





## Lawrence Steinman, MD

George A. Zimmermann Professor and Professor of Pediatrics  
Neurology & Neurological Sciences

 NIH Biosketch available Online

 Curriculum Vitae available Online

### CLINICAL OFFICES

- **Beckman Center**

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Stanford, CA 94304

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### Bio

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#### BIO

My research is in neuroimmunology. I attend on the inpatient service at LPCH.

#### CLINICAL FOCUS

- Neurology
- Neurology, Pediatric
- Multiple Sclerosis, Myasthenia Gravis, Immune Disorders

#### ACADEMIC APPOINTMENTS

- Professor, Neurology & Neurological Sciences
- Professor, Pediatrics - Operations
- Member, Bio-X
- Member, Maternal & Child Health Research Institute (MCHRI)
- Member, Wu Tsai Neurosciences Institute

#### ADMINISTRATIVE APPOINTMENTS

- Chairman, Interdepartmental Program in Immunology, Interdepartmental Program in Immunology, Stanford University, (2002-2011)

#### HONORS AND AWARDS

- Member, National Academy of Medicine, formerly named Institute of Medicine (October, 2009-onward)
- Member, National Academy of Sciences (2015-onward)
- Anthony Cerami Award in Translational Medicine, Feinstein Institute and Molecular Medicine (2015)
- Charcot Award for Lifetime Achievement in MS Research, International Federation of MS Societies (2011)
- Honorary PhD, Hasselt University (2008)
- John M. Dystel Prize, American Academy of Neurology and National MS Society (2004)

- Friedrich Sasse Prize, Free Univ.of Berlin (1994)
- Sen. Jacob Javits Award, US Congress (1988-2002)

## **BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS**

- Member Advisory Committee, Institute of Medicine, on “Multiple Sclerosis & Other Neurologic Disorders in Veterans of the Persian Gulf & Post-9/11 Wars”, Institute of Medicine, National Academy of Sciences (2015 - present)

## **PROFESSIONAL EDUCATION**

- Residency: Stanford University School of Medicine Registrar (1980) CA
- Residency: Stanford University School of Medicine Registrar (1974) CA
- Fellowship: National Institutes of Health (1977) MD
- Board Certification: Neurology, American Board of Psychiatry and Neurology (1984)
- Fellowship: Weizmann Institute Of Science (1977) Israel
- Internship: Stanford University School of Medicine (1974) CA
- Medical Education: Harvard Medical School (1973) MA
- MD, Harvard University , Neurochemistry (1973)

## **LINKS**

- My Lab Site: <http://steinmanlab.stanford.edu/>
- Get a Second Opinion: <https://stanfordhealthcare.org/second-opinion/overview.html>

## **Research & Scholarship**

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### **CURRENT RESEARCH AND SCHOLARLY INTERESTS**

Our laboratory is dedicated to understanding the pathogenesis of autoimmune diseases, particularly multiple sclerosis. We have developed several new therapies for autoimmunity, including some in Phase 2 clinical trials, as well as one approved drug, natalizumab. We have developed microarray technology for detecting autoantibodies to myelin proteins and lipids. We employ a diverse range of molecular and cellular approaches to trying to understand multiple sclerosis.

### **CLINICAL TRIALS**

- Biobank For MS And Other Demyelinating Diseases, Not Recruiting

## **Teaching**

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### **STANFORD ADVISEES**

#### **Postdoctoral Faculty Sponsor**

Fok Moon Lum, Noga Or-Geva

### **GRADUATE AND FELLOWSHIP PROGRAM AFFILIATIONS**

- Immunology (Phd Program)
- Neurosciences (Phd Program)

## **Publications**

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### **PUBLICATIONS**

- **Immune tolerance in multiple sclerosis and neuromyelitis optica with peptide-loaded tolerogenic dendritic cells in a phase 1b trial.** *Proceedings of the National Academy of Sciences of the United States of America*

Zubizarreta, I., Florez-Grau, G., Vila, G., Cabezon, R., Espana, C., Andorra, M., Saiz, A., Llufrui, S., Sepulveda, M., Sola-Valls, N., Martinez-Lapiscina, E. H., Pulido-Valdeolivas, I., Casanova, et al  
2019

- **Small Heat Shock Proteins, Amyloid Fibrils, and Nicotine Stimulate a Common Immune Suppressive Pathway with Implications for Future Therapies.** *Cold Spring Harbor perspectives in medicine*  
Rothbard, J. B., Kurnellas, M. P., Ousman, S. S., Brownell, S., Rothbard, J. J., Steinman, L.  
2018
- **Engineered DNA plasmid reduces immunity to dystrophin while improving muscle force in a model of gene therapy of Duchenne dystrophy.** *Proceedings of the National Academy of Sciences of the United States of America*  
Ho, P. P., Lahey, L. J., Mourkioti, F., Kraft, P. E., Filareto, A., Brandt, M., Magnusson, K. E., Finn, E. E., Chamberlain, J. S., Robinson, W. H., Blau, H. M., Steinman, L.  
2018
- **An amyloidogenic hexapeptide derived from amylin attenuates inflammation and acute lung injury in murine sepsis** *PLOS ONE*  
Mahapatra, S., Ying, L., Ho, P., Kurnellas, M., Rothbard, J., Steinman, L., Cornfield, D. N.  
2018; 13 (7): e0199206
- **Molecular signature of Epstein-Barr virus infection in MS brain lesions.** *Neurology(R) neuroimmunology & neuroinflammation*  
Moreno, M. A., Or-Geva, N., Aftab, B. T., Khanna, R., Croze, E., Steinman, L., Han, M. H.  
2018; 5 (4): e466
- **Identification of a common immune regulatory pathway induced by small heat shock proteins, amyloid fibrils, and nicotine.** *Proceedings of the National Academy of Sciences of the United States of America*  
Rothbard, J. B., Rothbard, J. J., Soares, L., Fathman, C. G., Steinman, L.  
2018
- **Blocking immune intrusion into the brain suppresses epilepsy in Rasmussen's encephalitis model** *JOURNAL OF CLINICAL INVESTIGATION*  
Steinman, L.  
2018; 128 (5): 1724–26
- **Single-cell mass cytometry reveals distinct populations of brain myeloid cells in mouse neuroinflammation and neurodegeneration models.** *Nature neuroscience*  
Ajami, B., Samusik, N., Wieghofer, P., Ho, P. P., Crotti, A., Bjornson, Z., Prinz, M., Fantl, W. J., Nolan, G. P., Steinman, L.  
2018; 21 (4): 541–51
- **Narcolepsy and influenza vaccination-induced autoimmunity** *ANNALS OF TRANSLATIONAL MEDICINE*  
Ahmed, S., Steinman, L.  
2017; 5 (1): 25
- **A Journey in Science: The Privilege of Exploring the Brain and the Immune System.** *Molecular medicine*  
Steinman, L.  
2016; 22
- **Taming Autoimmunity** *SCIENTIST*  
Steinman, L.  
2016; 30 (6): 32–37
- **Obeticholic acid, a synthetic bile acid agonist of the farnesoid X receptor, attenuates experimental autoimmune encephalomyelitis** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*  
Ho, P. P., Steinman, L.  
2016; 113 (6): 1600-1605
- **Amyloid fibrils activate B-1a lymphocytes to ameliorate inflammatory brain disease** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*  
Kurnellas, M. P., Ghosn, E. E., Schartner, J. M., Baker, J., Rothbard, J. J., Negrin, R. S., Herzenberg, L. A., Fathman, C. G., Steinman, L., Rothbard, J. B.  
2015; 112 (49): 15016-15023
- **Antibodies to influenza nucleoprotein cross-react with human hypocretin receptor 2** *SCIENCE TRANSLATIONAL MEDICINE*

- Ahmed, S. S., Volkmuth, W., Duca, J., Corti, L., Pallaoro, M., Pezzicoli, A., Karle, A., Rigat, F., Rappuoli, R., Narasimhan, V., Julkunen, I., Vuorela, A., Vaarala, et al  
2015; 7 (294)
- **No quiet surrender: molecular guardians in multiple sclerosis brain** *JOURNAL OF CLINICAL INVESTIGATION*  
Steinman, L.  
2015; 125 (4): 1371-1378
  - **Mechanisms of action of therapeutic amyloidogenic hexapeptides in amelioration of inflammatory brain disease.** *journal of experimental medicine*  
Kurnellas, M. P., Schartner, J. M., Fathman, C. G., Jagger, A., Steinman, L., Rothbard, J. B.  
2014; 211 (9): 1847-1856
  - **Immunology of Relapse and Remission in Multiple Sclerosis** *ANNUAL REVIEW OF IMMUNOLOGY, VOL 32*  
Steinman, L.  
2014; 32: 257-281
  - **Defective sphingosine 1-phosphate receptor 1 (S1P1) phosphorylation exacerbates TH17-mediated autoimmune neuroinflammation.** *Nature immunology*  
Garris, C. S., Wu, L., Acharya, S., Arac, A., Blaho, V. A., Huang, Y., Moon, B. S., Axtell, R. C., Ho, P. P., Steinberg, G. K., Lewis, D. B., Sobel, R. A., Han, et al  
2013; 14 (11): 1166-1172
  - **Plasmid-Encoded Proinsulin Preserves C-Peptide While Specifically Reducing Proinsulin-Specific CD8+ T Cells in Type 1 Diabetes.** *Science translational medicine*  
Roep, B. O., Solvason, N., Gottlieb, P. A., Abreu, J. R., Harrison, L. C., Eisenbarth, G. S., Yu, L., Leviten, M., Hagopian, W. A., Buse, J. B., von Herrath, M., Quan, J., King, et al  
2013; 5 (191): 191ra82-?
  - **Expansion of oligodendrocyte progenitor cells following SIRT1 inactivation in the adult brain.** *Nature cell biology*  
Rafalski, V. A., Ho, P. P., Brett, J. O., Ucar, D., Dugas, J. C., Pollina, E. A., Chow, L. M., Ibrahim, A., Baker, S. J., Barres, B. A., Steinman, L., Brunet, A.  
2013; 15 (6): 614-624
  - **Amyloid Fibrils Composed of Hexameric Peptides Attenuate Neuroinflammation** *SCIENCE TRANSLATIONAL MEDICINE*  
Kurnellas, M. P., Adams, C. M., Sobel, R. A., Steinman, L., Rothbard, J. B.  
2013; 5 (179)
  - **A writing-intensive course improves biology undergraduates' perception and confidence of their abilities to read scientific literature and communicate science** *ADVANCES IN PHYSIOLOGY EDUCATION*  
Brownell, S. E., Price, J. V., Steinman, L.  
2013; 37 (1): 70-79
  - **Weighing in on autoimmune disease: 'Hub-and-spoke' T cell traffic in autoimmunity.** *Nature medicine*  
Steinman, L.  
2013; 19 (2): 139-141
  - **Inflammatory Cytokines at the Summits of Pathological Signal Cascades in Brain Diseases** *SCIENCE SIGNALING*  
Steinman, L.  
2013; 6 (258)
  - **Piet Mondrian's trees and the evolution in understanding multiple sclerosis, Charcot Prize Lecture 2011** *MULTIPLE SCLEROSIS JOURNAL*  
Steinman, L., Axtell, R. C., Barbieri, D., Bhat, R., Brownell, S. E., de Jong, B. A., Dunn, S. E., Grant, J. L., Han, M. H., Ho, P. P., Kuipers, H. F., Kurnellas, M. P., Ousman, et al  
2013; 19 (1): 5-14
  - **Science Communication to the General Public: Why We Need to Teach Undergraduate and Graduate Students this Skill as Part of Their Formal Scientific Training.** *Journal of undergraduate neuroscience education : JUNE : a publication of FUN, Faculty for Undergraduate Neuroscience*  
Brownell, S. E., Price, J. V., Steinman, L.  
2013; 12 (1): E6-E10
  - **The discovery of natalizumab, a potent therapeutic for multiple sclerosis** *JOURNAL OF CELL BIOLOGY*  
Steinman, L.  
2012; 199 (3): 413-416

- **Chaperone Activity of Small Heat Shock Proteins Underlies Therapeutic Efficacy in Experimental Autoimmune Encephalomyelitis** *JOURNAL OF BIOLOGICAL CHEMISTRY*  
Kurnellas, M. P., Brownell, S. E., Su, L., Malkovskiy, A. V., Rajadas, J., Dolganov, G., Chopra, S., Schoolnik, G. K., Sobel, R. A., Webster, J., Ousman, S. S., Becker, R. A., Steinman, et al  
2012; 287 (43): 36423-36434
- **Reversal of Paralysis and Reduced Inflammation from Peripheral Administration of beta-Amyloid in T(H)1 and T(H)17 Versions of Experimental Autoimmune Encephalomyelitis** *SCIENCE TRANSLATIONAL MEDICINE*  
Grant, J. L., Ghosn, E. E., Axtell, R. C., Herges, K., Kuipers, H. F., Woodling, N. S., Andreasson, K., Herzenberg, L. A., Herzenberg, L. A., Steinman, L.  
2012; 4 (145)
- **Janus-like opposing roles of CD47 in autoimmune brain inflammation in humans and mice** *JOURNAL OF EXPERIMENTAL MEDICINE*  
Han, M. H., Lundgren, D. H., Jaiswal, S., Chao, M., Graham, K. L., Garris, C. S., Axtell, R. C., Ho, P. P., Lock, C. B., Woodard, J. I., Brownell, S. E., Zoudilova, M., Hunt, et al  
2012; 209 (7): 1325-1334
- **Peroxisome proliferator-activated receptor (PPAR)alpha and -? regulate IFN? and IL-17A production by human T cells in a sex-specific way.** *Proceedings of the National Academy of Sciences of the United States of America*  
Zhang, M. A., Rego, D., Moshkova, M., Kebir, H., Chruscinski, A., Nguyen, H., Akkermann, R., Stanczyk, F. Z., Prat, A., Steinman, L., Dunn, S. E.  
2012; 109 (24): 9505-9510
- **Peroxisome proliferator-activated receptor (PPAR)alpha and -gamma regulate IFN gamma and IL-17A production by human T cells in a sex-specific way** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*  
Zhang, M. A., Rego, D., Moshkova, M., Kebir, H., Chruscinski, A., HoangKim Nguyen, H., Akkermann, R., Stanczyk, F. Z., Prat, A., Steinman, L., Dunn, S. E.  
2012; 109 (24): 9505-9510
- **Identification of Naturally Occurring Fatty Acids of the Myelin Sheath That Resolve Neuroinflammation** *SCIENCE TRANSLATIONAL MEDICINE*  
Ho, P. P., Kanter, J. L., Johnson, A. M., Srinagesh, H. K., Chang, E., Purdy, T. M., Van Haren, K., Wikoff, W. R., Kind, T., Khademi, M., Matloff, L. Y., Narayana, S., Hur, et al  
2012; 4 (137)
- **Protective effect of an elastase inhibitor in a neuromyelitis optica-like disease driven by a peptide of myelin oligodendroglial glycoprotein** *MULTIPLE SCLEROSIS JOURNAL*  
Herges, K., de Jong, B. A., Kolkowitz, I., Dunn, C., Mandelbaum, G., Ko, R. M., Maini, A., Han, M. H., Killestein, J., Polman, C., Goodyear, A. L., Dunn, J., Steinman, et al  
2012; 18 (4): 398-408
- **Therapeutic Effects of Systemic Administration of Chaperone alpha B-Crystallin Associated with Binding Proinflammatory Plasma Proteins** *JOURNAL OF BIOLOGICAL CHEMISTRY*  
Rothbard, J. B., Kurnellas, M. P., Brownell, S., Adams, C. M., Su, L., Axtell, R. C., Chen, R., Fathman, C. G., Robinson, W. H., Steinman, L.  
2012; 287 (13): 9708-9721
- **Optimization of current and future therapy for autoimmune diseases** *NATURE MEDICINE*  
Steinman, L., Merrill, J. T., McInnes, I. B., Peakman, M.  
2012; 18 (1): 59-65
- **Systemic augmentation of alpha B-crystallin provides therapeutic benefit twelve hours post-stroke onset via immune modulation** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*  
Arac, A., Brownell, S. E., Rothbard, J. B., Chen, C., Ko, R. M., Pereira, M. P., Albers, G. W., Steinman, L., Steinberg, G. K.  
2011; 108 (32): 13287-13292
- **Functional rescue of experimental ischemic optic neuropathy with alpha B-crystallin** *EYE*  
Pangratz-Fuehrer, S., Kaur, K., Ousman, S. S., Steinman, L., Liao, Y. J.  
2011; 25 (6): 809-817
- **Interferon-beta exacerbates Th17-mediated inflammatory disease** *TRENDS IN IMMUNOLOGY*  
Axtell, R. C., Raman, C., Steinman, L.  
2011; 32 (6): 272-277
- **Chaperone Activity of alpha B-Crystallin Is Responsible for Its Incorrect Assignment as an Autoantigen in Multiple Sclerosis** *JOURNAL OF IMMUNOLOGY*

- Rothbard, J. B., Zhao, X., Sharpe, O., Strohmaan, M. J., Kurnellas, M., Mellins, E. D., Robinson, W. H., Steinman, L.  
2011; 186 (7): 4263-4268
- **Modulation of postoperative cognitive decline via blockade of inflammatory cytokines outside the brain** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*  
Steinman, L.  
2010; 107 (48): 20595-20596
  - **Peroxisome proliferator-activated receptor delta limits the expansion of pathogenic Th cells during central nervous system autoimmunity** *JOURNAL OF EXPERIMENTAL MEDICINE*  
Dunn, S. E., Bhat, R., Straus, D. S., Sobel, R. A., Axtell, R., Johnson, A., Nguyen, K., Mukundan, L., Moshkova, M., Dugas, J. C., Chawla, A., Steinman, L.  
2010; 207 (8): 1599-1608
  - **Inverse vaccination, the opposite of Jenner's concept, for therapy of autoimmunity** *JOURNAL OF INTERNAL MEDICINE*  
Steinman, L.  
2010; 267 (5): 441-451
  - **T helper type 1 and 17 cells determine efficacy of interferon-beta in multiple sclerosis and experimental encephalomyelitis** *NATURE MEDICINE*  
Axtell, R. C., de Jong, B. A., Boniface, K., Van der Voort, L. F., Bhat, R., De Sarno, P., Naves, R., Han, M., Zhong, F., Castellanos, J. G., Mair, R., Christakos, A., Kolkowitz, et al  
2010; 16 (4): 406-U21
  - **Inhibitory role for GABA in autoimmune inflammation** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*  
Bhat, R., Axtell, R., Mitra, A., Miranda, M., Lock, C., Tsien, R. W., Steinman, L.  
2010; 107 (6): 2580-2585
  - **Innate and Adaptive Autoimmunity Directed to the Central Nervous System** *NEURON*  
Bhat, R., Steinman, L.  
2009; 64 (1): 123-132
  - **Blocking angiotensin-converting enzyme induces potent regulatory T cells and modulates TH1-and TH17-mediated autoimmunity** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*  
Platten, M., Youssef, S., Hur, E. M., Ho, P. P., Han, M. H., Lanz, T. V., Phillips, L. K., Goldstein, M. J., Bhat, R., Raine, C. S., Sobel, R. A., Steinman, L.  
2009; 106 (35): 14948-14953
  - **A molecular trio in relapse and remission in multiple sclerosis** *NATURE REVIEWS IMMUNOLOGY*  
Steinman, L.  
2009; 9 (6): 440-447
  - **Improved Efficacy of a Tolerizing DNA Vaccine for Reversal of Hyperglycemia through Enhancement of Gene Expression and Localization to Intracellular Sites** *JOURNAL OF IMMUNOLOGY*  
Solvason, N., Lou, Y., Peters, W., Evans, E., Martinez, J., Ramirez, U., Ocampo, A., Yun, R., Ahmad, S., Liu, E., Yu, L., Eisenbarth, G., Leviten, et al  
2008; 181 (12): 8298-8307
  - **Nuanced roles of cytokines in three major human brain disorders** *JOURNAL OF CLINICAL INVESTIGATION*  
Steinman, L.  
2008; 118 (11): 3557-3563
  - **A rush to judgment on Th17** *JOURNAL OF EXPERIMENTAL MEDICINE*  
Steinman, L.  
2008; 205 (7): 1517-1522
  - **Phase 2 trial of a DNA vaccine encoding myelin basic protein for multiple sclerosis** *ANNALS OF NEUROLOGY*  
Garren, H., Robinson, W. H., Krasulova, E., Havrdova, E., Nadj, C., Selmaj, K., Losy, J., Nadj, I., Radue, E., Kidd, B. A., Gianettoni, J., Tersini, K., Utz, et al  
2008; 63 (5): 611-620
  - **Proteomic analysis of active multiple sclerosis lesions reveals therapeutic targets** *NATURE*  
Han, M. H., Hwang, S., Roy, D. B., Lundgren, D. H., Price, J. V., Ousman, S. S., Fernald, G. H., Gerlitz, B., Robinson, W. H., Baranzini, S. E., Grinnell, B. W., Raine, C. S., Sobel, et al  
2008; 451 (7182): 1076-U2

- **Induction of antigen-specific tolerance in multiple sclerosis after immunization with DNA encoding myelin basic protein in a randomized, placebo-controlled phase 1/2 trial** *ARCHIVES OF NEUROLOGY*  
Bar-Or, A., Vollmer, T., Antel, J., Arnold, D. L., Bodner, C. A., Campagnolo, D., Gianettoni, J., Jalili, F., Kachuck, N., Lapierre, Y., Niino, M., Oger, J., Price, et al  
2007; 64 (10): 1407-1415
- **Protective and therapeutic role for alpha B-crystallin in autoimmune demyelination** *NATURE*  
Ousman, S. S., Tomooka, B. H., Van Noort, J. M., Wawrousek, E. F., O'Connor, K. C., Hafler, D. A., Sobel, R. A., Robinson, W. H., Steinman, L.  
2007; 448 (7152): 474-U7
- **Peroxisome proliferator-activated receptor (PPAR)alpha expression in T cells mediates gender differences in development of T cell-mediated autoimmunity** *JOURNAL OF EXPERIMENTAL MEDICINE*  
Dunn, S. E., Ousman, S. S., Sobel, R. A., Zuniga, L., Baranzini, S. E., Youssef, S., Crowell, A., Loh, J., Oksenberg, J., Steinman, L.  
2007; 204 (2): 321-330
- **A brief history of T(H)17, the first major revision in the T(H)1/T(H)2 hypothesis of T cell-mediated tissue damage** *NATURE MEDICINE*  
Steinman, L.  
2007; 13 (2): 139-145
- **Osteopontin-induced relapse and progression of autoimmune brain disease through enhanced survival of activated T cells** *NATURE IMMUNOLOGY*  
Hur, E. M., Youssef, S., Haws, M. E., Zhang, S. Y., Sobel, R. A., Steinman, L.  
2007; 8 (1): 74-83
- **Isoprenoids determine Th1/Th2 fate in pathogenic T cells, providing a mechanism of modulation of autoimmunity by atorvastatin** *JOURNAL OF EXPERIMENTAL MEDICINE*  
Dunn, S. E., Youssef, S., Goldstein, M. J., Prod'homme, T., Weber, M. S., Zamvil, S. S., Steinman, L.  
2006; 203 (2): 401-412
- **Lipid microarrays identify key mediators of autoimmune brain inflammation** *NATURE MEDICINE*  
Kanter, J. L., Narayana, S., Ho, P. P., Catz, I., Warren, K. G., Sobel, R. A., Steinman, L., Robinson, W. H.  
2006; 12 (1): 138-143
- **Treatment of autoimmune neuroinflammation with a synthetic tryptophan metabolite** *SCIENCE*  
Platten, M., Ho, P. P., Youssef, S., Fontoura, P., Garren, H., Hur, E. M., Gupta, R., Lee, L. Y., Kidd, B. A., Robinson, W. H., Sobel, R. A., Selley, M. L., Steinman, et al  
2005; 310 (5749): 850-855
- **Design of effective immunotherapy for human autoimmunity** *NATURE*  
Feldmann, M., Steinman, L.  
2005; 435 (7042): 612-619
- **Blocking adhesion molecules as therapy for multiple sclerosis: Natalizumab** *NATURE REVIEWS DRUG DISCOVERY*  
Steinman, L.  
2005; 4 (6): 510-U3
- **Immune therapy for autoimmune diseases** *SCIENCE*  
Steinman, L.  
2004; 305 (5681): 212-216
- **REVERSAL OF EXPERIMENTAL ALLERGIC ENCEPHALOMYELITIS WITH MONOCLONAL-ANTIBODY TO A T-CELL SUBSET MARKER** *SCIENCE*  
Waldor, M. K., Sriram, S., Hardy, R., Herzenberg, L. A., Herzenberg, L. A., Lanier, L., Lim, M., Steinman, L.  
1985; 227 (4685): 415-417
- **DISAPPEARANCE AND REAPPEARANCE OF B-CELLS AFTER INVIVO TREATMENT WITH MONOCLONAL ANTI-I-A ANTIBODIES** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA-BIOLOGICAL SCIENCES*  
Waldor, M. K., Hardy, R. R., Hayakawa, K., Steinman, L., Herzenberg, L. A., Herzenberg, L. A.  
1984; 81 (9): 2855-2858
- **INVIVO THERAPY WITH MONOCLONAL ANTI-I-A ANTIBODY SUPPRESSES IMMUNE-RESPONSES TO ACETYLCHOLINE-RECEPTOR** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA-BIOLOGICAL SCIENCES*  
Waldor, M. K., Sriram, S., McDevitt, H. O., Steinman, L.

1983; 80 (9): 2713-2717

- **DNA threads released by activated CD4(+) T lymphocytes provide autocrine costimulation** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*  
Costanza, M., Poliani, P. L., Portararo, P., Cappetti, B., Musio, S., Pagani, F., Steinman, L., Colombo, M. P., Pedotti, R., Sangaletti, S.  
2019; 116 (18): 8985–94
- **Immune tolerance in multiple sclerosis and neuromyelitis optica with peptide-loaded tolerogenic dendritic cells in a phase 1b trial** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*  
Zubizarreta, I., Florez-Grau, G., Vila, G., Cabezon, R., Espana, C., Andorra, M., Saiz, A., Llufrui, S., Sepulveda, M., Sola-Valls, N., Martinez-Lapiscina, E. H., Pulido-Valdeolivas, I., Casanova, et al  
2019; 116 (17): 8463–70
- **DNA threads released by activated CD4+ T lymphocytes provide autocrine costimulation.** *Proceedings of the National Academy of Sciences of the United States of America*  
Costanza, M., Poliani, P. L., Portararo, P., Cappetti, B., Musio, S., Pagani, F., Steinman, L., Colombo, M. P., Pedotti, R., Sangaletti, S.  
2019
- **Axonal and Myelin Neuroprotection by the Peptoid BN201 in Brain Inflammation.** *Neurotherapeutics : the journal of the American Society for Experimental NeuroTherapeutics*  
Villoslada, P., Vila, G., Colafrancesco, V., Moreno, B., Fernandez-Diez, B., Vazquez, R., Pertsovskaya, I., Zubizarreta, I., Pulido-Valdeolivas, I., Messeguer, J., Vendrell-Navarro, G., Frade, J. M., Lopez-Sanchez, et al  
2019
- **Ozanimod reduces rates of annualised relapse requiring steroids or hospitalisation versus interferon beta-1a: pooled results from two multicentre, randomised, double-blind, phase 3 studies in relapsing multiple sclerosis (SUNBEAM and RADIANCE)**  
Comi, G., Kappos, L., Hartung, H., Cree, B. C., Selmaj, K. W., Bar-Or, A., Steinman, L., Arnold, D. L., Montalban, X., Havrdova, E. K., Sheffield, J. K., Campagnolo, D., Ferguson, et al  
SAGE PUBLICATIONS LTD.2018: 462–63
- **Immunophenotypic signature revealed by cytometry by time of flight (CyTOF) in patients treated with dimethyl fumarate**  
Ajami, B., Carlson, A., Ho, P., Nolan, G., Steinman, L.  
SAGE PUBLICATIONS LTD.2018: 667
- **Impact of ozanimod on early and advanced relapsing multiple sclerosis: annualised relapse rate and MRI endpoints from two randomised, multicentre, doubleblind, Phase 3 studies (SUNBEAM and RADIANCE)**  
Comi, G., Kappos, L., Cree, B. C., Arnold, D. L., Selmaj, K. W., Bar-Or, A., Steinman, L., Hartung, H., Montalban, X., Havrdova, E. K., Ferguson, B., Sheffield, J. K., Cohen, et al  
SAGE PUBLICATIONS LTD.2018: 671–72
- **CSF cytokine profile in MOG-IgG plus neurological disease is similar to AQP4-IgG+ NMOSD but distinct from MS: a cross-sectional study and potential therapeutic implications** *JOURNAL OF NEUROLOGY NEUROSURGERY AND PSYCHIATRY*  
Kaneko, K., Sato, D., Nakashima, I., Ogawa, R., Akaishi, T., Takai, Y., Nishiyama, S., Takahashi, T., Misu, T., Kuroda, H., Tanaka, S., Nomura, K., Hashimoto, et al  
2018; 89 (9): 927–36
- **Mining the cancer immuno-responsome: The identification of functional antitumor antibodies from patients receiving checkpoint inhibitors**  
Baia, G., Manning-Bog, A., Scholz, A., DeFalco, J., Harbell, M., Zhang, D., Chu, F., Millare, B., Sumi, M., Zuno, P., Sapugay, J., Kim, D., Leung, et al  
AMER ASSOC CANCER RESEARCH.2018
- **Efficacy of Ozanimod versus Interferon beta-1a by DMT treatment experience and EDSS categorisation from a multicenter, randomised, double-blind, phase-3 study of relapsing Multiple Sclerosis**  
Hartung, H., Cohen, J. A., Comi, G., Bar-Or, A., Selmaj, K. W., Arnold, D. L., Steinman, L., Montalban, X., Havrdova, E. K., Sheffield, J. K., Huang, V., Cree, B. C., Kappos, et al  
WILEY.2018: 69
- **Efficacy of Ozanimod Versus Interferon beta-1a by Prior Treatment and Baseline Disability in Two Multicenter, Randomized, Double-Blind, Parallel-Group, Active-Controlled, Double-Dummy Phase 3 Studies in Relapsing Multiple Sclerosis (SUNBEAM and RADIANCE Part B)**  
Kappos, L., Selmaj, K., Bar-Or, A., Comi, G., Arnold, D., Steinman, L., Hartung, H., Montalban, X., Havrdova, E., Sheffield, J., Raghupathi, K., Cree, B., Cohen, et al  
LIPPINCOTT WILLIAMS & WILKINS.2018



- **Clinical and Magnetic Resonance Imaging Results From RADIANCE Part B, a Multicenter, Randomized, Double-Blind, Phase 3 Trial of Ozanimod Versus Intramuscular Interferon beta-1a in Relapsing Multiple Sclerosis (RMS)**  
Cohen, J., Comi, G., Selmaj, K., Bar-Or, A., Arnold, D., Steinman, L., Hartung, H., Montalban, X., Havrdova, E., Cree, B., Sheffield, J., Raghupathi, K., Kappos, et al  
LIPPINCOTT WILLIAMS & WILKINS.2018
- **Ozanimod Demonstrates Efficacy and Safety in a Multicenter, Randomized, Double-Blind, Double-Dummy, Active-Controlled Phase 3 Trial of Relapsing Multiple Sclerosis (SUNBEAM)**  
Comi, G., Arnold, D., Cree, B., Kappos, L., Selmaj, K., Bar-Or, A., Steinman, L., Hartung, H., Montalban, X., Havrdova, E., Sheffield, J., Raghupathi, K., Cohen, et al  
LIPPINCOTT WILLIAMS & WILKINS.2018
- **Safety of Ozanimod Versus Interferon beta-1a in Two Multicenter, Randomized, Double-Blind, Parallel-Group, Active-Controlled, Double-Dummy Phase 3 Studies in Relapsing Multiple Sclerosis (SUNBEAM and RADIANCE Part B)**  
Cree, B., Bar-Or, A., Comi, G., Selmaj, K., Arnold, D., Steinman, L., Hartung, H., Montalban, X., Havrdova, E., Sheffield, J., Raghupathi, K., Kappos, L., Cohen, et al  
LIPPINCOTT WILLIAMS & WILKINS.2018
- **Regulator of Oligodendrocyte Maturation, Mir-219, a Potential Biomarker for MS**  
Bruinsma, I. B., van Dijk, M., van de Lisdonk, T., Haverkort, S., Runia, T., Steinman, L., Hintzen, R., Killestein, J., Verbeek, M., Teunissen, C., de Jong, B. A.  
SAGE PUBLICATIONS LTD.2018: 11
- **Non-progressing cancer patients have persistent B cell responses expressing shared antibody paratopes that target public tumor antigens** *CLINICAL IMMUNOLOGY*  
DeFalco, J., Harbell, M., Manning-Bog, A., Baia, G., Scholz, A., Millare, B., Sumi, M., Zhang, D., Chu, F., Dowd, C., Zuno-Mitchell, P., Kim, D., Leung, et al  
2018; 187: 37–45
- **Nonclassical monocytes: are they the next therapeutic targets in multiple sclerosis?** *IMMUNOLOGY AND CELL BIOLOGY*  
Ajami, B., Steinman, L.  
2018; 96 (2): 125–27
- **Ozanimod Demonstrates Efficacy and Safety in a Phase 3 Trial of Relapsing Multiple Sclerosis (SUNBEAM)**  
Comi, G., Arnold, D. L., Cree, B. C., Kappos, L., Selmaj, K. W., Bar-Or, A., Steinman, L., Hartung, H., Montalban, X., Havrdova, E. K., Sheffield, J. K., Raghupathi, K., Cohen, et al  
SAGE PUBLICATIONS LTD.2018: 20–21
- **Safety of Ozanimod Versus Interferon beta-1a in Phase 3 Studies in Relapsing Multiple Sclerosis (SUNBEAM and RADIANCE Part B)**  
Cree, B. C., Bar-Or, A., Comi, G., Selmaj, K. W., Arnold, D. L., Steinman, L., Hartung, H., Montalban, X., Havrdova, E. K., Sheffield, J. K., Raghupathi, K., Kappos, L., Cohen, et al  
SAGE PUBLICATIONS LTD.2018: 24–25
- **Efficacy and safety of ozanimod in multiple sclerosis: Dose-blinded extension of a randomized phase II study.** *Multiple sclerosis (Houndmills, Basingstoke, England)*  
Cohen, J. A., Comi, G., Arnold, D. L., Bar-Or, A., Selmaj, K. W., Steinman, L., Havrdová, E. K., Cree, B. A., Montalbán, X., Hartung, H. P., Huang, V., Frohna, P., Skolnick, et al  
2018: 1352458518789884
- **Amelioration of ongoing experimental autoimmune encephalomyelitis with fluoxetine** *JOURNAL OF NEUROIMMUNOLOGY*  
Bhat, R., Mahapatra, S., Axtell, R. C., Steinman, L.  
2017; 313: 77–81
- **Regulator of oligodendrocyte maturation, miR-219, a potential biomarker for MS** *JOURNAL OF NEUROINFLAMMATION*  
Bruinsma, I. B., van Dijk, M., Bridel, C., de Lisdonk, T., Haverkort, S. Q., Runia, T. F., Steinman, L., Hintzen, R. Q., Killestein, J., Verbeek, M. M., Teunissen, C. E., de Jong, B. A.  
2017; 14
- **Ozanimod vs interferon beta-1a: clinical and MRI results of RADIANCE part B - A 2-year Phase 3 trial in relapsing multiple sclerosis**  
Cohen, J. A., Comi, G., Selmaj, K. W., Bar-Or, A., Arnold, D. L., Steinman, L., Hartung, H., Montalban, X., Havrdova, E. K., Cree, B. C., Sheffield, J. K., Raghupathi, K., Kappos, et al  
SAGE PUBLICATIONS LTD.2017: 981–82

- **Lower baseline levels of vitamin D are associated with a higher risk of new lesion development in patients with relapsing multiple sclerosis**  
Southworth, H., Aranda, R., Frohna, P., Scott, F. L., Meadows, K., Steinman, L., Opitck, G. J.  
SAGE PUBLICATIONS LTD.2017: 295
- **Molecular signature of Epstein-Barr virus infection in multiple sclerosis brain lesions**  
Han, M. H., Moreno, M., Or-Geva, N., Aftab, B., Croze, E., Khanna, R., Steinman, L.  
SAGE PUBLICATIONS LTD.2017: 490
- **Ozanimod demonstrates efficacy and safety in a phase 3 trial of relapsing multiple sclerosis (SUNBEAM)**  
Comi, G., Kappos, L., Selmaj, K. W., Bar-Or, A., Arnold, D. L., Steinman, L., Hartung, H., Montalban, X., Havrdova, E., Cree, B. C., Sheffield, J. K., Raghupathi, K., Cohen, et al  
SAGE PUBLICATIONS LTD.2017: 73–74
- **Cardiac safety of ozanimod in a QT/QTc trial and a phase 2 trial in RMS**  
Comi, G., Kappos, L., Hartung, H., Arnold, D. L., Bar-Or, A., Selmaj, K. W., Steinman, L., Havrdova, E., Cree, B. C., Montalban, X., Skolnick, B. E., Agafonova, N., Cohen, et al  
SAGE PUBLICATIONS LTD.2017: 377–78
- **Ozanimod demonstrates preservation of brain volume at 1 and 2 years in two Phase 3 trials of relapsing multiple sclerosis (SUNBEAM and RADIANCE)**  
Arnold, D. L., Cohen, J. A., Comi, G., Selmaj, K. W., Bar-Or, A., Steinman, L., Hartung, H., Montalban, X., Havrdova, E. K., Cree, B. C., Sheffield, J. K., Ding, N., Kappos, et al  
SAGE PUBLICATIONS LTD.2017: 986–87
- **Iron-sulfur glutaredoxin 2 protects oligodendrocytes against damage induced by nitric oxide release from activated microglia *GLIA***  
Lepka, K., Volbracht, K., Bill, E., Schneider, R., Rios, N., Hildebrandt, T., Ingwersen, J., Prozorovski, T., Lillig, C., van Horssen, J., Steinman, L., Hartung, H., Radi, et al  
2017; 65 (9): 1521–34
- **Induction of Paralysis and Visual System Injury in Mice by T Cells Specific for Neuromyelitis Optica Autoantigen Aquaporin-4 *JOVE-JOURNAL OF VISUALIZED EXPERIMENTS***  
Sagan, S. A., Cruz-Herranz, A., Spencer, C. M., Ho, P. P., Steinman, L., Green, A. J., Sobel, R. A., Zamvil, S. S.  
2017
- **Induction of New Autoimmune Diseases After Alemtuzumab Therapy for Multiple Sclerosis Learning From Adversity *JAMA NEUROLOGY***  
Steinman, L.  
2017; 74 (8): 907–8
- **Cardiac profile of ozanimod: Overview of pharmacologic and clinical trial data**  
Comi, G., Kappos, L., Hartung, H., Arnold, D. L., Bar-or, A., Selmaj, K. W., Steinman, L., Havrdova, E., Cree, B., Skolnick, B. E., Cohen, J. A.  
WILEY.2017: 492–93
- **Treatment with anti-FcepsilonRIalpha antibody exacerbates EAE and T-cell immunity against myelin. *Neurology(R) neuroimmunology & neuroinflammation***  
Musio, S., Costanza, M., Poliani, P. L., Fontana, E., Cominelli, M., Abolafio, G., Steinman, L., Pedotti, R.  
2017; 4 (3): e342
- **T Cell-Transfer Experimental Autoimmune Encephalomyelitis: Pillar of Multiple Sclerosis and Autoimmunity *JOURNAL OF IMMUNOLOGY***  
Hohlfeldt, R., Steinman, L.  
2017; 198 (9): 3381–83
- **The emergence of neuroepidemiology, neurovirology and neuroimmunology: the legacies of John F. Kurtzke and Richard 'Dick' T. Johnson *JOURNAL OF NEUROLOGY***  
Kildebeck, E. J., Narayan, R., Nath, A., Weiner, H., Beh, S., Calabresi, P. A., Steinman, L., Major, E. O., Frohman, T. C., Frohman, E. M.  
2017; 264 (4): 817-828
- **Time correlation between mononucleosis and initial symptoms of MS *NEUROLOGY-NEUROIMMUNOLOGY & NEUROINFLAMMATION***  
Endriz, J., Ho, P. P., Steinman, L.  
2017; 4 (3): e308
- **PH20 is not expressed in murine CNS and oligodendrocyte precursor cells *ANNALS OF CLINICAL AND TRANSLATIONAL NEUROLOGY***

- Marella, M., Ouyang, J., Zombeck, J., Zhao, C., Huang, L., Connor, R. J., Phan, K. B., Jorge, M. C., Printz, M. A., Paladini, R. D., Gelb, A. B., Huang, Z., Frost, et al  
2017; 4 (3): 191-211
- **Phosphorylation of aB-crystallin supports reactive astrogliosis in demyelination.** *Proceedings of the National Academy of Sciences of the United States of America*  
Kuipers, H. F., Yoon, J., van Horssen, J., Han, M. H., Bollyky, P. L., Palmer, T. D., Steinman, L.  
2017; 114 (9): E1745-E1754
  - **Early Development of a Novel Serum Based Test to Measure Multiple Sclerosis Disease Activity**  
Axtell, R. C., Steinman, L., Hagstrom, W. A., Schmidt, R., Walker, M.  
SAGE PUBLICATIONS LTD.2017: 13
  - **The RADIANCE and SUNBEAM phase 3 studies of ozanimod in relapsing multiple sclerosis: study design and baseline characteristics**  
Cree, B. C., Cohen, J. A., Selmaj, K., Kopicko, J., Ziemssen, T., De Stefano, N., Bar-Or, A., Comi, G., Arnold, D. L., Steinman, L., Hartung, H., Montalban, X., Harvrdova, et al  
SAGE PUBLICATIONS LTD.2017: 24–25
  - **Adrenocorticotrophic hormone versus methylprednisolone added to interferon beta in patients with multiple sclerosis experiencing breakthrough disease: a randomized, rater-blinded trial** *THERAPEUTIC ADVANCES IN NEUROLOGICAL DISORDERS*  
Berkovich, R., Bakshi, R., Amezcua, L., Axtell, R. C., Cen, S. Y., Tauhid, S., Neema, M., Steinman, L.  
2017; 10 (1): 3–17
  - **Regulator of oligodendrocyte maturation, miR-219, a potential biomarker for MS.** *Journal of neuroinflammation*  
Bruinsma, I. B., van Dijk, M., Bridel, C., van de Lisdonk, T., Haverkort, S. Q., Runia, T. F., Steinman, L., Hintzen, R. Q., Killestein, J., Verbeek, M. M., Teunissen, C. E., de Jong, B. A.  
2017; 14 (1): 235
  - **Induction of Paralysis and Visual System Injury in Mice by T Cells Specific for Neuromyelitis Optica Autoantigen Aquaporin-4.** *Journal of visualized experiments : JoVE*  
Sagan, S. A., Cruz-Herranz, A., Spencer, C. M., Ho, P. P., Steinman, L., Green, A. J., Sobel, R. A., Zamvil, S. S.  
2017
  - **Tolerance checkpoint bypass permits emergence of pathogenic T cells to neuromyelitis optica autoantigen aquaporin-4** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*  
Sagan, S. A., Winger, R. C., Cruz-Herranz, A., Nelson, P. A., Hagberg, S., Miller, C. N., Spencer, C. M., Ho, P. P., Bennett, J. L., Levy, M., Levin, M. H., Verkman, A. S., Steinman, et al  
2016; 113 (51): 14781-14786
  - **An interferon-beta-resistant and NLRP3 inflammasome-independent subtype of EAE with neuronal damage** *NATURE NEUROSCIENCE*  
Inoue, M., Chen, P., Siecinski, S., Li, Q., Liu, C., Steinman, L., Gregory, S. G., Benners, E., Shinohara, M. L.  
2016; 19 (12): 1599-1609
  - **An interferon-β-resistant and NLRP3 inflammasome-independent subtype of EAE with neuronal damage.** *Nature neuroscience*  
Inoue, M., Chen, P., Siecinski, S., Li, Q., Liu, C., Steinman, L., Gregory, S. G., Benner, E., Shinohara, M. L.  
2016
  - **The emergence of neuroepidemiology, neurovirology and neuroimmunology: the legacies of John F. Kurtzke and Richard 'Dick' T. Johnson.** *Journal of neurology*  
Kildebeck, E. J., Narayan, R., Nath, A., Weiner, H., Beh, S., Calabresi, P. A., Steinman, L., Major, E. O., Frohman, T. C., Frohman, E. M.  
2016: -?
  - **Restoring immune tolerance in neuromyelitis optica: Part II.** *Neurology(R) neuroimmunology & neuroinflammation*  
Bar-Or, A., Steinman, L., Behne, J. M., Benitez-Ribas, D., Chin, P. S., Clare-Salzler, M., Healey, D., Kim, J. I., Kranz, D. M., Lutterotti, A., Martin, R., Schippling, S., Villoslada, et al  
2016; 3 (5)
  - **Restoring immune tolerance in neuromyelitis optica Part I** *NEUROLOGY-NEUROIMMUNOLOGY & NEUROINFLAMMATION*  
Steinman, L., Bar-Or, A., Behne, J. M., Benitez-Ribas, D., Chin, P. S., Clare-Salzler, M., Healey, D., Kim, J. I., Kranz, D. M., Lutterotti, A., Martin, R., Schippling, S., Villoslada, et al  
2016; 3 (5): e276

- **Genetic background modulates outcome of therapeutic amyloid peptides in treatment of neuroinflammation** *JOURNAL OF NEUROIMMUNOLOGY*  
Kraus, A., Race, B., Phillips, K., Winkler, C., Saturday, G., Kurnellas, M., Rothbard, J. B., Groveman, B. R., Steinman, L., Caughey, B.  
2016; 298: 42-50
- **The pharmacokinetics and dosing of oral 4-methylumbelliferone for inhibition of hyaluronan synthesis in mice.** *Clinical and experimental immunology*  
Kuipers, H. F., Nagy, N., Ruppert, S. M., Sunkari, V. G., Marshall, P. L., Gebe, J. A., Ishak, H. D., Keswani, S. G., Bollyky, J., Frymoyer, A. R., Wight, T. N., Steinman, L., Bollyky, et al  
2016; 185 (3): 372-381
- **Early development of a novel serum based test to measure multiple sclerosis disease activity.**  
Axtell, R. C., Steinman, L., Hagstrom, W. A., Schmidt, R. B., Walker, M.  
SAGE PUBLICATIONS LTD.2016: 60-61
- **CEACAM1 mediates B cell aggregation in central nervous system autoimmunity** *SCIENTIFIC REPORTS*  
Rovituso, D. M., Scheffler, L., Wunsch, M., Kleinschnitz, C., Doerck, S., Ulzheimer, J., Bayas, A., Steinman, L., Erguen, S., Kuersten, S.  
2016; 6: 29847
- **Beginning of the end of two-stage theory purporting that inflammation then degeneration explains pathogenesis of progressive multiple sclerosis** *CURRENT OPINION IN NEUROLOGY*  
Steinman, L., Zamvil, S. S.  
2016; 29 (3): 340-344
- **Development of Th17-Associated Interstitial Kidney Inflammation in Lupus-Prone Mice Lacking the Gene Encoding STAT-1** *ARTHRITIS & RHEUMATOLOGY*  
Yiu, G., Rasmussen, T. K., Ajami, B., Haddon, D. J., Chu, A. D., Tangsombatvisit, S., Haynes, W. A., Diep, V., Steinman, L., Faix, J., Utz, P. J.  
2016; 68 (5): 1233-1244
- **Cytokine profiles show heterogeneity of interferon-beta response in multiple sclerosis patients** *NEUROLOGY-NEUROIMMUNOLOGY & NEUROINFLAMMATION*  
Hegen, H., Adrianto, I., Lessard, C. J., Millonig, A., Bertolotto, A., Comabella, M., Giovannoni, G., Guger, M., Hoelzl, M., Khalil, M., Fazekas, F., Killestein, J., Lindberg, et al  
2016; 3 (2): e202
- **Anti-Insulin Immune Responses Are Detectable in Dogs with Spontaneous Diabetes** *PLOS ONE*  
Kim, J., Furrow, E., Ritt, M. G., Utz, P. J., Robinson, W. H., Yu, L., Eckert, A., Stuebner, K., O'Brien, T. D., Steinman, L., Modiano, J. F.  
2016; 11 (3)
- **The Safety of Adjuvanted Vaccines Revisited: Vaccine-Induced Narcolepsy** *ISRAEL MEDICAL ASSOCIATION JOURNAL*  
Ahmed, S. S., Montomoli, E., Pasini, F. L., Steinman, L.  
2016; 18 (3-4): 216-220
- **Multiplexed autoantigen microarrays identify HLA as a key driver of anti-desmoglein and -non-desmoglein reactivities in pemphigus** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*  
Sajda, T., Hazelton, J., Patel, M., Seiffert-Sinha, K., Steinman, L., Robinson, W., Haab, B. B., Sinha, A. A.  
2016; 113 (7): 1859-1864
- **Hyaluronan synthesis is necessary for autoreactive T-cell trafficking, activation, and Th1 polarization.** *Proceedings of the National Academy of Sciences of the United States of America*  
Kuipers, H. F., Rieck, M., Gurevich, I., Nagy, N., Butte, M. J., Negrin, R. S., Wight, T. N., Steinman, L., Bollyky, P. L.  
2016; 113 (5): 1339-1344
- **Provision of IL-10 by B cells are necessary for the therapeutic efficacy of amyloid fibrils in autoimmune encephalomyelitis**  
Kurnellas, M. P., Rothbard, J. B., Ghosn, E., Steinman, L.  
SAGE PUBLICATIONS LTD.2016: 31-32
- **Safety and immunologic effects of high- vs low-dose cholecalciferol in multiple sclerosis.** *Neurology*  
Sotirchos, E. S., Bhargava, P., Eckstein, C., Van Haren, K., Baynes, M., Ntranos, A., Gocke, A., Steinman, L., Mowry, E. M., Calabresi, P. A.  
2016; 86 (4): 382-390
- **Identification of Candidate Tolerogenic CD8(+) T Cell Epitopes for Therapy of Type 1 Diabetes in the NOD Mouse Model.** *Journal of diabetes research*  
Yu, C., Burns, J. C., Robinson, W. H., Utz, P. J., Ho, P. P., Steinman, L., Frey, A. B.

2016; 2016: 9083103-?

- **Hyaluronan synthesis is necessary for autoreactive T-cell trafficking, activation, and Th1 polarization.** *Proceedings of the National Academy of Sciences of the United States of America*  
Kuipers, H. F., Rieck, M., Gurevich, I., Nagy, N., Butte, M. J., Negrin, R. S., Wight, T. N., Steinman, L., Bollyky, P. L.  
2016
- **EXPLORING THE ANTI-INFLAMMATORY EFFECTS OF THE AMYLOIDOGENIC HEXAPEPTIDE, AMYLIN28-33, IN SEPSIS**  
Mahapatra, S., Kurnellas, M., Rothbard, J., Cornfield, D., Steinman, L.  
LIPPINCOTT WILLIAMS & WILKINS.2016: 321
- **Mechanistic insights into influenza vaccine-associated narcolepsy** *HUMAN VACCINES & IMMUNOTHERAPEUTICS*  
Ahmed, S. S., Steinman, L.  
2016; 12 (12): 3196-3201
- **Response to comment on "Antibodies to influenza nucleoprotein cross-react with human hypocretin receptor 2".** *Science translational medicine*  
Steinman, L., Ahmed, S. S.  
2015; 7 (314): 314lr2
- **Tissue Transglutaminase contributes to experimental multiple sclerosis pathogenesis and clinical outcome by promoting macrophage migration** *BRAIN BEHAVIOR AND IMMUNITY*  
van Strien, M. E., de Vries, H. E., Chrobok, N. L., Bol, J. G., Breve, J. J., van der Pol, S. M., Kooij, G., van Buul, J. D., Karpuj, M., Steinman, L., Wilhelmus, M. M., Sestito, C., Drukarch, et al  
2015; 50: 141-154
- **PATIENT-REPORTED OUTCOMES AND DISABILITY IN MULTIPLE SCLEROSIS**  
Scolding, N., Wang, H., Liu, Y., Steinman, L.  
BMJ PUBLISHING GROUP.2015
- **Parsing Physiological Functions of Erythropoietin One Domain at a Time (vol 12, pg 848, 2015)** *NEUROTHERAPEUTICS*  
Steinman, L.  
2015; 12 (4): 911
- **Parsing Physiological Functions of Erythropoietin One Domain at a Time** *NEUROTHERAPEUTICS*  
Steinman, L.  
2015; 12 (4): 848-49
- **The re-emergence of antigen-specific tolerance as a potential therapy for MS** *MULTIPLE SCLEROSIS JOURNAL*  
Steinman, L.  
2015; 21 (10): 1223-1238
- **Provision of IL-10 by B-cells are necessary for the therapeutic efficacy of amyloid fibrils in autoimmune encephalomyelitis**  
Kurnellas, M., Rothbard, J., Steinman, L.  
SAGE PUBLICATIONS LTD.2015: 797
- **Analysis of peripheral blood with CyToF combining flow cytometry and mass spectrometry in individuals ON Tecfidera**  
Ajami, B., Samusik, N., Ho, P., Nolan, G., Steinman, L.  
SAGE PUBLICATIONS LTD.2015: 786
- **mir-181a-1/b-1 Modulates Tolerance through Opposing Activities in Selection and Peripheral T Cell Function** *JOURNAL OF IMMUNOLOGY*  
Schaffert, S. A., Loh, C., Wang, S., Arnold, C. P., Axtell, R. C., Newell, E. W., Nolan, G., Ansel, K. M., Davis, M. M., Steinman, L., Chen, C.  
2015; 195 (4): 1470-1479
- **HDL-bound sphingosine-1-phosphate restrains lymphopoiesis and neuroinflammation.** *Nature*  
Blaho, V. A., Galvani, S., Engelbrecht, E., Liu, C., Swendeman, S. L., Kono, M., Proia, R. L., Steinman, L., Han, M. H., Hla, T.  
2015; 523 (7560): 342-346
- **Gaps in knowledge and prospects for research of adjuvanted vaccines** *VACCINE*  
Seder, R., Reed, S. G., O'Hagan, D., Malyala, P., D'Oro, U., Laera, D., Abrignani, S., Cerundolo, V., Steinman, L., Bertholet, S.  
2015; 33: B40-B43

- **Critical role for prokineticin 2 in CNS autoimmunity.** *Neurology® neuroimmunology & neuroinflammation*  
Abou-Hamdan, M., Costanza, M., Fontana, E., Di Dario, M., Musio, S., Congiu, C., Onnis, V., Lattanzi, R., Radaelli, M., Martinelli, V., Salvadori, S., Negri, L., Poliani, et al  
2015; 2 (3)
- **Cerebrospinal Fluid Aquaporin-4 Antibody Levels in Neuromyelitis Optica Attacks**  
Sato, D. K., Callegaro, D., Jorge, F. H., Nakashima, I., Nishiyama, S., Takahashi, T., Simm, R. F., Apostolos-Pereira, S. L., Misu, T., Steinman, L., Aoki, M., Fujihara, K.  
SAGE PUBLICATIONS LTD.2015: 827
- **CD4 cell response to interval therapy with natalizumab** *ANNALS OF CLINICAL AND TRANSLATIONAL NEUROLOGY*  
Berkovich, R., Togasaki, D. M., Cen, S. Y., Steinman, L.  
2015; 2 (5): 570–74
- **IFN- $\beta$  Treatment Requires B Cells for Efficacy in Neuroautoimmunity.** *Journal of immunology*  
Schubert, R. D., Hu, Y., Kumar, G., Szeto, S., Abraham, P., Winderl, J., Guthridge, J. M., Pardo, G., Dunn, J., Steinman, L., Axtell, R. C.  
2015; 194 (5): 2110-2116
- **Prolactin: A versatile regulator of inflammation and autoimmune pathology** *AUTOIMMUNITY REVIEWS*  
Costanza, M., Binart, N., Steinman, L., Pedotti, R.  
2015; 14 (3): 223-230
- **B-Lymphocyte-Mediated Delayed Cognitive Impairment following Stroke.** *journal of neuroscience*  
Doyle, K. P., Quach, L. N., Solé, M., Axtell, R. C., Nguyen, T. V., Soler-Llavina, G. J., Jurado, S., Han, J., Steinman, L., Longo, F. M., Schneider, J. A., Malenka, R. C., Buckwalter, et al  
2015; 35 (5): 2133-2145
- **Role reversal: infiltrating T cells protect the brain** *JOURNAL OF CLINICAL INVESTIGATION*  
Steinman, L.  
2015; 125 (2): 493–94
- **A century of pavlovian experiments forming a circuit from the elucidation of neural reflexes to pharmaceuticals and electroceuticals to treat diseases** *BRAIN BEHAVIOR AND IMMUNITY*  
Steinman, L.  
2015; 44: 17–18
- **The re-emergence of antigen-specific tolerance as a potential therapy for MS.** *Multiple sclerosis (Houndmills, Basingstoke, England)*  
Steinman, L.  
2015; 21 (10): 1223–38
- **THE AMYLOIDOGENIC HEXAPEPTIDE, AMYLIN 28-33, AMELIORATES SEPSIS**  
Mahapatra, S., Kurnellas, M., Rothbard, J., Steinman, L.  
LIPPINCOTT WILLIAMS & WILKINS.2015: 198
- **Self-Assembling Peptides Form Immune Suppressive Amyloid Fibrils Effective in Autoimmune Encephalomyelitis.** *Current topics in behavioral neurosciences*  
Kurnellas, M. P., Rothbard, J. B., Steinman, L.  
2015; 26: 221-232
- **Gene expression analysis of histamine receptors in peripheral blood mononuclear cells from individuals with clinically-isolated syndrome and different stages of multiple sclerosis** *JOURNAL OF NEUROIMMUNOLOGY*  
Costanza, M., Di Dario, M., Steinman, L., Farina, C., Pedotti, R.  
2014; 277 (1-2): 186-188
- **Going viral and the fatal vulnerability of neurons from immunity, not from infection** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*  
Steinman, L.  
2014; 111 (48): 16982–83
- **From defining antigens to new therapies in multiple sclerosis: Honoring the contributions of Ruth Arnon and Michael Sela** *JOURNAL OF AUTOIMMUNITY*

- Steinman, L., Shoenfeld, Y.  
2014; 54: 1-7
- **Conflicting consequences of immunity to cancer versus autoimmunity to neurons: Insights from paraneoplastic disease** *EUROPEAN JOURNAL OF IMMUNOLOGY*  
Steinman, L.  
2014; 44 (11): 3201-5
  - **Genome-wide RNA expression profiling in human grey and white matter tissue reveals a role for PSA-NCAM dysregulation in MS pathogenesis**  
Bruinsma, I., Eijssink, V., Kooi, E., Baranzini, S., Ji, X., Axtell, R., Han, M., Kuipers, H., Sobel, R., Polman, C., Geurts, J., Martens, G., Poelmans, et al  
ELSEVIER SCIENCE BV.2014: 180-81
  - **Gene expression analysis of histamine receptors in peripheral blood mononuclear cells from clinically-isolated syndrome and multiple sclerosis patients**  
Costanza, M., Di Dario, M., Steinman, L., Farina, C., Pedotti, R.  
ELSEVIER SCIENCE BV.2014: 146
  - **An important role for prokineticin 2 in autoimmune CNS demyelination**  
Abou-hamdan, M., Costanza, M., Fontana, E., Musio, S., Di Dario, M., Congiu, C., Onnis, V., Lattanzi, R., Negri, L., Poliani, P., Farina, C., Balboni, G., Steinman, et al  
ELSEVIER SCIENCE BV.2014: 131
  - **Differential phosphorylation of alpha B-crystallin in astrocytes and oligodendrocytes suggests a diversity in its biological function**  
Kuipers, H. F., Yoon, J., Winderl, J., Van Horssen, J., Han, M. H., Palmer, T. D., Steinman, L.  
ELSEVIER SCIENCE BV.2014: 157-58
  - **The role of hyaluronan and 4-methylumbelliferone treatment in multiple sclerosis**  
Kuipers, H. F., Rieck, M., Steinman, L., Bollyky, P. L.  
ELSEVIER SCIENCE BV.2014: 64-65
  - **Decreased miR-219 expression in MS: Clinical implications?**  
Bruinsma, I., Van Vugt, S., Ter Burg, H., De Lisdonk, T., Kooi, E., Baranzini, S., Ji, X., Geurts, J., Hintzen, R., Verbeek, M., Steinman, L., De Jong, B.  
ELSEVIER SCIENCE BV.2014: 111
  - **Why are prions and amyloid structures immune suppressive and other intriguing questions facing neuroimmunologists in the future** *REVUE NEUROLOGIQUE*  
Steinman, L.  
2014; 170 (10): 602-607
  - **Thymic Epithelium Determines a Spontaneous Chronic Neuritis in Icam1(tm1Jcgr)NOD Mice** *JOURNAL OF IMMUNOLOGY*  
Horste, G. M., Mausberg, A. K., Cordes, S., El-Haddad, H., Partke, H., Leussink, V. I., Roden, M., Martin, S., Steinman, L., Hartung, H., Kieseier, B. C.  
2014; 193 (6): 2678-2690
  - **Defining clinical meaning of patient-reported outcomes with disability assessment in multiple sclerosis: an analysis of the CARE-MS II study**  
Steinman, L., Wang, H., Liu, Y., Palmer, J., Zhang, Q., CARE-MS II Investigators  
SAGE PUBLICATIONS LTD.2014: 419
  - **Greater cost savings associated with disability improvement in patients treated with alemtuzumab versus interferon beta-1a**  
Steinman, L., Herrera, V., Selzer, M., Zhang, Q., Margolin, D. H., CARE MS II Investigators  
SAGE PUBLICATIONS LTD.2014: 71
  - **Cerebrospinal Fluid Aquaporin-4 Antibody Levels in Neuromyelitis Optica Attacks** *ANNALS OF NEUROLOGY*  
Sato, D. K., Callegaro, D., de Haidar Jorge, F. M., Nakashima, I., Nishiyama, S., Takahashi, T., Simm, R. F., Apostolos-Pereira, S. L., Misu, T., Steinman, L., Aoki, M., Fujihara, K.  
2014; 76 (2): 305-309
  - **Janus faces of amyloid proteins in neuroinflammation.** *Journal of clinical immunology*  
Steinman, L., Rothbard, J. B., Kurnellas, M. P.  
2014; 34: S61-3
  - **Janus faces of amyloid proteins in neuroinflammation.** *Journal of clinical immunology*  
Steinman, L., Rothbard, J. B., Kurnellas, M. P.

2014; 34: 61-63

- **Narcolepsy, 2009 A(H1N1) pandemic influenza, and pandemic influenza vaccinations: What is known and unknown about the neurological disorder, the role for autoimmunity, and vaccine adjuvants** *JOURNAL OF AUTOIMMUNITY*  
Ahmed, S. S., Schur, P. H., MacDonald, N. E., Steinman, L.  
2014; 50: 1-11
- **Serum biomarkers predict IFN $\beta$  treatment response in patients with multiple sclerosis**  
Hegen, H., Axtell, R., Hu, Y., Millonig, A., Bertolotto, A., Comabella, M., Giovanonni, G., Guger, M., Hoelzl, M., Khalil, M., Killestein, J., Lindberg, R., Malucchi, et al  
WILEY-BLACKWELL.2014: 57
- **Serum biomarkers predict IFN $\beta$  treatment response in patients with multiple sclerosis**  
Hegen, H., Axtell, R., Hu, Y., Millonig, A., Bertolotto, A., Comabella, M., Giovanonni, G., Guger, M., Hoelzl, M., Khalil, M., Killestein, J., Lindberg, R., Malucchi, et al  
SPRINGER HEIDELBERG.2014: S43
- **Uncovering Cryptic Glycan Markers in Multiple Sclerosis (MS) and Experimental Autoimmune Encephalomyelitis (EAE)** *DRUG DEVELOPMENT RESEARCH*  
Wang, D., Bhat, R., Sobel, R. A., Huang, W., Wang, L., Olsson, T., Steinman, L.  
2014; 75 (3): 172-188
- **Development of therapies for autoimmune disease at Stanford: a tale of multiple shots and one goal** *IMMUNOLOGIC RESEARCH*  
Steinman, L.  
2014; 58 (2-3): 307-314
- **Antiviral drug ganciclovir is a potent inhibitor of microglial proliferation and neuroinflammation.** *journal of experimental medicine*  
Ding, Z., Mathur, V., Ho, P. P., James, M. L., Lucin, K. M., Hoehne, A., Alabsi, H., Gambhir, S. S., Steinman, L., Luo, J., Wyss-Coray, T.  
2014; 211 (2): 189-198
- **Neither T-helper type 2 nor Foxp3(+) regulatory T cells are necessary for therapeutic benefit of atorvastatin in treatment of central nervous system autoimmunity** *JOURNAL OF NEUROINFLAMMATION*  
Weber, M. S., Prod'homme, T., Youssef, S., Dunn, S. E., Steinman, L., Zamvil, S. S.  
2014; 11
- **A scientific sequel to Stieg Larsson: relationship between Pandemrix - pandemic influenza vaccine - and the subsequent development of narcolepsy** *JOURNAL OF INTERNAL MEDICINE*  
Fugger, L., Steinman, L.  
2014; 275 (2): 195-97
- **Mechanism of metabolic stroke and spontaneous cerebral hemorrhage in glutaric aciduria type I** *ACTA NEUROPATHOLOGICA COMMUNICATIONS*  
Zinnanti, W. J., Lazovic, J., Housman, C., Antonetti, D. A., Koeller, D. M., Connor, J. R., Steinman, L.  
2014; 2: 13
- **Evidence-based leadership council - a national collaborative.** *Frontiers in public health*  
Haynes, M., Hughes, S., Lorig, K., Simmons, J., Snyder, S. J., Steinman, L., Wilson, N., DiStefano, R., Raymond, J., FallCreek, S., Pelaez, M. B., Smith, D.  
2014; 2: 136-?
- **CRYAB modulates the activation of CD4(+) T cells from relapsing-remitting multiple sclerosis patients** *MULTIPLE SCLEROSIS JOURNAL*  
Que Lan Quach, Q. L., Metz, L. M., Thomas, J. C., Rothbard, J. B., Steinman, L., Ousman, S. S.  
2013; 19 (14): 1867-1877
- **Clinical optimization of antigen specific modulation of type 1 diabetes with the plasmid DNA platform** *CLINICAL IMMUNOLOGY*  
Gottlieb, P., Utz, P. J., Robinson, W., Steinman, L.  
2013; 149 (3): 297-306
- **Serum autoantibodies to myelin peptides distinguish acute disseminated encephalomyelitis from relapsing- remitting multiple sclerosis.** *Multiple sclerosis (Houndmills, Basingstoke, England)*  
Van Haren, K., Tomooka, B. H., Kidd, B. A., Banwell, B., Bar-Or, A., Chitnis, T., Tenenbaum, S. N., Pohl, D., Rostasy, K., Dale, R. C., O'Connor, K. C., Hafler, D. A., Steinman, et al  
2013; 19 (13): 1726-1733



- **A cognitive trap: chemistry defines the biology of amyloid proteins, not human language**  
Steinman, L.  
HUMANA PRESS INC.2013: S118
- **Defective sphingosine 1-phosphate receptor 1 (S1P1) phosphorylation exacerbates TH17-mediated autoimmune neuroinflammation.** *Nature immunology*  
Garris, C. S., Wu, L., Acharya, S., Arac, A., Blaho, V. A., Huang, Y., Moon, B. S., Axtell, R. C., Ho, P. P., Steinberg, G. K., Lewis, D. B., Sobel, R. A., Han, et al  
2013; 14 (11): 1166-1172
- **Therapeutic Decisions in Multiple Sclerosis Moving Beyond Efficacy** *JAMA NEUROLOGY*  
Brueck, W., Gold, R., Lund, B. T., Oreja-Guevara, C., Prat, A., Spencer, C. M., Steinman, L., Tintore, M., Vollmer, T. L., Weber, M. S., Weiner, L. P., Ziemssen, T., Zamvil, et al  
2013; 70 (10): 1315-1324
- **Pathogenic T helper 1 cells reach the brain before T helper 17 cells, and T regulatory cells suppress them albeit incompletely** *ACTA NEUROPATHOLOGICA*  
Steinman, L.  
2013; 126 (4): 517-18
- **Efficacy and safety of AIN457 (secukinumab) in patients with relapsing multiple sclerosis: design of an adaptive dose-ranging phase 2 study**  
Rudick, R., Wiendl, H., Steinman, L., Bar-Or, A., Bhore, R., Bennett, D., Bieniek, M., de Vera, A., Montalban, X.  
SAGE PUBLICATIONS LTD.2013: 518
- **Pilot study of monthly pulse adrenocorticotrophic hormone (ACTH) or methylprednisolone as an add-on therapy to beta interferons for long-term treatment of multiple sclerosis**  
Amezcuca, L., Axtell, R., Cen, S., Tauhid, S., Neema, M., Subhani, D., Bakshi, R., Steinman, L., Berkovich, R.  
SAGE PUBLICATIONS LTD.2013: 514-15
- **Peripheral blood immune cell profiling reveals distinct immunological and clinical phenotypes of neuromyelitis optica**  
You, Y., Alonso, M., Engleman, E., Pittock, S., Steinman, L., Han, M.  
SAGE PUBLICATIONS LTD.2013: 150
- **RNA profiling in grey and white matter tissue yields clues towards multiple sclerosis etiology**  
Bruinsma, I. B., Eijssink, V. D., Kooi, E. J., Baranzini, S. E., Ji, X., Axtell, R., Han, M. H., Kuipers, H., Sobel, R. A., Polman, C. H., Geurts, J. G., Martens, G. J., Poelmans, et al  
SAGE PUBLICATIONS LTD.2013: 564-65
- **miR-219: clinical implications for MS?**  
Bruinsma, I. B., van Vugt, S., ter Burg, H., van de Lisdonk, T., Kooi, E. J., Baranzini, S. E., Ji, X., Sobel, R. A., Geurts, J. G., Steinman, L., de Jong, B. A.  
SAGE PUBLICATIONS LTD.2013: 565
- **Therapeutic decisions in multiple sclerosis: moving beyond efficacy.** *JAMA neurology*  
Brück, W., Gold, R., Lund, B. T., Oreja-Guevara, C., Prat, A., Spencer, C. M., Steinman, L., Tintoré, M., Vollmer, T. L., Weber, M. S., Weiner, L. P., Ziemssen, T., Zamvil, et al  
2013; 70 (10): 1315-1324
- **The Interdependent, Overlapping, and Differential Roles of Type I and II IFNs in the Pathogenesis of Experimental Autoimmune Encephalomyelitis** *JOURNAL OF IMMUNOLOGY*  
Naves, R., Singh, S. P., Cashman, K. S., Rowse, A. L., Axtell, R. C., Steinman, L., Mountz, J. D., Steele, C., De Sarno, P., Raman, C.  
2013; 191 (6): 2967-2977
- **Interleukin 17F Level and Interferon Beta Response in Patients With Multiple Sclerosis** *JAMA NEUROLOGY*  
Hartung, H., Steinman, L., Goodin, D. S., Comi, G., Cook, S., Filippi, M., O'Connor, P., Jeffery, D. R., Kappos, L., Axtell, R., Knappertz, V., Bogumil, T., Schwenke, et al  
2013; 70 (8): 1017-1021
- **Th17 cells induce Th1-polarizing monocyte-derived dendritic cells.** *Journal of immunology*  
Davidson, M. G., Alonso, M. N., Yuan, R., Axtell, R. C., Kenkel, J. A., Suhoski, M. M., González, J. C., Steinman, L., Engleman, E. G.  
2013; 191 (3): 1175-1187
- **DIFFERENTIAL ROLES FOR THE SMALL HEAT SHOCK PROTEIN ALPHA B-CRYSTALLIN IN DE- & REMYELINATION** *11th European Meeting on Glial Cell Function in Health and Disease*

- Kuipers, H., Yoon, J., Winderl, J., van Horssen, J., Palmer, T., Steinman, L.  
WILEY-BLACKWELL.2013: S185–S185
- **Expansion of oligodendrocyte progenitor cells following SIRT1 inactivation in the adult brain.** *Nature cell biology*  
Rafalski, V. A., Ho, P. P., Brett, J. O., Ucar, D., Dugas, J. C., Pollina, E. A., Chow, L. M., Ibrahim, A., Baker, S. J., Barres, B. A., Steinman, L., Brunet, A.  
2013; 15 (6): 614-624
  - **The gender gap in multiple sclerosis: intersection of science and society.** *JAMA neurology*  
Dunn, S. E., Steinman, L.  
2013; 70 (5): 634-635
  - **Type I Interferons: Beneficial in Th1 and Detrimental in Th17 Autoimmunity** *CLINICAL REVIEWS IN ALLERGY & IMMUNOLOGY*  
Axtell, R. C., Raman, C., Steinman, L.  
2013; 44 (2): 114-120
  - **An investigation into the role of the prion protein in experimental autoimmune encephalomyelitis**  
Kraus, A., Race, B., Phillips, K., Groveman, B., Kurnellas, M., Rothbard, J. B., Steinman, L., Caughey, B.  
LANDES BIOSCIENCE.2013: 33
  - **A Tip leads cytotoxic T cells to the crime scene in neuroinflammation** *NATURE IMMUNOLOGY*  
Steinman, L.  
2013; 14 (3): 196-197
  - **Analysis of B Cell Subsets in Multiple Sclerosis Patients on Immunomodulatory Therapy Reveals Modulation of CD19+CD24hiCD38hi Cells with Implications for the Diagnosis and Monitoring of MS**  
Schubert, R., Goodyear, A., Abraham, P., Dunn, C., Steinman, L., Dunn, J., Axtell, R.  
LIPPINCOTT WILLIAMS & WILKINS.2013
  - **Vitamin D Status as a Risk Factor for Cerebral Demyelination in X-Linked Adrenoleukodystrophy**  
Van Haren, K., Mowry, E., Raymond, G., Moser, A., Steinman, L.  
LIPPINCOTT WILLIAMS & WILKINS.2013
  - **Transient B-Cell Depletion with Anti-CD20 in Combination with Proinsulin DNA Vaccine or Oral Insulin: Immunologic Effects and Efficacy in NOD Mice** *PLOS ONE*  
Sarikonda, G., Sachithanatham, S., Manenkova, Y., Kupfer, T., Posgai, A., Wasserfall, C., Bernstein, P., Straub, L., Pagni, P. P., Schneider, D., Calvo, T. R., Coulombe, M., Herold, et al  
2013; 8 (2)
  - **Natalizumab Bench to Bedside and Beyond** *JAMA NEUROLOGY*  
Rudick, R., Polman, C., Clifford, D., Miller, D., Steinman, L.  
2013; 70 (2): 172-182
  - **Vitamin D and Interferon beta Cooperate to Suppress Inflammatory Cytokines and to Ameliorate Disease Severity in Experimental Autoimmune Encephalomyelitis, the Murine Model of Multiple Sclerosis**  
Samanta, T., Axtell, R., Joshi, S., Dhawan, P., Sun, C., Steinman, L., Christakos, S.  
WILEY-BLACKWELL.2013
  - **The Road Not Taken: Antigen-Specific Therapy and Neuroinflammatory Disease.** *JAMA neurology*  
Steinman, L.  
2013: 1–2
  - **The small heat shock protein Alpha B-Crystallin rescues oligodendrocyte progenitors from cuprizone-induced demyelination and promotes remyelination** *11th International Congress of Neuroimmunology (ISNI)*  
Kuipers, H. F., Yoon, J., Vister, J., Palmer, T. D., Steinman, L.  
ELSEVIER SCIENCE BV.2012: 128–29
  - **The small heat shock protein alpha B-crystallin reveals a prominent role for astrogliosis in cuprizone-induced demyelination** *11th International Congress of Neuroimmunology (ISNI)*  
Kuipers, H. F., Yoon, J., Vister, J., Palmer, T. D., Steinman, L.  
ELSEVIER SCIENCE BV.2012: 64–64

- **Dynamics of the peripheral blood CD4 cell counts of JCV Ab positive patients at the different phases of natalizumab treatment**  
Berkovich, R., Togasaki, D., Subhani, D., Steinman, L.  
SAGE PUBLICATIONS LTD.2012: 457–58
- **Defective sphingosine-1-phosphate receptor 1 (S1PR(1)) internalization exacerbates autoimmune neuroinflammation by enhancing Stat3-mediated Th17 polarization**  
Garris, C. S., Acharya, S., Axtell, R., Lewis, D., Sobel, R. A., Steinman, L., Hla, T., Han, M. H.  
SAGE PUBLICATIONS LTD.2012: 510
- **Differential roles for the small heat shock protein Alpha B-Crystallin in cuprizone-induced de- & remyelination**  
Kuipers, H. F., Yoon, J., Vister, J., Palmer, T. D., Steinman, L.  
SAGE PUBLICATIONS LTD.2012: 21–22
- **Human aquaporin 4 281-300 is the immunodominant linear determinant in the context of HLA-DRB1\*03:01-Relevance for diagnosing and monitoring patients with neuromyelitis optica**  
Arellano, B., Hussain, R., Zacharias, T., Yoon, J., David, C., Zein, S., Steinman, L., Forsthuber, T., Greenberg, B., Lambracht-Washington, D., Ritchie, A., Bennet, J., Stuve, et al  
SAGE PUBLICATIONS LTD.2012: 289–90
- **Serum IL-17F does not predict poor response to IM IFN beta-1a in relapsing-remitting MS** *NEUROLOGY*  
Bushnell, S. E., Zhao, Z., Stebbins, C. C., Cadavid, D., Buko, A. M., Whalley, E. T., Davis, J. A., Versage, E. M., Richert, J. R., Axtell, R. C., Steinman, L., Medori, R.  
2012; 79 (6): 531-537
- **Nostalgia: the similarities between immunological and neurological memory** *IMMUNOLOGICAL REVIEWS*  
Steinman, L.  
2012; 248: 5-9
- **Regulation of selection and autoimmunity by miR-181 family miRNAs** *99th Annual Meeting of the American-Association-of-Immunologists*  
Schaffert, S., Wang, S., Axtell, R., Newell, E., Steinman, L., Davis, M., Chen, C.  
AMER ASSOC IMMUNOLOGISTS.2012
- **Platelets Provide a Bounty of Potential Targets for Therapy in Multiple Sclerosis** *CIRCULATION RESEARCH*  
Steinman, L.  
2012; 110 (9): 1157-1158
- **Lessons learned at the intersection of immunology and neuroscience** *JOURNAL OF CLINICAL INVESTIGATION*  
Steinman, L.  
2012; 122 (4): 1146-1148
- **Re-engineering of Pathogenic Aquaporin 4-Specific Antibodies as Molecular Decoys to Treat Neuromyelitis Optica** *ANNALS OF NEUROLOGY*  
Steinman, L., Zamvil, S. S.  
2012; 71 (3): 287-288
- **The protective and therapeutic function of small heat shock proteins in neurological diseases.** *Frontiers in immunology*  
Brownell, S. E., Becker, R. A., Steinman, L.  
2012; 3: 74-?
- **Treatment of Brain Inflammatory Diseases by Delivering Exosome Encapsulated Anti-Inflammatory Drugs From the Nasal Region to the Brain (vol 19, pg 1769, 2011)** *MOLECULAR THERAPY*  
Zhuang, X., Xiang, X., Grizzle, W., Sun, D., Zhang, S., Axtell, R. C., Ju, S., Mu, J., Zhang, L., Steinman, L., Miller, D., Zhang, H.  
2012; 20 (1): 239-239
- **The protective and therapeutic function of small heat shock proteins in neurological diseases** *FRONTIERS IN IMMUNOLOGY*  
Brownell, S. E., Becker, R. A., Steinman, L.  
2012; 3
- **Tyrosine Kinase Inhibitors Ameliorate Autoimmune Encephalomyelitis in a Mouse Model of Multiple Sclerosis** *JOURNAL OF CLINICAL IMMUNOLOGY*  
Crespo, O., Kang, S. C., Daneman, R., Lindstrom, T. M., Ho, P. P., Sobel, R. A., Steinman, L., Robinson, W. H.  
2011; 31 (6): 1010-1020

- **ALPHA B-CRYSTALLIN PLAYS DIFFERENTIAL ROLES IN CUPRIZONE-INDUCED DEMYELINATION AND REMYELINATION** *10th European Meeting on Glial Cells in Health and Disease*  
Kuipers, H. F., Brownell, S., Kurnellas, M., Palmer, T., Steinman, L.  
WILEY-BLACKWELL.2011: S142–S142
- **Alpha B crystallin preferentially binds inflammatory mediators in plasma from multiple sclerosis patients and mice with experimental autoimmune encephalomyelitis**  
Kurnellas, M., Rothbard, J., Adams, C., Steinman, L.  
SAGE PUBLICATIONS LTD.2011: S188–S189
- **Serum IL-17F levels not confirmed as predictors of nonresponse to IFN beta in RRMS in a large verification cohort**  
Bushnell, S., Whalley, E., Zhao, J., Buko, A., Versage, E., Stebbins, C., Davis, J., Cadavid, D., Richert, J., Axtell, R., Steinman, L., Medori, R.  
SAGE PUBLICATIONS LTD.2011: S517–S518
- **Protective effect of neutrophil elastase inhibitor in TH17 neuroinflammation**  
Axtell, R., Herges, K., Steinman, L.  
SAGE PUBLICATIONS LTD.2011: S290
- **Unexpected protective role of amyloid-beta in central nervous system autoimmunity**  
Grant, J. L., Axtell, R., Herges, K., Steinman, L.  
SAGE PUBLICATIONS LTD.2011: S10
- **Mechanisms of immunosuppression by tryptophan degradation in autoimmune neuroinflammation**  
Lanz, T. V., Ho, P. P., Kanai, M., Funakoshi, H., Nakamura, T., Steinman, L., Wick, W., Platten, M.  
SAGE PUBLICATIONS LTD.2011: S413–S414
- **Predictors of relapses in patients with multiple sclerosis treated with disease-modifying drugs**  
Steinman, L., Obi-Tabot, E., Wang, H., Guilhaume, C., Sondhi, M.  
SAGE PUBLICATIONS LTD.2011: S413
- **Predictors of disease modifying drug use in multiple sclerosis patients**  
Steinman, L., Obi-Tabot, E., Guilhaume, C., Yang, T., Zhang, Q.  
SAGE PUBLICATIONS LTD.2011: S189
- **Differential effect of GA therapy in TH17 and TH1-induced experimental autoimmune encephalomyelitis**  
Herges, K., Axtell, R., Steinman, L.  
SAGE PUBLICATIONS LTD.2011: S188
- **Alpha B-crystallin plays differential roles in cuprizone-induced de- and remyelination**  
Kuipers, H. F., Brownell, S. E., Kurnellas, M. P., Palmer, T. D., Steinman, L.  
SAGE PUBLICATIONS LTD.2011: S144
- **Four-year therapeutic pathways in patients diagnosed with multiple sclerosis**  
Steinman, L., Wang, H., Bodoria, M., Obi-Tabot, E., Sondhi, M., Zhang, Q.  
SAGE PUBLICATIONS LTD.2011: S440
- **Interleukin-17 Accelerates Allograft Rejection by Suppressing Regulatory T Cell Expansion** *Annual Meeting of the American-Heart-Association*  
Itoh, S., Kimura, N., Axtell, R. C., Vellotta, J. B., Gong, Y., Wang, X., Kajiwara, N., Nambu, A., Shimura, E., Adachi, H., Iwakura, Y., Saito, H., Okumura, et al  
LIPPINCOTT WILLIAMS & WILKINS.2011: S187–S196
- **1,25-Dihydroxyvitamin D-3 Ameliorates Th17 Autoimmunity via Transcriptional Modulation of Interleukin-17A** *MOLECULAR AND CELLULAR BIOLOGY*  
Joshi, S., Pantalena, L., Liu, X. K., Gaffen, S. L., Liu, H., Rohowsky-Kochan, C., Ichiyama, K., Yoshimura, A., Steinman, L., Christakos, S., Youssef, S.  
2011; 31 (17): 3653-3669
- **Combining statins with interferon beta in multiple sclerosis: think twice, it might not be all right** *LANCET NEUROLOGY*  
Zamvil, S. S., Steinman, L.  
2011; 10 (8): 672-673
- **IL-7 Promotes T(H)1 Development and Serum IL-7 Predicts Clinical Response to Interferon-beta in Multiple Sclerosis** *SCIENCE TRANSLATIONAL MEDICINE*

- Lee, L., Axtell, R., Tu, G. H., Logronio, K., Dilley, J., Yu, J., Rickert, M., Han, B., Evering, W., Walker, M. G., Shi, J., de Jong, B. A., Killestein, et al  
2011; 3 (93)
- **alpha B-Crystallin Improves Murine Cardiac Function and Attenuates Apoptosis in Human Endothelial Cells Exposed to Ischemia-Reperfusion** *ANNALS OF THORACIC SURGERY*  
Velotta, J. B., Kimura, N., Chang, S. H., Chung, J., Itoh, S., Rothbard, J., Yang, P. C., Steinman, L., Robbins, R. C., Fischbein, M. P.  
2011; 91 (6): 1907-1913
  - **Human peptidome display** *NATURE BIOTECHNOLOGY*  
Robinson, W. H., Steinman, L.  
2011; 29 (6): 500-502
  - **Identifying anti-Osteopontin Monoclonal Antibodies that Inhibit the Formation of Colonies by Cancer Cells in Soft Agar**  
Drashansky, T., Rajpal, M., Steinman, L., Ron, Y., Denhardt, D.  
FEDERATION AMER SOC EXP BIOL.2011
  - **The role of CTSH in narcolepsy susceptibility and autoimmunity**  
Weiner-Lachmi, K., Faraco, J., Kornum, B. R., Lin, L., Steinman, L., Mignot, E.  
AMER ASSOC IMMUNOLOGISTS.2011
  - **HLA and T cell receptor associations in narcolepsy, a disorder associated with the selective loss of hypocretin neurons**  
Mignot, E., Lin, L., Faraco, J., Kornum, B., Steinman, L., Hallmayer, J.  
AMER ASSOC IMMUNOLOGISTS.2011
  - **The P2Y11 receptor is associated with narcolepsy and with higher susceptibility to ATP induced cell death in T lymphocytes and NK cells.**  
Kornum, B., Lin, L., Kassack, M., Kuipers, H., Axtell, R., Jennum, P., Steinman, L., Mignot, E.  
AMER ASSOC IMMUNOLOGISTS.2011
  - **Vitamin D, Pregnancy, Breastfeeding, and Postpartum Multiple Sclerosis Relapses** *ARCHIVES OF NEUROLOGY*  
Langer-Gould, A., Huang, S., Van Den Eeden, S. K., Gupta, R., Leimpeter, A. D., Albers, K. B., Horst, R., Hollis, B., Steinman, L., Nelson, L. M.  
2011; 68 (3): 310-313
  - **Common variants in P2RY11 are associated with narcolepsy** *NATURE GENETICS*  
Kornum, B. R., Kawashima, M., Faraco, J., Lin, L., Rico, T. J., Hesselson, S., Axtell, R. C., Kuipers, H., Weiner, K., Hamacher, A., Kassack, M. U., Han, F., Knudsen, et al  
2011; 43 (1): 66-U90
  - **Peptides exhibiting chaperone activity from Alpha B Crystallin are therapeutic in EAE**  
Sanchez, A., Brownell, S., Rothbard, J., Steinman, L.  
WILEY-BLACKWELL.2011: 522
  - **Interleukin-17 Accelerates Allograft Rejection by Suppressing Regulatory T Cell Expansion**  
Itoh, S., Kimura, N., Nakae, S., Axtell, R. C., Velotta, J. B., Wang, X., Iwakura, Y., Steinman, L., Robbins, R. C., Fischbein, M. P.  
LIPPINCOTT WILLIAMS & WILKINS.2010
  - **Delivery of Myelin Peptides through The First Line of Defense, Skin, to Counter Autoimmunity in Multiple Sclerosis** *ANNALS OF NEUROLOGY*  
Steinman, L., Zamvil, S. S.  
2010; 68 (5): 567-569
  - **Inverse Vaccination to Silence Immunity to Myelin in Multiple Sclerosis** *CANADIAN JOURNAL OF NEUROLOGICAL SCIENCES*  
Steinman, L.  
2010; 37: S49-S58
  - **Angiotensin II sustains brain inflammation in mice via TGF-beta** *JOURNAL OF CLINICAL INVESTIGATION*  
Lanz, T. V., Ding, Z., Ho, P. P., Luo, J., Agrawal, A. N., Srinagesh, H., Axtell, R., Zhang, H., Platten, M., Wyss-Coray, T., Steinman, L.  
2010; 120 (8): 2782-2794
  - **alpha B-Crystallin Is a Target for Adaptive Immune Responses and a Trigger of Innate Responses in Preactive Multiple Sclerosis Lesions** *JOURNAL OF NEUROPATHOLOGY AND EXPERIMENTAL NEUROLOGY*  
van Noort, J. M., Bsibsi, M., Gerritsen, W. H., van der Valk, P., Bajramovic, J. J., Steinman, L., Amor, S.  
2010; 69 (7): 694-703

- **IL-17 Contributes to the Development of Chronic Rejection in a Murine Heart Transplant Model** *JOURNAL OF CLINICAL IMMUNOLOGY*  
Itoh, S., Nakae, S., Axtell, R. C., Velotta, J. B., Kimura, N., Kajiwara, N., Iwakura, Y., Saito, H., Adachi, H., Steinman, L., Robbins, R. C., Fischbein, M. P.  
2010; 30 (2): 235-240
- **Treatment with a Toll-like receptor inhibitory GpG oligonucleotide delays and attenuates lupus nephritis in NZB/W mice** *AUTOIMMUNITY*  
Graham, K. L., Lee, L. Y., Higgins, J. P., Steinman, L., Utz, P. J., Ho, P. P.  
2010; 43 (2): 140-155
- **Interferon-gamma-Producing T Cells, Pregnancy, and Postpartum Relapses of Multiple Sclerosis** *ARCHIVES OF NEUROLOGY*  
Langer-Gould, A., Gupta, R., Huang, S., Hagan, A., Atkuri, K., Leimpeter, A. D., Albers, K. B., Greenwood, E., Van Den Eeden, S. K., Steinman, L., Nelson, L. M.  
2010; 67 (1): 51-57
- **Distinctive and Cooperative Role of Type I and Type II Interferons in the Pathogenesis of TH1 and TH17 Cells in Autoimmune Neuroinflammation** *10th Annual Meeting of the Federation-of-Clinical-Immunology-Societies*  
Naves, R., Singh, S., De Sarno, P., Cashman, K., Axtell, R., Steinman, L., Raman, C.  
ACADEMIC PRESS INC ELSEVIER SCIENCE.2010: S29-S30
- **Autoimmunity against Fibrinogen Mediates Inflammatory Arthritis in Mice** *JOURNAL OF IMMUNOLOGY*  
Ho, P. P., Lee, L. Y., Zhao, X., Tomooka, B. H., Paniagua, R. T., Sharpe, O., Benbarak, M. J., Chandra, P. E., Hueber, W., Steinman, L., Robinson, W. H.  
2010; 184 (1): 379-390
- **Mixed results with modulation of T-H-17 cells in human autoimmune diseases** *NATURE IMMUNOLOGY*  
Steinman, L.  
2010; 11 (1): 41-44
- **Socioeconomic Trends in Hospitalization for Multiple Sclerosis** *NEUROEPIDEMIOLOGY*  
Lad, S. P., Chapman, C. H., Vaninetti, M., Steinman, L., Green, A., Boakye, M.  
2010; 35 (2): 93-99
- **HMG-CoA Reductase Inhibition Causes Increased Necrosis and Apoptosis in an In Vivo Mouse Glioblastoma Multiforme Model** *ANTICANCER RESEARCH*  
Bababegy, S. R., Polevaya, N. V., Youssef, S., Sun, A., Xiong, A., Prugpichailers, T., Veeravagu, A., Hou, L. C., Steinman, L., Tse, V.  
2009; 29 (12): 4901-4908
- **Exogenous aB-crystallin Improves Myocardial Function and Attenuates Apoptosis in Ischemia-Reperfusion Injury** *82nd National Conference and Exhibitions and Scientific Sessions of the American-Heart-Association*  
Chang, S. H., Velotta, J. B., Chung, J., Itoh, S., Rothbard, J. B., Yang, P. C., Steinman, L., Robbins, R. C., Fischbein, M. P.  
LIPPINCOTT WILLIAMS & WILKINS.2009: S998-S998
- **PPAR-delta senses and orchestrates clearance of apoptotic cells to promote tolerance** *NATURE MEDICINE*  
Mukundan, L., Odegaard, J. I., Morel, C. R., Heredia, J. E., Mwangi, J. W., Ricardo-Gonzalez, R. R., Goh, Y. P., Eagle, A. R., Dunn, S. E., Awakuni, J. U., Nguyen, K. D., Steinman, L., Michie, et al  
2009; 15 (11): 1266-U59
- **Shifting therapeutic attention in MS to osteopontin, type 1 and type 2 IFN** *EUROPEAN JOURNAL OF IMMUNOLOGY*  
Steinman, L.  
2009; 39 (9): 2358-2360
- **Activation of kinin receptor B1 limits encephalitogenic T-lymphocyte recruitment to the central nervous system**  
Schulze-Topphoff, U., Prat, A., Prozorovski, T., Siffrin, V., Paterka, M., Herz, J., Bendix, I., Ifergan, I., Schadock, I., Mori, M., Van Horsen, J., Schroeter, F., Smorodchenko, et al  
SAGE PUBLICATIONS LTD.2009: S75
- **Abundant alterations in microRNA and mRNA target expression in grey and white matter lesions of patients with multiple sclerosis**  
de Jong, B. A., Han, M. H., Kooi, E. J., Sobel, R. A., Geurts, J. G., Polman, C. H., Steinman, L.  
SAGE PUBLICATIONS LTD.2009: S271
- **TH1 and TH17 pathways determine responsiveness to IFN-beta treatment of autoimmune neuro-inflammation**  
Axtell, R. C., de Jong, B. A., Bhat, R., Katz, L., Raman, C., Steinman, L.  
SAGE PUBLICATIONS LTD.2009: S273-S274

- **Interim results of a phase I/II clinical trial of a DNA plasmid vaccine (BHT-3021) for type 1 diabetes** *45th Annual Meeting of the European-Association-for-the-Study-of-Diabetes*  
Gottlieb, P., Eisenbarth, G., Harrison, L., Colman, P., Roep, B., Quan, J., Solvason, N., Steinman, L., Garren, H.  
SPRINGER.2009: S83–S83
- **The gray aspects of white matter disease in multiple sclerosis** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*  
Steinman, L.  
2009; 106 (20): 8083-8084
- **Systems biology for identification of molecular networks in multiple sclerosis** *MULTIPLE SCLEROSIS*  
Han, M. H., Steinman, L.  
2009; 15 (5): 529-530
- **Anaphylaxis to a self-peptide in the absence of mast cells or histamine** *LABORATORY INVESTIGATION*  
Musio, S., Pedotti, P., Mantegazza, R., Ohtsu, H., Boon, L., Steinman, L., Galli, S. J., Pedotti, R.  
2009; 89 (4): 398-405
- **Enhanced Immune Recognition of Cryptic Glycan Markers in Human Tumors** *CANCER RESEARCH*  
Newsom-Davis, T. E., Wang, D., Steinman, L., Chen, P. F., Wang, L., Simon, A. K., Screaton, G. R.  
2009; 69 (5): 2018-2025
- **Inhibitory Role for gamma-Aminobutyric Acid in Autoimmune Inflammation** *9th Annual Meeting of the Federation-of-Clinical-Immunology-Societies*  
Bhat, R., Axtell, R., Miranda, M., Lock, C., Steinman, L.  
ACADEMIC PRESS INC ELSEVIER SCIENCE.2009: S24–S24
- **Small Heat Shock Proteins as Novel Therapeutic Treatments for Autoimmune Diseases**  
Brownell, S., Rothbard, J., Steinman, L.  
ACADEMIC PRESS INC ELSEVIER SCIENCE.2009: S89–S90
- **Interim Results of a Phase I/II Clinical Trial of a DNA Plasmid Vaccine (BHT-3021) for Type 1 Diabetes** *9th Annual Meeting of the Federation-of-Clinical-Immunology-Societies*  
Eisenbarth, G., Colman, P., Gottlieb, P., Harrison, L., Quan, J., Roep, B., Solvason, N., Steinman, L., Garren, H.  
ACADEMIC PRESS INC ELSEVIER SCIENCE.2009: S84–S84
- **Tyrosine Kinases in Autoimmune Demyelination** *9th Annual Meeting of the Federation-of-Clinical-Immunology-Societies*  
Crespo, O., Kang, S., Daneman, R., Sobel, R., Ho, P., Steinman, L., Robinson, W.  
ACADEMIC PRESS INC ELSEVIER SCIENCE.2009: S73–S73
- **Proteomic analysis of active multiple sclerosis lesions reveals therapeutic targets**  
Han, M. H., Steinman, L.  
SPRINGER WIEN.2008: 1717
- **New targets for treatment of multiple sclerosis** *13th Symposium of the European-Charcot-Foundation*  
Steinman, L.  
ELSEVIER SCIENCE BV.2008: 1–4
- **Differential Regulation of Chemokines by IL-17 in Colonic Epithelial Cells** *JOURNAL OF IMMUNOLOGY*  
Lee, J. W., Wang, P., Kattah, M. G., Youssef, S., Steinman, L., DeFea, K., Straus, D. S.  
2008; 181 (9): 6536-6545
- **PLENARY SESSION: Pathogenesis of neuroimmune disorders**  
Steinman, L.  
ELSEVIER SCIENCE BV.2008: 125
- **A Key Mechanism Underlying the Immunosuppressive Effects of Vitamin D: 1,25dihydroxyvitamin D-3 Is a Transcriptional Modulator of IL-17** *30th Annual Meeting of the American-Society-for-Bone-and-Mineral-Research*  
Joshi, S., Youssef, S., Gaffen, S., Steinman, L., Christakos, S.  
WILEY-BLACKWELL.2008: S105–S105

- **Phase 2 follow-up results of the BHT-3009 DNA vaccine for multiple sclerosis**  
Havrdova, E., Krasulova, E., Nadj, C. G., Selmaj, K., Losy, J., Nadj, I., Radue, E., Gianettoni, J., Valone, F., Utz, P. J., Robinson, W. H., Steinman, L., Garren, et al  
SAGE PUBLICATIONS LTD.2008: S47
- **Cerebrospinal fluid cell phenotypic analysis from a phase 2 trial of the BHT-3009 DNA vaccine for multiple sclerosis**  
Nadj, C., Nadj, I., Havrdova, E., Krasulova, E., Selmaj, K., Losy, J., Radue, E., Gianettoni, J., Solvason, N., Tersini, K., Valone, F., Utz, P. J., Robinson, et al  
SAGE PUBLICATIONS LTD.2008: S54
- **Peroxisome proliferator-activated receptor acts as an endogenous brake on the formation of Th1 and Th17 myelin-reactive cells**  
Dunn, S., Straus, D., Sobel, R., Johnson, A., Bhat, R., Dugas, J., Chawla, A., Steinman, L.  
SAGE PUBLICATIONS LTD.2008: S120
- **Proteomics and transcriptional profiling in understanding the pathogenesis of multiple sclerosis**  
Steinman, L.  
SAGE PUBLICATIONS LTD.2008: S15
- **Lipids as autoantigens and therapeutic immune modulators in multiple sclerosis**  
Ho, P. R., Kanter, J. L., Johnson, A. M., Steinman, L., Robinson, W. H.  
SAGE PUBLICATIONS LTD.2008: S13
- **Thymic selection determines gamma delta T cell effector fate: Antigen-naive cells make interleukin-17 and antigen-experienced cells make interferon gamma** *IMMUNITY*  
Jensen, K. D., Su, X., Shin, S., Li, L., Youssef, S., Yarnasaki, S., Steinman, L., Saito, T., Locksley, R. M., Davis, M. M., Baumgarth, N., Chien, Y.  
2008; 29 (1): 90-100
- **Failure of oral atorvastatin to modulate a murine model of systemic lupus erythematosus** *ARTHRITIS AND RHEUMATISM*  
Graham, K. L., Lee, L. Y., Higgins, J. P., Steinman, L., Utz, P. J., Ho, P. P.  
2008; 58 (7): 2098-2104
- **The aryl hydrocarbon receptor: a regulator of Th17 and Treg cell development in disease** *CELL RESEARCH*  
Ho, P. P., Steinman, L.  
2008; 18 (6): 605-608
- **Type 1 interferons cool the inflamed brain** *IMMUNITY*  
Axtell, R. C., Steinman, L.  
2008; 28 (5): 600-602
- **Extensive fusion of haematopoietic cells with Purkinje neurons in response to chronic inflammation** *NATURE CELL BIOLOGY*  
Johansson, C. B., Youssef, S., Koleckar, K., Holbrook, C., Doyonnas, R., Corbel, S. Y., Steinman, L., Rossi, F. M., Blau, H. M.  
2008; 10 (5): 575-583
- **CD4(+)CD25(+) regulatory T cells specific for a thymus-expressed antigen prevent the development of anaphylaxis to self** *JOURNAL OF IMMUNOLOGY*  
Scabeni, S., Lapilla, M., Musio, S., Gallo, B., Ciusani, E., Steinman, L., Mantegazza, R., Pedotti, R.  
2008; 180 (7): 4433-4440
- **Bioluminescence in vivo imaging of autoimmune encephalomyelitis predicts disease** *JOURNAL OF NEUROINFLAMMATION*  
Luo, J., Ho, P., Steinman, L., Wyss-Coray, T.  
2008; 5
- **Epitope spreading to citrullinated antigens in mouse models of autoimmune arthritis and demyelination** *ARTHRITIS RESEARCH & THERAPY*  
Kidd, B. A., Ho, P. P., Sharpe, O., Zhao, X., Tomooka, B. H., Kanter, J. L., Steinman, L., Robinson, W. H.  
2008; 10 (5)
- **Blocking serotonin reuptake ameliorates autoimmune neuroinflammation**  
Bhat, R., Axtell, R., Steinman, L.  
ACADEMIC PRESS INC ELSEVIER SCIENCE.2008: S22
- **Lipids as autoantigens and therapeutic immune modulators in autoimmune demyelination**  
Ho, P., Kanter, J., Johnson, A., Steinman, L., Robinson, W.  
ACADEMIC PRESS INC ELSEVIER SCIENCE.2008: S24-S25



- **Platelet derived growth factor receptor as a therapeutic target for rheumatoid arthritis** *8th Annual Meeting of the Federation-of-Clinical-Immunology-Societies*  
Paniagua, R., Chang, A., Mariano, M., Roscow, C., Ho, P., Sharpe, O., Lee, D., Steinman, L., Robinson, W.  
ACADEMIC PRESS INC ELSEVIER SCIENCE.2008: S20–S21
- **Preemptive HMG-CoA reductase inhibition provides graft-versus-host disease protection by Th-2 polarization while sparing graft-versus-leukemia activity** *BLOOD*  
Zeiser, R., Youssef, S., Baker, J., Kambham, N., Steinman, L., Negrin, R. S.  
2007; 110 (13): 4588-4598
- **Glia-dependent TGF-beta signaling, acting independently of the TH17 pathway, is critical for initiation of murine autoimmune encephalomyelitis** *JOURNAL OF CLINICAL INVESTIGATION*  
Luo, J., Ho, P. P., Buckwalter, M. S., Hsu, T., Lee, L. Y., Zhang, H., Kim, D., Kim, S., Gambhir, S. S., Steinman, L., Wyss-Coray, T.  
2007; 117 (11): 3306-3315
- **Tryptophan degradation in autoimmune diseases** *CELLULAR AND MOLECULAR LIFE SCIENCES*  
Opitz, C. A., Wick, W., Steinman, L., Platten, M.  
2007; 64 (19-20): 2542-2563
- **Inhibition of HMGCoA reductase by atorvastatin prevents and reverses MYC-induced lymphomagenesis** *BLOOD*  
Shachaf, C. M., Perez, O. D., Youssef, S., Fan, A. C., Elchuri, S., Goldstein, M. J., Shirer, A. E., Sharpe, O., Chen, J., Mitchell, D. J., Chang, M., Nolan, G. P., Steinman, et al  
2007; 110 (7): 2674-2684
- **Nanosensor detection of an immunoregulatory tryptophan influx/kynurenine efflux cycle** *PLOS BIOLOGY*  
Kaper, T., Looger, L. L., Takanaga, H., Platten, M., Steinman, L., Frommer, W. B.  
2007; 5 (10): 2201-2210
- **Antigen-specific therapy of multiple sclerosis: The long-sought magic bullet** *NEUROTHERAPEUTICS*  
Steinman, L.  
2007; 4 (4): 661-665
- **Statins-treatment option for central nervous system autoimmune disease?** *NEUROTHERAPEUTICS*  
Weber, M. S., Steinman, L., Zamvil, S. S.  
2007; 4 (4): 693-700
- **Type II monocytes modulate T cell-mediated central nervous system autoimmune disease** *NATURE MEDICINE*  
Weber, M. S., Prod'homme, T., Youssef, S., Dunn, S. E., Rundle, C. D., Lee, L., Patarroyo, J. C., Stuve, O., Sobel, R. A., Steinman, L., Zamvil, S. S.  
2007; 13 (8): 935-943
- **Self-antigen tetramers discriminate between myelin autoantibodies to native or denatured protein** *NATURE MEDICINE*  
O'Connor, K. C., McLaughlin, K. A., De Jager, P. L., Chitnis, T., Bettelli, E., Xu, C., Robinson, W. H., Cherry, S. V., Bar-Or, A., Banwell, B., Fukaura, H., Fukazawa, T., Tenembaum, et al  
2007; 13 (2): 211-217
- **Heme oxygenase-1 and carbon monoxide suppress autoimmune neuroinflammation** *JOURNAL OF CLINICAL INVESTIGATION*  
Chora, A. A., Fontoura, P., Cunha, A., Pais, T. F., Cardoso, S., Ho, P. P., Lee, L. Y., Sobel, R. A., Steinman, L., Soares, M. P.  
2007; 117 (2): 438-447
- **Proteomic profiling of multiple sclerosis lesions identify potential targets for therapy** *7th Annual Meeting of the Federation-of-Clinical-Immunology-Societies*  
Han, M. H., Hwang, S., Roy, D., Raine, C., Robinson, W. H., Sobel, R. A., Han, D., Steinman, L.  
ACADEMIC PRESS INC ELSEVIER SCIENCE.2007: S153–S153
- **Increasing GABA activity prevents autoimmune neuroinflammation** *7th Annual Meeting of the Federation-of-Clinical-Immunology-Societies*  
Bhat, R., Lock, C., Steinman, L.  
ACADEMIC PRESS INC ELSEVIER SCIENCE.2007: S140–S140
- **Tolerizing DNA vaccines for autoimmune arthritis** *AUTOIMMUNITY*  
Ho, P. P., Higgins, J. P., Kidd, B. A., Tomooka, B., Digennaro, C., Lee, L. Y., De Vegvar, H. E., Steinman, L., Robinson, W. H.  
2006; 39 (8): 675-682

- **Type IIIHMG-CoA reductase inhibitors (Statins) provide acute-graft-versus-host disease protection by Th-2 cytokine induction while sparing graft-versus-leukemia activity.** *48th Annual Meeting of the American-Society-of-Hematology*  
Zeiser, R., Youssef, S., Baker, J., Steinman, L., Negrin, R.  
AMER SOC HEMATOLOGY.2006: 60A–60A
- **Glatiramer acetate-mediated immunomodulation is driven by antigen presenting cells and is not T cell antigen specific** *131st Annual Meeting of the American-Neurological-Association*  
Weber, M. S., Prod'homme, T., Youssef, S., Rundle, C., Steinman, L., Zamvil, S. S.  
WILEY-LISS.2006: 644–45
- **Selective tyrosine kinase inhibition by imatinib mesylate for the treatment of autoimmune arthritis** *JOURNAL OF CLINICAL INVESTIGATION*  
Paniagua, R. T., Sharpe, O., Ho, P. P., Chan, S. M., Chang, A., Higgins, J. P., Tomooka, B. H., Thomas, F. M., Song, J. J., Goodman, S. B., Lee, D. M., Genovese, M. C., Utz, et al  
2006; 116 (10): 2633-2642
- **At once harmful and beneficial: the dual properties of NF-kappa B** *NATURE IMMUNOLOGY*  
Youssef, S., Steinman, L.  
2006; 7 (9): 901-902
- **STAT6-mediated Th2 differentiation is not required for prevention and reversal of experimental autoimmune encephalomyelitis by atorvastatin** *8th International Conference of Neuroimmunology*  
Prod'homme, T., Weber, M. S., Youssef, S., Rundle, C., Steinman, L., Zamvil, S. S.  
ELSEVIER SCIENCE BV.2006: 63–63
- **Proteomic profiling of multiple sclerosis plaques** *8th International Conference of Neuroimmunology*  
Han, M. H., Hwang, S., Robinson, W. H., Raine, C. S., Sobel, R., Han, D. K., Steinman, L.  
ELSEVIER SCIENCE BV.2006: 23–23
- **Glatiramer acetate mediated immune modulation is driven by antigen presenting cells and is not T cell antigen specific** *8th International Conference of Neuroimmunology*  
Weber, M. S., Prod'homme, T., Youssef, S., Rundle, C., Stuve, O., Steinman, L., Zamvil, S. S.  
ELSEVIER SCIENCE BV.2006: 117–117
- **Statins in the treatment of central nervous system autoimmune disease** *JOURNAL OF NEUROIMMUNOLOGY*  
Weber, M. S., Youssef, S., Dunn, S. E., Prod'homme, T., Neuhaus, O., Stuve, O., Greenwood, J., Steinman, L., Zamvil, S. S.  
2006; 178 (1-2): 140-148
- **The coming of age for antigen-specific therapy of multiple sclerosis** *EUROPEAN JOURNAL OF NEUROLOGY*  
Steinman, L.  
2006; 13 (8): 793-794
- **State of the art. Four easy pieces: interconnections between tissue injury, intermediary metabolism, autoimmunity, and chronic degeneration.** *Proceedings of the American Thoracic Society*  
Steinman, L.  
2006; 3 (6): 484-486
- **How to successfully apply animal studies in experimental allergic encephalomyelitis to research on multiple sclerosis** *ANNALS OF NEUROLOGY*  
Steinman, L., Zamvil, S. S.  
2006; 60 (1): 12-21
- **Nogo in multiple sclerosis: Growing roles of a growth inhibitor** *Symposium on Cognitive Decline in Multiple Sclerosis*  
Fontoura, P., Steinman, L.  
ELSEVIER SCIENCE BV.2006: 201–10
- **Emerging therapeutic targets in multiple sclerosis** *CURRENT OPINION IN NEUROLOGY*  
Fontoura, P., Steinman, L., Miller, A.  
2006; 19 (3): 260-266
- **Progressive multifocal leukoencephalopathy and multiple sclerosis: Lessons from natalizumab** *CURRENT NEUROLOGY AND NEUROSCIENCE REPORTS*  
Langer-Gould, A., Steinman, L.

2006; 6 (3): 253-258

- **Atorvastatin prevents and reverses experimental autoimmune encephalomyelitis independent of STAT6-mediated Th2 differentiation** *16th Annual Meeting of the European-Neurological-Society*  
Weber, M. S., Prod'homme, T., Youssef, S., Rundle, C., Steinman, L., Zamvil, S. S.  
SPRINGER HEIDELBERG.2006: 103-103
- **Statin therapy and autoimmune disease: from protein prenylation to immunomodulation** *NATURE REVIEWS IMMUNOLOGY*  
Greenwood, J., Steinman, L., Zamvil, S. S.  
2006; 6 (5): 358-370
- **A neuropeptide in immune-mediated inflammation, Y?** *TRENDS IN IMMUNOLOGY*  
Prod'homme, T., Weber, M. S., Steinman, L., Zamvil, S. S.  
2006; 27 (4): 164-167
- **Most patients with multiple sclerosis or a clinically isolated demyelinating syndrome should be treated at the time of diagnosis** *ARCHIVES OF NEUROLOGY*  
Frohman, E. M., Havrdova, E., Lublin, F., Barkhof, F., Achiron, A., Sharief, M. K., Stuve, O., Racke, M. K., Steinman, L., Weiner, H., Olek, M., Zivadinov, R., Corboy, et al  
2006; 63 (4): 614-619
- **Immunomodulatory synergy by combination of atorvastatin and glatiramer acetate in treatment of CNS autoimmunity** *JOURNAL OF CLINICAL INVESTIGATION*  
Stuve, O., Youssef, S., Weber, M. S., Nessler, S., von Budingen, H. C., Hemmer, B., Prod'homme, T., Sobel, R. A., Steinman, L., Zamvil, S. S.  
2006; 116 (4): 1037-1044
- **What went wrong in the natalizumab trials?** *LANCET*  
Langer-Gould, A., Steinman, L.  
2006; 367 (9512): 708-710
- **A key regulatory role for histamine in experimental autoimmune encephalomyelitis: Disease exacerbation in histidine decarboxylase-deficient mice** *JOURNAL OF IMMUNOLOGY*  
Musio, S., Gallo, B., Scabeni, S., Lapilla, M., Poliani, P. L., Matarese, G., Ohtsu, H., GALLI, S. J., Mantegazza, R., Steinman, L., Pedotti, R.  
2006; 176 (1): 17-26
- **Immunomodulation by statins and their potential role in MS therapy** *8th International Conference of Neuroimmunology*  
Weber, M. S., Youssef, S., Dunn, S. E., Prod'homme, T., Stuve, O., Steinman, L., Zamvil, S. S.  
MEDIMOND S R L.2006: 117-121
- **Controlling autoimmunity in sporadic inclusion-body myositis** *NEUROLOGY*  
Steinman, L.  
2006; 66: S56-S58
- **Drug Insight: using statins to treat neuroinflammatory disease** *NATURE CLINICAL PRACTICE NEUROLOGY*  
Weber, M. S., Prod'homme, T., Steinman, L., Zamvil, S. S.  
2005; 1 (2): 106-112
- **A suppressive oligodeoxynucleotide enhances the efficacy of myelin cocktail/IL-4-tolerizing DNA vaccination and treats autoimmune disease** *JOURNAL OF IMMUNOLOGY*  
Ho, P. P., Fontoura, P., Platten, M., Sobel, R. A., DeVoss, J. J., Lee, L. Y., Kidd, B. A., Tomooka, B. H., Capers, J., Agrawal, A., Gupta, R., Zernik, J., Yee, et al  
2005; 175 (9): 6226-6234
- **Virtues and pitfalls of EAE for the development of therapies for multiple sclerosis** *TRENDS IN IMMUNOLOGY*  
Steinman, L., Zamvil, S. S.  
2005; 26 (11): 565-571
- **Therapeutic considerations for disease progression in multiple sclerosis - Evidence, experience, and future expectations** *ARCHIVES OF NEUROLOGY*  
Frohman, E. M., Stuve, O., Havrdova, E., Corboy, J., Achiron, A., Zivadinov, R., Sorensen, P. S., Phillips, J. T., Weinshenker, B., Hawker, K., Hartung, H. P., Steinman, L., Zamvil, et al  
2005; 62 (10): 1519-1530

- **Antigen-specific therapies in multiple sclerosis: Going beyond proteins and peptides** *INTERNATIONAL REVIEWS OF IMMUNOLOGY*  
Fontoura, P., Garren, H., Steinman, L.  
2005; 24 (5-6): 415-446
- **Characterizing the mechanisms of progression in multiple sclerosis - Evidence and new hypotheses for future directions** *ARCHIVES OF NEUROLOGY*  
Frohman, E. M., Filippi, M., Stuve, O., Waxman, S. G., Corboy, J., Phillips, J. T., Lucchinetti, C., Wilken, J., Karandikar, N., Hemmer, B., Monson, N., De Keyser, J., Hartung, et al  
2005; 62 (9): 1345-1356
- **Multiple sclerosis: trapped in deadly glue** *NATURE MEDICINE*  
Platten, M., Steinman, L.  
2005; 11 (3): 252-253
- **Suppression of autoimmunity via microbial mimics of altered peptide ligands** *MOLECULAR MIMICRY: INFECTION-INDUCING AUTOIMMUNE DISEASE*  
Steinman, L., Utz, P. J., Robinson, W. H.  
2005; 296: 55-63
- **Atorvastatin prevents the Th1 differentiation of myelin-reactive T cells during EAE by interfering with the prenylation of Ras and the activation of ERK.** *5th Annual Meeting of the Federation-of-Clinical-Immunology-Societies*  
Dunn, S. E., Youssef, S., Goldstein, M. J., Prud'homme, T., Weber, M., Zamvil, S. S., Steinman, L.  
ACADEMIC PRESS INC ELSEVIER SCIENCE.2005: S43-S43
- **Individual statins differ in immunomodulatory potential and capability to treat Th1-mediated CNS autoimmune disease.** *5th Annual Meeting of the Federation-of-Clinical-Immunology-Societies*  
Goldstein, M. J., Weber, M. S., Dunn, S. E., Prod'homme, T., Steinman, L., Zamvil, S. S., Youssef, S.  
ACADEMIC PRESS INC ELSEVIER SCIENCE.2005: S94-S95
- **Autoimmune destruction in the CNS triggered by non-classical MHC class I-specific gamma delta T cells** *9th Annual Meeting of Americas-Committee-for-Treatment-and-Research-in-Multiple-Sclerosis*  
Yeh, J. H., Youssef, S., Chan, J. R., Cosgaya, J. M., Steinman, L., Chien, Y. H.  
SAGE PUBLICATIONS LTD.2005: 110-11
- **High-throughput analysis of autoantibodies recognizing myelin antigens in acute disseminated encephalomyelitis.** *5th Annual Meeting of the Federation-of-Clinical-Immunology-Societies*  
O'Connor, K. C., Robinson, W., Weichsel, K., Chitnis, T., Wong, S., Steinman, L., Fukaura, H., De Jager, P., Wucherpfennig, K., Hafler, D.  
ACADEMIC PRESS INC ELSEVIER SCIENCE.2005: S6-S6
- **Modulation of murine lupus by an inhibitory GpG oligonucleotide** *5th Annual Meeting of the Federation-of-Clinical-Immunology-Societies*  
Graham, K. L., Lee, L. Y., Teo, P., Steinman, L., Utz, P. J., Ho, P. P.  
ACADEMIC PRESS INC ELSEVIER SCIENCE.2005: S109-S110
- **Antiepileptogenic treatment of undercut neocortex reduces expression of neuritin** *59th Annual Meeting of the American-Epilepsy-Society/American-Clinical-Neurophysiology-Society*  
Graber, K. D., Fontoura, P. P., Ho, P. P., Steinman, L., Prince, D. A.  
WILEY-BLACKWELL.2005: 105-105
- **Linking innate immunity to autoimmunity through the role of TLRs and the MyD-88 signaling pathway.** *5th Annual Meeting of the Federation-of-Clinical-Immunology-Societies*  
Ho, P. P., Mitchell, D. J., Lee, L. Y., Robinson, W. H., Steinman, L.  
ACADEMIC PRESS INC ELSEVIER SCIENCE.2005: S7-S7
- **Immunity to the extracellular domain of Nogo-A modulates experimental autoimmune encephalomyelitis** *JOURNAL OF IMMUNOLOGY*  
Fontoura, P., Ho, P. P., DeVoss, J., Zheng, B. H., Lee, B. J., Kidd, B. A., Garren, H., Sobel, R. A., Robinson, W. H., Tessier-Lavigne, M., Steinman, L.  
2004; 173 (11): 6981-6992
- **The multifaceted role of transglutaminase in neurodegeneration: Review article** *8th International Congress on Amino Acids and Proteins*  
Karpuj, M., Steinman, L.  
SPRINGER.2004: 373-79
- **High-throughput methods for measuring autoantibodies in systemic lupus erythematosus and other autoimmune diseases** *AUTOIMMUNITY*  
Graham, K. L., Robinson, W. H., Steinman, L., Utz, P. J.

2004; 37 (4): 269-272

- **Elaborate interactions between the immune and nervous systems** *NATURE IMMUNOLOGY*  
Steinman, L.  
2004; 5 (6): 575-581
- **Statins as potential therapeutic agents in multiple sclerosis.** *Current neurology and neuroscience reports*  
Stüve, O., Prod'homme, T., Youssef, S., Dunn, S., Neuhaus, O., Weber, M., Hartung, H., Steinman, L., Zamvil, S. S.  
2004; 4 (3): 237-244
- **Effects of preventive treatment on NARP expression in posttraumatic epileptogenesis** *58th Annual Meeting of the American-Epilepsy-Society*  
Grabber, K. D., Fontoura, P. P., Ho, P. P., Steinman, L., Prince, D. A.  
WILEY-BLACKWELL.2004: 18-18
- **Genomic and proteomic analysis of multiple sclerosis - Opinion** *CURRENT OPINION IN IMMUNOLOGY*  
Robinson, W. H., Utz, P. J., Steinman, L.  
2003; 15 (6): 660-667
- **An immunomodulatory GpG oligonucleotide for the treatment of autoimmunity via the innate and adaptive immune systems** *JOURNAL OF IMMUNOLOGY*  
Ho, P. P., Fontoura, P., Ruiz, P. J., Steinman, L., Garren, H.  
2003; 171 (9): 4920-4926
- **Engineering better cytokines** *NATURE BIOTECHNOLOGY*  
Steinman, L.  
2003; 21 (11): 1293-1294
- **The potential therapeutic role of statins in central nervous system autoimmune disorders** *CELLULAR AND MOLECULAR LIFE SCIENCES*  
Stuve, O., Youssef, S., Dunn, S., Slavin, A. J., Steinmann, L., Zamvil, S. S.  
2003; 60 (11): 2483-2491
- **Protein arrays for autoantibody profiling and fine-specificity mapping** *PROTEOMICS*  
Robinson, W. H., Steinman, L., Utz, P. J.  
2003; 3 (11): 2077-2084
- **Statins and their potential targets in multiple sclerosis therapy** *EXPERT OPINION ON THERAPEUTIC TARGETS*  
Stuve, O., Prod'homme, T., Slavin, A., Youssef, S., Dunn, S., Steinman, L., Zamvil, S. S.  
2003; 7 (5): 613-622
- **Microarray profiling of antibody responses against simian-human immunodeficiency virus: Postchallenge convergence of reactivities independent of host histocompatibility type and vaccine regimen** *JOURNAL OF VIROLOGY*  
de Vegvar, H. E., Amara, R. R., Steinman, L., Utz, P. J., Robinson, H. L., Robinson, W. H.  
2003; 77 (20): 11125-11138
- **Involvement of both 'allergic' and 'autoimmune' mechanisms in EAE, MS and other autoimmune diseases** *TRENDS IN IMMUNOLOGY*  
Pedotti, R., De Voss, J. J., Steinman, L., GALLI, S. J.  
2003; 24 (9): 479-484
- **Synovial proteome microarrays identify deiminated proteins as targets of the autoantibody response in Rheumatoid Arthritis** *67th Annual Scientific Meeting of the American-College-of-Rheumatology/38th Annual Scientific Meeting of the Association-of-Rheumatology-Health-Professionals*  
Hueber, W., Lee, B. J., Genovese, M. C., Bruce, B., van Venrooij, W. J., Smolen, J. S., Steinman, L., Utz, P. J., Robinson, W. H.  
WILEY-BLACKWELL.2003: S429-S429
- **Protein microarrays guide tolerizing DNA vaccine treatment of autoimmune encephalomyelitis** *NATURE BIOTECHNOLOGY*  
Robinson, W. H., Fontoura, P., Lee, B. J., de Vegvar, H. E., Tom, J., Pedotti, R., DiGennaro, C. D., Mitchell, D. J., Fong, D., Ho, P. P., Ruiz, P. J., Maverakis, E., Stevens, et al  
2003; 21 (9): 1033-1039
- **Diverse targets for intervention during inflammatory and neurodegenerative phases of multiple sclerosis** *NEURON*  
Zamvil, S. S., Steinman, L.  
2003; 38 (5): 685-688

- **Osteopontin polymorphisms and disease course in multiple sclerosis** *GENES AND IMMUNITY*  
Caillier, S., Barcellos, L. F., Baranzini, S. E., Swerdlin, A., Lincoln, R. R., Steinman, L., Martin, E., Haines, J. L., Pericak-Vance, M., Hauser, S. L., Oksenberg, J. R.  
2003; 4 (4): 312-315
- **Statins as potential therapeutic agents in neuroinflammatory disorders** *CURRENT OPINION IN NEUROLOGY*  
Stuve, O., Youssef, S., Steinman, L., Zamvil, S. S.  
2003; 16 (3): 393-401
- **Transcriptional analysis of targets in multiple sclerosis** *NATURE REVIEWS IMMUNOLOGY*  
Steinman, L., Zamvil, S.  
2003; 3 (6): 483-492
- **Optic neuritis, a new variant of experimental encephalomyelitis, a durable model for all seasons, now in its seventieth year** *JOURNAL OF EXPERIMENTAL MEDICINE*  
Steinman, L.  
2003; 197 (9): 1065-1071
- **Medicine - Collateral damage repaired** *NATURE*  
Steinman, L.  
2003; 422 (6933): 671-672
- **Severe anaphylactic reactions to glutamic acid decarboxylase (GAD) self peptides in NOD mice that spontaneously develop autoimmune type 1 diabetes mellitus.** *BMC immunology*  
Pedotti, R., Sanna, M., Tsai, M., DeVoss, J., Steinman, L., McDevitt, H., Galli, S. J.  
2003; 4: 2-?
- **Multiple elements of the allergic arm of the immune response modulate autoimmune demyelination** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*  
Pedotti, R., DeVoss, J. J., Youssef, S., Mitchell, D., Wedemeyer, J., Madanat, R., Garren, H., Fontoura, P., Tsai, M., GALLI, S. J., Sobel, R. A., Steinman, L.  
2003; 100 (4): 1867-1872
- **The intricate interplay among body weight, stress, and the immune response to friend or foe** *JOURNAL OF CLINICAL INVESTIGATION*  
Steinman, L., Conlon, P., Maki, R., Foster, A.  
2003; 111 (2): 183-185
- **Multiplex autoantibody profiling using 'synovial proteome' microarrays identifies citrulline-modified peptides as major targets of the autoimmune response in rheumatoid arthritis** *3rd World Congress of the Global-Arthritis-Research-Network (GARN)*  
Hueber, W., Lee, B. J., Genovese, M., van Venrooij, W., Steinman, L., Utz, P. J., Robinson, W. H.  
BIOMED CENTRAL LTD.2003: S31-S31
- **Protein and peptide array analysis of autoimmune disease** *BIOTECHNIQUES*  
Robinson, W. H., Steinman, L., Utz, P. J.  
2002: 66-69
- **The HMG-CoA reductase inhibitor, atorvastatin, promotes a Th2 bias and reverses paralysis in central nervous system autoimmune disease** *NATURE*  
Youssef, S., Stuve, O., Patarroyo, J. C., Ruiz, P. J., Radosevich, J. L., Hur, E. M., Bravo, M., Mitchell, D. J., Sobel, R. A., Steinman, L., Zamvil, S. S.  
2002; 420 (6911): 78-84
- **Cholesterol-lowering statins possess anti-inflammatory activity that might be useful for treatment of MS** *NEUROLOGY*  
Zamvil, S. S., Steinman, L.  
2002; 59 (7): 970-971
- **Approved and future pharmacotherapy for multiple sclerosis** *NEUROLOGIST*  
Stuve, O., Cree, B. C., von Budingen, H. C., Yousef, S., Bowen, J. D., Genain, C. P., Hauser, S. L., Steinman, L., Zamvil, S. S.  
2002; 8 (5): 290-301
- **Late pregnancy suppresses relapses in experimental autoimmune encephalomyelitis: Evidence for a suppressive pregnancy-related serum factor** *JOURNAL OF IMMUNOLOGY*  
Langer-Gould, A., Garren, H., Slansky, A., Ruiz, P. J., Steinman, L.

2002; 169 (2): 1084-1091

- **Altered peptide ligands and MS treatment** *SCIENCE*  
Conlon, P., Steinman, L.  
2002; 296 (5574): 1801-1801
- **Immunomodulatory vaccination in autoimmune disease** *ENDOCRINOLOGY AND METABOLISM CLINICS OF NORTH AMERICA*  
Urbanek-Ruiz, I., Ruiz, P. J., Steinman, L., Fathman, C. G.  
2002; 31 (2): 441-?
- **Gene-microarray analysis of multiple sclerosis lesions yields new targets validated in autoimmune encephalomyelitis** *NATURE MEDICINE*  
Lock, C., Hermans, G., Pedotti, R., Brendolan, A., Schadt, E., Garren, H., Langer-Gould, A., Strober, S., Cannella, B., Allard, J., Klonowski, P., Austin, A., Lad, et al  
2002; 8 (5): 500-508
- **Millennium Award. Proteomics for the development of DNA tolerizing vaccines to treat autoimmune disease.** *Clinical immunology*  
Robinson, W. H., Garren, H., Utz, P. J., Steinman, L.  
2002; 103 (1): 7-12
- **Proteomics for the development of DNA tolerizing vaccines to treat autoimmune disease** *CLINICAL IMMUNOLOGY*  
Robinson, W. H., Garren, H., Utz, P. J., Steinman, L.  
2002; 103 (1): 7-12
- **Proteomics technologies for the study of autoimmune disease** *ARTHRITIS AND RHEUMATISM*  
Robinson, W. H., Steinman, L., Utz, P. J.  
2002; 46 (4): 885-893
- **Autoantigen microarrays for multiplex characterization of autoantibody responses** *NATURE MEDICINE*  
Robinson, W. H., DiGennaro, C., Hueber, W., Haab, B. B., KAMACHI, M., Dean, E. J., Fournel, S., Fong, D., Genovese, M. C., de Vegvar, H. E., Skriner, K., Hirschberg, D. L., Morris, et al  
2002; 8 (3): 295-301
- **Prolonged survival and decreased abnormal movements in transgenic model of Huntington disease, with administration of the transglutaminase inhibitor cystamine** *NATURE MEDICINE*  
Karpuj, M. V., Becher, M. W., Springer, J. E., Chabas, D., Youssef, S., Pedotti, R., Mitchell, D., Steinman, L.  
2002; 8 (2): 143-149
- **Evidence for a role for transglutaminase in Huntington's disease and the potential therapeutic implications** *NEUROCHEMISTRY INTERNATIONAL*  
Karpuj, M. V., Becher, M. W., Steinman, L.  
2002; 40 (1): 31-36
- **Autoantibody profiling for the study and treatment of autoimmune disease** *ARTHRITIS RESEARCH*  
Hueber, W., Utz, P. J., Steinman, L., Robinson, W. H.  
2002; 4 (5): 290-295
- **Multiple sclerosis: Deeper understanding of its pathogenesis reveals new targets for therapy** *ANNUAL REVIEW OF NEUROSCIENCE*  
Steinman, L., Martin, R., Bernard, C., Conlon, P., Oksenberg, J. R.  
2002; 25: 491-505
- **N-epsilon-(gamma-L-glutamyl)-L-lysine (GGEL) is increased in cerebrospinal fluid of patients with Huntington's disease** *JOURNAL OF NEUROCHEMISTRY*  
Jeitner, T. M., Bogdanov, M. B., Matson, W. R., Daikhin, Y., Yudkoff, M., Folk, J. E., Steinman, L., Browne, S. E., Beal, M. F., BLASS, J. P., Cooper, A. J.  
2001; 79 (5): 1109-1112
- **The influence of the proinflammatory cytokine, osteopontin, on autoimmune demyelinating disease** *SCIENCE*  
Chabas, D., Baranzini, S. E., Mitchell, D., Bernard, C. C., Rittling, S. R., Denhardt, D. T., Sobel, R. A., Lock, C., Karpuj, M., Pedotti, R., Heller, R., Oksenberg, J. R., Steinman, et al  
2001; 294 (5547): 1731-1735
- **Gene microarrays and experimental demyelinating disease: a tool to enhance serendipity** *BRAIN*  
Steinman, L.

2001; 124: 1897-1899

- **Immunotherapy of multiple sclerosis: the end of the beginning** *CURRENT OPINION IN IMMUNOLOGY*  
Steinman, L.  
2001; 13 (5): 597-600
- **Blockade of gamma interferon might be beneficial in MS - Commentary** *MULTIPLE SCLEROSIS JOURNAL*  
Steinman, L.  
2001; 7 (5): 275-276
- **Myelin-specific CD8 T cells in the pathogenesis of experimental allergic encephalitis and multiple sclerosis** *JOURNAL OF EXPERIMENTAL MEDICINE*  
Steinman, L.  
2001; 194 (5): F27-F30
- **Immunomodulation of experimental autoimmune encephalomyelitis with ordered peptides based on MHC-TCR binding motifs** *JOURNAL OF IMMUNOLOGY*  
Ruiz, P. J., DeVoss, J. J., Nguyen, L. V., Fontoura, P. P., Hirschberg, D. L., Mitchell, D. J., Garcia, K. C., Steinman, L.  
2001; 167 (5): 2688-2693
- **Multiple sclerosis: a two-stage disease** *NATURE IMMUNOLOGY*  
Steinman, L.  
2001; 2 (9): 762-764
- **Posttraumatic therapeutic vaccination with modified myelin self-antigen prevents complete paralysis while avoiding autoimmune disease** *JOURNAL OF CLINICAL INVESTIGATION*  
Hauben, E., Agranov, E., Gothilf, A., Nevo, U., Cohen, A., Smirnov, I., Steinman, L., Schwartz, M.  
2001; 108 (4): 591-599
- **Immunization with DNA encoding an immunodominant peptide of insulin prevents diabetes in NOD mice** *CLINICAL IMMUNOLOGY*  
Urbanek-Ruiz, I., Ruiz, P. J., Paragas, V., Garren, H., Steinman, L., Fathman, C. G.  
2001; 100 (2): 164-171
- **Combination of gene delivery and DNA vaccination to protect from and reverse Th1 autoimmune disease via deviation to the Th2 pathway** *IMMUNITY*  
Garren, H., Ruiz, P. J., Watkins, T. A., Fontoura, P., Nguyen, L. V., Estline, E. R., Hirschberg, D. L., Steinman, L.  
2001; 15 (1): 15-22
- **Evaluating human T cell receptor gene expression by PCR.** *Current protocols in immunology / edited by John E. Coligan ... [et al.]*  
Gussoni, E., Panzara, M. A., Steinman, L.  
2001; Chapter 10: Unit 10 26-?
- **An unexpected version of horror autotoxicus. Anaphylactic shock to a self peptide.**  
Pedotti, R., Mitchell, D., Wedemeyer, J., Karpuj, M., Chabas, D., Tsai, M., GALLI, S. J., Steinman, L.  
FEDERATION AMER SOC EXP BIOL.2001: A1218-A1218
- **Elevated osteopontin transcripts in MS brain libraries and its role in the development of progressive versus remitting autoimmune encephalomyelitis**  
Chabas, D. E., Steinman, L., Rittling, S. R., Sobel, R., Lock, C., Mitchell, D., Karpuj, M., Pedotti, R., Heller, R., Oksenberg, J., Baranzini, S. E.  
FEDERATION AMER SOC EXP BIOL.2001: A354-A354
- **Antigen specific immunotherapy of multiple sclerosis** *JOURNAL OF CLINICAL IMMUNOLOGY*  
Steinman, L., Conlon, P.  
2001; 21 (2): 93-98
- **An unexpected version of horror autotoxicus: anaphylactic shock to a self peptide** *NATURE IMMUNOLOGY*  
Pedotti, R., Mitchell, D., Wedemeyer, J., Karpuj, M., Chabas, D., Hattab, E. M., Tsai, M., GALLI, S. J., Steinman, L.  
2001; 2 (3): 216-222
- **Multiple sclerosis and gene expression profiling** *MECHANISMS OF LYMPHOCYTE ACTIVATION AND IMMUNE REGULATION VIII: AUTOIMMUNITY 2000 AND BEYOND*  
Steinman, L.  
2001; 490: 109-112



- **The design, synthesis, and evaluation of molecules that enable or enhance cellular uptake: Peptoid molecular transporters** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*  
Wender, P. A., Mitchell, D. J., Pattabiraman, K., Pelkey, E. T., Steinman, L., Rothbard, J. B.  
2000; 97 (24): 13003-13008
- **Polyarginine enters cells more efficiently than other polycationic homopolymers** *JOURNAL OF PEPTIDE RESEARCH*  
Mitchell, D. J., Kim, D. T., Steinman, L., Fathman, C. G., Rothbard, J. B.  
2000; 56 (5): 318-325
- **Induction of a non-encephalitogenic type 2 T helper-cell autoimmune response in multiple sclerosis after administration of an altered peptide ligand in a placebo-controlled, randomized phase II trial** *NATURE MEDICINE*  
Kappos, L., Comi, G., Panitch, H., Oger, J., Antel, J., Conlon, P., Steinman, L.  
2000; 6 (10): 1176-1182
- **Despite epitope spreading in the pathogenesis of autoimmune disease, highly restricted approaches to immune therapy may still succeed [with a hedge on this bet]** *JOURNAL OF AUTOIMMUNITY*  
Steinman, L.  
2000; 14 (4): 278-282
- **ICAM-1 expression in autoimmune encephalitis visualized using magnetic resonance imaging** *JOURNAL OF NEUROIMMUNOLOGY*  
Sipkins, D. A., Gijbels, K., Tropper, F. D., Bednarski, M., Li, K. C., Steinman, L.  
2000; 104 (1): 1-9
- **Gene microarray identification of redox and mitochondrial elements that control resistance or sensitivity to apoptosis** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*  
Voehringer, D. W., Hirschberg, D. L., Xiao, J., Lu, Q., Roederer, M., Lock, C. B., Herzenberg, L. A., Steinman, L., Herzenberg, L. A.  
2000; 97 (6): 2680-2685
- **Multiple approaches to multiple sclerosis** *NATURE MEDICINE*  
Steinman, L.  
2000; 6 (1): 15-16
- **DNA vaccination in the treatment of autoimmune disease.** *Current directions in autoimmunity*  
Garren, H., Steinman, L.  
2000; 2: 203-216
- **The role of TNF alpha and lymphotoxin in demyelinating disease** *ANNALS OF THE RHEUMATIC DISEASES*  
Lock, C., Oksenberg, J., Steinman, L.  
1999; 58: 121-128
- **The role of TNFalpha and lymphotoxin in demyelinating disease.** *Annals of the rheumatic diseases*  
Lock, C., Oksenberg, J., Steinman, L.  
1999; 58: 1121-8
- **Assessment of animal models for MS and demyelinating disease in the design of rational therapy** *NEURON*  
Steinman, L.  
1999; 24 (3): 511-514
- **T cell receptor BV gene rearrangements in the spinal cords and cerebrospinal fluid of patients with amyotrophic lateral sclerosis** *NEUROBIOLOGY OF DISEASE*  
Panzara, M. A., Gussoni, E., Begovich, A. B., MURRAY, R. S., Zang, Y. Q., Appel, S. H., Steinman, L., Zhang, J. W.  
1999; 6 (5): 392-405
- **Pick your fights wisely** *CURRENT OPINION IN NEUROLOGY*  
Steinman, L.  
1999; 12 (4): 375-376
- **Transglutaminase aggregates huntingtin into nonamyloidogenic polymers, and its enzymatic activity increases in Huntington's disease brain nuclei** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*  
Karpuj, M. V., Garren, H., Slunt, H., Price, D. L., Gusella, J., Becher, M. W., Steinman, L.

1999; 96 (13): 7388-7393

- **Antibodies to CD44 and integrin alpha(4), but not L-selectin, prevent central nervous system inflammation and experimental encephalomyelitis by blocking secondary leukocyte recruitment** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*  
Brocke, S., Piercy, C., Steinman, L., Weissman, I. L., VEROMAA, T.  
1999; 96 (12): 6896-6901
- **The immunobiology of multiple sclerosis: An autoimmune disease of the central nervous system** *NEUROBIOLOGY OF DISEASE*  
Conlon, P., Oksenberg, J. R., Zhang, J. Q., Steinman, L.  
1999; 6 (3): 149-166
- **Microbial epitopes act as altered peptide ligands to prevent experimental autoimmune encephalomyelitis** *JOURNAL OF EXPERIMENTAL MEDICINE*  
Ruiz, P. J., Garren, H., Hirschberg, D. L., Langer-Gould, A. M., Levite, M., Karpuj, M. V., Southwood, S., Sette, A., Conlon, P., Steinman, L.  
1999; 189 (8): 1275-1283
- **Absence of "original antigenic sin" in autoimmunity provides an unforeseen platform for immune therapy - Commentary** *JOURNAL OF EXPERIMENTAL MEDICINE*  
Steinman, L.  
1999; 189 (7): 1021-1024
- **Suppressive immunization with DNA encoding a self-peptide prevents autoimmune disease: Modulation of T cell costimulation** *JOURNAL OF IMMUNOLOGY*  
Ruiz, P. J., Garren, H., Ruiz, I. U., Hirschberg, D. L., Nguyen, L. V., Karpuj, M. V., Cooper, M. T., Mitchell, D. J., Fathman, C. G., Steinman, L.  
1999; 162 (6): 3336-3341
- **Selection of hpert mutant T cells as surrogates for dividing cells reveals a restricted T cell receptor BV repertoire in insulin-dependent diabetes mellitus** *CLINICAL IMMUNOLOGY*  
Falta, M. T., Magin, G. K., Allegretta, M., Steinman, L., Atkinson, M. A., Brostoff, S. W., Albertini, R. J.  
1999; 90 (3): 340-351
- **Non-coding plasmid DNA induces IFN-gamma in vivo and suppresses autoimmune encephalomyelitis** *INTERNATIONAL IMMUNOLOGY*  
Boccaccio, G. L., Mor, F., Steinman, L.  
1999; 11 (2): 289-296
- **Local delivery of TNF by retrovirus-transduced T lymphocytes exacerbates experimental autoimmune encephalomyelitis** *CLINICAL IMMUNOLOGY*  
Dal Canto, R. A., Shaw, M. K., Nolan, G. P., Steinman, L., Fathman, C. G.  
1999; 90 (1): 10-14
- **Viral peptide with limited homology to a self peptide can induce clinical signs of experimental autoimmune encephalomyelitis** *JOURNAL OF IMMUNOLOGY*  
Gautam, A. M., Liblau, R., Chelvanayagam, G., Steinman, L., Boston, T.  
1998; 161 (1): 60-64
- **Idiotypic immunization induces immunity to mutated p53 and tumor rejection** *NATURE MEDICINE*  
Ruiz, P. J., Wolkowicz, R., Waisman, A., Hirschberg, D. L., Carmi, P., Erez, N., Garren, H., Herkel, J., Karpuj, M., Steinman, L., Rotter, V., Cohen, I. R.  
1998; 4 (6): 710-712
- **Short peptide-based tolerogens without self-antigenic or pathogenic activity reverse autoimmune disease** *JOURNAL OF IMMUNOLOGY*  
Karin, N., Binah, O., Grabie, N., Mitchell, D. J., Felzen, B., Solomon, M. D., Conlon, P., Gaur, A., Ling, N., Steinman, L.  
1998; 160 (10): 5188-5194
- **Effects of locally delivered cytokines on EAE**  
Dal Canto, R. A., Shaw, M. K., Steinman, L., Nolan, G. P., Fathman, C. G.  
FEDERATION AMER SOC EXP BIOL. 1998: A308-A308
- **Microbial peptides and superantigens in the pathogenesis of autoimmune diseases of the central nervous system** *SEMINARS IN IMMUNOLOGY*  
Brocke, S., Hausmann, S., Steinman, L., Wucherpfennig, K. W.  
1998; 10 (1): 57-67
- **Neuropeptides, via specific receptors, regulate T cell adhesion to fibronectin** *JOURNAL OF IMMUNOLOGY*  
Levite, M., Cahalon, L., HERSHKOVIZ, R., Steinman, L., Lider, O.

- 1998; 160 (2): 993-1000
- **The specificity of the antibody response in multiple sclerosis** *ANNALS OF NEUROLOGY*  
Garren, H., Steinman, L., Lock, C.  
1998; 43 (1): 4-6
  - **CD4(+) T-cell subsets in autoimmunity** *CURRENT OPINION IN IMMUNOLOGY*  
O'Garra, A., Steinman, L., Gijbels, K.  
1997; 9 (6): 872-883
  - **More mayhem from molecular mimics** *NATURE MEDICINE*  
Steinman, L., Oldstone, M. B.  
1997; 3 (12): 1321-1322
  - **Viral damage and the breakdown of self-tolerance** *NATURE MEDICINE*  
Steinman, L., Conlon, P.  
1997; 3 (10): 1085-1087
  - **Recognition of the immunodominant myelin basic protein peptide by autoantibodies and HLA-DR2-restricted T cell clones from multiple sclerosis patients - Identity of key contact residues in the B-cell and T-cell epitopes** *JOURNAL OF CLINICAL INVESTIGATION*  
Wucherpfennig, K. W., Catz, I., Hausmann, S., STROMINGER, J. L., Steinman, L., Warren, K. G.  
1997; 100 (5): 1114-1122
  - **Perivascular T cells express the pro-inflammatory chemokine RANTES mRNA in multiple sclerosis lesions** *SCANDINAVIAN JOURNAL OF IMMUNOLOGY*  
Hvas, J., McLean, C., Justesen, J., Kannourakis, G., Steinman, L., Oksenberg, J. R., Bernard, C. C.  
1997; 46 (2): 195-203
  - **Some misconceptions about understanding autoimmunity through experiments with knockouts** *JOURNAL OF EXPERIMENTAL MEDICINE*  
Steinman, L.  
1997; 185 (12): 2039-2041
  - **Stress and autoimmunity - The neuropeptides corticotropin-releasing factor and urocortin suppress encephalomyelitis via effects on both the hypothalamic-pituitary-adrenal axis and the immune system** *JOURNAL OF IMMUNOLOGY*  
Poliak, S., Mor, F., Conlon, P., Wong, T., Ling, N., RIVIER, J., Vale, W., Steinman, L.  
1997; 158 (12): 5751-5756
  - **Exploring the potential of DNA vaccination** *HOSPITAL PRACTICE*  
Cohen, I. R., Steinman, L.  
1997; 32 (5): 169-?
  - **Local delivery of interleukin 4 by retrovirus-transduced T lymphocytes ameliorates experimental autoimmune encephalomyelitis** *JOURNAL OF EXPERIMENTAL MEDICINE*  
Shaw, M. K., Lorens, J. B., Dhawan, A., DalCanto, R., Tse, H. Y., Tran, A. B., Bonpane, C., Eswaran, S. L., Brocke, S., Sarvetnick, N., Steinman, L., Nolan, G. P., Fathman, et al  
1997; 185 (9): 1711-1714
  - **Multiple sclerosis: a polygenic disease involving epistatic interactions, germline rearrangements and environmental effects** *NEUROGENETICS*  
Karpuj, M. V., Steinman, L., Oksenberg, J. R.  
1997; 1 (1): 21-28
  - **Experimental autoimmune encephalomyelitis in IL-4-deficient mice** *INTERNATIONAL IMMUNOLOGY*  
Liblau, R., Steinman, L., Brocke, S.  
1997; 9 (5): 799-803
  - **Amelioration of relapsing experimental autoimmune encephalomyelitis with altered myelin basic protein peptides involves different cellular mechanisms** *JOURNAL OF NEUROIMMUNOLOGY*  
Gaur, A., Boehme, S. A., Chalmers, D., Crowe, P. D., Pahuja, A., Ling, N., Brocke, S., Steinman, L., Conlon, P. J.  
1997; 74 (1-2): 149-158
  - **Myoblast implantation in Duchenne muscular dystrophy: The San Francisco study** *MUSCLE & NERVE*

- MILLER, R. G., Sharma, K. R., PAVLATH, G. K., Gussoni, E., MYNHIER, M., LANCTOT, A. M., Greco, C. M., Steinman, L., Blau, H. M.  
1997; 20 (4): 469-478
- **Inhibition of nitric oxide synthase for treatment of experimental autoimmune encephalomyelitis** *JOURNAL OF IMMUNOLOGY*  
Brenner, T., Brocke, S., Szafer, F., Sobel, R. A., Parkinson, J. F., Perez, D. H., Steinman, L.  
1997; 158 (6): 2940-2946
  - **Local delivery of interleukin-4 by retrovirus-transduced lymphocytes ameliorates experimental autoimmune encephalomyelitis.**  
Shaw, M. K., Lorens, J. B., Dhawan, A., DalCanto, R., Tse, H. Y., Tran, A. B., Bonpane, C., Eswaran, S. L., Brocke, S., Sarvetnick, N., Steinman, L., Nolan, G. P., Fathman, et al  
MOSBY-ELSEVIER.1997: 1976-76
  - **IL-2 and TNF receptors as targets of regulatory T-T interactions - Isolation and characterization of cytokine receptor-reactive T cell lines in the Lewis rat** *JOURNAL OF IMMUNOLOGY*  
Mor, F., Reizis, B., Cohen, I. R., Steinman, L.  
1996; 157 (11): 4855-4861
  - **Differential activation of human autoreactive T cell clones by altered peptide ligands derived from myelin basic protein peptide (87-99)** *EUROPEAN JOURNAL OF IMMUNOLOGY*  
Vergelli, M., Hemmer, B., Utz, U., Vogt, A., Kalbus, M., Tranquill, L., Conlon, P., Ling, N., Steinman, L., McFarland, H. F., Martin, R.  
1996; 26 (11): 2624-2634
  - **The right stuff: Breaking through the xenotransplant barrier** *NATURE MEDICINE*  
Steinman, L.  
1996; 2 (11): 1185-1186
  - **Multiple sclerosis: From a myelin point of view** *JOURNAL OF NEUROSCIENCE RESEARCH*  
Boccaccio, G. L., Steinman, L.  
1996; 45 (6): 647-654
  - **Suppressive vaccination with DNA encoding a variable region gene of the T-cell receptor prevents autoimmune encephalomyelitis and activates Th2 immunity** *NATURE MEDICINE*  
Waisman, A., Ruiz, P. J., Hirschberg, D. L., Gelman, A., Oksenberg, J. R., Brocke, S., Mor, F., Cohen, I. R., Steinman, L.  
1996; 2 (8): 899-905
  - **CD45 isoforms on human CD4(+) T-cell subsets** *JOURNAL OF ALLERGY AND CLINICAL IMMUNOLOGY*  
Shanafelt, M. C., Yssel, H., SODERBERG, C., Steinman, L., Adelman, D. C., Peltz, G., Lahesmaa, R.  
1996; 98 (2): 433-440
  - **Regulation of disease susceptibility: Decreased prevalence of IgE-mediated allergic disease in patients with multiple sclerosis** *JOURNAL OF ALLERGY AND CLINICAL IMMUNOLOGY*  
ORO, A. S., Guarino, T. J., Driver, R., Steinman, L., Umetsu, D. T.  
1996; 97 (6): 1402-1408
  - **Isolation and Characterization of Autoreactive T Cells in Experimental Autoimmune Encephalomyelitis of the Mouse** *Methods (San Diego, Calif.)*  
BROCKE, Quigley, MCFARLAND, Steinman  
1996; 9 (3): 458-462
  - **Multiple sclerosis: A coordinated immunological attack against myelin in the central nervous system** *CELL*  
Steinman, L.  
1996; 85 (3): 299-302
  - **Superantigens in demyelinating disease** *SPRINGER SEMINARS IN IMMUNOPATHOLOGY*  
Brocke, S., Piercy, C., Steinman, L.  
1996; 18 (1): 51-56
  - **TCR usage in human and experimental demyelinating disease** *IMMUNOLOGY TODAY*  
Hafler, D. A., Saadeh, M. G., Kuchroo, V. K., Milford, E., Steinman, L.  
1996; 17 (4): 152-159

- **A few autoreactive cells in an autoimmune infiltrate control a vast population of nonspecific cells: A tale of smart bombs and the infantry** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*  
Steinman, L.  
1996; 93 (6): 2253-2256
- **Treatment of experimental encephalomyelitis with a peptide analogue of myelin basic protein** *NATURE*  
Brocke, S., Gijbels, K., Allegretta, M., Ferber, I., Piercy, C., Blankenstein, T., Martin, R., Utz, U., Karin, N., Mitchell, D., VEROMAA, T., Waisman, A., Gaur, et al  
1996; 379 (6563): 343-346
- **Mice with a disrupted IFN-gamma gene are susceptible to the induction of experimental autoimmune encephalomyelitis (EAE)** *JOURNAL OF IMMUNOLOGY*  
Ferber, I. A., Brocke, S., TAYLOREDWARDS, C., Ridgway, W., Dinisco, C., Steinman, L., Dalton, D., Fathman, C. G.  
1996; 156 (1): 5-7
- **Characterization of acute bone marrow graft rejection in T cell-depleted, partially mismatched related donor bone marrow transplantation** *24th Annual Meeting of the International-Society-for-Experimental-Hematology*  
Lamb, L. S., Szafer, F., HENSLEEDOWNEY, P. J., Walker, M., King, S., Godder, K., Pati, A. R., BEST, R., Steinman, L., Geier, S. S., Gee, A. P. CARDEN JENNINGS PUBL CO LTD.1995: 1595-1600
- **FINE SPECIFICITY OF THE ANTIBODY-RESPONSE TO MYELIN BASIC-PROTEIN IN THE CENTRAL-NERVOUS-SYSTEM IN MULTIPLE-SCLEROSIS - THE MINIMAL B-CELL EPI TOPE AND A MODEL OF ITS FEATURES** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*  
Warren, K. G., Catz, I., Steinman, L.  
1995; 92 (24): 11061-11065
- **ADMINISTRATION OF NEUTRALIZING ANTIBODIES TO INTERLEUKIN-6 (IL-6) REDUCES EXPERIMENTAL AUTOIMMUNE ENCEPHALOMYELITIS AND IS ASSOCIATED WITH ELEVATED LEVELS OF IL-6 BIOACTIVITY IN CENTRAL-NERVOUS-SYSTEM AND CIRCULATION** *MOLECULAR MEDICINE*  
Gijbels, K., Brocke, S., Abrams, J. S., Steinman, L.  
1995; 1 (7): 795-805
- **PATHOGEN ANTIGEN-REACTIVE AND SUPERANTIGEN-REACTIVE SYNOVIAL-FLUID T-CELLS IN REACTIVE ARTHRITIS** *JOURNAL OF INFECTIOUS DISEASES*  
Lahesmaa, R., SODERBERG, C., BLISKA, J., ALLSUP, A., Luukkainen, R., Steinman, L., Uchiyama, T., Peltz, G.  
1995; 172 (5): 1290-1297
- **MULTIPLE-SCLEROSIS - PRESENTING AN ODD AUTOANTIGEN** *NATURE*  
Steinman, L.  
1995; 375 (6534): 739-740
- **T-cell receptor repertoire V beta in alopecia areata.** *journal of investigative dermatology*  
Szafer, F., Price, V. H., Oksenberg, J. R., Steinman, L.  
1995; 104 (5): 22S-24S
- **REINDUCTION OF EXPERIMENTAL AUTOIMMUNE ENCEPHALOMYELITIS IN MICE** *CELLULAR IMMUNOLOGY*  
Lindsey, J. W., Pappolla, M., Steinman, L.  
1995; 162 (2): 235-240
- **MAJOR T-CELL RESPONSES IN MULTIPLE-SCLEROSIS** *MOLECULAR MEDICINE TODAY*  
Steinman, L., Waisman, A., ALTMANN, D.  
1995; 1 (2): 79-83
- **DESIGNING RATIONAL THERAPIES FOR MULTIPLE-SCLEROSIS** *BIO-TECHNOLOGY*  
Steinman, L., Conlon, P.  
1995; 13 (2): 118-120
- **ESCAPE FROM HORROR AUTOTOXICUS - PATHOGENESIS AND TREATMENT OF AUTOIMMUNE-DISEASE** *CELL*  
Steinman, L.  
1995; 80 (1): 7-10

- **UNIQUE T-CELL RECEPTOR JUNCTIONAL SEQUENCES FOUND IN MULTIPLE-SCLEROSIS AND T-CELLS MEDIATING EXPERIMENTAL ALLERGIC ENCEPHALOMYELITIS** *Conference on T-Cell Receptor Use in Human Autoimmune Diseases*  
Allegretta, M., Steinman, L.  
NEW YORK ACAD SCIENCES.1995: 265-282
- **COCCIDIOIDAL ANTIGEN-REACTIVE CD4(+) T-LYMPHOCYTES IN THE CEREBROSPINAL-FLUID IN COCCIDIOIDES-IMMITIS MENINGITIS** *JOURNAL OF MEDICAL AND VETERINARY MYCOLOGY*  
Vollmer, T. L., Gaiser, C., DELLOCA, R. L., Porteus, M., Steinman, L., Stevens, D. A.  
1995; 33 (1): 43-48
- **A PREDOMINANT ROLE OF INTEGRIN ALPHA(4) IN THE SPONTANEOUS DEVELOPMENT OF AUTOIMMUNE DIABETES IN NONOBESE DIABETIC MICE** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*  
Yang, X. D., Michie, S. A., Tisch, R., Karin, N., Steinman, L., McDevitt, H. O.  
1994; 91 (26): 12604-12608
- **REVERSAL OF EXPERIMENTAL AUTOIMMUNE ENCEPHALOMYELITIS BY A SOLUBLE PEPTIDE VARIANT OF A MYELIN BASIC-PROTEIN EPITOPE - T-CELL RECEPTOR ANTAGONISM AND REDUCTION OF INTERFERON-GAMMA AND TUMOR-NECROSIS-FACTOR-ALPHA PRODUCTION** *JOURNAL OF EXPERIMENTAL MEDICINE*  
Karin, N., Mitchell, D. J., Brocke, S., Ling, N., Steinman, L.  
1994; 180 (6): 2227-2237
- **REVERSAL OF EXPERIMENTAL AUTOIMMUNE ENCEPHALOMYELITIS WITH A HYDROXAMATE INHIBITOR OF MATRIX METALLOPROTEASES** *JOURNAL OF CLINICAL INVESTIGATION*  
Gijbels, K., Galardy, R. E., Steinman, L.  
1994; 94 (6): 2177-2182
- **CELL-ADHESION MOLECULES - A SELECTIVE THERAPEUTIC TARGET FOR ALLEVIATION OF IDDM** *13th Immunology of Diabetes Workshop*  
Yang, X. D., Michie, S. A., Tisch, R., Karin, N., Steinman, L., McDevitt, H. O.  
ACADEMIC PRESS LTD.1994: 859-64
- **SPECIFIC T-CELL RECEPTOR GENE REARRANGEMENTS AT THE SITE OF MUSCLE DEGENERATION IN DUCHENNE MUSCULAR-DYSTROPHY** *JOURNAL OF IMMUNOLOGY*  
Gussoni, E., PAVLATH, G. K., MILLER, R. G., Panzara, M. A., Powell, M., Blau, H. M., Steinman, L.  
1994; 153 (10): 4798-4805
- **MYELIN BASIC-PROTEIN PEPTIDE SPECIFICITY AND T-CELL RECEPTOR GENE USAGE OF HPRT MUTANT T-CELL CLONES IN PATIENTS WITH MULTIPLE-SCLEROSIS** *ANNALS OF NEUROLOGY*  
Lodge, P. A., Allegretta, M., Steinman, L., Sriram, S.  
1994; 36 (5): 734-740
- **IMMUNOPATHOGENESIS OF HUMAN INFLAMMATORY ARTHRITIS - LESSONS FROM LYME AND REACTIVE ARTHRITIS** *JOURNAL OF INFECTIOUS DISEASES*  
Lahesmaa, R., Shanafelt, M. C., Steinman, L., Peltz, G.  
1994; 170 (4): 978-985
- **REPEATED TREATMENT WITH CHIMERIC ANTI-CD4 ANTIBODY IN MULTIPLE-SCLEROSIS** *ANNALS OF NEUROLOGY*  
Lindsey, J. W., Hodgkinson, S., Mehta, R., Mitchell, D., ENZMANN, D., Steinman, L.  
1994; 36 (2): 183-189
- **HOMOLOGIES BETWEEN T-CELL RECEPTOR JUNCTIONAL SEQUENCES UNIQUE TO MULTIPLE-SCLEROSIS AND T-CELLS MEDIATING EXPERIMENTAL ALLERGIC ENCEPHALOMYELITIS** *JOURNAL OF CLINICAL INVESTIGATION*  
Allegretta, M., Albertini, R. J., Howell, M. D., Smith, L. R., Martin, R., McFarland, H. F., Sriram, S., Brostoff, S., Steinman, L.  
1994; 94 (1): 105-109
- **Specific motifs in T cell receptor V beta D beta J beta gene sequences in multiple sclerosis lesions in brain.** *Behring Institute Mitteilungen*  
Steinman, L.  
1994: 148-157
- **Infection and multiple sclerosis: a possible role for superantigens?** *Trends in microbiology*  
Brocke, S., VEROMAA, T., Weissman, I. L., Gijbels, K., Steinman, L.  
1994; 2 (7): 250-254

- **LUPUS-PRONE MICE ARE SUSCEPTIBLE TO ORGAN-SPECIFIC AUTOIMMUNE-DISEASE, EXPERIMENTAL ALLERGIC ENCEPHALOMYELITIS** *PATHOBIOLOGY*  
Zamvil, S. S., ALSabbagh, A., Nelson, P. A., Kaul, D., STCHARLES, M., Mitchell, D. J., Steinman, L., Weiner, H. L., Kuchroo, V. K.  
1994; 62 (3): 113-119
- **A HIPPOCAMPAL PROTEIN ASSOCIATED WITH PARANEOPLASTIC NEUROLOGIC SYNDROME AND SMALL-CELL LUNG-CARCINOMA** *BIOCHEMICAL AND BIOPHYSICAL RESEARCH COMMUNICATIONS*  
Sakai, K., GOFUKU, M., Kitagawa, Y., Ogasawara, T., Hirose, G., Yamazaki, M., Koh, C. S., Yanagisawa, N., Steinman, L.  
1994; 199 (3): 1200-1208
- **NEW ALLELIC POLYMORPHISMS IN TAP GENES** *IMMUNOGENETICS*  
Szafer, F., Oksenberg, J. R., Steinman, L.  
1994; 39 (5): 374-374
- **PHASE-1 CLINICAL-TRIAL OF CHIMERIC MONOCLONAL ANTI-CD4 ANTIBODY IN MULTIPLE-SCLEROSIS** *44th Annual Meeting of the American-Academy-of-Neurology*  
Lindsey, J. W., Hodgkinson, S., Mehta, R., Siegel, R. C., Mitchell, D. J., Lim, M., Piercy, C., Tram, T., Dorfman, L., ENZMANN, D., Steinman, L.  
LIPPINCOTT WILLIAMS & WILKINS.1994: 413-19
- **MINIMUM STRUCTURAL REQUIREMENTS FOR PEPTIDE PRESENTATION BY MAJOR HISTOCOMPATIBILITY COMPLEX CLASS-II MOLECULES - IMPLICATIONS IN INDUCTION OF AUTOIMMUNITY** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*  
Gautam, A. M., Lock, C. B., Smilek, D. E., Pearson, C. I., Steinman, L., McDevitt, H. O.  
1994; 91 (2): 767-771
- **THE EPIGENETICS OF MULTIPLE-SCLEROSIS - CLUES TO ETIOLOGY AND A RATIONALE FOR IMMUNE THERAPY** *ANNUAL REVIEW OF NEUROSCIENCE*  
Steinman, L., Miller, A., Bernard, C. C., Oksenberg, J. R.  
1994; 17: 247-265
- **GENETIC-FACTORS IN MULTIPLE-SCLEROSIS** *JAMA-JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION*  
Oksenberg, J. R., Begovich, A. B., Erlich, H. A., Steinman, L.  
1993; 270 (19): 2362-2369
- **INHIBITION OF INSULITIS AND PREVENTION OF DIABETES IN NONOBESE DIABETIC MICE BY BLOCKING L-SELECTIN AND VERY LATE ANTIGEN-4 ADHESION RECEPTORS** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*  
Yang, X. D., Karin, N., Tisch, R., Steinman, L., McDevitt, H. O.  
1993; 90 (22): 10494-10498
- **COMPETITIVE PCR QUANTIFICATION OF CD4, CD8, ICAM-1, VCAM-1, AND MHC CLASS-II MESSENGER-RNA IN THE CENTRAL-NERVOUS-SYSTEM DURING DEVELOPMENT AND RESOLUTION OF EXPERIMENTAL ALLERGIC ENCEPHALOMYELITIS** *JOURNAL OF NEUROIMMUNOLOGY*  
Lindsey, J. W., Steinman, L.  
1993; 48 (2): 227-234
- **INDUCTION OF RELAPSING PARALYSIS IN EXPERIMENTAL AUTOIMMUNE ENCEPHALOMYELITIS BY BACTERIAL SUPERANTIGEN** *NATURE*  
Brocke, S., Gaur, A., Piercy, C., Gautam, A., Gijbels, K., Fathman, C. G., Steinman, L.  
1993; 365 (6447): 642-644
- **CONNECTIONS BETWEEN THE IMMUNE-SYSTEM AND THE NERVOUS-SYSTEM** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*  
Steinman, L.  
1993; 90 (17): 7912-7914
- **AUTOIMMUNE-DISEASE** *SCIENTIFIC AMERICAN*  
Steinman, L.  
1993; 269 (3): 106-?
- **T-CELL RECEPTOR V-GENE USAGE IN SYNOVIAL-FLUID LYMPHOCYTES OF PATIENTS WITH CHRONIC ARTHRITIS** *HUMAN IMMUNOLOGY*

- Struyk, L., Kurnick, J. T., Hawes, G. E., VANLAAR, J. M., Schipper, R., Oksenberg, J. R., Steinman, L., DeVries, R. R., Breedveld, F. C., VANDENELSEN, P. 1993; 37 (4): 237-251
- **GAMMA-DELTA T-CELL RECEPTOR REPERTOIRE IN BRAIN-LESIONS OF PATIENTS WITH MULTIPLE-SCLEROSIS** *JOURNAL OF NEUROIMMUNOLOGY*  
Hvas, J., Oksenberg, J. R., Fernando, R., Steinman, L., Bernard, C. C. 1993; 46 (1-2): 225-234
  - **CLONAL ANALYSIS OF INVIVO ACTIVATED CD8+ CYTOTOXIC T-LYMPHOCYTES FROM A MELANOMA PATIENT RESPONSIVE TO ACTIVE SPECIFIC IMMUNOTHERAPY** *CANCER IMMUNOLOGY IMMUNOTHERAPY*  
KANMITCHELL, J., Huang, X. Q., Steinman, L., Oksenberg, J. R., Harel, W., Parker, J. W., Goedegebuure, P. S., Darrow, T. L., Mitchell, M. S. 1993; 37 (1): 15-25
  - **T-CELL RECEPTOR GENE USAGE OF ACETYLCHOLINE RECEPTOR-SPECIFIC T-HELPER CELLS** *ANNALS OF THE NEW YORK ACADEMY OF SCIENCES*  
Melms, A., Oksenberg, J. R., Malcherek, G., Schoepfer, R., Muller, C. A., Lindstrom, J., Steinman, L. 1993; 681: 313-314
  - **USAGE OF T-CELL RECEPTOR BETA-CHAIN VARIABLE GENE IS HIGHLY RESTRICTED AT THE SITE OF INFLAMMATION IN MURINE AUTOIMMUNE UVEITIS** *JOURNAL OF IMMUNOLOGY*  
Rao, N. A., Naidu, Y. M., Bell, R., Lindsey, J. W., Pararajasegaram, G., Sun, Y. M., Steinman, L. 1993; 150 (12): 5716-5721
  - **PREFERENTIAL USAGE OF T-CELL ANTIGEN RECEPTOR-V REGION GENE SEGMENT V-BETA-5.1 BY BORRELIA-BURGDORFERI ANTIGEN-REACTIVE T-CELL CLONES ISOLATED FROM A PATIENT WITH LYME-DISEASE** *JOURNAL OF IMMUNOLOGY*  
Lahesmaa, R., Shanafelt, M. C., ALLSUP, A., SODERBERG, C., Anzola, J., Freitas, V., Turck, C., Steinman, L., Peltz, G. 1993; 150 (9): 4125-4135
  - **DIVERSE T-CELL RECEPTOR V-BETA GENE USAGE IN THE CENTRAL-NERVOUS-SYSTEM IN EXPERIMENTAL ALLERGIC ENCEPHALOMYELITIS** *JOURNAL OF IMMUNOLOGY*  
Bell, R. B., Lindsey, J. W., Sobel, R. A., Hodgkinson, S., Steinman, L. 1993; 150 (9): 4085-4092
  - **SELECTIVE AND NONSELECTIVE STAGES IN HOMING OF T-LYMPHOCYTES TO THE CENTRAL-NERVOUS-SYSTEM DURING EXPERIMENTAL ALLERGIC ENCEPHALOMYELITIS** *JOURNAL OF IMMUNOLOGY*  
Karin, N., Szafer, F., Mitchell, D., Gold, D. P., Steinman, L. 1993; 150 (9): 4116-4124
  - **MULTIPLE-SCLEROSIS - FROM IMMUNOGENETICS TO IMMUNOTHERAPY** 1991 MILAN INTERNATIONAL SEMINAR ON NEUROPSYCHOLOGICAL, CLINICAL AND EPIDEMIOLOGICAL ASPECTS OF MULTIPLE SCLEROSIS  
Oksenberg, J. R., Panzara, M. A., Steinman, L. ELSEVIER SCIENCE BV.1993: S29-S37
  - **SEB INDUCED ANERGY - MODULATION OF IMMUNE-RESPONSE TO T-CELL DETERMINANTS OF MYOGLOBIN AND MYELIN BASIC-PROTEIN** *JOURNAL OF IMMUNOLOGY*  
Gaur, A., Fathman, C. G., Steinman, L., Brocke, S. 1993; 150 (7): 3062-3069
  - **SELECTION FOR T-CELL RECEPTOR V-BETA-D-BETA-J-BETA GENE REARRANGEMENTS WITH SPECIFICITY FOR A MYELIN BASIC-PROTEIN PEPTIDE IN BRAIN-LESIONS OF MULTIPLE-SCLEROSIS** *NATURE*  
Oksenberg, J. R., Panzara, M. A., Begovich, A. B., Mitchell, D., Erlich, H. A., MURRAY, R. S., Shimonkevitz, R., Sherritt, M., Rothbard, J., Bernard, C. C., Steinman, L. 1993; 362 (6415): 68-70
  - **Selection for T cell receptor Vbeta-Dbeta-Jbeta gene rearrangements with specificity for a myelin basic protein peptide in brain lesions of multiple sclerosis** *Nature*  
Steinman L., Oksenberg JR, Panzara MA, Begovich AB, Mitchell D, Erlich HA, Murray RS, Shimonkevitz R, Sherritt M, Rothbard J, Bernard CCA 1993
  - **T-CELL RECEPTOR GENE USAGE OF ACETYLCHOLINE RECEPTOR-SPECIFIC T-HELPER CELLS** 8TH INTERNATIONAL CONF ON MYASTHENIA GRAVIS AND RELATED DISORDERS : EXPERIMENTAL AND CLINICAL ASPECTS  
Melms, A., Oksenberg, J. R., Malcherek, G., Schoepfer, R., Muller, C. A., Lindstrom, J., Steinman, L.



NEW YORK ACAD SCIENCES.1993: 313-14

- **INTERACTION OF A T-CELL EPITOPE OF PERTUSSIS TOXIN WITH THE MOLECULES OF THE IMMUNE-SYSTEM** *5TH EUROPEAN WORKSHOP ON BACTERIAL PROTEIN TOXINS*  
DiTommaso, A., Oksenberg, J. R., Steinman, L., Judd, A. K., Sette, A., Karr, R. W., Olson, R., Fu, X. T., Rappuoli, R., DEMAGISTRIS, M. T.  
GUSTAV FISCHER VERLAG.1993: 377-384
- **Therapeutic peptides that block interaction of T cells with MHC in experimental allergic encephalomyelitis.** *Annals of the New York Academy of Sciences*  
Steinman, L.  
1993; 685: 521-24
- **From treatment of experimental allergic encephalomyelitis to clinical trials in multiple sclerosis.** *Immunology series*  
Steinman, L., Lindsey, J. W., Alters, S., Hodgkinson, S.  
1993; 59: 253-260
- **THERAPEUTIC PEPTIDES THAT BLOCK INTERACTION OF T-CELLS WITH MHC IN EXPERIMENTAL ALLERGIC ENCEPHALOMYELITIS** *3RD INTERNATIONAL CONF ON DRUG RESEARCH IN IMMUNOLOGIC AND INFECTIOUS DISEASES - IMMUNOMODULATING DRUGS : SYNTHESIS, PRECLINICAL AND CLINICAL EVALUATION*  
Steinman, L.  
NEW YORK ACAD SCIENCES.1993: 521-524
- **RECURRENT TRANSVERSE MYELITIS, MYASTHENIA-GRAVIS, AND AUTOANTIBODIES** *ANNALS OF NEUROLOGY*  
Lindsey, J. W., Albers, G. W., Steinman, L.  
1992; 32 (3): 407-409
- **A POLYALANINE PEPTIDE WITH ONLY 5 NATIVE MYELIN BASIC-PROTEIN RESIDUES INDUCES AUTOIMMUNE ENCEPHALOMYELITIS** *JOURNAL OF EXPERIMENTAL MEDICINE*  
Gautam, A. M., Pearson, C. I., Smilek, D. E., Steinman, L., McDevitt, H. O.  
1992; 176 (2): 605-609
- **[An analysis of lymphokine gene expression within astrocytoma].** *No shinkei geka. Neurological surgery*  
NITTA, T., Steinman, L., Sato, K.  
1992; 20 (7): 763-768
- **YERSINIA-ENTEROCOLITICA ACTIVATES A T-HELPER TYPE-1-LIKE T-CELL SUBSET IN REACTIVE ARTHRITIS** *JOURNAL OF IMMUNOLOGY*  
Lahesmaa, R., Yssel, H., Batsford, S., Luukkainen, R., MOTTONEN, T., Steinman, L., Peltz, G.  
1992; 148 (10): 3079-3085
- **INHIBITION OF EXPERIMENTAL AUTOIMMUNE ENCEPHALOMYELITIS BY A NONIMMUNOGENIC NON-SELF PEPTIDE THAT BINDS TO I-A(UL)** *JOURNAL OF IMMUNOLOGY*  
Gautam, A. M., Pearson, C. I., Sinha, A. A., Smilek, D. E., Steinman, L., McDevitt, H. O.  
1992; 148 (10): 3049-3054
- **ANALYSIS OF THE T-CELL REPERTOIRE USING THE PCR AND SPECIFIC OLIGONUCLEOTIDE PRIMERS** *BIOTECHNIQUES*  
Panzara, M. A., Gussoni, E., Steinman, L., Oksenberg, J. R.  
1992; 12 (5): 728-735
- **[T-cell receptor repertoire in tumor infiltrating lymphocytes within malignant brain tumors].** *No shinkei geka. Neurological surgery*  
NITTA, T., Ikeda, M., Cogen, P., Steinman, L., Sato, K.  
1992; 20 (5): 559-566
- **NORMAL DYSTROPHIN TRANSCRIPTS DETECTED IN DUCHENNE MUSCULAR-DYSTROPHY PATIENTS AFTER MYOBLAST TRANSPLANTATION** *NATURE*  
Gussoni, E., PAVLATH, G. K., LANCTOT, A. M., Sharma, K. R., MILLER, R. G., Steinman, L., Blau, H. M.  
1992; 356 (6368): 435-438
- **THE POLYMERASE CHAIN-REACTION FOR DETECTION OF T-CELL ANTIGEN RECEPTOR EXPRESSION** *CURRENT OPINION IN IMMUNOLOGY*  
Panzara, M. A., Oksenberg, J. R., Steinman, L.  
1992; 4 (2): 205-210

- **INTERACTION OF THE PERTUSSIS TOXIN PEPTIDE CONTAINING RESIDUES-30-42 WITH DR1 AND THE T-CELL RECEPTORS OF 12 HUMAN T-CELL CLONES** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*  
DEMAGISTRIS, M. T., DiTommaso, A., Domenighini, M., Censini, S., Tagliabue, A., Oksenberg, J. R., Steinman, L., Judd, A. K., OSULLIVAN, D., Rappuoli, R.  
1992; 89 (7): 2990-2994
- **PREVENTION OF EXPERIMENTAL AUTOIMMUNE ENCEPHALOMYELITIS BY ANTIBODIES AGAINST ALPHA-4-BETA-1 INTEGRIN** *NATURE*  
YEDNOCK, T. A., Cannon, C., Fritz, L. C., SANCHEZMADRID, F., Steinman, L., Karin, N.  
1992; 356 (6364): 63-66
- **ANTIGEN-SPECIFIC SUPPRESSOR CELLS IN EXPERIMENTAL AUTOIMMUNE UVEITIS** *OPHTHALMIC RESEARCH*  
Rao, N. A., ATALLA, L., Fong, S. L., Chen, F., LINKERISRAELI, M., Steinman, L.  
1992; 24 (2): 92-98
- **INVIVO-PRIMED CD8 CYTOTOXIC T-CELLS CAN BE INDUCED TO PROLIFERATE WITHOUT ANTIGEN PRESENTING CELLS**  
KANMITCHELL, J., Huang, X. Q., Steinman, L., Oksenberg, J. R., Harel, W., Parker, J. W., Goedegebuure, P. S., Darrow, T. L., Mitchell, M. S.  
FEDERATION AMER SOC EXP BIOL.1992: A1334-A1334
- **ASSOCIATION OF SUSCEPTIBILITY TO MULTIPLE-SCLEROSIS WITH TCR GENES** *IMMUNOLOGY TODAY*  
Steinman, L., Oksenberg, J. R., Bernard, C. C.  
1992; 13 (2): 49-51
- **CHARACTERIZATION OF T-CELL RECEPTOR-ALPHA-BETA REPERTOIRE IN SYNOVIAL TISSUE FROM DIFFERENT TEMPORAL PHASES OF RHEUMATOID-ARTHRITIS** *SCANDINAVIAN JOURNAL OF IMMUNOLOGY*  
Bucht, A., Oksenberg, J. R., Lindblad, S., Gronberg, A., Steinman, L., Klareskog, L.  
1992; 35 (2): 159-165
- **EXPRESSION OF GRANULOCYTE COLONY STIMULATING FACTOR AND GRANULOCYTE-MACROPHAGE COLONY STIMULATING FACTOR GENES IN HUMAN ASTROCYTOMA CELL-LINES AND IN GLIOMA SPECIMENS** *BRAIN RESEARCH*  
NITTA, T., Sato, K., Allegretta, M., Brocke, S., Lim, M., Mitchell, D. J., Steinman, L.  
1992; 571 (1): 19-25
- **MULTIPLE-SCLEROSIS AND ITS ANIMAL-MODELS - THE ROLE OF THE MAJOR HISTOCOMPATIBILITY COMPLEX AND THE T-CELL RECEPTOR REPERTOIRE** *SPRINGER SEMINARS IN IMMUNOPATHOLOGY*  
Steinman, L.  
1992; 14 (1): 79-93
- **IMMUNOGENIC PEPTIDES AND PERSPECTIVES FOR THE TREATMENT OF AUTOIMMUNE-DISEASES** *14TH INTERNATIONAL CONGRESS OF ALLERGOLOGY AND CLINICAL IMMUNOLOGY*  
Oksenberg, J. R., Steinman, L.  
HOGREFE & HUBER PUBLISHERS.1992: 602-607
- **EAE: a model for immune intervention with synthetic peptides.** *International reviews of immunology*  
Smilek, D. E., Gautam, A. M., Pearson, C., Steinman, L., McDevitt, H. O.  
1992; 9 (3): 223-230
- **NEOPLASTIC AND REACTIVE HUMAN ASTROCYTES EXPRESS INTERLEUKIN-8 GENE** *NEUROSURGICAL REVIEW*  
NITTA, T., Allegretta, M., Okumura, K., Sato, K., Steinman, L.  
1992; 15 (3): 203-207
- **Prevention of experimental autoimmune encephalomyelitis by antibodies against a4b1 integrin** *Nature*  
Steinman L, Yednock T, Cannon C, Fritz L, Sanchez-Madrid F, Karin N  
1992
- **PROSPECTS FOR IMMUNOTHERAPY DIRECTED TO THE T-CELL RECEPTOR IN HUMAN AUTOIMMUNE-DISEASE** *ANNALS OF THE NEW YORK ACADEMY OF SCIENCES*  
Steinman, L.  
1991; 636: 147-153
- **[Expression of cytokine genes within astrocytoma cell lines and brain specimens].** *No to shinkei = Brain and nerve*  
NITTA, T., Steinman, L., Sato, K.

- 1991; 43 (12): 1145-1150
- **A SINGLE AMINO-ACID CHANGE IN A MYELIN BASIC-PROTEIN PEPTIDE CONFERS THE CAPACITY TO PREVENT RATHER THAN INDUCE EXPERIMENTAL AUTOIMMUNE ENCEPHALOMYELITIS** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*  
Smilek, D. E., Wraith, D. C., Hodgkinson, S., Dwivedy, S., Steinman, L., McDevitt, H. O.  
1991; 88 (21): 9633-9637
  - **AN ANALYSIS OF T-CELL-RECEPTOR VARIABLE-REGION GENES IN TUMOR-INFILTRATING LYMPHOCYTES WITHIN MALIGNANT-TUMORS** *INTERNATIONAL JOURNAL OF CANCER*  
NITTA, T., Sato, K., Okumura, K., Steinman, L.  
1991; 49 (4): 545-550
  - **T-CELL RECEPTOR V-BETA GENE-EXPRESSION DIFFERS IN TUMOR-INFILTRATING LYMPHOCYTES WITHIN PRIMARY AND METASTATIC MELANOMA** *CANCER RESEARCH*  
NITTA, T., Bell, R., Okumura, K., Sato, K., Steinman, L.  
1991; 51 (20): 5565-5569
  - **New approaches to the therapy of demyelinating disease.** *Current opinion in neurobiology*  
Oksenberg, J. R., Steinman, L.  
1991; 1 (3): 436-440
  - **MODULATION OF MHC CLASS-II ANTIGEN EXPRESSION IN HUMAN MYOBLASTS AFTER TREATMENT WITH IFN-GAMMA** *NEUROLOGY*  
Mantegazza, R., Hughes, S. M., Mitchell, D., Travis, M., Blau, H. M., Steinman, L.  
1991; 41 (7): 1128-1132
  - **LYMPHOCYTES CYTOTOXIC TO UVEAL AND SKIN MELANOMA-CELLS FROM PERIPHERAL-BLOOD OF OCULAR MELANOMA PATIENTS** *CANCER IMMUNOLOGY IMMUNOTHERAPY*  
KANMITCHELL, J., LIGGETT, P. E., Harel, W., Steinman, L., NITTA, T., Oksenberg, J. R., Posner, M. R., Mitchell, M. S.  
1991; 33 (5): 333-340
  - **Trimolecular interactions in experimental autoimmune demyelinating disease and prospects for immunotherapy.** *Seminars in immunology*  
Bell, R. B., Steinman, L.  
1991; 3 (4): 237-245
  - **OLIGONUCLEOTIDE DOT-BLOT ANALYSIS OF HLA-DQ-BETA ALLELES ASSOCIATED WITH MULTIPLE-SCLEROSIS** *JOURNAL OF NEUROIMMUNOLOGY*  
Sinha, A. A., Bell, R. B., Steinman, L., McDevitt, H. O.  
1991; 32 (1): 61-65
  - **THE DEVELOPMENT OF RATIONAL STRATEGIES FOR SELECTIVE IMMUNOTHERAPY AGAINST AUTOIMMUNE DEMYELINATING DISEASE** *ADVANCES IN IMMUNOLOGY*  
Steinman, L.  
1991; 49: 357-379
  - **METHODOLOGIC CONSIDERATIONS IN CLINICAL-STUDIES OF MYOBLAST IMPLANTATION** *SATELLITE SYMPOSIUM ON MUSCULAR DYSTROPHY RESEARCH 90 / 7TH INTERNATIONAL CONGRESS ON NEUROMUSCULAR DISEASE*  
MILLER, R. G., Steinman, L., Majumdar, S., Almada, A., PAVLATH, G. K., Blau, H. M.  
ELSEVIER SCIENCE PUBL B V.1991: 117-122
  - **OBSERVATIONS ON THE EFFECT OF CHIMERIC ANTI-CD4 MONOCLONAL-ANTIBODY IN PATIENTS WITH MYCOSIS-FUNGIFORMIS** *BLOOD*  
Knox, S. J., Levy, R., Hodgkinson, S., Bell, R., Brown, S., Wood, G. S., Hoppe, R., Abel, E. A., Steinman, L., Berger, R. G., Gaiser, C., Young, G., Bindl, et al  
1991; 77 (1): 20-30
  - **ISOLATION OF A COMPLEMENTARY-DNA CLONE ENCODING AN AUTOANTIGEN RECOGNIZED BY AN ANTINEURONAL CELL ANTIBODY FROM A PATIENT WITH PARANEOPLASTIC CEREBELLAR DEGENERATION** *ANNALS OF NEUROLOGY*  
Sakai, K., Mitchell, D. J., Tsukamoto, T., Steinman, L.  
1990; 28 (5): 692-698
  - **The use of monoclonal antibodies for treatment of autoimmune disease.** *Journal of clinical immunology*  
Steinman, L.

1990; 10 (6): 30S-38S

- **HTLV-I SEQUENCES ARE NOT DETECTED IN PERIPHERAL-BLOOD GENOMIC DNA OR IN BRAIN CDNA OF MULTIPLE-SCLEROSIS PATIENTS** *ANNALS OF NEUROLOGY*  
Oksenberg, J. R., Mantegazza, R., Sakai, K., Bernard, C. C., Steinman, L.  
1990; 28 (4): 574-577
- **PREDOMINANT EXPRESSION OF T-CELL RECEPTOR-V-ALPHA-7 IN TUMOR-INFILTRATING LYMPHOCYTES OF UVEAL MELANOMA** *SCIENCE*  
NITTA, T., Oksenberg, J. R., Rao, N. A., Steinman, L.  
1990; 249 (4969): 672-674
- **INCREASED INCIDENCE OF CERTAIN TCR AND HLA GENES ASSOCIATED WITH MYASTHENIA-GRAVIS IN ITALIANS** *JOURNAL OF AUTOIMMUNITY*  
Mantegazza, R., Oksenberg, J. R., Baggi, F., Antozzi, C., Illeni, M. T., Pellegris, G., Cornelio, F., Steinman, L.  
1990; 3 (4): 431-440
- **DEVELOPMENT OF ANTIGEN-SPECIFIC THERAPIES FOR AUTOIMMUNE-DISEASE** *MOLECULAR BIOLOGY & MEDICINE*  
Steinman, L.  
1990; 7 (4): 333-339
- **PROSPECTS FOR SPECIFIC IMMUNOTHERAPY IN MYASTHENIA-GRAVIS** *FASEB JOURNAL*  
Steinman, L., Mantegazza, R.  
1990; 4 (10): 2726-2731
- **MECHANISMS OF ANTI-CD4-MEDIATED DEPLETION AND IMMUNOTHERAPY - A STUDY USING A SET OF CHIMERIC ANTI-CD4 ANTIBODIES** *JOURNAL OF IMMUNOLOGY*  
Alters, S. E., Sakai, K., Steinman, L., Oi, V. T.  
1990; 144 (12): 4587-4592
- **LYMPHOTOXIN AND TUMOR NECROSIS FACTOR-ALPHA PRODUCTION BY MYELIN BASIC PROTEIN-SPECIFIC T-CELL CLONES CORRELATES WITH ENCEPHALITOGENICITY** *INTERNATIONAL IMMUNOLOGY*  
Powell, M. B., Mitchell, D., Lederman, J., Buckmeier, J., Zamvil, S. S., Graham, M., Ruddle, N. H., Steinman, L.  
1990; 2 (6): 539-544
- **LIMITED HETEROGENEITY OF REARRANGED T-CELL RECEPTOR V-ALPHA TRANSCRIPTS IN BRAINS OF MULTIPLE-SCLEROSIS PATIENTS** *NATURE*  
Oksenberg, J. R., Stuart, S., Begovich, A. B., Bell, R. B., Erlich, H. A., Steinman, L., Bernard, C. C.  
1990; 345 (6273): 344-346
- **THE ROLE OF THE MHC AND T-CELL RECEPTOR IN SUSCEPTIBILITY TO MULTIPLE-SCLEROSIS** *CURRENT OPINION IN IMMUNOLOGY*  
Oksenberg, J. R., Steinman, L.  
1990; 2 (4): 619-621
- **THE LYMPHOCYTE-T IN EXPERIMENTAL ALLERGIC ENCEPHALOMYELITIS** *ANNUAL REVIEW OF IMMUNOLOGY*  
Zamvil, S. S., Steinman, L.  
1990; 8: 579-621
- **T cell recognition in experimental autoimmune encephalomyelitis: prospects for immune intervention with synthetic peptides.** *International reviews of immunology*  
Wraith, D. C., Smilek, D. E., Mitchell, D. J., Steinman, L., McDevitt, H. O.  
1990; 6 (1): 37-47
- **IMMUNOGENETIC MECHANISMS IN MYASTHENIA-GRAVIS** *PROGRESS IN BRAIN RESEARCH*  
Steinman, L.  
1990; 84: 117-124
- **GENETIC INFLUENCES ON NEUROIMMUNOLOGICAL DISEASE** *68TH ANNUAL SYMP OF THE ASSOC FOR RESEARCH IN NERVOUS AND MENTAL DISEASE : IMMUNOLOGIC MECHANISMS IN NEUROLOGIC AND PSYCHIATRIC DISEASE*  
Steinman, L.  
RAVEN PRESS.1990: 11-14

- **MULTIPLE T-CELL AND B-CELL EPITOPES IN THE S1 SUBUNIT (A-MONOMER) OF THE PERTUSSIS TOXIN MOLECULE** *JOURNAL OF IMMUNOLOGY*  
Oksenberg, J. R., Ko, C., Judd, A. K., Lim, M., Kent, A., SCHOOLNIK, G. K., Steinman, L.  
1989; 143 (12): 4227-4231
- **PREVENTION OF EXPERIMENTAL ENCEPHALOMYELITIS WITH PEPTIDES THAT BLOCK INTERACTION OF T-CELLS WITH MAJOR HISTOCOMPATIBILITY COMPLEX PROTEINS** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*  
Sakai, K., Zamvil, S. S., Mitchell, D. J., Hodgkinson, S., Rothbard, J. B., Steinman, L.  
1989; 86 (23): 9470-9474
- **ANTIGEN RECOGNITION IN AUTOIMMUNE ENCEPHALOMYELITIS AND THE POTENTIAL FOR PEPTIDE-MEDIATED IMMUNOTHERAPY** *CELL*  
Wraith, D. C., Smilek, D. E., Mitchell, D. J., Steinman, L., McDevitt, H. O.  
1989; 59 (2): 247-255
- **POLYMORPHIC RESIDUES ON THE I-A-BETA CHAIN MODULATE THE STIMULATION OF T-CELL CLONES SPECIFIC FOR THE N-TERMINAL PEPTIDE OF THE AUTO-ANTIGEN MYELIN BASIC-PROTEIN** *JOURNAL OF IMMUNOLOGY*  
Davis, C. B., Mitchell, D. J., Wraith, D. C., Todd, J. A., Zamvil, S. S., McDevitt, H. O., Steinman, L., Jones, P. P.  
1989; 143 (7): 2083-2093
- **CYCLIC ADENOSINE-3',5'-MONOPHOSPHATE METABOLISM IN ACTIVATED T-CELL CLONES** *IMMUNOLOGY*  
Oksenberg, D., Oksenberg, J. R., Sakai, K., Peroutka, S. J., Steinman, L.  
1989; 67 (4): 484-488
- **T-CELL RECOGNITION AS THE TARGET FOR IMMUNE INTERVENTION IN AUTOIMMUNE-DISEASE** *CELL*  
Wraith, D. C., McDevitt, H. O., Steinman, L., ACHAORBEA, H.  
1989; 57 (5): 709-715
- **The role of the MHC and T-cell receptor in susceptibility to multiple sclerosis.** *Current opinion in immunology*  
Oksenberg, J. R., Steinman, L.  
1989; 2 (4): 619-621
- **COMPARISON OF RAT AND RAT-MOUSE CHIMERIC ANTI-MURINE CD4 ANTIBODIES INVITRO - CHIMERIC ANTIBODIES LYSE LOW-DENSITY CD4+ CELLS** *JOURNAL OF IMMUNOLOGY*  
Alters, S. E., Steinman, L., Oi, V. T.  
1989; 142 (6): 2018-2023
- **T-CELL RECEPTOR V-ALPHA AND C-ALPHA ALLELES ASSOCIATED WITH MULTIPLE-SCLEROSIS AND MYASTHENIA-GRAVIS** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*  
Oksenberg, J. R., Sherritt, M., Begovich, A. B., Erlich, H. A., Bernard, C. C., CAVALLISFORZA, L. L., Steinman, L.  
1989; 86 (3): 988-992
- **T-CELL RECEPTORS IN MURINE AUTOIMMUNE-DISEASES** *ANNUAL REVIEW OF IMMUNOLOGY*  
ACHAORBEA, H., Steinman, L., McDevitt, H. O.  
1989; 7: 371-405
- **EVOLUTION, FUNCTION, AND UTILIZATION OF MAJOR HISTOCOMPATIBILITY COMPLEX POLYMORPHISM IN AUTOIMMUNE-DISEASE** *3RD SYM ON IMMUNOLOGICAL RECOGNITION*  
McDevitt, H. O., Wraith, D. C., Smilek, D. E., Lundberg, A. S., Steinman, L.  
COLD SPRING HARBOR LABORATORY PRESS.1989: 853-857
- **ROLE OF MHC POLYMORPHISM IN AUTOIMMUNE-DISEASE** *7TH INTERNATIONAL CONGRESS OF IMMUNOLOGY*  
McDevitt, H. O., Wraith, D. C., Smilek, D. E., Steinman, L.  
SPRINGER-VERLAG BERLIN.1989: 68-75
- **EVOLUTION, FUNCTION, AND UTILIZATION OF MAJOR HISTOCOMPATIBILITY COMPLEX POLYMORPHISM IN AUTOIMMUNE-DISEASE** *COLD SPRING HARBOR SYMPOSIA ON QUANTITATIVE BIOLOGY*  
McDevitt, H. O., Wraith, D. C., Smilek, D. E., Lundberg, A. S., Steinman, L.  
1989; 54: 853-857

- **T-CELL RECEPTORS IN AUTOIMMUNE-DISEASE AS TARGETS FOR IMMUNE INTERVENTION** *16TH INTERNATIONAL CONGRESS OF GENETICS : GENETICS AND THE UNITY OF BIOLOGY*  
ACHAORBEA, H., Steinman, L., McDevitt, H. O.  
NATL RESEARCH COUNCIL CANADA.1989: 656-61
- **MHC-RESTRICTED RECOGNITION OF IMMUNOGENIC T-CELL EPITOPES OF PERTUSSIS TOXIN REVEALS DETERMINANTS IN MAN DISTINCT FROM THE ADP-RIBOSYLASE ACTIVE-SITE** *JOURNAL OF EXPERIMENTAL MEDICINE*  
Oksenberg, J. R., Judd, A. K., Ko, C., Lim, M., Fernandez, R., SCHOOLNIK, G. K., Steinman, L.  
1988; 168 (5): 1855-1864
- **INVOLVEMENT OF DISTINCT MURINE T-CELL RECEPTORS IN THE AUTOIMMUNE ENCEPHALITOGENIC RESPONSE TO NESTED EPITOPES OF MYELIN BASIC-PROTEIN** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*  
Sakai, K., Sinha, A. A., Mitchell, D. J., Zamvil, S. S., Rothbard, J. B., McDevitt, H. O., Steinman, L.  
1988; 85 (22): 8608-8612
- **MULTIPLE DISCRETE ENCEPHALITOGENIC EPITOPES OF THE AUTO-ANTIGEN MYELIN BASIC-PROTEIN INCLUDE A DETERMINANT FOR I-E CLASS-II-RESTRICTED T-CELLS** *JOURNAL OF EXPERIMENTAL MEDICINE*  
Zamvil, S. S., Mitchell, D. J., Powell, M. B., Sakai, K., Rothbard, J. B., Steinman, L.  
1988; 168 (3): 1181-1186
- **CHARACTERIZATION OF A MAJOR ENCEPHALITOGENIC T-CELL EPITOPE IN SJL/J MICE WITH SYNTHETIC OLIGOPEPTIDES OF MYELIN BASIC-PROTEIN** *JOURNAL OF NEUROIMMUNOLOGY*  
Sakai, K., Zamvil, S. S., Mitchell, D. J., Lim, M., Rothbard, J. B., Steinman, L.  
1988; 19 (1-2): 21-32
- **AUTOIMMUNITY AND THE NERVOUS-SYSTEM** *IMMUNOLOGY AND ALLERGY CLINICS OF NORTH AMERICA*  
Steinman, L.  
1988; 8 (2): 213-221
- **LIMITED HETEROGENEITY OF T-CELL RECEPTORS FROM LYMPHOCYTES MEDIATING AUTOIMMUNE ENCEPHALOMYELITIS ALLOWS SPECIFIC IMMUNE INTERVENTION** *CELL*  
ACHAORBEA, H., Mitchell, D. J., Timmermann, L., Wraith, D. C., TAUSCH, G. S., Waldor, M. K., Zamvil, S. S., McDevitt, H. O., Steinman, L.  
1988; 54 (2): 263-273
- **POLYMORPHIC MARKERS OF HUMAN T-CELL RECEPTOR ALPHA-GENES AND BETA-GENES - FAMILY STUDIES AND COMPARISON OF FREQUENCIES IN HEALTHY-INDIVIDUALS AND PATIENTS WITH MULTIPLE-SCLEROSIS AND MYASTHENIA-GRAVIS** *HUMAN IMMUNOLOGY*  
Oksenberg, J. R., GAISER, C. N., CAVALLISFORZA, L. L., Steinman, L.  
1988; 22 (2): 111-121
- **A MOLECULAR-BASIS FOR MHC CLASS-II - ASSOCIATED AUTOIMMUNITY** *SCIENCE*  
Todd, J. A., ACHAORBEA, H., Bell, J. I., Chao, N., Fronck, Z., Jacob, C. O., McDermott, M., Sinha, A. A., Timmerman, L., Steinman, L., McDevitt, H. O.  
1988; 240 (4855): 1003-1009
- **HLA CLASS-II ALLELIC VARIATION AND SUSCEPTIBILITY TO PEMPHIGUS VULGARIS** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*  
Scharf, S. J., Friedmann, A., Brautbar, C., Szafer, F., Steinman, L., Horn, G., Gyllensten, U., Erlich, H. A.  
1988; 85 (10): 3504-3508
- **PREDOMINANT EXPRESSION OF A T-CELL RECEPTOR V-BETA GENE SUBFAMILY IN AUTOIMMUNE ENCEPHALOMYELITIS** *JOURNAL OF EXPERIMENTAL MEDICINE*  
Zamvil, S. S., Mitchell, D. J., Lee, N. E., Moore, A. C., Waldor, M. K., Sakai, K., Rothbard, J. B., McDevitt, H. O., Steinman, L., ACHAORBEA, H.  
1988; 167 (5): 1586-1596
- **ADP-RIBOSYLTRANSFERASE ACTIVITY OF PERTUSSIS TOXIN AND IMMUNOMODULATION BY BORDETELLA-PERTUSSIS** *SCIENCE*  
BLACK, W. J., Munoz, J. J., Peacock, M. G., Schad, P. A., COWELL, J. L., BURCHALL, J. J., Lim, M., Kent, A., Steinman, L., FALKOW, S.  
1988; 240 (4852): 656-659
- **A NEWLY CHARACTERIZED HLA DQ-BETA ALLELE ASSOCIATED WITH PEMPHIGUS VULGARIS** *SCIENCE*  
Sinha, A. A., Brautbar, C., Szafer, F., Friedmann, A., TZFONI, E., Todd, J. A., Steinman, L., McDevitt, H. O.  
1988; 239 (4843): 1026-1029

- **Immunologic basis for functional recovery in neurologic diseases.** *Advances in neurology*  
Steinman, L.  
1988; 47: 255-264
- **THERAPY OF AUTOIMMUNE-DISEASE WITH MONOCLONAL-ANTIBODIES TO CLASS-II GENE-PRODUCTS OF THE MAJOR HISTOCOMPATIBILITY COMPLEX** *PROGRESS IN ALLERGY*  
Steinman, L.  
1988; 45: 161-167
- **IMPORTANCE OF IMMUNOGLOBULIN ISOTYPE IN THERAPY OF EXPERIMENTAL AUTOIMMUNE ENCEPHALOMYELITIS WITH MONOCLONAL ANTI-CD4 ANTIBODY** *JOURNAL OF IMMUNOLOGY*  
Waldor, M. K., Mitchell, D., Kipps, T. J., Herzenberg, L. A., Steinman, L.  
1987; 139 (11): 3660-3664
- **HLA-DQ RESTRICTION FRAGMENT LENGTH POLYMORPHISMS IN MYASTHENIA-GRAVIS** *ANNALS OF THE NEW YORK ACADEMY OF SCIENCES*  
Bell, J. I., Steinman, L., Toyka, K., McDevitt, H. O.  
1987; 505: 382-387
- **TREATMENT OF EXPERIMENTAL AUTOIMMUNE MYASTHENIA-GRAVIS WITH MONOCLONAL-ANTIBODIES TO IMMUNE-RESPONSE GENE-PRODUCTS** *ANNALS OF THE NEW YORK ACADEMY OF SCIENCES*  
Waldor, M. K., OHEARN, M., Sriram, S., Steinman, L.  
1987; 505: 655-668
- **Molecular approaches toward a therapy for multiple sclerosis.** *Rivista di neurologia*  
Steinman, L.  
1987; 57 (3): 173-174
- **MONOCLONAL ANTI-IA ANTIBODY THERAPY IN ANIMAL-MODELS OF AUTOIMMUNE-DISEASE** *CIBA FOUNDATION SYMPOSIA*  
McDevitt, H. O., Perry, R., STEINMAN, L. A.  
1987; 129: 184-193
- **T-CELL EPITOPE OF THE AUTOANTIGEN MYELIN BASIC-PROTEIN THAT INDUCES ENCEPHALOMYELITIS** *NATURE*  
Zamvil, S. S., Mitchell, D. J., Moore, A. C., Kitamura, K., Steinman, L., Rothbard, J. B.  
1986; 324 (6094): 258-260
- **LEBERS DISEASE AND DYSTONIA - A MITOCHONDRIAL DISEASE** *NEUROLOGY*  
Novotny, E. J., Singh, G., Wallace, D. C., DORFMAN, L. J., Louis, A., SOGG, R. L., Steinman, L.  
1986; 36 (8): 1053-1060
- **THERAPY OF AUTOIMMUNE-DISEASES WITH ANTIBODY TO IMMUNE-RESPONSE GENE-PRODUCTS OR TO T-CELL SURFACE-MARKERS** *ANNALS OF THE NEW YORK ACADEMY OF SCIENCES*  
Steinman, L., Waldor, M. K., Zamvil, S. S., Lim, M., Herzenberg, L., Herzenberg, L., McDevitt, H. O., Mitchell, D., Sriram, S.  
1986; 475: 274-284
- **THE NEUROPATHOLOGY OF PROPIONIC ACIDEMIA** *DEVELOPMENTAL MEDICINE AND CHILD NEUROLOGY*  
Steinman, L., Clancy, R. R., Cann, H., Urich, H.  
1983; 25 (1): 87-94
- **GENETIC-CONTROL OF SUSCEPTIBILITY TO EXPERIMENTAL ALLERGIC NEURITIS AND THE IMMUNE-RESPONSE TO P2-PROTEIN** *NEUROLOGY*  
Steinman, L., Smith, M. E., Forno, L. S.  
1981; 31 (8): 950-954
- **ISOLATED OCULOMOTOR PALSY AFTER MEASLES IMMUNIZATION** *AMERICAN JOURNAL OF OPHTHALMOLOGY*  
CHAN, C. C., SOGG, R. L., Steinman, L.  
1980; 89 (3): 446-448
- **PERIPHERAL NEUROPATHY IN THE CHERRY-RED SPOT-MYOCLONUS SYNDROME (SIALIDOSIS TYPE-I)** *ANNALS OF NEUROLOGY*  
Steinman, L., Tharp, B. R., DORFMAN, L. J., Forno, L. S., SOGG, R. L., KELTS, K. A., OBRIEN, J. S.

1980; 7 (5): 450-456

● **CHERRY-RED SPOT-MYOCLONUS SYNDROME** *OPHTHALMOLOGY*

SOGG, R. L., Steinman, L., RATHJEN, B., Tharp, B. R., O'BRIEN, J. S., Kenyon, K. R.

1979; 86 (10): 1861-?

● **MALDISTRIBUTION OF PHYSICIANS IN YUGOSLAVIA** *JOURNAL OF MEDICAL EDUCATION*

Steinman, L.

1974; 49 (2): 182-187