

Curriculum Vitae

Theoharis C. Theoharides,

BA, MS, MPhil, PhD, MD, FAAAAI

Professor of Pharmacology, Internal Medicine (Allergy)

and Biochemistry

Director

Molecular Immunopharmacology and Drug Discovery Laboratory

(www.mastcellmaster.com)

Department of Molecular Physiology and Pharmacology
Tufts University School of Medicine
Tufts Medical Center
Suite M&V-208
136 Harrison Avenue
Boston, Massachusetts 02111, U.S.A.

**Clinical Pharmacologist, Massachusetts
Drug Formulary Commission (1986-2011)**

Phones: (617) 636-6866 (Main office - M&V 208)
(617) 636-0394 (Dept. Office - M&V 702)
(617) 636-6898 (Lab - M&V 322)
(617) 636-0426 (Lab - M&V 320)

Fax: (617) 636-2456 (Office)
(617) 636-6738 (Dept. office)

Email: theoharis.theoharides@tufts.edu

June 11, 2011

| <u>Content</u> | <u>Page</u> |
|--|--------------------|
| Personal information | 3 |
| Education | 3 |
| Postdoctoral training | 3 |
| Academic appointments | 3 |
| Awards and Honors | 4 |
| Continuing education credits | 5 |
| Certifications | 6 |
| Other appointments | 6 |
| Teaching | 6 |
| University Committee assignments | 6 |
| Other Committee assignments | 7 |
| Bibliographical listings | 7 |
| Pharmaceutical industry experience | 8 |
| Pharmaceutical regulatory experience | 8 |
| Corporate business experience | 8 |
| Editorial reviews | 10 |
| Membership to professional societies | 10 |
| Research interests | 11 |
| Clinical studies | 12 |
| Research fellowships and grants | 13-16 |
| Active grants | 16-17 |
| Patents | 18-19 |
| Training of postdoctoral fellows | 20-22 |
| Training of graduate students | 23-24 |
| Graduate student rotations | 25 |
| Medical and dental student rotations | 25 |
| College student research training | 26 |
| High school student summer research training | 26-27 |
| Trainee distinctions | 27-28 |
| Summary of publications and citations | 29 |
| Theses | 30 |
| Books | 29 |
| Full peer-review papers | 31-43 |
| Reviews | 44-50 |
| Editorials | 51-52 |
| Case reports | 53 |
| Abstracts/ Proceedings | 54-67 |
| Non-print publications | 68 |
| Invited lectures | 69-75 |

Personal Information

| | | | |
|-----------------|-------------------------------------|----------------------|------------------------|
| Date of Birth: | February 11, 1950 | Nationality: | Greek; U.S.A. |
| Place of Birth: | Thessaloniki, Greece | Permanent Residency: | U.S.A. since 8/3/79 |
| Marital Status: | Efthalia Triarhou, M.A. (Tufts '89) | Children: | Niove and Konstantinos |

Education

| | | | |
|----------|--|---|--|
| 1968 | Diploma | Anatolia College | Classics <i>with Honors</i> |
| 1972 | Bachelor of Arts (jointly in two fields) | Yale University | Biology and History of Science & Medicine, <i>Cum laude</i> |
| 1975 | Master of Science | Yale University | Neuroimmunology |
| 1975 | Master of Philosophy | Yale University | Immunopharmacology |
| 1978 | Doctor of Philosophy | Yale University | Pharmacology |
| 1983 | Doctor of Medicine | Yale University | Medicine |
| 1999 | Certificate | Tufts University Fletcher School of Law & Diplomacy | Global Leadership and Management |
| Deferred | Master of Public Administration | Harvard University- JF Kennedy School of Government | Biomedical Research/Health Policy |

Other Training

| | | |
|---------|--------------------|--|
| 1983-84 | Associate | Allergy and Clinical Immunology, Dept. Internal Medicine, Yale Un. |
| 1986-91 | House Staff | Internal Medicine, New England Med. Center, Boston, MA |
| 1991-93 | Associate | Allergy, New England Medical Center, Boston, MA |

Academic Appointments

| | | |
|----------------|--|---|
| 1968-72 | Assistant in Research | Department of Biology, Yale University, New Haven, CT |
| 1973-78 | Assistant in Research | Department of Pharmacology, Yale University, New Haven, CT |
| 1978-83 | Research Associate | Faculty of Clinical Immunology, Department of Internal Medicine, Yale University School of Medicine, New Haven, CT |
| 1981 | Visiting Professor | Department of Experimental Pharmacology, Aristotle University School of Medicine, Thessaloniki, Greece |
| 1983-88 | Assistant Professor | Biochemistry and Pharmacology, Tufts University School of Medicine |
| 1983-85 | Co-Director | Medical Pharmacology, Tufts Univ. School of Medicine |
| 1985-88 | Assistant Professor | Psychiatry (Clinical Pharmacology), Tufts University |
| 1985-91 | Director | Medical Pharmacology, Tufts University School of Medicine |
| 1989-94 | Associate Professor | Pharmacology, Tufts University (tenured 11/2/91) |
| 1989- 1995- | Associate Professor Professor | Biochemistry and Psychiatry, Tufts University, Boston, MA Pharmacology and Internal Medicine (Allergy), Tufts University |
| 2002- | Professor | Professor of Biochemistry, Tufts University |
| 2006 | Visiting Professor | Allergy Section, Attikon Hospital, Athens Univ. Med. School, Greece |
| 2006-13 | Special Advisor | Allergy Clinical Research Center, Allergy Section, Attikon Hospital, Athens Univ. Med. School, Athens, Greece |

Awards and Honors

- 1971 **Connecticut Commission for Undergraduate Research Award**
1971 **Yale College Dean's Research Award**
1972 **Yale College Cum Laude & Divisional Honors** for joint Bachelor of Arts
1972 **Yale University Cuyler Award** "for outstanding Yale College Graduates"
1975-77 **Advisory Committee to the Dean**, Graduate School, Yale University
1979 **Academic Award**, Hellenic Medical Society of New York
1980 **Travel Award**, American Society for Cell Biology
1980 **Yale University Winternitz Prize** "for the best work in Pathology"
1981,82 **Research Fellowship**, Intl. Institute of Cellular and Molecular Pathology, Brussels
1982 **Volunteer Award**, Veterans Administration Medical Center, West Haven, CT
1983 **Medical Award**, Hellenic Medical Society of New York
1983 **Chairman - Immunopharmacology**, 9th International Congress of Pharmacology, London
1984 **Travel Award**, American Society for Pharmacology and Experimental Therapeutics
1986 **Chairman - Neuroimmunology**, 2nd World Conference of Inflammation, Monte Carlo
1986 **Distinguished Service Citation** for faculty excellence, Tufts University
1987 **Special Faculty Recognition Award**, Tufts University School of Medicine
1987 **Honorary Member**, Alpha Omega Alpha Honor Medical Society
1988 **Special Faculty Recognition Award**, Tufts University School of Medicine
1989 **Chairman - Neuroimmune Modulation**, 3rd World Conf. on Inflammation, Monte Carlo
1989 **Citation for Excellence in Teaching**, Tufts University School of Medicine
1990 **Citation for Excellence in Teaching**, Tufts University School of Medicine
1991 **Advisory Committee**, 4th World Conference on Inflammation, Geneva
1991 **Citation for Excellence in Teaching**, Tufts University School of Medicine
1991 **Interstitial Cystitis Association Recognition Award**
1992 **Citation for Excellence in Teaching**, Tufts University School of Medicine
1993 **Advisory Committee**, 5th World Conference on Inflammation, Geneva
1993 **Citation for Excellence in Teaching**, Tufts University School of Medicine
1993 **Medical Awareness and Patient Support Award**, Interstitial Cystitis Association
1994 **Chairman, Inflammatory Mechanisms**, 6th Intl. Conference on Immunopharm., Prague
1994 **Citation for Excellence in Teaching**, Tufts University School of Medicine
1994 **Great Cross**, Greek Orthodox Diocese of Boston for humanitarian health care
1995 **Advisory Committee**, 6th World Conference on Inflammation, Geneva
1995 **Chairman**, International Committee to Upgrade Medical Education in Greece
1996 **Citation for Excellence in Teaching**, Tufts University School of Medicine
1997 **Advisory Committee**, 7th World Conference on Inflammation, Geneva
1997-00 **Supreme Scientific Health Council to Secretary of Health**, Hellenic Republic
1998 **Community Service Award** for humanitarian healthcare, Mayor T. Menino, Boston
1999-02 **Supreme Healthcare Board**, Social Welfare Organization, Ministry of Labor and Human Resources, Hellenic Republic
1999 **Oliver Smith Award**, Recognizing Excellence, Compassion and Service, New Engl.Med. Center
1999 **Certificate in Global Leadership and Management**, The Fletcher School of Law and Diplomacy, Tufts University
2000 **Archon of the Ecumenical Patriarchate** of Constantinople, Orthodox Christian Church (Istanbul) for humanitarian healthcare
2001 **Plenary Speaker**, National Minority Research Symposium, Cancun, Mexico
2002 **Dr. George Papanicolaou Gold Medal** for contributions in humanism and medicine
2003 **J.F. Kennedy Fellow**, Harvard University, J.F. Kennedy School of Government
2003-08 **National Public Health Council**, Secretary of Health, Hellenic Republic
2006 **Science and Medicine Award**, Federation HASNE, Boston, MA
2006 **Hygeia Award**, New England Hellenic Medical and Dental Society, Boston, MA
2007- **Fellow**, European Academy of Allergology and Clinical Immunology
2007- **Fellow**, American Academy of Allergy, Asthma and Immunology
2010 **Honorary Doctor of Science**, Athen University (Greece), conferred on January 25, 2011

| <u>Formal Continuing Education Credits</u> | <u>Dates</u> | <u>Credit</u> | |
|--|--|------------------|------|
| <u>Hours</u> | | | |
| 1998 | Tufts University School of Medicine | 9/97-6/98 | 6 |
| | Natl. Inst. Diabetes, Digestive and Kidney Diseases (NIH) | Jan. 9-11 | 15 |
| | Natl. Inst. Diabetes, Digestive and Kidney Diseases (NIH) | Oct. 5-6 | 11.5 |
| | Harvard's Primary Practice Internal Medicine | Nov. 2-6 | 41 |
| 1999 | Am. Acad. Allergy, Asthma and Immunology | July 3-7 | 32.5 |
| | Tufts University School of Medicine | 9/9/98-6/19/99 | 3 |
| | Harvard's Primary Practice Internal Medicine | Nov. 1-5 | 38 |
| | Endocrine Society's Lipid Lowering in the Management of Coronary Risk | Nov. 13 | 3 |
| | Harvard's Update in Internal Medicine | Dec. 5-11 | 61 |
| | Harvard's Current Clinical Issues in Primary Care | Dec. 10-12 | 3 |
| | Update in Infectious Diseases | Dec. 11 | 3 |
| 2000 | Harvard's Primary Practice Internal Medicine | Oct.6-11 | 37 |
| | Harvard's Intensive Review of Internal Medicine | Dec. 10-16 | 61 |
| 2001 | Harvard's Intensive Review of Internal Medicine | Aug. 12-19 | 61 |
| | Harvard's Primary Practice Internal Medicine | Nov. 5 - 9 | 37 |
| | Harvard's Update in Internal Medicine | Nov. 30 - Dec. 6 | 61 |
| 2002 | Harvard's Internal Medicine 2002 | June 10-15 | 17 |
| | Harvard's Update in Internal Medicine Dec 8-14 | Dec. 8-14 | 61 |
| | ACAAI's Complementary Alternative Medicine (San Antonio, TX) | Nov. 14 | 6.75 |
| 2003 | Harvard's Intensive Review of Internal Medicine | Jun. 5-12 | 61 |
| 2004 | Harvard's Intensive Review of Internal Medicine | July 11-18 | 78 |

Certifications

- 1983 National Board of Medical Examiners, USA
1984 Hellenic Ministry of Health and Social Services, Greece
1984- License to practice medicine, Republic of Greece and European Union (#34542-566)
1986-93 License to practice medicine, Commonwealth of Massachusetts (NEMC #92-3418)

Other Appointments

- 1964-68 Instructor of Braille, Anatolia College, Thessaloniki, Greece
1974-77 Instructor of Modern Greek, Yale University, New Haven, CT

Teaching

- 1984- Dental Pharmacology: 3 hours and one 1-hour review
1984-92 Veterinary Pharmacology: 5 hours and one 1-hour review
1984-89 Pre-matriculation program - Pharmacology: **Director**, 12 hours (summer)
1984- National Board of Medical Examiners, Part I (NBME-I): one 7 hour review
1985-93 Medical Pharmacology: **Director**, 25 hours and five 1 hour reviews
Created a unified pharmacology course for the first time with a syllabus which became a textbook, now in its second edition.
1993- Medical Pharmacology: 5 hours and four 1 hour reviews
1993-97 Graduate Pharmacology: **Director**, 30 hours; Created the graduate program in pharmacology for the first time which was granted independent status.
1994- Immunopharmacology: **Director**, 20 hours
2004- Bio 195-Pharmacology of Multiorgan Diseases (Tufts undergraduate course). **Director**, 50 hrs

University Committee Assignments

- 1984-86 **Curriculum Planning Committees:** Tufts University School of Medicine
1985-86 **Self-study Committee on Educational Methods:** Tufts University
1984-91 **Advisor, Progressive Minority Student Alliance:** Tufts University School of Medicine
1984-91 **Advisor, Medical Student Advisory Program:** Tufts University
1987-91 **Curriculum Committee:** Tufts University School of Medicine
1987-91 **Admissions Interviewing Committee:** Tufts University School of Medicine
1987-93 **Promotions Committee:** Tufts University School of Medicine
1987-91 **Ad Hoc Advisor:** Tufts Amnesty International Chapter
1987-91 **Ad Hoc Advisor:** Tufts Literary Club
1988-91 **Chairman:** Committee for Graduate Studies in Pharmacology, Sackler School of Graduate Biomedical Sciences, Tufts University
1992- **Member:** Committee for Graduate Studies in Pharmacology, Sackler School of Graduate Biomedical Sciences, Tufts University
1992- **Phase II Curriculum Committee:** Tufts University School of Medicine
1992- **Research Development Group:** Arthritis, autoimmunity, and immunologic diseases, Tufts
1992, 98 **Accreditation Review Committee on Educational Programs**
2000-03 **Basic Sciences Promotion and Tenure Committee,** Tufts University School of Medicine
2001-04 **Program and Faculty Committee,** Tufts University School of Medicine
2009 **Strategic Implementation Committee,** Tufts University School of Medicine

Other Committee Assignments

- 1974-78 **Senator:** Graduate and Professional Student Senate, Yale University
1977-78 **Executive Secretary:** Graduate and Professional Student Senate, Yale University
1980 **U.S.A. Representative:** for the IXth Congress of the European Association of Poison Control Centers and the European Meeting of the International Association of Forensic Toxicologists
1983 **Peer-Reviewer:** Cellular Biology Section, National Science Foundation
1984 **Co-Chairman:** Ninth International Congress of Pharmacology, London
1985 **Founding member:** Serotonin Club, U.S.A.
1986 **Chairman:** Second Interscience World Conference on Inflammation, Monte Carlo
1986 **Organizing Committee:** Conference on Healing, N.Y.
1986- **Clinical Pharmacologist:** Drug Formulary Commission of Massachusetts
1988- **Honorary Member:** Research Board of Advisors, The American Biographical Institute
1989 **Chairman:** Third Interscience World Conference on Inflammation, Monte Carlo
1989 **Peer-Reviewer:** National Institutes of Health - NIDDKD/Urology *Ad Hoc* study section
1990 **Advisory Committee:** Fourth World Conference on Inflammation, Geneva
1993 **Advisory Committee:** Fifth World Conference on Inflammation, Geneva
1993 **Visiting Consultant:** King Abdulaziz University Medical School, Jeddah, SA
1993-94 **Consultant:** Committee to Upgrade the National Health Care System, Athens, Greece
1994 **Chairman:** Inflammatory mechanisms, 6th Intl. Conference on Immunopharm, Prague
1994-99 **Board of Directors:** Institute of Pharmaceutical Research and Technology: responsible for the analytical branch of the Food and Drug Administration, as well as the National Pharmaceutical Industry and National Drug Warehouse, Athens, Greece
1994-99 **Special Advisor:** in charge of establishing a bioequivalence and drug development center for the Greek National Drug Organization, Athens, Greece
1994-95 **Chairman:** International Committee to Upgrade Medical Education, Athens, Greece
1995 **Advisory Committee:** 6th World Conference on Inflammation, Geneva
1997 **Advisory Committee:** 7th World Conference on Inflammation, Geneva
1997 **Chairman:** Postgraduate Medical Education, 3rd European Medical Students' Congress, Crete, Greece
2000 **Chairman:** International Congress on Interstitial Cystitis and Related Neuroinflammatory Conditions, Crete, Greece
1997-00 **Member:** Supreme Scientific Health Council to Secretary of Health, Hellenic Republic
1999-02 **Member:** Supreme Healthcare Board, Institute of Social Services, Hellenic Republic
2000-03 **Member:** School Site Council, Devotion School, Brookline, MA
2003- **Member:** Board of Directors, the Brookline Foundation, MA
2003-08 **Member:** National Public Health Council, Secretary of Health, Hellenic Republic

Bibliographical Listings

Marquis Who's Who in America

Marquis Who's Who in the World

Marquis Who's Who in Medicine and Healthcare

Marquis Who's Who in Frontier Science and Technology

Hellenic Who's Who in Business and the Professions

Men of Achievement

Dictionary of International Biography

Pharmaceutical Industry Experience

- 1984-88 Consultant, *Hoechst Pharmaceuticals*, Frankfurt, Germany
- 1988-2003 Consultant, *Kos Pharmaceuticals*, Miami, FL.
- 1990-98 Consultant, *Muro Pharmaceuticals*, Tewksbury, MA
- 1994-99.1 Consultant, *Galenica*, Athens, Greece
- 2011-15 Consultant, Thorne research (ID)

Pharmaceutical Regulatory Experience

- 1986-2010 Clinical Pharmacologist, *Massachusetts Drug Formulary Commission*
- 1994-97 Special Advisor, *Hellenic National Drug Organization*, Athens, Greece
- 1994-00 Member, Board of Directors, *Institute of Pharmaceutical Research and Technology*, Athens, Greece
- 1998-08 Member, *Supreme Special Scientific Health Council*, Ministry of Health, Hellenic Republic
- 1999-01 Member, *Supreme Healthcare Board*, Institute of Social Welfare, Ministry of Labor and Human Resources, Hellenic Republic

Corporate Business Experience

- 1986- President and CEO, *Theta Biomedical Consulting and Development Co., Inc.* (Brookline, MA)
- 1999-2004 Scientific Advisor International Pain Center, Hygeia Hospital (Athens, Greece)
- 2001- Scientific Director, Algonot, LLC. (Sarasota, FL)
- 2000-03 Executive Committee, Board of Trustees, Hellenic College (Brookline, MA)
- 2003-09 Board of Directors, Brookline Education Foundation, MA
- 2003-10 Board of Overseers, Brookline Education Foundation, MA

Editorial Review

- 1978- **Ad Hoc Reviewer:** *Archives of Dermatology, Biochemical Pharmacology, Behavioral and Neural Biology, Cancer Research, Clinical and Experimented Allergy, Journal of Allergy & Clinical Immunology, Journal of Cellular Physiology, Journal of Clinical Investigation, Journal of Clinical Psychopharmacology, Journal of Immunology, Journal of Neuroimmunology, Neuropharmacology, Neuroscience, New England Journal of Medicine, Proceedings of the Society for Experimental Biology and Medicine, Trends Immunology, Urology, Journal of Urology.*
- 1986- **Editorial Board:** *Acta Toxicologica et Therapeutica*
- 1988- **Deputy Editor:** *International Journal of Immunopathology and Pharmacology*
- 1992- **Editorial Board:** *Hellenic Allergology & Clinical Immunology*

- 1992- **Editorial Board:** *International Journal of Tissue Reactions*
- 1993- **Deputy Editor:** *International Journal of Immunopathology and Pharmacology*
- 2001- **Editorial Board:** *Allergy and Asthma Proceedings*
- 1994- **Consultant:** *Drug Evaluations, AMA*
- 2002- **Deputy Editor:** *European Journal of Inflammation*
- 2008- **Editorial Board** *Clinical, Cosmetic and Investigational Dermatology*
- 2009- **Deputy Editor** *Journal Biological Regulatory Homeostatic Agents*
- 2009- **Editorial Board** *Expert Opinion in Pharmacotherapy*
- 2009- **Editorial Board** *Autism Insight*

Grant Review

- 1992 NIDDK *Ad Hoc* Urology Study Section
- 2000-02 NIH Biobehavioral & Behavioral Processes-SS2
- 2001 MDCN1
- 2002 NINDS ZDK1 GRB-B (J2) Biology of Neuroendocrine Peptides
- 2001-02 NSF Division of Integrative Biology and Neuroscience
- 2002 NIDDK Reparative Medicine, Renal/Urology (SSS-M 05)
- 2002 NIDDK ZDK11 GRB-9 Urology Research Centers Special Urology Emphasis Panel
- 2003 VA Neurobiology Section A
- 2004 Italian Ministry of Universities and Research
- 2007 ZAI1 SV-IS1 Cellular & Inflammation Pathways
- 2007 NIAID Asthma & Allergic Dis Coop Res Centers
- 2009 DK ZDK1 GRB-6 Urology Research Centers
- 2009 SEP, Natl Center Minority Health & Disparities (NCMHD)
- 2010 Hellenic Ministry of University Review and Accreditation

Membership to Professional Societies

| | |
|-------|---|
| 1972- | Hellenic Biochemical and Biophysical Society |
| 1977- | New York Academy of Sciences |
| 1978- | American Medical Association |
| 1978- | American Association of University Professors |
| 1978- | American Institute of the History of Pharmacy |
| 1978- | American Association for the Advancement of Science |
| 1978- | Society for Health and Human Values |
| 1979- | American Association for the History of Medicine |
| 1979- | American Society for Cell Biology |
| 1980- | Sigma Xi: The Scientific Research Society |
| 1980- | Society for Neuroscience |
| 1980- | International Brain Research Organization |
| 1980- | International Society of the History of Medicine |
| 1980- | American Federation for Clinical Research |
| 1980- | Connecticut Academy of Arts and Sciences |
| 1980- | American Society for Pharmacology and Experimental Therapeutics |
| 1981- | American Society for Microbiology |
| 1981- | Hellenic Society for Cancer Research |
| 1981- | Hellenic Society for Medicinal Chemistry |
| 1981- | Hellenic Society of Pharmacology |
| 1981- | American Association of Immunologists |
| 1982- | International Society for Immunopharmacology |
| 1984- | Massachusetts Medical Society |
| 1987- | International Association for the Study of Pain |
| 1987- | Harvard Countway Historical Library Associates |
| 1994- | World Stress Society |
| 1996- | Physicians for Human Rights |
| 2007- | European Academy of Allergology and Clinical Immunology |
| 2007- | American Academy of Allergy, Asthma and Immunology |
| 2008- | Royal Academy of Medicine (UK) |

Office and Committee Assignments in Professional Societies

| | |
|---------|--|
| 1974-79 | Secretary: Association of Greeks at Yale University |
| 1978-79 | Board of Directors and Vice President for Relations with Greece, Krikos, NY |
| 1982-83 | President: Association of Greeks at Yale University |
| 1984-85 | Trustee: Anatolia College, Boston, Massachusetts |
| 1984-86 | Secretary: International Anatolia Alumni Association, Boston, MA |
| 1984-85 | Secretary: New England Hellenic Medical Society, Boston, MA |
| 1985 | Board of Directors: Hellenic Scientists Association of Boston, Boston, MA |
| 1985-86 | Vice-President: New England Hellenic Medical Society, Boston, MA |
| 1986-87 | President: New England Hellenic Medical Society, Boston, MA |
| 1995-97 | Vice-President: New England Hellenic Medical & Dental Society, Boston, MA |
| 2000- | Trustee, Hellenic College, Brookline, MA |

Research Interests

1. Pathophysiology of mast cells in mastocytosis and in neuroimmunoendocrine disorders. Mast cells are known for their involvement in allergic reactions, but we were the first to show that they are also necessary to initiate inflammation, thus participating in inflammatory diseases that worsen by stress, such as autism, cancer, chronic fatigue syndrome, interstitial cystitis, migraine headaches, psoriasis and multiple sclerosis. We have developed *in vivo* and *in vitro* models for these diseases and we are studying neurohormonal activation of mast cells. The only plausible way to explain how mast cells can participate in so many diverse processes is their ability to secrete distinct chemicals relative for different pathophysiological settings (see below).
2. Molecular events involved in mast cell stimulus-secretion coupling, especially with their ability to release mediators selectively without degranulation. Mast cells are typically activated by immunoglobulin E and antigen, a process that leads to an explosive release of over 20 biologically active molecules (some of which are presorted in some 500 secretory granules, while others are synthesized during activation) through a process called degranulation or exocytosis. However, we were the first to show that mast cells can also respond to non-allergic triggers and release mediators **selectively, without degranulation**. We specifically reported that the inflammatory cytokine IL-1 can induce selective release of the also inflammatory cytokine IL-6, that the stress hormone corticotropin-releasing hormone (CRH) can induce selective release of vascular endothelial growth factor (VEGF), and IL-33 augments substance P-induced VEGF release. We are currently studying the regulation of CRH receptor expression and function on human cultured mast cells and the effects of their respective activation on allergic stimulation.
3. Mast cells have the ability to superstimulate activated T cells; moreover, the mast cell mediators IL-6 and TGFβ participate in the maturation of Th17 cells, which are increasingly implicated in autoimmune diseases such as multiple sclerosis and psoriasis. Part of this process requires cell-to-cell contact, but also TNF secretion. We are investigating how IL-33 and SP (see above) could drive mast cells to participate in Th1-type of diseases and how such interactions may be interrupted for therapeutic purposes.
4. Regulation of mast cell secretion by the mitochondrial uncoupling protein 2 (UCP2) and mitochondrial dynamics. We showed for the first time that there is an inverse relationship between UCP2 expression and mast cell secretion. We also showed for the first time that mast cell degranulation, but not selective release of tumor necrosis factor (TNF), is associated with mitochondrial fission and relocation from perinuclear localization to cell-widespread distribution.
5. Antisecretory and antiproliferative function of the 78 kD mast cell phosphoprotein. We sequenced this protein and showed that, in its phosphorylated state, it inhibits mast cell secretion and tumor growth. We are investigating the regulation of its expression, identification of the phosphorylated sites and molecules that could increase and sustain the phosphorylated state of this protein.
6. Anti-allergic and anti-inflammatory actions of some natural polyphenolic flavonoids. We are investigating the mechanism of action of the select flavonoids luteolin and quercetin, their formulation in ways that increases their absorption, as well as their blood concentrations in order to achieve maximal effective levels. Such compounds could serve as anti-allergic, anti-inflammatory and anticancer drugs.
7. Role of neonatal mast cell activation in the pathogenesis of autism. We reported that the prevalence of autism is ten times higher (1/10 children) in patients with mastocytosis than the general population (1/100 children). What makes this finding even more impressive is that mastocytosis is a rare disease occurring in 1/4000 children and is characterized by many hypersensitive mast cells in many tissues; once would, therefore, expect that the combined prevalence would have been $1/100 \times 1/4,000 = 1/400,000$ and not 1/10 children! We also found that the neuropeptide neurotensin, which is a potent mast cell trigger, is statistically much higher in the serum of autistic patients. We are investigating the presence of additional biomarkers in the serum of autistic patients, the effect of stress (CRH) and environmental (mercury) triggers on the action of neurotensin on mast cells, as well as the potential benefit of a flavonoid formulation for the treatment of autism.

Clinical Studies

1. Double-blind, placebo-controlled, cross-over study for the treatment of remitting-relapsing multiple sclerosis. (Principal Investigator: T.C. Theoharides, Ph.D., M.D, Co-PI: S.L. Hauser, M.D. Site: Massachusetts General Hospital, Boston, MA).
2. Double-blind, placebo-controlled, study for the treatment of interstitial cystitis. (Principal Investigator: T.C. Theoharides, Ph.D., M.D, Co-PI: G.R. Sant, M.D. Site: Clinical Research Center, New England Med. Center).
3. Double-blind, placebo-controlled, study for the prevention of migraine headaches. (Principal Investigator: T.C. Theoharides, Ph.D., M.D; co-PI: E. Spierings, M.D., Ph.D. Site: Boston, Clinical Research Center, Newton, MA-2004).
4. Single-blind, open label study of the effect of a flavonoid formulation on niacin-induced flush. (Principal Investigator: T.C. Theoharides, Ph.D., M.D., Co-I: Dimitris Kalogeromitros, Ph.D., M.D. Site: Attikon Hospital, Athens, Greece-2008).
5. Single-blind, open label study of the effect of a flavonoid formulation, CystoProtek, on interstitial cystitis. (Principal Investigator: T.C. Theoharides, Ph.D., M.D., Co-I: Grannum R. Sant, M.D. Site: Multiple throughout the USA-2008).
6. Single-blind, open label study of the effect of a flavonoid formulation on niacin-induced flush. (Principal Investigator: T.C. Theoharides, Ph.D., M.D., Co-I: Dimitris Kalogeromitros, Ph.D., M.D. Site: Attikon General Hospital, Athens, Greece-2009).
7. Open label study of biomarkers in young children with autism. (Principal Investigator: T.C. Theoharides, Ph.D., M.D., Co-Is: Dimitris Kalogeromitros, Ph.D., M.D., Konstantinos Francis, M.D. Site: Attikon General Hospital, Athens, Greece-2009).
8. Double-blind, placebo-controlled, cross-over study of a flavonoid formulation for the treatment of autism. (Principal Investigator: T.C. Theoharides, Ph.D., M.D, Co-PI:M. Bauman, M.D. Site: Massachusetts General Hospital, Boston, MA-2010).
9. Double-blind, placebo-controlled, cross-over study of luteolin/oleocanthal for the treatment of Alzheimer's disease. (Principal Investigator: T.C. Theoharides, Ph.D., M.D, Co-PI: N. Robakis, M.D. Site: Conrell-Weil Medical center, NY, NY-2010).

Research Fellowships and Grants

- 1980 **Co-Investigator:** *Alternate pathways of tumor immunity.* American Cancer Society
(PI: P.W. Askenase, M.D.).
- 1980 **Co-Investigator:** *T-cell mediated serotonin release from mast cells.* Veterans Administration
(PI: P.W. Askenase, M.D.).
- 1981 **Co-principal Investigator:** *Mast cell and histamine involvement in immunoregulation of patients with chronic renal failure.* Veterans Administration (PI: P.W. Askenase, M.D.).
- 1982 **Collaborator:** *The immunology of cutaneous basophil hypersensitivity.* National Institutes of Health
(PI: P.W. Askenase, M.D.).
- 1983 **Collaborator:** *The role of conjugated amines in modulating cell function.* Veterans Administration
(PI: P.K. Bondy, M.D.).
- 1983 **Charlton Award:** Tufts University School of Medicine. Duration: 5/1/84 - 4/30/86. Budget: \$4,000.
- 1984 **Grasp Center Awards:** Tufts University School of Medicine / New England Medical Center.
Duration: 9/1/85 - 12/31/86. Budget: \$7,000.
- 1985 **Dean's Fund:** Tufts University School of Medicine. Duration: 9/1/85 - 8/31/90. Budget: \$85,000.
- 1985 **Principal Investigator:** *Effect of cromolyn-like drugs on leukotriene secretion.* Fisons Pharmaceuticals, England. Duration: 7/1/86 - 6/31/87. Budget: \$5,000.
- 1986 **Post-Doctoral Stipend:** Muro Pharmaceutical, Tewksbury, MA. Duration: 7/1/86 - 6/31/91.
Budget: \$109,000.
- 1987 **Principal Investigator:** *Central effects of non-opioid analgesics.* Hoechst Pharmaceuticals, Frankfurt, Germany. Duration: 1/1/87 - 12/31/90. Budget: \$240,000.
- 1987 **Charlton Award:** Tufts University School of Medicine. Duration: 5/1/87 - 4/30/88. Budget: \$5,000.
- 1988 **Principal Investigator:** *Involvement of mast cells in demyelinating processes.* Multiple Sclerosis Society, RG-1961-A-1. Duration: 10/1/87 - 9/30/90. Budget: \$118,410.
- 1987 **Principal Investigator:** *Tricyclic effects on mast cell secretion.* Muro Pharmaceutical, Tewksbury, MA. Duration: 7/1/87 - 6/30/89. Budget: \$114,758.
- 1987 **Post-Doctoral stipend:** Gerondelis Foundation, MA. Duration: 9/1/87 - 6/30/89. Budget: \$5,000.
- 1988 **Principal Investigator:** *Functional relationship between brain mast cells and neurons.*
Kos Pharmaceuticals, Miami, FL. Duration: 10/1/88 - 9/30/93.
Budget: \$1,299,400 (plus \$200,000 towards an endowed professorship in pharmacology).
- 1989 **Principal Investigator:** *Secretion of bladder mast cell mediators in interstitial cystitis.*
National Institute of Diabetes and Digestive and Kidney Diseases.
RFA #98-DK-03, Division of Kidney, Urologic and Hematologic Diseases
R01-DK-42409. Duration: 9/30/89 -9/29/92. Budget: \$630,785.

- 1992 **Principal Investigator:** *Neurohormonal and free radical activation of bladder mast cells.* National Institute of Diabetes and Digestive and Kidney Diseases. RFA #DK-9104, Division of Kidney, Urologic and Hematologic Diseases R01-DK 44816. Duration: 3/1/92-2/28/95. Budget: \$468,899.
- 1992 **Co-Principal Investigator:** *Mast cell activation in child migraine patients before and after training in self-regulation.* W.T.Grant Foundation. Duration: 4/1/92-3/31/95. Budget: \$376,168.
- 1994 **Principal Investigator:** *Functional relationship between brain mast cells and neurons.* Kos Pharmaceuticals, Miami, FL. Duration: 7/1/94 - 6/30/97. Direct costs: \$263,446. Entire budget: \$399,504.
- 1995 **Principal Investigator:** *Double blind study of hydroxyzine for the treatment of interstitial cystitis.* ICA. Duration: 6/1/95-5/30/97. Direct costs: \$44,666. Entire budget: \$49,666.
- 1997 **Principal Investigator:** *Characterization of the 78 kD mast cell phosphoprotein which inhibits mast cell secretion.* Muro Pharmaceutical, Tewksbury, MA. Duration: 4/1/97-3/31/00. Direct costs: \$533,406. Budget: \$611,791.
- 1997 **Principal Investigator:** *Effect of acute stress on dura mast cell activation and implications for migraine pathophysiology.* Kos Pharmaceuticals, Miami, FL. Duration: 7/1/97 - 6/30/99. Direct costs: \$269,265. Entire budget: \$323,118.
- 1998 **Principal Investigator:** *Effect of Elmiron on the proliferation and activation of bladder mast cells.* Alza Corporation, Mountain View, CA. Duration: 7/1/98 - 6/30/2000. Direct costs: \$58,369. Entire budget: \$75,879.
- 1999 **Principal Investigator:** *Effect of acute stress on cardiac mast cell activation.* Kos Pharmaceuticals, Miami, FL. Duration: 7/1/99 - 6/30/00. Direct costs: \$140,721. Entire budget: \$168,983.
- 1999 **Principal Investigator:** *Effect of chondroitin sulfate and hyaluronic acid on the activation of bladder mast cells.* Seikagaku Corporation, Japan. Duration: 9/1/99 - 2/28/00. Direct costs: \$50,000. Entire budget: \$50,000.
- 2000 **Principal Investigator:** *Effect of acute stress on cardiac mast cell activation.* Kos Pharmaceuticals, Miami, FL. Duration: 7/1/00 - 6/30/01. Direct costs: \$140,721. Entire budget: \$168,983.
- 2001 **Principal Investigator:** *Effect of acute stress on cardiac mast cell activation.* Kos Pharmaceuticals, Miami, FL. Duration: 7/1/01 - 6/30/02. Direct costs: \$140,721. Entire budget: \$168,983.

| | | |
|---|---|-----|
| 1 U01 DK065244-01 NIDDK (PI: Sant; Co-I: Theoharides) Interstitial cystitis clinical trials group | Duration: 7/1/98-6/30/03 Direct Cost/yr: \$140,000 | 10% |
| 1 R01 NS38326 NINDS (PI: Theoharides) CRH-induced dura mast cell activation | Duration: 7/1/99-6/30/03 Direct Cost/yr: \$153,573 | 40% |
| Research Grant (PI: Theoharides) Kos Pharmaceuticals, Inc., Miami, FL Effect of stress on myocardial mast cells | Duration: 7/1/02-6/30/03 Direct Cost/yr: \$108,333 | 10% |
| Research Contract (PI: Theoharides) Kos Pharmaceuticals, Inc., Miami, FL Mechanism of niacin-induced flush | Duration: 2/1/02-1/31/03 Direct Cost/yr: \$ 72,500 | 10% |

| | | |
|--|---|-----|
| Research Grant (PI: Theoharides) Estee-Lauder, Inc., LI, NY Keratinocyte effect on mast cells | Duration: 5/1/01-6/30/03 Direct Cost/yr: \$ 45,000 | 5% |
| Research Grant (PI: Theoharides) Cantata Pharmaceuticals, Inc. Cambridge, MA) | Duration: 2/5/03-2/4/04 Direct Cost/yr: \$ 50,000 | 5% |
| 1 U01 DK65244-01 NIDDK (PI: Sant; Co-I: Theoharides) Interstitial cystitis clinical research network | Duration: 9/1/03-2/28/04 Direct Cost/yr: \$140,000 | 10% |
| BC024430 DOD- Concept Award (PI: Theoharides) Role of mast cells in mammary gland carcinogenesis | Duration: 7/1/03– 6/30/04 Direct Cost/yr: \$75,000 | 10% |
| Research Grant (PI: Theoharides) Estee-Lauder, Inc., LI, NY Keratinocyte effect on mast cells | Duration: 7/1/03-6/30/04 Direct Cost/yr: \$ 45,000 | 5% |
| Research Grant (PI: Theoharides) TAIHO Pharmaceutical Co., Japan IPD effect on human mast cells | Duration: 10/15/03-10/15/04 Direct Cost/yr: \$ 60,000 | 5% |
| Research Grant (PI: Theoharides) TAIHO Pharmaceutical Co., Japan IPD effect on bladder inflammation in mice | Duration: 11/1/04-05/01/05 Direct Cost/yr: \$ 30,000 | 5% |
| William James Foundation (Sarasota, FL) (PI: Theoharides) Research and publication preparation | Duration: 11/1/04– 3/31/05 Direct Cost only: \$55,000 | N/A |
| Research Grant-continuation (PI: Theoharides) TAIHO Pharmaceutical Co., Japan IPD effect on bladder inflammation | Duration: 05/01/05-10/15/05 Direct Cost: \$ 15,000 | 5% |
| Research Grant (PI: Theoharides) Nucryst Pharmaceuticals., Wakefield, MA Nanocrystalline silver on bladder inflammation | Duration: 11/1/04-6/30/05 Direct Cost: \$ 27,500 | N/A |
| Research Grant (PI: Theoharides) Nucryst Pharmaceuticals., Wakefield, MA Nanocrystalline silver on bladder inflammation | Duration: 12/1/05-6/30/07 Direct Cost: \$ 47,500 | N/A |
| 1 R01 DK062861 (PI: Theoharides) NIDDK Acute restraint stress-induced neurogenic bladder inflammation The major goal of this grant is to investigate the role of CRH and mast cells in stress-, SP- and LPS-induced rodent bladder inflammation as it may relate to the pathogenesis of bladder pain syndrome/interstitial cystitis. | Duration: 5/1/2003-4/30/2007 Direct Cost/yr: \$175,000 | |
| 1 R21 NS055681 (PI: Theoharides) NINDS Mast cells, tricyclic antidepressants and chronic fatigue syndrome The major goal of this application is to investigate the ability of human cord blood and cord matrix-derived mast cells to be activated by corticotrophin-releasing hormone and the effect of certain antidepressants. | Duration: 9/1/2006-9/29/2008 Direct cost: \$175,000 | |

| | |
|---|---|
| Research Grant-continuation (PI: Theoharides) TAIHO Pharmaceutical Co., Japan IPD effect on bladder neurogenic inflammation | Duration: 03/01/07-02/28/08 Direct Cost: \$ 80,000 |
| Mastocytosis Society (PI: Theoharides) Skin mast cell expression of CRH receptors | Duration: 5/1/09-12/31/09 Direct cost: \$45,000 |
| National Autism Association (PI: Theoharides) Mast cell-related biomarkers in autism | Duration: 5/1/09-12/31/09 Direct cost: \$35,000 |
| Safe Minds (PI: Theoharides) Effect of mercury on human mast cells | Duration: 5/1/09-12/31/09 |
| <i>Active</i> 2 R01 AR047652-09 (PI: Theoharides) NIAMSD Stress induces skin mast cell activation and vasodilation The major goal of this grant is to investigate the role of CRH receptors in stress and CRH-induced skin vascular permeability using knockout mice and recombinant techniques, as well as in human skin biopsies from patients with urticaria, psoriasis and mastocytosis, the symptoms of which worsen by stress | Duration: 9/1/2007-3/31/2012 Direct Cost/yr: \$215,000 |
| National Autism Association (PI: Theoharides) Serum biomarkers in children with autism | Duration: 5/1/10-12/31/11 Direct cost: \$30,000 |
| Safe Minds (PI: Theoharides) Mercury and neurotensin induce mitochondrial DNA release from human mast cells and contribute to auto-immunity in autism | Duration: 12/30/10-12/29/11 Direct cost: \$75,000 |
| Autism Research Collaborative (PI: Theoharides) Investigation of IL-9, IL-33 and TSLP in serum of autistic children | Duration: 4/19/11-12/31/11 Direct cost: \$8,500 |
| 1 R01 NS071361-01 (PI: Theoharides) NINDS Brain mast cells and chronic fatigue syndrome The major role of this grant to investigate the role of brain mast cells in a mouse model of CFS | Duration: 7/1/10-6/30/14 Direct Cost/yr: \$220,000 |
| 1 R01 NS066205-01A2 MPI: Veves and LoGerfo NIH Role of neuropeptides in diabetic foot problems Role: Consultant (0.6 calendar) | Duration: 7/1/10-6/30/15 Direct cost/yr: \$353,843 |
| Thorne Research (PI: Theoharides) Comparison of anti-inflammatory anti-flushing effects of six different flavonoid compounds | Duration: 6/13/11-10/31/11 Direct cost/yr: \$50,000 |
| 1R01DK091949-01A1 MPI: Veves and LoGerfo Mechanisms of Neuropeptides Action in Diabetes Role: Subcontract (PI: Theoharides) The major goal of this grant is to investigate the role of CRH, neurotensin, substance P and their receptors in diabetic wound healing | Duration: 7/1/10-6/30/15 Direct cost/yr: \$49,389 |

US Patents in chronological order-no. date=d,m,y)

Methods claims

- #5,250,529 (10/05/93) Method of alleviating migraine headache with mast cell degranulation blocking agents.
- #5,648,350 (07/15/97) Method of treatment of endogenous, painful gastrointestinal conditions of non-ulcerative
- #5,821,259 (10/13/98) Histamine-3 receptor agonists as therapeutic agents.
- #5,855,884 (01/05/99) Treatment of stress-induced migraine headache with a corticotropin releasing hormone b
- #5,994,357 (11/30/99) Method of treatment of interstitial cystitis.
- #6,020,305 (02/01/00) Treatment of stress-induced skin diseases by CRH antagonists and mast cell inhibitors.
- #6,689,748 (02/10/04) Method of treating mast cell activation-induced diseases with a proteoglycan.
- #7,759,307 (3/30/04) A method of treating niacin-induced flush.
- #10/166,088 (filed 06/11/02) Method of treating IL-6-mediated inflammatory diseases.
- #12/151,268 (Filed 5/2/08) Method for treating niacin-induced flush syndromes ...
- #12/534,571 (Filed 3/8/09) Method of treating an autism spectrum disorder.
- #61/405,414 (filed 10/21/10) Extracellular mitochondria-based screening and treatment.

Composition claims

- #6,624,148 (09/23/03) Proteoglycan compositions for treatment of cardiovascular inflammatory diseases.
- #6,635,625 (10/21/03) Proteoglycan compositions for treating prostate and bladder inflammatory conditions.
- #6,641,806 (11/04/03) Proteoglycan compositions for treating arthritic inflammation conditions.
- #6,645,482 (11/11/03) Proteoglycan compositions for the treatment of arthritic inflammatory diseases.
- #6,984,667 (1/10/06) Synergistic proteoglycan compositions for treatment of inflammatory diseases.
- # 7,155,278 (10/3/06) Compositions for oral use for treatment of cardiovascular inflammatory diseases.
- #7,799,766 (Filed 9/21/10) Composition for treatment of hormone-dependent cancers.
- #7,906,153 (3/15/11) Anti-inflammatory somposition for treating multiple sclerosis.
- #11/999,991 (Filed 12/10/07) Pharmaceutical compositions for protecting against superficial flush ...
- #12/861,152 (Filed 8/23/10) Anti-inflammatory compositions for treating brain inflammation
- #13/112,675 (Filed 5/23/11) Compositions for protecting against sdupeficial vasodilator flush syndrome and methods of use

Foreign patents

EPO # 0618796 (6/5/99) Alleviating or preventing of migraine headache with mast cell degranulation blocking agents.

France, Germany (6922912.5), Ireland, Italy, Netherlands, Spain, United Kingdom

New Zealand #246748 (13/7/00) Method for alleviating or preventing migraine headache onset with mast cell degranulation blocking agents.

Australia #672,772 (4/4297) Method for alleviating or preventing migraine headache onset with mast cell degranulation blocking agents.

EPO # 0748217 (7/8/02) Compositions comprising a mast cell degranulation-blocking agents for treatment of endogenous, painful, gastrointestinal conditions of non-inflammatory, non-ulcerative origin

France, Germany (69722809.6), Greece, Ireland, Italy, Netherlands, Spain, United Kingdom

EPO # 0618796 (11/6/03) Treatment of stress-induced skin diseases by corticotropin-releasing hormone antagonists and skin mast cell degranulation blockers.

France, Germany (69722809.6), Ireland, Italy, Spain, United Kingdom

EPO # 1365777 (4/19/06) Proteoglycan compositions for the treatment of skin inflammatory diseases.

France, Germany, Greece, Ireland, Italy, Spain, United Kingdom

European Application No. 09743496.3

Based on International Application No. PCT/US09/042888)

Method for protecting humans against superficial vasodilator flush syndrome

International Application No. PCT/US09/52577

Methods of treating autism spectrum disorders and compositions for same

Training of Postdoctoral Fellows

| <u>Year</u> | <u>Name</u> | <u>Title</u> | <u>Present Position</u> |
|--------------------|---------------------------|---------------------------|---|
| 1979-80 | Nikolaos Kokolis, MD | Post-doctoral Fellow | Professor of Biochemistry Vet School, Aristotle University, Thessaloniki, Greece |
| 1979-80 | Zaphiroula Kritsi, MD | Post-doctoral Fellow | Professor of Biology, Aristotle University, Thessaloniki, Greece |
| 1981-83 | Sandra Kraeuter-Kops, MD | Assoc. Research Scientist | Section of Trauma, Department of Surgery, Yale University School of Medicine, New Haven, CT |
| 1984-85 | Katerina Marathias, MD | Research Associate | Attending in Critical Care Medicine, Onasis Memorial Cardiac Center, Athens, Greece |
| 1985-86 | Larry G. Miller, MD | Research Fellow | Chief Science Officer, Medi Phase Venture Partners |
| 1986-87 | Zenon Protopapas, MD | Research Fellow | Attending in Radiology, St. Elizabeth's Hospital, Yale University, New Haven, CT |
| 1986-88 | A. Konstantinidou, MD | Research Fellow | Practicing Neurologist, Thessaloniki, Greece |
| 1987 | Nikos Flaris, MD | Research Fellow | Attending in Neuropathology, Hippokratio Hospital, Thessaloniki, Greece |
| 1987-88 | Vasilios Blatsios, MD | Research Fellow | Chief, Internal Medicine, 401 Military Hospital, Athens, Greece |
| 1987-88 | P. Panagiotacopoulos, MD | Research Fellow | Attending in Cardiology, Rochester University, Rochester, NY |
| 1988-90 | Harissis Vliagoftis, MD | Research Associate | Assistant Professor in Internal Medicine, Canada |
| 1989-90 | Violetta Dimitriadou, PhD | Research Associate | Chief Science Officer, Biotech Company, Ottawa, Canada |
| 1991 | Linda Mak, MD, PhD | Research Fellow | Resident in Pediatrics, Stanford University, CA |
| 1991-92 | E. Kotronis, MD | Research Fellow | Attending, Internal Medicine, 401 Military Hospital, Athens |
| 1991-92 | V. Agelakas, MD | Research Fellow | Attending, Vascular Surgery, 201 Military Athens, Greece |
| 1989-90 | Jan Trnovsky, PhD | Research Associate | Director, Molecular Biology, Gene-Trak, Framingham, MA |
| 1991-92 | Panagiotis Bakos, MD | Research Fellow | Attending in Anesthesia, |

Cleveland, OH

| | | | |
|----------|---------------------------|--------------------|---|
| 1990-93 | Mervat El-Mansoury, MD | Research Fellow | Attending in Anesthesia, Bay State, Boston, MA |
| 1991-94 | Efthymios Deliarhyris, MD | Research Fellow | Invasive Cardiologist, Medical Center Athens Greece |
| 1991-94 | Miltos Sugiultzoglou, MD | Research Fellow | Attending in Neurosurgery, Cornell Hospital, New York, NY |
| 1990-95 | J.J. Rozniecki, MD, PhD | Research Associate | Associate Professor of Neurology, Medical Academy of Lodz, Poland |
| 1992-94 | Constantinos Spanos, MD | Research Fellow | Instructor in Surgery, Aristotle University, Thessaloniki, Greece |
| 1993-94 | Nasser Hosseini, MD | Research Fellow | Instructor in Dentistry, Kaz Medical School, Jeddah, Saudi Arabia |
| 1992-98 | Xinzhu Pang, MD, MSc | Research Associate | Attending in Pathology, Walter Reed Medical Institute Washington D.C. |
| 1993-96 | Linghua Wang, MD, MSc | Research Associate | Internist, New York, NY |
| 1996-97 | Spiros Manolidis, MD, Dsc | Res Asst Professor | Assistant Professor ENT, Columbia University, NY |
| 1994-99 | Leena K. Singh, MD, PhD | Research Fellow | Practicing Endocrinologist, CA |
| 1997-98 | Apostolos Filippou, MD | Research Fellow | Instructor in Urology, University of Athens, Greece |
| 1998-00 | D. Georghe, M.D. | Research Fellow | Attending in Neurosurgery, Paris, France |
| 1998-99 | Phani Patra, PhD | Research Fellow | |
| 1998-02 | Subimal Basu, MD, PhD | Research Fellow | Bioinformatics Officer, Boston, MA |
| 1998- 09 | D. Kempuraj, PhD | Research Associate | Research Scientist I, Iowa Veterans Administration Medical Center |
| 2001-03 | Koreaki Sugimoto, MD | Research Fellow | Assistant Professor of Neurology, Osaka, Japan |
| 2002--03 | Man Huang, PhD, MD | Research Fellow | Research Associate, Eli Lilly, OH |
| 2002-03 | B. Kempuraj, MD | Research Associate | |
| 2003-05 | N. Papapodoulou, PhD | Research Fellow | Research Fellow, National Center Munich, Germany |

| | | | |
|---------|---|-----------------|-------------------------------------|
| 2006-07 | Vahagn Kotsinyan, MD | Research Fellow | |
| 2007 | Margaret Michaelian, MD | Research Fellow | |
| 2008-09 | Taxiarchis Kourelis, M.D. | Research Fellow | Resident in Medicine, U Connecticut |
| 2008-10 | Akrivi Manola, M.D. | Research Fellow | Research Fellow, Mass Eye & Ear |
| 2009-11 | Asimena Angelidou, M.D. | Research Fellow | |
| 2009-11 | Konstantinos-Dionysios Alysandratos, M.D. Research Fellow | | |
| 2009- | Shahzad Asadi, Pharm.D. | Research Fellow | |
| 2009- | Zoi Magga, M.S. | Research Fellow | |
| 2010- | Nikos Sismanopoulos, M.D. | Research Fellow | |
| 2010-11 | Danae Delivane, M.D. | Research Fellow | |
| 2010- | Alexandra Miniati, M.D. | Research Fellow | |

Training of Graduate Students

| <u>Year</u> | <u>Name</u> | <u>Degree</u> | <u>Present Position</u> |
|--------------------|----------------------------|---|--|
| 1978-79 | Stewart Greissman, MD | MD, Yale Sch of Medicine | Asst. Professor of Rheumatology, Cornell Medical Center, New York |
| 1980-82 | Nikolaos Tsakalos, MD | DSc, Aristotle University Greece (deceased 1/86) | Instructor in Medicine, Aristotle University, Thessaloniki, Greece |
| 1985-90 | Mona Lambracht-Hall, BS | PhD, Tufts University | Associate Professor of Biology, Wellesley College, Wellesley, MA |
| 1991 | G. Goumenos, BPh, DDS | MS, Tufts University DSc, Athens Univ. Greece | Asst. Professor of Periodontology, Athens Univ. School of Medicine, Greece |
| 1989-93 | A. Konstantinidou, MD | DSc, Aristotle University Greece | Practicing Neurologist, Thessaloniki, Greece |
| 1990-93 | H. Vliagoftis, MD | DSc, Aristotle University Greece | Assistant Professor in Internal Medicine Canada |
| 1992-93 | Eman Haggag, MS | DSc, Cairo University | Research Scientist, National Egypt Research Foundation, Egypt |
| 1989-95 | Ivan Correia, MS, MBA | PhD, Tufts University | CEO, Biotech Company, Cambridge, MA |
| 1994-95 | Mohammed Alhelal, DDS | MSc, Tufts University | Faculty of Dentistry, Riahd University, Saudia Arabia |
| 1994-98 | Leena Singh, MD | PhD, Tufts University | Practicing Endocrinologist, CA |
| 1998-02 | Pamela Esposito, BS | PhD, Tufts U. | Researcher, Galena Pharmaceuticals, Cambridge, MA |
| 1999-02 | Man Huang, MD | PhD, Tufts U. | Research Associate, Eli Lilly, OH |
| 1999-02 | Michael Lytinas, DDS | PhD, U. Athens | Inventer, Boston, MA |
| 1999-03 | Kristiana Kandere, BS | PhD, Tufts U. | Post-doctorate Fellow, NorthWestern University, IL |
| 2002- 03 | Abdulmohsen Alrohaimi, DDS | MS, PhD Tufts U. | VP, FDA, Saudi Arabia |
| 2002- 05 | Jill Donelan, BS | PhD, Tufts U | Post-doctorate Fellow, AstraZeneca Waltham, MA |
| 2003-05 | Jing Cao, M.D. | PhD, Tufts U | Post-doctorate Fellow, Cancer Inst., NJ |
| 2005-08 | Michael Tagen, BS | PhD, Tufts U | Post-doctorate Fellow, St. Jude's Childrens Hospital, TN |

| | | | |
|---------|---------------------------------|-------------------------|--|
| 2007-08 | Virginia Karapanou, DMD. | MSc, Tufts University | Associate Professor of Endodontics, Tufts School of Dental Medicine |
| 2006- | Magdalini Vasiadi, BA | PhD candidate, Athens U | |
| 2008- | Bodi Zhang, MPH | PhD candidate, Tufts U | |
| 2009- | Evangelos Papathanasiou, D.M.D. | M.S. candidate, Tufts U | |
| 2011- | Anilia Taliou, MD | DSc candidate, Athens U | |
| 2011- | Anastasia Therianou, MD | DSc candidate, Athens U | |
| 2011- | Alexandra Miniati, MD | DSc candidate, Athens U | |
| 2011- | Nikolaos Sismanopoulos, MD | DSc candidate, Athens U | |

Graduate Student Rotations

| | | | |
|------|--------------------------|------|-----------------|
| 1984 | Charles Vecoli | 2002 | Abdu Alrohaimi |
| 1985 | Karen J. Kotkow | 2003 | Lu Gan |
| 1986 | Jennifer Hartigan | 2003 | Anna Markowska |
| 1986 | Barbara LeDuc | 2004 | Man Chun |
| 1989 | Ivan Correia | 2004 | Lauren Oleson |
| 1989 | Michael Polymenis | 2005 | Brigham B. Hyde |
| 1993 | Leena Kudchadker | 2005 | Michael Tagen |
| 1994 | Monette M. Cotreau-Bibbo | 2005 | Brenda Stoller |
| 1997 | Beverly Harrington | 2006 | Kathryn Heard |
| 1998 | Pamela Esposito | 2008 | Bodi Zhang |
| 1998 | Leah Hesse | 2009 | Erin Fields |
| 1998 | Kerry Culm | 2010 | Katie Weng |
| 1999 | Kristiana Kandere | | |
| 2000 | Jill Berry | | |
| 2001 | Sarah Poplawski | | |

Medical & Dental Student Research Training

| | | |
|---------|-------------------|-------|
| 1985 | Alicia Cartagena | M '88 |
| 1985-86 | Aviva Lee-Parritz | M '88 |
| 1985-86 | John Savala | M '90 |
| 1989-90 | John Malczynski | M '91 |
| 1989-90 | Jonathan Gorbach | M '93 |
| 1990 | Todd Leventhal | M '92 |
| 1992 | Ali Habibi | M '94 |
| 1992 | Shahram Hoghaddam | D '94 |
| 1999 | George Chiang | M '00 |
| 2004 | Matthew Christian | M '05 |
| 2004 | Craig Weikauf | M' 08 |
| 2005 | Kristen Farwell | M'08 |
| 2007-10 | Dean Papaliadis | M' 11 |
| 2010- | John Stratigis | M' 14 |

College Student Research Training

| | | | |
|---------|---------------------------|------------------------|--------------------------|
| 1990-91 | John Solomonides | Tufts '91 | |
| 1990 | Helen Delihatsiou | MIT '91 | |
| 1992 | Patti Siri | Tufts '92 | |
| 1993 | Jessica Greenwood | Tufts '93 | |
| 1993-94 | Tania Mangones | BU '95 | |
| 1994 | Eric Evans | Tufts '94 | |
| 1995 | Lisa Alferes | Tufts '95 | |
| 1995 | Nicholas Varelas | BunkerHill '99 | |
| 1995 | Konstantinos Ligris | BU '98 | |
| 1995-99 | Nicholas Alexakos | Tufts '97 | |
| 1995 | Dana Wald | Tufts '96 | |
| 1996 | Jose Betances | Amherst '98 | (NIH - Minority Trainee) |
| 1997 | Panagiotis Theofilopoulos | U. Athens '98 | |
| 1997 | Tracye D. Kyles | Southern U. '98 | (NIH - Minority Trainee) |
| 1998 | Kim Bates, R.N. | Tufts '99 | |
| 1998-99 | Marlon Green | U.Mass. Boston '01 | (NIH-Minority Trainee) |
| 1998 | Kathleen Spear | Curry College '99 | |
| 1999-00 | Antone Alfonso | Curry College '00 | |
| 2000 | Sheila Jeudy | Tufts '03 | (NIH-Minority Trainee) |
| 2000 | Athena-Eleni Mavroudhes | BU '00 | |
| 2000 | Gregory Patakos | Tufts '02 | |
| 2006 | Rachel Singh | Tufts '06 | |
| 2006 | E.J. Isoba | Tufts '06 | |
| 2006 | Lauren Hess | U. Texas at Austin '08 | |
| 2006-07 | Nivine Baba | Am. U. Beirut '06 | |
| 2007 | Vasilios Kotsiopoulos, BS | BU '07 | |
| 2009 | Jennifer Eng | Tufts '11 | |
| 2009 | Vangelis Papadimas | Cornell '09 | |

Post-Baccalaureate Student Research Training

| | | |
|---------|-----------------|-----------------|
| 2005-07 | Anthony Clemons | NIH PREP Fellow |
|---------|-----------------|-----------------|

High School Student Summer Research Training

| | | |
|------|---------------------|---|
| 1985 | Tracy Desmond | Museum of Science Internship |
| 1986 | Diane Pfaelzer | Museum of Science Internship |
| 1992 | Ruth Dorcelus | NIH Minority Trainee |
| 1993 | Novella Brady | Boston Latin Academy, NIH Minority Trainee |
| 1993 | Nicholas Karatzas | Woburn High, went to Boston U. |
| 1993 | Anastasia Condos | Windsor High, went to Harvard U. |
| 1993 | Konstantinos Ligris | Newton South, went to Boston U, Boston Law |
| 1994 | Jason Goler | Walpole High, NIH Minority Trainee |
| 1995 | Monica David | Newton North, NIH Minority Trainee |
| 1996 | Marlon Green | Madison Park, NIH Minority Trainee |
| 1997 | Paki Philips | Pinkerton Academy, NIH Minority Trainee |
| 1998 | Cynthia Mompoin | Montrose School, NIH Minority Trainee, went to Georgetown U. |
| 1998 | Daphne Duvalsaint | Stoughton High School, Stoughton, MA |
| 1999 | Sheila Jeudy | Fontbonne Academy, Milton, MA, NIH Minority Trainee, went to Tufts Univ |
| 2001 | Amma Asane | Milton Academy, NIH Minority Trainee |
| 2001 | David Tutor | Newton South |

| | | |
|------|-------------------|--|
| 2002 | Joshna Hicks | Brookline High, NIH Minority Trainee |
| 2003 | Rayna Briceno | Newton County Day, NIH Minority Trainee, will attend Tufts U. |
| 2004 | Kathleen Solage | Boston Latin, NIH Minority Trainee |
| 2004 | Tayrickia Adams | Arlington High, NIH Minority Trainee |
| 2005 | Harrison Barnes | Brimmer & Mary School, Chestnut Hill, MA, NIH Minority Trainee |
| 2005 | Linwood Jackson | Archbishop Williams High, Braintree, MA, NIH Minority Trainee |
| 2007 | Cedric S. White | St. Sebastian's School, MA, NIH Minority Trainee |
| 2009 | Kwaku Acheampong | |
| 2009 | Trisha Barungi | |
| 2009 | H. Kalogeromitros | Psychico Athens Prep School, Athens, Greece |
| 2010 | Jodaelle Racine | Prospect Hill Academy Charter School, Cambridge, MA |

Trainee Distinctions (on work performed in our laboratory)

| | | |
|------|-------------------------------------|---|
| 1985 | Alicia Cartagena, MD (M'88) | Dean's Research Fellowship; First Prize, Mennheim-Ingelheim National Student Pharmacology Assay Competition; 1988 Henry J. Kaiser Family Foundation National Medical Fellowship Merit Award, Tufts U. |
| 1985 | Mona Lambracht-Hall, PhD ('89) | Berlex Laboratory Graduate Fellowship |
| 1985 | Aviva Lee-Parritz, MD (M'88) | Dean's Research Fellowship; 1988 William Dameshek Research Award; 1988 Harry H. Brenner Memorial Award, Tufts University |
| 1986 | John H. Savala, MD ('90) | American Heart Association Student Stroke Scholarship |
| 1988 | Leticia Acquah, MD (M'88) | Kos Pharmaceuticals Student Fellowship |
| 1990 | Todd Leventhal, MD (M'92) | American Foundation for Urologic Disease Fellowship |
| 1990 | Mohamed G. Haggag, DDS | American Peace Fellowship |
| 1991 | John Solomonides, MD (T'90) | New England Hellenic Medical & Dental Society Award |
| 1992 | Shahram Hoghaddam (D'93) | Provost and NIH Student Summer Research Fellowship |
| 1999 | George Chiang (M'00) | American Urologic Association Student Summer Research Fellowship |
| 1999 | Marlon Green (UMass'00) | New England Biomedical Science Careers Award |
| 2001 | George Chiang (M'00) | William Dameshek Research Award, Tufts University |
| 2001 | Man Huang, M.D. | Christian Herter Fund Travel Award |
| 2002 | Man Huang, M.D. | Norris Cotton Cancer Graduate Student Award |
| 2002 | Natha Chandler, M.D. (M'02) | William Dameshek Research Award |
| 2005 | Jill Donelan, B.S. | Sackler 2004, Experimental Biology 2005 Travel Fellowships |
| 2005 | Kristen Farwell, M'08 | Harold Williams Tufts Medical Student Research Fellowship |
| 2006 | Jill Donelan, B.S., Ph.D. '06 | First Louis Lasagna Translational Research Award, Commencement speaker 2006, Tufts University |
| 2008 | Michael Tagen, B.S., Ph.D. '08 | Experimental Biology 2008 Travel Award New England Pharmacologists 2008 Award Sackler 2008 Travel Award |
| 2010 | Bodi Zhang, M.D., M.P.H., Ph.D. '11 | Sackler Earl Charton 2010 Award |

Summary of Publications

| Type | Number | Page |
|--------------------------------------|--------|-------|
| a. Theses | 2 | 29 |
| b. Books | 3 | 29 |
| c. Full papers | 194 | 31-44 |
| d. Reviews/ Chapters/Editorials | 127 | 45-52 |
| e. Commentaries | 30 | 53-54 |
| f. Case reports | 10 | 55 |
| g. Abstracts/Proceedings | 198 | 56-69 |
| <hr/> | | |
| Total | 564 | |
| i. Non-print publications | 1 | 70 |
| j. Invited lectures | 149 | 71-78 |
| <hr/> | | |
| Citations to March 2010 (300 papers) | 8,847 | |

a. Theses

- 1972 ***Medical Psychology in pre-Hippocratic Greece***
Joint Bachelor of Arts, Departments of Biology and History of Science and Medicine, Yale University (Professors Edgar J. Boell and Frederick L. Holmes, advisors)
- 1978 ***Regulation of Histamine Secretion in Rat Peritoneal Mast Cells***
Doctor of Philosophy, Department of Pharmacology, Yale University (Professor William W. Douglas, advisor)

b. Books

- Theoharides, T.C. *Pharmacokinetics: Administration, Uptake, Distribution, Biotransformation and Excretion of Drugs*, pp. 1-151. Pournaras: Thessaloniki, Greece, 1981.
- Theoharides, T.C. (ed.) *Essentials of Pharmacology*, pp. 1-479. Little, Brown and Company: Boston, 1992; 2nd edition, 1996.
- Theoharides, T.C. (ed.) *Pharmacology: Basic Principles in Clinical Practice*, pp. 1-750. Litsas Publishers: Athens, Greece, 1997.

c. Website presentations

Autism

www.autismmedia.org/media3.html

c. Full Peer-Reviewed Papers

1. Theoharides, T.C. Galen on marasmus. *Journal of the History of Medicine and Allied Sciences* 26:369-390, 1971.
2. Theoharides, T.C. Some considerations of the mechanism underlying malaria infections and the relative resistance exhibited by sickle cell disease in humans. *Folia Biochemica et Biologica Graeca* 11:21-29, 1974.
3. Theoharides, T.C. Biosynthesis of ornithine decarboxylase. *Recent Progress in Hormone Research* 31:90-91, 1975.
4. Theoharides, T.C. and Canellakis, Z.N. Spermine inhibits induction of ornithine decarboxylase by cyclic AMP but not by dexamethasone in rat hepatoma cells. *Nature* 255:733-734, 1975.
5. Canellakis, Z.N. and Theoharides, T.C. Hormonal induction of ornithine decarboxylase in rat hepatoma (HTC) cells in culture and its regulation by polyamines. *Folia Biochemica et Biologica Graeca* 12:39-48, 1975.
6. Theoharides, T.C. and Canellakis, Z.N. Antiserum monospecific to hepatic ornithine decarboxylase. *Journal of Biological Chemistry* 251:1781-1784, 1976.
7. Theoharides, T.C. and Canellakis, Z.N. Isozymes of ornithine decarboxylase in fast growing malignant cells in culture. *Materia Medica Graeca* 4, supplement III:201-206, 1976.
8. Canellakis, Z.N. and Theoharides, T.C. Stimulation of ornithine decarboxylase synthesis and its control by polyamines in regenerating rat liver and cultured rat hepatoma cells. *Journal of Biological Chemistry* 251:4436-4441, 1976.
9. Theoharides, T.C. and Canellakis, Z.N. Immunological properties of ornithine decarboxylase from regenerating rat liver and cultured rat hepatoma cells. *Folia Biochemica et Biologica Graeca* 13:11-23, 1976.
10. Theoharides, T.C. On viral infectivity and carcinogenesis. *Perspectives in Biology and Medicine* 20:603-606, 1977.
11. Theoharides, T.C. Historical notes on some early clinical and biochemical investigations on sickle cell disease. *Folia Biochemica et Biologica Graeca* 13:57-66, 1976.
12. Scheinman, S., Burrow, G.N., Theoharides, T.C. and Canellakis, Z.N. Stimulation of ornithine decarboxylase synthesis in the rat thyroid. *Life Sciences* 21:1143-1148, 1977.
13. Theoharides, T.C. and Douglas, W.W. Somatostatin induces histamine secretion from rat peritoneal mast cells. *Endocrinology* 102:1637-1640, 1978.
14. Sieghart, W., Theoharides, T.C., Alper, D.S., Douglas, W.W. and Greengard, P. Calcium-dependent protein phosphorylation during exocytotic release of mast cell secretory granules. *Nature* 275:329-331, 1978.
15. Theoharides, T.C. and Douglas, W.W. Secretion in mast cells induced by calcium entrapped within phospholipid vesicles. *Science* 201:1143-1145, 1978.
16. Theoharides, T.C., Sieghart, W., Greengard, P. and Douglas, W.W. Antiallergic drug cromolyn may inhibit histamine secretion by regulating phosphorylation of a mast cell protein. *Science* 207:80-82, 1980.
17. Theoharides, T.C., Betchaku, T. and Douglas, W.W. Somatostatin-induced histamine secretion in mast cells. Characterization of the effect. *European Journal of Pharmacology* 69:127-137, 1981.

18. Baloyannis, S.J. and Theoharides, T.C. Mast cells in the central nervous system. *Materia Medica Greca* 9: 142-150, 1981.
19. Theoharides, T.C. Mast cells and precursor protein molecules. *Perspectives in Biology and Medicine* 24:499-502, 1981.
20. Theoharides, T.C. and Douglas, W.W. Mast cell histamine secretion in response to somatostatin analogues. Structural considerations. *European Journal of Pharmacology* 73: 131-136, 1981.
21. Theoharides, T.C., Sieghart, W., Greengard, P. and Douglas, W.W. Somatostatin-induced phosphorylation of mast cell proteins. *Biochemical Pharmacology* 30:2735-2736, 1981.
22. Sieghart, W., Theoharides, T.C., Douglas, W.W. and Greengard, P. Phosphorylation of a single mast cell protein in response to drugs that inhibit secretion. *Biochemical Pharmacology* 30:2737-2738, 1981.
23. Canellakis, Z.N., Theoharides, T.C., Bondy, P.K. and Triarhos, E.T. The role of calcium in the induction of ornithine decarboxylase in rat HTC cells. *Life Sciences* 29:707-710, 1981.
24. Tamir, H., Theoharides, T.C., Gershon, M. and Askenase, P.W. Serotonin storage pools in basophil leukemia and mast cells: characterization of two types of serotonin binding proteins and radioautographic analysis of the intracellular distribution of ³H-serotonin. *Journal of Cell Biology* 93:638-647, 1982.
25. Tsakalos, N.D., Theoharides, T.C., Dwyer, J.M. and Askenase, P.W. Dialyzable leukocyte extract induces mast cell secretion. *Cellular Immunology* 66:383-393, 1982.
26. Theoharides, T.C., Bondy, P.K., Tsakalos, N.D. and Askenase, P.W. Differential release of serotonin and histamine from mast cells. *Nature* 297: 229-231, 1982.
27. Tsakalos, N.D., Theoharides, T.C., Kops, S.K. and Askenase, P.W. Induction of mast cell secretion by parathormone. *Biochemical Pharmacology* 32:355-360, 1983.
28. Theoharides, T.C. Mast cells and migraines. *Perspectives in Biology and Medicine* 26:672-675, 1983.
29. Kritsi, Z.I., Theoharides, T.C., Baumgarten, A., Bondy, P.K. and Canellakis, Z.N. Affinity chromatography with specific antibody increases activity and retains antigenicity of ornithine decarboxylase. *Preparative Biochemistry* 12:445-460, 1983.
30. Askenase, P.W., Loveren, H.V., Kops, S.K., Ron, Y., Meade, R., Theoharides, T.C., Nordlund, J.J., Scovern, H., Gershon, M.D. and Ptak, W. Defective elicitation of delayed-type hypersensitivity in W/W^v and Sl/Sl^d mast cell deficient mice. *Journal of Immunology* 131:2687-2694, 1983.
31. Theoharides, T.C., Kops, S.K., Bondy, P.K. and Askenase, P.W. Differential release of serotonin without comparable histamine under diverse conditions in the rat mast cell. *Biochemical Pharmacology* 34:1389-1398, 1985.
32. Baloyannis, S.J., Theoharides, T.C., Manolidou, P. and Manolides, L.S. Morphologic alterations in rat cortical and cerebellar neurones and synapses during prolonged oral barbiturate administration. *Hellenic Anesthesiology* 19:225-234, 1985.
33. Tsakalos, N.D., Theoharides, T.C., Goffinet, J., Dwyer, J.M., Whisler, R.L. and Askenase, P.W. Immune impairment in chronic renal failure: evidence for defective regulation of lymphocyte responses by macrophages and T cells from chronic renal impairment patients on hemodialysis. *Clinical and Experimental Immunology* 63:218-227, 1986.

34. Baloyannis, S.J., Theoharides, T.C. and Manolides, L.S. Synaptic alterations in the acoustic cortex of the rat following insulin-induced hypoglycemia. *Archives of Otorhinolaryngology* 244:36-43, 1987.
35. Miller, L.G., Lee-Parritz, A., Greenblatt, D.J. and Theoharides, T.C. High affinity benzodiazepine receptors on rat peritoneal mast cells and RBL-1 cells: binding characteristics and effects on granule secretion. *Pharmacology* 36:52-60, 1988.
36. Theoharides, T.C., Manolidis, S.L. and Manolides, L.S. Treatment of secretory otitis media with hydroxyzine. *Hellenic Otorhinolaryngology* 1:11-18, 1989.
37. Manolides, L.S., Baloyannis, S.J., Giala, M., Manolidis, S.L. and Theoharides, T.C. Controlled hypotension during anesthesia in otological operations. An ultrastructural study of the brain in experimental animals. *Archives of Otorhinolaryngology* 246:190-194, 1989.
38. Lambracht-Hall, M., Konstantinidou, A.D. and Theoharides, T.C. Serotonin release from rat brain mast cells *in vitro*. *Neuroscience* 39:199-207, 1990.
39. Dimitriadou, V., Lambracht-Hall, M., Reichler, J. and Theoharides, T.C. Histochemical and ultrastructural characteristics of rat brain perivascular mast cells stimulated with compound 48/80 and carbachol. *Neuroscience* 39:209-224, 1990.
40. Lambracht-Hall, M., Dimitriadou, V. and Theoharides, T.C. Migration of mast cells in the developing rat brain. *Developmental Brain Research* 56:151-159, 1990.
41. Kops, S.K., Theoharides, T.C., Cronin, C.T., Kashgarian, M. and Askenase, P.W. Ultrastructural characteristics of rat peritoneal mast cells during differential release of serotonin without histamine and without degranulation. *Cell Tissue Research* 262:415-424, 1990.
42. Theoharides, T.C., Flaris, N.A., Cronin, C.T., Ucci, A. and Meares, E. Mast cell activation in sterile bladder and prostate inflammation. *International Archives of Allergy and Applied Immunology* 92:281-286, 1990.
43. Vliagoftis, H., Dimitriadou, V. and Theoharides, T.C. Progesterone triggers selective mast cell secretion of 5-hydroxytryptamine. *International Archives of Allergy and Applied Immunology* 93:113-119, 1990.
44. Pothoulakis, C., LaMont, T., Eglow, R., Ning, G., Rubins, J., Theoharides, T.C. and Dickey, B.F. Characterization of rabbit ileal receptors for *Clostridium difficile* toxin A. Evidence for a receptor-coupled G protein. *Journal of Clinical Investigation* 88:119-125, 1991.
45. Dimitriadou, V., Buzzi, M.G., Moskowitz, M.A. and Theoharides, T.C. Trigeminal sensory fiber stimulation induces morphologic changes reflecting secretion in rat dura mater mast cells. *Neuroscience* 44:97-112, 1991.
46. Kouretas, D., Trnovsky, J., Holdridge, H. and Theoharides, T.C. Two dimensional gel electrophoretic profile of rat basophilic leukemia (RBL) and mast cells. *Life Sciences* 49:1289-1294, 1991.
47. Marathias, K., Lambracht-Hall, M., Savala, J. and Theoharides, T.C. Endogenous regulation of rat brain mast cell serotonin release. *International Archives of Allergy and Applied Immunology* 95:332-340, 1991.
48. Theoharides, T.C., Baloyannis, S.J. and Manolides, L.S. Activated rat peritoneal mast cells can cause syngeneic rat brain demyelination *in vitro*. *International Journal of Immunopathology and Pharmacology* 4:137-144, 1991.
49. Dimitriadou, V., Buzzi, M.G., Theoharides, T.C. and Moskowitz, M.A. Ultrastructural evidence for neurogenically mediated changes in blood vessels of rat dura mater and tongue following antidromic trigeminal stimulation. *Neuroscience* 48:187-203, 1992.

50. Conti, P., Reale, M., Barbacane, R.C., Panara, M.R., Bongrazio, M. and Theoharides, T.C. Role of lipoxins A4 and B4 in the generation of arachidonic acid metabolites by rat mast cells and their effect on [³H] serotonin release. *Immunology Letters* 32:117-124, 1992.
51. Vliagoftis, H., Boucher, W.S., Mak, L.L. and Theoharides, T.C. Inhibition of mast cell secretion by oxidation products of natural polyamines. *Biochemical Pharmacology* 10:2237-2245, 1992.
52. Buzzi, M.G., Dimitriadou, V., Theoharides, T.C. and Moskowitz, M.A. 5-Hydroxytryptamine₁ receptor agonists for the abortive treatment of vascular headaches block mast cell, endothelial and platelet activation within the dura mater after trigeminal stimulation. *Brain Research* 583:137-149, 1992.
53. Vliagoftis, H., Dimitriadou, V., Correia, I., Boucher, W.S., Raam, S. and Theoharides, T.C. Estradiol augments, while tamoxifen inhibits rat mast cell secretion. *International Archives of Allergy and Applied Immunology* 98:398-409, 1992.
54. Theoharides, T.C. Hydroxyzine for interstitial cystitis. *Journal of Allergy and Clinical Immunology* 91:686-687, 1993.
55. Letourneau, R. Sant, G.R., El-Mansoury, M. and Theoharides, T.C. Activation of bladder mast cells in interstitial cystitis. *International Journal of Tissue Reactions* 14:307-312, 1992.
56. Theoharides, T.C., El-Mansoury, M., Letourneau, R., Boucher, W.S. and Rozniecki, J.J. Dermatitis characterized by mastocytosis at immunization sites in mast cell deficient W/W^v mice. *International Archives of Allergy and Immunology* 102:352-361, 1993.
57. Theoharides, T.C., Dimitriadou, V., Letourneau, R., Vliagoftis, H., Rozniecki, J.J. and Holdridge, M. Synergistic action of estrogen and myelin basic protein on rat mast cell secretion and brain myelin changes resembling early stages of demyelination in Lewis, but not Sprague/Dawley rats. *Neuroscience* 57:861-871, 1993.
58. Trnovsky, J., Letourneau, R., Haggag, E., Boucher, W. and Theoharides, T.C. Quercetin-induced expression of rat mast cell protease II and accumulation of secretory granules in rat basophilic leukemia cells. *Biochemical Pharmacology* 46:2315-2326, 1993.
59. Theoharides, T.C., Manolidis, S.L., Vliagoftis, H. and Manolidis, L.S. Treatment of secretory otitis media with local installation of hydroxyzine. *International Archives of Allergy and Immunology* 103:195-101, 1994.
60. El-Mansoury, M., Boucher, W., Sant, G.R. and Theoharides, T.C. Increased urine histamine and methylhistamine in interstitial cystitis. *Journal of Urology* 152:350-353, 1994.
61. Castagliuolo, I., LaMont, J.T., Letourneau, R., Kelly, C., O'Keane, J.C., Jaffer, A., Theoharides, T.C. and Pothoulakis, C. Neuronal involvement in the intestinal effects of *Clostridium difficile* toxin A and *Vibrio cholera* enterotoxin in rat ileum. *Gastroenterology* 107:657-665, 1994.
62. Bakos, P., Agelakas, V., Letourneau, R., Brophy, C.M., Spanos, P. and Theoharides, T.C. Increased number of activated mast cells at sites of aortic aneurysms. *International Journal of Immunopathology and Pharmacology* 7:153-162, 1994.
63. Conti, P., Boucher, W., Barbacane, R.C., Reale, M., Placido, F.C., Haggag, I. and Theoharides, T.C. Down-regulation of histamine and serotonin release in a basophilic leukemia cell line by interleukin-1 receptor antagonist (IL-1RA). *Challenges of Modern Medicine* 8:323-330, 1994.
64. Rozniecki, J.J., Hauser, S.L. and Theoharides, T.C. Elevated mast cell tryptase in cerebrospinal fluid of multiple sclerosis patients. *Annals of Neurology* 37:63-66, 1995.

65. Theoharides, T.C., Sant, G.R., El-Mansoury, M., Letourneau, R.J., Ucci, A. and Meares, E. Activation of bladder mast cells in interstitial cystitis: a light and electron microscopic study. *Journal of Urology* 153:629-636, 1995.
66. Pang, X., Cotreau-Bibbo, M.M., Sant, G.R. and Theoharides, T.C. Bladder mast cell expression of high affinity estrogen receptors in patients with interstitial cystitis. *British Journal of Urology* 75:154-161, 1995.
67. Pang, X., Marchand, J., Sant, G.R., Kream, R.M. and Theoharides, T.C. Increased number of substance P positive fibers in interstitial cystitis. *British Journal of Urology* 75:744-750, 1995.
68. Boucher, W., El-Mansoury, M., Pang, X., Sant, G.R. and Theoharides, T.C. Elevated mast cell tryptase in urine of interstitial cystitis patients. *British Journal of Urology* 76:94-100, 1995.
69. Conti, P., Boucher, W., Letourneau, R., Feliciani, C., Reale, M., Barbacane, R.C., Vliagopoulos, P., Bruneau, G., Thibault, J. and Theoharides, T.C. Monocyte chemotactic protein 1 (MCP-1) is a potent histamine and [³H]-5HT-releasing factor for mast cells and provokes cell aggregation. *Immunology* 86:434-440, 1995.
70. Theoharides, T.C., Spanos, C.P., Pang, X., Alferes, L., Ligris, K., Letourneau, R., Rozniecki, J.J., Webster, E. and Chrousos, G. Stress-induced intracranial mast cell degranulation. A corticotropin releasing hormone-mediated effect. *Endocrinology* 136:5745-5750, 1995.
71. Letourneau, R., Sant, G.R. and Theoharides, T.C. Intragranular activation of bladder mast cells and their association with nerve processes in interstitial cystitis. *British Journal of Urology* 77:41-54, 1996.
72. Conti, P., Boucher, W., Feliciani, C., Mammarella, S., Kudchadker, L., Barbacane, R.C., Reale, M., Haggag, I., Bruneau, G., Thibault, J. and Theoharides, T.C. Effect of interleukin-1 receptor antagonist (IL-1RA) on histamine and serotonin release by rat basophilic leukemia cells (RBL-2HC) and peritoneal mast cells. *Molecular Cell Biochemistry* 155:61-68, 1996.
73. Pang, X., Letourneau, R., Rozniecki, J.J., Wang, L. and Theoharides, T.C. Definitive characterization of rat hypothalamic mast cells. *Neuroscience* 73:889-902, 1996.
74. Correia, I., Wang, L., Pang, X. and Theoharides, T.C. Characterization of the 78 kDa mast cell protein phosphorylated by the antiallergic drug cromolyn and homology to moesin. *Biochemical Pharmacology* 52:413-424, 1996.
75. Spanos, C., El-Mansoury, M., Letourneau, R.J., Minogiannis, P., Greenwood, J., Siri, P., Sant, G.R. and Theoharides, T.C. Carbachol-induced activation of bladder mast cells is augmented by estradiol - implications for interstitial cystitis. *Urology* 48:809-816, 1996.
76. Spanos, C.P., Pang, X., Ligris, K., Letourneau, R., Alferes, L., Alexacos, N., Sant, G.R. and Theoharides, T.C. Stress-induced bladder mast cell activation: implications for interstitial cystitis. *Journal of Urology* 157:669-672, 1997.
77. Conti, P., Pang, X., Boucher, W., Letourneau, R., Reale, M., Barbacane, R.C., Thibault, J. and Theoharides, T.C. Monocyte chemotactic protein-1 is a proinflammatory chemokine in rat skin injection sites and chemoattracts basophilic granular cells. *International Immunology* 9:1563-1570, 1997.
78. Conti, P., Pang, X., Boucher, W., Letourneau, R., Reale, M., Barbacane, R.C., Thibault, J. and Theoharides, T.C. Impact of Rantes and MCP-1 chemokines on *in vivo* basophilic mast cell recruitment in rat skin injection model and their role in modifying the protein and mRNA levels for histidine decarboxylase. *Blood* 89:4120-4127, 1997.
79. Conti, P., Pang, X., Boucher, W., Letourneau, R., Reale, M., Barbacane, R.C., Thibault, J. and Theoharides, T.C. RANTES is a proinflammatory chemokine and chemoattracts mast cells to extravascular sites. *J. Pathol.* 183:352-358, 1997.

80. Pang, X., Sant, G.R. and Theoharides, T.C. Altered expression of bladder mast cell growth factor receptor (c-kit) expression in interstitial cystitis. *Urology* 51:939-944, 1998.
81. Theoharides T.C., Singh, L., Boucher, W., Pang, X., Letourneau, R., Webster, E. and Chrousos, G. Corticotropin-releasing hormone induces skin mast cell degranulation and increased vascular permeability, a possible explanation for its proinflammatory effects. *Endocrinology* 139:403-413, 1998.
82. Conti, P., Reale, M., Barbacane, R.C., Felaco, M., Grilli, A. and Theoharides, T.C. Mast cell recruitment after subcutaneous injection of RANTES in the sole of the rat paw. *British J. Haematology* 103:798-803, 1998.
83. Pang, X., Gao, W., Seretakis, D. and Theoharides, T.C. A neurotensin receptor antagonist inhibits acute immobilization stress-induced cardiac mast cell degranulation, a corticotropin-releasing hormone-dependent process. *J. Pharmacol. Exp. Therapeutics* 287:307-314, 1998.
84. Minogiannis, P., El-Mansoury, M., Betances, J.A., Sant, G.R. and Theoharides, T.C. Hydroxyzine inhibits neurogenic bladder mast cell activation. *Intl J Immunopharmacol* 20:553-563, 1998.
85. Conti, P., Reale, M., Barbacane, R.C. and Theoharides, T.C. Intramuscular injection of hrRANTES causes mast cell recruitment and transcriptional activation of histidine decarboxylase in mice. Lack of effects in genetically mast cell-deficient W/W^v mice. *FASEB J.* 12:1693-1700, 1998.
86. Singh, L., Boucher, W., Pang, X., Letourneau, R., Seretakis, D., Green, M. and Theoharides, T.C. Potent mast cell degranulation and vascular permeability triggered by urocortin through activation of CRH receptors. *J. Pharmacol. Exp. Therap.* 288:1349-1356, 1999.
87. Olness, K., Hall, H., Rozniecki, J.J., Schmidt, W. and Theoharides, T.C. Mast cell activation in child migraine patients before and after training in self-regulation. *Headache* 39:101-107, 1999.
88. Alexacos, N., Pang, X., Boucher, W., Cochrane, D.E., Sant, G.R. and Theoharides, T.C. Neurotensin mediates rat bladder mast cell degranulation triggered by acute psychological stress. *Urology* 53:1035-1040, 1999.
89. Wang, L., Correia, I., Basu, S. and Theoharides, T.C. Calcium and phorbol ester effect on the mast cell phosphoprotein induced by cromolyn. *European J. Pharmacol.* 371:241-249, 1999.
90. Alexandrakis, M., Singh, L., Boucher, W., Letourneau, R., Theofilopoulos, P. and Theoharides, T.C. Differential effects of flavonoids on inhibition of secretion and on accumulation of secretory granules in rat basophilic leukemia cells. *Int. J. Immunopharm.* 21:379-390, 1999.
91. Theoharides, T.C., Letourneau, R., Patra, P., Hesse, L., Pang, X., Boucher, W., Mompoin, C. and Harrington, B. Stress-induced rat intestinal mast cell intragranular activation and the inhibitory effect of sulfated proteoglycans. *Digestive Diseases and Sciences* 44:87S-92S, 1999.
92. Singh, L.K., Pang, X., Alexacos, N., Letourneau, R. and Theoharides, T.C. Acute immobilization stress triggers skin mast cell degranulation via corticotropin-releasing hormone, neurotensin and substance P: A link to neurogenic skin disorders. *Brain, Behavior and Immunity* 13:225-239, 1999.
93. Rozniecki, J.J., Letourneau, R., Sugiultzoglou, M., Spanos, G., Gorbach, J. and Theoharides, T.C. Differential effect of histamine 3 receptor-active agents on brain, but not peritoneal, mast cell activation. *J. Pharm. Exp. Therap.* 290:1427-1435, 1999.
94. Filippou, A., Green, M., Sant, G.R. and Theoharides, T.C. Increased expression of intercellular adhesion molecule 1 in interstitial cystitis. *Int. J. Immunopathol. Pharmacol.* 12:49-53, 1999.

95. Vliagoftis, H., Mak, L.L. and Theoharides, T.C. Dual effect of spermine on mast cell secretion exhibits different calcium and temperature requirements. *Int. J. Immunopharmacol.* 21:547-559, 1999.
96. Rozniecki, J.J., Pang, X., Dimitriadou, V., Lambracht-Hall, M., Letourneau, R. and Theoharides, T.C. Morphological and functional demonstration of rat dura mast cell-neuron interactions *in vitro* and *in vivo*. *Brain Res.* 849:1-15, 1999.
97. Katsarou, A., Davoy, E., Xenos, K., Armenaka, M. and Theoharides, T.C. Effect of an antioxidant (Quercetin) on sodium lauryl sulfate induced skin irritation. *Contact Dermatitis* 42:85-89, 2000.
98. Deliargyris, E.N., Raymond, R.J., Theoharides, T.C., Boucher, W., Tate, D.A. and Dehmer, G.J. Elevated circulating levels of interleukin-6 are due to cardiac release in acute coronary syndromes, but not in congestive heart failure. *Am. J. Cardiol.* 86:913-918, 2000.
99. Theoharides, T.C., Wang, L., Pang, X., Letourneau, R., Culm, K.E., Basu, S., Wang, Y. and Correia, I. Cloning and cellular localization of the rat mast cell 78kD protein phosphorylated in response to the mast cell "stabilizer" cromolyn. *J. Pharmacol. Exp. Therap.* 294:810-821, 2000.
100. Dimitriadou, V., Pang, X., Letourneau, R. and Theoharides, T.C. Hydroxyzine inhibits experimental allergic encephalomyelitis (EAE) and associated brain mast cell activation. *Int. J. Immunopharmacol.* 22:673-684, 2000.
101. Chiang, G., Patra, P., Letourneau, R., Jeudy, S., Boucher, W., Green, M., Sant, G.R. and Theoharides, T.C. Pentosanpolysulfate inhibits mast cell histamine secretion and intracellular calcium ion levels: an alternative explanation of its beneficial effects in interstitial cystitis. *J. Urol.* 164:2119-2125, 2000.
102. Theoharides, T.C., Patra, P., Boucher, W., Letourneau, R., Kempuraj, D., Chiang, G., Jeudy, S., Hesse, L. and Athanassiou, A. Chondroitin sulfate inhibits connective tissue mast cells. *Br. J. Pharmacol.* 131:1039-1049, 2000.
103. Raymond, R.J., Dehmer, G.J., Theoharides, T.C. and Deliargyris, E.N. Elevated interleukin-6 levels in patients with asymptomatic mild to moderate left ventricular systolic dysfunction. *Am. Heart J.* 141:435-438, 2001.
104. Esposito, P., Jacobson, S., Pang, X., Georghe, D., Kandere, K. and Theoharides, T.C. Acute stress increases permeability of the blood-brain-barrier through activation of mast cells. *Brain Res.* 188:117-127, 2001.
105. Reuter, U., Bolay, H., Jansen-Olesen, J., Chiarugi, A., Sanchez del Rio, M., Letourneau, R., Theoharides, T.C., Waeber, C. and Moskowitz, M.A. Delayed inflammation in rat meninges: implications for migraine pathophysiology. *Brain* 124:2490-2502, 2001.
106. Esposito, P., Jacobson, S., Connolly, R., Gheorghe, D. and Theoharides, T.C. Non-invasive assessment of blood-brain barrier (BBB) permeability using a gamma camera to detect ⁹⁹technetium-gluceptate extravasation in rat brain. *Brain Res. Protocols* 8:143-149, 2001.
107. Boucher, W.S., Letourneau, R., Huang, M., Kempuraj, D., Green, M., Sant, G.R. and Theoharides, T.C. Intravesical sodium hyaluronate inhibits the rat urinary mast cell mediator increase triggered by acute immobilization stress. *J. Urol.* 167: 380-384, 2002.
108. Lytinas, M., Kempuraj, D., Huang, M., Kandere, K., Boucher, W., Letourneau, R., Jeudy, S., Fitzgerald, K., Spear, K., Athanassiou, A. and Theoharides, T.C. Azelastine inhibits histamine and tryptase release from human umbilical cord blood-derived cultured mast cells, as well as rat skin mast cell-induced vascular permeability: comparison to olopatadine. *Allergy and Asthma Proc.* 23:45-51, 2002.

109. Kempuraj, D., Huang, M., Kandere, K., Boucher, W., Letourneau, R., Jeudy, S., Fitzgerald, K., Spear, K., Athanassiou, A. and Theoharides, T.C. Azelastine is more potent than olopatadine in inhibiting interleukin-6 and tryptase release from human umbilical cord blood derived cultured mast cells. *Annals Allergy, Asthma and Immunol.* 88:501-506, 2002.
110. Di Gioacchino, M., Verna, N., Cavallucci, E., Paolini, F., Caruso, R., Grana, M., Schiavone, C., Di Iorio, A., Ramondo, S., Reale, M., Paganelli, R., Theoharides, T.C. Steroid and antihistamines modulate RANTS release in cultured peripheral blood mononuclear cells of atopic patients. *Int. J. Immunopathol. Pharmacol.* 15:27-34, 2002.
111. Huang, M., Pang, X., Letourneau, R., Boucher, W. and Theoharides, T.C. Acute stress induces cardiac mast cell activation and histamine release effects that are increased in apolipoprotein E knockout mice. *Cardiovascular Res.* 55:150-160, 2002.
112. Huang, M., Berry, J., Kandere, K., Lytinas, M., Karalis, K. and Theoharides, T.C. Mast cell deficient W/W^v mice lack stress-induced increase in serum IL-6 levels, as well as in peripheral CRH and vascular permeability, a model of rheumatoid arthritis. *Int. J. Immunopathol. Pharmacol.* 15: 249-254, 2002.
113. Theoharides, T.C., Boucher, W., Spear, K. Serum interleukin-6 reflects disease severity and osteoporosis in mastocytosis patients. *Int. Arch. Allergy Immunol.* 128:334-350, 2002.
114. Chandler, N., Jacobson, S., Esposito, P., Connolly, R. and Theoharides, T.C. Acute stress shortens the time to onset of experimental allergic encephalomyelitis in SJL/J mice. *Brain, Behavior Immunity* 16:757-763, 2002.
115. Di Gioacchino, M., Verna, N., Cavallucci, E., Paolini, F., Caruso, R., Grana, M., Schiavone, C., Di Iorio, A., Ramondo, S., Reale, M., Paganelli, R. and Theoharides, T.C. Steroid and antihistamines modulate RANTES release in cultured peripheral blood mononuclear cells of atopic patients. *Intl. J. Immunopathol. Pharmacol.* 15:27-34, 2002
116. Esposito, P., Kandere, K., Chandler, N., Basu, S., Jacobson, S., Connolly, R., Tutor, D. and Theoharides, T.C. Corticotropin-releasing hormone (CRH) and brain mast cell regulate blood-brain-barrier (BBB) permeability induced by acute stress. *J. Pharmacol. Exp. Therap.* 303:1061-1066, 2002.
117. Alexandrakis, M., Seretakis, D., Letourneau, R., Boucher, W. and Theoharides, T.C. Inhibitory effect of retinoic acid on proliferation maturation and tryptase level in human leukemic mast cells (HMC-1). *Intl. J. Immunopathol. Pharmacol.* 16:1-5, 2003.
118. Esposito, P., Basu, S., Letourneau, R., Jacobson, and Theoharides, T.C. Corticotropin-releasing factor (CRF) can directly affect brain microvessel endothelial cells. *Brain Res.* 968:192-198, 2003.
119. Lytinas, M., Kempuraj, D., Huang, M., Boucher, W., Esposito, P. and Theoharides, T.C. Acute stress results in skin corticotropin-releasing hormone secretion, mast cell activation and vascular permeability, an effect mimicked by intradermal corticotropin-releasing hormone and inhibited by histamine –1 receptor antagonists. *Intl. Arch. Allergy Immunol.* 130: 224-231, 2003.
120. Madhappan, B., Kempuraj, D., Christodoulou, S., Boucher, W., Tsapikidis, S., Karagiannis, V., Athanassiou, A. and Theoharides, T.C. High levels of intrauterine corticotropin-releasing hormone, urocortin, tryptase and interleukin-8 in spontaneous abortions. *Endocrinology* 144:2285-2290, 2003.
121. Huang, M., Pang, X., Karalis, K. and Theoharides, T.C. Stress-induced interleukin-6 release in mice is mast cell-dependent and more pronounced in Apolipoprotein E knockout mice. *Cardiovascular Res.* 59:241-249, 2003.
122. Kandere-Grzybowska, K., Gheorghe, D., Priller, J., Esposito, P., Huang, M., Gerard, N. and Theoharides, T.C. Stress-induced dura vascular permeability does not develop in mast cell-deficient and neurokinin-1 knock-out mice. *Brain Res.* 980:213-220, 2003.

123. Alexandrakis, M.G., Kyriakou, D.S., Kempuraj, D., Huang, M., Boucher, W., Seretakis, D. and Theoharides, T.C. The isoflavone genistein inhibits proliferation and increases histamine content in human leukemic mast cells. *Allergy Asthma Proc.* 24:1-5, 2003.
124. Alexandrakis, M., Letourneau, R., Kempuraj, D., Kandere-Grzybowska, K., Huang, M., Christodoulou, S., Boucher, W., Seretakis, D. and Theoharides, T.C. Flavonoids inhibit proliferation and increase mediator content in human leukemic mast cells (HMC-1). *Eur. J. Hematol.* 71:1-7, 2003.
125. Kempuraj, D., Basu, S., Huang, M., Kandere-Grzybowska, K., Boucher, W., Letourneau, R., Athanassiou, A. and Theoharides, T.C. Azelastine inhibits synthesis and secretion of IL-6, IL-8 and TNF- α , by reducing NF- κ B expression and intracellular calcium ion levels in human umbilical cord blood-derived cultured mast cells. *Intl. Arch. Allergy Immunol.* 132:231-239, 2003.
126. Sant, G.R., Propert, K.J., Hanno, P.M., Burks, D., Culkin, D., Diokno, A.C., Hardy, C., Landis, J.R., Mayer, R., Madigan, R., Messing, E.M, Peters, K., Theoharides, T.C., Warren, J., Wein, A.J., Ratner, V., Steers, W., Kusek, J.W., Nyberg, L.M. and the Interstitial Cystitis Clinical Trials Group (ICCTG). A Pilot clinical trial of oral pentosan polysulfate and hydroxyzine in interstitial cystitis. *J. Urol.* 170:810-815, 2003.
127. Kandere-Grzybowska, K., Letourneau, R., Kempuraj, D., Donelan, J., Paplawski, S., Boucher, W., Athanassiou, A. and Theoharides, T.C. Interleukin-1 induces vesicular secretion of interleukin-6 without degranulation from human mast cells. *J. Immunol.* 171:4830-4836, 2003.
128. Letourneau, R., Rozniecki, J.J., Dimitriadou, V., and Theoharides, T.C. Ultrastructural evidence of brain mast cell activation without degranulation in monkey experimental allergic encephalomyelitis (EAE). *J. Neuroimmunol.* 145:18-26, 2003.
129. Kempuraj, D., Lytinas, M., Kandere-Grzybowska, K., Papadopoulou, N., Huang, M., Madhappan, B., Christodoulou, S., Athanassiou, A. and Theoharides, T.C. Human mast cells synthesize and secrete corticotropin-releasing hormone (CRH) and urocortin (Ucn). *Endocrinology* 145:43-48, 2004.
130. Haggag, E.G., Abou-Moustafa, M.A., Boucher, W. and Theoharides, T.C. The effect of a herbal water-extract on histamine release from mast cells and on allergic asthma. *J. Herbal Pharmacotherapy* 3:41-54, 2003.
131. Upadhyya, B., Kontos, J., Ardeshirpour, F., Pye, J., Boucher, W., Theoharides, T.C., Dehmer, G., Deliargyris, E.N. Relation of serum levels of mast cell tryptase to left ventricular systolic function, left ventricular volume or congestive heart failure. *J. Cardiac Failure* 10:31-35, 2004.
132. Green, M., Sant, G.R. and Theoharides, T.C. Increased expression of intercellular adhesion molecules in the bladder of interstitial cystitis patients. *Urology* 63:688-693, 2004.
133. Gambi, R., Reale, M., Iarlori, C., Salone, A., Toma, L., Paladini, C., De Luca, G., Feliciani, C., Salvatore, M., Salerno, R.M., Theoharides, T.C., Conti, P., Exton, M. and Gambi, D. Alzheimer patients treated with an AChE inhibitor show higher IL-4 and lower IL-1beta levels and expression in peripheral blood mononuclear cells. *J. Clin. Psychopharmacol.* 24:314-321, 2004.
134. Kempuraj, D., Papadopoulou, N., Stanford, E.J., Christodoulou, S., Madhappan, B., Gsant, G.R., Theoharides, T.C. Increased numbers of activated mast cells in endometriosis. *Am. J. Reprod. Immunol.* 52:267-275, 2004.
135. Deliargyris, E.N., Upadhyya, B., Sane, D.C., Dehmer, G.J., Pye, J., Smith, S.C. Jr, Boucher, W.S., Theoharides, T.C. Mast cell tryptase: a new biomarker in patients with stable coronary artery disease. *Atherosclerosis.* 178:381-386, 2005.
136. Theoharides, T.C. and Sant, G.R. A pilot open label study of Cystoprotek in interstitial cystitis. *Intl. J. Immunopathol. Pharmacol.* 18: 183-188, 2005.

137. Kempuraj, D., Madhappan, B., Christodoulou, S, Boucher, W., Cetrulo, C.L. and Theoharides, T.C. Inhibition of pro-inflammatory mediator release from human umbilical cord-derived cultured mast cells by select flavonols. *Br. J. Pharmacol.* 145:934-944, 2005.
138. Cao, J., Papadopoulou, N., Kempuraj, D., Boucher, W.S., Sugimoto, K., Cetrulo, C.L. and Theoharides TC. Human mast cells express corticotropin-releasing hormone (CRH) receptors and CRH leads to selective secretion of vascular endothelial growth factor (VEGF). *J. Immunol.* 174:7665-7675, 2005.
139. Kalogeromitros, D., Kempura,j D., Katsarou-Katsari, A., Gregoriou, S., Makris, M., Boucher, W., Theoharides, T.C. Theophylline as add-on therapy in patients with delayed pressure urticaria: a prospective self-controlled study. *Int. J. Immunopathol. Pharmacol.* 18:595-602, 2005.
140. Papadopoulou, N., Kalogeromitros, D., Staurianeas, N.G.and Theoharides, T.C. CRH receptor and histidine decarboxylase expression in chronic urticaria. *J. Invest. Dermatol* 125:952-955, 2005.
141. Papadopoulou, N., OLeson, L., Kempuraj, D., Donelan, J., Cetrulo, C.L., Theoharides, T.C. Expression and regulation of corticotropin-releasing hormone receptors in human umbilical cord blood derived mast cells. *J. Mol. Endocrinol.* 35:R1-R8, 2005.
142. Cao, J., Cetrulo, C.L. and Theoharides, T.C. Corticotropin-releasing hormone (CRH) induces vascular endothelial growth factor (VEGF) release from human mast cells via the camp/PKA/p38 MAPK pathway. *Mol. Pharmacol.*69:998-1006, 2006.
143. Logothetis, I., Mylonas, I.A., Baloyaniis, S., Pashalidou, M., Oroglogas, A., Zafeiropoulos, A., Kosta, V. and Theoharides, T.C. A pilot, open label clinical trial using hydroxyzine in multiple sclerosis. *Int. J. Immunopathol. Pharmacol.* 18:771-778, 2005.
144. Kalogeromitros, D., Kempuraj, D., Katsarou-Katsari, A., Makris, M., Gregoriou, S., Papalioidis, D. and Theoharides, T.C. Theophylline as “add-on” therapy to cetirizine in patients with chronic idiopathic urticaria: a randomized, double-blind, placebo-controlled pilot study. *Int. J. Allergy Immunol.* 139:258-264, 2006.
145. Donelan, J., Marchand, J., Kempuraj, D., Papadopoulou, N., Papalioidis, D. and Theoharides, T.C. Corticotropin-releasing hormone receptor 1 (CRHR-1) association with perifollicular mouse skin mast cells. *J. Inv. Dermatol.* 126:932-935, 2006.
146. Kandere-Grzybowska, K., Kempouraj, S., Cao, J. and Theoharides, T.C. Regulation of IL-1-induced selective IL-6 release from human mast cells. *Br. J. Pharmacol.* 148:208-215, 2006.
147. Donelan, J., Papadopoulou, N., Marchand, J., Kempuraj, D., Lytinas, M., Boucher, W., Papalioidis, D. and Theoharides, T.C. Corticotropin-releasing hormone (CRH) induces skin vascular permeability through a neurotensin (NT)-dependent process. *Proc. Natl. Acad. Sci. USA* 103:7759-7764, 2006.
148. Cao, J., Boucher, W., Donelan, J. and Theoharides, T.C. Intravesical corticotropin-releasing hormone (CRH) induces mast cell-dependent vascular endothelial growth factor (VEGF) release from mouse bladder explants. *J. Urol.* 176:1208-1213, 2006.
149. Kempuraj, D., Castellani, M.L., Petrarca, C., Frydas, S., Conti P., Theoharides, T.C., Vecchiet, J. Inhibitory effect of quercetin on tryptase and interleukin-6 release, and histidine decarboxylase mRNA transcription by human mast cell-1 cell line. *Clin. Exp. Med.* 6(4):150-156, 2006.
150. Castellani, M.L., Kempuraj, D., Frydas, S., Theoharides, T.C., Simeonidou, I., Conti, P., Vecchiet, J. Inhibitory effect of quercetin on tryptase and MCP-1 chemokine release, and histidine decarboxylase mRNA transcription by human mast cell-1 cell line. *Neuroimmunomodulation* 13(3):179-186, 2006.

151. Castellani, M.L., Perrella, A., Kempuraj, D.J., Boucher, W., Tagen, M., Salini, V., Vecchiet, J., Tete, S., Frydas, S., Theoharides, T.C., Conti, P. Immunological activation of human umbilical cord blood mast cells induces tryptase secretion and interleukin-6, and histidine decarboxylase mRNA gene expression. *Pharmacol Res.* 55:57-63, 2006.
152. Vasiadi, M., Kempuraj, D., Boucher, W., Kalogeromitros, D. and Theoharides, T.C. Progesterone inhibits mast cell secretion. *Intl. J. Immunopathol. Pharmacol.* 19:787-794, 2006.
153. Bhattacharya, K., Farwell, K., Huang, M., Kempuraj, D., Donelan, J., Papaliadis, D., Vasiadi, M. and Theoharides, T.C. Lower serum IL-6 and less cardiac tissue necrosis in mast cell deficient W/W^v mice following myocardial ischemia-reperfusion. *Intl. J. Immunopathol. Pharmacol.* 20:69-74, 2007.
154. Boucher, W., Cao, J., Kempuraj, D., Donelan, J. and Theoharides, T.C. Intravesical IPD inhibits experimental bladder inflammation. *J. Urol.* 177:1186-1190, 2007.
155. Kalogeromitros, D., Syrigou, E., Makris, M., Kempuraj, D., Stavrianeas, N., Vasiadi, M., Theoharides, T.C. Nasal provocation of allergic rhinitis patients and the hypothalamic-pituitary-adrenal-axis. *Annals Allergy, Asthma, Immunol.* 98:269-273, 2007.
156. Tagen, M., Stiles, L., Kalogeromitros, D., Gregoriou, S., Kempuraj, D., Makris, M., Donelan, J., Vasiadi, M., Staurianeas, G., Theoharides, T.C. Skin corticotropin-releasing hormone receptor expression in psoriasis. *J. Inv. Dermatol.* 127:1789-91, 2007.
157. Kalogeromitros, D., Papagerorgiou, C., Gregoriou S, Chatziantonakis, N., Makris, M., Spanoudaki, N., Rabavilas, A., Rigopoulos, D., Theoharides, T.C. Depressive symptoms in urticaria patients treated with first or second-generation histamine-1 receptor antagonists. *J. Clin. Psychopharmacol.* 27:404-466, 2007.
158. Sugimoto, K., Theoharides, T.C., Kempuraj, D., Conti, P. Response of spinal myoclonus to combination therapy of autogenic training and biofeedback. *Biosychosoc. Med.*, 1:18, 2007.
159. Speranza, L., De Lutiis, M.A., Shaik, Y.B., Felaco, M., Patruno, A., Tetè, A., Mastrangelo, F., Madhappan, B., Castellani, M.L., Conti, F., Vecchiet, J., Theoharides, T.C., Conti, P., Grilli, A. Localization and activity of iNOS in normal human lung tissue and lung cancer tissue. *Int. J. Biol. Markers* 22:226-231, 2007.
160. Boucher, W., Stern, J., Kempuraj, D., Papaliadis, D., Kotsinyan, V., Cohen, M.S. and Theoharides, T.C. Intravesical nanocrystalline silver inhibits experimental bladder inflammation. *J. Urol.* 179:1598-602, 2008.
161. Karapanou, V., Kempuraj, D., Theoharides, T.C. Interleukin-8 is increased in gingival crevicular fluid from patients with acute pulpitis. *J. Endodontics* 34:148-151, 2008.
162. Papaliadis, D., Boucher, W., Kempuraj, D., Theoharides, T.C. The flavonoid luteolin inhibits niacin-induced flush. *Br. J. Pharmacol.* 153:1382-1387, 2008.
163. Maffini, M.V., Soto, A.M., Sonnenenschein, C., Theoharides, T.C. Lack of c-kit receptor promotes mammary tumors in NMU-treated Ws/Ws rats. *Cancer Cell International* 8:5, 2008.
164. Kalogeromitros, D., Makris, M., Cliva, C., Aggelides, X., Kempuraj, D., Theoharides, T.C. A quercetin containing supplement reduces niacin-induced flush in humans. *Intl. J. Immunopathol. Pharmacol.* 21:467-472, 2008.
165. Kempuraj, D., Tagen, M., Iliopoulou, B.P., Clemons, A, Vasiadi, M., Boucher, W., House, M., Wolferg, A., Theoharides, T.C. Luteolin inhibits myelin basic protein-induced human mast cell activation and mast cell-dependent stimulation of Jurkat T cells. *Br. J. Pharmacol.* 155(7):1076-84, 2008.

166. Papaliadis, D., Boucher, W., Kempuraj, D., Michaelian, M., Wolfberg, A., House, M., Theoharides, T.C. Niacin-induced "flush" involves release of PGD₂ from mast cells and serotonin from platelets: evidence from human cells *in vitro* and an animal model. *J. Pharmacol. Exp. Therap.* 327(3):665-672, 2008.
167. Katsarou-Katsari, A., Makris, M., Lagogianni, E., Gregoriou, S., Theoharides, T. Kalogeromitros, D. Clinical features and natural history of acquired cold urticaria in a tertiary referral hospital: a 10-year prospective study. *J. European Acad. Dermatol. Venereol.* 22(12):1405-11, 2008.
168. Castellani, M.L., Ciampoli, C., Felaco, M., Tetè, S., Conti, C.M., Salini, V., De Amicis, D., Orso, C., Antinolfi, P.L., Caraffa, A., Cerulli, G., Boscolo, P., Theoharides, T.C., Conti, P., Kempuraj, D. Neuropeptide substance P induces mRNA expression and secretion of CXCL8 chemokine, and HDC in human umbilical cord blood mast cells. *Clin Invest Med.* 31(6):E362-72, 2008
169. Theoharides T.C., Vakali, S., Kempuraj, D., Sant, G.R. Treatment of refractory interstitial cystitis/painful bladder syndrome with CystoProtek-an oral multiagent natural supplement. *Canadian J. Urol.* 15:4410-4414, 2008.
170. Huang, M., Kempuraj, D., Papadopoulou, N., Kourelis, T., Donelan, J., Manola, A., Theoharides, T.C. Urocortin induces IL-6 production from rat cardiomyocytes through of p38 MAP kinase, RSK and NF-κB activation. *J. Mol. Endocrinol.* 42(5):397-405, 2009.
171. Castellani, M.L., Conti, P., Felaco, M., Vecchiet, J., Ciampoli, C., Cerulli, G., Boscolo, P., Theoharides, T.C. Substance P upregulates LTB₄ in rat adherent macrophages from granuloma induced by KMnO₄. *Neurotox Res.* 15(1):49-56, 2009.
172. Castellani, M.L., Vecchiet, J., Salini, V., Conti, P., Theoharides, T.C., Caraffa, A., Antinolfi, P., Tetè, S., Ciampoli, C., Cuccurullo, C., Cerulli, G., Felaco, M., Boscolo, P. Stimulation of CCL2 (MCP-1) and CCL2 mRNA by substance P in LAD2 human mast cells. *Transl Res* 154(1):27-33, 2009.
173. Tagen, M., Elorza A, Boucher W, Kepley CL, Sirihai, O., Theoharides, T.C. The mitochondrial uncoupling protein 2 (UCP2) inhibits mast cell activation and reduces histamine content. *J. Immunol.* 15;183(10):6313-9, 2009.
174. Theoharides TC. Autism spectrum disorders and mastocytosis. *Int J Immunopathol Pharmacol* 22(4):859-65, 2009.
175. Castellani ML, Vecchiet J, Salini V, Conti P, Theoharides TC, Caraffa A, Antinolfi P, Tetè S, Ciampoli C, Cuccurullo C, Cerulli G, Felaco M, Boscolo P. Stimulation of CCL2 (MCP-1) and CCL2 mRNA by substance P in LAD2 human mast cells. *Transl Res* 154(1):27-33, 2009.
176. Castellani ML, Conti P, Felaco M, Vecchiet J, Ciampoli C, Cerulli G, Boscolo P, Theoharides TC. Substance P upregulates LTB₄ in rat adherent macrophages from granuloma induced by KMnO₄. *Neurotox Res* 15(1):49-56, 2009.
177. Kalogeromitros D, Makris M, Koti I, Chliva C, Mellios A, Avgerinou G, Theoharides TC. A simple 3-day "rush" venom immunotherapy protocol: documentation of safety. *Allergol Immunopathol (Madr).* 2010 Mar-Apr;38(2):69-73.
178. Vasiadi, M., Kalogeromitros, D., Kempuraj, D., Clemons, A., Zhang, B., Chliva, C., Makris, M., Wolfberg, A., House, M., Theoharides, T.C. Rupatadine inhibits pro-inflammatory mediator secretion from human mast cells triggered by different stimuli. *Int. Arch. Allergy Immunol.* 151(1):38-45, 2010.
179. Theoharides TC, Zang B, Kempuraj D, Tagen M, Vasiadi M, Angelidou A, Alysandratos K-D, Kalogeromitros D, Asadi S, Stavrianeas N, Peterson E, Leeman S, Conti P. IL-33 augments substance P-induced VEGF secretion from human mast cells and is increased in psoriatic skin. *Proc Natl Acad Sci USA* 107(9):4448-4453, 2010.

180. Kempuraj D, Asadi S, Zhang B, Manola A, Hogan J, Peterson E, Theoharides TC. Mercury induces VEGF release from human mast cells. *J Neuroinflammation* 7(1):20, 2010.
181. Boucher B, Kempuraj D, Michaelian M, Theoharides TC. Corticotropin-releasing hormone (CRH)-receptor 2 is required for acute stress-induced bladder vascular permeability. *Br J Urol Int* 106(9):1394-9, 2010.
182. Angelidou A, Francis K, Vasiadi M, Alysandratos KD, Kempuraj D, Theoharides A, Lykouras L, Kalogeromitros D., Theoharides TC. Increased serum neurotensin in young children with autism. *J Neuroinflamm* 7:48, 2010.
183. Kempuraj D, Conti P, Tagen M, Kalogeromitros D, Vasiadi M, Alysandratos K-D, Kourelis T, Gregoriou S, Makris M, Staurianeas NG, Theoharides TC. IL-32 is increased along with tryptase in lesional psoriatic skin is up-regulated by substance P in human mast cells. *European J Dermatol* 20(6):865-867, 2010.
184. Alysandratos K-D, Angelidou A, Zhang B, Vasiadi M, Theoharides TC. Increased affected skin gene expression of thymic stromal lymphopoietin in atopic dermatitis. *Annals Allergy Asthma Immunol* 105(5):403-4, 2010.
185. Rozniecki JJ, Sahagian G, Jacobson S, Kempuraj D, Zhang B, Theoharides TC. Acute restraint stress induces brain metastases of luciferase-tagged breast cancer cells in mice. *Brain Research* 1366:204-210, 2010.
186. Zhang B, Angelidou A, Alysandratos KD, Vasiadi M, Francis K, Asadi S, Theoharides A, Sideri K, Lykouras L, Kalogeromitros D, Theoharides TC. Mitochondrial DNA and anti-mitochondrial antibodies in serum of autistic children. *J Neuroinflammation* 7(1):80, 2010.
187. Asadi S, Zhang B, Weng Z, Angelidou A, Kempuraj D, Alysandratos KD, Theoharides TC. Luteolin and thiosalicylate inhibit HgCl₂ and thimerosal-induced VEGF release from human mast cells. *Int J Immunopathol Pharmacol* 23(4):1015-20., 2010.
188. Clemons A, Vasiadi M, Kempuraj D, Kourelis T, Tagen M, House A, Theoharides TC. Amitriptyline and prochlorperazine inhibit human mast cell pro-inflammatory mediator release-possible relevance to chronic fatigue syndrome. *J Clin Psychopharmacol* 31(3): 385-387, 2011.
189. Zhang B, Alysandratos KD, Angelidou A, Asadi S, Sismanopoulos N, Delivanis D-A, Weng Z, Miniati A, Vasiadi M, Katsarou-Katsari A, Miao B, Leeman S, Kalogeromitros D, Theoharides TC. Human mast cell degranulation and granule-stored TNF secretion requires mitochondrial translocation to sites of exocytosis. *J Allergy Clin Immunol* 127(6):1522-1531, 2011.
190. Zhang B, Alysandratos K-D, Angelidou A, Kempuraj D, Asadi S, Vasiadi M, Shirihai O, Theoharides TC. Mast cell mitochondrial function and dynamics distinguish degranulation from selective TNF secretion. *PlosONE*, submitted.
191. Donelan J, Boucher W, Kempuraj D, Michaelian M, Theoharides TC. Corticotropin-releasing hormone receptor involvement in stress-induced mouse skin vascular permeability. *J Immunol*, submitted.
192. Marchand J, Kempuraj D, Vasiadi M, Theoharides TC. Corticotropin-releasing hormone (CRH) receptor expression in human urothelium and association with mast cells. *J Urol*, submitted.
193. Clemons A, Vasiadi M, Kempuraj D, Kourelis T, Vadoros G, Tagen M, House A, Theoharides TC. Tricyclic antidepressants inhibit human mast cell mediator release. *Intl J Immunopathol Pharmacol*, submitted.

d. Reviews

1. Theoharides, T.C. Liposomes as carriers of biologically active molecules. *Folia Biochemica et Biologica Graeca* 14:11-21, 1978.
2. Theoharides, T.C. Liposomes as carriers of cytostatic drugs. In *Biological Basis of Cancer Chemotherapy* (L. Boutis, ed.), pp. 67-86. Theagenion Medical Institute: Thessaloniki, Greece, 1978.
3. Theoharides, T.C. Somatostatin: mast cell secretagogue and physiological implications. *Annual of Medicine* (in Greek) 13:258-272, 1980.
4. Theoharides, T.C. Polyamines spermidine and spermine as modulators of calcium dependent immune processes. *Life Sciences* 27:703-713, 1980.
5. Theoharides, T.C. The mechanism of secretion and the physiological role of the mast cell. *Pediatric Chronicle* 10:5-23, 90-113, 1981.
6. Tsakalos, N.D. and Theoharides, T.C. Agents transferring cellular immunity (transfer factor) or dialyzable leukocyte extract (DLE): an immunopharmacological enigma. *Materia Medica Graeca* 9:541-550, 1981.
7. Theoharides, T.C. Mast cell secretion: basis for jelly-fish poisoning and prospects for relief. *U.N. Workshop on Jelly Fish Blooms* 1:63-73, 1984.
8. Theoharides, T.C. Allergy and antihistamines: a new riddle. *Archives of Dermatology* 122:995-996, 1986.
9. Theoharides, T.C. Neuroimmunology of tumor growth: the role of mast cells. *International Journal of Immunopathology and Pharmacology* 1:89-98, 1988.
10. Theoharides, T.C. Histamine₂ (H₂)-receptor antagonists in the treatment of urticaria. *Drugs* 37: 345-355, 1989.
11. Theoharides, T.C. Central effects of non-opioid analgesics. *Latin American Symposium on Antipyretic Analgesics in Perspective* (W.O. Spitzer and R. Campo, eds.), pp. 42-54, SIS: London, 1989.
12. Blatsios, V. and Theoharides, T.C. The importance of interleukin 2 in the treatment of cancer. *Hellenic Armed Forces Medical Review* 23:373-37, 1989.
13. Theoharides, T.C. Mast cells: the immune gate to the brain. *Life Sciences* 46:607-617, 1990.
14. Theoharides, T.C. and Sant, G. Mast cell activation in interstitial cystitis. *Seminars in Urology* 9:74-87, 1991.
15. Goumenos, G., Theoharides, T.C. and Smulow, J. New aspects of the role of mast cells in periodontal disease. *Periodontologica Analecta*, 3166-174, 1992.
16. Sant, G.R. and Theoharides, T.C. The role of the mast cell in interstitial cystitis. *Urologic Clinics of North America* 21:41-53, 1994.
17. Theoharides, T.C. Hydroxyzine in the treatment of interstitial cystitis. *Urologic Clinics of North America* 21:113-119, 1994.
18. Theoharides, T.C. Antidepressants, antihistamines, interstitial cystitis and cancer. *Journal of Urology* 154:1481-1482, 1995.
19. Theoharides, T.C. Neuroimmunoendocrine basis of interstitial cystitis. *Aktuelle Urology* (Germany), 1996.

20. Theoharides, T.C. and Sant, G.R. The mast cell as a neuroimmunoendocrine effector in interstitial cystitis. In: *Interstitial Cystitis*, edited by Sant, G.R., pp. 101-108. New York: Raven Press, 1997.
21. Theoharides, T.C. and Sant, G.R. Hydroxyzine for symptomatic relief of interstitial cystitis symptoms. In: *Interstitial Cystitis*, edited by Sant, G.R., pp. 241-245. New York: Raven Press, 1997.
22. Theoharides, T.C. Mast cell: a neuroimmunoendocrine master player. *International Journal of Tissue Reactions* 18:1-21, 1996.
23. Theoharides, T.C., Pang, X., Letourneau, R. and Sant, G.R. Interstitial cystitis: a neuroimmunoendocrine disorder. *Annals NY Academy of Science* 840:619-634, 1998.
24. Theoharides, T.C. and Sant, G.R. Hydroxyzine therapy for interstitial cystitis. *Urology* 49 (Supplement 5A):108-110, 1997.
25. Filippou, A., Sant, G.R. and Theoharides, T.C. Interstitial cystitis-The role of mast cells. *Hellenic Urology* 10:321-330, 1998.
26. Sant, G.R. and Theoharides, T.C. Interstitial cystitis. *Current Opinion in Urology* 9:297-302, 1999.
27. Alexandrakis, M. and Theoharides, T.C. Biologic actions of flavonoids on blood cells. *Hellenic Medicine* 65:210-219, 1999.
28. Filippou, A., Sant, G.R. and Theoharides, T.C. Mast cells in interstitial cystitis. *Urolog. Integr. Investig.*4:315-323, 1999.
29. Antelo, M., Filippou, A., Theoharides, T.C. and Sant, G.R. Medical treatment of interstitial cystitis. *Urolog. Integr. Investig.* 4:342-349, 1999.
30. Filippou, A., Theoharides, T.C. and Sant, G.R. Interstitial cystitis: a practical approach to diagnosis and treatment. *Aquarius (Netherlands IC Association Newsletter)*, 1-5, 1999.
31. Katsarou - Katsari A., Filippou A. and Theoharides, T.C. Effect of stress and other psychological factors on the the pathophysiology and treatment of dermatoses. *Intl. J. Immunopathol. Pharmacol.* 12:7-11,1999.
32. Middleton, E., Kandaswami, C. and Theoharides, T.C. The effects of plant flavonoids on mammalian cells: implications for inflammation, heart disease and cancer. *Pharmacol. Rev.* 52:673-751, 2000.
33. Theoharides, T.C. and Sant, G.R. New drugs for the treatment of interstitial cystitis. *Expert Opin. Investig. Drugs* 10:527-552, 2001.
34. Conti, P., Kempuraj, D., Boucher, W., Letourneau, R. and Theoharides, T.C. Mechanism by which IL-16 generated by mast cells mediates allergic inflammation. *Intl. J. Immunopathol. Pharmacol.* 14:1-4, 2001.
35. Theoharides, T.C., Kempuraj, D. and Sant, G.R. Mast cell involvement in interstitial cystitis: a review of human and experimental evidence. *Urology* 57 (Suppl 6A): 47-55, 2001.
36. Theoharides, T.C., Alexandrakis, M., Kempuraj, D. and Lytinas, M. Anti-inflammatory actions of flavonoids and structural requirements for new design. *Intl. J. Immunopathol. Pharmacol.* 14:119-127, 2001.
37. Samenuk, D., Link, M.S., Homoud, M.K., Contreras, R., Theoharides, T.C., Wang, P.J. and Estes, M. Adverse cardiovascular events temporarily associated with Ma Huang, an herbal source of ephedrine. *Mayo Clin Proc* 77:12-16, 2002.

38. Theoharides, T.C. and Kandere, K.. Mast cell involvement in neurogenic inflammation. In *Migraine: a Neuroinflammatory Disease?* Pp. 115-128, 1st Edition (*E.L.H. Spierings and M. Sanchez del Rio, eds.*), pp.115-32, Birkhäuser verlag:Basel, Switzerland, 2002.
39. Conti, P., Kempuraj D., Kandere K., Giacchino, M.D., Reale, M., Barbacane, R.C., Castellani, M.L., Mortari, U., Boucher, W., Letourneau, R. and Theoharides, T.C. IL-16 network in inflammation and allergy. *Allergy Asthma Proceedings*, 23:331-335, 2002.
40. Bielory, L., Kempuraj, D., and Theoharides, T.C. Topical immunopharmacology of ocular allergies. *Curr Opin Allergy Clin Immunol.* 2: 435-445, 2002.
41. Theoharides, T.C. Mast cells and stress: A psychoneuroimmunological perspective. *J. Clin. Psychopharmacol.*, 22:103-8, 2002.
42. Conti, P., Kempuraj, D., Di Gioacchino, M., Boucher, W., Letourneau, R., Kandere, K., Barbacane, R.C., Reale, M., Felaco, M., Frydas, S., Theoharides, T.C. Interleukin-6 and mast cells. *Allergy and Asthma Proc* 23: 331-335, 2002.
43. Conti, P., Reale, M., Barbacane, R.C. and Theoharides, T.C. Role of RANTES and MCP-1 in acute and chronic inflammatory reactions. *Intl. J. Immunopath. Pharmacol.*, in press.
44. Theoharides T.C. Antidepressants and risk of cancer: a case of misguided associations and priorities. *J. Clin. Psychopharmacol.* 23: 1-4, 2003.
45. Theoharides, T.C. Dietary supplements for arthritis and other inflammatory conditions: key role of mast cells and benefit of combining anti-inflammatory and proteoglycan products. *European J. Inflamm.* 1:128, 2003.
46. Theoharides, T.C. and Sant, G.R. Neuroimmune connections and regulation of function in the urinary bladder. In *Autonomic Neuroimmunology* (J. Bienenstock, E. Goetzl and M. Blennerhasset, eds.). *The Autonomic Nervous System (Series Editor: Geoffrey Burnstock)*, vol. 15:345 – 369. Harwood Academic Publishers: Reading, 2003.
47. Conti, P., Kempuraj, D., Frydas, S., Kandere, K., Boucher, W., Letourneau, R., Madhappan, B., Sugimoto, K., Christodoulou, S., Theoharides, T.C. IL-10, an inflammatory/inhibitory cytokine, but not always. *Immunol Lett*, 86:23-129, 2003.
48. Kempuraj, D., Frydas, S., Kandere, K., Madhappan, B., Letourneau, R., Christodoulou, S., Boucher, W., Riccioni, G., Conti, P., and Theoharides, T.C. Interleukin-19 (IL-19) network revisited. *Intl. J. Immunopath. Pharmacol.* 16:95-97, 2003.
49. Conti, P., Kempuraj, D., Frydas, S., Kandere, K., Boucher, W., Letourneau, R. Madhappan, B., Sugimoto, K., Christodoulou, S. and Theoharides, T.C. L-10 subfamily members: IL-19, IL-20, IL-22, IL-24 and IL-26. *Immunology Letters* 88:171-174, 2003.
50. Kempuraj, D., Frydas, S., Conti, P., Kandere, K., Boucher, W., Letourneau, R. Madhappan, B., Sugimoto, K., Christodoulou, S. and Theoharides, T.C. Interleukin-25 (or IL-17E): a new IL-17 family member with growth factor/inflammatory actions. *Intl. J. Immunopath. Pharmacol.* 16:185-188, 2003.
51. Conti, P., Huang, S., Frydas, S., Kempuraj, D., Barbacane, R.C., Grilli, A., Boucher, W., Letourneau, R., Madhappan, B., Papadopoulou, N., Di Gioacchino, M., De Lutiis, M., Theoharides, T.C. Interleukin-17 and the IL-17 family member network. *Immunol. Lett.* 88:171-174, 2003.
52. D’Orazio, N., Riccioni, G., Conti, P., Theoharides, T.C., Bollea, M.R. Conjugated linoleic acid: a functional food? *Intl. J. Immunopath. Pharmacol.* 16:215-220, 2003.

53. Maurer, M., Theoharides, T.C., Granstein, R.D., Bischoff, S.C., Bienenstock, J., Henz, B.M., Kovanen, P.T., Piliponsky, A.M., Kambe, N., Vliagoftis, H., Levi-Schaffer, F., Metz, M., Miyachi, H., Befus, D., Forsythe, P., Kitamura, Y., Galli, S. What is the physiological function of mast cells? *Exp. Dermatol.* 12:886-910, 2003.
54. Theoharides, T.C., Cochrane, D. Critical role of mast cells in neuroinflammatory diseases and the effect of acute stress. *J. Neuroimmunol.* 146:1-12, 2004.
55. Chiang, G., Patra, P., Letourneau, R., Jeudy, S., Boucher, W., Green, M., Sant, G.R. and Theoharides, T.C. Pentosanpolysulfate (Elmiron) is a potent inhibitor of mast cell histamine secretion. In *Bladder Disease: Research Concepts and Clinical Applications*, (A. Atala and D. Slade, Eds.). *Adv. Exp. Med. Biol.* 539:713-729, 2003.
56. Huang, S., Frydas, S., Conti, P., Kempuraj, D., Barbacane, R.C., Grilli, A., Boucher, W., Letourneau, R., Papadopoulou, N., Donelan, J., Madhappan, B., Theoharides, T.C., De Lutiis, M.A., Riccioni, G. and Sabatino, G. Interleukin-17: a revisited study. *Intl. J. Immunopathol. Pharmacol.* 17:1-4, 2004.
57. Theoharides, T.C., Conti, P. Mast cells: the Jekyll and Hyde of tumor growth. *Trends Immunol.* 25:235-241, 2004.
58. Kempuraj D, Donelan J, Frydas S, Iezzi T, Conti F, Boucher W, Papadopoulou NG, Madhappan B, Letourneau L, Cao J, Sabatino G, Meneghini F, Stellin L, Verna N, Riccioni G, Theoharides TC. Interleukin-28 and 29 (IL-28 and IL-29): new cytokines with anti-viral activities. *Int. J. Immunopathol. Pharmacol.* 17:103-106, 2004.
59. Conti, P., Huang, S., Frydas, S., Kempuraj, D., Barbacane, R.C., Grilli, A., Boucher, W., Letourneau, R., Madhappan, B., Papadopoulou, N., Di Gioacchino, M., De Lutiis, M., Theoharides, T.C. Interleukin-17 and interleukin-17 family member network. *Allergy Asthma Proc.* 25:17-21, 2004.
60. Theoharides, T.C., Bielory, L. Mast cells and mast cell mediators as targets of dietary supplements. *Ann. Allergy, Asthma Immunol.* 93 (Suppl 1):S24-S34, 2004.
61. Theoharides, T.C. Panic disorder, interstitial cystitis and mast cells. *J Clin. Psychopharmacol.* 24:361-364, 2004.
62. Theoharides, T.C., Donelan, J.M., Papadopoulou, N., Cao, J., Kempuraj, D. and Theoharides, T.C. Mast cells as targets of corticotropin-releasing factor and related peptides. *Trends Pharmacol. Sci.* 25:563-568, 2004.
63. Kempuraj, D., Konstantinidou, A., Karagouni, E., Boscolo, P., Ferro, F., Di Giannantonio, M., Conti, V.M.V., Doyle, R. and Theoharides, T.C. Cytokines and the brain. *Intl. J. Immunopath. Pharmacol.* 17:4, 2004.
64. Theoharides, T.C., Weinkauf, C. and Conti, P. Brain cytokines and neuropsychiatric disorders. *J. Clin. Psychopharmacol.* 24:577-581, 2004.
65. Riccioni, G., Di Ilio, C., Conti, P., Theoharides, T.C. and D'Orazio, N. Advances in therapy with antileukotriene drugs. *Ann. Clin. Lab. Sci.* 34:379-387, 2004.
66. Avgerinos, D.V. and Theoharides, T.C. Mesenteric traction syndrome or gut in distress. *Intl. J. Immunopathol. Pharmacol.* 18:195-199, 2005.
67. Theoharides, T.C., Donelan, J., Kandere-Grzybowska, K. and Konstantinidou A. The role of mast cells in migraine pathophysiology. *Brain Res. Rev.* 49:65-76, 2005.
68. Theoharides, T.C. and Sant, G.R. Immunomodulators for the treatment of interstitial cystitis. *Urology* 65:633-638, 2005.

69. Theoharides, T.C. Synovial mast cells in inflammatory arthritis. In *Encyclopedia of Molecular Cell Biology and Molecular Medicine* (ED Meyers, ed.), pp. 37-63. Wiley-VCH Verlag GmbH & Co. Weinheim, 2005.
70. Theoharides, T.C., Papaliadis, D., Tagen, M., Konstantinidou, A., Kempuraj, D. and Clemons A. Chronic fatigue syndrome, mast cells and tricyclic antidepressants. *J. Clin. Psychopharmacol.* 25:515-520, 2005.
71. Paus, R., Theoharides, T.C. and Arck, P.C. Neuroimmunoendocrine circuitry of the “brain-skin connection.” *Trends Immunol.* 27:32-39, 2006.
72. Theoharides, T.C. and O’Leary, M. Nutraceuticals in painful bladder syndrome/interstitial cystitis. *Semin. Prev. Altern. Med.* 2:6-14, 2006.
73. Lucas, H.J., Brauch, C.M., Settas, L. and Theoharides, T.C. Fibromyalgia-New concepts of pathogenesis and treatment. *Intl. J. Immunopathol. Pharmacol.* 19:5-10, 2006.
74. Arck, P.C., Slominski, A., Theoharides, T.C., Peters, E. and Paus, R. Neuroimmunology of stress: skin takes center stage. *J. Invest. Dermatol.* 126:1697-1704, 2006.
75. Theoharides, T.C. Migraines headaches: the immunologist’s view. *Hospital Chronicle Supplement*:79-83, 2006.
76. Theoharides, T.C. The role of mast cells in acute coronary syndromes. *Hospital Chronicles Supplement*:192-196, 2006.
77. Kumarasamy, N.A., Lam, F.S., Wang, A.L. and Theoharides, T.C. Glaucoma: current and developing concepts for pathology and treatment, *European J. Inflamm.* 19:129-137, 2006.
78. Theoharides, T.C. and Kalogeromitros, D. Mast cells in allergy and inflammation. *Annals New York Acad. Sci.* 1088:78-99, 2006.
79. Theoharides, T.C. and Konstantinidou, A. Corticotropin-releasing hormone and the blood-brain-barrier. *Frontiers Bioscience* 12:1615-1628, 2007.
80. Theoharides, T.C., Kempuraj, D., Tagen, M., Vasiadi, M. and Cetrullo, C.L. Human umbilical cord-derived mast cells: a unique model for the study of neuroimmunoendocrine interactions. *Stem Cell Rev.* 2:143-154, 2006.
81. Conti, P., Youinou, P., Theoharides, T.C. Modulation of autoimmunity by the latest interleukins (with special emphasis on IL-32). *Autoimmunity Rev.* 6:131-137, 2006.
82. Theoharides, T.C. Treatment approaches for painful bladder syndrome/interstitial cystitis. *Drugs* 67:215-235, 2007.
83. Theoharides, T.C., Kempuraj, D., Tagen, M., Conti, P. and Kalogeromitros, D. Differential release of mast cell mediators and the pathogenesis of inflammation. *Immunol. Rev.* 217:65-78, 2007.
84. Sant, G.R., Kempuraj, D., Marchand, J.E. and Theoharides, T.C. The mast cell in interstitial cystitis-role in pathophysiology and pathogenesis. *Urology* 69 (suppl 4A):34-40, 2007.
85. Tariverdian, N., Theoharides, T.C., Siedentopf, F., Gutiérrez, G., Jeschke, U., Rabinovich GA, Blois, S.M. and Arck, P.C. Neuroendocrine-immune disequilibrium and endometriosis: an Interdisciplinary approach. *Springer Seminars in Immunopathology* 29:193-210, 2007.
86. Theoharides, T.C., Kempuraj, D. and Iliopoulou, B.P. Mast cells, T Cells and inhibition by luteolin: Implications for the pathogenesis and treatment of multiple sclerosis. *Adv. Exper. Med. Biol.* 601:423-30, 2007.

87. Castellani, M.L., Bhattacharya, K., Tagen, M., Kempuraj, D., Perrella, A., De Lutiis, M., Boucher, W., Conti, P., Theoharides, T.C., Cerulli, G., Salini, V., Neri, G. Anti-chemokine therapy for inflammatory diseases. *Int J Immunopathol Pharmacol.* 20:447-453, 2007.
88. Kounis, N.G., Hahalis, G. and Theoharides, T.C. Drug-eluting stent thrombosis, hypersensitivity and the Kounis syndrome. *J. Intervent. Cardiol.* 20:314-323, 2007. Kounis, N.G., Hahalis, G. and Theoharides, T.C. Drug-eluting stent thrombosis, hypersensitivity and the Kounis syndrome. *J. Intervent. Cardiol.* 20:314-323, 2007.
89. Conti, P., Castellani, M.L., Kempuraj, D.J., Salini, V., Vecchiet, J., Tetè, S., Mastrangelo, F., Perrella, A., De Lutiis, M.A., Tagen, M. and Theoharides, T.C. Role of Mast cells in tumor growth. *Am. Clin. Lab. Sci.* 37:315-321, 2007.
90. Theoharides, T.C. Antiinflammatory actions of flavonoids and structural requirements for new design. In *Chemistry and Molecular Aspects of Drug Design and Action* (E.A. Rekka, P.N. Kourounakis, Eds.), Ch. 15, pp. 215-226. CRC Press: Boca Raton, FL, 2008.
91. Theoharides, T.C., Makris, M. and Kalogeromitros, D. Allergic inflammation and adipocytokines. *Int. J. Immunopathol. Pharmacol.* 21:1-4, 2008.
92. Boscolo, P., Youinou, P., Theoharides, T.C. and Conti, P. Environmental/occupational stress and autoimmunity. *Autoimmun. Rev.* 7:340-343, 2008.
93. Theoharides, T.C. and Doyle, R. Autism, gut-blood-brain-barrier and mast cells. *J. Clin. Psychopharm.*, Oct. 2008.
94. Theoharides, T.C., Doyle, R., Francis, K., Conti, P., Kalogeromitros, D. Novel therapeutic targets for autism. *Trends Pharmacol. Sci.*29:375-382, 2008.
95. Manola, A., Kourelis, T., Kounis, G.N., Kounis, N.G., Theoharides, T.C. Mast cells and their activation: insights on the pathophysiology of Kounis syndrome. In *Angina Pectoris: Etiology, Pathogenesis and Treatment*, (F. Columbus, Ed.), Nova Science Publishers: Hauppauge, N.Y, 2008.
96. Kourelis, T., Manola, A., Kempuraj, D., Theoharides, T.C. Umbilical cord-derived mast cells as in vitro models for neuroinflammatory diseases. In *Perinatal Stem Cells* (C. Citrullo, Ed.) John Wiley and sons: Hoboken, NJ, 2008.
97. Theoharides, T.C. Mast cells and pancreatic cancer. *N. Engl. J. Med.* 24;358(17):1860-1, 2008.
98. Theoharides, T.C., Whitmore, K., Stanford, E., Moldwin, R., O'Leary, M. Interstitial cystitis-bladder pain and beyond. *Expert Opinion Pharmacotherapy* 9(17):2979-2994, 2008.
99. Theoharides, T.C., Rozniecki, J.J., Sahagian, G., Kempuraj, D., Kalogeromitros, D. and Conti, P. Impact of stress and mast cells on brain metastases. *J. Neuroimmunol.* 15;205(1-2):1-7, 2008.
100. Theoharides, T.C., Kempuraj, D., Kourelis, T., Manola, A. Human mast cells stimulate activated T cells: implications for multiple sclerosis. *Ann. N. Y. Acad. Sci.* 1144:74-82, 2008.
101. Castellani, M.L., Kempuraj, D., Salini, V., Vecchiet, J., Tete, S., Ciampoli, C., Conti, F., Cerulli, G., Caraffa, A., Antinolfi, P., Theoharides, T.C., De Amicis, D., Perrella, A., Cuccurullo, C., Boscolo, P., Shaik, Y. The latest interleukin: IL-33 the novel IL-1-family member is a potent mast cell activator. *J. Biol. Regul. Homeost. Agents.* 23(1):11-4, 2009.
102. Castellani, M.L., Conti, C.M., Kempuraj, D.J., Salini, V., Vecchiet, J., Tete, S., Ciampoli, C., Conti, F., Cerulli, G., Caraffa, A., Antinolfi, P., Galzio, R., Shaik, Y., Theoharides, T.C., De Amicis, D., Perrella, A., Cuccurullo,

- C., Boscolo, P., Felaco, M., Doyle, R., Verrocchio, C., Fulcheri, M. Autism and immunity: revisited study. *Int. J. Immunopathol. Pharmacol.* 22(1):15-9, 2009.
103. Castellani, M.L., Kempuraj, D.J., Salini, V., Vecchiet, J., Tete, S., Ciampoli, C., Conti, F., Cerulli, G., Caraffa, A., Antinolfi, P., Theoharides, T.C., De Amicis, D., Perrella, A., Cuccurullo, C., Boscolo, P., Shaik, Y. The latest interleukin: IL-33 the novel IL-1-family member is a potent mast cell activator. *J Biol Regul Homeost Agents* 23(1):11-4, 2009.
104. Theoharides, T.C., Kempuraj, D., Redwood, L. Autism-an emerging “neuroimmune disorder” in search for therapy. *Exp. Opinion Pharmacotherapy* 10(13):2127-43, 2009.
105. Karapanou, V., Kempuraj, D., Theoharides, T.C. Oral neuroimmune network and mast cells. *European J. Inflamm.* 7(1), 2009.
106. Felaco P, Castellani ML, De Lutiis MA, Felaco M, Pandolfi F, Salini V, De Amicis D, Vecchiet J, Tete S, Ciampoli C, Conti F, Cerulli G, Caraffa A, Antinolfi P, Cuccurullo C, Perrella A, Theoharides TC, Conti P, Toniato E, Kempuraj D, Shaik YB. IL-32: a newly-discovered proinflammatory cytokine. *J Biol Regul Homeost Agents* 23(3):141-7, 2009.
107. Theoharides TC. Luteolin as a therapeutic option for multiple sclerosis. *J Neuroinflammation* 13;6:29, 2009.
108. Pandolfi F, Cianci R, Cammarota G, Pagliari D, Landolfi R, Conti P, Theoharides TC. Recent insights in primary immunodeficiency diseases: the role of T-lymphocytes and innate immunity. *Ann Clin Lab Sci* 40(1):3-9, 2010.
109. Manola, A., Kourelis, T., Angelidou A, Theoharides, TC. Mast cell mediators and inflammatory diseases. In *Kounis Syndrome: The Coronary Hypersensitivity Syndrome* (Nicholas G. Kounis, ed.). Nova Science Publishers: Hauppauge, N.Y, 2010.
110. Kourelis, T., Manola, A., Alysandratos K-D, Theoharides, TC. Mast cell activation. In *Kounis Syndrome: The Coronary Hypersensitivity Syndrome* (Nicholas G. Kounis, ed.). Nova Science Publishers: Hauppauge, N.Y, 2010.
111. Castellani ML, Anogeianaki A, Felaco P, Toniato E, De Lutiis MA, Shaik B, Fulcheri M, Vecchiet J, Tetè S, Salini V, Theoharides TC, Caraffa A, Antinolfi P, Frydas I, Conti P, Cuccurullo C, Ciampoli C, Cerulli G, Kempuraj D. IL-35, an anti-inflammatory cytokine which expands CD4+CD25+ Treg Cells. *J Biol Regul Homeost Agents* 24(2):131-5, 2010.
112. Castellani ML, De Lutiis MA, Toniato E, Conti F, Felaco P, Fulcheri M, Theoharides TC, Caraffa A, Antinolfi P, Conti P, Cuccurullo C, Ciampoli C, Felaco M, Orso C, Salini V, Cerulli G, Kempuraj D, Tetè S, Shaik B. Impact of RANTES, MCP-1 and IL-8 in mast cells. *J Biol Regul Homeost Agent* 24(1):1-6, 2010.
113. Castellani ML, Felaco P, Galzio RJ, Tripodi D, Toniato E, De Lutiis MA, Fulcheri M, Caraffa A, Antinolfi P, Tete S, Felaco M, Conti F, Pandolfi F, Theoharides TC, Shaik-Dasthagirisahab YB. IL-31 a Th2 cytokine involved in immunity and inflammation. *Int J Immunopathol Pharmacol* 23(3):709-13, 2010.
114. Castellani ML, Galzio RJ, Felaco P, Tripodi D, Toniato E, De Lutiis MA, Conti F, Fulcheri M, Conti C, Theoharides TC, Caraffa A, Antinolfi P, Felaco M, Tete S, Pandolfi F, Shaik-Dasthagirisahab YB. VEGF, substance P and stress, new aspects: a revisited study. *J Biol Regul Homeost Agents* 24(3):229-37, 2010.
115. Castellani ML, Anogeianaki A, Felaco P, Toniato E, De Lutiis MA, Shaik B, Fulcheri M, Vecchiet J, Tetè S, Salini V, Theoharides TC, Caraffa A, Antinolfi P, Frydas I, Conti P, Cuccurullo C, Ciampoli C, Cerulli G, Kempuraj D. IL-35, an anti-inflammatory cytokine which expands CD4+CD25+ Treg Cells. *J Biol Regul Homeost Agents* 24(2):131-5, 2010.

116. Castellani ML, De Lutiis MA, Toniato E, Conti F, Felaco P, Fulcheri M, Theoharides TC, Caraffa A, Antinolfi P, Conti P, Cuccurullo C, Ciampoli C, Felaco M, Orso C, Salini V, Cerulli G, Kempuraj D, Tetè S, Shaik B. Impact of RANTES, MCP-1 and IL-8 in mast cells. *J Biol Regul Homeost Agents* 24(1):1-6, 2010.
117. Castellani ML, Galzio RJ, Felaco P, Tripodi D, Toniato E, De Lutiis MA, Conti F, Fulcheri M, Conti C, Theoharides TC, Caraffa A, Antinolfi P, Felaco M, Tete S, Pandolfi F, Shaik-Dasthagirisahab YB. VEGF, substance P and stress, new aspects: a revisited study. *J Biol Regul Homeost Agents* 24(3):229-37, 2010.
118. Castellani ML, Felaco P, Galzio RJ, Tripodi D, Toniato E, De Lutiis MA, Fulcheri M, Caraffa A, Antinolfi P, Tetè S, Felaco M, Conti F, Pandolfi F, Theoharides TC, Shaik-Dasthagirisahab YB. IL-31 a Th2 cytokine involved in immunity and inflammation. *Int J Immunopathol Pharmacol* 23(3):709-13, 2010.
119. Anogeianaki A, Castellani ML, Tripodi D, Toniato E, DeLutiis MA, Conti F, Felaco P, Fulcheri M, Theoharides TC, Galzio R, Caraffa A, Antinolfi P, Cuccurullo C, Ciampoli C, Felaco M, Cerulli G, Pandolfi F, Sabatino G, Neri G, Shaik-Dasthagirisahab YB. Vitamins and mast cells. *Int J Immunopathol Pharmacol* 2010 Oct-Dec;23(4):991-6.
120. Angelidou A, Alysandratos K-D, Asadi S, Zhang B, Francis K, Vasiadi M, Kalogeromitros D, Theoharides TC. Neonatal mast cell activation and autism. More than meets the eye? *J Autism Dev Disorders*, 2011 Jan 6. [Epub ahead of print]
121. Whitmore, K., Theoharides, T.C. When to suspect interstitial cystitis. *J Family Practice* 60(6):340-348, 2011.
122. Theoharides TC, Angelidou A, Alysandratos K-D, Zhang BD, Asadi S, Francis K, Toniato E, Kalogeromitros D. Mast cell activation and autism. *Biochim Biophys Acta*. 2010 Dec 28. [Epub ahead of print]
123. Theoharides TC, Angelidou A, Alysandratos K-D, Zhang BD, Sismanopoulos N, Delivane D, Vasiadi M, Asadi S, Miniati A, Kalogeromitros D. Mast cells and inflammation. *Biochim Biophys Acta*. 2010 Dec 28. [Epub ahead of print]
124. Theoharides, T.C. Kourembanas, S. Perinatal stress and risk for autism. *BMC Paediatrics*, submitted
125. Theoharides TC, Sismanopoulos N, Delivanis D-A, Zhang B, Hatziagelaki EE, Kalogeromitros D. Mast cells squeeze the heart and stretch the gird: their role in atherosclerosis and obesity. *Trends Pharmacol Sci*, in press.
126. Theoharides TC, Asadi S, Zhang B. SSRIs and NSAIDs: Important considerations and caution for the treatment of myalgic encephalomyelitis/chronic fatigue syndrome. *J Clinical Psychopharmacol*. 31(7):August, 2011.
127. Alysandratos K-D, Angelidou A, Papadimas E, Dizon P, Theoharides TC. Stress gets the lungs squeezing and wheezing. *In preparation*.

e. Commentaries

1. Theoharides, T.C. The End. *Prosanatolismoi* (Anatolia Coll. Lit. Gazette) 7: 24, 1965.
2. Theoharides, T.C. Cyprus: A Greek View. *Yale Graduate Professional* 5(7): 2, 1975.
3. Theoharides, T.C. Jolly Graduate Fellows? *Yale Graduate Professional* 5(8): 2, 1975.
4. Theoharides, T.C. The cromolyn connection: zeroing in. *Wellcome Trends In Otorhinolaryngology and Allergy* 2: 3, 1980.
5. Theoharides, T.C. Research and public education in pharmacology. In *Health Care Delivery in Greece. Annals.* 5:23-39, 1983. Krikos: New York.
6. Theoharides, T.C. Allergy and antihistamines. A new riddle. *Arch of Dermatol* 122:995-996, 1986.
7. Theoharides, T.C. Leukotrienes in cardiovascular and pulmonary function. (A.M. Lefer and M.H. Gee, eds.), pp. 1-270 A.R. Liss: New York, 1985. *Journal of Clinical Psychopharmacology* 7: 111, 1987.
8. Theoharides, T.C. Pharmacology: From the lab to the bedside. *Tufts Medical Alumni Bulletin* 47: 15-18, 1987.
9. Theoharides, T.C. Miracles: a medical perspective. In *Health and Faith* (J. Chirban, ed.), pp. 117-120. University Press of America: New York, 1991.
10. Theoharides, T.C. Doctor's Forum: Interstitial cystitis and irritable bowel syndrome. *ICA Update* 6:6, 1991.
11. Theoharides, T.C. Doctor's Forum: Hydroxyzine for the treatment of interstitial cystitis. *ICA Update* 8:5, 1993.
12. Theoharides, T.C. Scientific discovery and medical practice: the God within. *Greek Orthodox Theological Review* 37: 35-41, 1993.
13. Theoharides, T.C. Always the Good Samaritan. *Tufts Medicine* 53: 22, 1994 (written by Majorie H. Dwyer).
14. Theoharides, T.C. Discovery holds promise of pre-empting allergies. *Dean's Rounds* Spring, 1994 (written by Robert Levy).
15. Theoharides, T.C. Doctor's Forum: Antihistamines, antidepressants and cancer growth? Not really. *ICA Update*, in press.
16. Conti, P. and Theoharides, T.C. Action of Monocyte chemotactic protein-1 (MCP-1) is active on mast cells and causes clump formation. *Intl. J. Immunopathol. Pharmacol*, 73:149-151, 1994.
17. Theoharides, T.C. Directives for the development of orphan drugs. *Medical Press*, p. 27, December 1994 (written by Ekaterini Horeftaki).
18. Theoharides, T.C. and Sant, G.R. Letter to the Editor: Mast cell mediators in interstitial cystitis. *J.Urol.* 153:1952-1955, 1995.
19. Theoharides, T.C. and Sant, G.R. Letter to the Editor: Role of the immune response in interstitial cystitis. *Clin. Immunol. Immunopathol.* 77:115-116, 1995.
20. Pang, X., Sant, G.R. and Theoharides, T.C. Letter to the Editor: Oestrogen receptor status of mast cells in interstitial cystitis. *Br. J. Urol.* 77:475-478, 1996.

21. Sant, G.R. and Theoharides, T.C. Letter to the Editor: Mast cell counts are not useful in the diagnosis of nonulcerative interstitial cystitis. *J. Urol.* 156:1445-1446, 1996.
22. Theoharides, T.C. Response to neuroleptic malignant-like syndrome due to cyclobenzaprine? *J. Clin. Psychopharmacol.* 16:97-99, 1996.
23. Theoharides, T.C. Reply to letter to the Editors by Carroll and Taylor. *J. Clin. Psychopharmacol.* 17:235-238, 531997.
24. Theoharides, T.C. and Sant, G.R. Reply to the Editor concerning mast cell counts not being useful in the diagnosis of nonulcerative interstitial cystitis. *J. Urol.* 755:885-887, 1996.
25. Theoharides, T.C. Pathophysiology of migraines and the role of stress. *Hellenic Pain Society News Report* 3:2-3, 1997.
26. Theoharides, T.C. Mast cells may account for success of GAG. *Urology Times* 26:26, 1998.
27. Theoharides, T.C. U.S. State action on limiting ephedrine use. *J. Clin. Psychopharmacol.* 19:198-190, 1998.
28. Theoharides, T.C. In God We Trust. *The Hellenic Chronicle*, p. 4. April 11, 1999.
29. Theoharides, T.C. Health: The fabric of peace for a world community. *The Hellenic Chronicle*, pp.1, 4. October 27, 1999.
30. Theoharides, T.C., Madhappan, B., Kempuraj, D., Papadopoulou, N. Dual role of CRH/urocortin in human pregnancy? *J. Clin. Endocrinol. Metabolism*, in press.

f. Case Reports

1. Theoharides, T.C., Harris, S.R. and Weckstein, D. Neuroleptic malignant-like syndrome due to cyclobenzaprine? *J. Clin. Psychopharmacol.* 15:79-81, 1995.
2. Pang, X., Boucher, W., Triadafilopoulos, G., Sant, G.R. and Theoharides, T.C. Mast cell (MC) and substance P (SP)-positive nerve involvement in the bladder and colon of a patient with both interstitial cystitis (IC) and irritable bowel syndrome (IBS). *Urology* 47:436-438, 1995.
3. Sant, G.R., Theoharides, T.C., Letourneau, R., Gelfand, J. and Ucci, A.A. Interstitial cystitis and bladder mastocytosis in a woman with chronic urticaria. *Scandinavian J. Urol. Nephrol.* 31:407-507, 1997.
4. Theoharides, T.C. Sudden death of a healthy college student related to ephedrine toxicity from Ma huang containing drink. *J. Clin. Psychopharmacol.* 17:437-439, 1997.
5. Katsarou-Katsari, A., Singh, L. and Theoharides, T.C. Alopecia areata and affected skin CRH receptor supregulation induced by acute emotional stress. *Dermatology* 203:157-161, 2001.
6. Theoharides, T.C., Kempuraj, D. and Sant, G.R. Massive extracellular tryptase from activated bladder mast cells in interstitial cystitis. *Urology* 58:605-606, 2001.
7. Pehlivanidis, C., Fotoulaki, M., Boucher, W., Kempuraj, D., Pang, X., Konstantinidou, A. and Theoharides, T.C. Acute stress-induced seizures and loss of consciousness in a ten-year-old boy with mastocytosis. *J. Clin. Psychopharmacol.*, 22:221-224, 2002.
8. Kalogeromitros, D., Gregoriou, S., Syrigou, E., Georgala, S., Panagiotides, G.J., Kempuraj, D. and Theoharides, T.C. Secondary anetoderma associated with mastocytosis. *Intl. Arch. Allergy Immunol.* 142:86-88, 2006.
9. Theoharides TC, Kempuraj D, Marchand J, Tzianoumis L, Vasiadi M, Katsarou-Katsari A, Makris M, Kalogeromitros D. Urticaria pigmentosa associated with acute stress and lesional skin mast-cell expression of CRF-R1. *Clin. Exp. Dermatol.* 34(5):e163-6, 2009 (on line only).
10. Theoharides, T.C. and Kondou-Filli, K. Stress-induced anaphylaxis. *Intl. Arch. Allergy Immunol*, Submitted.

g. Abstracts/Proceedings

1. Theoharides, T.C. and Canellakis, Z.N. Induction of ornithine decarboxylase (ODC) in rat hepatoma cultured cells (HTC) by cellular uptake of cyclic AMP enclosed in phospholipid vesicles. *Federation of European Biochemical Societies* 10:188, 1975.
2. Theoharides, T.C. and Canellakis, Z.N. Induction of ornithine decarboxylase (ODC) in enucleated cultured hepatoma cells (HTC). *International Congress of Biochemistry* 10:07-8-144, 1976.
3. Canellakis, Z.N. and Theoharides, T.C. Some properties of ornithine decarboxylase induction in normal and neoplastic tissue. In *Genetic Polymorphism*, p. 20. European Society for Human Genetics: Athens, Greece, 1976.
4. Askenase, P.W. and Theoharides, T.C. Differential release of serotonin and histamine in the mast cell. *Federation Proceedings (Fed. Am. Soc. Exp. Biol.)* 39:905, 1980.
5. Theoharides, T.C. and Askenase, P.W. Amitriptyline permits release of serotonin but not histamine from mast cells. *European Journal of Cell Biology* 22:181, 1980.
6. Tamir, H., Askenase, P.W., Theoharides, T.C. and Gershon, M. Serotonin binding proteins of neuronal and mesenchymal (mast cell and basophil) origin. *Society for Neuroscience Abstracts* 6:119, 1980.
7. Askenase, P.W., Tamir, H., Theoharides, T.C. and Gershon, M. Serotonin binding proteins (SBP) derived from rat mast cells or basophil leukemia (RBL) cells. *Federation Proceedings (Fed. Am. Soc. Exp. Biol.)* 40:1022, 1981.
8. Tamir, H., Askenase, P.W., Theoharides, T.C. and Gershon, M. Serotonin binding proteins: studies of a mast cell model. *Transactions of the American Society of Neurochemistry* 12:232, 1981.
9. Theoharides, T.C., Tsakalos, N.D., Dwyer, J.M. and Askenase, P.W. Transfer factor stimulates secretion in rat peritoneal mast cells. *Journal of Cell Biology* 91:75, 1981.
10. Tsakalos, N.D., Theoharides, T.C., Kops, S.K. and Askenase, P.W. Parathyroid hormone stimulates mast cell secretion *in vitro* and *in vivo*. *Clinical Research* 30:359, 1982.
11. Baloyannis, S.J. and Theoharides, T.C. Mast cells may induce demyelination of rat brain slices *in vitro*. *Clinical Research* 30:407, 1982.
12. Kops, S.K., Tsakalos, N.D., Theoharides, T.C. and Askenase, P.W. Mast cell secretion of serotonin and histamine induced by parathyroid hormone (PTH). *Federation Proceedings (Fed. Am. Soc. Exp. Biol.)* 41:376, 1982.
13. Tsakalos, N.D., Theoharides, T.C., Dwyer, J.M., Goffinet, J. and Askenase, P.W. Spontaneous suppressor cell activity in patients with chronic renal failure. *Clinical Research* 31:355, 1983.
14. Kops, S.K., Theoharides, T.C. and Askenase, P.W. Morphologic changes accompanying differential release in the rat peritoneal mast cell. *Journal of Cell Biology* 97:436, 1983.
15. Theoharides, T.C., Kops, S.K. and Askenase, P.W. Rat mast cell ultrastructural changes accompanying differential release of serotonin. *Federation Proceedings (Fed. Am. Soc. Exp. Biol.)* 43:1626, 1984.
16. Theoharides, T.C. Tricyclic antidepressant drug amitriptyline alters the permeability of mast cell secretory granules and permits selective release of serotonin. *Proc. 14th Congress Collegium Internationale Neuropsychopharmacologicum* (Florence) 234, 1984.

17. Theoharides, T.C. Psychotropic agents alter the permeability of mast cell secretory granules. *Proc. 9th International Congress of Pharmacology* (London) 53, 1984.
18. Theoharides, T.C., Baloyannis, S.J. and Manolides, L.S. Mast cell degranulation may cause neuronal degeneration. *International Congress Series* (E.H. Meyers, ed.) 680:140-141. Excerpta Medica: Amsterdam, 1985.
19. Baloyannis, S.J., Theoharides, T.C. and Manolides, L.S. Synaptic alterations in the acoustic pathway following hypoglycemia. *International Congress Series* (E.H. Myers, ed.) 680:89-90. Excerpta Medica: Amsterdam, 1985.
20. Marathias, K.P. and Theoharides, T.C. Serotonin secretion from brain mast cells. *Journal of Cell Biology* 101:124, 1985.
21. Theoharides, T.C. and Kotkow, K.J. Calcium ion levels during differential mast cell secretion. *Federation Proceedings (Fed. Am. Soc. Exp. Biol.)* 45:387, 1986.
22. Lambracht-Hall, M., Marathias, K.P. and Theoharides, T.C. Compound 48/80-induced serotonin release from brain mast cells. *Federation Proceedings (Fed. Am. Soc. Exp. Biol.)* 45:437, 1986.
23. Cartagena, A. and Theoharides, T.C. Inhibition of mast cell degranulation by naturally occurring polyamines. *Federation Proceedings (Fed. Am. Soc. Exp. Biol.)* 45:437, 1986.
24. Theoharides, T.C., Lee-Parritz, A., Berringer, R.W. and Dorkin, H. Rat mast cell secretion with cystic fibrosis homozygote serum. *Clinical Research* 34:278, 1986.
25. Theoharides, T.C., Johnson, H.A., Lee-Parritz, A., Bergman, K. and Reinhold, R.B. Systemic mastocytosis serum induces rat mast cell secretion. *Clinical Research* 34:278, 1986.
26. Pothoulakis, H., Theoharides, T.C., McAndrew, P.E. and LaMont, J.T. Clostridium difficile toxin A releases mediators from mucosal-like rat basophil leukemia (RBL) cells. *Clinical Research* 34:871, 1986.
27. Theoharides, T.C. Peritoneal mast cell secretion due to 48/80 decreases after fusion to rat basophil leukemia (RBL) cells. *Journal of Cell Biology* 103:458, 1986.
28. Theoharides, T.C. and Cartagena, A. Naturally occurring polyamines inhibit inflammatory cell secretion. *Proc. 2nd World Conference on Inflammation* (Monte Carlo), p. 390. Bioscience Ediprint: Switzerland, 1986.
29. Lambracht-Hall, M. and Theoharides, T.C. Release of inflammatory mediators from brain mast cells. *Proc. 2nd World Conference on Inflammation* (Monte Carlo), p. 391. Bioscience Ediprint: Switzerland, 1986.
30. Theoharides, T.C., Baloyannis, S.J. and Manolides, L.S. Brain demyelination during release of mast cell mediators. *Proc. 2nd World Conference on Inflammation* (Monte Carlo), p. 392. Bioscience Ediprint: Switzerland, 1986.
31. Manolides, L.S., Baloyannis, S.J., Theoharides, T.C. and Apostolides, T.H. A clinical and laboratory study on 1,000 children suffering from secretory otitis media. *Proc. International Symposium on Acute Secretory Otitis Media* (Miami), pp. 563-569. Krueger: Amsterdam, 1986.
32. Baloyannis, S.J., Manolides, L.S. and Theoharides, T.C. Ultrastructural changes accompanying mast cell-induced brain demyelination. *Proc. 10th International Congress of Neuropathology* (Stockholm), p. 415, 1986.
33. Theoharides, T.C. New findings concerning the mechanism of action of non-narcotic analgesics. *5th World Congress of Pediatrics* (Panama City), 1987.

34. Theoharides, T.C. Substance P-induced release of brain mast cell nociceptive mediators. *Pain Supplement* 4:262, 1987.
35. Theoharides, T.C. New findings concerning the mechanism of action of non-narcotic analgesics. *Proc. 3rd E.N.T.-Neuro-Ophthalmology-Neurosurgery Congress* (Rome), p. 89. Rivista Italiana: Rome, 1987.
36. Theoharides, T.C. and Hauser, S.L. Tricyclics inhibit brain mast cell secretion and neuronal demyelination. *Proc. International Workshop on Diagnostic and Therapeutic Trials in Multiple Sclerosis: a New Look*, H.L. Weiner and D.W. Patty (eds.), pp. 44-46, National Multiple Sclerosis Society, New York, 1988.
37. Konstantinidou, A.D., Flaris, N., Lambracht-Hall, M. and Theoharides, T.C. Functional localization of brain mast cells. *Society for Neuroscience Abstracts* 14:226, 1988.
38. Lambracht-Hall, M., Konstantinidou, A.D., Holdridge, M. and Theoharides, T.C. Tricyclic compounds inhibit thalamic mast cell secretion. *Society for Neuroscience Abstracts* 14:25, 1988.
39. Vliagoftis, H., Raam, S. and Theoharides, T.C. Female sex hormones trigger mast cell secretion. *Journal Cell Biology* 109:52, 1989.
40. Theoharides, T.C., Vliagoftis, H. and Hauser, S.L. Myelin basic protein (MBP) degranulates mast cells from rats with experimental allergic encephalomyelitis (EAE). *Proc. 8th Annual Meeting of New England Pharmacologists*, 46 (Boston), 1989.
41. Konstantinidou, A.D., Lambracht-Hall, M., Holdridge, M. and Theoharides, T.C. Amitriptyline inhibits thalamic mast cell secretion and neuronal depolarization. *Proc. 3rd Interscience World Conference on Inflammation* (Monte Carlo), p. 251. Bioscience Ediprint: Switzerland, 1989.
42. Savala, J., Konstantinidou, A.D., Lambracht-Hall, M. and Theoharides T.C. Clonidine stimulates the release of vasoactive substances from brain mast cells. *Proc. 3rd Interscience World Conference on Inflammation* (Monte Carlo), p. 252. Bioscience Ediprint: Switzerland, 1989.
43. Lambracht-Hall, M., Konstantinidou, A., Holdridge, M. and Theoharides, T.C. Somatostatin and substance P stimulate release of brain mast cell mediators. *Proc. 3rd Interscience World Conference on Inflammation* (Monte Carlo), p. 253. Bioscience Ediprint: Switzerland, 1989.
44. Vliagoftis, H., Cartagena, A. and Theoharides, T.C. Spermine inhibits mast cell secretion by two distinct mechanisms. *Proc. 3rd Interscience World Conference on Inflammation* (Monte Carlo), p. 254. Bioscience Ediprint: Switzerland, 1989.
45. Panagiotacopoulos, P., Conti, P., Vliagoftis, H., Serhan, C. and Theoharides, T.C. Modulation of rat mast cell secretion by leukotrienes and lipoxins. *Proc. 3rd Interscience World Conference on Inflammation* (Monte Carlo), p. 255. Bioscience Ediprint: Switzerland, 1989.
46. Theoharides, T.C., Vliagoftis, H. and Hauser, S.L. Myelin basic protein induces mast cell secretion from EAE-susceptible Lewis, but not resistant Sprague-Dawley, rats. *Proc. 3rd Interscience World Conference on Inflammation* (Monte Carlo), p. 256. Bioscience Ediprint: Switzerland, 1989.
47. Theoharides, T.C. Treatment of allergic rhinitis and secretory otitis media with tricyclic drugs. *Proc. 4th E.N.T. - Neurosurgery Congress* (Thessaloniki), 1990.
48. Theoharides, T.C., Lambracht-Hall, M., Massacesi, L. and Hauser, S.L. Reduced incidence of experimental allergic encephalomyelitis (EAE) with the tricyclic SEP-CH. *Proc. XIth International Congress of Pharmacology* (Amsterdam). *European J. Pharmacol.* 183:626-627, 1990.

49. Dimitriadou, V., Massacesi, L., Hauser, S.L. and Theoharides, T.C. Ultrastructural evidence of mast cell involvement in monkey experimental allergic encephalomyelitis (EAE). *Proc. 1st International Congress on Inflammation* (Barcelona), p. 282, 1990.
50. Dimitriadou, V., Buzzi, M.G., Theoharides, T.C. and Moskowitz M.A. Dura mast cell activation induced by trigeminal ganglion stimulation in the rat. *Proc. 1st International Congress on Inflammation* (Barcelona), p. 280, 1990.
51. Theoharides, T.C., Dimitriadou, V. and Vliagoftis, H. Testosterone inhibits rat mast cell degranulation. *Proc. 1st International Congress on Inflammation* (Barcelona), p. 279, 1990.
52. Pothoulakis, C., Linevsky, J., Becker, S., Holdridge, M., Theoharides, T.C. and LaMont, J.T. Release of mast cell mediators in an animal model for inflammatory bowel disease. *Proc. 1st International Congress on Inflammation* (Barcelona), p. 281, 1990.
53. Dimitriadou, V., Lambracht-Hall, M. and Theoharides, T.C. Can inhibition of carbachol and substance P-induced selective release from dura mast cells be associated with analgesia? *Pain Suppl.* 5:S14, 1990.
54. Lambracht-Hall, M., Holdridge, M., Dimitriadou, V. and Theoharides, T.C. Myelin basic protein (MBP), substance P (SP) and carbachol (C) induce histamine release from rat dural mast cells. *FASEB Journal* 4:903, 1990.
55. Linevsky, J., Becker, J., Pothoulakis, H., Holdridge, M., Theoharides, T.C. and LaMont, J.T. *Clostridium difficile* toxin A stimulates release of mast cell mediators in rabbit ileal loops. *Gastroenterology* 98:459, 1990.
56. Kouretas, D., Trnovsky, J., Holdridge, M. and Theoharides, T.C. Two-dimensional protein electrophoretic pattern of mast and rat basophilic leukemia (RBL) cells during growth and differentiation. *The Pharmacologist* 32:153, 1990.
57. Buzzi, M.G., Dimitriadou, V., Theoharides, T.C. and Moskowitz, M.A. Morphological effects of electrical trigeminal ganglion stimulation (ETG) on intra- and extracranial vessels. *Society for Neuroscience Abstracts* 16:160, 1990.
58. Dimitriadou, V., Buzzi, M.G. Lambracht-Hall, M., Moskowitz, M.A. and Theoharides, T.C. *In vivo* and *in vitro* ultrastructural evidence for stimulation of dura mast cells by neuropeptides. *Society for Neuroscience Abstracts* 16:161, 1990.
59. Solomonides, J., Dimitriadou, V. and Theoharides, T.C. Intimate contact between rat basophilic leukemia (RBL) and pheochromocytoma (PC-12) cells combined in culture. *Society for Neuroscience Abstracts* 16:973, 1990.
60. Correia, I. and Theoharides, T.C. Inhibition of mast cell secretion is associated with phosphorylation of the major protein kinase C substrate. *FASEB Journal* 5:1008, 1991.
61. Trnovsky, J., Letourneau, R. and Theoharides, T.C. Quercetin induces differentiation/maturation of rat basophilic leukemia cells. *FASEB Journal* 5:1006, 1991.
62. Moskowitz, M.A., Buzzi, M.G., Theoharides, T.C., Dimitriadou, V., Heath, H.H. and Carter, B. Evidence that serotonin receptors on trigeminovascular axons mediate the anti-migraine effects of ergot alkaloids and sumatriptan. *Neurology* 41(suppl. 1):164, 1991.
63. Leventhal, T., El-Mansoury, M. and Theoharides, T.C. Carbachol induces rat bladder mast cell serotonin release. *Clinical Research* 39:319, 1991.
64. Kouretas, D., Correia, I., Dimitriadou, V. and Theoharides, T.C. High affinity binding of progesterone to rat basophilic leukemia cells. *Clinical Research* 39:320, 1991.

65. Vliagoftis, H. and Theoharides, T.C. Cholera toxin inhibits rat mast cell secretion. *Journal of Cell Biology*, 115:24, 1991.
66. Buzzi, M.G., Dimitriadou, V., Theoharides, T.C. and Moskowitz, M.A. Neurogenic inflammatory response in rat dura mater is blocked by drugs that share 5-HT₁ like mechanisms. *Proc. 2nd International Union of Pharmacology Satellite Meeting on Serotonin* (Basel, Switzerland), 1991.
67. Moskowitz, M.A., Buzzi, M.G., Dimitriadou, V. and Theoharides, T.C. Evidence that antimigraine drugs via 5HT₁-receptors block peptide release and sterile inflammation in dura mater. *Proc. 16th International Conference on Stroke and Cerebral Circulation* (San Francisco), 1991.
68. Moskowitz, M.A., Buzzi, M.G., Carter, B., Dimitriadou, V., Theoharides, T.C. and Health, H. Evidence that serotonin-like heteroreceptors block neuropeptide release and neurogenic plasma extravasation to mediate the actions of ergot alkaloid and sumatriptan (GR 43175) in migraine headaches. *Proc. 15th International Symposium on Cerebral Blood Flow and Metabolism* (Miami), 1991.
69. El-Mansoury, M., Letourneau, R. and Theoharides, T.C. Carbachol-induced bladder mast cell secretion may be involved in neurogenic bladder inflammation and interstitial cystitis (IC). *Proc. 4th Interscience World Conference on Inflammation* (Geneva), 376, 1991.
70. Dimitriadou, V., Solomonides, J., Delihatsios, H. and Theoharides, T.C. Morphological and functional association of rat basophilic leukemia (RBL) and pheochromocytoma (PC-12) cells *in vitro*. *Proc. 4th Interscience World Conference on Inflammation* (Geneva), 377, 1991.
71. Dimitriadou, V., Buzzi, M.G., Theoharides, T.C. and Moskowitz, M.A. Anti-inflammatory effects of dihydroergotamine and sumatriptan in blood vessels and mast cells of dura mater. *Proc. 5th International Headache Congress* (Washington, D.C.), *Cephalalgia* 11(suppl. 11): 9-10, 1991.
72. Lambracht-Hall, M., Holdridge, M., Konstantinidou, V. and Theoharides, T.C. The antidepressant sertraline promotes serotonin secretion from thalamic mast cells and neurons. *Proc. 3rd IBRO World Congress of Neuroscience*, 23, 1992.
73. Rozniecki, J.J., Sugiultzoglou, M. and Theoharides, T.C. Azatadine inhibits serotonin secretion from brain mast cells. *Proc. 8th International Congress of Immunology* (Budapest), 159, 1992.
74. Sant, G.R. and Theoharides, T.C. Activation of bladder mast cells in interstitial cystitis. *Proc. Can. Soc. Urology*, 47, 1992.
75. Bakos, P., Agelakas, J., Brophy, C.M., Letourneau, R.J. and Theoharides, T.C. Increased numbers of activated mast cells in abdominal aortic aneurysms. *FASEB Journal* 6:998, 1992.
76. Rozniecki, J.J., Sugiultzoglou, M.K. and Theoharides, T.C. Histamine 3 (H₃)-receptor agonists inhibit brain mast cell and neuronal serotonin (5HT) secretion. *FASEB Journal* 6:1559, 1992.
77. Theoharides, T.C. and Sant, G.R. Hydroxyzine for the treatment of interstitial cystitis. *Journal Urology* 147:461, 1992.
78. Rozniecki, J.J., Letourneau, R.J., Sugiultzoglou, M.K. and Theoharides, T.C. Histamine 3 (H₃) receptor antagonists potentiate brain mast cell (MC) and neuronal serotonin (5HT) and histamine secretion. *Molecular Biology of the Cell (suppl)*, 3:194, 1992.
79. Rozniecki, J.J., Hauser, S.L. and Theoharides, T.C. Elevated mast cell tryptase in cerebrospinal fluid (CFS) of patients with multiple sclerosis (MS). *FASEB Journal* 7:852, 1993.

80. Marchand, J., Pang, X., Sant, G.R., Kream, R.M. and Theoharides, T.C. Substance P (SP)-positive nerve fibers in interstitial cystitis (IC). *Society of Neuroscience Abstracts* 19:947, 1993.
81. Habibi, A., Pothoulakis, I., Letourneau, R. and Theoharides, T.C. Mast cells (MC) are increased in neoplastic as compared to non-neoplastic human thyroid tissue. *Molecular Biology of the Cell* suppl. 4:219, 1993.
82. Correia, I. and Theoharides, T.C. Characterization of the 78 kD phosphoprotein involved in inhibition of mast cell secretion - homology to Moesin. *Proc. 5th Interscience World Conference on Inflammation* (Geneva), 294, 1993.
83. Pang, X., Raam, S., Sant, G.R. and Theoharides, T.C. Estrogen receptor positive bladder mast cells in interstitial cystitis (IC). *Proc. 7th ICA/NIDDK IC Scientific Workshop* (Orlando), 18, 1993.
84. Theoharides, T.C. Treatment of interstitial cystitis (IC) symptoms with hydroxyzine. *Proc. 7th ICA/NIDDK IC Scientific Workshop* (Orlando), 50, 1993.
85. El-Mansoury, M., Boucher, W., Spanos, C., Sant, G.R. and Theoharides, T.C. Elevated urinary tryptase levels in interstitial cystitis patients. *Proc. 7th ICA/NIDDK IC Scientific Workshop* (Orlando), 1993.
86. Pang, X., Marchand, J., Sant, G.R., Kream, R.M. and Theoharides, T.C. Increased numbers of substance P (SP)-positive nerve fibers associated with bladder mast cells in interstitial cystitis (IC). *Proc. 7th ICA/NIDDK IC Scientific Workshop* (Orlando), 44, 1993.
87. Deliargyris, E.N., Theoharides, T.C. Differential effects of plant flavonoids on mast cell secretion. *European Academy of Allergology and Clinical Immunology* (Rotterdam, The Netherlands), p.109, 1993.
88. Rozniecki, J.J. and Theoharides, T.C. Functional relationship between dural mast cells and neurons. *Canadian Journal of Physiology and Pharmacology*, 72(suppl), 425, 1994.
89. Spanos, C.P., Rozniecki, J.J., Letourneau, R. and Theoharides, T.C. Dura mast cell activation and cerebrospinal (CSF) fluid rat mast cell protease (RMCP) elevations in a rat stress model. *Canadian Journal of Physiology and Pharmacology*, 72(suppl), 425, 1994.
90. Rozniecki, J.J., Spanos, C.P., Letourneau, R.J. and Theoharides, T.C. Heterogeneity of intracranial mast cells. *FASEB Journal*, 8:108, 1994.
91. Pang, X., Raam, S., Sant, G.R. and Theoharides, T.C. Estrogen receptor positive bladder mast cells in interstitial cystitis. *Journal of Urology, Proc 7th ICA/NIDDK IC Workshop*, (Olandao), 1993
92. Wang, L., Correia, I., Pang, X., Wang, Y. and Theoharides, T.C. Rat moesin: cloning phosphorylation and localization in mast cells. *FASEB Journal* 9A803:1995.
93. Boucher, W., Pang, X., Webster, E., Chrousos, G., Papanicolaou, D. and Theoharides, T.C. Corticotropin releasing hormone (CRH) induces rat mast cell (MC) secretion. *FASEB Journal* 9:A919, 1995.
94. Spanos, C., Letourneau, R., Sant, G.R. and Theoharides, T.C. Degranulation of rat bladder mast cells in a non-traumatic stress model. Implications for the pathophysiology of interstitial cystitis. *NIH Interstitial Cystitis Scientific Research Symposium*, (Bethesda), 110, 1995.
95. Pang, X., Letourneau, R., Triadafilopoulos, G., Sant, G.R. and Theoharides, T.C. Mast cell (MC)- substance P (SP) increases in the bladder and colon of a patient with interstitial cystitis (IC) and irritable bowel syndrome (IBS). *NIH Interstitial Cystitis Scientific Research Symposium*, (Bethesda), 59, 1995.

96. Theoharides, T.C., Pang, X., El-Mansoury, M. and Sant, G.R. Estrogen-positive mast cells (MC) are increased and their secretion in response to substance P (SP) is augmented by estradiol in interstitial cystitis (IC). *NIH Interstitial Cystitis Scientific Research Symposium*, (Bethesda), 77, 1995.
97. Webster, E., Papanicolaou, D.A., Boucher, W., Pang, X., Conlon, P., DeSouze, E., Theoharides, T.C. and Chrousos, G. The mast cell as a target of peripheral "immune" corticotropin-releasing hormone (CRH) and mediator of its proinflammatory properties: clinical implications. *The Endocrine Society*, 77:PI-669, 1995.
98. Theoharides, T.C., Wang, L., Correia, I., Pang, X. and Wang, Y. Inhibition of mast cell exocytosis by a unique phosphoprotein: cloning, phosphorylation and localization in mast cells. *NIH Immunology Workshop on "Signal transduction in mast cell activation and development"*, (Bethesda), 1995.
99. Spanos, C.P., Pang, X., Alexacos, N., Alferes, L., Ligris, K., Cochrane, D., Sant, G.R. and Theoharides, T.C. Neural activation of rat bladder mast cells (MC) by immobilization stress and significance for the etiology of interstitial cystitis (IC). *International Bladder Symposium*, 1996.
100. Rozniecki, J.J., Pang, X. and Theoharides, T.C. Colocalization of substance P-reactive neurons and mast cells in the dura mater - implications for headaches. *Proceeding 3rd EHF Conference*, February 29, 1996.
101. Theoharides, T.C. and Sant, G.R. Interstitial cystitis: a neuroimmunoendocrine disorder. *NeuroImmunoModulation*. 3:176, 1996.
102. Alexandrakis, M. and Theoharides, T.C. Inhibition of basophil leukemic cell (RBL) activation by flavonoids. *Proceedings 7th Panhellenic Hematology Congress*, p. 269 (Thessaloniki, Greece) December 14-17, 1996.
103. Pang, X., Spanos, C.P. and Theoharides, T.C. Stress-induced cardiac mast cell activation: implication for silent ischemia. *FASEB Journal*, 10:A34, 1996.
104. Sant, G.R., El-Mansoury, M. and Theoharides, T.C. *In situ* human bladder mast cell secretion in interstitial cystitis. *Br. Assn. Urol. Surgeons*, 1996, in press.
105. Spanos, C.P., Pang, X., Alexacos, N., Alferes, L., Ligris, K., Cochrane, D., Sant, G.R. and Theoharides, T.C. Neural activation of rat bladder mast cells (MC) by immobilization stress and significance for the etiology of interstitial cystitis (IC). *International Bladder Symposium* (Boston), 1996.
106. Boucher, W., Singh, L. and Theoharides, T.C. Differential effect of corticotropin-releasing hormone (CRH) on rat mast cell (MC) secretion. *FASEB J.* 10:A1290, 1996
107. Singh, L., Boucher, W., Pang, X., and Theoharides, T.C. Corticotropin-releasing hormone and immobilization stress induce skin mast cell degranulation and increased vascular permeability. *Society for Neuroscience Abstracts*, 23:714, 1997.
108. Theoharides, T.C., Boucher, W., Singh, L. and Pang, X. Urocortin is a potent inducer of skin mast cell activation and vasodilation: implications for stress-induced atopic diseases. *79th Annual Meeting of the Endocrine Society*, June 1997.
109. Theoharides, T.C., Boucher, W., Singh, L., Pang, X., Seretakis, D., Green, M. and Bastas, G. Urocortin powerfully induces mast cell-dependent skin vasodilation which may explain the role of stress in atopic diseases. *EAACI '97 Annual Meeting*, June 1-4, 1997.
110. Theoharides, T.C., Singh, L., Boucher, W., Pang, X., Seretakis, D., Green, M. and Bastas, G. Urocortin (Ucn) and corticotropin-releasing factor (CRF) trigger mast cell activation and increased vascular permeability: implications for the pathophysiology of stress-induced atopic and inflammatory syndromes. *7th Interscience World Conference*, Geneva, Switzerland, May 19-21, 1997.

111. Alexacos, N., Pang, X., Cochrane, D., Sant, G.R. and Theoharides, T.C. Bladder mast cell (MC) activation by acute psychological stress is blocked by a neurotensin (NT) receptor antagonist, a possible approach to the treatment of interstitial cystitis (IC). Proceedings, *ICA/NIDDK International Scientific Symposium*, p. 40 (Washington, D.C.) October 30-31, 1997.
112. Theoharides, T.C., Boucher, W. and Sant, G.R. Inhibitory effect of sulfated proteoglycans on mast cell (MC) secretion may explain their benefit in interstitial cystitis (IC). Proceedings, *ICA/NIDDK International Scientific Symposium*, p. 35 (Washington, D.C) October 30-31, 1997.
113. Theoharides, T.C., Boucher, W., Singh and Pang, X. Urocortin is a potent inducer of skin mast cell activation and vasodilation: Implications for stress-induced atopic diseases. Proceedings *79th Annual Meeting of The Endocrine Society*, p. 89 (Minneapolis, MN) June 11-14, 1997.
114. Theoharides, T.C., Pang, X., Alexakos, N., Seretakis, D. and Cochrane, D. A neurotensin (NT) receptor antagonist blocks stress-induced cardiac mast cell (MC) degranulation. Proceedings *ISHR World Congress* (Rhodes, Greece) May 27-31, 1998. *J. Mol. Cellular Cardiol.* 30:A189, 1998.
115. Theoharides, T.C., Boucher, W. Sulfated polysaccharides inhibit mast cell (MC) secretion and may be useful in bone inflammation. *FASEB, J.* 12:A761, 1998.
116. Alexandrakis, M., Huang, M., Theofilopoulos, P., Boucher, W., Seretakis, D., Letourneau, R. and Theoharides, T.C. Flavonoids inhibit proliferation and constitutive secretion of human leukemic mast cells (HMC-1) in culture. *FASEB, J.* 12:A896, 1998.
117. Patra, P.B., Hesse, L., Boucher, W., Letourneau, R. and Theoharides, T.C. Chondroitin sulfate (CS) inhibits mast cell secretion. *FASEB J.* 13:A149, 1999.
118. Esposito, P., Pang, X., Boucher, W. and Theoharides, T.C. Acute psychological stress induces mast cell dependent increase in brain vascular permeability: implications for multiple sclerosis (MS). *FASEB J.* 13:A326, 1999.
119. Chiang, G., Patra, P., Boucher, W., Letourneau, R., Jeudy, S., Sant, G.R. and Theoharides, T.C. Elmiron is a potent inhibitor of mast cell secretion. *FASEB J.* 14:A779, 1999.
120. Deliargyris, E.N., Dehmer, G.J., Tate, D.A., Smith, S.C., Boucher, W.S. and Theoharides, T.C. Elevated mast cell mediators in the coronary circulation of patients with coronary artery disease (CAD). *Atherosclerosis* 144(Suppl. I):I120, 1999.
121. Deliargyris, E.N., Kontos, J.L., Dehmer, G.J., Boucher, W.S. and Theoharides, T.C. Tryptase, a novel modulator of fibrinogen activity is elevated in patients with coronary artery disease. *Proc. 4th Int. Fibrinogen Symposium (Paris, February 3-4) Blood Coagulation & Fibrinolysis* 10 (Suppl):S108 1999.
122. Theoharides, T.C., Patra, P., Letourneau, R., Theofilopoulos, P., Boucher, W. and Lytina, M. Chondroitin sulfate is a natural anti-allergic agent. *Proc. 18th Congress of the European Association of Allergology and Clinical Immunology* (Brussels, Belgium, July 3-7) *European J Allergy Clinical Immunol* 54 (Suppl 52):154, 1999.
123. Deliargyris, E.N., Raymond, R.J., Theoharides, T.C., Boucher, W.S., Tate, D.A., Smith, S.C. and Dehmer, G.J. Interleukin-6 release in the coronary circulation of patients with acute coronary syndromes. *Proc. 21st Congress of the European Society of Cardiology* (Barcelona, August 28-Sept. 1) *Eur. Heart J.* 20 (Suppl. I):I395, 1999.

124. Deliargyris, E.N., Raymond, R.J., Theoharides, T.C., Boucher, W.S., Tate, D.A. and Dehmer, G.J. Elevated serum interleukin-6 levels are from cardiac sources in acute coronary syndromes, but not in congestive heart failure. *Proc. Circulation* 100(Suppl. I):I-372, 1999.
125. Rozniecki, J.J., Pang, X. and Theoharides, T.C. Colocalization of substance P - reactive neurons and mast cells in the rat dura mater - implications for headaches. *3rd European Headache Foundation Conference*, in press.
126. Filippou, A., Sant, G.R. and Theoharides, T.C. Increased expression of ICAM-1 in bladder of interstitial cystitis patients. *Proc. Annual Meeting of the Urology Association (Dallas TX, May 1-6, 1999)*, in press.
127. Theoharides, T.C., Wang, L., Pang, X., Letourneau, R., Culm, K.E., Basu, S., Wang, Y. and Correia, I. Cloning and cellular localization of the rat mast cell 78kD protein phosphorylated in response to the mast cell "stabilizer" cromolyn:a target of the ERM family of proteins linking the cell surface to the cytoskeleton. *Proc. European Conference on Biomedical Research and Peace (Cyprus, October 17-21)*, p57. 1999.
128. Theoharides, T.C., Esposito, P., Pang, X., Boucher, W. and Spear, K. Acute psychological stress induces mast cell dependent increase in brain vascular permeability:implications for multiple sclerosis (MS) and inhibition by hydroxyzine. *Proc. European Conference on Biomedical Research and Peace (Cyprus, October 17-21, 1999)*, p58.
129. Chiang, G., Patra, P., Boucher, W., Letourneau, R., Jeudy, S., Sant, G.R. and Theoharides, T.C. Elmiron is a potent inhibitor of mast cell secretion. *Proc. International Bladder Symposium (Washington DC, November 5-6, 1999)*.
130. Deliargyris, E.N., Dehmer,G.J., Pye, J.P., Smith, S.C., Boucher, W.S. and Theoharides, T.C. Mast cell tryptase: a new inflammatory marker in patients with stable coronary artery disease. *Eur Heart J* 21(Suppl. I):I-159, 2000.
131. Deliargyris, E.N., Raymond, R.S., Theoharides, T.C., Boucher, W.S., Pye, J.P., Smith, S.C. and Dehmer, G.J. Elevated serum IL-6 levels in asymptomatic left ventricular systolic dysfunction. *Eur Heart J*, 21(Suppl. I): I-664, 2000.
132. Deliargyris, E.N., Raymond, R.S., Theoharides, T.C., Boucher, W.S., Pye J.P., Smith Jr. S.C. and Dehmer, G.J. Cytokine production in subclinical left ventricular dysfunction. *Eur J Heart Fail*, (Suppl. I):I-9, 2000.
133. Deliargyris, E.N., Raymond, R.S., Theoharides, T.C., Pye, J.P., Boucher, W.S. and Dehmer, G.J. Elevated serum IL-6 levels in patients with asymptomatic left ventricular dysfunction. *Circulation (Suppl. II)* 102:II-781, 2000.
134. Theoharides, TC. Acute stress induces cardiac IL-6 release and inflammation:Therapeutic effect of natural flavonoids. *Proceedings Sixth Conference of the World Hellenic Biomedical Association*, Athens, Greece (October 11-14, 2000).
135. Esposito, P., Jacobson, S., Gheorge, D., Kandere, K. and Theoharides, T.C. Acute immobilization stress increases blood-brain-barrier permeability in mast cell rich brain regions. *Soc. for Neuroscience*.26:1271, 2000.
136. Esposito, P., Jacobson, S., Georghe, D., Pang, X., Kandere, K. and Theoharides, T.C. Acute immobilization stress increases ⁹⁹Technetium extravasation in distinct brain areas. *FASEB J*, in press.
137. Huang, M., Kempuraj, D., Boucher, W., Letourneau, R. and Theoharides, T.C. Differential release of histamine and IL-6 from umbilical cord blood-derived human cultured mast cells. *FASEB J*, in press.
138. Kandere-Grzybowska, K., Theoharides, T.C. IL-1 induces differential release of IL-6 from human cells. *Experimental Biology 2002 (Louisiana, April 20-24)* 16:A245.8, 2002.

139. Huang, M., Theoharides, T.C. Stress-induced interleukin-6 release in mice is mast cell-dependent and also involves cardiomyocytes stimulated by urocortin. *Experimental Biology 2002* (Louisiana, April 20-24) 16:A182, 2002.
140. Kempuraj, D., Theoharides, T.C. Effect of flavonoids on mediator release from human umbilical cord blood-derived cultured mast cells. *FASEB J*, (Louisiana, April 20-24,) 16:A549, 2002.
141. Kempuraj, D., Huang, M., Boucher, W., Kaudere, K., Letourneau, R., Jeudy, S., Fitzgerald, K., Spear, K., Athanasiou, A. and Theoharides, T.C. Azelastine is more potent than olopatadine in inhibiting interleukin-6 (IL-6) and other mediator release from human umbilical cord blood - derived cultured mast cells. *Am. Acad, Allergy, Asthma and Immunol*, 88:501-506, 2002.
142. Kandere, K., Boucher, W., Letourneau, R. and Theoharides, T.C. Laser Doppler flowmetry and 99-Techneium gluceptate (⁹⁹Tc-G) extravasation to assess cortical cerebral blood flow (cCBF) and dura vascular permeability during acute restraint stress in knock-out mice. *Proc. XIVth World Congress of Pharmacology* (San Fransisco, July 7-12, 2002), *The Pharmacologist*: 44:A58, 2002.
143. Theoharides, T.C, Stein, M., Spear, K., and Hauser, S.. A pilot, double-blind, study using hydroxyzine in remitting-relapsing multiple sclerosis (RR-MS), *Proceedings XIVth World Congress on Pharmacology*, San Francisco, CA (July 7-12, 2002). *The Pharmacologist* 44:A165, 2002.
144. Kandere-Grzybowska, K., Theoharides, T.C. IL-1 induces differential release of IL-6 from human mast cells. *Proc. New England Pharmacologists 31st Annual Meeting* (Hanover, NH, January 25-26, 2002).
145. Kandere-Grzybowska, K., Theoharides, T.C. IL-1 induces differential release of IL-6 from human mast cells. *FASEB J*, (New Orleans, April 20-24, 2002), in press.
146. Kempuraj, D., Huang, M., Boucher, W., Letourneau, R., Jeudy, S., Bates, K., Spear, K., Athanasiou, A. and Theoharides, T.C. Azelastine inhibits interleukin-6 production and intracellular calcium ion levels in human umbilical cord blood-derived cultured mast cells. *Intl Arch Allergy Immunol*, in press.
147. Sugimoto, K., Kandere, K., Kempuraj, D., Letourneau, R., Athanasiou, A. and Theoharides, T.C. Human mast cell expression of corticotropin-releasing hormone (CRH) receptors and selective release of interleukin-6 (IL-6) by CRH may explain stress-induced atopic diseases. *Proc. XIVth World Congress of Pharmacology* (San Fransisco, July 7-12, 2002), *The Pharmacologist*: 44:A241, 2002.
148. Basu, S., Boucher, W., Huang, M., Sant, G.R., Theoharides, T. C. Pentosan polysulfate (PPS) inhibits intravesical carbachol-induced urine histamine and interleukin-6 (IL-6) release, as well bladder NF-kappaB (NF- κ B) activation. *Proc. 71st Annual Meeting, New England Section of the AUA*, 2002, in press.
149. Boucher, W., Huang, M., Sant, G.R., Theoharides, T.C. Chondroitin sulfate (CS) and sodium hyaluronate (SH) inhibit intravesical carbachol triggered urine histamine release. *Proc. 71st Annual Meeting, New England Section of the AUA*, 2002, in press.
150. Upadhy, B., Kontos, J.L., Ardeshipour, F., Pye, J.P., Boucher, W.C., Theoharides, T.C. Dehmer, G.J., Deliargyris, E.N. Mast cell tryptase is not elevated in patients with left ventricular systolic dysfunction. *J Heart Fail* 7:72, 2002.
151. Kempuraj, B., Kempuraj, D., Christodoulou, S., Boucher, W., Tsapikidis, S., Athanassiou, A., Theoharides, T.C. High intrauterine levels of corticotropin-releasing hormone, urocortin, tryptase and IL-8 in habitual abortions. *Experimental Biology 2003* (San Diego, CA, April 11-15, 2003) *FASEB* 130:A446. 2003.

152. Mattheos, S., Christodoulou, S., Kempuraj, D., Kempuraj, B., Karalis, K., Theoharides, T.C. Mast cells and corticotropin-releasing hormone (CRH) are required for experimental inflammatory arthritis. *FASEB, Proc. Am. Assoc. Immunologist 90th Anniv Meeting* (Colorado, May 6-10, 2003), 17:C44, 2003.
153. Cao, J., Papadopoulou, N., Theoharides, T.C. Identification of functional corticotropin-releasing hormone (CRH) receptor isoforms in human leukemic mast cells (HMC-1). *Molecular Biology of the Cell* (San Francisco, December 13-17, 2003) The American Society for Cell Biology 43rd Annual Meeting, 14:L212, 2003
154. Christodoulou, S., Papadopoulou, N., Mattheos, S., Kempuraj, D., Kempuraj, B., Karalis, K. and Theoharides, T.C. Mast cells and corticotropin-releasing hormone (CRH) are required for experimental inflammatory arthritis. *Molecular Biology of the Cell*, The American Society for Cell Biology 43rd Annual Meeting, (San Francisco, December 13-17, 2003) 14:L357, 2003.
155. Wei, D., Li, L., Rugg, A., Abdul-Hadi, K., Rogers, J., Rosenberg, A., Rounsley, S., McCarroll, R., Trusheim, M., Wiegand, R., Boucher, W., Sant, G.R., Theoharides, T.C. Diagnosis of interstitial cystitis using biochemical profiling. *Proc. Intl. Consultation on Interstitial Cystitis Japan* (March 28-30, 2003) Kyoto, Japan.
156. Osborne, J., Sant, G.R., Theoharides, T.C. Increased rate of spontaneous abortions in interstitial cystitis patients? *Proc. NIDDK/ICA Conf. on Interstitial Cystitis* (October 31-November 1, 2003) Washington, DC
157. Green, M., Sant, G.R., Theoharides, T.C. Increased expression of intercellular adhesion molecules in interstitial cystitis. *Proc. NIDDK/ICA Conf. on Interstitial Cystitis* (October 31-November 1, 2003) Washington, DC
158. Theoharides, T.C. Sant, G.R. A pilot, open-label, clinical study on the effect of CystoProtek in interstitial cystitis. *Proc. NIDDK/ICA Conf. on Interstitial Cystitis* (October 31-November 1, 2003) Washington, DC
159. Wei, D., Li, L., Rugg, A., Abdul-Hadi, K., Rogers, J., Rosenberg, A., Rounsley, S., McCarroll, R., Trusheim, M., Wiegand, R., Boucher, W., Sant, G.R., Theoharides, T.C. Rapid and sensitive diagnosis of interstitial cystitis using biochemical profiling. *Proc. NIDDK/ICA Conf. on Interstitial Cystitis* (October 31-November 1, 2003) Washington, DC
160. Donelan, J.M., Boucher, W., Letourneau, R. and Theoharides, T.C. Corticotropin-releasing hormone (CRH) and neuropeptides in stress-induced skin mast cell activation. *Ann. Meeting N.E. Pharmacologists*, P9 (Feb. 6-7, 2004) Portland, Maine.
161. Kempuraj, D., Boucher, W., Letourneau, R., Madhappan, B., Christodoulou, S., Athanassiou, A., and Theoharides, T.C. Comparative inhibitory effect of flavonoids quercetin, kaempferol, myricetin and morin to that of cromolyn on pro-inflammatory mediator release and on intracellular calcium ion levels from human mast cells. *Experimental Biology 2004* (Washington, DC, April 15-17, 2004) *FASEB* 131:A446. 2004.
162. Kempuraj, D., Papadopoulou, N., Oleson, L., Cao, J. and Theoharides, T.C. Human umbilical cord blood-derived mast cells (hCBMCs) express corticotropin-releasing hormone (CRH) receptor 2 which is up-regulated by proinflammatory molecules. *Proc. 6th International Cord Blood Society Congress* (Boston, MA October 3, 2004).
163. Cao, J., Papadopoulou, N., Kempuraj, D. and Theoharides, T.C. Human umbilical cord blood-derived mast cells (hCBMCs) express multiple isoforms of corticotropin-releasing hormone (CRH) receptors. *Experimental Biology 2005* (San Diego, CA, March 31-April 5, 2005).
164. Cao, J., Kempuraj, D., William B. and Theoharides, T.C. Corticotropin-releasing hormone (CRH) induces secretion of vascular endothelial growth factor (VEGF) from human mast cells. *Experimental Biology 2005* (San Diego, CA, March 31-April 5, 2005).

165. Donelan, J., Marchand, J., Lytinas, M., Boucher, W., Papaliodis, D. and Theoharides, T.C. Co-expression of corticotropin-releasing hormone (CRH) and neurotensin (NT) in mouse dorsal root ganglia (DRG) and effect on skin vascular permeability. *Experimental Biology 2005* (San Diego, CA, March 31-April 5, 2005).
166. Farwell, K., Bhattacharya, K., Huang, M., D. Kempuraj, D., Cao, J., Donelan, J. and T.C. Theoharides. Myocardial ischemia-reperfusion Injury results in less cardiac tissue damage and no serum IL-6 concentration change in W^V/W^V mast cell deficient mice as compared to their normal littermates. *Experimental Biology 2006*, in press
167. Kempuraj, K., Geiger, B., Tagen, M., Boucher, W. and Theoharides, T.C. Myelin basic protein (MBP) triggers IL-8 and tryptase release from human umbilical cord blood-derived mast cells. *J Immunol* (Boston, May 12-16) 176:S4, 2006.
168. Hyde, B.B., Papadopoulou, N. and Theoharides, T.C. Human mast cells express TLR 3, 7 and TLR-9 mRNA is induced by viral sequence K3 CPG-ODN. *Proc. Am. Association of Immunologists* (Boston, May 12-16), 176:S322, 2006.
169. Boucher, W., Donelan, J., Leeman, S. and Theoharides, T.C. The neurotensin (NT) receptor antagonist SR-48,692 inhibits mast cell-dependent rat skin vascular permeability induced by NT, but also compound 48/80, SP and VIP. *Proc. Am. Association of Immunologists* (Boston, May 12-16) C167, 2006.
170. Bhattacharya, K., Farwell, K., Huang, M., Kempuraj, D. and Theoharides, T.C. Mast-cell deficient mice produce less circulating IL-6 and exhibit less cardiac tissue damage than their littermates following myocardial ischemia reperfusion injury. *Circulation Res.* 99 (5):E43-43 (September 1, 2006).
171. Makris, M., Kalogeromitros, D., Kempuraj, D., Katsarou-Katsari, A., Grigoriou, S. and Theoharides, T.C. Theophylline as “add-on” therapy to cetirizine in patients with chronic idiopathic urticaria: a randomized, double-blind, placebo-controlled pilot study. *Proc. European Histamine Research Society XXXV Annual Meeting* (May 10-13 2006, Delphi, Greece).
172. Theoharides, T.C., Kempuraj, D. Amitriptyline inhibits mast cell histamine secretion: implications for chronic fatigue syndrome therapy. *Proc. European Histamine Research Society XXXV Annual Meeting* (May 10-13 2006, Delphi, Greece).
173. Kalogeromitros, D., Papadopoulou, N., Staurianeas, N.G., Tiblalexi, D., Theoharides, T.C. Skin histidine decarboxylase (HDC) and corticotropin-releasing hormone receptor-1 (CRH-R1) genes are overexpressed in chronic urticaria (CU). *Proc. European Histamine Research Society XXXV Annual Meeting* (May 10-13 2006, Delphi, Greece).
174. Theoharides, T.C., Cao, J., Papadopoulou, N., Kempuraj, D., Tagen, M. Evidence of human mast cell function in inflammatory diseases. *Proc. European Histamine Research Society XXXV Annual Meeting* (May 10-13 2006, Delphi, Greece).
175. Cao, J., W. Boucher, W., Donelan, J.M. and Theoharides, T.C. Intravesical corticotropin-releasing hormone (CRH) induces mast cell-dependent vascular endothelial growth factor (VEGF) release from mouse bladder explants. *Proc. NIDDK International Symposium: Frontiers in Painful Bladder Syndrome and Interstitial Cystitis* (October 24-27, 2006; Bethesda, MD).
176. Marchand, J., Kempuraj, D., Vasiadi, M., Theoharides, T.C. Corticotropin-releasing hormone receptor expression in human urothelium and association with mast cells. *Proc. NIDDK International Symposium: Frontiers in Painful Bladder Syndrome and Interstitial Cystitis* (October 24-27, 2006; Bethesda, MD).

177. Boucher, W., Kempuraj, D., Cao, J., Theoharides, T.C. Intravesical suplatast tosilate (IPD-1151T) inhibits experimental Bladder inflammation. *Proc. NIDDK International Symposium: Frontiers in Painful Bladder Syndrome and Interstitial Cystitis* (October 24-27, 2006; Bethesda, MD).
178. Theoharides, T.C., Vakali, S., D. Kempuraj, D., Sant, G.R. A retrospective open label study of CYSTOPROTEK[®] in painful bladder syndrome/interstitial cystitis (PBS/IC). *Proc. NIDDK International Symposium: Frontiers in Painful Bladder Syndrome and Interstitial Cystitis* (October 24-27, 2006; Bethesda, MD).
179. Boucher, W., Stern, J.M., Kempuraj, D., Papaliadis, D., Cohen, M.S., Theoharides, T.C. Intravesical nanocrystalline silver (NCS) inhibits experimental bladder inflammation in rats. *Proc. NIDDK International Symposium: Frontiers in Painful Bladder Syndrome and Interstitial Cystitis* (October 24-27, 2006; Bethesda, MD).
180. Boucher, W., V. Kotsinyan, V., Kempuraj, D., Shing, R., Theoharides, T.C. Corticotropin-releasing hormone receptor (CRH-R) involvement in CRH-induced mouse bladder inflammation. *Proc. NIDDK International Symposium: Frontiers in Painful Bladder Syndrome and Interstitial Cystitis* (October 24-27, 2006; Bethesda, MD).
181. Kempuraj, D., Tagen, M., Iliopoulou, B.P., Vasiadi, M., Boucher, W., House, M., Theoharides, T.C. Myelin basic protein stimulates human mast cells and together they activate T cells: inhibition by luteolin and implications for multiple sclerosis. *Proc. Keystone Symposia. Mast cells, Basophils, and IgE: Host Defenses and Disease*, p. 52 (January 20-24, 2007; Copper Mountain, CO).
182. Maliakal, J.C., Tagen, M., Drori, T., Kempuraj, D., Biran, I., Theoharides, T.C. Live cell imaging of human mast cells on a pico-well live cell array at single cell resolution. *Proc. Keystone Symposia. Mast cells, Basophils, and IgE: Host Defenses and Disease*, p. 56 (January 20-24, 2007; Copper Mountain, CO).
183. Karapanou, V., Theoharides, T.C. Interleukin-8 and TNF-alpha detection in gingival crevicular fluid of teeth with acute pulpitis. *Proc. Annual Meeting of the American Society of Endodontics* (April 27-29, 2007; Philadelphia, PA).
184. Kempuraj, D., Boucher, W., Theoharides, T.C. Flavonols inhibit proinflammatory mediator release, intracellular calcium ion levels and protein kinase C theta phosphorylation in human mast cells: implications for the treatment of allergic and inflammatory disorders. *Proc. BIO International Convention* (May 7-9, 2007; Boston, MA).
185. Theoharides, T.C. Kounis syndrome. In: Drug-Eluting Stents: Thrombosis and Hypersensitivity. *Proc. 56th Annual Scientific Session, Am. College of Cardiology* (March 24-27, 2007; New Orleans, LO), in press.
186. Kempuraj, D., Iliopoulou, B.P., Clemons, A., Boucher, W., Tagen, M., Vasiadi, M., House, M., Wolfberg, A., Theoharides, T.C. Substance P stimulates human mast cells and together they activate T cells: Inhibition by luteolin. *Proc. Am. Association of Immunologists* (2007).
187. Theoharides, T.C. CRH, mast cells and bladder function. *HANS SELYE and Saint Justine Hospital Centennial Symposium: Stress: basic Mechanisms and Clinical Implications* (July 11-14, 2007, UNIVERSITÉ DU QUÉBEC À MONTRÉAL (UQAM), Montreal, Quebec, Canada).
188. Theoharides TC. Mast cells, T cells and inhibition by luteolin: Implications for the pathogenesis and treatment of multiple sclerosis. *2nd International Immune Mediated Diseases Congress* (September 10-14, 2007, Moscow, Russia).
189. Tagen, M., Elorza, A., Shirihai, O., Theoharides, T.C. Inhibition of mast cell degranulation by PPAR α agonists is mediated through UCP2. *Experimental Biology 2008-Abstract #1139.1*. (April 5-9; San Diego, CA)

190. Tagen, M., Elorza, A., Shirihai, O., Theoharides, T.C. Uncoupling protein 2 regulates histamine production and mast cell activation *New England Pharmacologists Meeting 2008*-Abstract O-15. (Feb 29-March 1; Dedham, MA).
191. Vasiadi, M, Kalogeromitros, D, Kempuraj, D, Theoharides, T.C *Rupatadine inhibits mediator secretion from human mast cells*. XXVII Congress of the European Academy of Allergology and Clinical Immunology (June 7-11; Barcelona, Spain), in press.
192. Kempuraj, D., Iliopoulou, B.P, Clemons, A, Boucher, W, Tagen, M, Vasiadi, M, House, M, Wolfberg, A, Theoharides, T.C. Human mast cells stimulate activated T cells, an effect increased by substance P and inhibited by the flavonoid luteolin. XXVII Congress of the European Academy of Allergology and Clinical Immunology (June 7-11; Barcelona, Spain), in press.
193. Tagen, M., Elorza, A., Shirihai, O., Theoharides, T.C. Uncoupling protein 2 regulates mast cell histamine production and activation. *FASEB 2008*, in press. 5th International Innate Immunity Conference (June 21-26; Hania, Greece, 2008).
194. Kempuraj, D., Hogan, J., Zhang, B., Kourelis, T., Manola, A., Theoharides, T.C. Mercury chloride triggers human mast cells to release vascular endothelial growth factor (VEGF)-relevance to autism. *AAI*, in press.
195. Asadi S, Zhang B, Weng Z, Angelidou A, Kempuraj D, Alysandratos K-D, Theoharides TC. Thimerosal induces VEGF releae from human mast cells, but its effect is weakened by its thiosalicylate componenet and is blocked by luteolin. *The Emerging Neuroscience of Autism Spectrum Disorders: Etiologic Insights; Treatment Opportunities*. *Society of Neuroscience* (November 11-12, 2010; San Diego, CA).
196. Angelidou A, Francis K, Vasiadi M, Alysandratos K-D, Zhang B, Asadi S, Theoharides A, Lykouras L, Kalogeromitros D, Theoharides TC. Neurotensin is increased in serum of young children with autism. *The Emerging Neuroscience of Autism Spectrum Disorders: Etiologic Insights; Treatment Opportunities*. *Society of Neuroscience* (November 11-12, 2010; San Diego, CA).
197. Zhang B, Alysandratos K-D, Angelidou A, Vasiadi M, Kempuraj D, Tagen M, Asadi S, Theoharides TC. TNF secretion from human mast cells is regulated by mitochondrial dynamics and mitochondrial uncoupling protein 2 (UCP2). *Am. Assn. Immunol.* (May 14, 2010; Bethesda, MD)

h. Non-print publications

1. The *Pharmacology TextStack*. Educational Software for pharmacology available for Macintosh and windows. Keyboard Publishing, PA, 1992.

The *Pharmacology TextStack* is an electronic edition of *Pharmacology*, a student-friendly succinct text, problem and review book edited by Theoharis C. Theoharides and published by Little, Brown & Co, 1992. In addition to the complete text and all figures, diagrams and tables appearing in the textbook, this program also includes all of the review and self-testing materials from the text, with complete feedback on all questions and easy access to the full text for additional review.

This was the **only** textbook of pharmacology available in an electronic edition at the time and was ideal for teaching purposes. Each chapter in the *Pharmacology TextStack* begins with a statement of objectives and ends with a self-testing module linked to related sections in the chapter, making it ideal for easy incorporation into the pharmacology curriculum in medical, dental, pharmacy and basic science programs.

The *Pharmacology TextStack* enables you to locate, view, manipulate, tag and save information on key topics. As with other Keyboard Series software, the *Pharmacology TextStack* is fully searchable - locate any word or phrase from this 600 page text quickly and easily.

In addition, the *Pharmacology TextStack* includes a unique Transcript function that lets you build customized lessons for easy review and learning, letting you add your own notes to further enhance the materials provided by the program.

i. Invited Lectures

- 1) 1975 Genetics Colloquium, University of Michigan, Ann Arbor
- 2) 1978 Biological Basis of Cancer Chemotherapy, Thessaloniki, Greece
- 3) 1980 Immunology Rounds, Johns Hopkins University/Good Samaritan Hospital, Bethesda
- 4) 1980 IXth Congress of the European Association of Poison Control Centers, Greece
- 5) 1981 Cystic Fibrosis Rounds, University of Florida, Gainesville
- 6) 1982 Health Care Delivery in Greece, New York
- 7) 1983 United Nations Environment Program - Mediterranean Action Plan, Athens
- 8) 1984 Gastroenterology Rounds, Boston University Medical Center, Boston
- 9) 1984 Ninth International Congress of Pharmacology, London
- 10) 1985 Immunotherapy of Cancer, Thessaloniki, Greece
- 11) 1986 Second World Conference on Inflammation, Monte Carlo
- 12) 1986 Conference on Healing, New York
- 13) 1986 Third E.N.T.- Neurosurgery Italian-Greek-Jugoslav Congress, Rome
- 14) 1986 National Conference on Cancer Treatment, Thessaloniki, Greece
- 15) 1987 World Conference on Analgesics, Caracas
- 16) 1987 Internal Medicine Association of Guatemala, Guatemala City
- 17) 1987 Neurology Grand Rounds, Social Security Administration of Mexico
- 18) 1987 Conference on Science and Religion, Boston
- 19) 1987 World Congress of Pediatrics, Panama
- 20) 1987 Fifth World Congress on Pain, Hamburg
- 21) 1987 35th Meeting of the European Tissue Culture Society, Patras, Greece
- 22) 1989 Third Interscience World Conference on Inflammation, Monte-Carlo
- 23) 1989 Fourth E.N.T. - Neurosurgery Italian-Greek-Jugoslav Congress, Greece
- 24) 1990 Annual Meeting, National Nutritional Foods Association, Boston
- 25) 1990 Panel speaker: 3rd ICA/NIH National Meeting on Interstitial Cystitis, New Orleans, LA
- 26) 1991 Sixth Panhellenic Congress of Otorhinolaryngology-Allergic Rhinitis, Thessaloniki
- 27) 1991 Panel Speaker: 4th ICA/NIH National Meeting on Interstitial Cystitis, Arlington, VA

- 28) 1992 First Panhellenic Congress of Allergy and Clinical Immunology, Athens
- 29) 1992 Pharmacology Program, Mt. Sinai School of Medicine, New York
- 30) 1992 Immunology Program, McMaster University, Canada
- 31) 1992 XI International Symposium on Infection and Allergy of the Nose, Rome
- 32) 1993 Fifth World Conference on Inflammation, Geneva
- 33) 1993 Keynote speaker: New trends in IC therapy, PA ICA Association, Harrisburg, PA
- 34) 1993 Keynote speaker: 7th NIH/ICA National Meeting, Orlando, FL.
- 35) 1993 Keynote speaker: *Pathophysiology of interstitial cystitis: the role of the mast cells*, First International Seminar on Female Urology in Patras, Greece (November 19-21, 1993).
- 36) 1994 *New Trends in the treatment of urticaria: neuroimmunoendocrine stimulation of skin mast cells*. Fourth International Symposium on Dermatology, Jeddah, Saudi Arabia (January 31-February 3, 1994).
- 37) 1994 *Differentiation and pathophysiology of bone marrow-derived mast cells*, Evangelismos General Hospital, Athens, Greece (February 7, 1994).
- 38) 1994 Keynote speaker: *The mast cell and inhibitors of its degranulation*, Second Panhellenic Congress of Allergy and Clinical Immunology in Athens, Greece (February 10-12, 1994).
- 39) 1994 *Pathophysiology of neuroimmunoendocrine syndromes*, AHEPA General Hospital, Thessaloniki, Greece (February 14, 1994).
- 40) 1994 *Inhibition of mast cell secretion by a unique phosphoprotein*, Yale University School of Medicine (May 20, 1994).
- 41) 1994 Keynote speaker: *Scientific and social implications of generic drug use*, Second Panhellenic Congress of Hospital Pharmacists, Thessaloniki, Greece (May 27, 1994)
- 42) 1994 Keynote speaker: *Politics and funding of drug development for orphan diseases*, Seventh Panhellenic Pharmaceutical Congress, Athens, Greece (June 11, 1994).
- 43) 1994 Keynote speaker: *Neuroimmunoendocrine involvement in interstitial cystitis*. Tenth Annual Meeting, Texas ICA, Houston, TX (November 5, 1994).
- 44) 1994 State of the Art Lecture: *Pathophysiology and treatment of interstitial cystitis*. C.E. Acken International Meeting in Wuppertal-Barmen, West Germany (December 1, 1994).
- 45) 1995 *Neuroimmunoendocrine stimulation of mast cells: new implications for pathophysiology and therapy*, Pulmonary and Critical Care Division, Tufts-New England Medical Center.
- 46) 1995 Plenary Lecture: *Neurogenic inflammation and neuroinflammatory disorders*. Sixth World Conference on Inflammation, Geneva, (March 28, 1995).
- 47) 1995 *Stress-induced skin mast cell activation*. International Meeting on Mast Cell-Neuron Interactions, Berlin (September 1995).

- 48) 1995 *Pharmacology of interstitial cystitis: workshop*. Eighth Annual ICA Meeting, San Diego (October 1995).
- 49) 1996 *The mast cell: a neuroimmunoendocrine master player*. 2nd European Medical Students' Symposium, Thessaloniki, Greece (May 4-5, 1996).
- 50) 1996 *New trends explaining the pathophysiology of allergy: correlation with neuroinflammatory syndromes*. Pan Cretan Medical Congress, Heraklion, Greece (October 24-27, 1996).
- 51) 1996 *Neuroimmunoendocrine basis of interstitial cystitis*. 3rd International Society for Neuroimmunomodulation, Bethesda MD (November 13-15, 1996).
- 52) 1996 *Pathophysiology of migraines and the role of stress*. First Pain Congress of the Hellenic Pain Society, Volos, Greece (December 1-3, 1996).
- 53) 1997 *Urocortin-induced skin mast cell activation and vasodilation: implications for the role of stress in atopic diseases*. Section of Allergy and Clinical Immunology, Yale University School of Medicine, New Haven, CT (March 7, 1997).
- 54) 1997 *A natural phosphoprotein inhibiting mast cell secretion: implications for the therapy of atopic diseases*. Annual Congress of the European Association of Allergy and Clinical Immunology, Rhodes, Greece (June 1-5, 1997).
- 55) 1997 *Urocortin and CRF trigger mast cell activation and increased vascular permeability: implications for the pathophysiology of stress-induced atopic and inflammatory syndromes*. Seventh Interscience World Conference on Inflammation, Geneva (May 19-21, 1997).
- 56) 1997 Chairman, *Round table discussion on post graduate medical education*. Third European Medical Student Congress, Crete, Greece (April 11-13, 1997).
- 57) 1997 Chairman, *Symposium on Immue-Neuronal-Endocrine Interactions in the Pathophysiology of Allergic and Autoimmune Diseases*. Annual Congress of the European Association of Allergy and Clinical Immunology, Rhodes, Greece (June 1-5, 1997).
- 58) 1997 Grand Rounds. *Interstitial Cystitis and Pelvic Pain*. Department of Obstetrics and Gynecology, Dartmouth-Hitchcock Medical Center, Lebanon, New Hampshire (October 9, 1997).
- 59) 1997 *Pharmacology and Interstitial Cystitis*. Interstitial Cystitis Association's Ninth Annual Meeting, Arlington, VA (November 1 & 2, 1997).
- 60) 1997 *CRH-Induced Vascular Permeability and Its Role in Stress-Induced Syndromes*. University of Pennsylvania Medical Center (November 5, 1997).
- 61) 1998 *Allergy and mast cell mediators in cyclic vomiting*. 2nd International Scientific Symposium on Cyclic Vomiting Syndrome, Milwaukee, WI (April 24-25, 1998).
- 62) 1998 *Psychological stress triggers cardiac mast cell activation and myocardial ischemia in mice*. XVI World Congress of the International Society for Heart Research, Rhodes (May 30, 1998).
- 63) 1998 *Sex Differences in Pain Perception in Neuroinflammatory Syndromes*. 5th Congress of the Hellenic Anesthesiology and Intensive Care Medicine Society, Thessaloniki (June 5, 1998).
- 64) 1998 *Pharmacokinetics and polypharmacy in the elderly. The problem of benzodiazepines*. 5th Congress of the Hellenic Anesthesiology and Intensive Care Medicine Society, Thessaloniki (June 5, 1998).
- 65) 1998 *Health Care Opportunities in the Private Sector. Prospects and Challenges for the Greek and International Health Care Sector of Today and Tomorrow*. The Economist Conferences, Athens (November 11-12, 1998).
- 66) 1998 *Corticotropin releasing hormone and mast cells: a new view of neurogenic inflammation*. Endocrinology Grand Rounds, New England Medical Center (Nov 24).

- 67) 1999 *Biomedical research and health as stabilizing factors among world communities*. Key Note Address: Fifth World Hellenic Biomedical Conference, New York City (December 4-6, 1998).
- 68) 1999 *Novel approaches to pain: gender, sex and neurogenic inflammation*. HIT: Hellenic-Israeli-Turkish Conference on Pain, Crete (May 1999).
- 69) 1999 *Effect of acute stress on inflammatory processes*. European Conference on Biomedical Research and Peace, Cyprus (October 17-21, 1999).
- 70) 2000 *Pathophysiology and treatment of neuro-inflammatory syndromes*. First Congress of the Hellenic Pharmacological Society, Athens (February 19, 2000).
- 71) 2000 *The use and abuse of ethical medications: the next millennium*. The Economist Conferences, Athens (June 10, 2000).
- 72) 2000 *Translational Research: a case study*. First Conference on Biomedical Research in Education, Heraklion, Greece (October 6-8, 2000).
- 73) 2000 *Acute stress induces cardiac IL-6 release and inflammation: therapeutic effect of natural flavonoids*. Sixth Conference of the World Hellenic Biomedical Association, Athens, Greece (October 11-14, 2000).
- 74) 2001 *Benefits and risks of epharma*. European Conference on Health, Thessaloniki, Greece (March 8, 2001).
- 75) 2001 *Structural requirements for antiinflammatory effects of flavonoids*. Advanced Medicinal Chemistry Seminars, Thessaloniki, Greece (May 18, 2001).
- 76) 2001 *Design and implementation of an electronic drug interactions program for Greece: why it is needed and why it is not in place*. **The First Flessas Memorial Lecture**. The Hellenic Medical Society of New York and Hellenic Link, Inc., New York City (June 10, 2001).
- 77) 2001 *Stress-induced inflammation: asthma, migraines, multiple sclerosis and beyond*. Plenary Lecture, National Minority research Symposium, Cancun, Mexico (October 18-20, 2001).
- 78) 2002 *Acute stress-induced blood-brain-barrier permeability, a mast cell and corticotropin releasing hormone dependent process*. Division of Rheumatology, Immunology and Allergy, Brigham and Women's Hospital, Harvard Medical School (March 25, 2002).
- 79) 2002 *Selective release of IL-6 from human mast cells*. Keynote speaker. 8th Annual Meeting, The Mastocytosis Society, Windsor Locks, CT (October 4&5, 2002).
- 80) 200 2 *The role of mast cells in the neurocutaneous axis*. 1st International Workshop on cutaneous neuroendocrinology, Hamburg, Germany (Sept. 13-15, 2002).
- 81) 2002 *Dietary supplement effect on mast cells*. International Symposium on Complementary Alternative Medicine - Allergy, Asthma & Immunology, American College of Allergy, Asthma and Immunology, San Antonio, TX (Nov, 14, 2002).
- 82) 2003 *Mast cells in inflammatory arthritis*. Department of Biochemistry, Tufts University School of Medicine. Boston, MA (January 9, 2003).
- 83) 2002 *Abuse of OTC drugs*. Brookline High School, Brookline, MA. (December 2002 series).
- 84) 2003 *Abuse of dietary supplements*. Brookline High School, Brookline, MA (January 2003 series).
- 85) 2003 *Stress induced-bladder inflammation*. International IC Conference, Kyoto, Japan (March 28 – 30, 2003).

- 86) 2003 *Global health, leadership and world peace*. Keynote Address at 10th Annual Conference of the Midwest Institute, Cleveland, OH (April 5, 2003).
- 87) 2003 *Code 99: Cardiac mast cells feel the squeeze*. Department of Medicine, Tufts - New England Medical Center (April 8, 2003).
- 88) 2003 *Global education and world leadership*. Keynote address, St. Louis Community College, St. Louis, MO (August 25, 2003).
- 89) 2004 *The mast cell as an immune sensor of stress*. Dept. Of veterinary PathoBiology, College of veterinary Medicine, University of Minnesota, St. Paul, MN (April 28, 2004).
- 90) 2004 *Co-Chairman, Emerging Infectious Diseases and New Problems*, 3rd International Workshop on Immunology and Infectious Diseases, Naples, Italy (June 8-10, 2004).
- 91) 2004 *Corticotropin-releasing factor-mast cell axis: Link to allergic diseases*. Stress and Asthma, Arlington, VA (October 2, 2004).
- 92) 2004 *Stem cell physiology/The role of mast cells*. 6th International Cord Blood Society Congress, Boston, MA (October 3, 2004).
- 93) 2004 *Mast cells as key modulators of environmental and psychological stress*. 3rd International Conference on Innate Immunity, Hersonisos, Crete, Greece (October 11, 2004).
- 94) 2004 *Acute stress triggers selective mast cell activation through CRH and IL-1*. Gastroenterology Division, Beth Israel/Deaconess Medical Center-Harvard Medical School, Boston, MA (October 27, 2004).
- 95) 2004 *Selective mast cell activation mediates the effect of acute stress*. The Mind/Body Medical Institute-Harvard Medical School, Boston, MA (November 22, 2004).
- 96) 2005 *Activation of distinct CRH receptors leads to selective secretion of either IL-6 or VEGF from human mast cells*. 5th Mast Cell Workshop: Mast Cell Signaling and Function in Health and Disease, Eilat, Israel (February 6-10, 2005).
- 97) 2005 *Stress, mast cells and CR: The fateful triangle of inflammatory diseases*. 39th Annual Scientific Meeting of the European Society for Clinical Investigation, Athens, Greece (April 9, 2005).
- 98) 2005 *Critical role of mast cells in stress-induced inflammatory disorders*. 6th Meeting of the International Society for NeuroImmunomodulation. Athens, Greece (September 25-28, 2005).
- 99) 2005 *Neuroimmune aspects of painful bladder syndrome/insterstitial cystitis and endometriosis: two major chronic pelvic pain disorders*. 6th Congress on Women's health & Disease. Athens, Greece (September 25-28, 2005).
- 100) 2005 *Critical role of mast cells and neuropsychiatric disorders*. Annual Meeting of the Systemic Mastocytosis Society, Santa Ana, CA (October 7-10, 2005).
- 101) 2005 *Mast cells in chronic fatigue syndrome and fibromyalgia*. Munich, Germany (November 28, 2005).
- 102) 2006 *Role of mast cells in inflammatory disorders*. 10th Medical Meeting of the Naval Hospital, Athens, Greece (February 10-11, 2006).
- 103) 2006 *Migraine headaches: the immunologist's view*. Cardiology Update 2006- Cardiology & Neurology at a Crossroad, Athens, Greece (April 14-15, 2006).
- 104) 2006 *The role of mast cells in acute coronary syndromes*. Cardiology Update 2006-Coronary Artery Disease Prevention & Therapy Update, Athens, Greece (April 14-15, 2006).
- 105) 2006 *Stress-induced skin mast cell activation and increased vascular permeability*. Conference on Stress and skin, New York, NY (June 2-5, 2006).

- 106) 2006 *Stress, mast cells and the blood-brain-barriers: the fateful triangle in MS pathogenesis*. Serono Pharmaceutical, Geneva, Switzerland (June 16, 2006).
- 107) 2006 *The immune sensor of environmental stress*. Hellenic Armed Forces Medical Symposium, Tessaaloniki, Greece (Nov. 25, 2006).
- 108) 2007 *The spectrum of mastocytosis*. University of Carolina College of Pharmacy, Columbia, SC (January 23, 2007).
- 109) 2007 *Mastocytosis and mast cell activation diseases*. Hellenic Hematology Association, Athens, Greece (Feb. 3, 2007).
- 110) 2007 *The effect of stress on inflammatory diseases*. Open Public University and Hellenic Medical Society, Municipality of Hania, Crete, Greece (Feb. 21, 2007).
- 111) 2007 *Skin corticotropin-releasing hormone receptor expression in urticaria, psoriasis and mastocytosis-implications for multiple sclerosis*. Section of Allergy and Clinical Immunology, Yale University School of Medicine, New Haven, CT (March 9, 2007).
- 112) 2007 *Mast cell-dependent T cell stimulation and inhibition by luteolin*. Section of Allergy and Clinical Immunology, Yale University School of Medicine, New Haven, CT (March 9, 2007).
- 113) 2007 *Kounis syndrome*. In: *Drug-Eluting Stents: Thrombosis and Hypersensitivity*. 56th Annual Scientific Session, Am.College of Cardiology (March 24-27, 2007; New Orleans, LO).
- 114) 2007 *CRH, mast cells and bladder function*. HANS SELYE and Saint Justine Hospital Centennial Symposium: Stress: basic Mechanisms and Clinical Implications (July 11-14, 2007, UNIVERSITÉ DU QUÉBEC À MONTRÉAL (UQAM), Montreal, Qubec, Canada).
- 115) 2007 *Mast cells, T cells and inhibition by luteolin: Implications for the pathogenesis and treatment of multiple sclerosis*. 2nd International Immune Mediated Diseases Congress (September 10-14, Moskow, Russia).
- 116) 2007 *Selective release of mast cell mediators*. Department of Pathology, Boston University (October 2, 2007).
- 117) 2007 *Selective mediator release and effect of stress in urticaria pigmentosa*. Annual Meeting, US Systemic Mastocytosis Society (October 12, 2007; Houston, TX).
- 118) 2007 *CRH dysregulation in psoriasis*. 3rd Attikes Dermatology Days Congress (November 5, 2007; Athens, Greece).
- 119) 2007 *Regulation of selective release of mast cell mediators*. Brigham and Women's Hospital-Dana Farber Cancer Center, Harvard University (November 29, 2007; Boston, MA).
- 120) 2007 *Role of mast cells in wound healing*. 8th Annual Meeting on Wound Healing-Science and Industry-CME lecture (St. Thomas, USA; December 14, 2007).
- 121) 2008 *Interstitial Cystitis/Painful Bladder Syndrome*. University of Phoenix, (January 1, 2008; Phoenix, AZ).
- 122) 2008 *Mast cells, myelin basic protein and substance P enhance T cell activation: inhibition by luteolin and implications for multiple sclerosis*. International Conference on Neural Signalling (Feb. 16-20, 2008; Pacific Grove, CA).
- 123) 2008 *Interstitial Cystitis: Bladder Pain and beyond*. Lakeland Medica Center-CME lecture, (March 20, 2008; St. Joseph, MI).
- 124) 2008 *Mast cells, myelin basic protein and substance P enhance T cell activation: and multiple sclerosis*. Department of Immunology, University of Connecticut (April 17, 2008; Farmington, CT).

- 125) 2008 *Chair, Round Table Discussion on pharmacology teaching.* 5th Panhellenic Congress of Pharmacology (May 23-25, 2008; Athens, Greece).
- 126) 2008 *Rupatadine inhibits mediator secretion from human mast cells.* XXVII Congress of the European Academy of Allergology and Clinical Immunology (June 7-11, 2008; Barcelona, Spain).
- 127) 2008 *Human mast cells stimulate activated T cells, an effect increased by substance P and inhibited by the flavonoid luteolin.* XXVII Congress of the European Academy of Allergology and Clinical Immunology (June 7-11, 2008; Barcelona, Spain).
- 128) 2008 *Mast cell-T cell interactions in health and disease.* 5th International Innate Immunity Conference (June 21-26, 2008; Hania, Greece).
- 129) 2008 *Role of mast cells in cancer growth.* 3rd PanHellenic Forum on Oncology (July 6-7, 2008; Hania, Greece).
- 130) 2008 *Novel therapeutic targets for autism.* Defeat Autism Now (October 24-26, 2008; San Diego, CA).
- 131) 2008 *New aspects of regulation of mast cell activation.* 5th Balkan Congress of Alleregology and Clinical Immunology October 17-19, 2008; Thessaloniki, Greece).
- 132) 2008 *Autism, food intolerance and mast cells.* 5th Balkan Congress of Alleregology and Clinical Immunology October 17-19, 2008; Thessaloniki, Greece).
- 133) 2008 *Neuropeptide interactions in skin inflammation.* Attica Dermatologic Days IV (November 21-23, 2008; Athens, Greece).
- 134) 2008 *Role of mast cells in mesenteric traction syndrome.* T-NEMC Anesthesia Grand Rounds (Dec. 8, 2008).
- 135) 2009 *Perinatal mast cell activation and risk of autism.* Yale Univeristy Allergy and Clinical Immunology Grand Rounds (February 9, 2009; New Haven, CT).
- 136) 2009 *Mast cells disrupt the gut-blood-brain barriers and contribute to autism.* Autism One 2009 Conference (Chicago, IL; May 22-24, 2009).
- 137) 2009 *Rupatadine: mechanism of action and anti-inflammatory effects. Why multiple actions? The Pharmacologist's point of view.* II Multidisciplinary Symposium. (Guatemala; May 29, 2009).
- 138) 2009 *Novel antihistamines: Dual anti-mediator action and anti-inflammatory effects.* XIX World Congress of Oto-Rhino-Laryngology (São Paulo, Brazil; June 3, 2009).
- 139) 2009 *Role of mast cells in blood-brain-barrier permeability and autism.* Autism 1 Conference (Chicago, IL; May 22, 2009).
- 140) 2009. *Mastocytosis, allergic symptomatology and autism.* National Autism Association (Fort Lauderdale, FL; Nov. 12, 2009).
- 141) 2009 *IL-33 augments substance P-induced VEGF release from human mast cells and its expression is increased in psoriasis.* Attica Dermatologic Days V (November 25, 2009; Athens, Greece).
- 142) 2009 *Anti-inflammatory effects of rupatadine.* Regional Allergy Update (Nicosia, Cyprus; Dec.7, 2009).
- 143) 2009 *Anti-inflammatory actions of newer anti-histamines.* (Berlin, Germany; Dec. 17, 2009).
- 144) 2010 *Mast cells and mitochondria: culprits in the pathogenesis of allergy.* Panahellenic Allergy Conference (Athens, Greece; April 17, 2010).

- 145) 2010 “Allergic-like” symptoms, brain inflammation and autism: beneficial effect of a luteolin formulation (NeuroProtek).” Autism 1 Conference (Chicago, IL; May 28, 2010).
- 146) 2010 “Mast cells and mitochondria-culprits in the pathogenesis of autism: novel treatment.” National Autism Association Conference (Tampa, FL; November 12, 2010).
- 147) 2010 “Mast cells and mitochondria: culprits in inflammation and auto-immunity” UCLA. (Los Angeles: December 13, 2010).
- 148) 2010 “Mast cells: multitasking at the edge of wounds.” Wound Healing Conference (St. Thomas; December 10, 2010).
- 149) 2011 “The role of IL-9 and IL-33 in mast cell activation.” Brigham & Women’s Hospital-Harvard Medical School. (Boston, MA; February 8, 2011).