crimmins DL, Thoma RS, Hunnicutt RE, Radding W, Sharma RK, McDonald JM. Tyrosine-phosphorylated calmodulin has reduced biological activity. *Arch Biochem Biophys* 1994; 315:119-126.
21. Benguria A, Perera OH, Pastor MT, Sacks DB, Villalobo A. Phosphorylation of calmodulin by the epidermal-growth-factor-receptor tyrosine kinase. *Eur J Biochem* 1994; 224:909-916.
22. Sacks DB, Mazus B. Assessment of the interaction between calmodulin and casein kinase II. *Biochem Mol Biol Int* 1994; 34:251-259.
23. Joyal JL, Sacks DB. Insulin-dependent phosphorylation of calmodulin in rat hepatocytes. *J Biol Chem* 1994; 269:30039-30048.
24. Antman EM, Grudzien C, Sacks DB. Evaluation of a rapid bedside assay for the detection of serum cardiac troponin T. *JAMA* 1995; 273:1279-1282.
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26. Hughes-Davies L, Sacks D, Rescigno J, Howard S, Harris J. Serum cardiac troponin T levels during treatment of early-stage breast cancer. *J Clin Oncol* 1995; 13:2582-2584.
27. Sacks DB, Mazus B, Joyal JL. The activity of calmodulin is altered by phosphorylation: modulation of calmodulin function by the site of phosphate incorporation. *Biochem J* 1995; 312:197-204.
28. Benguria A, Soriano M, Joyal JL, Sacks DB, Villalobo A. Phosphorylation of calmodulin by plasma-membrane-associated protein kinase(s). *Eur J Biochem* 1995; 234:50-58.
29. Lee TH, Thomas EJ, Ludwig L, Sacks DB, Johnson PA, Donaldson MC, Cook EF, Pedan A, Kuntz KM, Goldman L. Troponin T as a marker for myocardial ischemia in patients undergoing major noncardiac surgery. *Am J Cardiol* 1996; 77:1031-1036.

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36. Lipshultz SE, Rifai N, Sallan SE, Lipsitz SR, Dalton V, Sacks DB, Ottlinger ME. Predictive value of cardiac troponin T in pediatric patients at risk for myocardial injury. *Circulation* 1997; 96:2641-2648.
37. Joyal JL, Annan RA, Ho YD, Huddleston ME, Carr SA, Hart MJ, Sacks DB. Calmodulin modulates the interaction between IQGAP1 and Cdc42: Identification of IQGAP1 by nanoelectrospray tandem mass spectrometry. *J Biol Chem* 1997; 272:15419-15425.
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40. Nadeau OW, Sacks DB, Carlson GM. The structural effects of endogenous and exogenous  $\text{Ca}^{2+}$ /calmodulin on phosphorylase kinase. *J Biol Chem* 1997; 272:26202-26209.
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55. Li Z, Joyal JL, Sacks DB. Calmodulin enhances the stability of the estrogen receptor. *J Biol Chem* 2001; 276:17354-17360.
56. Little RR, Rohlfing CL, Wiedmeyer H-M, Myers GL, Sacks DB, Goldstein DE. The National Glycohemoglobin Standardization Program: A five-year progress report. *Clin Chem* 2001; 47:1985-1992.
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75. Chiang MY, Xu ML, Histen G, Shestova O, Roy M, Nam Y, Blacklow SC, Sacks DB, Pear WS, Aster JC. Identification of a conserved negative regulatory sequence that influences the leukemogenic activity of NOTCH1. *Mol Cell Biol* 2006; 26:6261-6271.

**Book Chapters/Reviews/Editorials/Letters (peer reviewed):**

1. Sacks DB, Valdes R Jr. Gestational diabetes: Implications for the laboratory [special feature]. American Association of Clinical Chemistry. Washington DC. *Endocrinology and Metabolism*, October 1986; 5:5-7.
2. Sacks DB. Halothane hepatitis [letter]. *N Engl J Med* 1986; 314:1321.
3. Sacks DB, McDonald JM. The enigma of insulin resistance and hypertension [letter]. *Am J Med* 1988; 84:1096-1097.
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10. Benjamin RJ, Sacks DB. Glycated protein update: Implications of recent studies, including the Diabetes Control and Complications Trial [Review]. *Clin Chem* 1994; 40:683-687.
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19. Sacks DB. Modified criteria for the diagnosis and classification of diabetes mellitus - impact on the laboratory. *Diabetes News* 1998; 6:1-4.
20. Sacks DB. Carbohydrates. In: Burtis C, Ashwood E, editors. *Tietz textbook of clinical chemistry*. 3rd ed. Philadelphia: WB Saunders, 1999. p. 750-808.
21. Sacks DB. Acute coronary ischemia: The role of troponin I and T [Review]. *Vascular Med* 1999; 4:253-256.
22. Sacks DB. Carbohydrates. In: Burtis C, Ashwood E, editors. *Tietz fundamentals of clinical chemistry*. 5th ed. Philadelphia: WB Saunders, 2000. p. 427-461.
23. Chun KY, Sacks DB. The interaction of calmodulin with novel target proteins. In: Pochet R, Donato R, Haiech J, Heizmann C, Gerke V, editors. *Calcium: The molecular basis of calcium action in biology and medicine*. Dordrecht: Kluwer, Academic Publishers, 2000. p. 541-563.
24. Bry L, Chen PC, Sacks DB. Effects of hemoglobin variants and chemically modified derivatives on assays for glycohemoglobin [Review]. *Clin Chem* 2001; 47:153-163.
25. Sacks DB, Lernmark A. Molecular manipulation of autoantibody testing in type 1 diabetes: two for one [Editorial]. *Clin Chem* 2001; 47:803-804.
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[Published concurrently in *Diabetes Care* 2002; 25:750-786.]
28. Sacks DB, Bernhardt P, Dunka LJ, Goldstein DE, Hortin GL, Mueller P. Point-of-care blood glucose testing in acute and chronic care facilities. *NCCLS* 2002:28 pp.

29. Sacks DB, Bruns DE, Goldstein DE, Maclaren NK, McDonald JM, Parrott M. Guidelines and recommendations for laboratory analysis in the diagnosis and management of diabetes mellitus. National Academy of Clinical Biochemistry, 2002:64 pp.
30. Babic AM, Sacks DB. Hemoglobin A1c: the marker for long-term glycemic control in diabetes mellitus. Clin Lab News 2003; 29(2):8-10.
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34. Sacks DB, Higgins JMG. Cadherin signalling. In: Lennarz WJ, Lane MD, editors. Encyclopedia of biological chemistry. Vol. 1. San Diego: Academic Press/Elsevier Science, 2004. p. 199-204.
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37. Steffes MW, Sacks DB. Measurement of circulating glucose concentrations: the time is now for consistency among methods and types of samples [Editorial]. Clin Chem 2005; 51:1569-1570.
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39. Berg AH, Sacks DB. Diabetes management and complications. In: Scott M, Gronowski A, Eby C, editors. Applied Laboratory Medicine. Hoboken:John Wiley & Sons, 2006. in press.
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42. Wells A, Smith BR, Sacks DB. The challenge of training pathologists in the 21<sup>st</sup> century [Editorial]. Human Pathology 2006; in press.
43. Brown MD, Sacks DB. IQGAP1 in cellular signalling: bridging the GAP [Review]. Trends Cell Biol 2006; 16:242-249.
44. Sacks, DB. The role of scaffold proteins in MEK/ERK signalling. Biochem Soc Trans, 2006, in press.
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**Other:**

1. Sacks DB. CAP Surveys: Participant Summary for Whole Blood Glucose Survey 1999 Set WBG-B. Northfield, IL: College of American Pathologists.
2. Sacks DB. CAP Surveys: Participant Summary for Glycohemoglobin Survey 1999 Set GH2-B. Northfield, IL: College of American Pathologists.
3. Sacks DB. CAP Surveys: Participant Summary for Whole Blood Glucose Survey 2000 Set WBG-A. Northfield, IL: College of American Pathologists.
4. Sacks DB. CAP Surveys: Participant Summary for Glycohemoglobin Survey 2000 Set GH2-A. Northfield, IL: College of American Pathologists.
5. Sacks DB. CAP Surveys: Participant Summary for Glycohemoglobin Survey 2000 Set GH2-B. Northfield, IL: College of American Pathologists.
6. Sacks DB. CAP Surveys: Participant Summary for Glycohemoglobin Survey 2001 Set GH2-A. Northfield, IL: College of American Pathologists.
7. Sacks DB. Clinical Diagnosis and Management by Laboratory Methods, 20th ed. John Bernard Henry, ed. Philadelphia: WB Saunders, 2001, 1512 pp., \$99.00. ISBN 0-7216-8864-0. Clin Chem 2001;47:2188-2189.
8. Sacks DB. CAP Surveys: Participant Summary for Glycohemoglobin Survey 2002 Set GH2-A. Northfield, IL: College of American Pathologists.
9. Sacks DB. CAP Surveys: Participant Summary for Glycohemoglobin Survey 2003 Set GH2-A. Northfield, IL: College of American Pathologists.
10. Sacks DB. CAP Surveys: Participant Summary for Glycohemoglobin Survey 2003 Set GH2-B. Northfield, IL: College of American Pathologists.
11. Sacks DB. CAP Surveys: Participant Summary for Glycohemoglobin Survey 2004 Set GH2-A. Northfield, IL: College of American Pathologists.
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