## **CURRICULUM VITAE: Harvard**

## Part I:

### **DEMOGRAPHIC INFORMATION:**

| Name:      | Nicholas A. Tritos                                     |
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| Address:   | 241 Lexington Str # 14-2B, Woburn, Massachusetts 01801 |
| Telephone: | (617) 713 3421   |
| Fax:       | (617) 732 2469   |
| Email:     | natritos@pol.net                                       |

# **EDUCATION AND TRAINING:**

### **Education:**

| Year | Degree | Institution                           |
|------|--------|---------------------------------------|
| 1989 | M.D.   | Athens Medical School, Athens, Greece |
| 1992 | D.Sc.  | University of Athens, Athens, Greece  |

### **Postdoctoral training:**

| Year      | Specialty            | Place of Training                          |
|-----------|----------------------|--|
| 1989-1990 | Intern in Medicine   | Naval Hospital of Crete, Greece            |
| 1992-1993 | Intern in Medicine   | New England Deaconess Hospital, Boston, MA |
| 1993-1995 | Resident in Medicine | New England Deaconess Hospital, Boston, MA |

## **Fellowships:**

| Year      | Specialty                         | Place of Training                                     |
|-----------|-----------------------------------|---|
| 1992-1999 | Clinical Fellow in Medicine       | Harvard Medical School, Boston, MA                    |
| 1995-1999 | Fellow in Endocrinology, Diabetes | Beth Israel Deaconess Medical Center, Joslin Diabeter |
|           | and Metabolism                    | Center, Boston, MA and Lahey Clinic Medical Center    |
|           |                                   | Burlington, MA  |
| 1997-1999 | Research Fellow                   | Joslin Diabetes Center, Boston, MA                    |
|           | Section of Cellular and Molecular |   |

|       | Physiology                             |  |
|-------|--|--|
| 2001- | Fellow, Clinical Investigator Training | Beth Israel Deaconess Medical Center, Boston, MA |
|       | Program                                | and Pfizer, Inc                                  |

## Licensure and Certification:

| Year      | Type of License   |
|-----------|---|
| 1995      | Massachusetts License Registration                      |
| 1997-2001 | New Hampshire License Registration                      |
| 1995      | American Board of Internal Medicine (Internal Medicine) |
| 1997      | American Board of Internal Medicine (Endocrinology)     |

## **Other Certifications:**

| 1998 | Thyroid Ultrasound (American Association of Clinical Endocrinologists) |
|------|--|
| 1999 | Bone Densitometry (International Society for Clinical Densitometry)    |
| 2000 | Nuclear Endocrinology (Brigham and Women's Hospital)                   |

### **PROFESSIONAL APPOINTMENTS:**

## Academic Appointments:

| Year      | Academic Title              | Institution                        |
|-----------|-----------------------------|------------------------------------|
| 1992-1999 | Clinical Fellow in Medicine | Harvard Medical School, Boston, MA |
| 1999-     | Instructor in Medicine      | Harvard Medical School, Boston, MA |

## Hospital or Affiliated Institution Appointments:

| Year      | Hospital Title                  | Institution                              |
|-----------|---------------------------------|--|
| 1992-1995 | Intern/Resident                 | New England Deaconess Medical            |
|           |                                 | Center, Boston, MA                       |
| 1995-1996 | Fellow                          | Lahey Clinic Medical Center, Burlington, |
|           |                                 | MA                                       |
| 1995-1997 | Fellow                          | Beth Israel Deaconess Medical Center,    |
|           |                                 | Boston, MA                               |
| 1996-1999 | Fellow                          | Joslin Diabetes Center, Boston, MA       |
| 1999-     | Research Associate Investigator | Joslin Diabetes Center, Boston, MA       |
| 2000-     | Staff Physician                 | Joslin Diabetes Center, Boston, MA       |
| 2000-     | Staff Physician                 | Beth Israel Deaconess Medical Center,    |
|           |                                 | Boston, MA                               |

### **HOSPITAL SERVICE ASSIGNMENTS:**

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2001- Endocrinology consult service, Beth Israel Deaconess Medical Center, Boston, MA

#### **PROFESSIONAL SOCIETY INVOLVEMENT:**

| Year  | Society   | Role                      |
|-------|---|---------------------------|
| 1993- | Massachusetts Medical Society                     | Member                    |
| 1993- | American Medical Association                      | Member                    |
| 1994- | American College of Physicians                    | Member                    |
| 1994- | New England Hellenic Medical Society              | Member                    |
| 1995- | American Association of Clinical Endocrinologists | Member                    |
| 1996- | The Endocrine Society                             | Member                    |
| 1999- | International Society for Clinical Densitometry   | Member                    |
| 1999- | New England Hellenic Medical Society              | Research Committee member |
| 2000- | Norfolk District Medical Society                  | Delegate                  |
| 2001- | New England Hellenic Medical Society              | Secretary                 |
| 2001  | American Association of Clinical Endocrinologists | Fellow                    |

#### **NONPROFESSIONAL SOCIETY INVOLVEMENT:**

| Year  | <u>Society</u>        | Role   |
|-------|-----------------------|--------|
| 1995- | The Planetary Society | Member |
| 1996- | Axion                 | Member |
| 1996- | American Mensa        | Member |

#### **COMMUNITY SERVICE:**

| Year | Position  |
|------|---|
| 1997 | Volunteer physician at Elliot P Joslin Summer Camp        |
| 1999 | "Current and evolving therapies for the diabetes mellitus |
|      | epidemic" (Lay audience talk), Newton-Wellesley           |
|      | Hospital, Newton, MA                                      |

### **EDITORIAL BOARDS:**

| 1998- | manuscript reviewer | Southern Medical Journal                         |
|-------|---------------------|--|
| 1999- | manuscript reviewer | Diabetes   |
| 2000- | manuscript reviewer | Journal of Clinical Endocrinology and Metabolism |
|       | -                   |  |
| 2000- | editorial board     | www.medicine.gr                                  |

### **AWARDS AND HONORS:**

| Year      | Name of Award  |
|-----------|--|
| 1977-1982 | Honorary Awards for excellence in all years of High School     |
| 1983-1988 | Award from the Papadakis bequest to the University of Athens,  |
|           | Greece   |
| 1994-1995 | Department of Radiology Awards, New England Deaconess          |
|           | Hospital, Boston, MA   |
| 1996      | Travel Grant Award, Endocrine Fellows' Foundation              |
| 1997      | Travel Grant Award, Endocrine Fellows' Foundation              |
| 1998      | Merck Senior Fellows' Award, The Endocrine Society             |
| 1998-1999 | Mary K Iacocca Research Fellowship, Joslin Diabetes Center and |
|           | Harvard Medical School, Boston, MA                             |
| 1999      | Physician's Recognition Award, American Medical Association    |
| 2000      | Strathmore's Who's Who, member                                 |
| 2000      | National Who's Who, Lifetime member                            |
| 2001-     | Clinical Investigator Training Program Fellowship, Beth Israel |
|           | Deaconess Medical Center, Boston, MA and Pfizer, Inc           |
| 2001      | Fellow, American Association of Clinical Endocrinologists      |
|           |  |

## Part II

## A. Report of Research

1. Major Research Interests

a) Hypothalamic peptides implicated in the regulation of appetite and energy balance

b) Role of leptin in the regulation of energy balance

c) Cardiovascular correlates of obesity

### **Research Funding Information**

| 1998      | Merck Senior Fellows' Award               | PI    |
|-----------|---|-------|
| 1998-1999 | Mary K Iacocca Fellowship Award           | PI    |
| 1999-     | Boston Obesity Nutrition Research Center  | PI    |
|           | Pilot Study Award                         |       |
| 2000-     | Eli Lilly sponsored clinical trial Award  | Co PI |
| 2001-     | Clinical Investigator Training Program PI |       |

### **B. Report on Teaching**

1. Local Contributions

a. Medical School Courses

1983 - 1985 Teaching assistant for the laboratory exercises of the General Biology course offered to first year medical students, Athens Medical School, Athens, Greece.

1993- 1997 Mentor for third and fourth year Harvard Medical School students in clinical clerkships and electives (Internal Medicine and Endocrinology), Beth Israel Deaconess Medical Center and Joslin Diabetes Center, Boston, Massachusetts.

| 1996-1997 | Instructor in Core Medicine I, Harvard Medical School.                          |
|-----------|---|
| 1996-1997 | Preceptor in Introduction to Clinical Medicine, Harvard Medical School.         |
| 2000      | Focused Exercise Leader in Integrated Human Physiology, Harvard Medical School. |

e. Advisory and Supervisory Responsibilities

Student evaluator in Patient-Doctor II, Harvard Medical School.
Student evaluator in Patient-Doctor II, OSCE 2000 & 2001, Harvard Medical School.

2001- Endocrinology fellow clinical supervisor, Beth Israel Deaconess Medical Center Endocrinology Training Program, Boston, MA.

#### 2. Regional Contributions

#### Speaker

| October 1994 | "A case of a patient with carcinoid" (Resident Clinicopathological exercise), |
|--------------|---|
|              | New England Deaconess Hospital, Boston, MA                                    |
|              |   |
| June 1995    | "Cushing's syndrome" (Resident Grand Rounds), New England Deaconess           |
|              | Hospital, Boston, MA  |
| April 1999   | Melanin concentrating hormone (Seminar), Joslin Dabetes Center, Boston,       |
|              | MA.   |
| 1998-        | Journal Club presentations, Joslin Diabetes Center, Boston, MA.               |

#### 3. National Contributions

1998- Question writer and reviewer for the ABIM examination in Endocrinology, Diabetes and Metabolism

1999 "Melanin concentrating hormone", Invited speaker, Annual Scientific Meeting of the North American Association for the Study of Obesity, Charleston, SC

4. International Contributions

| 2000 | "The role of melanin concentrating hormone in appetite and body weight                |
|------|---|
|      | regulation; studies of MCH knockout and MCH transgenic mice". Invited                 |
|      | speaker, 10 <sup>th</sup> Annual Summer Neuropeptide Conference, International        |
|      | Neuropeptide Society, St. Adele (Montreal), Canada.                                   |
|      |   |
| 2000 | "Etiology and pathogenesis of obesity" Invited speaker 6 <sup>th</sup> World Hellenic |

- 2000 "Etiology and pathogenesis of obesity". Invited speaker, 6" World Hellenic Biomedical Association Congress, World Hellenic Biomedical Association, Athens, Greece.
- 2000 "Research opportunities in the US". Invited speaker, 6<sup>th</sup> World Hellenic Biomedical Association Congress, World Hellenic Biomedical Association, Athens, Greece.

2001 Central effects of leptin on energy homeostasis and neuroendocrine function. 4<sup>th</sup> Postgraduate Course in Endocrinology: Obesity, Hellenic Endocrine Society, Athens, Greece.

### **C. Clinical Activities**

- 1. Diabetes and General Endocrinology practice at Joslin Diabetes Center, Boston, MA.
- 2. Endocrinology consult service, Beth Israel Deaconess Medical Center, Boston, MA.
- 3. Physician, DOIT (outpatient diabetes program), Joslin Diabetes Center, Boston, MA.

#### PART III: BIBLIOGRAPHY

#### Original reports

- 1. N.Katsilambros, K.Aliferis, C.Darviri, P.Tsapogas, Z.Alexiou, N.Tritos, M.Arvanitis. Evidence for an increase in the prevalence of known diabetes in a sample of an urban population in Greece. Diabetic Medicine 1993;**10:87**-90.
- 2. N.Katsilambros, K.Aliferis, C.Darviri, P.Tsapogas, Z.Alexiou, N.Tritos, M.Arvanitis, P. Lyraki, S.Heliopoulos, P.Sfikakis: Pattern of treatment among diabetic patients in a sample of urban Greek population in Greece. Diabete & Metabolisme 1993;**19**(**1 Pt 2**): 138-142.
- N.Katsilambros, P.C.Tsapogas, M.P.Arvanitis, N.Tritos, Z.Alexiou, K.L.Rigas: Risk factors for lower extremity arterial disease in noninsulin dependent diabetic persons. Diabetic medicine 1996;13: 243-246.
- E. Bozas, N. Tritos, H. Phillipidis, F. Stylianopoulou: At least three neurotransmitter systems mediate a stress-induced increase in c-fos in the rat brain. Cellular and Molecular Neurobiology 1997;17: 157-169.
- 5. G.Sakoulas, N. Tritos, M.Lally, C.Wanke, P.Hartzband: Hypercalcemia in an AIDS patient treated with growth hormone. AIDS 1997;**11**:1353-1356.
- 6. N.Tritos, A.Guay, W.Malarkey: Big hyperprolactinemia in two men with pituitary adenomas. European Journal of Endocrinology 1998;**138**: 82-85.
- 7. C.S.Mantzoros, A.Liolios, N.Tritos, V.G.Kaklamani, A.C.Moses, J.S.Flier: Serum leptin concentrations are independently associated with obesity, insulin concentrations, alcohol intake and smoking in young healthy men. Obesity Research 1998;6: 179-186.
- N.Tritos, E.Kitraki, H.Phillipidis, F.Stylianopoulou: β–adrenergic receptors mediate a stress-induced decrease in IGF-II mRNA in the rat cerebellum. Cellular and Molecular Neurobiology 1998;18: 525-534.
- 9. N. Tritos, D. Vicent, J. Gillette, D.S. Ludwig, E.S. Flier, E. Maratos-Flier: Functional interactions between melanin concentrating hormone, neuropeptide Y and anorectic neuropeptides in the rat hypothalamus. Diabetes 1998;47: 1687-1692.
- 10. N. Tritos, J.K. Elmquist, J. Mastaitis, J.S. Flier, E. Maratos-Flier: Characterization of expression of hypothalamic appetite-regulating peptides in obese hyperleptinemic brown adipose tissue deficient (UCP-DTA) mice. Endocrinology 1998;**139**: 4634-4641.
- 11. N.Tritos, S.Weinrib, T.B.Kaye: Endocrine manifestations of Erdheim-Chester disease.

Journal of Internal Medicine 1998;244: 529-535.

- C.F. Elias, C.B. Saper, E. Maratos-Flier, N. Tritos, C. Lee, J. Kelly, M.M. Ollmann, G.S. Barsh, T. Sakurai, M. Yanagisawa, J.K. Elmquist: Chemically defined projections linking the mediobasal hypothalamus and the lateral hypothalamic area. Journal of Comparative Neurology 1998;402: 442-459.
- 13. M. Shimada, N. Tritos, B.B. Lowell, J.S. Flier, E. Maratos-Flier: Mice lacking melanin concentrating hormone are hypophagic and lean. Nature 1998;**396**: 670-674.
- N. Tritos, E. Kitraki, H. Phillipidis, F. Stylianopoulou. Neurotransmitter modulation of glucocorticoid receptor mRNA levels in the rat hippocampus. Neuroendocrinology 1999;69: 324-330.
- N. Tritos, P.I. Hartzband. Rapid improvement of osteoporosis following parathyroidectomy in a premenopausal woman with acute primary hyperparathyroidism. Archives of Internal Medicine 1999;159: 1495-1498.
- N.A. Tritos, G.W. Cushing, G. Heatley, J.A. Libertino. Clinical features and prognostic factors associated with adrenocortical carcinoma: Lahey Clinic Medical Center experience. American Surgeon 2000;66: 73-79.
- E. Kokkotou, J.W. Mastaitis, D. Qu, D. Hoersch, L. Slieker, K. Bonter, N.A. Tritos, E. Maratos-Flier: Characterization of [Phe13, Tyr19]-MCH analog binding activity to the MCH receptor. Neuropeptides 2000;34: 240-247.
- E.G. Kokkotou, N.A. Tritos, J.W. Mastaitis, L. Slieker, E. Maratos-Flier: Melanin Concentrating-Hormone Receptor is a target of leptin action in the mouse brain. Endocrinology 2001;21: 680-686.
- D.S. Ludwig, N.A. Tritos, J.W. Mastaitis, R. Kulkarni, E. Kokkotou, J.K. Elmquist, B. Lowell, J.S. Flier, E. Maratos-Flier: Obesity and insulin resistance in a transgenic model of melanin concentrating hormone overexpression. Journal of Clinical Investigation 2001; 107: 379-386.
- N.A. Tritos, J.W. Mastaitis, E. Kokkotou, E. Maratos-Flier: Characterization of melanin concentrating hormone and preproorexin expression in the murine hypothalamus. Brain Research 2001; 895 (1-2): 160-166.

#### Reviews in peer-reviewed journals

1. N.Tritos, C.S.Mantzoros: Leptin: its role in obesity and beyond. Diabetologia 1997;40: 1371-1379.

- 2. N.Tritos, C.S.Mantzoros: The role of leptin in health and disease. Iatriki [Medicine, Gr] 1997;**72**: 392-396.
- 3. N.Tritos, C.S.Mantzoros: Recombinant human growth hormone: old and novel uses. American Journal of Medicine 1998;105: 44-57.
- 4. N. Tritos, C.S. Mantzoros: Syndromes of severe insulin resistance. Journal of Clinical Endocrinology and Metabolism 1998;83: 3025-3030.
- 5. N. Tritos, E. Maratos-Flier: Two important systems in energy homeostasis: melanocortins and melanin concentrating hormone. Neuropeptides 1999;**33**: 339-349.

#### Invited review and viewpoint

1. Etiology, pathogenesis and treatment of obesity: recent developments and prospects. Diabetes News (Gr) 2001 (in press).

#### Letters

- 1. N.Tritos, K.Casper, G.King: Electrostatic discharge leads to insulin pump malfunction. Annals of Internal Medicine 1997;**126**: 746.
- 2. N.A. Tritos, K. Stuart, P.I. Hartzband: Hypothyroidism in two patients after hepatic arterial chemoembolization. Annals of Internal Medicine 2001;**134**: 535.

#### Monograph chapter:

N. Tritos and N. Katsilambros: Central effects of leptin on energy homeostasis and neuroendocrine function. 4<sup>th</sup> Postgraduate Course in Endocrinology: Obesity, Hellenic Endocrine Society, Athens, Greece, pages 137-145, Athens, Greece, February 2001.

#### Book chapters:

E. Maratos-Flier, N. Tritos: Endocrine Control of Energy Intake. In: R. Eckel (Ed): Obesity: Clinical Evaluation and Treatment. Lippincott Williams & Wilkins, Philadelphia, PA (in press).

#### Electronic publications

- 1. N.A. Tritos: Adrenal hemorrhage. Emedicine Online Textbook, November 1999.
- 2. N.A. Tritos: Kallman's syndrome and idiopathic hypogonadotropic hypogonadism. Emedicine Online Textbook, January 2000.

#### Thesis

Characterization of the neurotransmitter modulation of insulin-like growth factor II (IGF II) and glucocorticoid receptor (GR) expression in the rat brain, Athens, Greece, June 1992.

#### ABSTRACTS

- P. Tsapogas, Z. Alexiou, M. Arvanitis, N. Tritos, D. Papadogiannis, G. Papazachos, C. Richardson, N. Katsilambros. Prevalence of coronary heart disease and its relation to various risk factors in a population sample of type 2 diabetic persons. 32nd annual Meeting European Association for the Study of Diabetes Mellitus, Vienna, Austria, September 1996, Diabetologia 1996; **39** [Suppl 1]: A276.
- D. Qu, J.W. Mastaitis, N.A. Tritos, E. Maratos-Flier. MCH action is mediated through stimulation of a PI 3 Kinase. Endocrine Society 80<sup>th</sup> Annual Meeting, New Orleans, LA, June 1998.
- P.G. Danias, N.A. Tritos, K.V. Kissinger, W.J. Manning. Magnetic resonance assessment of cardiac structure and function in obesity. 2nd Annual Meeting, Society of Cardiovascular Magnetic Resonance, Atlanta, GA, January 1999.
- P.G. Danias, N.A. Tritos, K.V. Kissinger, W.J. Manning. Cardiovascular function in the obese: Insights from cardiac magnetic resonance imaging. 48<sup>th</sup> Annual Meeting, American College of Cardiology, March 1999
- P.G. Danias, N.A. Tritos, K.V. Kissinger, W.J. Manning. Magnetic resonance assessment of aortic elasticity in obesity. 3<sup>d</sup> Annual Meeting, Society for Cardiovascular Magnetic Resonance, Atlanta, GA, January 2000.
- P.G. Danias, N.A. Tritos, K.V. Kissinger, W.J. Manning. Magnetic resonance assessment of aortic elasticity in obesity. Journal of Cardiovascular Magnetic Resonance 2000;1(4): 340.
- P.G. Danias, N.A. Tritos, K.V. Kissinger, W.J. Manning. Cardiovascular function in the obese: Insights from cardiac magnetic resonance imaging. 49<sup>th</sup> Annual Meeting, American College of Cardiology, Anaheim, CA, March 2000.
- P.G. Danias, N.A. Tritos, K.V. Kissinger, W.J. Manning. Cardiovascular function in the obese: Insights from cardiac magnetic resonance imaging. Journal of the American College of Cardiology 2000; 35(Suppl A): 427A.

- P.G. Danias, M. Stuber, N.A. Tritos, C. Salton, K.V. Kissinger, W.J. Manning. CSPAMM assessment of systolic and diastolic left ventricular apical rotation in obesity. 8<sup>th</sup> Meeting of the International Society for Magnetic Resonance in Medicine, Denver, CO, April 2000.
- P.G. Danias, M. Stuber, N.A. Tritos, C. Salton, K.V. Kissinger, W.J. Manning. CSPAMM assessment of systolic and diastolic left ventricular apical rotation in obesity. Proceedings of the International Society for Magnetic Resonance in Medicine 2000; 3: 1613.
- 11. N.A. Tritos, J.W. Mastaitis, D.S. Ludwig, R. Kulkarni, E.G. Kokkotou, J.S. Flier, E. Maratos-Flier. The obese phenotype of melanin concentrating hormone overexpressing mice. Endocrine Society 82<sup>nd</sup> Annual Meeting, Toronto, Canada, June 2000.
- E.G. Kokkotou, R.L. Bradley, N.A. Tritos, J.W. Mastaitis, B. Cheatham, E. Maratos-Flier. Analysis of melanin concentrating hormone receptor expression in brain and adipose tissue. Endocrine Society 82<sup>nd</sup> Annual Meeting, Toronto, Canada, June 2000.
- 13. N.A. Tritos, J.W. Mastaitis, D.S. Ludwig, R. Kulkarni, E.G. Kokkotou, J.S. Flier, E. Maratos-Flier. The obese phenotype of melanin concentrating hormone overexpressing mice. Endocrine Society 82<sup>nd</sup> Annual Meeting, Toronto, Canada, June 2000.
- 14. E.G. Kokkotou, R.L. Bradley, N.A. Tritos, J.W. Mastaitis, B. Cheatham, E. Maratos-Flier. Analysis of melanin concentrating hormone receptor expression in brain and adipose tissue. Endocrine Society 82<sup>nd</sup> Annual Meeting, Toronto, Canada, June 2000.
- 15. N.A. Tritos, J.W. Mastaitis, D.S. Ludwig, R. Kulkarni, B. Lowell, J.S. Flier, E. Maratos-Flier. Obesity, diet-dependent hyperphagia and hyperinsulinemia in MCH transgenic overexpressor mice. Boston Obesity Nutrition Research Center research meeting, Boston, MA, June 2000.
- 16. P.G. Danias, N.A. Tritos, M. Stuber, C.J. Salton, K.V. Kissinger, W.J. Manning. Altered apical left ventricular rotation in obesity – A cardiac Magnetic Resonance Tagging Study, 4<sup>th</sup> Annual Meeting, Society for Cardiovascular Magnetic Resonance, Atlanta, GA, January 2001.
- N.A. Tritos, G. Lieberman, P. Vezerides, E. Maratos-Flier. Estradiol induces profound anorexia in mice exposed to a high fat diet. Obesity/Homeostasis (Keystone Symposia) Taos, NM, February 2001.
- 18. P.G. Danias, N.A. Tritos, M. Stuber, C.J. Salton, K.V. Kissinger, W.J. Manning. Obesity is Associated with Altered Apical Left Ventricular Rotation A Cardiac Magnetic

Resonance Tagging Study. 50<sup>th</sup> Annual Meeting, American College of Cardiology, Orlando, FL, March 2001.

- 19. P.G. Danias, N.A. Tritos, M. Stuber M, C.J. Salton, K.V. Kissinger, W.J. Manning. Obesity is associated with altered apical left ventricular rotation: A cardiac magnetic resonance tagging study. J Am Coll Cardiol 2001;39(Suppl A):392A.
- 20. N.A. Tritos, G. Lieberman, P. Vezerides, E. Maratos-Flier. Estradiol-induced anorexia is independent of melanin concentrating hormone (MCH) and leptin. Endocrine Society 83<sup>rd</sup> Annual Meeting, Denver, Colorado, June 2001.