

## CURRICULUM VITAE

August, 2021

**NAME** GARY C. ROSENFELD

**PRESENT TITLE** Professor of Pharmacology  
Associate Dean for Educational Programs

**ADDRESS** Department of Integrative Biology and Pharmacology  
The University of Texas Medical School  
6431 Fannin Street  
Houston, Texas 77030  
(713) 500-7435

**CITIZENSHIP** U.S.A.

**UNDERGRADUATE EDUCATION**  
1959 - 1963 Lehman College  
City University of New York  
Bronx, New York  
A.B. - Chemistry

**GRADUATE EDUCATION**  
1963 - 1968 The University of Chicago  
Department of Pharmacology  
Chicago, Illinois  
Ph.D. - Pharmacology  
Advisor: Dr. Lloyd J. Roth

**POSTGRADUATE TRAINING**  
1968 - 1972 Max Planck Institute for Cell Biology  
Wilhelmshaven, West Germany  
Postdoctoral Fellow  
Advisor: Dr. Peter Jungblut

1970 - 1972 Vanderbilt University  
Nashville, Tennessee  
Reproductive and Cell Biology  
Postdoctoral Fellow  
Advisor: Dr. Bert O'Malley

1982 Baylor College of Medicine  
Department of Cell Biology  
Houston, Texas  
Development Leave  
Laboratory: Dr. Joseph Bryan

**CONTINUING EDUCATION**  
1989 Management Trainee Internship Program  
University of Texas Houston - Health Science Center

1992 New Pathways in General Medical Education: Problem  
Based Learning  
Harvard Medical School  
Program Director: Dr. Elizabeth Armstrong

1993 CQI: Principles & Implementation  
University of Texas Health Science Center, Houston

1995-1997	Medical Education Scholars Program Office of Educational Development University of Texas Medical Branch Director: Dr. Gwendie Camp
1996	Harvard-Macy Institute Program for Leaders in Medical Education Office of Educational Development Harvard Medical School Program Director: Dr. Fred Longnecker
1997	Teaching Medical Ethics Program on Humanities and Technology in Health Care University of Texas-Health Science Center Director: Dr. Stanley Reiser
1999-2000	Research Methods in Education; 3 credit hours Statistical Analyses in Education; 3 credit hours Action Research; 3 credit hours University of Houston School of Education Instructor: Dr. Will Weber
2000	Short-Term Qualitative Research Experience University of Connecticut School of Medicine Advisor: Dr. Steven Schensul
2012	Harvard Macy Institute: Leading Innovations in Health Care & Education Program

## **ACADEMIC APPOINTMENTS**

### *UT Houston - Medical School*

2015-Present	Associate Dean for Educational Programs
2001-Present	Director, Summer Research Program
2009-Present	Director, Scholarly Concentrations Program
1995-Present	Professor of Pharmacology
2009-2018	Campus Director, University of Texas System "Transformation in Medical Education" (TIME) Initiative
2005-2011	Liaison for Basic Sciences to Dental Branch
1993-2015	Assistant Dean for Educational Programs
1992-2010	Director of Medical Education - Pharmacology
1985-1993	Vice-Chairman of Pharmacology
1978-1995	Associate Professor of Pharmacology
1972-1978	Assistant Professor of Pharmacology

### *UT Houston Graduate School of Biomedical Sciences (GSBS)*

2008-Present	Distinguished Member
1973-2008	Faculty Member

## **PROFESSIONAL ORGANIZATIONS**

### *Elected to Membership-Present*

American Society for Pharmacology and Experimental Therapeutics (1977)

### *Elected to Membership-Past*

American Society for Cell Biology (1989)

New York Academy of Sciences (1977)

Endocrine Society (1973)

### *Other Professional Memberships*

International Association for Medical Science Educators (1997-Present), University of Texas Health Science Center Neuroscience Research Center (1992-Present), American Educational Research Association, Section I (1995-2005), American Association for the Advancement of Science (1965-2005), Sigma XI (1968-2001), American Association of Medical Colleges Basic Science Education-Special Interest Group (1992-2000) Basic Science Education Forum (1992-1997), Texas Pharmacological Association (1977-1981)

## HONORS AND AWARDS

2019	International Association of Medical Science Educators (IAMSE): The Edward Patrick Finnerty Lifetime Achievement Award
2019	Chief Marshall McGovern Medical School Graduation
2017	AAMC: Group on Educational Affairs (GEA) Merrell Flair Award in Medical Education
2017	AAMC: Southern Group on Educational Affairs (SGEA) Career Educator Award
2016	Alpha Omega Alpha (AOA) National Medical Honor Society-Elected
2014, 2016, 2018	Nominated for UT-Health President's Scholar Award for Teaching
2013	UT System Regent's Outstanding Teaching Award (ROTA)
2012	UT System Distinguished Teaching Professor
2011-2013	Chairman, AAMC Southern Group on Educational Affairs (SGEA)
2011-2013	Fulbright Scholar
2010	"Scholarship in Teaching: An Imperative for the 21 <sup>st</sup> Century - recognized as one of the highly cited Academic Medicine articles since 1999 (AM Classics Collection) <a href="http://journals.lww.com/academicmedicine/pages/collectiondetails.aspx?TopicalCollectionId=10">http://journals.lww.com/academicmedicine/pages/collectiondetails.aspx?TopicalCollectionId=10</a>
2008	UTMSH Academy of Master Educators (AME)–Appointed Charter Member
2008	International Association of Medical Science Educators (IAMSE) "Master Scholar Award"
2008-2012	Association of American Medical Colleges (AAMC) "MCAT Program Advisory Review Committee (MR5)"-Appointed
2007-2010	SACS Leadership Committee-Appointed
2006	University of Texas Academy of Health Science Educators-Elected
2005-2006	Chairman, UTHMS Faculty Senate-Elected
2000-2005	Psychiatry Expert Committee of the U.S. Pharmacopeia-Appointed
2000-2004	Founding Chairman, Division for Pharmacology Education (DPE), American Society for Pharmacology and Experimental Therapeutics (ASPET)-Appointed
2002-2003	Chairman UTHSC Interfaculty Council-Elected
1986, 1989-1996	Dean's Teaching Excellence Award
2001-2004, 2006, 2008-2017	Liaison Committee on Medical Education (LCME)-Appointed
2006-2011	a) Team Member (University of Florida Medical School, Gainesville, Virginia Commonwealth Medical School, University of Hawaii Medical School, Boston University School of Medicine
2002-2003	b) Faculty Fellow Accreditation Surveyor (Mayo Medical School)
1997-2003	Founding Member, Board of Directors, International Association for Medical Science Educators (IAMSE)
2001, 2003	UT-Health Science Center Nationally Recognized Honors in Teaching
1998, 2003	UT-Health Science Center "Star" Award
2000	Educational Commission for Foreign Medical Graduates (ECFMG) Short-Term Exchange Fellowship
1997-2007	Association of American Medical Colleges (AAMC) "Scholarship Project"-Appointed
1997	Convener, American Association of Medical Colleges (AAMC) Basic Science Education-Special Interest Group (BSE-SIG)-Appointed
1996	Educational Commission for Foreign Medical Graduates (ECFMG) Foreign Faculty Fellowship
1996	Macy Institute Program for Leaders in Medical Education, Harvard Medical School
1995	UT-Health Science Center Outstanding Faculty Award for Problem Based Learning
1985, 1993, 1995	Outstanding Basic Science Course
1992	"Texas Plan" Institutional Advisory Award-appointed

1992 Graduate School of Biomedical Sciences (GSBS) Reappointment with Commendation  
1981-1982 President, Graduate School of Biomedical Sciences (GSBS)  
1978 Research Career Development Award (NIH)  
1970 NIH Postdoctoral Traineeship  
1968 Max Planck Gesellschaft Fellowship  
1964 NIMH Predoctoral Traineeship

### **EDITORIAL/CONSULTANT/REVIEWER**

*Invited Reviewer – Academic Medicine (2019 - )*

*Ad Hoc Reviewer – Education-Related Journals/Books/Meeting Abstracts (1991-Present)*

Academic Medicine; Appleton and Lang Publ.; Harwall Publ.; Little Brown, Publ. Co.; American Educational Research Association (AERA), Section I; AAMC:Group on Educational Affairs (GEA, Small Group and Mini-Workshop Proposals); AAMC: Southern Group on Educational Affairs (SGEA), John Wiley & Sons, Medical Education (“Really Good Stuff”); MedEdPortal; International Association of Medical Science Educators (IAMSE)

*Ad Hoc Reviewer- Scientific Journals/Books (1975-1997)*

American Journal of Physiology; Molecular Pharmacology; Life Sciences; Journal of Cell Biology; Journal of Pharmacology and Experimental Therapeutics; Gastroenterology; Journal of Cellular Physiology, Biochemical Pharmacology; News in Physiological Sciences

*Consultant*

Time-Life Books, “The Drug and Natural Medicine Advisor” (1997)

### **PUBLIC AFFAIRS**

Telephone Interviews: Ken Ortolon, Texas Medicine (2011); Houston Chronicle (2011); American Independent News (2011)

### **FACULTY EDUCATOR EVALUATIONS**

*McGovern Evaluations for Promotion, Tenure, Emeritus (UTHSC), Awards*

Donald Molony, Margaret Uthman, Philip Orlander, John Ribble, Roger O’Neil, Judith Smith, Phillip Carpenter, Patricia Butler, Gabe Aisenberg

*External Evaluations for Appointments, Promotion/Tenure, Awards*

J. Charles Eldridge (Wake Forest University School of Medicine), Carol Whitfield (Pennsylvania State University College of Medicine), Denise Ferrier (Drexel University College of Medicine), Richard Dusold (Texas A&M), Carol Nichols (Medical College of Georgia); William Jeffries (University of Vermont), Ingrid Bahmer (University of South Florida Medical School), Julie Corvarrubias (University of Alabama, Birmingham Medical School), Courtney West, Texas A&M College of Medicine), Bonny Dickinson (Western Michigan University Homer Stryker MD School of Medicine), Andrew Bergemann (Dell Medical School), Kara E. Sawarynski (Oakland University William Beaumont School), Neil Pellis (Baylor College of Medicine), Karen Szauter (University of Texas Medical Branch, Galveston)

*External Evaluations for Appointment to Academies of Education*

James Rawson; Dianne Turnbull; Adarsh K. Gulati; Teresa A. Coleman (Medical College of Georgia); Nicolas Bazan (LSU Health Science Center),

### **INVITED PRESENTATIONS**

International Narcotic Research Club on “The Opiate Narcotics”, Airlie, Virginia, Discussant (1975)

Satellite Symposium on “Acute Effects of Narcotic Analgesics”, Nokkala, Finland - Discussant (1975)

Third International Congress on “Pharmacology of Thermoregulation”, Banff, Canada - Discussant (1976)

Third International Conference on “Clinical Aspects of Cyclic Nucleotides”, Vail (1979)

M. D. Anderson Hospital and Tumor Institute, Division of Gastroenterology, Houston (1979)

McNeil Laboratories, Philadelphia (1979)

University of Connecticut, Department of Pharmacology, Farmington (1979)

Searle Laboratories, Chicago (1980)

McNeil Laboratories, Second Pharmacology I Gastrointestinal Research Review, Philadelphia, (1980)

Merck Pharmaceutical Co., West Point (1983)

International Symposium on “Subtypes of Muscarinic Receptors” - Discussant, Boston, (1983)

University of Houston, Department of Pharmacology (1986)

FASEB Minisymposium on “Parietal Cell Acid Secretion”, Washington, D.C. (1987)

University of Texas Medical Branch, Department of Pharmacology, Galveston (1987)

Texas A&M University, Department of Pharmacology (1988)

National Institute of General Medical Sciences (1989)

University of Kansas, Department of Pharmacology, Kansas City, "Problem-Based Learning" (1993)

Basic Science Education Forum, "Evaluating Programs Designed for Content Integration in Years 3-4", Chicago (1995)

University of Illinois, "Problem Based Instruction - Lecture and Demonstration" Peoria (1995)

Chinese Rural Health Workforce Development Project Delegation, "Interdisciplinary Problem Based Learning", Houston (1996)

University of South Alabama, "Problem Based Learning", Mobile (1996)

Tulane University Medical School, "The I's and O's of Curriculum Renewal", New Orleans (1999)

Rice Pre-Medical Society Annual Symposium "Details on Problem Based Learning" (2000)

Institute for Community Research, "Drugs and the Brain", Hartford (2000)

Pecs University, "Problem Based Learning: A Strategy for Medical Student Education" Pecs, Hungary (2001)

Western Pharmacology Association, "Knowledge Objectives in Pharmacology - A Base on Which to Develop National Teaching Materials in Pharmacology", Vancouver (2001)

Medical University of South Carolina, Department of Pharmacology, Discussion of issues in medical education, Charleston (2002)

National Youth Leadership Forum, "UTHMS Summer Research Program", Houston (2002- 2013)

Experimental Biology, "Problem Based Learning: An Educational Strategy for Graduate Education", San Diego (2003)

Problem-Based Learning-Assessment and Demonstration, M.D. Anderson Cancer Center Classrooms of the 21<sup>st</sup> Century Instructional Delivery Series (2003)

State University of New York (SUNY) Upstate Medical School, "The Scholarship of Teaching: Reaching a Consensus on What Counts", Syracuse, NY (2005)

State University of New York (SUNY) Upstate Medical School, Workshop: "Constructing a Local Infrastructure to Support Educational Scholarship", Syracuse, NY (2005)

Texas A&M University School of Medicine, "Scholarly Concentrations and Academies of Education" (2010)

Texas Association of Advisors for the Health Professions (TAAHP), "Progress and Status of MCAT Review 5", UTMB, Galveston (2011)

American Society of Physiology (APS), "Entering Medical Student Competencies and the MCAT Revision", Experimental Biology, Washington, D.C. (2011)

Texas Medical Association (TMA), "Final Recommendations for the 2015 MCAT Exam – MR5 Committee", Austin (2012)

American Medical Student Association (AMSA), "The New MCAT: The Basics for Students", San Antonio (2012)

*University of Texas-Houston Medical School*

- "Initiatives in Problem-Based Learning", Department of Pathology, (1993)
- "PBL", Lecture to Gunma University Medical School Delegation, (1994)
- "Area and Scholarly Concentrations" (2008)

*University of Texas-Houston Nursing School*

- Scholarship of Teaching (2001)

*University of Texas-Houston Dental Branch*

- "Problem Based Learning", Retreat (1996)
- "Problem Based Learning", Basic Science Department Retreat (1997)

*University of Texas-Houston Health Science Center*

- "Problem Based Learning", Panel (1996)
- "Problem Based Learning: Past, Present and Future", Advances in Teaching and Learning (2000)
- "Scholarship of Teaching", Advances in Teaching and Learning (2000)
- "The Structural, Human, Political and Symbolic Infrastructure Necessary to Foster, Assess, and Reward Teaching", Advances in Teaching and Learning (2002)
- "Scholarship of Teaching: From Inception to Publication", Advances in Teaching and Learning (2004)
- "Educational Scholarship: An Emerging Consensus About Standards of Evidence", Advances in Teaching and Learning (2006)

*University of Texas System Transformation IN Medical Education (TIME)*

- "MCAT Revisions: Overview", Austin (2011)

- "A Medical Cruise", Austin, 2013
- Accelerated Clinical Skills Development for Undergraduate Premedical Students in the A-PRIME TIME Partnership (with J. Oakes, A. Mercado, M. Ainsworth), Austin (2014)

*University of Texas System Innovations in Health Science Education Conference*

- "Recognizing and Rewarding the Scholarship of Teaching" (with R-M Fincher), Austin, (2004)
- "The Scholarship of Education: Discussion of AAMC-GEA Consensus Conference" (with B. Richards and A. Frye), Austin, (2006)
- "Academies Round Table" Austin (2104)
- Accelerated Clinical Skills Development for Undergraduate Premedical Students in the A-PRIME TIME Partnership (with J. Oakes, A. Mercado, M. Ainsworth), Austin (2015)

*Baylor College of Medicine*

- Baylor College of Medicine, Houston (1980)
- Baylor College of Medicine, "The Scholarship of Teaching", Master Teacher Fellowship Program, Houston (2002)
- Baylor College of Medicine, Demonstration of PBL Facilitation, Master Teacher Fellowship Program, Houston (2002)
- Baylor College of Medicine, "The Scholarship of Education: Discussion of AAMC-GEA Consensus Conference" (2007)
- Baylor College of Medicine, "The Scholarship of Education: Discussion of AAMC-GEA Consensus Conference" (2009)
- "The New MCAT", Houston (2012)
- "State of the Academy: The UTMSH Academy of Master Educators" (2013)
- "Meet the Professors" TCH National Educator Conference (2014)

*Association of American Medical Colleges (AAMC)*

- "Planning, Implementing and Evaluating the Hybrid PBL Curriculum", Washington, D.C. (1995)
- "Determining Core Objectives in Basic Science Education, GEA Basic Science Education-Special Interest Group, Washington, D.C. (1997)
- "Introduction and Observations", GEA Basic Science Education-Special Interest Group, Washington, D.C. (1999)
- "Defining and Measuring Scholarship in Medical Education", GEA Plenary Session, Chicago (2000)
- "The Basic Science Education-SIG in the New Millennium: Whither Thou Goest", GEA Basic Science Education-Special Interest Group, Chicago (2000)
- "Basic Science in the Clinical Years: Why All the Fuss", GEA/GSA Group Discussion Session, San Francisco (2002)
- "Credible Assessment of the Scholarship of Teaching", GEA, San Francisco (2002)
- "Moving Educational Activities into Scholarship: Communities of Engaged Scholars-Teaching", GEA Consensus Conference on Educational Scholarship, Charlotte (2006)
- "Reflections for Action: Translating the 2006 Consensus Conference on Educational Scholarship into Meaningful Institutional and Individual Change", Seattle (2006)
- "Moving Educational Activities Into Scholarship – Results and recommendations from the AAMC GEA Consensus Conference on Educational Scholarship", Seattle (2006)
- "Advancing Educators and Education: Defining the Components and Evidence of Educational Scholarship". Summary report and findings from the AAMC Group on Educational Affairs Consensus Conference on Educational Scholarship, 2006 Feb 9-10; Charlotte, NC.
- "RIME Grantsmanship: How to Write Promising Grant Proposals", Washington, D.C., 2010
- Entrustable Professional Activities (CEPAER) Reactor Panel (2013)
- "Changing the Value Culture for Teaching and for Teachers", Discussant, AAMC, Baltimore (2015)

*American Society for Pharmacology and Experimental Therapeutics (ASPET)*

- "Initiatives in Undergraduate Research Training in Pharmacology", Salt Lake City (1989)
- "Pharmacology Graduate Instruction in the Age of Molecular Biology", Orlando (1992)
- "Knowledge Objectives in Pharmacology-a Base on Which to Develop National Teaching Materials in Pharmacology", Boston (2000)
- "Teaching That First Course", Orlando (2001)
- "Use of the Association for Medical School Pharmacology (AMSP) Knowledge Objectives to Develop National Teaching Materials", Orlando (2001)
- "Strategies for Integrating Herbal Medicine in to the Teaching of Medical Pharmacology", New Orleans,

(2002)

- "The Knowledge Objectives and Essential Drug List", San Diego (2003)
- "Introduction and the Use of Web-Based Knowledge Objectives to Enhance Teaching and Learning Pharmacology", Washington, D.C. (2004)

*Association for Medical School Pharmacology Chairs (AMSPC)*

- "Internet Access to the Knowledge Objectives in Pharmacology", Sea Isle, GA. (1994)
- "Knowledge Objectives in Pharmacology", Sea Isle, GA. (1996)
- "University of Texas Houston Medical School: A Modified Problem Based Learning Program", Workshop on the Teaching of Pharmacology to Medical Students, Sea Isle, GA. (1998)
- "Update on Knowledge Objectives", Sea Isle, GA. (1998)
- "Knowledge Objectives in Pharmacology Update", Bermuda (1999)
- "Teaching as Scholarship", Bermuda (1999)
- "Knowledge Objectives in Pharmacology", Sea Isle, GA (2002)
- "Knowledge Objectives in Pharmacology", Sea Isle, GA (2004)
- "ASPET Division for Pharmacology Education" Sea Isle, GA (2004)

*AAMC Southern Group on Educational Affairs (SGEA)*

- "Computer Assisted Instruction in the Basic Science Medical Curriculum, Nashville, (1995)
- "Basic Science Education in the Clinical Years: Much Ado About Nothing", Gainesville (1996)
- "Downsizing and Mergers of Basic Science Departments: Impact on Medical Education", Augusta (1997)
- "PBL in the Second Year Curriculum: A "Front-Loaded" Experience", New Orleans, (1998)
- "Scholarship in Education/Teaching: What Is It? Can it be Recognized? Assessed"?, Discussion Group, San Juan (1999)
- "Basic Science in the Clinical Years: Much Ado About Nothing?", Charleston (2002)
- "Basic Science Educators and the National and Regional GEA" Charleston (2002)
- "Scholarship is More than Research and Peer-reviewed Manuscripts: Making Other "Stuff" Count", Savannah (2004)
- "Advancing the Scholarship of Education: Discussion of AAMC-GEA Consensus Conference Outcomes and Recommendations", Louisville (2007)
- "The SGEA RIME Grants: Grantsmanship", Oklahoma City (2010)
- "The SGEA RIME Grants: Grantsmanship", Houston (2011)
- "MR5: The 5<sup>th</sup> Comprehensive Review of the MCAT Exam", Houston (2011)
- "The MCAT Exam: Diversity and Outreach", Savannah (2013)
- "Rethinking Premedical Science: Competency Framework and Transition Milestones", Savannah (2013)

*International Association of Medical Science Educators (IAMSE)*

- "Alternative Models of Problem-Based Learning: The East Texas Experience", Washington, D.C. (1999)
- Discipline-Based Round Table Discussion: Pharmacology, Guadalajara, Mexico (2002)
- Discipline-Based Round Table Discussion: "Neurobiology, Behavioral Sciences, Psychiatry", Washington, D.C. (2003)
- "Strategies to Increase Motivation for Teaching" Washington, D.C. (2003)
- "The Scholarship of Teaching: Authentic Peer Assessment" Washington, D.C. (2003)
- "Program Evaluation: Frameworks for Assessing Educational Effectiveness in the Basic Sciences." San Juan, Puerto Rico (2006)
- "The Scholarship of Education: Discussion of the AAMC-GEA Consensus Conference Outcomes and Recommendations", Salt Lake City (2008)
- "MR5: The Fifth Comprehensive Review of the Medical College Admission Test", WebCast (2010)
- "MR5: The 5<sup>th</sup> Comprehensive Review of the Medical College Admission Test", New Orleans (2010)
- "The Role and Value of the Basic Sciences in Med Ed: Report of the IAMSE Flexner Revisited Study Group", New Orleans (2010)
- "Better Aligning USMLE Step Exams With What We Want: What's Your Discipline's Metabolic Map?" Las Vegas, (Focus Session, 2018)
- Assessing Desired Abilities: Exploring Provision of Basic Science Reference Materials for Exams, Roanoke, ((Focus Session, 2019)
- I Want To Be Promoted! A Hands-On Workshop for Medical Science Educators, Roanoke (2019)
- Should This Medical Science Educator Be Promoted? A Workshop for Institutional Leaders, Roanoke (2019)

- Educator Portfolios: Documenting Your Activities As An Educator, Denver (Pre-Conference Workshop, 2020)

## **SERVICE ON STATE, REGIONAL, and NATIONAL ORGANIZATIONS, GRANT REVIEW PANELS, STUDY SECTIONS, COMMITTEES**

### *Association of American Medical Colleges (AAMC)*

- Workshop Co-Organizer, "Planning, Implementing and Evaluating the Hybrid PBL Curriculum", Washington, D.C. (1995)
- Curriculum Management and Information Tool (CurrMIT) Orientation and Training Conference for Texas Medical Schools, Houston (1999)
- Medical College Admissions Test (MCAT)
  - MCAT-PAC Advisory Committee (2005-2007)
  - Fifth "Medical College Admissions Test (MCAT) Comprehensive Review Committee" ("MR5" Committee; 2008-2012)
  - MCAT Focus Group, Science Content Survey (2009-2010)
- Academies Collaborative (2007-Present)
- Scholarly Concentrations Collaborative (2008-Present)
- Liaison Committee on Medical Education (LCME)
  - Faculty Fellow Accreditation Surveyor, Mayo Medical School (2002-2003)
  - Team Member, University of Florida Medical School (Gainesville; 2006-2007)
  - Team Member, Virginia Commonwealth Medical School (2007-2008)
  - Team Member, University of Hawaii Medical School (2008-2009)
  - Team Member, Boston University School of Medicine (2010-2011)
- *Group on Educational Affairs (GEA)*
  - CurrMIT/GQ Workshop, Chicago (2000)
  - Organizer, Group on Educational Affairs (GEA), "Credible Assessment of the Scholarship of Teaching", San Francisco (2002)
  - Scholarship Project Committee (1996-2007)
  - Organizing Committee, GEA Consensus Conference on Educational Scholarship, Charlotte (2005-2006)
  - Facilitator, "Evaluating Educators for Academic Advancement" (2011, 2012)
  - GEA Steering Committee (2011-2013)
  - Representative on Physician Scientist Workforce Committee (2012)
- *AAMC: Southern Group on Educational Affairs (SGEA)*
  - Pathways, Pipelines and Bridges Special Interest Group (2018-Present)
  - Chairman (2011-2013); Past-Chair (2013-2015); Chair-Elect/Treasurer, (2009-2011)
  - Steering Committee (2009-2015; Chairman 2011-2013)
  - Wellness Project (2015-Present)
  - Abstract Review Committee (2016-Present)
  - Research in Medical Education (RIME) Awards Review Subcommittee (2009-2016)
- *Group on Educational Affairs (GEA): Basic Science Education-Special Interest Group (BSE-SIG)*
  - Southern Region Convener (1993-1997)
  - Conference Organizer, "Determining Core Objectives in Basic Science Education", Washington, D.C. (1997)
  - National Convener (1997-2000)
  - Conference Organizer, "Basic Science in the Continuum of Medical Education: Promises, Promises, Promises", Washington, D.C. (1999)
  - Conference Organizer, "The Basic Science Education-SIG in the New Millenium: Whither Thou Goest", Chicago (2000).
- *Southern Group on Educational Affairs: Basic Science Education-Special Interest Group (BSE-SIG)*
  - Conference Co-Organizer, "CAI in the Basic Sciences", Nashville (1995)
  - Conference Co-Organizer, "Basic Science Education in the Clinical Years", Gainesville (1996)
  - Conference Co-Organizer, "Downsizing and Mergers of Basic Science Departments: Impact on Medical Education", Augusta (1997)
  - Conference Co-Organizer, "Alternative Applications of Problem-Based Learning", New Orleans (1998)
  - Nominating Committee (1999)



*International Association of Medical Science Educators (IAMSE)*

- Chairman, Public Affairs Committee (2000-2019)
- Publications Committee (2009-2019)
- Committee for the Advancement of Medical Science Educators (CAMSE; 2015-Present)
- Program Committee, 6<sup>th</sup> annual meeting, Guadalajara (2001-2002), 8<sup>th</sup> annual meeting, New Orleans (2003-2004), 14<sup>th</sup> annual meeting, Leiden (2008-2009)
- Advisory Committee: Stanford University School of Medicine Faculty Development Teacher Training Program for Basic Scientists (2005-2008)
- Program Committee Chair, 7<sup>th</sup> annual meeting, Washington, D.C. (2002-2003)
- Chairman, Resource Committee (1999-2002)
- Board of Directors of the International Association for Medical Science Educators (1997-2003)

*American Society of Pharmacology and Experimental Therapeutics (ASPET)*

- Local Arrangements Committee and Chairman of Entertainment Committee (1978)
- Minisymposium, Chairman - "Cholinergic Regulation of Gastric Acid Secretion", FASEB, Washington, D.C., (1987)
- Teaching Workshop, Chairman - "Pharmacology Graduate Instruction in the Age of Molecular Biology", Orlando, (1992)
- Committee on Educational Affairs (1989-1995)
- Short Course/Continuing Education Committee (1998-2002)
- Co-Chairman, "Who Controls and Teaches Pharmacology in the New Integrated Curriculum?", San Diego (2003)
- Division Leadership Committee, Washington, D.C. (2004)
- Co-Chairman, "Electronic Resources for Pharmacology Education", Washington, D.C., (2004)
- Committee on Graduate Education and Recruitment (2000-2006)
- Chairman, Division for Pharmacology Education (2000-2004); Past-Chair (2004-2006)
- Division for Pharmacology Education, "Academy of Educators" Sub-Committee (2007-2016)

*Association for Medical School Pharmacology Chairs (AMSPC)*

- Education Resource Committee (1994-2002)
- CNS Knowledge Objectives Subcommittee (1996-2011)
- Co-Director of Steering Committee for Knowledge Objectives in Pharmacology (1996-2011)

University of Texas Medical Branch (UTMB) Academy of Master Teachers (AMT) Advisory Board (2013-2019)

*UT-System (Austin)*

- Faculty Advisory Council (FAC; 2001-2004)
- Faculty Quality Committee (2001-2004); Co-Chair (2003-2004)
- Steering Team, "Innovations in Medical Education Conference" (2004)
- Learning Objectives Repository Committee (2008-2010)
- Transformation in Medical Education (TIME)
  - a) Steering Committee (2009-2019)
  - b) Biomedical Science Group (2012-2016)
- Institute for Transformational Learning (ITL): The BS in Biomedical Sciences Competency-Based Degree Kenneth I. Shine Program Advisory Committee (2015-2016)
- Chairman, Education Subcommittee of the UT-System Kenneth I. Shine, MD Academy of Health Science Educators (AHSE; 2017)
- Chairman, UT-System Annual Kenneth I. Shine, MD Academy of Health Science Educators' (AHSE) Innovations in Health Science Education Meeting (2017-2018)

2020 Kenneth I. Shine Academy Membership Review Committee (2016-Present)

*Texas Medical Association (TMA): Council of Deans*

- Education Research Sub-Group-"CoMerit" (2009-Present)

*U.S. Pharmacopoeia (USP) - UT-Houston Medical School Representative (2000-Present)*

- Psychiatry Expert Committee (2000-2005)

*University of Texas Medical Branch (UTMB): Judge for Academy of Master Teachers (AMT) Posters (2009)*

*Baylor College of Medicine: Fulbright & Jaworski Distinguished Educator Award Peer Review Panel (2001-2004) "CATCHUM"*

- Pain Control Education Workgroup (1999)

*Basic Science Education Forum (BSEF)*

- Southern Regional Director (1993-1997)

- BSEF Conference Co-Organizer, "Strategies for Integrating Clinical and Basic Sciences", Chicago (1995)
- Gulf Coast Regional Consortium (1991-2000)*
  - Community-Based Education
    - Steering Committee (1998-2000)
    - Faculty Development Committee (1997-2000)
  - Assessment of Performance
    - Research Group (1991-1996)
- American Society of Cell Biology*
  - Local Arrangements Committee: Chairman of Professor/Student Program (ASCB Meeting, 1989)
- Veterans Administration Hospital*
  - Merit Review Board for Basic Sciences (1986)
- National Student Research Forum* - Reviewer (1979, 1987)
- Texas Pharmacological Association: UT Representative* (1977-1981)
- National Health Science Consortium* - Reviewer (1977-1981)

## UNIVERSITY COMMITTEES

### UNIVERSITY OF TEXAS HOUSTON-McGOVERN MEDICAL SCHOOL

- Academic Medicine Student Organization (AMSO) – Advisor (2019-2022)
- Learning Environment and Professionalism Taskforce (2019-2021)
- Physician Burnout & Resilience Task Force (2017-2018)
- Rice University MD-MBE Bioengineering Curriculum Planning Committee (2018)
- Chairman (2017-2018), UTMSH, UTMB, Baylor & MD Anderson Texas Educators Academies Collaborative for Health Professions-Southeast (TEACH-S) Meeting Steering Committee (2012-2019)
- Chairman, Scholarly Concentrations Steering Committee (2009-2021)
- Chairman, Academy of Master Educators (AME) Executive Committee (2009-2019)
- Chairman, Transformation in Medical Education (TIME) Steering Committee (2009-2019)
- Item-Writing Workshop, "Beyond Recall: Systematic Item-Writing to Assess Application of Basic Science Knowledge" (2009)
- Chairman, Academy of Master Educators (AME) Organizing Committee (2008-2009)
- Problem-Based Learning Committees/Activities
  - Case Review Working Group (2018-Present)
  - Executive Committee (1997- 2019)
  - Steering Committee, Chairman (1993-1997)
  - Curriculum Development Groups (1993-2010)
  - Workshop Coordinator: Facilitator Training (1993-2016); Case-Writing (1994); Test-Writing (1995)
- Curriculum Committee (1983-1985; 1986-1989; 1990-2022)
  - Preclerkship Education Subcommittee (2018-2022)
  - Continuous Accreditation Review and Quality Improvement (CARQI) Subcommittee (2020-2022)
  - Longitudinal Themes Subcommittee (Co-chair; 2021-2022)
  - Preclerkship Pharmacology Discipline Director (2017-2022)
  - Curriculum Integration Subcommittee (2021-2022 (Co-chair); 2010-2017)
- Curriculum Revision (2014-2019)
  - a) Steering Committee
  - b) Program Evaluation Sub-Committee
  - c) Retreat Facilitator (Progress Testing)
- Curriculum Evaluation Subcommittee (2009-2010)
- Chairman, Vision Committee (2000-2009)
- Competencies Subcommittee (2003-2007)
- 3<sup>rd</sup> & 4<sup>th</sup> Year Subcommittee (1997-2007)
- 2<sup>nd</sup> Year Curriculum Subcommittee (1997- 1998; 2007-2017)
- 1<sup>st</sup> Year Curriculum Review Committee (1997-2017)
- Vice-Chairman (1993-1994)
- Committee to Review the Curriculum Implementation and Monitoring Plan (1992-1993); Chairman
- 1st Semester Evaluator (1989); March Month Evaluator (1991); 2nd Semester Evaluator (1992)
- Subcommittee for Evaluation of Second Year Curriculum (1988-1989)

- Sixth Quarter Coordinator (1984)
- Subcommittee for Evaluation of First Year Curriculum (1984)
- Educational Computer Services Advisory Committee (1992-2005)
- Coordinator MSI Computer Training Workshop (1995-1999)
- Technology in Education Advisory Committee (TEAC; 2005-2016)
- Dean's Educational RVU Committee (2003-2007)
- Integrative Biology and Pharmacology (IBP) Curriculum Committee (2003-2010)
- 4th Year Pharmacology Electives Coordinator (1994-2019)
- Faculty Senate (1977-1980; 1989-1994, 2002-2012)
- President (2005-2006); Vice-President (1992-1993; 2004-2005)
- Secretary (1978-1979)
- LCME
- Self-Study Task Force (2019-2020)
- Strategic Planning Committee (2017-2020)
- Steering Committee (1995-1997, 2002-2004, 2010-2012)
- Self-Study Task Force: Chairman, "Resources for Educational Programs" (1995-1996, 2002-2003)
- Self-Study Task Force: "Educational Programs for the M.D. Degree" (1989-1990, 1995-1996, 2010-2012)
- Self-Study Steering Committee: Ad Hoc member (1989-1990)
- Self-Study Task Force: "Graduate Education in Sciences Basic to Medicine" (1977)
- Academic Medicine Student Organization Advisory Board (2017- )
- Committee for the Development of Faculty Educators (2002-2010)
- Dean's Teaching Excellence Award Review Committee (2003-Present)
- Asian Medical Student Association
- Co-Advisor (1993-2000)
- Faculty Advisor (1990-1993)
- Pharmacology Administrative Advisory Committee (1994-1996)
- Telephone Touchstone/Voice Response Advisory Committee (1995-1996)
- Computer Resources Planning Committee, Department of Pharmacology (1994-1996)
- Faculty Search Committee, Department of Pharmacology/Office of Educational Affairs (1977, 1984, 1995/1994)
- Primary Care Task Force (1992-1994)
- Continuous Quality Improvement Committees
- Academic Affairs Steering Committee (1994)
- Quality Council (1993-1995)
- Pre-Entry Program (1992-1993)
- Institutional Advisory Committee for the Texas Educational Opportunity Plan (TEOP) for Public Higher Education ("Texas Plan"; 1989-1994) – Chairman
- Creation of "Alternate Pathway" Program for Medical Education
- Task Force for Educational Initiatives (1992-1993); Chairman
- Anesthesiology Chair Search Committee (1992)
- Committee on Committees (1979, 1986, 1992)
- Committee for Development Leave, Chairman (1990-1991; Vice-Chairman 1989-1990)
- NSF Research Training Program in Regulatory Biology Steering Committee (NSF, 1989-1990)
- Internal Committee on Departmental Review (Physiology-1984)
- Student-Faculty Relations Committee (1980-1981)
- Student-Support Services Committee (1980)
- Summer Research Training Grant - NIH, Co-coordinator (1979-1981)
- Educational Policy Committee (1978-1981; merged with Curriculum Committee)
- 3rd Quarter Coordinator (1978-1980)
- Liaison to Curriculum Committee (1979)
- Department of Pharmacology Retreat: Medical Education (1977); Faculty Cohesion and Morale (1981); Report on Medical Education (1990), Common Equipment Survey (1990)
- Medical Student Applicant Interviewer (1974-2015)
- Student Evaluation and Promotion Committee (1974-1977)
- Faculty Group Leader - Freshman Orientation Retreat (1978-1980)
- Medical Education Committee, Department of Pharmacology, Chairman (1977-1981)
- "Dope" Club - Co-organizer and Co-coordinator, (1974-1977)

Undergraduate Education Library Committee, "Planning for 1975 and Beyond" (1974)  
National Medical Audiovisual Center Workshop (NIH); UTMSH representative, Houston, Texas (1975)

*UNIVERSITY OF TEXAS SCHOOL OF DENTISTRY (SOD)*  
*Curriculum Committee (Ex Officio, 2013)*

*UNIVERSITY OF TEXAS GRADUATE SCHOOL OF BIOMEDICAL SCIENCES (GSBS)*

Experimental Therapeutics Education Program Steering Committee (2007-2016)  
Curriculum Committee (2001-2004)  
- Chairman (2002-2003)  
President's Research Scholarship – Reviewer (2002, 2005)  
Membership Committee (1989-1992)  
Dean's Program Planning Group (1989-1991)  
Course Evaluation Task Force (1989)  
Graduate Research Student Symposium  
- Judge (1989)  
- Review Board (1986)  
Graduate Faculty  
- President (1981-1982); Vice President/President-Elect (1980-1981)  
Committee to Evaluate Programs (1981)  
Faculty Retreat Planning Committee (1981, 1988)  
- Retreat Chairman (1981)  
Executive Committee (1979-1982); Chairman (1980-1981)  
Academic Standards Committee (1977-1980); Chairman (1979-1980)  
Fellowship and Scholarship Committee (1977-1980)  
Graduate Programs in Pharmacology and Regulatory Biology  
- Curriculum Committee, Chairman (1993-1996)  
- Director of Graduate Pharmacology Program (1976-1981; 1986-1989)  
- Director of Program in Regulatory Biology (1988-1989)

*UNIVERSITY OF TEXAS HEALTH SCIENCE CENTER (UTHealth)*

Southern Association of Colleges and Schools (SACS)  
- Quality Enhancement Plan (QEP) "Written Communication" Committee (2018-2019)  
- Leadership Committee, Quality Enhancement Plan (QEP) Committee, Education Subcommittee (2007-2010)  
- Review Committee: Evaluation (1998-1999)  
Selection Committee for UT System Kenneth I. Shine, MD Academy of Health Science Education (Shine Academy) Membership (2015, 2016)  
Dean's Search Committee (2006-2007)  
Learning and Technology Advisory Team (2005-Present)  
Administrative Council: Faculty Senate Representative (2005-2006)  
Steering Team, "Innovations in Medical Education Conference" (2004)  
Interfaculty Council (1999-2012)  
- Chairman (2002-2003); Chair-elect (2001-2002); Past-Chair (2003-2004),  
- Academic Council Representative (2002-2003)  
Advances in Teaching and Learning Regional Conference Planning Committee (1999-2009)  
Task Force on Teaching Excellence (2000-2001)  
Center for Teaching Excellence Task Force (1999-2001)  
Sexual Harassment Board (1998-2001)  
- Sexual Harassment Investigative Panel (2000)  
Academic Leadership Program Steering Committee (1998-2000)  
Advisory Team Hightower High School (1998-2000)  
Learning and Technology Group (1997-2000)  
Committee for the Protection of Human Subjects (1989-2000)  
- Ad Hoc Subcommittee on Scientific Merit (1996)  
Core Curriculum

- Steering Committee (1995-1999)
- Task Force (1992-1995)
- Core Curriculum Group Facilitator (1996-1997)
- Minority Faculty Association (1988-1997)
- "Fourth" Committee (1990-1993)
- Health Informatics Chairperson Search Committee
- Chairman (1996-1997)
- Health Informatics Steering Committee (1995-1996)
- Disciplinary Appeal Tribunal (1995-1997)
- Procurement & Material Management Advisory Committee (1992-1998)
- Faculty Governance Task Force (1991-1994)
- TEOP ("Texas Plan) - Medical School representative (1989-1994)
- Minority Student Mentor Program (1989-1995)
- Strategic Planning Groups (1993-1996)
- Review Panel for Minnie Stevens Piper Professorship (1992)
- Development Leave Review Committee-Medical School Representative (1990-1991; alternate 1989-90)
- UTHSC and Prairie View A&M University Joint Educational Program Planning Committee (1989)
- Scientific Review Committee (1989-1990)
- Selection Committee for Meadows Foundation Grant (1987)

### **BAYLOR COLLEGE OF MEDICINE**

- Judge, Academy of Distinguished Educators, Annual Showcase of Educational Scholarship (2016-2019)
- Reactant, Academy of Distinguished Educators Retreat (2013)
- Committee for Joint Master's Degree in Education (2002)
- Peer Review Panel for Distinguished Educator Award (2001-2006)
- Facilitator, "Investigation of Student Performance on the 2003 End of Basic Science Exam" (EBSE), (2004)
- UTMSH Committee for the Development of Faculty Educators, representative to Baylor Fac-Ed retreat (2006)
- Academy of Distinguished Educators Faculty Retreat: Office of Medical Education (2013)

### **SERVICE TO COMMUNITY**

- University Classified Staff Committee (USCS) Educational Awards Selection Committee (2018, UTHSC)
- Wine & Spirits Guild of America, "Ethanol and Health-Evidence-Based Medicine" (with G. Cordua), Houston, 2004
- Summer Science Program for High School Students, "Problem-Based Learning" (1998, UTHSC)
- Marshall Middle School Staff Development Day Presentation, "Teaching Science to Students: Problem Based Learning" (1996, UTHMS).
- Organization of Parents and Friends - "Problem-Based Learning" (1994, UTHMS)
- Parkinson Foundation of Harris County, "Parkinson's Disease: Neurochemistry and Drug Therapy" (1989, 1991)
- Team Up For Drug Prevention, Drug Enforcement Administration, "Physiological Effects of Substances of Abuse", Presentation to Region XIII Education Service Center, Austin, TX. (Jan., 1990)
- Parents Teacher Organization Executive Committee for the High School for Performing and Visual Arts (1989-1990). Academic Affairs Committee - Chairman
- High School for Performing and Visual Arts - Campus Substance Abuse Committee (1988 - 1990)
- Medical Student Parents Orientation (1988)
- High School for Performing and Visual Arts (1988) - Biology class lecture - "Drugs of Abuse"
- Science and Engineering Fair at Houston - Judge (1978, 1980)
- "The Program in Pharmacology", presented to the Texas Health Sciences Advisors (1979, UT-GSBS)

### **SPONSORSHIP OF CANDIDATES FOR POSTGRADUATE DEGREE**

#### **GRADUATE ADVISOR**

- Stevin Zorn (Ph.D, 1987)

#### **ADVISORY, ORAL CANDIDACY and SUPERVISORY COMMITTEES (1976-2009)**

- Thyon Chentanez; Wen-Der Jiang; John Ferkany; Bob McClung; Melinda Smyser; Melba Malsky; Mike Martin; Lynn Redels; Pearlie Fennell; James Gum; Linda Barone; Bob Sikes; Elaine Mann; Sherwood Lynn; Daniel

Stralka, Susmita Poddar; Paul Kussie; Steve Nadler; Stevin Zorn; Patrick Dougherty; Anne Hodgson; Sijiu Shen; Hernan Vasquez; Haiying Zhang; Philip Steele, Pam Yang, Leposava Antonovic, Ying Wang, Jade Hatley

#### **SPONSORSHIP OF POSTDOCTORAL FELLOWS/VISITING SCIENTISTS**

Rainer Ecknauer (1977-1979); Cynthia Bearer (1978-1979); Betsy Dial (1979-1981); Sy Fatemi (1980-1982); Alan Barker (1983); Toshiro Fujii (1985-1986); Shuichiro Nishihara (1986-1987); Judit Szabo (1996-1997), Maravic Villamor (2001-2002)

#### **TEACHING/EDUCATIONAL RESPONSIBILITIES**

##### **UNIVERSITY OF TEXAS HOUSTON-MEDICAL SCHOOL**

Medical Pharmacology; Discipline Director (2017-Present)  
Medical Pharmacology; Course Director (1984-1985, 1992-2017)  
Medical Pharmacology: "CNS Drugs", Coordinator and Lecturer (1983 - Present)  
Problem-Based Learning Facilitator (1994-Present)  
Dental Pharmacology: Alcohol and Nicotine (2004-2011)  
Resident as Teacher Workshops, Co-organizer (1998)  
Pre-entry Program: Problem-Based Learning, Director and Facilitator (1992-1993)  
Neurology Residents Neuropharmacology Review (1992-1993)  
Molecular Medicine Discussion Group for the M.D./Ph.D Program (1988)  
Medical Pharmacology, 4th Quarter Coordinator (1984-1985)  
"Principles of Pharmacology", Coordinator and Lecturer (1974-1982)  
Discussion Group Leader (1980-1982)  
Preceptorship, Experimental Pharmacology Colloquium (1978-1980)  
Laboratory Preceptorships (1974-1984): 9 students

##### **UNIVERSITY OF TEXAS HOUSTON-GRADUATE SCHOOL OF BIOMEDICAL SCIENCES (GSBS)**

"Cellular and Molecular Mechanisms of Drug Action", Course Coordinator (1996-1997)  
CNS Pharmacology, Lecturer (1996-1997)  
"Selected Topics in Regulatory Biology" - Course Co-coordinator (1989-1991)  
"Seminar in Pharmacology" - Coordinator (1983-1984)  
"Principles of Neuroeffector Drug Action", (1973-1981)  
"Pharmacology I" (1975-1979); Course Co-coordinator and lecturer

##### **OTHER TEACHING**

"CNS Pharmacology", Department of Biology, University of Houston (1986)  
"SAR of Cholinergic Drugs." Department of Pharmacology, Baylor College of Medicine (1978)

#### **GRANT SUPPORT**

2013-2018 Co-Principle Investigator (PI), "Short-Term Research Training" (NIDDK; \$582,810)  
2013-2018 Campus Director/PI, UTMSH "TIME" initiative: A-PRIME & SHAPE (UT-System, \$369,000)  
2009-2014 Co-PI, "Short-Term Research Training" (NINDS; \$108,000)  
2008-2013 Principle Investigator (PI), "Short-Term Research Training" (NIDDK; \$535,819)  
2011-2013 Campus Director/PI, UTMSH "TIME" initiative: A-PRIME & SHAPE (UT-System, \$320,000)  
2003-2008 Principle Investigator, "Short-Term Research Training" (NIDDK; \$996,440)  
2005-2009 Co-Principle Investigator, Summer Medical and Dental Education Program: Health Education Academic Training (H.E.A.T.) Initiative (Robert Wood Johnson Foundation; \$1,181,239)  
1993-2002 New Initiative Grant, "Problem-Based Learning" (University of Texas Health Science Center; \$72,100/yr), Principle Investigator, M. Buja, M.D.  
2001-2004 Principle Investigator, Opioid Gastrointestinal Tolerance and Dependence (NIH; \$525,359)  
2001-2002 Foreign Faculty Fellowship Educational Commission for Foreign Medical Graduates (ECFMG; \$24,000)  
2001-2002 "Educational Initiatives in Debrecen, Hungary", Short-Term Exchange Fellowship (ECFMG; \$5,000)  
2000-2001 Opioid Gastrointestinal Tolerance and Dependence (NIH; 10% salary, P.I.: Tom Burks, Ph.D.)  
2000 P.I., "Jump-Start" Grant (University of Texas-Houston Medical School; \$2,000)

1996-1997 ECFMG Foreign Faculty Fellowship (\$24,000)  
1992-1996 "Visiting Professorship in Medical Education" Upjohn Co., (\$1,500/yr; P.I.: P.M. Butler M.D.)  
1988-1990 Principal Investigator, "Platelet Activation and Microfilament Organization", American Heart Association - Texas Affiliate  
1988-1989 Principal Investigator, "Platelet Activation and Microfilament Organization", Biomedical Research Support Grant, UTMSH  
1984-1987 Principal Investigator, Platelet Activation and Microfilament Organization (NIH-HL33021)  
1979-1981 McNeil Laboratories  
1978-1986 Principal Investigator, Hormonal Regulation of Isolated Gastric Mucosal Cells (NIH-AM20431 & AM30517)  
1978-1983 Research Career Development Award (NIH-AM00457)  
1978-1981 Principal Investigator, Purified Gastric Mucosal Parietal Cells: Hormonal Interactions and Metabolic Function, (NSF) - award declined  
1977-1978 Principal Investigator, Hormonal Regulation of Isolated Parietal Cells, Biomedical Research Support Grant (UTMSH)  
1977-1978 Upjohn Pharmaceutical Corp.  
1977-1978 Merck Foundation  
1974-1977 Principal Investigator, Mechanisms of Narcotic Addiction (NIH-DA00926)

## PUBLICATIONS (SCIENTIFIC)

### JOURNALS

- Rosenfeld, G.C.:** The effects of anoxic and anemic hypoxia on the blood brain-barrier of the cat. Ph.D. Thesis, The University of Chicago, 1968.
- Little, M., **Rosenfeld, G.C.**, and Jungblut, P.W.: Cytoplasmic estradiol "receptors" associated with the "microsomal" fraction of pig uterus. Hoppe-Seylers Z. Physiol. Chem. 353:231-242, 1972.
- Rosenfeld, G.C.**, Comstock, H.P., Means, A.R., and O'Malley, B.W.: Estrogen-induced synthesis of ovalbumin messenger RNA and its translation in a cell free system. Biochem. Biophys. Commun., 46:1695-1793, 1972.
- Rosenfeld, G.C.**, Comstock, J.P., Means, A.R., and O'Malley, B.W.: A rapid method for the isolation and partial purification of specific eukaryotic messenger RNA's. Biochem Biophys. Commun., 47:387-392, 1972.
- Means, A.R., Comstock, J.P., **Rosenfeld, G.C.**, and O'Malley, B.W.: Ovalbumin messenger RNA of chick oviduct: partial characterization, estrogen dependence and translation *in vitro*. Proc. Nat. Acad. Sci., 69:1146-1150, 1972.
- Comstock, J.P., **Rosenfeld, G.C.**, O'Malley, B.W., and Means, A.R.: Estrogen changes in translation and specific mRNA levels during oviduct differentiation. Proc. Nat. Acad. Sci., 69:2377-2380, 1972.
- O'Malley, B.W., **Rosenfeld, G.C.**, Comstock, J.P., and Means, A.R.: Steroid hormone induction of specific translatable messenger RNA. Nature, 240:45-48, 1972.
- Rosen, J.M., Harris, S.E., **Rosenfeld, G.C.**, Liarakos, C., and O'Malley, B.W.: Effect of estrogen on gene expression in the chick oviduct: III. Hybridization studies with <sup>3</sup>H-messenger RNA and <sup>3</sup>H-complementary DNA under conditions of DNA excess. Cell Differentiation, 3:103-116, 1974.
- Rosenfeld, G.C.**, Jacobson, E.D., and Thompson, W.J.: Re-evaluation of the role of cyclic AMP in histamine-induced gastric acid secretion. Gastroenterology, 70:832-835, 1976.
- Rosenfeld, G.C.**, and Burks, T.F.: Single dose tolerance to morphine hypothermia in rat: Differentiation of acute from chronic tolerance. J. Pharmacol. Exp. Ther., 202:654-659, 1977.
- Thompson, W.J., Chang, L.K., **Rosenfeld, G.C.**, and Jacobson, E.D.: Activation of rat gastric mucosal adenylyl cyclase by secretory inhibitors, Gastroenterology, 72:252-254, 1977.
- Tepperman, B.L., Jacobson, E.D., and **Rosenfeld, G.C.**: Histamine H<sub>2</sub>-receptors in the gastric mucosa: Role in acid secretion. Life Sci. 24:2301-2308, 1979.
- Burks, T.F. and **Rosenfeld, G.C.**: Neurotransmitter mediation of morphine hypothermia in rats. Life Sci., 24:1067-1074, 1979.
- Ecknauer, R., Thompson, W.J., Johnson, L.R., and **Rosenfeld, G.C.**: Isolated parietal cells: [<sup>3</sup>H]-QNB binding to putative cholinergic receptors. Amer. J. Physiol. 239:G204-G209, 1980.
- Thompson, W.J., Chang, L.K., and **Rosenfeld, G.C.**: Histamine regulation of adenylyl cyclase of enriched rat gastric mucosal parietal cells. Amer. J. Physiol. 240:G76-G84, 1981.
- Bearer, C.F., Chang, L.K., **Rosenfeld, G.C.**, and Thompson, W.J.: Modulation of histaminergic regulation of rat gastric parietal cell adenylyl cyclase by guanine nucleotides. Arch Biochem. Biophys. 207: 325-336, 1981.
- Ecknauer, R., Dial, E., Thompson, W.J., Johnson, L.R., and **Rosenfeld, G.C.**: Isolated rat gastric parietal cells: Cholinergic response and pharmacology. Life Sci. 28:609-621, 1981.
- Rosenfeld, G. C.**, McAllister, E., and Thompson, W.J.: Cytochalasin inhibition of isolated rat gastric parietal cell function. J. Cell Physiol. 109:53-57, 1981.
- Dial, E., Thompson, W.J., and **Rosenfeld, G.C.**: Isolated parietal cells: Histamine response and pharmacology. J. Pharmacol. Exp. Ther. 219:585-590, 1981.
- Fatemi, S., Thompson, W.J., and **Rosenfeld, G.C.**: Isolation and enrichment of the gastric chief cells of the rat. Cell Tiss. Res. 226:667-674, 1982.
- Rosenfeld, G.C.**: Pirenzepine (LS 519): A weak inhibitor of acid secretion by isolated parietal cells. Eur. J. Pharmacol. 86:99-101, 1982.
- Rosenfeld, G.C.**: Isolated rat parietal cells: Adrenergic response and pharmacology. J. Pharmacol. Exp. Ther. 229:763-767, 1984.
- Rosenfeld, G.C.**, Dingus, J., Meza, I. and Bryan, J.: Isolation and partial characterization of human platelet vinculin. J. Cell Biology 100:669-676, 1985.
- Rosenfeld, G.C.**: Prostaglandin-E<sub>2</sub> inhibition of secretagogue-stimulated [<sup>14</sup>C] aminopyrine accumulation in isolated rat parietal cells. A model for its mechanism of action. J. Pharmacol. Exp. Ther. 237:513-518, 1986.
- Fujii, T., Imai, M., **Rosenfeld, G.C.** and Bryan, J.: Domain mapping of chicken gizzard caldesmon. J. Biol. Chem. 262:2757-2763, 1987.



- Aitken, A., Collinge, D.B., Van Heusden, G.P.H., Isobe, T., Roseboom, P.H., **Rosenfeld, G.** and Soll, J.: 14-3-3 proteins: A highly conserved widespread family of eukaryotic proteins. Trends in Biochemical Sciences, 17:498-501, 1993.
- Williams, C.L., **Rosenfeld, G.C.**, Dafny, N., Fang, S.-N., Hruby, V.J., Bowden, G., Cullinan, C.A. and Burks, T.F.: SNF9007: A novel analgesic that acts simultaneously at delta<sub>1</sub>, delta<sub>2</sub> and mu opioid receptors. J. Pharmacol. Exp. Ther. 269:750-755, 1994.
- Tanji, M., Horwitz, R., **Rosenfeld, G.** and Waymire, J.C.: Activation of protein kinase C by purified bovine brain 14-3-3: Comparison with tyrosine hydroxylase activation. J. Neurochem. 63:1908-1916, 1994.
- Li, S., Janosch, P., Tanji, M., **Rosenfeld, G.C.**, Waymire, J.C., Mischak, H., Kolch, W., and Sedivy, J.M.: Regulation of Raf-1 kinase activity by the 14-3-3 family of proteins. EMBO J., 14:685-696, 1995.
- Roerig, S.C., Williams, C.L., Hruby, V.J., Burks, T.F. and **Rosenfeld, G.C.**: Inhibition of adenylyl cyclase activity by the cholecystokinin analog SNF9007 in neuroblastoma x glioma NG108-15 hybrid cells. Regulatory Peptides 61: 51-56, 1996.
- Williams, C.L., **Rosenfeld, G. C.**, and Burks, T.F.: Morphine tolerance and dependence in the rat Intestine *In Vivo*. J. Pharmacol. Exp. Ther., 280: 656-663, 1997.
- Williams, C.L., **Rosenfeld, G.C.**, Fang, S.-N. Hruby, V.J., and Burks, T.F.: Cholecystokinin-induced antinociception is not blocked by CCK-A or CCK-B receptor antagonists. Peptides 18: 409-414, 1997.
- Banach, T., Ferreira, C.E., Weisbrodt, N.W., **Rosenfeld, G.C.**, and Thor, P.J.: Mechanisms of intestinal dysmotility in morphine dependence: Whether central or peripheral? Folia Medica Cracoviensia, XLVI, 75-82, 2005.
- Banach, T., Zurowski, D., Gil, K., Weisbrodt, N.W., **Rosenfeld, G.C.**, and Thor, P.J.: Peripheral mechanisms of intestinal dysmotility in morphine tolerant and dependent rats. J. Physiol. Pharmacol., 57: 73-82, 2006.

#### INVITED ARTICLES and BOOK CHAPTERS

- Jungblut, P.W., McCann, S., Gorlich, L., **Rosenfeld, G.C.**, and Wagner, R.: Binding of steroids by tissue proteins; Steroid hormone "receptors". In: "Research on Steroids". Vol. IV, Conti (ed.), Vieweg-Pergamon Press, 1970.
- Jungblut, P.W., Hughes, A., Little, M., Hughes-McCann, S., **Rosenfeld, G.C.**, and Wagner, R.K.: Origin and properties of target organ estradiol binders. In: "Advances in the Biosciences". Vol. 7, pp. 137-145, Schering Workshop on Steroid Hormone Receptors, G. Raspe (ed.) Pergamon Vieweg, Berlin, 1971.
- Sierralta, W., Gaus, J., Gorlich, L., Hughes, A., Kallweit, E. Kielhorn, J., Little, M., Maschler, I., McCann, S. Meyer, H., Parl, F., **Rosenfeld, G.**, Stone, G., Szendro, P., Teran, C., Truitt, A., Wagner, R, Jungblut, P.: Effects of Estrogens on Receptor "Nucleotropy" and "Activation" In: Hormonally Active Brain Peptides, pp 215-233, Biochemical Endocrinology, Springer-Verlag US 1982
- O'Malley, B.W., **Rosenfeld, G.C.**, Comstock, J.P., and Means, A.R.: Induction of specific translatable messenger RNA's by estrogen and progesterone. Acta Endocrinol. Suppl. 168, 1972 5:381-395, 1972.
- Thompson, W.J., **Rosenfeld, G.C.**, and Jacobson, E.D.: Adenylyl cyclase and gastric secretion. Fed. Proc. 36:1938-1941, 1977.
- Burks, T.F. and **Rosenfeld, G.C.**: Central neurotransmitter participation in temperature responses to morphine in the rat. In: "The Pharmacology of Thermoregulation", K.E. Cooper, P. Lomax, E. Schonbaum (eds.), Karger, p. 204-206, 1977.
- Burks, T.F. and **Rosenfeld, G.C.**: Changes in sensitivity to dopamine-induced hypothermia in morphine tolerant rats. In: "The Pharmacology of Thermoregulation", K.E. Cooper, P. Lomax, E. Schonbaum (eds.), Karger, p. 207-209, 1977.
- Burks, T.F. and **Rosenfeld, G.C.**: Carbachol-induced thermoregulatory tolerance to morphine. In: "Characteristics and Function of Opioids" J. Van Rees and L. Terenius (eds.), p. 57-58. 1978.
- Burks, T.F. and **Rosenfeld, G.C.**: Narcotic analgesics. In: "Body Temperature Regulation, Drug Effects, and Therapeutic Implications", P. Lomax and J. E. Shonbaum (eds.), Marcel Dekker, Inc., New York, p. 531-549, 1979.
- Rosenfeld, G.C.**, Strada, S.J., and Robison, G.A.: Cyclic nucleotides and the central effects of opiates; An overview of current research. In: Neurochemical Mechanisms for Opiate and Endorphin Actions, H. Loh and D.H. Ross (eds.), Raven Press, New York, Adv. Biochem. Psychopharmacol. 20:261-279, 1979.
- DeVaul, R.A. and **Rosenfeld, G.C.**: Analgesics and antipyretics. In: "The Neuropsychiatric Side Effects of Drugs in the Elderly", A. Levenson, (ed.), Raven Press, New York, Aging 9:111-112, 1979.
- Rosenfeld, G.C.**, Strada, S.J., Dial, E.J., Bearer, C.F., and Thompson, W.J.: Histamine, cyclic nucleotides and gastric parietal cell secretion. Adv. Cyclic Nucl. Res. 12:255-266, 1980.

- Thompson, W.J., Jacobson, E.D., and **Rosenfeld, G.C.**: Cyclic AMP in receptor control of hydrogen ion secretion by mammalian gastric mucosa. In: "Handbook of Experimental Pharmacology: Cyclic Nucleotides". J.A. Nathanson and J.W. Keabian (eds.), 58:651-682, 1982.
- Thompson, W.J. and **Rosenfeld, G.C.**: Regulation of gastric acid secretion. In: "Cell Regulation by Intracellular Signals", S. Swillers, J.E. Dumont (eds.), Plenum Press, N.Y., London, p. 269-274, 1982.
- Rosenfeld, G.C.**: Sympathetic nerves and the regulation of gastric acid secretion. In: "Trends in Autonomic Pharmacology", S. Kalsner (ed.), Vol. 3:161-171, 1985.
- Dafny, N. and **Rosenfeld, G.C.**: Neurobiology of Drugs of Abuse. In: "Translational Neuroscience", Conn, P.J. (ed.), Elsevier, Inc., pp. 715-722, 2017.

## **PUBLICATIONS (EDUCATION)**

### **JOURNALS**

- Fincher, R-M.E., Simpson, D.E., Mennin, S.P., **Rosenfeld, G.C.**, Rothman, A., McGrew, M.C., Hansen, P.A., Mazmanian, P.E. and Turnbull, J.: Scholarship in teaching: An imperative for the new millennium. *Academic Medicine*, 75:887-894, 2000.
- Weaver, B., **Rosenfeld, G.**, Krane, K., Menna, J., Walsh, J., and Jackson, J.: Low attendance by basic science educators at medical education meetings. *Teaching and Learning in Medicine*, 16:306-311, 2004.
- Edwards, M.S., and **Rosenfeld, G.C.**: A problem-based learning approach to incorporating nutrition into the medical curriculum. *Med. Educ. Online* 11:1-6, 2006) <https://www.ncbi.nlm.nih.gov/pubmed/28253786>.
- Simpson, D., Fincher, R-M.E., Hafler, J.P., Irby, D.M., Richards, B.F., **Rosenfeld, G.C.**, and Viggiano, T.R.: Advancing educators and education by defining the components and evidence associated with educational scholarship. *Medical Education*, 41: 1002-1009, 2007.
- Jefferies, W.B., McMahon, K.K., **Rosenfeld, G.C.**, Strandhoy, J.W., Szarek, J., Wilson-Delfosse, A.: "Pharmacology – In the Face of Revisiting Flexner's View of Medical Education", *Journal International Association of Medical Science Educators (JIAMSE)*, 20:288-292, 2010.
- Schwartzstein, R., **Rosenfeld, G.C.**, Hilborn, R., Oyewole, SH., Mitchell, K.: "Redesigning the MCAT Exam: Balancing Multiple Perspectives", *Acad. Med.*, 88:560-567, 2013.
- Dickinson, B.L., Deming, N., Huggett, K.N., Coplit, L., Sheakley, M., Quesnelle, K., **Rosenfeld, G.C.**, and Wragg, S.: "IAMSE Member Perspectives on the Recognition, Reward, and Promotion of Medical Science Educators: An IAMSE Sponsored Survey", *Medical Science Educator*, 28:335-343, 2018

### **BOOKS (EDUCATION)**

Pharmacology: Board Review Series (BRS), Williams and Wilkins/Harwell, Baltimore, Philadelphia

Rose, K.M. (ed.), Loose-Mitchell, D.S., and **Rosenfeld, G.C.**: 1<sup>st</sup> edition, 1989.

**Rosenfeld, G.C.**, Rose, K.M., and Loose-Mitchell, D.S.: 2<sup>nd</sup> edition, 1993.

**Rosenfeld, G.C.** and Loose-Mitchell, D.S.: 3<sup>rd</sup> – 6<sup>th</sup> editions, 1997-2014.

Lerchenfeldt, S. (**Rosenfeld, G.C.** & Loose, D.S.): 7<sup>th</sup> edition, 2019

Case Files: Pharmacology, McGraw-Hill (Lange), New York

Toy, E.C., **Rosenfeld, G.C.**, Loose, D.S., and Briscoe, D, 1<sup>st</sup> and 2<sup>nd</sup> edition, 2005, 2008.

### **WEB PUBLICATIONS**

Eisenberg, R. and **Rosenfeld, G.** (eds.), Association for Medical School Pharmacology Chairs, "Knowledge Objectives in Pharmacology (4<sup>th</sup> ed.)", 2005-2012.

[http://www.aspet.org/AMSPC/Knowledge\\_Objectives/default.asp](http://www.aspet.org/AMSPC/Knowledge_Objectives/default.asp)

Simpson, D., Fincher, R-M.E., Hafler, J.P., Irby, D.M., Richards, B.F., **Rosenfeld, G.C.**, and Viggiano, T.R.: Advancing educators and education: Defining the components and evidence of educational scholarship. AAMC, 2007

[https://services.aamc.org/Publications/index.cfm?fuseaction=Product.displayForm&prd\\_id=196&prv\\_id=237&cfid=1&cftoken=A91CBC31-1167-41DD-ACCA160799A7F14E](https://services.aamc.org/Publications/index.cfm?fuseaction=Product.displayForm&prd_id=196&prv_id=237&cfid=1&cftoken=A91CBC31-1167-41DD-ACCA160799A7F14E))

Blanco, M.A., Lee, M.Y., McMahon, K. and **Rosenfeld, G.** "RIME Grantsmanship: How to Write Promising Grant Proposals Workshop", MedEdPORTAL, 2012.

[www.mededportal.org/publication/9069](http://www.mededportal.org/publication/9069)

### **VIDEOS**

Schnapp, B., Butler, P.M. and **Rosenfeld, G.C.**: Problem Based Learning: The facilitator's role. UT-TV Video, 1999.

## **COMMUNICATIONS/MEDIA**

Gulf Coast Regional Consortium for the Assessment of Performance: "Report", AAMC, Washington, D.C., IME Abstract 1993.

**Rosenfeld, G.C.** and Loose-Mitchell, D.: "Internet access to the knowledge objectives in pharmacology". For distribution by Association for Medical School Pharmacology and ASPET, 1994.

Hyde, R. and **Rosenfeld, G.**: News from the Regional Chapters: Southern Region. In: Basic Science Educator, 4:15, 1994.

Boutwell, B.: "UT Medical School to Implement Problem-Based Learning Curricula". Printed publicity release of interview with **G.C. Rosenfeld**, P.M. Butler and D. Molony; In: Monday Morning, Texas Medical Center News (16:3), The Alumni News, 1994.

**Rosenfeld, G.C.**: "Changing MCAT". Quoted in Texas Medicine, July, pp. 47-51, 2011

**Rosenfeld, G.C.**: News from the Regional Chapters: Southern Region. In: Basic Science Educator, 6:25, 1996.

**Rosenfeld, G.C.**: News And Views From The Regions: Southern Region. In: Basic Science Educator, 1997.

Koment, R.W., Galey, W.R., Hansen, P.A., **Rosenfeld, G.C.**, and Saffron, M.: Evolution of a global information network for basic science education. Basic Science Educator, 7 (Nos. 1&2): 25-26, 1997

**Rosenfeld, G.C.**: Report of the Basic Science Education-SIG. GEA Correspondent, 12, #1, 1999.

**Rosenfeld, G.C.**: Report of the Basic Science Education-SIG. GEA Correspondent, 12, #2, 1999.

**Rosenfeld, G.C.**: Report of the Basic Science Education-SIG. GEA Correspondent, 13, #1, 2000.

## ABSTRACTS (SCIENTIFIC)

- Rosenfeld, G.C.**, McCann, S., Gorlich, L., Wagner, R.K., and Jungblut, P.W.: Origin and properties of the estrogen "cytosol receptor". In: Endokrinologie der Entwicklung and Reifung, Springer-Verlag, Berlin, Heidelberg, New York, p. 412, 1970.
- Jungblut, P.W.**, McCann, S., Gorlich, L., **Rosenfeld, G.C.**, and Wagner, R.: Binding of Steroids by Tissue Proteins, Steroid Hormone "Receptors", in: Research on Steroids IV, 213, Conti, C. ed., Vieweg-Pergamon, 1970.
- Jungblut, P.W., Hughes, A., Little, M., McCann-Hughes, S., **Rosenfeld, G.C.**, and Wagner, R.K.: Origin and properties of target organ estradiol binders In: Raspe G, ed. Advances in the Biosciences, vol. 7, December 7-9, 1970. New York, Pergamon Press, Vieweg, 1971. 137-54.
- Rosenfeld, G.C.**, Comstock, J., Miller, D., Means, A., and O'Malley, B.W.: Isolation of a specific steroid-hormone regulated messenger RNA. IV Int. Congress of Endocrinology, 1972.
- O'Malley, B.W., **Rosenfeld, G.C.**, Comstock, J.P., and Means, A.R.: Isolation of a specific steroid-hormone regulated mRNA. 23rd Ann. Meeting of the Tissue Culture Assoc., May, 1972.
- Comstock, J.P., **Rosenfeld, G.C.**, Means, A., and O'Malley, B.: Mechanisms of steroid hormone action: proof of the messenger RNA hypothesis. 65th Ann Meeting Soc. Clin. Invest., May, 1972.
- Rosenfeld, G.C.**, and Burks, T.F.: Single dose tolerance to morphine hypothermia in rats. Sixth International Congress of Pharmacology, Helsinki, 1975.
- Juliano, J.V., Bell, L., Tipton, S.M., Stancel, G.M., and **Rosenfeld, G.C.**: Opiate receptors: Stereospecific binding of opiates to rat brain tissue slices, Texas J. Sci., 1:156, 1976.
- Rosenfeld, G.C.**, Thompson, W.J., and Jacobson, E.D.: Cyclic AMP, histamine and the gastric mucosa: a search for the elusive second messenger. Clinical Research, 24:13a 1976.
- Rosenfeld, G.C.**, Thompson, W.J., and Jacobson, E.D.: Gastric mucosal binding of <sup>3</sup>H-metiamide to putative histamine H<sub>2</sub>-receptors. Gastroenterology, 70:963, 1976.
- Thompson, W.J., **Rosenfeld, G.C.**, and Jacobson, E.D.: Stimulation of rat gastric mucosal adenylyl cyclase inhibitors of gastric acid secretion. Gastroenterology, 70:964, 1976.
- Rujirekagulwat, T., Redburn, D.A., Cope, T., and **Rosenfeld, G.C.**: Morphine-induced stimulation of high affinity choline uptake in rat brain striatum. Pharmacologist, 18:213, 1976.
- Redburn, D.A., Rujirekagulwat, T., Cope, T., and **Rosenfeld, G.C.**: Effect of morphine in vivo on release of [<sup>3</sup>H]-acetylcholine from rat striatal synaptosomes in vitro. Sixth Ann. Soc. Neuroscience Meetings, Toronto, Neuroscience Abst's., 11:795, 1976.
- Thompson, W.J., **Rosenfeld, G.C.**, Ray, T.K., and Jacobson, E.D.: Activation of adenylyl cyclase from isolated rat parietal cells by gastric acid secretagogues. Clinical Research, 537A, 1976.
- Jacobson, E.D., **Rosenfeld, G.C.**, and Thompson, W.J.: Rat gastric mucosal adenylyl cyclase. Proc. 1st. Int. Symp. G.I. Hormones, 1977.
- Burks, T.F., Grant, J.K., and **Rosenfeld, G.C.**: Cholinergic inhibition of morphine-induced hypothermia. Pharmacologist, 19:170, 1977.
- Thompson, W.J., Ferkany, J.W., Chang, L.K., Jacobson, E.D., and **Rosenfeld, G.C.**: Guanine nucleotide dependent histamine activation of adenylyl cyclase in purified gastric parietal cells. Adv. Cyclic Nucl. Res., 9:737, 1978.
- Mehta, C.S., **Rosenfeld, G.C.**, and Strada, S.J.: Altered cyclic AMP response to norepinephrine induced by acute and chronic morphine administration. Fed. Proc., 37:772, 1978.
- Rosenfeld, G.C.**, Ecknauer, R., Johnson, L.R., and Thompson, W.J.: Purified gastric mucosal parietal cells: Demonstration of [<sup>3</sup>H]-QNB binding to cholinergic receptors. Proc. 7th Int. Congress Pharmacol., Paris, July 16-21, p. 132, 1978.
- Rosenfeld, G.C.**, Gerba, P., Strada, S.J., and Thompson, W.J.: Stimulation by acid secretagogues of <sup>14</sup>C-aminopyrine accumulation into isolated rat gastric mucosal parietal cells. Pharmacologist, 20:208, 1978.
- Ecknauer, R., Thompson, W.J., Johnson, G.C., and **Rosenfeld, G.C.**: Isolated parietal cells: Cholinergic pharmacology and function. Fed. Proc., 38:884, 1979.
- Bearer, C.F., Chang, L.K., **Rosenfeld, G.C.**, and Thompson, W.J.: Interactions of acid secretagogues with adenylyl cyclase of rat gastric parietal cells. Fed. Proc., 38:1948, 1979.
- Dial, E.J., Thompson, W.J., and **Rosenfeld, G.C.**: Characterization of the histamine response of isolated rat parietal cells using <sup>14</sup>C-aminopyrine. Physiologist, 22:29, 1979.
- Dial, E.J., Thompson, W.J., and **Rosenfeld, G.C.**: The effect of calcium and other cations on carbachol and histamine stimulated acid secretion in isolated rat parietal cells. Pharmacologist, 22:167, 1980.
- Ecknauer, R., Johnson, L.R., and **Rosenfeld, G.C.**: Isolated rat parietal cells: Comparison of binding and functional response to cholinergic drugs. Fres. Zeit Anal. Chem., 301:197, 1980.

- Rosenfeld, G.C.**, McAllister, E., and Thompson, W.J.: Cytochalasin inhibition of acid secretion by isolated rat parietal cells. *J. Cell. Biol.*, 91:290, 1981.
- Rosenfeld, G.C.**, and Thompson, W.J.: Isolated parietal cell acid secretion is stimulated by beta<sub>2</sub>-adrenergic agonists. *Fed. Proc.*, 41:1359, 1982.
- Bryan, J., Dingus, J., Hwo, S., Kurth, M., **Rosenfeld, G.C.** and Sedlar, P.: Partial characterization of platelet gelsolin. In: "Actin-Membrane Interaction", 2nd Int. Conf. Biol. Struct. p.24, 1983.
- Hou, D.C., Dingus, J., **Rosenfeld, G.C.** and Bryan, J.: Actin gelation in platelet extracts. *J. Cell Biol.*, 97:276a, 1983.
- Rosenfeld, G.C.**, Meza, I., Hwo, S. and Bryan, J.: Isolation and partial characterization of human platelet vinculin. *J. Cell Biol.*, 97:283a, 1983.
- Rosenfeld, Gary C.**: The effect of PGE<sub>2</sub> or secretagogue stimulated acid secretion in isolated parietal cells. Proc.9th Int. Congress Pharmacol., London, July 29 - August 3, 1984.
- Rosenfeld, Gary C.**: Carbachol potentiation and inhibition of histamine-stimulated acid secretion by isolated rat parietal cells. *Trends Pharmacol. Sci.*, Feb., 1986 (Supplement).
- Fujii, T., M., **Rosenfeld, G.C.** and Bryan, J.: Domain mapping of chicken gizzard caldesmon. *J. Cell Biol.*, 103:537a, 1986.
- Zorn, S.H., Giachetti, A., Enna, S.J., Micheletti, R. and **Rosenfeld, G.C.**: Characterization of nipectic acid ethyl ester-stimulated acid secretion: Relationship to phosphotidyl inositol turnover. *Fed. Proc.*, 46:857, 1987.
- Nishihara, S., Eddy, B.J., Zorn, S.H. and **Rosenfeld, G.C.**: Cholinergic muscarinic-stimulated acid secretion and inositol phosphate accumulation in rat parietal cells. *Fed. Proc.*, 46:857, 1987.
- Rosenfeld, G.C.**, Sanborn, B., Loose-Mitchell, D.: Cloning, distribution and expression of rat 14-3-3 protein. *FASEB J.*, 5:A834, 1991.
- Williams, C.L., **Rosenfeld, G.C.**, Dafny, N., Hruby, V.J., Fang, S.-N. and Burks, T.F.: A novel opioid analgesic with simultaneous actions at  $\mu$  and delta opioid receptors. *FASEB J.*, 7:A487, 1993.
- Williams, C.L., **Rosenfeld, G.C.**, Hruby, V.J., Fang, S.-N. and Burks, T.F.: Central gastrointestinal antipropulsive effects of cholecystokinin (CCK) and CCK-A and CCK-B site selective analogues in mice. *Gastroenterology*, 104:A601, 1993.
- Williams, C.L., **Rosenfeld, G.C.** and Burks, T.F.: Centrally administered CCK produces antinociception that is not blocked by CCK-A or CCK-B receptor antagonists. *FASEB J.*, 8:A627, 1994.
- Williams, C.L., **Rosenfeld, G.C.**, and Burks, T.F.: Direct demonstration of opioid tolerance and dependence in the intestine. *Gastroenterology* 106:A589, 1994.
- Burks, T.F., **Rosenfeld, G.C.** and Williams, C.L. Intestinal tolerance to morphine and precipitated withdrawal **in vivo**. Proceedings College on the Problems of Drug Dependence, Palm Beach, 1994.
- Roerig, S.C., Williams, C.L., Hruby, V.J., Burks, T.F. and **Rosenfeld, G.C.**: Cholecystokinin (CCK) analog SNF9007-induced inhibition of adenylyl cyclase activity in NG108-15 hybrid cells and SH-S5Y cells shows differential activation of delta opioid receptors. *Reg. Peptides* 54: 247-248, 1994.
- Roerig, S.C., Williams, C.L., Hruby, V.J., Burks, T.F. and **Rosenfeld, G.C.**: Cholecystokinin (CCK) analog SNF9007 activates delta-opioid receptors to inhibit adenylyl cyclase activity in neuroblastoma X glioma NG108-15 cells. XII International Congress of Pharmacology. Montreal, July, 1994 *Can. J. Physiol. Pharmacol.* 72(Suppl.1), 352, 1994.
- Williams, C.L., **Rosenfeld, G.C.**, and Burks, T.F.: Cholecystokinin-induced stimulation and inhibition of morphine antinociception. Proceedings College on the Problems of Drug Dependence, Scottsdale, AZ, June, 1995.
- Williams, C.L., **Rosenfeld, G.C.**, and Burks, T.F.: Coticotropin-releasing factor (CRF) is ten-fold more potent in accelerating colonic transit in female than in male rats. *Gastroenterology*, 110:A1132, 1996.
- Williams, C.L., **Rosenfeld, G.C.**, and Burks, T.F.: Mu but not delta opioid agonists produce dependence in the intestine in the rat, *FASEB J.*, 10: A454, 1996.
- Burks, T.F., **Rosenfeld, G.C.**, Bihm, C., and Williams, C.L.: Brain opioid receptors are responsible for morphine physical dependence in the colon. *Gastroenterology*, 1997.
- Burks, T.F., Bihm, C., Williams, C.L., and **Rosenfeld, G.C.**: Gastrointestinal opioid dependence resides in the brain. Falk Symposium, Germany, 1999.
- Ferreira, C., Banach, T., Phan, T. Weisbrodt, N. and **Rosenfeld, G.**: The influence of CTOP on gastrointestinal motility in the morphine-tolerant and -dependent rats. *Neurogastroenterol. Mot.* 14:427, 2002.
- Banach, T., Thor, P.J., Ferreira, C.E., Weisbrodt, N.W., and **Rosenfeld, G.**: The influence of opioid mu-receptor antagonists on gastrointestinal motility in morphine tolerant and dependent rats. *Neurogastroenterol. Motil.* 14:570, 2002.

- Banach, T., Weisbrodt, N., Ferreira, C., **Rosenfeld, G.**, and Thor, P.: Intramuscular interstitial cells of Cajal in morphine tolerant and dependent rats. *Neurogastroenterol. Motil.* 15: 6, 2003.
- Banach, T., Weisbrodt, N., Ferreira, C., Rosenfeld, G., and Thor, P.: Vagal afferent activity in morphine tolerant and dependent rats. *Neurogastroenterol. Motil.* 15, 74, 2003.
- Banach, T., Weisbrodt, N.W., **Rosenfeld, G.** and Thor, P.J.: Vagal afferent activity and interstitial cells of Cajal expression in morphine tolerant and dependent rats. *Neurogastroenterol. Motil.* 16:683, 2004.
- Gil K.M., Ferreira C.E, Weisbrodt N.W., **Rosenfeld G.C.**, Thor P.J.: The  $\mu$ -opioid agonist, DAMGO, inhibits intestinal motility via peripheral mechanisms when given intraperitoneally. *Neurogastroenterol. Motil.* 16: 863, 2004.

### **ABSTRACTS/POSTERS (EDUCATION)**

- Rosenfeld, G.C.**, Crow, M., and Redburn, D.A.: Initiatives in undergraduate research training in pharmacology. *Pharmacologist* 32:24, 1990.
- Rosenfeld, G.C.:** Graduate pharmacology instruction in the age of molecular biology. *Pharmacologist* 34:251, 1992.
- Koment, R.W., Galey, W.R., Robinson, A.I., **Rosenfeld, G.C.** and Saffran, M.: Basic science education for the 21st century. AAMC, Boston, IME Abstract, 1994.
- Koment, R.W., Galey, W.R., Hansen, P.A., **Rosenfeld, G.C.** and Saffran, M.: Expanding the scope of basic science education. AAMC, Washington, D.C., IME Abstract, 1995.
- Koment, R.W., Galey, W.R., Hansen, P.A., **Rosenfeld, G.C.** and Saffran, M.: Evolution of a global information network for basic science education. AAMC, San Francisco, IME Abstract, 1996.
- Varagoor, G., Butler, P.M., Lund, K., **Rosenfeld, G.C.** and Schultz, S.G.: Pre-entry program at the University of Texas-Houston Medical School. AAMC, New Orleans, 1998.
- Fincher, R-M.E. and **Rosenfeld, G.:** Scholarship in Teaching: What is it and how should it be rewarded? AAMC:SGEA, San Juan, Abstract, 1999.
- Varagoor, G., Butler, P.M., Lund, K., **Rosenfeld, G.C.** and Schultz, S.G.: Pre-entry program at the University of Texas-Houston Medical School. Ottawa Conference, 1999.
- Edwards, M.S. and **Rosenfeld, G.C.:** Problem Based Learning: A model for medical nutrition education. *Exp. Biology*, 14: A481, 2000.
- Gardner, R.M., **Rosenfeld, G.C.** and Stancel, G.M.: Teaching that first course. *Experimental Biology Program:* S201, p.69, 2001.
- Rosenfeld, G.C.**, and Burks, T.F.: "Use of the AMSP Knowledge Objectives to Develop National Teaching Materials", *Exp. Biol.*, 2001.
- Yeoman, L., Fleischmann, R. and **Rosenfeld, G.C.:** Alternative models of Problem-Based Learning: The East-Texas experience. *Basic Science Educator*, 2001.
- Rosenfeld, G.C.**, and Burks, T.F.: Knowledge objectives in pharmacology: A base on which to develop national teaching materials in pharmacology. *Proceedings Western Pharmacology Association*, 2001.
- Rosenfeld, G.**, Menna, J., Krane, K., and Weaver, B.: Basic science educators and the national and regional GEA. , 6<sup>th</sup> Annual Meeting International Association of Medical Science Educators (IAMSE), Guadalajara, 2002.
- Rosenfeld, G.C.**, Krane, N.K., Menna, J. and Weaver, B.: A national survey on the relationship between basic science educators and the Association of American Medical Colleges. AAMC Group on Educational Affairs, Southern Region, 2002.
- Scott, J.R., Chauvin, S.W. and **Rosenfeld, G.C.:** Program evaluation: Frameworks for assessing educational effectiveness in the basic sciences, 2006 (Poster, award finalist).
- Lieberman, S.A., Franzen, S.L., and **Rosenfeld, G.C.:** Transformation in Medical Education (TIME): A new model for US pre-doctoral medical education. Association for Medical Education in Europe (AMEE), 2014.
- Nelson, B., Kreutzer, K., Cottrell, S., **Rosenfeld, G.**, and Elam C.: Unanticipated Positive Consequences: Transforming Professional Development for Medical Educators. Southern Group on Educational Affairs (SGEA), 2014.
- Oakes J, Mercado A, **Rosenfeld G.**, and Ainsworth M. Accelerated clinical skills development for undergraduate premedical students in the A-PRIME TIME partnership., Poster presentation at the 2014 TIME Fall Conference. Austin, TX September 15, 2014 and Poster presentation at the 11<sup>th</sup> annual Innovations in Health Science Education Meeting. Austin, TX February 19, 2015.
- Deming, N., Sheakley, M., Quesnelle, K., **Rosenfeld, G.**, Coplit, L., Wragg, S. Huggett, K. and Dickinson, B: IAMSE Members' Perception of their Institutional Processes for Evaluation, Recognition, and Promotion of Medical Science Educators. 21st Annual Meeting International Association of Medical Science

Educators (IAMSE), Burlington, Vt., 2017.

Anderson, P., Carroll, R., Fulton, T., Lindsley, J., Moore, K., and Rosenfeld, G.: Better Aligning USMLE Step Exams With What We Want: What's Your Discipline's Metabolic Map? International Association of Medical Science Educators (IAMSE), Las Vegas, NV, 2018