


Lawrence Steinman, MD

George A. Zimmermann Professor and Professor of Pediatrics
Neurology

 NIH Biosketch available Online

 Resume available Online

CLINICAL OFFICE (PRIMARY)

- **Beckman Center**

279 Campus Dr Rm B002

MC 5316

Stanford, CA 94304

Tel (650) 725-6401

Fax (650) 725-0627

Bio

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
- Professor, Pediatrics
- 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)
- Doctorate Honoris Causa, University of Buenos Aires (October 24, 2022)
- 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

- Chairman, Research Advisory Committee on Gulf War Illness, Veteran's Administration (2018 - 2022)
- 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 Dept of Neurology (1980) CA
- Residency: Stanford University School of Medicine (1976) CA
- Internship: Stanford University Dept of Medicine (1974) CA
- Board Certification: Neurology, American Board of Psychiatry and Neurology (1984)
- Fellowship: Weizmann Institute Of Science (1977) Israel
- 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

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

GRADUATE AND FELLOWSHIP PROGRAM AFFILIATIONS

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

Publications

PUBLICATIONS

- **Antibody reactivity against EBNA1 and GlialCAM differentiates multiple sclerosis patients from healthy controls.** *Proceedings of the National Academy of Sciences of the United States of America*
Sattarnejad, N., Kockum, I., Thomas, O. G., Liu, Y., Ho, P. P., Barrett, A. K., Comanescu, A. I., Wijeratne, T. U., Utz, P. J., Alfredsson, L., Steinman, L., Robinson, W. H., Olsson, et al
2025; 122 (11): e2424986122

- **Epstein-Barr virus and the immune microenvironment in multiple sclerosis: Insights from high-dimensional brain tissue imaging.** *Proceedings of the National Academy of Sciences of the United States of America*
Orr, N., Steinman, L.
2025; 122 (11): e2425670122
- **Multiple Sclerosis: A Virus-Induced Gliopathy?** *Neurology(R) neuroimmunology & neuroinflammation*
Sabatino, J. J., Steinman, L.
2025; 12 (2): e200383
- **Epstein-Barr virus as a potentiator of autoimmune diseases.** *Nature reviews. Rheumatology*
Robinson, W. H., Younis, S., Love, Z. Z., Steinman, L., Lanz, T. V.
2024
- **Association of Levels of CSF Osteopontin With Cortical Atrophy and Disability in Early Multiple Sclerosis.** *Neurology(R) neuroimmunology & neuroinflammation*
Marastoni, D., Turano, E., Tamanti, A., Colato, E., Pisani, A. I., Scartezzini, A., Carotenuto, S., Mazziotti, V., Camera, V., Anni, D., Ziccardi, S., Guandalini, M., Pizzini, et al
2024; 11 (5): e200265
- **MOG CNS Autoimmunity and MOGAD.** *Neurology(R) neuroimmunology & neuroinflammation*
Moseley, C. E., Virupakshaiah, A., Forsthuber, T. G., Steinman, L., Waubant, E., Zamvil, S. S.
2024; 11 (5): e200275
- **Hunger guides immunity to friend versus foe.** *Nature neuroscience*
Or-Geva, N., Steinman, L.
2024
- **Elevated $\alpha 5$ integrin expression on myeloid cells in motor areas in amyotrophic lateral sclerosis is a therapeutic target.** *Proceedings of the National Academy of Sciences of the United States of America*
Chiot, A., Roemer, S. F., Ryner, L., Bogachuk, A., Emberley, K., Brownell, D., Jimenez, G. A., Leviten, M., Woltjer, R., Dickson, D. W., Steinman, L., Ajami, B.
2023; 120 (32): e2306731120
- **T cell deletional tolerance restricts AQP4 but not MOG CNS autoimmunity.** *Proceedings of the National Academy of Sciences of the United States of America*
Sagan, S. A., Moinfar, Z., Moseley, C. E., Dandekar, R., Spencer, C. M., Verkman, A. S., Ottersen, O. P., Sobel, R. A., Sidney, J., Sette, A., Anderson, M. S., Steinman, L., Wilson, et al
2023; 120 (30): e2306572120
- **An intrinsically disordered protein, osteopontin, driving neuropathology in Alzheimer's dementia.** *Proceedings of the National Academy of Sciences of the United States of America*
Steinman, L.
2023; 120 (6): e2221816120
- **Experimental encephalomyelitis at age 90, still relevant and elucidating how viruses trigger disease.** *The Journal of experimental medicine*
Steinman, L., Patarca, R., Haseltine, W.
2023; 220 (2)
- **Roadmap for understanding mechanisms on how Epstein-Barr virus triggers multiple sclerosis and for translating these discoveries in clinical trials.** *Clinical & translational immunology*
Lanz, T. V., Robinson, W. H., Ho, P. P., Steinman, L.
2023; 12 (2): e1438
- **Larry Steinman** *NEURON*
Steinman, L.
2022; 110 (21): 3412-3414
- **NAD⁺ metabolism drives astrocyte proinflammatory reprogramming in central nervous system autoimmunity.** *Proceedings of the National Academy of Sciences of the United States of America*
Meyer, T., Shimon, D., Youssef, S., Yankovitz, G., Tessler, A., Chernobylsky, T., Gaoni-Yogev, A., Perelroizen, R., Budick-Harmelin, N., Steinman, L., Mayo, L.

2022; 119 (35): e2211310119

- **Ublituximab versus Teriflunomide in Relapsing Multiple Sclerosis.** *The New England journal of medicine*
Steinman, L., Fox, E., Hartung, H. P., Alvarez, E., Qian, P., Wray, S., Robertson, D., Huang, D., Selmaj, K., Wynn, D., Cutter, G., Mok, K., Hsu, et al
2022; 387 (8): 704-714
- **Risk of severe COVID-19 infection among adults with prior exposure to children.** *Proceedings of the National Academy of Sciences of the United States of America*
Solomon, M. D., Escobar, G. J., Lu, Y., Schlessinger, D., Steinman, J. B., Steinman, L., Lee, C., Liu, V. X.
2022; 119 (33): e2204141119
- **Michael Sela: Scientist, statesman, sage (1924-2022).** *Proceedings of the National Academy of Sciences of the United States of America*
Steinman, L.
2022; 119 (34): e2211991119
- **Mobilization of innate and adaptive antitumor immune responses by the RNP-targeting antibody ATRC-101.** *Proceedings of the National Academy of Sciences of the United States of America*
Scholz, A., DeFalco, J., Leung, Y., Aydin, I. T., Czupalla, C. J., Cao, W., Santos, D., Vad, N., Lippow, S. M., Baia, G., Harbell, M., Sapugay, J., Zhang, et al
2022; 119 (19): e2123483119
- **Epstein-Barr virus and multiple sclerosis.** *Science (New York, N.Y.)*
Robinson, W. H., Steinman, L.
2022; 375 (6578): 264-265
- **Clonally Expanded B Cells in Multiple Sclerosis Bind EBV EBNA1 and GlialCAM.** *Nature*
Lanz, T. V., Brewer, R. C., Ho, P. P., Moon, J. S., Jude, K. M., Fernandez, D., Fernandes, R. A., Gomez, A. M., Nadj, G. S., Bartley, C. M., Schubert, R. D., Hawes, I. A., Vazquez, et al
2022
- **Capturing pathogenic immune cells before they home to brain.** *Med (New York, N.Y.)*
Steinman, L.
2021; 2 (3): 214-16
- **Generating tumor-selective conditionally active biologic anti-CTLA4 antibodies via protein-associated chemical switches.** *Proceedings of the National Academy of Sciences of the United States of America*
Chang, H. W., Frey, G., Liu, H., Xing, C., Steinman, L., Boyle, W. J., Short, J. M.
2021; 118 (9)
- **Biological Significance of Anti-SARS-CoV-2 Antibodies: Lessons Learned From Progressive Multifocal Leukoencephalopathy.** *Neurology(R) neuroimmunology & neuroinflammation*
Manouchehri, N., Steinman, L., Stuve, O.
2021; 8 (2)
- **Improvement of Comorbid Psoriasis in Patients With MS Treated With Natalizumab.** *Neurology(R) neuroimmunology & neuroinflammation*
Berkovich, R., Yakupova, A., Eskenazi, J., Carlson, N. G., Steinman, L.
2021; 8 (2)
- **A sugar-coated strategy to treat a rare neurologic disease provides a blueprint for a decoy glycan therapeutic and a potential vaccine for CoViD-19: An Editorial Highlight for "Selective inhibition of anti-MAG IgM autoantibody binding to myelin by an antigen specific glycopolymer" on <https://doi.org/10.1111/jnc.15021>.** *Journal of neurochemistry*
Steinman, L. n.
2020
- **Reduced development of COVID-19 in children reveals molecular checkpoints gating pathogenesis illuminating potential therapeutics.** *Proceedings of the National Academy of Sciences of the United States of America*
Steinman, J. B., Lum, F. M., Ho, P. P., Kaminski, N. n., Steinman, L. n.
2020
- **Autoantibodies against central nervous system antigens in a subset of B cell-dominant multiple sclerosis patients.** *Proceedings of the National Academy of Sciences of the United States of America*

- Kuerten, S. n., Lanz, T. V., Lingampalli, N. n., Lahey, L. J., Kleinschnitz, C. n., Mäurer, M. n., Schroeter, M. n., Braune, S. n., Ziemssen, T. n., Ho, P. P., Robinson, W. H., Steinman, L. n.
2020
- **Epstein-Barr Virus in Multiple Sclerosis: Theory and Emerging Immunotherapies.** *Trends in molecular medicine*
Bar-Or, A., Pender, M. P., Khanna, R., Steinman, L., Hartung, H., Maniar, T., Croze, E., Aftab, B. T., Giovannoni, G., Joshi, M. J.
2019
 - **Antigen-specific tolerance to self-antigens in protein replacement therapy, gene therapy and autoimmunity.** *Current opinion in immunology*
Steinman, L., Ho, P. P., Robinson, W. H., Utz, P. J., Villoslada, P.
2019; 61: 46–53
 - **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.
2019; 9 (7)
 - **Immune tolerance in patients with Multiple Sclerosis and Neuromyelitis Optica by peptide-loaded tolerogenic dendritic cells: final results of the phase 1b clinical trial and extension**
Zubizarreta, I., Florez-Grau, G., Vila, G., Cabezon, R., Espana, C., Andorra, M., Saiz, A., Llufrui, S., Sepulveda, M., Sola, N., Martinez-Lapiscina, E., Pulido Valdeolivas, I., Casanova, et al
LIPPINCOTT WILLIAMS & WILKINS.2019
 - **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., Filaretto, 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., Garriss, 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) α and γ regulate IFN γ 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) α and γ regulate IFN γ 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., Strohmaier, 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
- **Repurposing Licensed Drugs with Activity Against Epstein-Barr Virus for Treatment of Multiple Sclerosis: A Systematic Approach.** *CNS drugs*
Li, V., McKay, F. C., Tschärke, D. C., Smith, C., Khanna, R., Lechner-Scott, J., Rawlinson, W. D., Lloyd, A. R., Taylor, B. V., Morahan, J. M., Steinman, L., Giovannoni, G., Bar-Or, et al
2025
- **A Novel Mouse Model for Cerebral Inflammatory Demyelination in X-Linked Adrenoleukodystrophy: Insights into Pathogenesis and Potential Therapeutic Targets.** *Annals of neurology*
Hashemi, E., Srivastava, I. N., Aguirre, A., Yoseph, E. T., Kaushal, E., Awani, A., Ryu, J. K., Akassoglou, K., Talebian, S., Chu, P., Pisani, L., Musolino, P., Steinman, et al
2024
- **Improvements in no evidence of disease activity with ublituximab vs. teriflunomide in the ULTIMATE phase 3 studies in relapsing multiple sclerosis.** *Frontiers in neurology*
Alvarez, E., Steinman, L., Fox, E. J., Hartung, H. P., Qian, P., Wray, S., Robertson, D., Selmaj, K., Wynn, D., Mok, K., Xu, Y., Bodhinathan, K., Miskin, et al
2024; 15: 1473284
- **Myeloid cell replacement is neuroprotective in chronic experimental autoimmune encephalomyelitis.** *Nature neuroscience*

- Mader, M. M., Napole, A., Wu, D., Atkins, M., Scavetti, A., Shibuya, Y., Foltz, A., Hahn, O., Yoo, Y., Danziger, R., Tan, C., Wyss-Coray, T., Steinman, et al
2024
- **Regulatory T cells use heparanase to access IL-2 bound to extracellular matrix in inflamed tissue.** *Nature communications*
Martinez, H. A., Koliesnik, I., Kaber, G., Reid, J. K., Nagy, N., Barlow, G., Falk, B. A., Medina, C. O., Hargil, A., Zihlsler, S., Vlodavsky, I., Li, J. P., Pérez-Cruz, et al
2024; 15 (1): 1564
 - **An expert panel on the adequacy of safety data and physiological roles of dietary bovine osteopontin in infancy.** *Frontiers in nutrition*
Fleming, S. A., Reyes, S. M., Donovan, S. M., Hernell, O., Jiang, R., Lonnerdal, B., Neu, J., Steinman, L., Sorensen, E. S., West, C. E., Kleinman, R., Wallingford, J. C.
2024; 11: 1404303
 - **A Novel Mouse Model for Cerebral Inflammatory Demyelination in X-Linked Adrenoleukodystrophy: Insights into Pathogenesis and Potential Therapeutic Targets** *Annals of Neurology*
Hashemi, E., Srivastava, I., Aguirre, A., Yoseph, E. T., Van Haren, K. P.
2024
 - **Bioavailable central nervous system disease-modifying therapies for multiple sclerosis** *FRONTIERS IN IMMUNOLOGY*
Hartung, H., Cree, B. C., Barnett, M., Meuth, S. G., Bar-Or, A., Steinman, L.
2023; 14
 - **Bioavailable central nervous system disease-modifying therapies for multiple sclerosis.** *Frontiers in immunology*
Hartung, H. P., Cree, B. A., Barnett, M., Meuth, S. G., Bar-Or, A., Steinman, L.
2023; 14: 1290666
 - **A novel mouse model of cerebral adrenoleukodystrophy highlights NLRP3 activity in lesion pathogenesis.** *bioRxiv : the preprint server for biology*
Hashemi, E., Narain Srivastava, I., Aguirre, A., Tilahan Yoseph, E., Kaushal, E., Awani, A., Kyu Ryu, J., Akassoglou, K., Talebian, S., Chu, P., Pisani, L., Musolino, P., Steinman, et al
2023
 - **Absolute Lymphocyte Count Around Infections During Phase 3 and Open-Label Extension Trials of Ozanimod in Participants With Relapsing Multiple Sclerosis**
Hartung, H., Steinman, L., Bar-Or, A., Sheffield, J., Harris, S., Riolo, J., Cheng, C., Reardon, J., Thorpe, A., Cree, B.
SAGE PUBLICATIONS LTD.2023: 354
 - **Ublituximab Reduces Thalamic Volume Loss and New Lesion Formation in Participants of the ULTIMATE I & II Phase 3 Studies**
Arnold, D. L., Steinman, L., Hartung, H., Selmaj, K., Lee, L., Campagnolo, D., Mok, K., Cree, B.
SAGE PUBLICATIONS LTD.2023: 246-247
 - **Update on Hepatic Safety of Ozanimod in Relapsing Multiple Sclerosis in the DAYBREAK Open-Label Extension Trial**
Selmaj, K. W., Steinman, L., Comi, G., Bar-Or, A., Hartung, H. P., Montalban, X., Havrdova, E. K., Sheffield, J. K., Thorpe, A., Riolo, J. V., Krakovich, A., Cheng, C. Y., Kappos, et al
WILEY.2023: 325-326
 - **Clinical Stage Deoxycytidine Kinase Inhibitor TRE-515 Blocks Lymphocyte Proliferation and Disease in Three Mouse Models of Multiple Sclerosis**
Clark, P. M., Schultz, K. A., Chen, B., Salas, J. R., Shepard, H., Steinman, L.
SAGE PUBLICATIONS LTD.2023: 83
 - **Long-term Efficacy of Ozanimod by Age Category in Patients With Relapsing Multiple Sclerosis in Two Phase 3 Trials and an Open-label Extension Trial**
Cree, B. A., Selmaj, K., Steinman, L., Comi, G., Bar-Or, A., Arnold, D. L., Hartung, H., Montalban, X., Havrdova, E. K., Sheffield, J. K., Cheng, C., Riolo, J. V., Silva, et al
SAGE PUBLICATIONS LTD.2023: 55-56
 - **Long-term Safety and Tolerability of Ozanimod by Age Category in Patients With Relapsing Multiple Sclerosis From Two Phase 3 Trials and an Open-Label Extension Study**
Selmaj, K. W., Cohen, J. A., Steinman, L., Comi, G., Bar-Or, A., Hartung, H., Montalban, X., Kappos, L., Sheffield, J. K., Krakovich, A., Cheng, C., Riolo, J., Silva, et al

SAGE PUBLICATIONS LTD.2023: 56-57

- **The B Cell Repertoire in Multiple Sclerosis Reveals Molecular Mimicry between EBV EBNA1 and GlialCAM**
Lanz, T. V., Brewer, R. C., Ho, P. P., Steinman, L., Robinson, W. H.
SAGE PUBLICATIONS LTD.2023: 216
- **Disease Outcomes With Ublituximab in Participants With Highly Active Disease: Subpopulation Analyses of the Phase 3 ULTIMATE I and II Studies in Participants With Relapsing Multiple Sclerosis**
Alvarez, E., Steinman, L., Hartung, H., Fox, E., Qian, P., Wray, S., Robertson, D., Mok, K., Garner, C. A., Cree, B.
LIPPINCOTT WILLIAMS & WILKINS.2023
- **A Phase 1 Study of Oral Vitamin D3 in Boys and Young Men With X-Linked Adrenoleukodystrophy. *Neurology. Genetics***
Van Haren, K. P., Cunanan, K., Awani, A., Gu, M., Peña, D., Chromik, L. C., Považan, M., Rossi, N. C., Goodman, J., Sundaram, V., Winterbottom, J., Raymond, G. V., Cowan, et al
2023; 9 (2): e200061
- **Multiple Sclerosis Followed by Neuromyelitis Optica Spectrum Disorder: From the National Multiple Sclerosis Society Case Conference Proceedings. *Neurology(R) neuroimmunology & neuroinflammation***
Goldschmidt, C., Galetta, S. L., Lisak, R. P., Balcer, L. J., Hellman, A., Racke, M. K., Lovett-Racke, A. E., Cruz, R., Parsons, M. S., Sattarnejad, N., Steinman, L., Zamvil, S. S., Frohman, et al
2023; 10 (1)
- **Reply to Fillmore et al.: Additional evidence of non-SARS-CoV-2 coronavirus cross-immunity. *Proceedings of the National Academy of Sciences of the United States of America***
Solomon, M. D., Steinman, L., Liu, V. X.
2022; 119 (46): e2215620119
- **Peripheral T-Cells, B-Cells, and Monocytes from Multiple Sclerosis Patients Supplemented with High-Dose Vitamin D Show Distinct Changes in Gene Expression Profiles. *Nutrients***
Kim, D., Witt, E. E., Schubert, S., Sotirchos, E., Bhargava, P., Mowry, E. M., Sachs, K., Bilen, B., Steinman, L., Awani, A., He, Z., Calabresi, P. A., Van Haren, et al
2022; 14 (22)
- **Inhibiting Deoxycytidine Kinase Significantly Improves Multiple Sclerosis Symptoms in Experimental Autoimmune Encephalomyelitis Mouse Models**
Clark, P. M., Schultz, K. A., Chen, B., Shepard, H., Steinman, L.
WILEY.2022: S139-S140
- **COVID-19 infections and vaccinations among patients receiving ozanimod in the daybreak open-label extension trial**
Cree, B. A., Selmaj, K. W., Steinman, L., Comi, G., Bar-Or, A., Arnold, D. L., Hartung, H., Montalban, X., Havrdova, K., Desai, H., Sheffield, J. K., Minton, N., Cheng, et al
SAGE PUBLICATIONS LTD.2022: 401-402
- **Disability changes in the absence of relapse in the phase 3 ULTIMATE I and II studies of ublituximab versus teriflunomide in participants with relapsing multiple sclerosis**
Wray, S., Steinman, L., Hartung, H., Fox, E. J., Alvarez, E., Qian, P., Robertson, D., Huang, D., Selmaj, K., Wynn, D., Bosco, J. A., Garner, C. A., Cree, et al
SAGE PUBLICATIONS LTD.2022: 333-334
- **Long-term safety and efficacy of ozanimod in relapsing multiple sclerosis: interim analysis of the DAYBREAK open-label extension study**
Selmaj, K. W., Steinman, L., Comi, G., Bar-Or, A., Arnold, D. L., Hartung, H., Montalban, X., Havrdova, E. K., Krakovich, A., Sheffield, J. K., Cheng, C., Minton, N., Silva, et al
SAGE PUBLICATIONS LTD.2022: 359-360
- **Functional systems scores and expanded disability status scale score evaluations in the ultimate I and II studies of ublituximab versus teriflunomide in participants with relapsing multiple sclerosis**
Cree, B. C., Fox, E. J., Hartung, H., Alvarez, E., Qian, P., Wray, S., Robertson, D., Huang, D., Selmaj, K., Wynn, D., Bosco, J. A., Lee, L., Steinman, et al
SAGE PUBLICATIONS LTD.2022: 329-330
- **NEDA-4 with ublituximab versus teriflunomide in the ULTIMATE I and II studies in participants with relapsing multiple sclerosis**

- Alvarez, E., Steinman, L., Hartung, H., Fox, E. J., Qian, P., Wray, S., Robertson, D., Huang, D., Selmaj, K., Wynn, D., Bosco, J. A., Campagnolo, D., Cree, et al
SAGE PUBLICATIONS LTD.2022: 602-603
- **Relationship between infections and absolute lymphocyte count during phase 3 and open-label extension trials of ozanimod in patients with relapsing multiple sclerosis**
Hartung, H., Steinman, L., Bar-Or, A., Sheffield, J. K., Harris, S., Riolo, J. V., Cheng, C., Silva, D., Cree, B. C.
SAGE PUBLICATIONS LTD.2022: 622
 - **Disease outcomes with ublituximab in treatment-naive participants: subpopulation analyses of the phase 3 ULTIMATE I and II studies in participants with relapsing multiple sclerosis**
Steinman, L., Fox, E. J., Hartung, H., Alvarez, E., Qian, P., Wray, S., Robertson, D., Huang, D., Selmaj, K., Wynn, D., Bosco, J. A., Mok, K., Garner, et al
SAGE PUBLICATIONS LTD.2022: 605-606
 - **B-cell depletion and return in participant subgroups of the phase 3 ULTIMATE I and II studies of ublituximab versus teriflunomide in participants with relapsing multiple sclerosis**
Fox, E. J., Steinman, L., Hartung, H., Alvarez, E., Qian, P., Wray, S., Robertson, D., Huang, D., Selmaj, K., Wynn, D., Bosco, J. A., Lee, L., Cree, et al
SAGE PUBLICATIONS LTD.2022: 615-617
 - **Correlations between early MRI parameters and long-term clinical outcomes in phase 3 and open-label extension studies of ozanimod in relapsing multiple sclerosis**
Arnold, D. L., Freeman, L., Hartung, H., Xavier Montalban, X., Cohen, J. A., Bar-Or, A., Steinman, L., DeLuca, J., Cheng, C., Riolo, J. V., Silva, D., Pachai, C., Cree, et al
SAGE PUBLICATIONS LTD.2022: 377-378
 - **Targeting deoxycytidine kinase improves symptoms in mouse models of multiple sclerosis. *Immunology***
Chen, B. Y., Salas, J. R., Trias, A. O., Perez Rodriguez, A., Tsang, J. E., Guemes, M., Le, T. M., Galic, Z., Shepard, H. M., Steinman, L., Nathanson, D. A., Czernin, J., Witte, et al
2022
 - **Improved Quality of Life With Ublituximab in the ULTIMATE I and II Studies in Relapsing Multiple Sclerosis**
Selmaj, K., Steinman, L., Fox, E., Hartung, H., Alvarez, E., Qian, P., Wray, S., Robertson, D., Huang, D., Wynn, D., Lee, L., Cree, B.
WILEY.2022: 634-635
 - **Disability Improvements With Ublituximab in Relapsing Multiple Sclerosis: Pooled Post Hoc Analyses of ULTIMATE I and II**
Cree, B., Fox, E., Hartung, H., Alvarez, E., Qian, P., Wray, S., Robertson, D., Huang, D., Selmaj, K., Wynn, D., Campagnolo, D., Steinman, L.
WILEY.2022: 628-629
 - **Ublituximab Efficacy Outcomes in Relapsing Multiple Sclerosis Patient Subgroups in the ULTIMATE I and II Studies**
Hartung, H., Steinman, L., Fox, E., Alvarez, E., Qian, P., Wray, S., Robertson, D., Huang, D., Selmaj, K., Wynn, D., Garner, C., Cree, B.
WILEY.2022: 631
 - **Long-term safety and efficacy of ozanimod in relapsing multiple sclerosis: Up to 5 years of follow-up in the DAYBREAK open-label extension trial. *Multiple sclerosis (Houndmills, Basingstoke, England)***
Cree, B. A., Selmaj, K. W., Steinman, L., Comi, G., Bar-Or, A., Arnold, D. L., Hartung, H. P., Montalbán, X., Havrdová, E. K., Sheffield, J. K., Minton, N., Cheng, C. Y., Silva, et al
2022: 13524585221102584
 - **COVID-19 therapeutics: Challenges and directions for the future. *Proceedings of the National Academy of Sciences of the United States of America***
Robinson, P. C., Liew, D. F., Tanner, H. L., Grainger, J. R., Dwek, R. A., Reisler, R. B., Steinman, L., Feldmann, M., Ho, L., Hussell, T., Moss, P., Richards, D., Zitzmann, et al
2022; 119 (15): e2119893119
 - **Relationships between on-treatment changes in glial fibrillary acidic protein levels and clinical outcomes in patients with relapsing multiple sclerosis: post hoc analysis of the phase 3 ozanimod SUNBEAM trial**
Harris, S., Comi, G., Cree, B. C., Arnold, D. L., Steinman, L., Sheffield, J. K., Maddux, R., Southworth, H., Kappos, L., Cohen, J. A.
SAGE PUBLICATIONS LTD.2021: 507-508
 - **Hepatic safety of ozanimod in relapsing multiple sclerosis in the DAYBREAK open-label extension study**

- Selmaj, K., Steinman, L., Comi, G., Bar-Or, A., Hartung, H., Montalban, X., Havrdova, E. K., Sheffield, J. K., Minton, N., Afsari, S., Shi, F., Kappos, L., Cohen, et al
SAGE PUBLICATIONS LTD.2021: 608-609
- **Ublituximab is associated with significant improvement in the multiple sclerosis functional composite (MSFC): results from the Phase 3 ULTIMATE I & II studies**
Steinman, L., Alvarez, E., Fox, E., Hartung, H., Qian, P., Wray, S., Robertson, D., Huang, D., Selmaj, K., Wynn, D., Weiss, M. S., Bosco, J., Power, et al
SAGE PUBLICATIONS LTD.2021: 760-761
 - **Phase 3 results of the ULTIMATE I & II global studies: ublituximab versus teriflunomide in relapsing multiple sclerosis**
Steinman, L., Alvarez, E., Fox, E., Hartung, H., Qian, P., Wray, S., Robertson, D., Huang, D., Selmaj, K., Wynn, D., Weiss, M. S., Bosco, J. A., Power, et al
SAGE PUBLICATIONS LTD.2021: 70-72
 - **Long-term safety and efficacy of ozanimod in relapsing multiple sclerosis: interim analysis of the DAYBREAK open-label extension study**
Selmaj, K. W., Steinman, L., Comi, G., Bar-Or, A., Arnold, D. L., Hartung, H., Montalban, X., Havrdova, K., Hoogerheyde, J., Afsari, S., Sheffield, J. K., Shi, F., Minton, et al
SAGE PUBLICATIONS LTD.2021: 617-618
 - **Plasma neurofilament light chain concentrations as a biomarker of clinical and radiologic outcomes in relapsing multiple sclerosis: Post hoc analysis of phase 3 ozanimod trials.** *European journal of neurology*
Harris, S., Comi, G., Cree, B. A., Arnold, D. L., Steinman, L., Sheffield, J. K., Southworth, H., Kappos, L., Cohen, J. A., ozanimod study investigators
2021
 - **GFAP as a Marker of Disease in Relapsing Multiple Sclerosis: Post Hoc Analysis of the Phase 3 Ozanimod SUNBEAM Trial**
Harris, S., Comi, G., Cree, B., Arnold, D., Steinman, L., Sheffield, J., Southworth, H., Kappos, L., Cohen, J.
WILEY.2021: 121
 - **Efficacy of Ozanimod by Baseline EDSS Score in RMS: A Post Hoc, Exploratory Analysis of Pooled Data from Phase 3 Ozanimod Trials**
Hartung, H., Steinman, L., Comi, G., Bar-Or, A., Selmaj, K. W., Arnold, D. L., Montalban, X., Havrdova, E. K., Sheffield, J. K., Minton, N., Huang, V., Kappos, L., Cohen, et al
SAGE PUBLICATIONS LTD.2021: 37
 - **The Fourth Bioelectronic Medicine Summit "Technology Targeting Molecular Mechanisms": current progress, challenges, and charting the future.** *Bioelectronic medicine*
Datta-Chaudhuri, T., Zanos, T., Chang, E. H., Olofsson, P. S., Bickel, S., Bouton, C., Grande, D., Rieth, L., Aranow, C., Bloom, O., Mehta, A. D., Civillico, G., Stevens, et al
2021; 7 (1): 7
 - **Efficacy and safety of ublituximab versus teriflunomide in relapsing multiple sclerosis: Results of the Phase 3 ULTIMATE I and II trials**
Steinman, L., Fox, E., Hartung, H., Alvarez, E., Qian, P., Wray, S., Robertson, D., Huang, D., Selmaj, K., Wynn, D., Weiss, M., Bosco, J., Power, et al
LIPPINCOTT WILLIAMS & WILKINS.2021
 - **Ozanimod in relapsing multiple sclerosis: Pooled safety results from the clinical development program.** *Multiple sclerosis and related disorders*
Selmaj, K. W., Cohen, J. A., Comi, G., Bar-Or, A., Arnold, D. L., Steinman, L., Hartung, H. P., Montalban, X., Havrdova, E. K., Cree, B. A., Minton, N., Sheffield, J. K., Ding, et al
2021; 51: 102844
 - **Calibration of cell-intrinsic interleukin-2 response thresholds guides design of a regulatory T cell biased agonist.** *eLife*
Glassman, C. R., Su, L. n., Majri-Morrison, S. S., Winkelmann, H. n., Mo, F. n., Li, P. n., Pérez-Cruz, M. n., Ho, P. P., Koliesnik, I. n., Nagy, N. n., Hnizdilova, T. n., Picton, L. K., Kovar, et al
2021; 10
 - **Mitigating alemtuzumab-associated autoimmunity in MS: A "whack-a-mole" B-cell depletion strategy.** *Neurology(R) neuroimmunology & neuroinflammation*
Meltzer, E., Campbell, S., Ehrenfeld, B., Cruz, R. A., Steinman, L., Parsons, M. S., Zamvil, S. S., Frohman, E. M., Frohman, T. C.
2020; 7 (6)
 - **MMR Vaccination: A Potential Strategy to Reduce Severity and Mortality of COVID-19 Illness.** *The American journal of medicine*

- Ashford, J. W., Gold, J. E., Huenergardt, M. A., Katz, R. B., Strand, S. E., Bolanos, J., Wheeler, C. J., Perry, G., Smith, C. J., Steinman, L., Chen, M. Y., Wang, J. C., Ashford, et al
2020
- **Part I. SARS-CoV-2 triggered 'PANIC' attack in severe COVID-19.** *Journal of the neurological sciences*
Frohman, E. M., Villemarette-Pittman, N. R., Melamed, E., Cruz, R. A., Longmuir, R., Varkey, T. C., Steinman, L., Zamvil, S. S., Frohman, T. C.
2020: 116936
 - **Long-term Efficacy of Ozanimod in Relapsing Multiple Sclerosis in DAYBREAK: An Open-Label Extension of the Phase 3 SUNBEAM and RADIANCE Trials**
Selmaj, K. W., Steinman, L., Comi, G., Bar-or, A., Arnold, D. L., Hartung, H., Montalban, X., Havrdova, E. K., Sheffield, J. K., Hetzer, J., Silva, D., Kappos, L., Cohen, et al
WILEY.2020: 473–74
 - **New targets and therapeutics for neuroprotection, remyelination and repair in multiple sclerosis.** *Expert opinion on investigational drugs*
Villoslada, P., Steinman, L.
2020
 - **Baseline Demographics and Disease Characteristics from the ULTIMATE Phase III Trials Evaluating Ublituximab, a Novel Glycoengineered Anti-CD20 Monoclonal Antibody, in Patients with Relapsing Multiple Sclerosis**
Steinman, L., Fox, E., Hartung, H., Cree, B., Alvarez, E., Qian, P., Wray, S., Robertson, D., Huang, D., Selmaj, K., Wynn, D., Weiss, M., Bosco, et al
LIPPINCOTT WILLIAMS & WILKINS.2020
 - **Part II. high-dose methotrexate with leucovorin rescue for severe COVID-19: An immune stabilization strategy for SARS-CoV-2 induced 'PANIC' attack.** *Journal of the neurological sciences*
Frohman, E. M., Villemarette-Pittman, N. R., Cruz, R. A., Longmuir, R. n., Rowe, V. n., Rowe, E. S., Varkey, T. C., Steinman, L. n., Zamvil, S. S., Frohman, T. C.
2020: 116935
 - **Autoimmune Diseases: The Role for Vaccines** *AUTOIMMUNE DISEASES, 6TH EDITION*
Ahmed, S., Steinman, L., Rose, N. R., Mackay, I. R.
2020: 375–81
 - **Effect of ozanimod on neurofilament light chain level in relapsing multiple sclerosis: pooled results from phase 2 and phase 3 trials**
Harris, S., Comi, G., Cree, B. C., Steinman, L., Sheffield, J. K., Silva, D., Southworth, H., Kappos, L.
SAGE PUBLICATIONS LTD.2019: 558–59
 - **Long-term safety and efficacy of ozanimod in relapsing multiple sclerosis: results from the DAYBREAK open-label extension study**
Steinman, L., Comi, G., Bar-Or, A., Selmaj, K. W., Arnold, D. L., Hartung, H., Montalban, X., Havrdova, E. K., Sheffield, J. K., Minton, N., Janjua, A., Huang, V., Silva, et al
SAGE PUBLICATIONS LTD.2019: 548–49
 - **Study design and patient demographics of the ULTIMATE phase III trials evaluating Ublituximab (UTX), a novel glyco-engineered anti-CD20 monoclonal antibody (mAb), in patients with relapsing multiple sclerosis (RMS)**
Steinman, L., Fox, E., Hartung, H., Alvarez, E., Qian, P., Wray, S., Robertson, D., Huang, D., Selmaj, K., Wynn, D., Weiss, M., Power, S., Bosco, et al
SAGE PUBLICATIONS LTD.2019: 523–24
 - **Axonal and Myelin Neuroprotection by the Peptoid BN201 in Brain Inflammation** *NEUROTHERAPEUTICS*
Villoslada, P., Vila, G., Colafrancesco, V., Moreno, B., Fernandez-Diez, B., Vazquez, R., Pertsovskaya, I., Zubizarreta, I., Pulido-Valdeolivas, I., Messegue, J., Vendrell-Navarro, G., Maria Frade, J., Lopez-Sanchez, et al
2019; 16 (3): 808–27
 - **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., Cabezón, R., España, C., Andorra, M., Saiz, A., Llufrí, S., Sepúlveda, M., Sola-Valls, N., Martínez-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
- **Neurofilament Light Chains as a Marker of Concurrent and Future Active Disease in Relapsing Multiple Sclerosis: An Analysis of Baseline Data From the Phase 3 Ozanimod Clinical Trials**
Harris, S., Comi, G., Cree, B. C., Steinman, L., Sheffield, J. K., Silva, D., Southworth, H., Kappos, L.
LIPPINCOTT WILLIAMS & WILKINS.2019
- **Ozanimod Efficacy in Relapsing Multiple Sclerosis Supported by Open-Label Long-Term Extension of Two Phase 3 Trials**
Steinman, L., Comi, G., Cree, B. C., Bar-Or, A., Selmaj, K. W., Arnold, D. L., Hartung, H., Montalban, X., Havrdova, E. K., Sheffield, J. K., Huang, V., Silva, D., Kappos, et al
LIPPINCOTT WILLIAMS & WILKINS.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
- **Safety and efficacy of ozanimod versus interferon beta-1a in relapsing multiple sclerosis (RADIANCE): a multicentre, randomised, 24-month, phase 3 trial.** *The Lancet. Neurology*
Cohen, J. A., Comi, G. n., Selmaj, K. W., Bar-Or, A. n., Arnold, D. L., Steinman, L. n., Hartung, H. P., Montalban, X. n., Kubala Havrdová, E. n., Cree, B. A., Sheffield, J. K., Minton, N. n., Raghupathi, et al
2019
- **Safety and efficacy of ozanimod versus interferon beta-1a in relapsing multiple sclerosis (SUNBEAM): a multicentre, randomised, minimum 12-month, phase 3 trial.** *The Lancet. Neurology*
Comi, G. n., Kappos, L. n., Selmaj, K. W., Bar-Or, A. n., Arnold, D. L., Steinman, L. n., Hartung, H. P., Montalban, X. n., Kubala Havrdová, E. n., Cree, B. A., Sheffield, J. K., Minton, N. n., Raghupathi, 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-Orb, 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. n., Arnold, D. L., Bar-Or, A. n., Selmaj, K. W., Steinman, L. n., Havrdová, E. K., Cree, B. A., Montalbán, X. n., Hartung, H. P., Huang, V. n., Frohna, P. n., 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
- **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
- **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.** *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
- **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
- **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
- **Time correlation between mononucleosis and initial symptoms of MS *NEUROLOGY-NEUROIMMUNOLOGY & NEUROINFLAMMATION***
 Endriz, J., Ho, P. P., Steinman, L.
 2017; 4 (3): e308
- **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
- **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., Havrdova, et al
 SAGE PUBLICATIONS LTD.2017: 24–25
- **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
- **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
- **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., Benner, 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., Kuerten, 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., Millionig, 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
- **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
- **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-?
- **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., Karpuij, 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
- **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
- **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
 - **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
 - **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-β 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
 - **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

● **THE AMYLOIDOGENIC HEXAPEPTIDE, AMYLIN 28-33, AMELIORATES SEPSIS**

Mahapatra, S., Kurnellas, M., Rothbard, J., Steinman, L.
LIPPINCOTT WILLIAMS & WILKINS.2015: 198

● **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

● **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

● **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

● **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
 - **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
 - **Serum biomarkers predict IFN β treatment response in patients with multiple sclerosis**
Hegen, H., Axtell, R., Hu, Y., Millionig, A., Bertolotto, A., Comabella, M., Giovannoni, G., Guger, M., Hoelzl, M., Khalil, M., Killestein, J., Lindberg, R., Malucchi, et al
WILEY-BLACKWELL.2014: 57
 - **Serum biomarkers predict IFN β treatment response in patients with multiple sclerosis**
Hegen, H., Axtell, R., Hu, Y., Millionig, A., Bertolotto, A., Comabella, M., Giovannoni, G., Guger, M., Hoelzl, M., Khalil, M., Killestein, J., Lindberg, R., Malucchi, et al
SPRINGER HEIDELBERG.2014: S43
 - **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
 - **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
 - **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
- **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-?
 - **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
 - **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
 - **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
 - **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., Bhole, 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**
Amezcu, L., Axtell, R., Cen, S., Tauhid, S., Neema, M., Subhani, D., Bakshi, R., Steinman, L., Berkovich, R.
SAGE PUBLICATIONS LTD.2013: 514–15
- **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 Horsen, 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
- **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
- **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
- **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. n.
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
 - **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
 - **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
 - **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-?
- **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
- **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
- **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
- **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
- **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
- **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., Velotta, 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
- **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

- **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
- **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
- **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
- **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., Kajiwar, N., Iwakura, Y., Saito, H., Adachi, H., Steinman, L., Robbins, R. C., Fischbein, M. P.
2010; 30 (2): 235-240
- **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
- **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
- **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

- **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
- **Mixed results with modulation of T-H-17 cells in human autoimmune diseases** *NATURE IMMUNOLOGY*
Steinman, L.
2010; 11 (1): 41-44
- **HMG-CoA Reductase Inhibition Causes Increased Necrosis and Apoptosis in an In Vivo Mouse Glioblastoma Multiforme Model** *ANTICANCER RESEARCH*
Bababeygy, S. R., Polevaya, N. V., Youssef, S., Sun, A., Xiong, A., Pruggichailers, 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
- **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
- **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 Horssen, J., Schroeter, F., Smorodchenko, et al
SAGE PUBLICATIONS LTD.2009: S75
- **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
- **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
- **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
- **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
- **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
- **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
- **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
- **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
- **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
- **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
- **Type 1 interferons cool the inflamed brain** *IMMUNITY*
Axtell, R. C., Steinman, L.
2008; 28 (5): 600-602
- **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)
- **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
- **Blocking serotonin reuptake ameliorates autoimmune neuroinflammation**
Bhat, R., Axtell, R., Steinman, L.
ACADEMIC PRESS INC ELSEVIER SCIENCE.2008: S22
- **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
- **Statins-treatment option for central nervous system autoimmune disease?** *NEUROTHERAPEUTICS*
Weber, M. S., Steinman, L., Zamvil, S. S.
2007; 4 (4): 693-700
- **Antigen-specific therapy of multiple sclerosis: The long-sought magic bullet** *NEUROTHERAPEUTICS*
Steinman, L.
2007; 4 (4): 661-665
- **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
- **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
- **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., Tenenbaum, 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 IIHMG-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
- **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
 - **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
 - **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
 - **At once harmful and beneficial: the dual properties of NF-kappa B** *NATURE IMMUNOLOGY*
Youssef, S., Steinman, L.
2006; 7 (9): 901-902
 - **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
- **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
- **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
- **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
- **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
- **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

- **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
- **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
- **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
- **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
- **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
- **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
- **Elaborate interactions between the immune and nervous systems** *NATURE IMMUNOLOGY*
Steinman, L.
2004; 5 (6): 575-581
- **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
- **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*
Graber, 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
 - **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
 - **Engineering better cytokines** *NATURE BIOTECHNOLOGY*
Steinman, L.
2003; 21 (11): 1293-1294
 - **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
 - **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
 - **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
 - **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
 - **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., Radosевич, 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., Youssef, 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
- **Proteomics technologies for the study of autoimmune disease** *ARTHRITIS AND RHEUMATISM*
Robinson, W. H., Steinman, L., Utz, P. J.
2002; 46 (4): 885-893
- **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
- **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
- **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., Skriver, 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
- **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
- **Gene microarrays and experimental demyelinating disease: a tool to enhance serendipity** *BRAIN*
Steinman, L.
2001; 124: 1897-1899
- **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
- **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
- **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
- **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
- **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
- **Antigen specific immunotherapy of multiple sclerosis** *JOURNAL OF CLINICAL IMMUNOLOGY*
Steinman, L., Conlon, P.
2001; 21 (2): 93-98
- **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
 - **More mayhem from molecular mimics** *NATURE MEDICINE*
Steinman, L., Oldstone, M. B.
1997; 3 (12): 1321-1322
 - **CD4(+) T-cell subsets in autoimmunity** *CURRENT OPINION IN IMMUNOLOGY*
O'Garra, A., Steinman, L., Gijbels, K.
1997; 9 (6): 872-883
 - **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

- **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., LANCOTOT, A. M., Greco, C. M., Steinman, L., Blau, H. M.
1997; 20 (4): 469-478
- **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
- **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
- **The right stuff: Breaking through the xenotransplant barrier** *NATURE MEDICINE*
Steinman, L.
1996; 2 (11): 1185-1186
- **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
- **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 EPITOPE 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
- **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
- **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
- **MULTIPLE-SCLEROSIS - PRESENTING AN ODD AUTOANTIGEN** *NATURE*
Steinman, L.
1995; 375 (6534): 739-740
- **MAJOR T-CELL RESPONSES IN MULTIPLE-SCLEROSIS** *MOLECULAR MEDICINE TODAY*
Steinman, L., Waisman, A., ALTMANN, D.
1995; 1 (2): 79-83
- **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
- **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
- **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

- **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
- **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
- **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
- **NEW ALLELIC POLYMORPHISMS IN TAP GENES** *IMMUNOGENETICS*
Szafer, F., Oksenberg, J. R., Steinman, L.
1994; 39 (5): 374-374
- **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
- **AUTOIMMUNE-DISEASE** *SCIENTIFIC AMERICAN*
Steinman, L.
1993; 269 (3): 106-?

- **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
- **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., VANDENSEN, 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
- **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: 521-4
- **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
- **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
- **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

- **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
- **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
- **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 EPIOTOPE 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
- **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
- **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
- **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
- **[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
- **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

- **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
- **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
- **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
- **Prevention of experimental autoimmune encephalomyelitis by antibodies against $\alpha 4 \beta 1$ integrin** *Nature*
Steinman L, Yednock T, Cannon C, Fritz L, Sanchez-Madrid F, Karin N
1992
- **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
- **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
- **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
 - **Trimolecular interactions in experimental autoimmune demyelinating disease and prospects for immunotherapy.** *Seminars in immunology*
Bell, R. B., Steinman, L.
1991; 3 (4): 237-245
 - **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
 - **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
 - **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 SYM 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-FUNGOIDES** *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
- **The use of monoclonal antibodies for treatment of autoimmune disease.** *Journal of clinical immunology*
Steinman, L.
1990; 10 (6): 30S-38S
 - **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
 - **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
 - **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
 - **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
- **THE LYMPHOCYTE-T IN EXPERIMENTAL ALLERGIC ENCEPHALOMYELITIS** *ANNUAL REVIEW OF IMMUNOLOGY*
Zamvil, S. S., Steinman, L.
1990; 8: 579-621
 - **IMMUNOGENETIC MECHANISMS IN MYASTHENIA-GRAVIS** *PROGRESS IN BRAIN RESEARCH*
Steinman, L.
1990; 84: 117-124
 - **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 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
 - **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 MURINE AUTOIMMUNE-DISEASES** *ANNUAL REVIEW OF IMMUNOLOGY*
ACHAORBEA, H., Steinman, L., McDevitt, H. O.
1989; 7: 371-405
 - **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., Fronek, Z., Jacob, C. O., McDermott, M., Sinha, A. A., Timmerman, L., Steinman, L., McDevitt, H. O.
1988; 240 (4855): 1003-1009
 - **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

- **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., Gyllenstein, U., Erlich, H. A.
1988; 85 (10): 3504-3508
- **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., Ulrich, 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., OBRIEN, 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