

Curriculum Vitae**Anne Searls De Groot M.D.****DR.ANNIE.DEGROOT@GMAIL.COM****Cell: 401 952 4227****Education**

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| B.A., Smith College, Northampton, Massachusetts | 1974-1978 |
| M.D., Pritzker School of Medicine, University of Chicago | 1979-1983 |

Post-Graduate Training

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| Residency in Internal Medicine | 1983-1986 |
| Department of Internal Medicine | |
| Tufts New England Medical Center, Boston MA | |

Fellowship in Parasitology and Vaccine Research 1986-1989

National Research Service Award Fellow, National Institutes of Health
Malaria Section, Laboratory of Parasitic Diseases, NIAID (Russell Howard, Michael Good)
Metabolism Branch, NCI, National Institutes of Health (Jay A. Berzofsky)

Fellowship in Infectious Disease 1989-1992

Division of Geographic Medicine and Infectious Disease,
Tufts New England Medical Center, Boston MA

Graduate and Post-Graduate Honors/Awards

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| Kraft Nutrition Fellow: Research on newborn nutrition in Zaire and South Africa | 1983 |
| National Research Service Award for malaria and HIV immunology research | 1986-1989 |
| NFID Eli Lilly Award for TB immunology research | 1991-1992 |
| Visiting Scholar Award, TMRC, RITM, Manila, the Philippines | 1995 |
| Woman in Science of the Year, Women and Infants Hospital Auxiliary Committee | 2002 |
| Esquire "Best and the Brightest 2003" (Science and Industry) | 2003 |
| Unsung Heroes of HIV Rhode Island HIV Prevention Planning Committee | 2004 |
| Rhode Island Woman Physician of the Year, 2006 | 2006 |
| Dr. Al Fisher Red Ribbon Award, Medicine, AIDS Project Rhode Island | 2007 |
| YWCA "Woman of Achievement Award" (Health Care) | 2008 |

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| Lifetime Achievement Award 2009 (Providence Business News) | 2009 |
| Bank of America "Local Hero" (for Clinica Esperanza/Hope Clinic) | 2010 |
| "Top Doctor" in the Jewelry District, Providence RI (RI Monthly) | 2010 |
| Community Service Award (CEHC) from Dorcas Place | 2012 |
| Smith Medalist. Smith College Award, Rally Day 2013 | 2013 |

Contact information

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Biography

Educated at **Smith College** (BA, 1978), Pritzker School of Medicine / **University of Chicago** (MD, 1983), Internal Medicine (New England Medical Center, 1986); additional training in immunoinformatics and vaccinology with Russell Howard and Jay Berzofsky at the **National Institutes of Health** (Laboratory for Parasitic Diseases and National Cancer Institute, 1986-89), followed by clinical training in infectious disease at **New England Medical Center** (1989-92). Board certified Internal Medicine (1986) and Infectious Disease (1992). Joined **Brown University Medical School**, and opened the TB/HIV Research Laboratory in 1992. Licensed EpiMatrix vaccine design technology from her laboratory at Brown and established **EpiVax** with Bill Martin, 1998. Invited to direct the activities of the **Institute for Immunology and Informatics** at University of Rhode Island, beginning October, 2008 and awarded \$13M to initiate research on epitope-driven vaccines at the Institute in 2009.

Recipient of a NFID-Eli Lilly Award, two RI Foundation awards and a **Commercial Innovation Award** (Slater Biomedical Foundation), given a **Genius Award** in Science and Technology by Esquire Magazine (2003) and honored by the RI Tech Collective (2006) for work on the GAIA HIV vaccine. Awarded **RI Woman Physician of the Year** in 2006, received the Alvan Fisher **Red Ribbon Award** for Medical Advocacy from AIDS project Rhode Island in December 2007 and the **Woman of Achievement Award**, 2008 from the YWCA for her work relating to Access to Care in Providence and West Africa. Has published more than 120 research papers, chapters and reviews in addition to numerous essays and blogs. On May 22, 2009, was given the **Lifetime Achievement Award** at the Business Women Awards by Providence Business News. Featured as a **Top Doctor in Rhode Island** in the RI Monthly, May 2010. Mother of two young adults (Aminata 19, Zeno 23).

Professional Licenses and Board Certification

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| Internal Medicine | 1987 |
| Infectious Disease | 1992 |

American Academy of HIV Medicine AAHIVM 2002

Academic Appointments

Clinical Instructor, Department of Medicine 1989-1991
 Division of Geographic Medicine and Infectious Diseases

Special Scientific Staff, Department of Medicine 01/92-06/92
 Division of Geographic Medicine and Infectious Diseases
 Tufts New England Medical Center

Assistant Professor of Medicine and Community Health 07/92-12/00
 Division of Biology and Medicine
 Joint appointment in the Department of Medicine and
 the Department of Community Health, Brown University School of Medicine

Assistant Professor of Community Health (Research) 01/01- 06/02
 Vincent Mor, Ph.D. Chairman
 Division of Biology and Medicine
 Brown University School of Medicine

Associate Professor of Community Health (Research) 07/02-12/05
 Vincent Mor, Ph.D. Chairman
 Division of Biology and Medicine
 Brown University School of Medicine

Adjunct Associate Professor of Medicine 01/06-03/08
 Division of Biology and Medicine
 Brown University School of Medicine

Adjunct Associate Professor of Pediatrics 03/08-05/11
 Division of Biology and Medicine
 Brown University School of Medicine

Professor, Biotechnology (Research) Sept 1, 2008-
 College of Environmental and Life Sciences
 John Kirby, Ph.D., Dean

University of Rhode Island

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| Director, Institute for Immunology and Informatics University of Rhode Island Biotechnology Program | Sept 1, 2008- |
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Hospital Appointments

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| Assistant Director, HIV/AIDS Unit, Lemuel Shattuck Hospital | 07/92-06/93 |
| Director, Dual Infection (HIV/TB) Clinic, Lemuel Shattuck Hospital | 05/93-01/94 |
| Medical Staff, Geographic Medicine, Miriam Hospital, RI | 07/92-present |
| Medical Staff, Infectious Diseases, (HIV clinic) Memorial Hospital of RI | 07/97-06/01 |
| Medical Staff, Rhode Island State TB Clinic (Roger Williams Hospital) | 10/93-07/01 |
| TB Clinic Staff/ Miriam Hospital Rise Clinic (TB Clinic) | 07/01-present |
| Staff, HIV in Prisons Program, Yale University (York Institution for Women) | 08/96-11/04 |
| Rhode Island Free Clinic (Volunteer MD) | 01/03-07/07 |
| Clinica Esperanza Interim Medical Director, Olneyville, Rhode Island) (Volunteer) | 07/07-present |

Other Appointments (Previous)

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| Director, I.D. (HIV) Clinic for Female Inmates, Massachusetts Correctional Institution at Framingham (under the MA Department of Public Health and the Shattuck Hospital) | 05/92- 01/96 |
| Yale HIV in Prison Program York Correctional Facility HIV Clinic Staff | 01/96-11/04 |
| Medical Director, Clinica Esperanza/Hope Clinic | 07/2007-present |

Other Appointments (Current)

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| Founder and CEO, EpiVax Inc. | 5/98-present |
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EpiVax is a specialized biotech company that holds the exclusive license to the EpiMatrix technology. The company is located at 146 Clifford Street, in Providence. Clients have included vaccine companies (Wyeth, Chiron), pharmaceutical companies (Genentech, Roche, Bristol Meyers Squibb, Amgen), other biotechnology companies (Sequella), the Department of Defense (BDRD, DARPA) and academic groups (CDC, Forsythe Institute, and the USAMRIID, NMRC, UMD, UCSF, SLU, UPitt, etc. (See <http://www.EpiVax.com>).

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| Founder and Co-Chief editor, Infectious Diseases in Corrections Report (IDCR) | 7/98-7/2008 |
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Formerly known as HIV Education/Prison Project Report (HEPP Report)

Monthly update on the management of Infectious Diseases (Hepatitis and HIV) specifically geared to address the needs of correctional health providers in prison settings. Yearly Budget \$250,000. 12 Employees and Contributors (Full and Part time). Circulation: >20,000 by facsimile and email. Website <http://www.HIVcorrections.org>

Founder and Scientific Director / **GAIA Vaccine Foundation** 5/01-present

GAIA (Global Alliance to Immunize against AIDS) is a non-profit (501C-3) organization that supports the development of a "Globally relevant, globally accessible" AIDS vaccine. EpiVax and Brown U. (Brown University Research Foundation) have agreed in principle to license the HIV vaccine that is currently being developed by the TB/HIV Research Lab in collaboration with EpiVax to GAIA. GAIA is seeking to fund further development of the vaccine through studies to be carried out in developing countries such as Mali, in West Africa. The GAIA Vaccine Foundation efforts are directed by the GAIA Board of Directors (See <http://www.GAIAvaccine.org>).

Founding member and Interim Medical Director, **Clinica Esperanza/ Hope Clinic.** 07/07- present

Clinica Esperanza/Hope Clinic is a community initiative-free clinic that offers free, high quality medical care and preventive health services to adults living in Rhode Island who do not have health insurance or cannot afford to purchase health care. Located in the Olneyville neighborhood of Providence, Clinica Esperanza patients receive care from an all-volunteer staff of highly trained and qualified physicians, nurse practitioners, nurses, medical assistants, medical students and interpreters.

Editor/Editorial Boards

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| Founder and Chief Editor Infectious Diseases in Corrections Report (IDCR) | 1998-2008 |
| Editor, AIDS Reader; Guest Editor (Prison series) | 2000-2008 |
| Guest Editor, Rhode Island Journal of Medicine (Clinical Trials series) | 2000 |
| Invited Editor for issue of Methods (Academic Press) | 2004 |
| Co-editor (with L. Moise) of Special Issue in Medicine and Health Rhode Island | 2007 |
| Editorial Board, Emerging Infectious Diseases | 2001-present |
| Editorial Board, Human Vaccines | 2008-present |
| Editorial Board, Immunome Research | 2004-present |
| Editorial Board, Current Opinion in Immunology. | 2012-present |

University Committees

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| People's Health Colloquium, Working group on the Social and Community Contexts of Health Care; Brown University School of Medicine | 1992-1993 |
| Foreign Research Fellowship Committee, Brown U. Medical School | 1996-1997 |
| Fogarty ARTP, International Health Institute, Senior Executive Committee | 1996-1998 |
| URI Center for Biotechnology and Life Sciences Development Committee | 2008-2009 |

Other Committees

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| Expert Panel, Health Status of Soon-to-be-released Inmates Project | 1999 |
| National Commission on Correctional Health Care | |
| Advisory Panel, World Health Organization TB Programme | 1998-2000 |
| National AIDS Minority Council (NMAC) Prison Advisory Panel | 2000-2004 |
| HRSA Advisory Panel on Medical Case Management and Support Services to Individuals with HIV Disease Being Released from Federal or State Prisons | 2002 |
| Rhode Island Technology Council BioGroup Steering Committee | 2004- present |
| Advisor to Public Health Watch HIV/AIDS Project, Open Society Institute | |
| Assessment of the United States response to its domestic HIV/AIDS epidemic | 2005-2006 |
| UN Millennium Village Project Medical Advisor (Peter Hotez, Sonia Sachs) | 2006-present |
| Entrepreneurship “Hot Team” Providence Chamber of Commerce | Summer 2008 |
| Co-Leader (with Barrett Bready) of Mayor Cicilline’s Biotech Jewelry District Initiative | 2007-2009 |
| Smith College Fulfill the Potential Project | 2008-present |
| Mayor-Elect Angel Taveras Transition Team (Economy) | 2010-present |
| Jewelry District Biotech Development Committee (Providence) | 2011-present |

Board Membership

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| International Immunomics Society | 2003-present |
| Rhode Island Free Clinic Medical Advisory Board | 2004-2007 |
| Clinica Esperanza/Hope Clinic Medical Advisory Board | 2007-present |
| International Vaccine Society Executive Board | 2009- present |

Membership in Societies

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| Massachusetts Medical Society | current |
| Massachusetts Infectious Diseases Society | previous |
| Rhode Island Medical Society | current |
| Rhode Island Medical Women’s Association | current |
| Wayland Collegium (Brown University) | until 2010 |
| International Immunomics Society | current |
| International Vaccine Society | current |
| American Association of HIV Medicine | current |

Languages

English and French (Fluent); Spanish (Medical), Italian (Conversational)

Primary Publications (74) Reviews / Chapter and Proceedings (86); Total = 156

1. Quakyi IA, Otoo LN, Pombo D, Sugars LY, Menon A, A.S. DeGroot, Johnson AH, Alling D, Miller LH, and Good MF, **Differential nonresponsiveness in humans of candidate *Plasmodium falciparum* vaccine antigens**, *Am. J. Trop. Med. Hyg.*, 1989, Vol. 41, Issue 2, pp. 125-134.
2. A.S. De Groot, Johnson AH, Maloy WL, Quakyi IA, Riley EM, Menon A, Banks S M, Berzofsky JA, and Good MF, **Human T cell recognition of polymorphic epitopes from malaria circumsporozoite protein**, *J. Immunol.*, 1989, Vol.142, No.11, pp. 4000-4005.
3. Good MF, Kumar S, A.S. De Groot, Weiss WR, Quakyi IA, Dontfraid F, Smith FE, Cochran M, Berzofsky JA, Miller LH, **Evidence implicating MHC genes in the immunological nonresponsiveness to the plasmodium falciparum CS protein**, *Bulletin of the World Health Organization*, 68 Supplement: pp. 80-84, 1990.
4. A.S. De Groot, Hosmalin CM, Hughes A, Barnd SH, Hendrix D, Houghten CW, Shearer GM, Berzofsky JA, **Human Immunodeficiency Virus Reverse Transcriptase T Helper Epitopes Identified in Mice and Humans: Correlation with a Cytotoxic T Cell Epitope**, *J. Infectious Disease* 1991, Vol.164, pp.1058-1065.
5. A.S. De Groot, Scheib RG, McGowan K, Schmid CP, Lieberman J, Wyler DJ, **T-cell responses to *Mycobacterium tuberculosis* antigens in the HIV-infected host**. *Vaccines* 93, Cold Spring Harbor Press, Cold Spring Harbor, NY, pp. 251-257.
6. Meister GE, Roberts CGP, Berzofsky JA, A.S. De Groot, **Two novel T cell epitope prediction algorithms based on MHC-binding motifs; comparison of predicted and published epitopes from *Mycobacterium tuberculosis* and HIV protein sequences**, *Vaccine* 1995, Vol. 13, No. 6, pp. 581-591.
7. A.S. De Groot, Jesdale BM, Meister GE, Muni N, Roberts CGP, **Prediction of T Cell Epitopes for HIV vaccine development by computer-driven algorithm**, in *HIV Molecular Immunology Database 1995*, Bette Korber, Gerald Meyers eds., Los Alamos National Laboratories, New Mexico, pp. iv17-iv28.
8. Stevens J, Zierler S, Dean D, Goodman AK, Chalfen EM, A.S. De Groot, **Prevalence of prior sexual abuse and HIV risk-taking behaviors in incarcerated women in Massachusetts**, *J. Correctional Health Care*, 1995, Vol. 2, Issue 2, pp. 137-149.
9. Stevens J, Zierler S, Cram V, Dean D, Mayer KH, A.S. De Groot, **Risks for HIV infection in incarcerated women**, *J. Women's Health*, 1995, Vol. 4, No. 5, pp. 569-577.
10. A.S. De Groot, Carter EJ, Roberts CGP, Edelson BT, Jesdale BM, Meister GE, Houghten RA, Montoya J, Romulo RC, Berzofsky JA, and Ramirez BDLL, **A novel algorithm for the efficient identification of T cell epitopes: prediction and testing of candidate TB vaccine peptides in genetically diverse populations**, *Vaccines* 96, Cold Spring Harbor Laboratory, Cold Spring Harbor, NY, pp. 127-134.
11. Roberts CGP, Meister GE, Jesdale BM, Lieberman J, Berzofsky JA, A.S. De Groot, **Prediction of HIV peptide epitopes by a novel algorithm**, *AIDS Research and Human Retroviruses*, 1996, Vol. 12, No. 7, pp. 593-610.
12. A.S. De Groot, Jesdale BM, Szu E, Schafer JR, Chiczy RM, Deocampo G. **An interactive Web site providing major histocompatibility ligand predictions: application to HIV research**. *AIDS*

- Res Hum Retroviruses*. 1997 May 1; 13(7):529-31.
13. Jesdale BM, Deocampo G, Meisell J, Mullen L, Beall J, Marinello M, A.S. De Groot, **Matrix-based prediction of MHC-binding peptides: the EpiMatrix algorithm, reagent for HIV research**, *Vaccines* 97, pp. 57-64, Cold Spring Harbor Laboratory Press 1997.
 14. Nguyen, KB, Suri, PK, Shah, AM, Goldberg, M, De Groot, AS, and Knopf, PM. **Differential immune responses against a Schistosoma mansoni candidate vaccine antigen in three murine strains**. *Vaccines* 97, 1997, 213-217.
 15. Gampper, SNR, George JA, Carter EJ, Jesdale BM, Flanigan TP, Mayer KH, A.S. De Groot, **Co-infection with M. tuberculosis (Mtb) and HIV in high risk clinical care settings in Rhode Island**, *AIDS Care*, 1998, Vol. 10, No. 2, pp. 221-229.
 16. Santiago ML, Santiago EG, Hafalla JCR, Manalo, MA, Orantia, L, Cajima, MNB, Martin C, Cuaresma, C, Dominguez CE, Borromeo ME, A.S. De Groot, Flanigan TP, Carpenter CJ, Mayer KH, Ramirez B, **Molecular Epidemiology of HIV-1 Infection in the Philippines, 1985-1997: Transmission of Subtypes B and E and Potential Emergence of Subtypes C and F**, *J. AIDS and Hu Retrovirology*, 1998, Vol. 18, No. 3, pp. 260-269.
 17. Schafer JA, Jesdale BM, George JA, Kouttab NM, A.S. De Groot, **Prediction of well-conserved HIV-1 ligands using a Matrix-based Algorithm, EpiMatrix**, *Vaccine*, 1998, Vol. 16, No. 19, pp. 1880-1884.
 18. Fink MJ, Goodman, AK, Hight E, Miller- Mack E, A.S. De Groot, **Critical prevention, critical care: gynecological and obstetrical aspects of comprehensive HIV prevention and treatment among incarcerated women**. *J. Correctional Health Care*, 1998, Vol. 5, Issue 2, pp.201-223.
 19. A.S. De Groot, Leibel SR, Zierler S, **A Standard of HIV care for incarcerated women: Northeastern United States' Experiences**. *J. Correctional Health Care*, 1998, Vol. 5, Issue 2, pp. 139-177.
 20. Xia Jin, DF Nixon, CGP Roberts, Nixon DF, J Safrit, LQ Zhang, YX Huang, N Bhardwaj, B Jesdale, A.S. De Groot, RA Koup, **Identification of subdominant cytotoxic T lymphocyte epitopes encoded by autologous HIV type 1 sequences, using dendritic cell stimulation and computer-driven algorithm**. *AIDS Res Hu Retroviruses* Vol 16, No.1, pp. 67-76, January 2000.
 21. A.S. De Groot, Bick, J, Thomas, D, Stubblefield, E, **HIV Clinical Trials in Correctional Settings: Right or Retrogression?** *AIDS Reader*. 2001; 11(1):34-40.
 22. Bond KB, Sriwanthana B, Hodge TW, De Groot AS, Mastro TD, Young NL, Promadej N, Altman JD, Limpakarnjanarat K, McNicholl JM. **An HLA-directed molecular and bioinformatics approach identifies new HLA-A11 HIV-1 subtype E cytotoxic T lymphocyte epitopes in HIV-1 infected Thais**. *AIDS Research and Human Retroviruses* 2001; 17(8):703-18.
 23. A.S. De Groot, H. Sbai, C. Saint-Aubin, W. Martin, A. Bosma, G. Skowron, K. H. Mayer **Designing HIV-1 vaccines to reflect viral diversity and the global context of HIV/AIDS**. *AIDScience* 1(2) June 22, 2001.
 24. A.S. De Groot, Bosma A, Chinai N, Frost J, Jesdale BM, Gonzalez MA, Martin W, Saint-Aubin C **From genome to vaccine: in silico predictions, ex vivo verification**. *Vaccine*. 2001 Aug 14;19(31):4385-95.
 25. A.S. De Groot, Saint Aubin, CS, Rayner, J, Martin, W. **Rapid Determination of HLA B*07-ligands from the West Nile Virus genome**. *Emerging Infectious Diseases*, Vol. 7, No. 4, July-

August 2001: 706-713.

26. H. Sbai, A. Mehta, A.S. De Groot. **Use of T cell epitopes for vaccine development.** *Current Drug Targets - Infectious Disorders*, 2001, 1, 283-293.
27. A.S. De Groot, H. Sbai, C. Saint Aubin, J.A. McMurry, William Martin. **Immuno-informatics: Mining the genome for Vaccine Components.** *Immunology and Cell Biology*. *Immunology and Cell Biology* (2002) 80, 255–269.
28. A.S. De Groot, J. Rayner, W. Martin. **Modeling the immunogenicity of therapeutic proteins using T cell epitope mapping.** In: *Immunogenicity of Therapeutic Biological Products. Developments in Biologicals.* Fred Brown, Anthony Mire Suis, editors. Basel, Karger, 2003. Vol 112:71-80.
29. W. Martin, A. Bosma, H. Sbai and A.S. De Groot. **The use of bioinformatics for identifying class I restricted T cell epitopes.** *Methods* (Epitope Mapping Issue). Bill Kwok, editor, *Methods* 29 (2003) 289–298.
30. A.S. De Groot, Vishvanath Nene, Nagendra R. Hedge, S. Srikumaran, James Rayner and William Martin. **T Cell Epitope Identification for Bovine Vaccines: An Epitope Mapping Method for BoLA A-11.** *International Journal for Parasitology* (Thematic Issue on Vaccines, David Brake Editor, (Vol 33/5-6 pp 641-653). 2003.
31. Lopes AR, Jaye A, Dorrell L, Sabally S, Alabi A, Jones NA, Flower DR, De Groot AS, Newton P, Lascar RM, Williams I, Whittle H, Bertoletti A, Borrow P, Maini MK. **Greater CD8+ TCR heterogeneity and functional flexibility in HIV-2 compared to HIV-1 infection.** *J Immunol.* 2003 Jul 1; 171(1):307-16.
32. De Groot A,S. Hakima Sbai, Bill Jesdale, W. Martin, C. Saint Aubin, H. Sbai, A. Bosma, Judy Lieberman, G.A. Skowron, Fadi Mansourati, Ken Mayer. **Mapping Cross-clade HIV-1 Vaccine Epitopes Using a Bioinformatics Approach.** *Vaccine* 21 (2003) 4486–4504. <http://www.sciencedirect.com/science/journal/0264410X>.
33. Dong Y, Demaria S, Sun X, Santori FR, Jesdale BM, De Groot AS, Rom WN, Bushkin Y. **HLA-A2-restricted CD8+cytotoxic-T-cell responses to novel epitopes in Mycobacterium tuberculosis superoxide dismutase, alanine dehydrogenase, and glutamine synthetase.** *Infect Immun.* 2004 Apr; 72(4):2412-5.
34. De Groot AS, Bishop EA, Khan B, Lally M, Marcon L, Franco J, Mayer KH, Carpenter CC, Martin W. **Engineering immunogenic consensus T helper epitopes for a cross-clade HIV vaccine.** *Methods.* 2004 Dec; 34(4):476-87 *Bioinformatics in Vaccine Design.*
35. McMurry, J, Sbai H, Gennaro ML, Carter EJ, Martin W, De Groot AS. **Analyzing Mycobacterium tuberculosis proteomes for candidate vaccine epitopes.** *Tuberculosis* (Edinb). 2005; 85(1-2):95-105.
36. De Groot AS, Marcon L, Bishop EA, Rivera D, Kutzler M, Weiner DB, Martin W. **HIV vaccine development by computer assisted design: the GAIA vaccine.** *Vaccine.* 2005 Mar 18; 23 [7-18]:2136-48.
37. De Groot AS, McMurry J, Marcon L, Franco J, Rivera D, Kutzler M, Weiner D, Martin B. **Developing an epitope-driven tuberculosis (TB) vaccine.** *Vaccine.* 2005 Mar 18; 23(17-18):2121-31.
38. Otero M, Calarota SA, Dai A, De Groot AS, Boyer JD, Weiner DB. **Efficacy of novel plasmid DNA encoding vaccinia antigens in improving current smallpox vaccination strategy.**

- Vaccine. 2005 Aug 30.
39. De Groot A.S., P.M. Knopf, Bill Martin. **De-immunization of therapeutic proteins by T cell epitope modification.** Mire-Sluis, A. Ed. State of the Art Analytical Methods for the Characterization of Biological Products and Assessment of Comparability. Dev. Biol. Basel, Karger, 2005. Vol 122. pp 137-160.
 40. Inaba H, Martin W, De Groot AS, Qin S, De Groot LJ. **Thyrotropin receptor epitopes and their relation to histocompatibility leukocyte antigen-DR molecules in Graves' disease.** J Clin Endocrinol Metab. 2006 Jun;91(6):2286-94. Epub 2006 Apr 4.
 41. Koita, OA, D. Dabitaou, I. Mahamadou, M. Tall, A. S. Dao, A. Tounkara, H. Guiteye, C. Noumsi, O. Thiero, M. Kone, D. Rivera, J. A. McMurry, W. Martin, De Groot AS. **Confirmation of Immunogenic Consensus Sequence HIV-1 T-cell Epitopes in Bamako, Mali and Providence, Rhode Island.** Human Vaccines 2006 June; 2(3), 119-128.
 42. McMurry JA, S. Kimball, J. Lee, D. Rivera, W. Martin, D.B. Weiner, M. Kutzler, D.R. Sherman, H. Kornfeld, De Groot AS. **Epitope-Driven TB Vaccine Development : A streamlined approach using immunoinformatics, ELISpot assays, and HLA transgenic mice.** Current Molecular Medicine, Curr Mol Med. 2007 Jun;7(4):351-68.
 43. McMurry JA, Gregory SH, Moise L, Rivera D, Buus S, De Groot AS. **Diversity of Francisella tularensis Schu4 antigens recognized by T lymphocytes after natural infections in humans: Identification of candidate epitopes for inclusion in a rationally designed tularemia vaccine.** Vaccine. 2007 Apr 20;25(16):3179-91.
 44. De Groot AS, Goldberg M, Moise L, Martin W. **Evolutionary deimmunization: An ancillary mechanism for self-tolerance.** Cell Immunol. 2007 Apr 17; Epub. Cellular Immunology. Volume 244, Issue 2, December **2006**, Pages 148-153. <http://dx.doi.org/10.1016/j.cellimm.2007.02.006>
 45. Koren E, De Groot AS, Jawa V, Beck KD, Boone T, Rivera D, Li L, Mytych D, Koscec M, Weeraratne D, Swanson S, Martin W. **Clinical validation of the "in silico" prediction of immunogenicity of a human recombinant therapeutic protein.** Clin Immunol. **2007** Jul;124(1):26-32.
 46. De Groot AS, L. Moise, W. Martin, F. Guirakhoo, and T. Monath. **Analysis of ChimeriVax Japanese Encephalitis (JE) virus Sequence for T cell epitopes and comparison to circulating wild type JE Virus strains.** Nov. **2007**. Vaccine 25 (2007) 8077–8084.
 47. Moise L, McMurry JA, Pappo J, Lee DS, Moss SF, Martin WD, **De Groot AS.** **Identification of genome-derived vaccine candidates conserved between human and mouse-adapted strains of H. pylori.** Hum Vaccin. **2008** May-Jun;4(3):219-23. Epub 2010 May 8.
 48. Knopf PM, Rivera DS, Hai SH, McMurry J, Martin W, **De Groot AS.** **Novel function of complement C3d as an autologous helper T-cell target.** Immunol Cell Biol. **2008** Mar;86(3):221-5.
 49. **De Groot AS.** Rivera DS, McMurry JA, Buus S, Martin W, **Identification of Immunogenic HLA-B7 "Achilles' heel" Epitopes Within Highly Conserved Regions of HIV.** Vaccine, **2008** 26, 3059—3071.
 50. Liso A, Colau D, Benmaamar R, **De Groot AS**, Martin W, Benedetti R, Specchia G, Martelli MP, Coulie P, Falini B. **Nucleophosmin leukaemic mutants contain C-terminus peptides that bind HLA class I molecules..** Leukemia, **2008**, Feb;22(2):424-6.

51. De Groot A.S., L. Moise, J.A. McMurry, Erik Wambre, Laurence Van Overvelt, Philippe Moingeon, W. Scott, W. Martin, **Activation of Natural Regulatory T cells by IgG Fc-derived Peptide "Tregitopes"**. *Blood*, **2008**, 112: 3303. <http://tinyurl.com/ASDeGroot-Blood-2008>.
52. Moise L., McMurry JA, Buus S., Frey S., Martin WD and De Groot AS. **In Silico-Accelerated Identification of Conserved and Immunogenic Variola/Vaccinia T-Cell Epitopes**. <http://dx.doi.org/10.1016/j.vaccine.2009.06.018> *Vaccine*, **2009** Oct 30;27(46):6471-9. Epub 2009 Jun 24.
53. Gregory SH, Mott S, Phung J, Lee J, Moise L, McMurry JA, Martin W, De Groot AS. **Epitope-based vaccination against pneumonic tularemia**. *Vaccine*. **2009** Aug 27;27(39):5299-306. Epub 2009 Jul 17
54. De Groot AS, Ardito M, McClaine E, Moise L, Martin W. **Immunoinformatic comparison of T-cell epitopes contained in novel swine-origin influenza A (H1N1) virus with epitopes in 2008-09 Conventional Influenza Vaccine**. *Vaccine*. **2009** Sep 25;27(42):5740-7. PMID: 19660593.
55. Inaba H, Martin W, Ardito M, De Groot AS, De Groot LJ. **The role of glutamic or aspartic Acid in position four of the epitope binding motif and thyrotropin receptor-extracellular domain epitope selection in graves' disease**. *J Clin Endocrinol Metab*. **2010** Jun;95(6):2909-16. Epub 2010 Apr 14.
56. Cohen T., Moise, L, Ardito M., Martin W.D., De Groot AS. **A method for individualizing the prediction of immunogenicity of protein vaccines and biologic therapeutics: iTEM (individualized T Cell Epitope Measure)**. *J Biomed Biotechnol*. 2010. pii: 961752. Epub 2010 Jul 18. doi: 10.1155/2010/961752.
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62. J. I. Franco, L. Marcon, H. Sbai, S. Foti, D. Rivera, A. Bosma, B. Martin, De Groot A.S. **Prototype Multi-Epitope DNA Vaccine Design for HIV.** Poster: The National Foundation for Infectious Diseases: Sixth Annual Conference on Vaccine Research, 05/03.
63. De Groot A.S. J. A. McMurry, W. Martin. **Analyzing Mycobacterium tuberculosis proteomes for candidate TB vaccine epitopes.** The National Foundation for Infectious Diseases: Sixth Annual Conference on Vaccine Research, 05/03.
64. X. D. Guo, W. Martin; A. D. Groot, M. L. Gennaro **Use of Bioinformatics and Molecular Biology for Mycobacterium tuberculosis Antigen.** Keystone Symposium. 01/03.
65. De Groot A.S., H. Sbai, J. A. McMurry, M. L. Gennaro, E. J. Carter, W. Martin. **Analyzing the Mycobacterium tuberculosis proteomes for candidate TB vaccine epitopes.** 4th World TB Congress, Marriot Hotel, 06/02. Washington DC.
66. A.S. De Groot, H. Sbai, E. A. Bishop, S. Foti, J. Franco, M. Lally, D. B. Weiner, K. H. Mayer, C. C. J. Carpenter, W. Martin. **Developing an Immunogenic Consensus Sequence T cell Epitopes for the GAIA Cross-Clade HIV Vaccine** (Poster 15) Sixth Annual Conference on Vaccine Research/NFID National Foundation for Infectious Diseases, 05/03 Arlington, Virginia.
67. R. Doctors, H. Sbai, B. Martin, A.S. De Groot. **Using Computational methods and in vitro testing to identify novel epitopes in Epstein Barr Virus.** Cold Spring Harbor Laboratory Microbial Pathogenesis & Host Response, 09/03.

68. J.I. Franco, H. Sbai, B. Khan, B. Martin, M. Stellar, A.S. De Groot. **Towards Developing an Epitope-Based HPV Vaccine.**” Poster Presentation. Microbial Pathogenesis and Host Response. Cold Spring Harbor, 09/03.
69. De Groot A.S., J. A. McMurry, H. Sbai, M. L. Gennaro, E. J. Carter, W. Martin, David Sherman. **Epitope-Driven TB DNA Vaccines: An Immunoinformatics Approach** TB Vaccine 2003. Montreal, Canada. 09/03.
70. Judith Franco HIV Epitope Delivery: **Prototype Multi-epitope DNA Vaccine Design.** Oral Presentation Undergraduate International Research Conference on Global Public Health. CDC. 05/03 <http://www.sit.edu/publichealth/>
71. Sangeeta Tripathi **Knowledge, Attitudes, Practice survey of an HIV Vaccine in Bamako Mali.** Oral Presentation. Undergraduate International Research Conference on Global Public Health. CDC. 05/03. <http://www.sit.edu/publichealth/>
72. S. Foti, De Groot A.S., W. B. Martin, J. E. Crowe, M. T. Rock. **Prediction and Confirmation of Novel Smallpox Ligands Based on Conserved T cell Epitopes from the Vaccinia and Variola Genomes.** The National Foundation for Infectious Diseases: Eighth Annual Conference on Vaccine Research, 05/04.
73. A.S. De Groot, H. Sbai, E.A. Bishop, S. Foti, J. Franco, M. Lally, D. B. Weiner, K.H. Mayer, C.C.J. Carpenter, W. Martin. **Developing a Immunogenic Consensus Sequence T cell Epitopes for the Cross-Clade HIV Vaccine.** The National Foundation for Infectious Diseases: Eight Annual Conference on Vaccine Research, 05/04.
74. A Tounkara, S Dao, H Guiteye, C Noumsi, D Dabita, E A Bishop, W Martin, A S De Groot **Bamako, Mali: confirmation of immunogenic consensus sequence T cell Epitopes for the GAIA Cross-Clade HIV Vaccine** Abstract no. ThPeA6996 The XV International AIDS Conference, 2004.
75. A S DeGroot, EA Bishop, S Foti, J Franco, W Martin, M Lally, C C J Carpenter, K H Mayer **Providence, USA: Confirmation of immunogenic consensus sequence T cell Epitopes for the GAIA cross-clade HIV vaccine** Abstract no. ThPeA6995 The XV International AIDS Conference, 2004.
76. S. Foti, W. Martin, L. Marcon A.S. De Groot **In silico and in vitro evaluation of cross-conserved T cell epitopes for Japanese encephalitis virus and West Nile virus.** Accepted, (Poster P4) Fourth World Congress on Vaccines and Immunization, Tskukuba Science City /Tokyo, Japan, 09-10/04.
77. S. Foti, W. Martin, L. Marcon A.S. De Groot **T-cell epitopes conserved between variola and vaccinia: Prediction and confirmation.** (Poster P5) Fourth World Congress on Vaccines and Immunization, Tskukuba Science City /Tokyo, Japan, 09-10/04.
78. R. Doctors, S. Foti S. Kimball, B. Martin A.S. De Groot. **Computational methods and in vitro testing to identify novel epitopes for a therapeutic EBV vaccine.** (Poster P6) Fourth World Congress on Vaccines and Immunization, Tskukuba Science City /Tokyo, Japan, 09-10/04.
79. Martin W, Marcon L, Rivera D, Kutzler M, Bishop EA, O.A. Koita, Weiner DB, De Groot A.S. **T-helper Multiepitope HIV-1 Vaccine Constructs Engineered by Computer-Assisted Selection and Design elicit broad T cell responses in vivo in the presence of IL-15;** Poster Abstract AIDS Vaccine 2005, 09/05, Montreal, Canada.
80. D Rivera, C Boren, E.A. Bishop, W. Martin, M. Lally, KA Mayer, A.S. De Groot, **Mapping and confirming highly conserved HLA B7-restricted epitopes for the GAIA vaccine.** Poster

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81. J.A. McMurry, O.A. Koita, D. Dabita, I. Mahamadou, M. Tall, A.S. Dao, A. Tounkara, W. Martin, A.S. De Groot. **Confirmation of Immunogenic Consensus Sequence T cell Epitopes for the GAIA Cross-Clade HIV Vaccine In Bamako, Mali.** Poster Abstract AIDS Vaccine 2005, 09/05, Montreal, Canada.
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84. De Groot, AS, Kone, M, Koita, OA, Marcon, L, Martin, W, McMurry, JA, Rivera, D, Bishop, E, Lally, M, Mayer, KA, Kutzler, M, Weiner DB. **GAIA HIV Vaccine Development: Optimization of the Immunogens in Pre Clinical Studies.** Oral Abstract, AIDS Vaccine 2005 (poster). 09/05, Montreal, Canada
85. J Beckerman, N Vu, N Keita, M Koné, A De Groot, M Lally, K Mayer. **Potential Barriers to an HIV Vaccine Trial in Bamako Mali.** Poster Abstract, AIDS Vaccine 2005. 09/05, Montreal, Canada.
86. Paul Mark Knopf, Sarah Kimball, William Martin, Anne DeGroot. **Class II HLA-binding peptides in C3d: possible role as co-signal 2 in B-cell help.** American Association of Immunologists, Boston 2006
87. C Cohen, M Kone, A LaFaunce, N Vu, M Lally, K Mayer, N Keita, A De Groot. **Knowledge, Attitudes, and Practices study in marketplaces of Bamako, Mali to inform the design of HIV vaccine trials.** Paper Number: 231.00. AIDS Vaccine 2006, Amsterdam, 08/06.
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89. L Marcon, L Moise, D Rivera, M Lally, M Kutzler, JA McMurry, WD Martin, DB Weiner, AS De Groot. **Elicitation of robust T cell responses in HLA DRB1*0101 transgenic mice by MHC class II compartment-targeted and untargeted HIV T helper multiepitope molecular constructs.** Paper Number: 441.00. AIDS Vaccine 2006, Amsterdam, 08/06.
90. Sueker J.J, Bernard K, Colton E., Paris J., Wohl D., De Groot A.S. **Provider perspectives about the standard of HIV care in correctional settings and comparison to the community standard of care: How do we measure up?** World AIDS Conference. Toronto, 2006.
91. C Cohen, M Koné, A LaFaunce, N Vu, M Lally, K Mayer, N Keita, AS De Groot. **Knowledge, Attitudes, and Practices study in marketplaces of Bamako, Mali to inform the design of HIV vaccine trials.** World AIDS Conference. Toronto, 2006.
92. AS De Groot, M. Goldberg, D Rivera, JA McMurry, L Moise, M Kone, OA Koita, L Marcon, M Kutzler, M Lally, KH Mayer, DB Weiner, WD Martin. **2006 progress update on the GAIA HIV Vaccine: Broad coverage by HLA alleles and Geographic Location, Optimization of HIV Immunogens in Pre Clinical Studies.** Paper Number: 438.00. AIDS Vaccine 2006, Amsterdam, August 2

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95. C Cohen, M Koné, A LaFaunce, N Vu , M Lally, K Mayer, N Keita, AS De Groot. **Knowledge, Attitudes, and Practices study in marketplaces of Bamako, Mali to inform the design of HIV vaccine trials.** World AIDS Conference. Toronto, 2006.
96. Daniel Rivera, Christine Malboeuf, Julie McMurry, Leonard Moise, Bill Martin, Annie De Groot. **High Throughput validation of predicted T-cell epitopes conserved between Variola and Vaccinia: Development of a novel immunome based Smallpox vaccine.** Abstract Number: 241561. Poster presentation at the 6th Annual Meeting of the Federation of Clinical Immunology Societies (FOCIS 2006), June 1-5 in San Francisco, Calif.
97. Kimball SL, Rivera DS, Rodriguez C, McMurry JA, Martin W, and De Groot AS. **High Throughput validation of predicted T-cell epitopes in F. Tularensis: The development of a novel T-cell epitope based Tularemia vaccine.** Abstract Number: 241551. Poster presentation at the 6th Annual Meeting of the Federation of Clinical Immunology Societies (FOCIS 2006), June 1-5 in San Francisco, Calif.
98. Rivera DS, Kimball SL, McMurry JA, Moise L, Martin W, Marcon L, and De Groot AS. **High Throughput validation of predicted T-cell epitopes conserved between Variola and Vaccinia: Development of a novel immunome based Smallpox vaccine,** 9th Annual Conference on Vaccine Research, National Foundation for Infectious Diseases.
99. Wright C, Malboeuf CM, Rodriguez C, Rivera DS, Finucane D, Lee J, McMurry JA, Moise L, Gregory S, Martin W, and De Groot AS. **High Throughput Validation of Predicted T-cell Epitopes in F. Tularensis: The Development of a Novel T-cell Epitope Based Tularemia Vaccine;** Poster Abstract, 32nd Annual New England Immunology Conference, October 2006, Woods Hole, MA, USA.
100. Moise L., Rivera DS, J.A. McMurry, W. Kim, D. Lee, J. Pappo, E. Sordillo, S. Moss, W.D. Martin, and A.S. De Groot. **Targeted PCR confirmation of vaccine components conserved between human and mouse-adapted strains of H. pylori.** American Gastro Association meeting, May 2007 Washington DC. L.Moise presented poster/oral abstract.
101. Moise L, Rivera DS, McMurry JA, Kim W, Lee D, Pappo J, Sordillo E, Moss S, Martin W, and De Groot AS. **Potential immunogenicity of predicted epitopes conserved between human and mouse-adapted strains of H. pylori.** 10th Annual Conference on Vaccine Research, NFID, 2007 Baltimore, MD.
102. Moise L, Rivera DS, Malboeuf CM, Rodriguez C, McMurry JA, Goldberg M, Martin W, Frey S, Buller M, and De Groot AS. **Further progress on the immunome-based DNA prime / Peptide boost smallpox vaccine: Results from in vivo immunogenicity assays.** L.Moise presented poster/oral abstract. 10th Annual Conference on Vaccine Research, NFID, 2007. Baltimore, MD.
103. Rivera DS, Malboeuf CM, Rodríguez C, Lee J, McMurry JA, Moise L, Gregory S, Martin W and De Groot AS. **Protective effect of an epitope driven vaccine against F. tularensis: Survival of aerosol-challenged mice. Oral presentation.** 10th Annual Conference on Vaccine Research,

- NFID, 2007. Baltimore, MD. L.Moise presented poster/oral abstract.
104. Coulibaly K, Koita OA, Rivera DS, Moise L, Martin WD, De Groot AS. **Updated results from ongoing work on the GAIA HIV Vaccine: Recognition of class I and II-restricted epitopes in Bamako, Mali and Providence, USA.** CROI meeting, January 2008, Boston MA.
 105. De Groot A.S. **IgG Tregitopes and AITD-ASATI: Antigen Specific Tolerance Induction in Autoimmune Thyroid Disease**, Poster presentation Tregs and Th17 Cells in Autoimmunity March 25-26, 2008. Washington, DC. LJ De Groot presented poster at the meeting.
 106. De Groot A.S. **Updated results from ongoing work on the GAIA HIV Vaccine: Broad Recognition of class I and II-restricted epitopes and in vivo studies**, Poster presentation, Eleventh Annual Conference on Vaccine Research, National Foundation for Infectious Diseases. Baltimore, May, 2008.
 107. De Groot A.S. **Positive Prediction of Immunogenic Vaccine Candidate Epitopes and Progress on the Development of an IDV Vaccine for H. pylori**, Oral presentation and abstract, , Eleventh Annual Conference on Vaccine Research, National Foundation for Infectious Diseases, Baltimore, May 2008. L. Moise presented oral report and poster at the meeting.
 108. Moise L, McMurry JA, W, Lee J, Buller M, Frey S Martin W, and De Groot AS. **Immunogenicity in vivo: Proof-of-concept study of an immunome-derived smallpox vaccine.** NFID Eleventh Annual Meeting on Vaccine Research. National Foundation for Infectious Diseases, 2008 Baltimore, MD.
 109. TOUNKARA Karamoko, KONE Youssouf, KOTY Zoumana, ABOUBACAR Ben, Bicki, Alexandra, WERWIE Timothy, DE GROOT Anne S. **Patient adherence to HIV treatment and prevention in the Centre de Santé Communautaire de Sikoro, Bamako, Mali.** IAPAC, Miami, Florida May 2008.
 110. Yattasaye R, Tounkara K, Kone Y, Closson E, Perez Reyes A, De Groot A.S., **Hand of Hope (Here Bolo): A Peer Education Tool for Low Literacy Settings.** GAIA Mali, ASACOMSI, Millennium Villages Project, University of Bamako, GAIA Vaccine Foundation (USA). Poster and Abstract A-072-0179-00876 International AIDS Conference, Mexico City, 2008.
 111. Tounkara, K., Aboubacar, B. Kone Y, Closson E, Perez Reyes A, De Groot A.S. **Increased HIV and STI testing in Bamako, Mali using a push/pull intervention.** Poster CDC0368 accepted to the CD-ROM of the XVII International AIDS Conference, Mexico City, 3-8 August 2008.
 112. McMurry JA, Moise L, Rivera DS, Martin WD, Gregory SH, De Groot AS. **Development of a novel epitope-based vaccine that protects against lethal F tularensis LVS challenge.** Vaccine Technology, Portugal, 2008.
 113. J.A. McMurry, L. Moise, W.D. Martin, S.H. Gregory, A.S. De Groot, **High Throughput validation of predicted T-cell epitopes in F. Tularensis: The development of a novel T-cell epitope-based Tularemia vaccine** Rhode Island Research Alliance Symposium on June 3, 2008 at the RI Convention Center.
 114. De Groot A.S., L Moise, J McMurry, B Wu, J Desrosiers, C Eil, W Martin, LJ De Groot. **IgG Tregitopes and AITD-ASATI: Antigen specific tolerance induction in Autoimmune Thyroid Disease.** Rhode Island Research Alliance Symposium on June 3, 2008 at the RI Convention Center.
 115. Daniel S Rivera, William Martin¹, Erik Wambre, Laurence Van Overvelt, David W Scott, Paul M Knopf, Philippe Moingeon³and Anne S De Groot, **A Novel Model of IVIG Immunosuppression: Activation of Natural Regulatory T cells by IgG-Derived Peptides.** FASEB. The FASEB

- Journal. 2008;22:848.18.
116. Cohen TSD, Ardito M, Trehan S, Martin W, De Groot AS. **Does Epstein-Barr virus activate natural regulatory T cells?** Poster session presented at: Vaccine Development 2008; 2008 Sep 28-30; Pittsburgh, PA.
 117. J. McMurry, L. Moise, W. Martin, De Groot A.S.. **A call to humoral and cellular arms: A case for enlisting cognate T cell help to develop broad-spectrum vaccines against influenza.** Sixth World Congress on Vaccines, Immunisation and Immunotherapy, 23-25 September 2008: Milan, Italy.
 118. Anne S. De Groot, M.D, Leonard Moise, Yan Su, Julie A McMurry, William D Martin and David W. Scott. **IgG-Derived Tregitope Peptides Suppress T Cell Responses in Vitro and in Vivo.** Oral Presentation 677, 50th annual Meeting of the American Society for Hematology. December 6-10, 2008. San Francisco, California.
 119. Leonard Moise, Ph.D, Jonathan Skupsky, Ryan Tassone, Julie A McMurry, William D Martin, Anne S. De Groot, and David W. Scott. **De-Immunization of Human Factor VIII: Identification of Epitopes in the C2 Domain.** Poster 1030, 50th annual Meeting of the American Society for Hematology. December 6-10, 2008. San Francisco, California.
 120. Shuo Li, Stefan Floess, Gaudieri Silvana, Andrew Lucas, Alf Hamann, Matt Ardito, Anne S. De Groot, William Martin, and Eric J. Gowans. **Role of Tregs: Insights for the design of improved Hepatitis C vaccine.** Poster 128. 2nd Global Vaccine Congress, Boston Massachusetts, Dec 7-9 2008.
 121. J. McMurry, K. Coulibaly, L. Moise, J. Desrosiers, R. Tassone, O. A. Koita, W. Martin, De Groot A.S.. **The GAIA HIV vaccine progress report: broad recognition of class I and II-restricted epitopes and in vivo studies.** Poster 127. 2nd Global Vaccine Congress, Boston Massachusetts, Dec 7-9 2008.
 122. L. Moise, W.D. Martin, J. Desrosiers, R. Tassone, J.A. McMurry, S.H. Gregory, De Groot A.S.. **Rapid development and validation of a T-cell epitope-based Tularemia vaccine for F. Tularensis.** Poster 125. 2nd Global Vaccine Congress, Boston Massachusetts, Dec 7-9 2008.
 123. L. Moise, JA. McMurry, J. Lee, J. Desrosiers, R. Tassone, M. Buller, S. Frey, W. Martin, De Groot A.S.. **A Venn vaccine: selection and validation of vaccinia-variola-conserved epitopes.** Poster 126. 2nd Global Vaccine Congress, Boston Massachusetts, Dec 7-9 2008.
 124. M. Ardito, De Groot A.S., J.A. McMurry, L. Moise, W. Yang¹, W.D. Martin. **EpiMatrix: Tool for Accelerated Epitope Selection and Vaccine Design.** Poster 133. 2nd Global Vaccine Congress, Boston Massachusetts, Dec 7-9 2008. **(Award winning poster)**.
 125. L Moise; H Veelken; W Yang; C Weber; J McMurry; W Martin; A De Groot **De-tolerization of anti-DEC-205 for HIV subunit vaccine delivery.** HIV Immunobiology: From Infection to Immune Control (X4) March 22 - March 27, 2009 Keystone Resort, Keystone, Colorado. Poster Number: 2095.
 126. De Groot A.S., W. Yang, L. Moise, J. A. McMurry, J. Desrosiers, W. Martin; **A Novel Compound for the Treatment of Allergy and Autoimmune Disease.** Oral Presentation, AAAI, March 13-17, Washington, DC. 2009. Journal of Allergy and Clinical Immunology, Volume 123, Issue 2, Pages S139-S139
 127. Leonard Moise, Ph.D., Jill M. Schriewer, William Martin, Jinhee Lee, Ph.D., R. Mark L. Buller, Ph.D., Sharon Frey, M.D., and Anne S. De Groot, M.D. **T-cell Epitope Vaccine Protects HLA Transgenic Mice Against Lethal Vaccinia Challenge.** NFID, Baltimore, MD, March 2009.

128. L. Moise, W.D. Martin, J. Desrosiers, R. Tassone, J.A. McMurry, S.H. Gregory, De Groot A.S.. **Rapid development and validation of a T-cell epitope-based Tularemia vaccine for *F. Tularensis***. Poster Presentation. NFID, Baltimore, MD, March 2009.
129. Moise L, McMurry JA, Pappo J, Lee DS, Moss SF, Martin WD, De Groot AS. **HelicoVax - a genome-derived vaccine candidate developed from T cell epitopes conserved between human and mouse-adapted strains of *H. pylori***. Oral Presentation. NFID, Baltimore, MD, March 2009.
130. Hui D.J., Pien G.C., Basner-Tschakarjan E., Mingozi F., Finn J.D., Martin W., De Groot A.S., High K.A. Antigen-Specific Modulation of CTL Responses Triggered by AAV-Capsid Epitope Presentation on Transduced Hepatocytes. American Society of Gene and Cell Therapy, 13th Annual Meeting, San Diego, CA, May 2009.
131. Leonard Moise, Wen Yang, Yan Su, Daniel J. Hui, Federico Mingozi, William D Martin, David W. Scott, Katherine A. High, Francesca D'Addio, N Najafian, Mo H Sayegh, Anne S. De Groot. **T cell epitopes (Tregitopes) contained in IgG Constant Domains activate natural Tregs: Relevance for autoimmune disease, gene therapy, and less immunogenic biologics**. Oral Presentation, **WSD18/**. 2nd European Congress of Immunology, September 13 - 16, 2009 in Berlin, Germany.
132. Joseph Desrosiers II, Leonard Moise Jonathan Skupsky, Ryan Tassone, , Julie A. McMurry, William D. Martin, David W. Scott, Anne S. De Groot. **De-immunization” of Human Factor VIII: Identification of Epitopes in the C2 Domain**. Oral presentation. WSD14/1. 2nd European Congress of Immunology, September 13 - 16, 2009 in Berlin, Germany.
133. Anne S. De Groot, Leonard Moise, Xin Li, Yan Su, Wen Yang¹, Joseph Desrosiers, Ryan Tassone, Preema Mehta, William D. Martin, David W. Scott. **Effect of Tregitopes on T1D Immune response in vitro and on diabetes in NOD mice. oral presentation**. WSC11/3. 2nd European Congress of Immunology, September 13 - 16, 2009 in Berlin, Germany.
134. Tounkara Karamoko, Kone Youssouf, Koty Zoumana, Aboubacar Ben, Wirwie Timothy, De Groot Anne S. **Patient adherence to HIV treatment and prevention in the Centre de Santé Communautaire de Sikoro, Bamako, Mali**. Poster and Abstract 0294. 4th International Conference on HIV Treatment Adherence, Miami FLA, April 2009.
135. Karamoko Tounkara, Yssouf Kone, Ben Aboubacar, Ousmane Koita, Sankare Moussa, Dolo Ibrahima, Siby Fanta, and Anne S. De Groot. **Knowledge, Attitudes, Practices and Willingness to Participate in HIV Vaccine trials among urban residents of Bamako, Mali, in West Africa**. Prevention of HIV/AIDS (X3) Dates: March 22 - March 27, 2009 Keystone Resort, Keystone, Colorado, Poster.
136. L Moise; H Veelken; W Yang; C Weber; J McMurry; W Martin; A De Groot **De-tolerization of anti-DEC-205 for HIV subunit vaccine delivery**. HIV Immunobiology: From Infection to Immune Control (X4) March 22 - March 27, 2009 Keystone Resort, Keystone, Colorado. Poster Number: 2095.
137. L Moise; J Desrosiers; W Martin; A De Groot; J McMurry; C Weber **Effective design of T-cell driven vaccines applied to the GAIA HIV vaccine**: Advances in vaccine design based on current preclinical success Prevention of HIV/AIDS (X3) Dates: March 22 - March 27, 2009 Keystone Resort, Keystone, Colorado, Poster Number: 2036.
138. De Groot A.S., W. Yang, L. Moise, J. A. McMurry, J. Desrosiers, W. Martin; **A Novel Compound for the Treatment of Allergy and Autoimmune Disease**. Oral Presentation, AAAI, March 13-17, Washington, DC. 2009. Journal of Allergy and Clinical Immunology, Volume 123, Issue 2, Pages

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139. Daniel J. Hui, Gary Pien, Etiena Basner-Tschakarjan, Federico Mingozzi, Jonathan D. Finn, Bill Martin, Anne S. De Groot, Katherine A. High. **Antigen-specific modulation of CTL responses triggered by AAV-capsid epitope presentation on transduced hepatocytes**. American Society of Gene Therapy.
140. F. D'Addio, O. Boenisch, T. Watanabe, A De Groot, M.H. Sayegh and N. Najafian. **Immuno-modulatory functions of a novel IgG Fc-derived Peptides, Tregitopes, in alloimmunity**. Oral presentation. **Young Investigator Award** (D'Addio) American Transplant Conference (ATC) June, 2009.
141. Yan Su, Leonard Moise, Xin Li, Robert Rossi, Jonathan Skupsky, William D Martin, Anne S. De Groot, and David W. Scott. **T cell epitopes (Tregitopes) contained in IgG Constant Domains activate Natural Tregs**. 1st International Conference on Tolerance, Boston MA. Sept 2009. Elsevier.
142. De Groot AS, Moise L, Li X, Su Y, Yang W, Desrosiers J, Tassone R, Mehta P, Cohen T, Martin W, Scott DW. **Effect of "Tregitopes" on T1D immune response in vitro and diabetes in NOD mice**. Oral Presentation 0085. 1st International Conference on Immune Tolerance, Boston MA 25 - 27th October 2009.
143. Constanze A. Weber, Leonard Moise, Ph.D., William D. Martin, Hendrik Veelken, M.D. and Anne S. De Groot, M.D. **De-tolerization of anti-DEC-205 for HIV subunit vaccine delivery**. 1st International Conference on Immune Tolerance, Boston MA 25 - 27th October 2009.
144. Francesca D'Addio¹, Olaf Boenisch¹, Toshiko Watanabe¹, Leonard Moise^{2,3}, William D Martin³, Anne S. De Groot^{2,3,4}, Mohamed Sayegh¹, Nader Najafian¹. **Regulatory T cell epitope IgG Fc derived peptide (Tregitope) modulates tolerance/immunogenicity balance in murine and human allo-antigen stimulation models**. 1st International Conference on Immune Tolerance, Boston MA 25 - 27th October 2009.
145. Leonard Moise, Ph.D., Jill M. Schriewer, William Martin, Jinhee Lee, Ph.D., R. Mark L. Buller, Ph.D., Sharon Frey, M.D., and Anne S. De Groot, M.D. **T-cell Epitope Vaccine Protects HLA Transgenic Mice Against Lethal Vaccinia Challenge Without B Cell Priming**. Poster # 131452, Cold Spring Harbor Laboratory. Meeting, "Harnessing immunity to prevent and treat disease". October 11-14, 2009.
146. Leonard Moise, Ph.D., Ryan Tassone, Tobias Cohen, Rachel DuPont, William Martin, Jinhee Lee, Ph.D., Hardy Kornfeld, M.D. and Anne S. De Groot, M.D. **Immunoinformatic-discovered mycobacterium tuberculosis T-cell epitopes are immunogenic in HLA transgenic mice**. Poster # 131449, Cold Spring Harbor Laboratory. Meeting, "Harnessing immunity to prevent and treat disease". October 11-14, 2009.
147. Tobias Cohen, Matthew Ardito, Joe Desrosiers, William Martin, Anne S. De Groot, M.D. Individualized T cell epitope measure (item): **A new tool for vaccine design and personal therapeutics**. Poster # 131448, Cold Spring Harbor Laboratory. Meeting, "Harnessing immunity to prevent and treat disease". October 11-14, 2009.
148. Constanze A. Weber, Leonard Moise, Ph.D., William D. Martin, Hendrik Veelken, M.D. and Anne S. De Groot, M.D. **De-tolerization of anti-dec-205 for HIV subunit vaccine delivery**. Poster # 131453, Cold Spring Harbor Laboratory. Meeting, "Harnessing immunity to prevent and treat disease". October 11-14, 2009.
149. Tounkara Karamoko, Kone Youssouf, Koty, Zoumana, Aboubacar Ben, Dilorenzo, Madeline, De

- Groot Anne S. **Longitudinal study of pregnant women's acceptance of and adherence to HIV treatment in the Centre de Santé Communautaire de Sikoro, Bamako, Mali.** Poster Presentation, IAPAC 09. November 29 - December 1, 2009, New Orleans. (Maddie DiLorenzo Presented Poster).
150. AS De Groot, L Moise, J Desrosiers, C Weber and W Martin. **Effective design of T-cell driven vaccines applied to the GAIA HIV vaccine: advances in vaccine design based on current preclinical success.** [P17-26](#). AIDS Vaccine 2009. Paris, France. 19–22 October 2009.
 151. K Tounkara, B Aboubacar, O Koita, A Traore, S Dao, S Moussa, D Ibrahima, S Fanta, F Bougoudogo, R Gerber and AS De Groot. **Knowledge, attitudes, practices and willingness to participate in HIV vaccine trials among urban residents of Bamako, Mali, in West Africa, 2005–2009.** [P15-07](#). AIDS Vaccine 2009. Paris, France. 19–22 October 2009. *Retrovirology*, Volume 6 Suppl 3.
 152. C Weber, L Moise, H Veelken and W Martin. **Regulatory T cell epitopes in a dendritic cell-targeted HIV vaccine delivery platform.** [P19-43](#). AIDS Vaccine 2009. Paris, France. 19–22 October 2009. *Retrovirology*, Volume 6 Suppl 3.
 153. Scott D.W., Su Y., Skupsky J., Li X., Martin W.D., and De Groot, A.S. Activation of Regulatory T cells by T-cell epitopes (Tregitopes) contained in IgG Constant Domains. *International Forum on Immunoglobulin Research (IFIR)*, 2009.
 154. Cohen T, Moise L, Ardito M, Martin W, De Groot AS. **A method for individualizing the prediction of immunogenicity of protein vaccines and biologic therapeutics: iTEM (individualized T Cell Epitope Measure).** 13th annual conference on vaccine research. Hosted by the National Foundation for Infectious Diseases; 2010 Apr 26-28; North Bethesda, MD
 155. Hui, Daniel J, Pien, Gary C, Basner-Tschakarjan, Etiena, Mingozzi, Federico, Finn, Jonathan D, Zhou, Shangzhen, Martin, William, Groot, Anne S. De, High, Katherine A. Suppression of CTL Responses against AAV-Capsid Epitopes by Peptide-Induced Regulatory T Cells. **American Society of Hematology**, Annual Meeting Abstracts 2009 114: 377 (Oral presentation) <http://abstracts.hematologylibrary.org/cgi/content/abstract/114/22/377>
 156. Pischel L., Caplow J., Chokshi B., Tounkara K., Berthé M., Aboubacar B., Bougoudogo F., De Groot A.S. **Tuberculosis Knowledge, Attitudes and Practices in Sikoro, Mali.** IUATLB North America, Oral and Poster presentation, 14th Annual North American International Union Against Tuberculosis and Lung Disease (IUATLD NA), Orlando Florida, March 11-13 2010.
 157. Hui, D.J., Pien, G., Basner-Tschakarjan, E., Mingozzi, F., Finn, J.D., Zhou, S., Martin, W., De Groot, A.S., and High, K.A. **Induction of Regulatory T Cells As An Approach To Modulate CTL Responses Against AAV Capsid Epitopes.** Oral Presentation. American Society of Gene and Cell Therapy 13th Annual Meeting, Washington, D.C., May 19-22, 2010.
 158. Constanze A. Weber, Leonard Moise, Janet E. Buhlmann, William D. Martin, Hendrik Veelken and Anne S. De Groot, **De-Tolerization of Anti-DEC205 for HIV Subunit Vaccine Delivery**, abstract, Vaccine Technology III, Nuevo Vallarta, 06/10.
 159. Anne S. De Groot, Robert Malone, Toby Cohen, Liz McLaine, Matt Ardito, Bill Martin, **Universal Flu Vaccines: Now more than Ever**, abstract, Vaccine Technology III, Nuevo Vallarta, 06/10.
 160. Leonard Moise, Jill Schriewer, William Martin, Jinhee Lee, Mark Buller, Sharon Frey and Anne S. De Groot **T-cell Epitope Vaccine Provides Complete Protection Against Lethal Vaccinia Infection In HLA Transgenic Mouse Model**, abstract, Vaccine Technology III, Nuevo Vallarta, 06/10.

161. Tobias Cohen, Matthew Ardito, William Martin, Anne S. De Groot, **Personalizing Immune Responses to Vaccines, Autoantigens, and Protein Therapeutics: The iTEM (individualized T Cell Epitope Measure) Tool**, Vaccine Technology III, Nuevo Vallarta, 06/10.
162. Anne S. De Groot, Mark Buller, Sharon Frey, Steven Gregory, Steven Moss, Hardy Kornfeld, Jinhee Lee, Leonard Moise, William Martin. **T cell-driven Vaccines: Now more than Ever**. Oral Presentation Accepted to Vaccine Technology III, Nuevo Vallarta, 06/10.
163. EpiMatrix: Tool for Accelerated Epitope Selection and Vaccine Design. **Ardito, M., Cohen T., Martin B. De Groot AS**. Poster Presentation Accepted to Vaccine Technology III, Nuevo Vallarta, 06/10.
164. J.E. Buhlmann, N. Najafian, D. J. Hui, F. D'Addio, F. Mingozzi, L. Moise, L. J. De Groot, A. Keegan, K. A. High, M. H. Sayegh, D. W. Scott, A. S. De Groot. **Preclinical Design of Less Immunogenic Biologics: Tregitopes and Tolerance**. Poster Presentation. AAI, Baltimore, MD May 2010.
165. Su Y ,Moise L., Li X., Rossi R., Skupsky J., Martin W.D., De Groot A.S., and Scott D.W. T cell epitopes (Tregitopes) Suppress Immune Responses in vivo by Activating Natural Tregs. Poster Presentation. AAI, Baltimore, MD May 2010. J Immunol 2010 184:49.24 (Abstr)
166. Chang (Jerry) Song, Leonard Moise, R. Tassone, William D. Martin, Anne S. De Groot, and David W. Scott. **Deimmunization of HLA-DR Epitopes in the C2 Domain of Human FVIII**. Poster Presentation. AAI, Baltimore, MD May 2010.
167. Cohen T, Moise L, Ardito M, Martin W, De Groot AS. **A method for individualizing the prediction of immunogenicity of protein vaccines and biologic therapeutics: iTEM (individualized T Cell Epitope Measure)**. Poster session presented at: The 13th annual conference on vaccine research. Hosted by the National Foundation for Infectious Diseases; 2010 Apr 26-28; North Bethesda, MD.
168. Cohen T, Moise L, Ardito M, Martin W, De Groot AS. **A method for individualizing the prediction of immunogenicity of protein vaccines and biologic therapeutics: iTEM (individualized T Cell Epitope Measure)**. Poster session presented at: Vaccine Technology III. Hosted by Engineering Conferences International; 2010 Jun 6-11; Nuevo Vallarta, Nayarit, Mexico.
169. Tounkara, K., Aboubacar, B., Diallo, FS, Bougoudogo, F, Traore, Y., Dao, S, Traore, S, Kone, Y, Koita, OA, Rochas, M, De Groot, AS. **Development of an HIV Vaccine trial site in collaboration with regional DOH, HIV experts, and community based organizations in Mali, West Africa**. Submitted, AIDS Vaccine Conference, September 2010.
170. De Groot A.S., N. Najafian, D. J. Hui, F. D'Addio, F. Mingozzi, L. Moise, J.E. Buhlmann, L. J. De Groot, A. Keegan, K. A. High, M. H. Sayegh, D. W. Scott. **Preclinical Design of Less Immunogenic Biologics: Tregitopes and Tolerance, *AAPS Innovation Award 2010* Oral and poster presentation** AAPS 2010 National Biotechnology Conference. May 16-19 in San Francisco, California.
171. De Groot A.S., Epitope-Based Immunome-Derived Vaccines: **A Strategy for Improved Design and Safety**. Oral Presentation accepted at 5th Annual Novel Vaccines, Design and Development, Cambridge, MA. August 2010. [This abstract was withdrawn by CHI]
172. Cohen T, Moise L, Ardito M, Martin W, De Groot AS. **A method for individualizing the prediction of immunogenicity of protein vaccines and biologic therapeutics: iTEM (individualized T Cell Epitope Measure)**. Poster session presented at: Immunoinformatics and computational immunology workshop. In conjunction with ACM International Conference on Bioinformatics and Computational Biology; 2010 Aug 2-4; Niagara Falls, NY.

173. Buhlmann JE, Najafian, N, Hui, DJ. D'Addio, F, Mingozi, F, Moise, L, De Groot, LJ, Keegan, A, K. High, KA, Sayegh, MH, Scott, DW, De Groot AS. **Preclinical Design of Less Immunogenic Biologics: Tregitopes and Tolerance.** Poster Presentation. **AAI**, Baltimore, MD May 2010.
174. D'Addio F., Boenisch O., Wattanabe T., De Groot A.S., Sayegh M.H. and Najafian N. **Immuno-modulatory functions of a novel IgG Fc-derived Peptides, Tregitopes, in alloimmunity.** Oral presentation. Young Investigator Award (D'Addio) American Transplant Conference (ATC) June, 2009.
175. Hui, DJ, Basner-Tschakarjan E, Pien GC, Martin WD, De Groot AS, High KA, and F Mingozi, **Peptide-Induced Antigen-Specific CD4+CD25+FoxP3+ T Cells Suppress Cytotoxicity T Cell Responses Directed Against the AAV Capsid.** **American Society of Hematology.** Blood (ASH Annual Meeting Abstracts), Nov 2010; 116: 3769. <http://abstracts.hematologylibrary.org/cgi/content/abstract/116/21/3769>
176. Cousens, L. P., C. A. Weber, L. Moise, W. D. Martin, H. Veelken and A. S. De Groot. **Development of De-tolerized Anti-DEC-205 for Delivery of an HIV Subunit Vaccine (Abstract).** Immunological Mechanisms of Vaccination, Seattle, Washington. 2010.
177. Cousens, L. P., C. A. Weber, A. Reslow, J. E. Buhlmann, W. D. Martin, L. Moise and A. S. De Groot. **Importance of Regulatory T-Cells Epitopes in Vaccine Delivery Design (Abstract).** Vaccine and ISV 4th Annual Vaccine Congress, Vienna, Austria. 2010.
178. D'Addio, F., O. Boenish, T. Watanbe, W. Martin, A. DeGroot and N. Najafian. **Ex Vivo Expansion of Human Antigen-Specific Natural Tregs Using IgG Fc Derived Peptides ("Tregitopes")** (Abstract). American Journal of Transplantation. 10(Suppl.4):188. April 2010.
179. De Groot, A., J. Bulmann, C. Weber, A. Reslow, B. Martin, W. Martin and L. Moise. **De-Tolerization of Anti-DEC-205 for HIV Vaccine** (Abstract). AIDS Research and Human Retroviruses. 26(10):A135-A136. October 2010.
180. DeGroot, A. S., N. Najafian, D. J. Hui, F. S'Addio, F. Mingozi, J. Buhlmann, L. Moise. L. J. De Groot, A. Keegan, K. A. High, M. H. Sayegh and D. W. Scott. **Clinical Design of Less Immunogenic Biologics: Tregitopes and Tolerance.** Inflammation Research. 59(S3):S288-S289. September 2010. (Poster award).
181. Inaba, Hidefumi, William Martini, Matt Ardito, Anne Searls De Groot and Leslie J. De Groot. **The Role of Glutamic or Aspartic Acid in Position Four of Epitope Binding Motif of TSH-R-ECD Epitope Selection in Graves Disease** (Poster Presentation Abstract). Endocrine Journal. 57(S2):S475-S476. March 2010. Oral Presentation 851146 at ENDO 2010: The 92nd Annual Meeting & Expo, June 19-22 2010 in San Diego.
182. Moise, L., J. A. McMurry, J. Desrosiers, C. Weber, W. D. Martin and A. S. De Groot. **Effectively Designing T-Cell Driven Vaccines With Immunoinformatics Tools.** Journal of Medical Primatology. 39(4):285. August 2010.
183. Sangare, K., O. Koita, K. Tounkara, Z. Koty, L. Moise, M. Ardito, T. Cohen, J. Desrosiers, R. DuPont, M. Riochas, W. Martin and A. DeGroot. **Tracking Highly Conserved and Immunogenic Cross-Clade HIV CTL Epitopes Included the GAIA HIV Vaccine Over Time** (Abstract)."AIDS Research and Human Retroviruses. 26(10): A136. October 2010.
184. Zhang, Songhua; Moise, Leonard; Tassone, Ryan; Fast, Loren; Maraj, Bharat; Ardito, Matthew T.; Martin, William; DeGroot, Anne S.; Moss, Steven F. **Bioimmunoinformatic approach to mine H. pylori genomes for targeted vaccine development. DDW 2011 Abstract # 1028775**
185. Moise L, Gustafson E, Ardito M, McGowan M, Martin W, De Groot AS. Cousens LP, Weber CA, Moise L, Martin WD, Veelken H, De Groot AS. **Development of de-tolerized anti-DEC-205 for delivery of an HIV subunit vaccine.** Immunological Mechanisms of Vaccination. October, 2010. Seattle Washington.

186. Moise L, Ardito M, Martin WD, De Groot AS, J Desrosiers; K DaSilva, Zhang S, Moss SF. **Immunoinformatic identification of H. pylori core genome vaccine candidates**. Keystone Immunological Mechanisms of Vaccination. October 2010, Seattle, WA.
187. Ardito M, Martin W, Gregory S, Losikoff P, De Groot A. **Epitope Selection for a Dendritic Cell-Based Vaccine against Hepatitis C**. Keystone Symposia: Immunological Mechanisms of Vaccination; Seattle, WA; October 2010.
188. Gustafson E, Moise L, Ardito M, Tejada G, Desrosiers J, Martin W, De Groot AS. **Immunogenic Consensus Sequence T helper Epitopes for a Pan-Burkholderia Biodefense Vaccine**. Accepted poster presentation. 2011. NFID Fourteenth Annual Conference on Vaccine Research. Baltimore, MD.
189. Zhang S, Moise L, Tassone R, Levitz L, Fast L, Desrosiers J, DaSilva K, Meraj B, Ardito M, Martin B, De Groot A, Moss SF. **Bioimmunoinformatic approach to mine H. pylori genomes for targeted vaccine development**. American Gastroenterology Association annual meeting, May 2011, Chicago, IL
190. Ardito M, Fueyo J, DaSilva K, Zhang S, Martin W, De Groot AS, Moss SF, Moise L. **An Integrated Genomic and Immunoinformatic Approach to H. pylori Vaccine Design**. 2011 NFID Fourteenth Annual Conference on Vaccine Research. Baltimore, MD.
191. Reslow A, Aguirre D, Cousens L, Martin B, Weber CA, Martin WD, De Groot AS, Moise L. **Improved vaccine delivery by removal of tolerogenic signals in dendritic cell targeting antibodies**. 2011. NFID Fourteenth Annual Conference on Vaccine Research. Baltimore, MD.
192. Kotou Sangare, Ousmane Koita, Karamoko Tounkara, Zoumana Koty, Lenny Moise, Matt Ardito, Toby Cohen, Joe Desrosiers, Rachel Dupont, Mali Rochas, Bill Martin, Anne S. De Groot. **'Conservation across time and sequence: Validation of immunogenic HLA-A2 'Achilles' heel' epitopes for the GAIA HIV vaccine'**. Poster **218130**. AIDS Vaccine 2011, Bangkok Convention Centre. Monday, 12 September- Wednesday, 14 September 2011
193. Leonard Moise, Ousmane Koita, Kotou Sangare, Lauren Levitz, John Rozehnal, Zoumana Koty, Karamoko Tounkara, Matthew Ardito, Mali Rochas, William Martin, Anne S. De Groot; **GAIA HIV Vaccine progress report: Further validation of broadly conserved class I epitopes in West Africa'**; Poster Abstract 218180. AIDS Vaccine 2011, Bangkok Convention Centre. Monday, 12 September- Wednesday, 14 September 2011
194. KOTY Zoumana, SANGARE Kotou, TOUNKARA Karamoko, DIALLO Fanta Siby, TRAORE Sylvestre, KONE Yssouf, KOITA Ousmane, ROZEHNAL John, LEVITZ Lauren, ROCHAS Mali, DE GROOT Anne S. **Providing care and education prior to engaging in an HIV vaccine trial, Bamako Mali, West Africa..** Poster Abstract 217875. AIDS Vaccine 2011, Bangkok Convention Centre. Monday, 12 September- Wednesday, 14 September 2011.
195. Levitz L, Messitt T, McClaine E, Tassone R, Ardito M, Buhlmann JE, Moise L, Knopf PM, Martin W, De Groot AS. **Adjuvant Effects of C3d Are Mediated Through the Activation of C3d-specific Autoreactive T-cells**. Poster Presentation and Oral Presentation by Lauren Levitz. 5th Vaccine and ISV Annual Congress. Seattle, Washington, USA. October 2011.
196. Moss SF, Zhang S, Ardito M, Terry F, Fueyo J, DaSilva K, Martin W, De Groot AS, and Moise L. **Bioinformatic-Driven H. pylori Vaccine Design**. Poster Presentation. 5th Vaccine and ISV Annual Congress. Seattle, Washington, USA. October 2011.
197. Ardito M, Terry F, Kurczyk G, Gregory SH, Losikoff PT, Spero D, Martin W, **De Groot AS. Personalizing Immune Responses to Vaccines, Autoantigens, and Protein Therapeutics: The iTEM (individualized T cell Epitope Measure) Tool**. Poster Presentation. 5th Vaccine and ISV Annual Congress. Seattle, Washington, USA. October 2011.

198. Terry F, Ardito M, Mather TN, Coy W, Ribeiro JMC, Martin W, **De Groot AS. Epitope Selection for a Transmission-Blocking Vaccine Against Tick-Borne Diseases.** Poster Presentation. 5th Vaccine and ISV Annual Congress. Seattle, Washington, USA. October 2011.
199. Moise L, Ardito M, Martin W, **De Groot AS. Immunoinformatic Discovery of Potential Cross-reactive T Cell epitopes in the Measles Genome.** Poster Presentation. 5th Vaccine and ISV Annual Congress. Seattle, Washington, USA. October 2011.
200. **De Groot AS**, Ardito M, Moise L, Tassone R, Martin W. **An Integrated Genomic and Immunoinformatic Approach to Pan-Burkholderia Biodefense Vaccine Development.** Poster Presentation, NERCE/BEI Annual Retreat. Newport, Rhode Island, USA. November 2011.
201. Ardito M, Terry F, Kurczyk G, Gregory SH, Losikoff PT, Spero D, Martin W, **De Groot AS. iVAX Web-based Vaccine Design: Application to a Hepatitis C Virus Vaccine.** Poster Presentation. 5th Vaccine and ISV Annual Congress. Seattle, Washington, USA. October 2011.
202. Terry F, Ardito M, Mather TN, Coy W, Ribeiro JMC, Martin W, **De Groot AS. Epitope Selection for a Transmission-Blocking Vaccine Against Tick-Borne Diseases.** Poster Presentation. 5th Vaccine and ISV Annual Congress. Seattle, Washington, USA. October 2011.
203. Moise L, Ardito M, Martin W, **De Groot AS. Immunoinformatic Discovery of Potential Cross-reactive T Cell epitopes in the Measles Genome.** Poster Presentation. 5th Vaccine and ISV Annual Congress. Seattle, Washington, USA. October 2011.
204. **De Groot AS**, Moise L, Ardito M, McClaine E, DuPont R, Tassone R, Haran J, Suner S, Martin WD. **Evidence from H1N1 Supporting Development of Broad-Spectrum Vaccines Against Influenza.** Poster Presentation, Chemical and Biological Defense Science and Technology Conference, Las Vegas, Nevada, USA. November 2011.
205. Terry F, Ardito M, Cohen T, Moise L, Martin W, **De Groot AS. A method for individualizing the prediction of immunogenicity of vaccines and protein therapeutics: iTEM (individualized T Cell Epitope Measure).** Poster Presentation, Chemical and Biological Defense Science and Technology Conference, Las Vegas, Nevada, USA. November 2011.
206. Moise L, Schriewer J, Martin W, Lee JH, Buller M, Frey S, **De Groot AS. T-cell Epitopes Are Sufficient for Protective Vaccination Against Lethal Vaccinia Infection In HLA Transgenic Mouse Model.** Poster Presentation, Chemical and Biological Defense Science and Technology Conference, Las Vegas, Nevada, USA. November 2011.
207. Messitt T, Dupuy L, Ardito M, Terry F, Tassone R, Martin W, **De Groot AS. An Immunoinformatics Approach to Developing a Single Vaccine for VEEV EEEV and WEEV.** Poster Presentation, Chemical and Biological Defense Science and Technology Conference, Las Vegas, Nevada, USA. November 2011. ****Winner of Outstanding Poster Presentation Award****
208. **De Groot AS**, Moise L, Messitt T, McClaine E, Einck L, Del Pozzo J, Martin W. **FastVax: Accelerated Vaccine Design, Production and Delivery.** Poster Presentation, Chemical and Biological Defense Science and Technology Conference, Las Vegas, Nevada, USA. November 2011.
209. Losikoff PT, Fast LD, Nevola MM, Mishra S, Desrosiers J, Martin W, Ardito M, De Groot AS, Gregory SH. **Human peptide homologues encoded by hepatitis C virus promote a regulatory T cell response in chronically infected patients.** Annual NERCE Conference, Newport, RI; November 2011.
210. DIARRA Abdoulaye Lassana,, PISCHEL Lauren, CAPLOW Julie, DIARRA Guide, CHOKSHI Binny, TOUNKARA Karamoko, ABOUBACAR Ben, **Bicki, Alexandra**, ROCHAS Mali, BOUGOUDOUGO Flabou, DE GROOT, Anne S., **TB Bolo: A five-finger mnemonic and motivational method used for promoting tuberculosis testing in Bamako Mali, West Africa.** Abstract submitted to IAS World AIDS Conference, Washington DC, 2012.

211. Sander van der Marel, Anna Majowicz, Karin Kwikkers, Richard van Logtenstein, Anje A. te Velde, Anne S. De Groot, Sybren L. Meijer, Sander van Deventer, Harald Petry, Daniel W. Hommes, and Valerie Ferreira. **AAV5 mediated delivery of Regulatory T-cell epitope 167 ameliorates acute experimental colitis and prevents a type 1 hypersensitivity reaction in a TNBS model of Crohn's disease.** Digestive Diseases Week, San Diego CA, May 2012.
212. De Groot AS., TOUNKARA Karamoko¹, ABOUBACAR Ben, DIALLO Fanta Siby, BOUGOUDOGO, Flabou, KOITA Ousmane A, DAO Sounkalo, DIALLO Souleymane, TRAORE Youssouf, DIARRA, Lassina, DIARRA Guide, KONE Yssouf, ROCHAS Mali, LUTTERBECK Steven, **A Decade of Partnering to Stop HIV in West Africa: GAIA VF Prevention, Education, Access to Care and Vaccine Trial Site Development in Bamako Mali.** AIDS Vaccine Conference, Boston MA 2012.
213. Yssouf Kone,, Ben Aboubacar, Lauren Levitz, Christina Gomez Mira, Julia Toffoli, Natasha Ryback, Emily Kossow, Tonhu Huang, **Ali Bicki**, Karamoko Tounkara, Youssouf Traore, Fanta Siby Diallo, Mali Rochas, Annie S. De Groot. **HIV-Free children born to Seropositive Mothers in Bamako Mali: A six-year perspective on providing MTCTP at the front line of AIDS.** AIDS Vaccine Conference, Boston MA 2012.
214. Zoumana Koty: **Evaluating short-term patient outcomes after HIV care interventions in a low resource setting: Preparing for an HIV vaccine trial site in Bamako, Mali.** AIDS Vaccine Conference, Boston MA. September 2012.
215. Tounkara Karamoko. **Pediatric HIV infection due to maternal transmission: A solvable problem in a peri-urban setting in Bamako, Mali'** AIDS Vaccine Conference, Boston MA. September 2012.
216. Danielle Poole, Kathleen Tracy, Lauren Levitz, Shahla Yekta, Emily Kossow, Tonhu Huang, Mali Rochas, Kotou Sangare, Karamoko Tounkara, Ben Aboubacar, Ousmane Koita, Siby Fanta, Samba Sow, Ibrahima Tégouété, Amadou Dolo, Flabou Bougoudogo, Anne S. De Groot, **Knowledge, attitudes, practices of HPV and cervical cancer and willingness to participate in a vaccine trial in preparation for HIV and HPV vaccine clinical trials in Mali, West Africa.** AIDS Vaccine Conference, Boston MA. September 2012.
217. Z. Koty, A. Bicki, N. Platt, Y. Koné, L. Diarra, K. Tounkara, Fanta Siby Diallo. Lauren Levitz, B. Aboubacar, M. Rochas, S. Dao A.S. De Groot. HIV Care in a Low Resource Setting in Mékin-Sikoro, Commune I, Bamako, Mali: **Does Providing Universal Access Improve Short Term Outcomes?** Abstract submitted to IAS World AIDS Conference, Washington DC, 2012.
218. De Groot A.S., Najafian N., Hui D.J., Mingozi F., Cousens L.P., Moise L., Khoury S.J., Elyaman W., Martin W., and Scott D.W. **Tregitopes and tolerance: Harnessing regulatory T cells to suppress inflammation. Oral presentation.** 10th World Congress on Inflammation. Paris, France. 2011 June 25-29. Inflamm. Res. 2011; 60(Suppl 1): S1-S321.
219. De Groot A.S., Najafian N., Hui D.J., Mingozi F., Cousens L.P., Moise L., Scott D.W., Khoury S., Elyaman W., and Martin W. **Making Better Biologics by Harnessing Tolerance and Immunogenicity.** AAPS National Biotechnology Conference 2011 Meeting. Oral presentation. San Francisco, CA. 2011 May 16-18. AAPS Journal. 2011;13(S1).
220. Cousens L.P., De Groot A.S., Najafian N., Mingozi F., Elyaman W., McClaine E.M., Mazer B., Hui D.J., Khoury S., Su Y., Scott D.W., and Martin W.D. **Tregitope applications to tolerance induction in autoimmune diseases.** Oral and poster presentation. AAI "Immunology 2012" Meeting. Boston, MA. 2012 May 4-8. J. Immunol. 2012;188:116.10.
221. De Groot A.S., Cousens L.P., Najafian N., Mingozi F., Elyaman W., McClaine E.M., Mazer B., Hui D.J., Khoury S., Su Y., Scott D.W., and Martin W.D. **Tregitope Applications to Tolerance Induction in Autoimmune Diseases.** Poster presentation. American Association of

- Pharmaceutical Sciences (AAPS) National Biotechnology Conference 2012 Meeting. San Diego, CA. 2012 May 21-23. AAPS Journal. 2012;14(S1).
222. Loli S, Gutiérrez AH, Zimic M, De Groot AS. **Immunogenicity scores across the Leishmania major proteome.** Third Immunoinformatics and Computational Immunology Workshop, October 2012, Orlando, FL.
 223. Gutiérrez AH, Bailey-Kellogg C, DaSilva K, Terry F, Ardito M, Moise L, Martin W, De Groot AS. **Immunogenicity analysis of HCP derived from CHO genome.** 17th International IRA Conference - September 2012 Lake George Bolton Landing, NY.
 224. Gutiérrez AH, Loving C., Garmendia A, Verardi P, Golde W, Martin W, De Groot AS. **'PigMatrix' - Development of T cell epitope prediction tools.** Summer School on Computational Immunology, University of Rochester, June 10-14, 2012, Rochester, NY.
 225. Gutiérrez AH, De Groot AS, Zimic M, Ardito M, Terry F, DesRosiers J, Spero D, Martin W. **'PigMatrix' and the Design of a Genome-derived Epitope-driven Taenia solium Vaccine: Conservation of Pig-Human T helper Epitopes.** Second Immunoinformatics and Computational Immunology Workshop, August 2011, Chicago, IL.

Invited Presentations • Infectious Diseases, Immunopathogenesis, Vaccines

1. **Tuberculosis: Epidemiology and Treatment in the 1990's,** Pulmonary Rounds, St. John's Hospital, Lowell MA, 12/91.
2. **T Cell Responses to Mycobacterium tuberculosis in the HIV-infected Host,** Modern Approaches to New Vaccines, Cold Spring Harbor Laboratory, 09/92.
3. **Tuberculosis: Multi Drug Resistant Tuberculosis and Drug Therapy,** Pulmonary Rounds, St. John's Hospital, Lowell MA, 12/92.
4. **Multi Drug Resistant Tuberculosis,** Massachusetts Association of Physician's Assistants Annual Meeting, Falmouth, MA, 10/92.
5. **Immunopathogenesis of an Epidemic: TB and HIV infection,** Invited Speaker. Grand Rounds, Lemuel Shattuck Hospital, Boston MA, 01/93.
6. **Two Novel Computer Driven T Cell Epitope Prediction Algorithms for Vaccine Development** Invited Speaker. Brown University Immunology Seminar, Brown University, Providence, RI, 09/94.
7. **Algorithms for mycobacterial vaccine development,** Invited Speaker. International symposium on Bovine TB in Animals and Human Beings, USDA/NIAID, NIH, 05/95.
8. **A novel algorithm for the efficient identification of T cell epitopes: prediction and testing of candidate TB vaccine peptides in genetically diverse populations,** Invited Speaker. Cold Spring Harbor meeting on Vaccines for Infectious Diseases, 09/95.
9. **Computer Algorithms for Vaccine Development,** Invited Speaker. Biology and Technology Seminar: Boston University (Dr. Charles Delisi, host), Boston MA, 09/95.
10. **Computer Algorithms for TB Vaccine Development,** Invited Speaker. Public Health Research Institute (Dr. Marilla Gennaro, host), New York, 10/95.
11. **Evolution of HIV Quasi Species: Response to Immune Pressure?** Invited Speaker. Aaron Diamond AIDS Research Center (Dr. Rick Koup, host), New York City, NY 11/95.
12. **EpiMatrix algorithm, reagent for HIV vaccine research,** Invited Speaker. Molecular Approaches

- to Vaccines for Infectious Diseases, Cold Spring Harbor Laboratory, New York 09/96.
13. **Comstock Conference on Epidemiology and Control of TB: Vaccines & TB Control**, Invited Participant, Baltimore Maryland; organized by Phil Hopewell, UCSF: 06/96.
 14. **Matrix based prediction of MHC binding peptides**, Division of AIDS Spring workshop on HIV Variability and Cellular Immune Recognition, Bethesda, Maryland, 04/96.
 15. **Epitope prediction for HIV vaccine development**, Harvard AIDS Institute, HIV Vaccines for Developing Countries: Antigen Design, Boston, Massachusetts, 04/96.
 16. **CTL workshop: Computer driven epitope prediction for HIV vaccine development, NCDVG conference on HIV Vaccine development**, Invited Speaker. CTL workshop. (Jim Bradac, DAIDS Program Officer). Bethesda, Maryland, 02/96.
 17. **Computer Algorithms for Cancer Vaccine Development**, Invited Speaker. Wistar Institute (Dorothee Herlyn, host), Philadelphia, Pennsylvania, 01/96.
 18. **Computer Algorithms for TB and HIV Vaccine Development**, Invited Speaker. Department of Immunology (Dr. David McMurray, host), Texas A & M University, College Station Texas, 01/96.
 19. **Computer Algorithms for HIV Vaccine Development**, Invited Speaker. HIV Research Unit, (Drs. Brigitte Autran, Anne Hosmalin, hosts) Hôpital Pitié-Salpêtrière, Paris, France, 06/96.
 20. **Computer algorithms for TB vaccine design**, Invited Speaker. Pasteur Institute (Dr. Brigitte Gicquel, host), Paris, France 09/97.
 21. **Computer-driven Design of new HLA-based vaccines for HIV**, Invited Speaker. Partners AIDS Research Center (Dr. Bruce Walker, host), Massachusetts General Hospital, 02/97.
 22. **Symposium on Immunogenicity of Recombinant Human Proteins. EpiMatrix: Prediction of MHC ligands**, Invited Speaker. Genentech (Dr. Gene Koren, host), South San Francisco, 03/97.
 23. **Epitope Predictions for TB vaccine development**, Invited Speaker. Global Tuberculosis Programme for Vaccines and Immunization/Vaccine Research and Development conference, "Definition of Strategies for an optimal use of Information resulting from Mycobacterial genome sequencing" at the World Health Organization Headquarters (Dr. John Foulds, organizer), Geneva 09/97.
 24. **TB and HIV vaccine development**, Invited Speaker. Infectious Disease Conference (Dr. Jennifer Daly, Host) TB/HIV vaccine development, Worcester MA, 03/98.
 25. **From Genome to T Cell: Searching for Agretopes**, Invited Speaker. Microbial Genomes conference, sponsored by the Institute for Genomic Research (TIGR) (Dr. Clare Fraser, host), Chantilly VA, 01/99.
 26. **HIV Vaccine Development** (speaker on panel, presenting poster, Dr. Doug Nixon, panel chair) 6th conference on Retroviruses and Opportunistic Infections, Chicago, Illinois, 02/99.
 27. **Epitope Predictions and Vaccine Testing**, Invited Speaker. EEC committee on the Ethical and Legal Applications of Vaccines (ELAV, (R. Whalen, host), Paris, France. 01/99.
 28. **Bio informatics approaches to Vaccine Development for TB and HIV**. Invited Speaker. DASTLR, Center for Disease Control and Prevention, Immunology, (Dr. Janet McNicholl, host), Atlanta Georgia, 02/99.
 29. **Bio informatics approaches to Vaccine Development for HIV**, Invited Speaker. Emory Center for Vaccine Research, (for the CFAR program, Dr. Mark Feinberg, host), Atlanta, Georgia, 02/99.
 30. **Scientific Working Group on TB**, Participant. World Health Organization. (Dr. Paul Nunn,

- organizer), 02/00 Geneva, Switzerland
31. **From Genome to T cell: *In silico* predictions, *in vivo* veritas.** Invited speaker. **Symposium on Genomics and Vaccinology.** National Foundation for Infectious Diseases annual Vaccine conference. 04-05/00. (Regina Rabinovich, M.D.)
 32. **Informatics Approaches to Vaccine Design.** Invited Speaker. Vaccines and Immunotherapeutics in the Third Millennium CSIRO, Lorne Australia, 03/00
 33. **From Genome to Vaccine: Bioinformatics and Vaccine Design.** Invited speaker, Emerging Technologies Seminar, Center for Biomedical Inventions and Department of Internal Medicine & Cardiology University of Texas-Southwestern Medical Center at Dallas, 10/00. (Dr. Irene Rombel and Stephen Johnston).
 34. **Genomic Approaches for Identifying Vaccine Candidates – Bioinformatics and Predictive Algorithms.** Invited Speaker. Special meeting on Otitis Media: New Approaches for Analysis, Treatment and Prevention, 11/00 (Dr. Thomas M. Johnson, NIDCD and Dr. Lauren Bakeletz)
 35. **Scanning the TB Genome for DNA Vaccine Epitopes.** Invited Speaker. Sequella TB Vaccine Conference, 11/00, at Brown University (Carol Nacy, Director, SGTBF)
 36. **TB pathogenesis, Vaccination, and Treatment update.** Invited Speaker. Anesthesiology Rounds, Kent Hospital 11/00 (Steve St. Aubin, Nurse Anesthetist).
 37. **Genomics and Vaccinomics.** Invited Speaker. (Dr. Brad Goodner). University of Richmond, VA, 12/00.
 38. **Cross-Clade Conservation of HIV-1 CTL Epitopes in the Aidsvax® and Aventis CP205™ Vaccines** National Foundation for Infectious Diseases annual Vaccine conference. 04-05/01.
 39. **Epitope-Driven Vaccines for TB and HIV infection,** Invited Speaker. (Dr. Kay McGowan) Grand Rounds, Lemuel Shattuck Hospital, Boston MA, 07/01.
 40. **Epitope-Driven HIV Vaccine Development.** Invited Speaker (Jim Bradac, Senior Program Officer). Division of AIDS. 06/01.
 41. **From Genome to T cell: Bioinformatics and Vaccine Design.** Invited Speaker (Dr. Marcelo Sztein). Lecture at Center for Vaccine Development. (Myron M. Levine, M.D., D.T.P.H. Director). University of Maryland School of Medicine. 06/01.
 42. **Computational Algorithms to Predict T cell Immunogenicity,** Conference on Immunogenicity of Therapeutic Biological Products, Lister Hill Auditorium, NIH, Bethesda MD 10-11/01
 43. **TB Genome to Vaccine (Bringing a Genome Derived TB Vaccine to Phase I Trials).** Sequella Foundation Vaccine 2001 Conference, Renaissance Conference Center, 11/01, Montreal, Canada.
 44. **Developing an Epitope-Driven Cross-Clade HIV Vaccine using Bioinformatics** (Dr. Ray Dolan) Harvard HIV Vaccine Trial Unit, Harvard Medical School, 11/01.
 45. Plenary Speaker: **From Genome to T Cell: Epitope-Driven Vaccine Design** Australian Society for Immunology Canberra Australia, 12/01.
 46. De Groot A.S., R.G. Scheib, K. McGowan, D. Doughty, A. Bosma, W. Martin. **Building Vaccines from Immunogenic Consensus Sequences.** Oral Presentation S29: The National Foundation for Infectious Diseases: Fifth Annual Conference on Vaccine Research, 05/02, Baltimore, Maryland.
 47. De Groot A.S., A. Bosma, C. Saint Aubin, H. Sbai, W. Martin **New Uses for Licensed Vaccines: Evaluation of the Japanese Encephalitis Virus Vaccine and the NY99 West Nile Virus**

- Genomes for Cross-reactive T Cell Epitopes.** Oral presentation S35: The National Foundation for Infectious Diseases: Fifth Annual Conference on Vaccine Research, 05/02, Baltimore, Maryland.
48. A.S. DeGroot, H. Sbai, A McMurry, ML Gennaro, EJ Carter, W. Martin. **Analyzing Myobacterium Tuberculosis Proteomes for Candidate TB Vaccine Epitopes.** Oral presentation S36: The National Foundation for Infectious Diseases: Fifth Annual Conference on Vaccine Research, 05/02, Baltimore, Maryland.
 49. **Epitope mapping and vaccine design tools.** Invited Speaker, Novartis Foundation Symposium No.254 Immuno-informatics: Bioinformatic strategies for better understanding of immune function. 10/02, London.
 50. **Harnessing the 'Immunome',** Invited Speaker, Phacilitate Vaccine Forum. 11/ 2002, Swiss Hotel, Boston, MA.
 51. **Medical Update on Opening Pandora's Box: Is there Hope after AIDS?** Invited lecturer (Marlene Cuititar), 2002 Rhode Island Medical Women's Association's Educational Session on 11/02.
 52. **Adolescent STDs: The situation with HIV and update on the GAIA HIV Vaccine.** Pediatric Grand Rounds, Hasbro and Rhode Island Hospital. Pediatric Grand Rounds (Rosalind Vaz), 02/03.
 53. **From genome to vaccine: epitope mapping and vaccine design tools.** Invited Speaker, Computational Molecular Biology Series. Brown University [Franco Preparata]. 03/03.
 54. **TB Vaccines: How long do we need to wait?** Tuberculosis Education Day 2003, Miriam Hospital. 05/03.
 55. **In Silico Prediction of Immunogenicity.** Invited speaker (Tony Mire Suis). State of the art Analytical Methods for the Characterization of Biological Products and Assessment of Comparability Natcher Building, National Institutes of Health Bethesda, Maryland. 06/03.
 56. **The GAIA HIV Vaccine: Vaccine for the World.** HIV Vaccines: Design, Potency and Delivery. The Knowledge Foundation. Conference on HIV Vaccines. Royal Sonesta Hotel. Cambridge, MA USA 06/03.
 57. **Rapid Vaccine Design for Emerging Infections; EpiVax-Brown University Collaborations on SARS, WNV, Smallpox, WNV, TB and HIV.** Rhode Island Department of Public Health (Grey Hayes, Ph.D) 09/03.
 58. **TB vaccine development: practical design and implementation.** Presentation of work by invitation. (Norren Meehan, host). World Vaccine Congress, Lyon, 09/03.
 59. **From TB Genome to Vaccine.** TB Vaccines for the World- TBV 2003, Montreal Marriott Chateau Champlain, Montreal, Canada. Presentation of work by invitation (TBVW, host). 09/03.
 60. **From Genome to Vaccine: Faster, Better Design of Vaccines and Therapeutic Products through Immunoinformatics** Fall Connecticut Nanotech Initiative Conference, University of Connecticut, Storrs. CT. 10/03.
 61. **Immunomodulation: In silico prediction and in vitro confirmation.** Immunogenicity testing for Protein-based therapeutics. Back Bay Hilton, Boston MA. 11/03.
 62. **From Genome to Vaccine, A story about Microsoft, Motifs, and Molecules.** Colloquium Series, Biology Department at Rhode Island College (Charles Owens, host). 11/03.
 63. **Accelerating Vaccine Design: new in insilico epitope mapping methods.** Animal Research

- Service (ARS) Immunology Research Workshop Bethesda MD. (Cyril Gay, Host). 12/03.
64. **From immunome to vaccine: the epitope-driven vaccine approach.** 1st International Immunoinformatics Symposium - Immunology meets Bioinformatics. RIKEN (The Institute of Physical and Chemical Research), Yokohama Institute, Genomic Sciences Center (GSC), Bioinformatics Group. Session on Computer-aided vaccine and adjuvant development. Yokohama, Japan (Scientific Advisory Committee). (Christian Shonbach, Host). 02/04.
 65. **From immunome to vaccine: the epitope-driven vaccine approach.** Singapore Immunoinformatics Symposium. From databases to vaccines. Institute for Infocomm Research, Singapore. (Vladimir Brusnic, Host). 03/04.
 66. **The Economics of AIDS and HIV Vaccine Development.** International Affairs Committee, Providence Rhode Island. (Charles Andrews, Host). 03/04.
 67. **HIV Vaccine for all Clades.** (In French) Rencontre des Specialistes VIH/SIDA a Bamako. GAIA Vaccine Foundation / Fondation Merieux 01/04.
 68. **Genome-derived Vaccines.** Southern Center for Vaccine Development. University of Texas Medical Branch, Galveston, Texas, 03/04.
 69. **From Genome to Vaccine.** University of Rhode Island. BRIN seminar. (Joan Peckham, Host) 04/04.
 70. **New Immunoinformatics Approaches to Emerging Infectious Diseases.** Boston University, Bioinformatics program. 04/04. (Charles DeLisi, Host).
 71. **AIDS Vaccines and Prevention.** Provoking Hope, A Brown University AIDS Symposium. 04/04.
 72. **The AIDS Pandemic** – with Ira Magaziner (chairman of the Clinton Foundation AIDS Initiative), Sandra Nusinoff Lehrman, M.D., (director of the Therapeutics Research Program Division of AIDS, National Institutes of Health). Brown University 135th Commencement Forum. Sayles Hall, The College Green, 05/04.
 73. **Elicitation of de novo T-cell responses in mice immunized with an multi HIV-1 epitope cross-clade DNA vaccine** L. Marcon, W. Martin, J.I. Franco, E.A. Bishop, D. Rivera, M. Lally, M. Kutzler, D.B. Weiner, K.H. Mayer, De Groot A.S., Brown Medical School, EpiVax Inc., University of Padua, University of Pennsylvania (Providence, USA; Padua, IT; Philadelphia, USA); AIDS Vaccine 2004, Lausanne, 08-09/04.
 74. De Groot A.S.. **Immunogenic consensus sequence T cell epitopes for a cross-clade HIV vaccine.** (Oral Presentation, Thursday, September 30, 15:45 S1-7) Fourth World Congress on Vaccines and Immunization, Tskukuba Science City /Tokyo, Japan, 09-10/04.
 75. De Groot A.S.. From tuberculosis immunome to vaccine: **The epitope-driven vaccine approach.** (Invited presentation S2-4. Friday, October 1, 15:00) Fourth World Congress on Vaccines and Immunization, Tskukuba Science City /Tokyo, Japan, 09-10/04.
 76. J. I. Franco, H. Sbai, S. Foti, J. McMurry, K. Forsythe, M. Steller, B. Martin, A. S. DeGroot. **Developing an Epitope-Based HPV Vaccine.** (Invited presentation W4-6, Saturday, October 2, 15:40), Fourth World Congress on Vaccines and Immunization, Tskukuba Science City /Tokyo, Japan, 09-10/04.
 77. Anne S. De Groot, Bill Martin, Luisa Marcon, Elizabeth Bishop, Shawn Foti, Judith Franco, Daniel Rivera, Gandhi Drak and Paul Knopf. **From Immunome to Vaccine: the Epitope-Driven Vaccine Approach**, [Invited Presentation S1-6]. Fourth World Congress on Vaccines and Immunization, Tskukuba Science City /Tokyo, Japan, 09-10/04.

78. **From Immunome to Vaccine.** Statistical and Applied Mathematical Sciences Institute, Opening Workshop of the SAMSI Program Genomes To Global Health: Computational Biology Of Infectious Disease. Invited presentation (Host Tom Kepler, Duke University Medical Center. 09/04.
79. **TB Vaccine Development Update.** 9th Annual Meeting of the North American Region of the International Union Against Tuberculosis and Lung Disease to be held in Vancouver, British Columbia, Canada on 02/05. Vancouver IUALTb. (Hosts Jane Carter, Lee Reichman) 02/05.
80. **T epitope Revelations: Antigen Discovery (Vaccines) and De-Immune (Therapeutics)** Salk Institute, San Diego, 03/05. Hosts Tony Hunter and David Roth.
81. **What's New? From Genomics to Vaccine Design; From Immunome to Vaccine.2nd** International Immunomics Symposium. Boston University, 03/05.
82. **Deimmunization - the DeFT (T cell epitope mapping) approach.** FDA-CDER, HFD-122, 03/05 (Amy Rosenberg, Director, Division of Therapeutic Proteins, CDER, host).
83. **FDA Science Forum (04/05).** Interactive Round Table Discussion Immunology: "Host-Product Interactions and Immune Responses" Moderator: Amy Rosenberg, Director, Division of Therapeutic Proteins, CDER. Topic: **"What can Therapeutics learn from Vaccines"**
84. Cohen, B. Pelsue, A. Lafauce, M. Koné, P. Symonds, M. Lally, K. Mayer, N. Keita, De Groot A.S., **Survey of Knowledge, attitudes and practices related to HIV and HIV Vaccines in Urban Markets, Bamako Mali.** Oral presentation at the 3^{ème} Journées VIH/SIDA de Bamako, 2006, 01/07. Bamako Mali.
85. J Beckerman, N Vu, N Keita, M. Koné, M. Lally, K. Mayer, A .S. De Groot, **Potential Barriers to an HIV Vaccine Trial in Bamako Mali.** Oral presentation at the 3^{ème} Journées VIH/ SIDA de Bamako, 2006, 01/07. Bamako Mali.
86. O. Koita,, S. Dao, A. Tounkara, M. Koné, W. Martin, K. Mayer, M. Lally, J. McMurry, L. Marcon, De Groot A.S., **Update on the GAIA HIV Vaccine 01/06.** Oral presentation at the 3^{ème} Journées VIH/ SIDA de Bamako, 2006, 01/07. Bamako Mali.
87. De Groot. CBER Brown Bag Seminar – **Update on De-immunization Studies (DeFT).** FDA-CDER, HFD-122, 01/06. (Amy Rosenberg, Director, Division of Therapeutic Proteins, CDER, host).
88. A. De Groot. **"Vaccine Development from Soup to Nuts - the GAIA HIV Vaccine Case Study,"** 04/06, Brown Medical School Infectious Disease Division Lecture Series.
89. Plenary talk –**"Sugar or Spice: New approaches to solve the Immunogenicity Problem"** Cell Culture Engineering X – Whistler Resort, Vancouver CA. 04/06. Invited by Konstantin Konstantinov, Bayer Inc.
90. **Cancer Grand Rounds "Immunoengineering of Cancer Vaccines and Therapeutics - Recent developments."** Alan Rosmarin, MD, Host. Rhode Island Hospital (Lifespan Hospitals, Brown University).
91. Invited Presentation. Annie De Groot, L. Moise, D. Rivera, J. McMurry, M. Goldberg, W. Martin. **Applied Epitope Mapping: Progress report on Epitope-driven BioDefense Vaccine Development for Smallpox and Tularemia,** International Immunomics Society Meeting, Budapest, 10/06.
92. Invited Presentation to University of Rhode Island Department of Cellular and Molecular Biology January 22 2007; **Upregulating and Downregulating Immunity from the T cell Perspective.** Jan 22, 2007 (Dr. Jay Sperry, Chair of CMB, URI).

93. Invited Presentation – Nature Biotechnology Winter Symposium, organized by the University of Miami, **Moving Computer Driven Vaccine Design in silico to in vivo**. Nature Biotechnology Miami January 28, 2007.
94. Organizer and Panelist, **Cutting Edge: Screening and Reengineering Biological Therapeutics** Track: Drug Discovery and Development, Bio 2007. Boston, June, 2007.
95. Invited Talk, **De-immunization of protein therapeutics**. Crossroad of Biotechnology 12th edition at the Biotechnology Research Institute of the National Research Council (NRC-BRI), June 13, 14 2007.
96. **De Groot AS**. CBER Brown Bag Seminar - **Update on De-immunization Studies (DeFT). January 2006 and March 2007**; hosted by Amy Rosenberg, Director, Division of Therapeutic Proteins. CDER, FDA-CDER, HFD-122. Baltimore, MD.
97. **De Groot AS. De-Immunization of Protein Therapeutics**. Crossroad of Biotechnology, Montreal, Canada. June 13, 14, 2007. Hosted by Biotechnology Research Institute, NRC/CNRC, Canada.
98. **De Groot AS. New Approaches to Immunogenicity: Screening, Reengineering and Modulation**. Antibodies Europe. 7-8 November 2007. Intercontinental Hotel, Vienna Austria.
99. **De Groot AS**. Invited Speaker. **Moving Computer Driven Vaccine Design From In Silico to In Vivo**. January 30, 2008; Nature Biotechnology Winter Symposium. Miami, FL.
100. De Groot, A.S. **A Novel Model of IVIG Immunosuppression: Activation of Natural Regulatory T cells by IgG-Derived Peptides**, Oral Presentation and poster, Keystone Symposium Tolerance in Transplantation and Autoimmunity (A8), Organizer(s): Jeffrey A. Bluestone, Abul K. Abbas, Laurence A. Turka and Diane J. Mathis, Keystone Resort, Keystone, Colorado, January 29 - February 3, 2008.
101. De Groot, A.S. Voices from the Vanguard Lecture Series, 2008: **HIV Vaccines: Time for a New Vision**, University of Georgia Atlanta. Grady College, University of Georgia. Host Professor Patricia Thomas, Knight Chair in Health and Medical Journalism at UGA's Grady College of Journalism and Mass Communication. April 15, 2008.
102. De Groot, A.S. **Rational design and regulatory issues of immunotherapeutic vaccines**, Vaccine and Immunotherapy Technologies, Sir Mark Oliphant Conference. Invited Presentation at the Australian Academy of Sciences, 4/8/08. Gus Nossal, Ian Fraser, Ian Ramshaw, Hosts. Canberra, Australia, April, 2008.
103. De Groot A.S. **Epitope-based Immunome-derived Vaccines: A Strategy for Improved Design and Safety**, Invited oral Presentation Eleventh Annual Conference on Vaccine Research, National Foundation for Infectious Diseases. Baltimore May 2008.
104. De Groot A.S., **Epitope Driven GAIA HIV Vaccine Development**, Invited oral presentation, Vaccine Technology II. Barry Buckland, Host. Portugal, June, 2008.
105. De Groot, A.S. **Immunogenicity of Biologics**. Inflammation Research Association's 15th International Conference. 21-24 September, Chantilly, VA,
106. De Groot A.S., **The GAIA Vaccine Progress Report: Broad Recognition of Class I and II-Restricted Epitopes and in vivo Studies**. Invited oral presentation at the Vaccine Development conference, 2008, Pittsburgh, PA, September, 2008.
107. De Groot A.S., **Computer-Driven Vaccine Design: From Concept to Reality**. Invited oral presentation, Vaccine Development 2008, Pittsburgh, PA, September, 2008.

108. De Groot A.S. **Designing Personalized Vaccines for the 21st Century**. Invited oral Presentation. Sixth World Congress On Vaccines, Immunization and Immunotherapy. Milan, September, 2008.
109. De Groot A.S., **Relevance of T cell epitopes, effector T cells and regulatory T cells to the development of immunogenicity, and the accuracy of T cell epitope analysis for immunogenicity screening**. EpiVax, Inc. **Oral presentation to European Medicines Agency (EMA) London, UK October 29, 2008**. Invited Presentation. Christian Schneider (Host).
110. Anne S. De Groot, M.D, Leonard Moise, Yan Su, Julie A McMurry, William D Martin and David W. Scott. **IgG-Derived Tregitope Peptides Suppress T Cell Responses in Vitro and in Vivo**. Oral Presentation 677, selected from more than 10,000 abstracts, 50th annual Meeting of the American Society for Hematology. December 6-10, 2008. San Francisco, California.
111. Anne S. De Groot, M.D.. **Immunogenicity Problems: A Paradigm Shift?** 19th annual Antibody Engineering: Immunotherapeutics for the 21st Century. December 7-11, 2008 - Sheraton San Diego Hotel and Marina - San Diego, California. Invited Speaker.
112. A.S. De Groot. **Immuno-informatics: How to design more effective vaccines and therapeutic proteins**. Host, Jeremy Kunkel, Ph. D. Regulatory Scientific Research Seminar Series, Centre for Biologics Research, Health Canada. January 18th 2009.
113. Anne De Groot, M.D. NOVA Southeastern University, David Thomas M.D. J.D. Host. Protecting Our Next Generation. **Immunology of Vaccines. January 30th. 2009**. Ft. Lauderdale, FL.
114. Anne De Groot, M.D. **Reducing Protein Immunogenicity by Design: Deimmunization and Tolerance Induction**. Invited talk in Emerging, "Disruptive" Technologies: Disruptive Science and Technology Session, **Accelerating Biopharmaceutical Development, San Diego, March 2009**. Invited Speaker. Host – Jim Swarz. Chairs: Gordon Moore (Centocor), Brian Kelley (Genentech) and Jim Swartz (Standford).
115. Anne S. De Groot, Bill Martin. **Immunome-derived, Epitope-driven vaccine design**. Laboratory of Parasitic Disease, NIH. David Sacks, host. **May 6th, 2009**.
116. Anne De Groot, Bill Martin. **Enhancing Safety by Reducing Immunogenicity through Tolerance Induction. Invited talk at the FDA**, Amy Rosenberg, Host. May 7, 2009.
117. Anne S. De Groot, Invited Seminar at the National Institute of Health Sciences, Japan; **Enhancing Safety for Protein Therapeutics by (1) Reducing Immunogenicity and (2) Tolerance Induction**. June 3, 2009. Dr. Shingo Niimi, Division of Biological Chemistry and Biologicals, Host.
118. Annie De Groot, EpiVax, **Reducing protein immunogenicity by Design: Deimmunization and tolerance induction**, 21st ESACT Meeting will be held in Dublin, Ireland from 7th to 10th June 2009, Invited Speaker, Nigel Jenkins, host.
119. Annie De Groot — **VennVax: T cell mediated protection against aerosol challenge; Epitope Driven Vaccines**; 3rd Vaccine Congress, Singapore, October 2009. Oral presentation selected from abstracts.
120. De Groot/ **New Vaccines for Old Diseases** / CMB Seminar, University of Rhode Island, Fall 2009
121. Leonard Moise, Wen Yang, Constanze Weber³, Julie A. McMurry, William D. Martin, Hendrik Veelken and Anne S. De Groot. **De tolerization of anti-DEC 205 for HIV subunit vaccine delivery**. Poster. PD01/14. DEC205 ECI/Berlin September 2009.
122. Leonard Moise, Wen Yang, Yan Su, Daniel J. Hui, Federico Mingozzi, William D Martin, David W. Scott, Katherine A. High, Francesca D'Addio, N Najafian, Mo H Sayegh , Anne S. De Groot. **T cell**

- epitopes (Tregitopes) contained in IgG Constant Domains activate natural Tregs:Relevance for autoimmune disease, gene therapy, and less immunogenic biologics.** Oral Presentation, **WSD18/**. 2nd European Congress of Immunology, September 13 - 16, 2009 in Berlin, Germany.
123. Joseph Desrosiers II, Leonard Moise Jonathan Skupsky, Ryan Tassone, Julie A. McMurry, William D. Martin, David W. Scott, Anne S. De Groot. **De-immunization” of Human Factor VIII: Identification of Epitopes in the C2 Domain.** Oral presentation. WSD14/1. 2nd European Congress of Immunology, September 13 - 16, 2009 in Berlin, Germany.
 124. Anne S. De Groot, Leonard Moise, Xin Li, Yan Su, Wen Yang¹, Joseph Desrosiers, Ryan Tassone, Preema Mehta, William D. Martin, David W. Scott **Effect of Tregitope on immune response to T1D antigens in vitro and on diabetes in NOD mice.** Oral presentation. WSC11/3. 2nd European Congress of Immunology, September 13 - 16, 2009 in Berlin, Germany.
 125. Anne S. De Groot. **Oral presentation to European Medicines Agency (EMA) on H1N1 Epitopes to EMA – November 2009.**
 126. Anne S. De Groot. **Oral Presentation to the FDA - CBER Brown Bag Seminar January 29th 2010– Update on Tregitope.** Ed Max, Amy Rosenberg, Host.
 127. Anne S. De Groot, Mark Buller, Sharon Frey, Steven Gregory, Steven Moss, Hardy Kornfeld, Jinhee Lee, Leonard Moise, William Martin. **T cell-driven Vaccines: Now more than Ever.** Oral Presentation, Vaccine Technology III, Nuevo Vallarta, 06/10.
 128. Anne S. De Groot, **T cell-directed Vaccines: Now more than Ever.** Invited presentation – University of Florida Institute for Emerging Infectious Diseases. Janet Yamamoto, Host. November 2010.
 129. Anne S. De Groot, **T cell-driven Vaccines: Immunoinformatics.** Invited presentation – University of Michigan (Oliver He, Host). Division of Infectious Diseases. March 2011.
 130. Anne S. De Groot, **T cell-driven Vaccines: Validation in Vivo.** Invited presentation – University of Pennsylvania (David Weiner, Host). Vaccine Research Center. March 2011.
 131. Anne S. De Groot, **Moving the Epitope-Driven Approach Forward for Human and Animal Vaccines.** Invited presentation – University of Connecticut (Paulo Verardi Host). Division of Pathobiology. March 2011.
 132. Anne S. De Groot. **Tregitope Update. Oral Presentation to the FDA - CBER Brown Bag Seminar January 2011.** Ed Max, Amy Rosenberg, Hosts.
 133. Anne S. De Groot. **Oral presentation to European Medicines Agency (EMA) Update on the Relevance of T cell epitopes, Effector T cells and Regulatory T cells to Protein Immunogenicity, Risk Mitigation and Biomarkers – April 2011.**
 134. Anne S. De Groot/Leslie Cousens/Federico Mingozi/Nader Najafian/David Scott: **4th Tregitope Update Meeting** May 11, 2011, Immunogenicity Determinants and Correlates, Post-conference. Providence, RI. 2011
 135. Anne S. De Groot. Tregitope – **Regulatory T-Cells Epitopes in Vaccine Delivery Design.** Host. Anne Hosmalin, MD, PhD., Research Director, CNRS Head, Antigen Presentation by Dendritic Cell Team. INSERM Unit 567, UMR CNRS 8104, Paris-Descartes University, Paris France. October 2011.
 136. Anne S. De Groot - **Genome-derived epitope driven vaccines for neglected tropical disease and emerging infectious diseases.** 5th International Eijkman Conference, Invited Plenary, November 2012 Marsia Gustiananda, Host. Jakarta, Indonesia, November 9 2011.

137. Anne S. De Groot , **Epitope-driven Cancer Vaccines**, University of Honolulu, March 2012 (Miguel Carbone, Cancer Center Director, Host). March 24th 2012, Honolulu.
138. Anne S. De Groot – **New Vaccine Technologies for the Next Generation**. Rhode Island Science Teachers Association (RISTA) Plenary. March 2012.
139. Anne S. De Groot/Leslie Cousens: FDA Brown Bag Lunch: **Tregitope Update 2012**. –May 1 2012, Amy Rosenberg, Host.
140. Anne S. De Groot/Leslie Cousens: **6th Tregitope Update Meeting 2012**, April 20th 2012, Baltimore MD.
141. Anne S. De Groot iVAX – **Extremely Rapid Online Immunoinformatics Tool for Vaccine Design**. Oral Presentation, Chemical and Biological Defense Science and Technology Conference, Las Vegas, Nevada, USA. November 2011.
142. Anne S. De Groot. **Better, Faster Vaccines for Bacterial and Viral Threats**. Oral Presentation, Chemical and Biological Defense Science and Technology Conference, Las Vegas, Nevada, USA. November 2011.
143. Anne S. De Groot. **Tregitopes: Application to Autoimmune Disease**. Invited Plenary, Yehuda Shoenfeld, Organizers. Autoimmunity 2012, May 11, 2012, Granada Spain.
144. Anne S. De Groot, Leslie Cousens: **Treg epitopes defined using immunoinformatics; and Tregitope Mechanism of Action**. Alex Sette, La Jolla Allergy and Immunology Institute, May 23 2012.

Invited Presentations (Epidemiology/HIV/Women/Prison)

1. **Condoms and HIV Transmission**, Member of Panel, Falmouth, Massachusetts Public School Board Panel 07/92.
2. **Battering and the Cycle of Violence**; speaker on the panel "Locked up and Locked out; Women in Prison," Criminal Justice Institute conference, Harvard Law School. 12/93.
3. **Sexual Abuse and HIV Risk Taking among Incarcerated Women** HIV infection in Women, 1st National Meeting in Washington DC, 02/95; Women's Health Conference, Women & Infants Hospital, 09/94, Providence RI.
4. **HIV in Incarcerated Women**: HIV Update, and Rhode Island Hospital Nursing Update, 03/94, and New England HIV in Prisons Conference, Wesleyan College, 05/94.
5. **Sexual Abuse and HIV Risk Taking among Incarcerated Women** Invited Speaker. Women's Health Conference, Women & Infants Hospital, Providence RI, 09/94.
6. **HIV in Prisons**: Breakout group leader at the conference HIV Update: Current State of the Art, Brown University AIDS program conference, Butler Hospital, Providence, Rhode Island, 01/94.
7. **Risks for HIV infection among Incarcerated Women**, Invited Speaker. Yale AIDS Colloquium Series (YACS, Dr. Rick Altice, host) New Haven CT, 10/95.
8. **TB in Prisons workshop leader**, Invited Speaker. New England HIV in Prisons Conference (and conference co-organizer)Springfield MA, 10/95.
9. **HIV infection in Incarcerated Women: Priorities for Research**, Invited Speaker. Clinical AIDS Research; PRIM&R, Boston MA, 11/95.
10. **The Framingham model and Health Services for HIV seropositive women**, Invited Speaker. National Correctional Health Care conference, Washington DC, 11/95.

11. **Reducing the risk of tuberculosis transmission in the prison setting through the use of environmental controls (HEPA filters and UV lights)**, Invited Speaker. National Correctional Health Care conference, Washington DC, 11/95.
12. **HIV infection in Women**, Invited Speaker. Harvard AIDS Institute, Changing Times, Changing Strategies, AIDS in New England, 04/95.
13. **Sexual Abuse and HIV Risk Taking among Incarcerated Women**, Invited Speaker. HIV infection in Women, 1st National Meeting in Washington DC, 02/95.
14. **Sexual Abuse and HIV Risk Taking among Incarcerated Women**, National Drug Abuse Treatment Association conference, Newport RI, 11/95.
15. **Prisons: Inside/Out** Departments of Legal Studies, Political Science, and Women's Studies, UMass Amherst. Invited speaker, panel on Economics of Prison and Sentencing Issues, 03/96.
16. **Second Generation HIV/AIDS behind Bars** Invited speaker on panel with members of NORA, CDC, Federal Bureau of Prisons. NCCHC conference, Nashville Tennessee, 10/96.
17. **Sexual abuse and HIV Risk taking**, Invited Speaker. Suffolk County Jail, Massachusetts DPH HIV Case Managers meeting 01/96 and Planned Parenthood open seminar, Boston, MA, 04/96.
18. **1996 Prevention Summit, HIV Prevention Planning Co-Chairs Meeting**, CDC, Bethesda, Maryland, Panel, invited speaker: Effective Interventions to prevent HIV in Correctional Facilities, Atlanta, GA, 05/96.
19. **HIV and incarcerated women: Risks, Models of Care**, Invited Speaker. APHA panel on Prisons and Jails (Socialist Caucus) APHA meeting, New York City, 11/96.
20. **Closed Roundtable on HIV/Prison**, Invited Speaker. **Corrections Responds to HIV disease among Incarcerated Women**, Correctional HIV Consortium Winter Update, San Pedro, California, 01/97.
21. **Intensive workshop on HIV Behind Bars: Providing Education, Advocacy, Care and Services (Intensive workshop #1)** Invited Speaker. 9th Annual AIDS Update Conference, San Francisco, California, 03/97.
22. **Care and Treatment in Prisons and Jails (Panel #406)**, Invited Speaker. 9th Annual AIDS Update Conference, San Francisco, California, 03/97.
23. **State of the Art Workshop, Living with HIV behind prison walls: perspectives from a patient and her physician**, Invited Speaker. Women and HIV infection Conference, Los Angeles, California, 10/97.
24. **HIV infection among incarcerated women: Clinical Care**, Invited Speaker. New England School of Law, Symposium on the Treatment of Women Prisoners Boston, MA, 01/98.
25. **HIV infection among incarcerated women**, Invited Speaker. New England Medical Center series for HIV infected Women (sponsored by AIDS Action and the New England Medical Center) **Gender Politics of HIV/AIDS in Women** Boston, MA 06/98.
26. **What's different about Women living with HIV in Corrections**, Invited Speaker. (AIDS track talk on HIV infection among incarcerated women), National Commission on Correctional Health Care (National Meeting, 11/98).
27. **HIV Management in the Prison Setting: An Update**, Invited Speaker. NJ AIDS Education and Training Center and Correctional Medical Service, Newark, New Jersey, 12/98.
28. **Management of the HIV infected inmate**, Invited Speaker. Delaware AIDS Council Annual

Meeting, Wilmington Delaware, 11/98.

29. **Management of HIV in Correctional Facilities** to HIV providers on site
 - South Carolina Women's Facility, Columbia, South Carolina
 - Central Florida Receiving Facility, Orlando Florida, 08/98, 11/98, 06/99, 02/01.
 - Delaware Department of Corrections, at the Delaware AIDS Council, 11/98.
30. Policy Action Network Briefing at the US Senate, Russell Office Building for Senate Staffers: **Breaking the Wall of Silence: Women, HIV/AIDS, and the Prison System**, Invited Speaker. 02/99.
31. **Prisoner Research** Invited Speaker. CCG Scientific Agenda Subcommittee conference call. Jeff Taylor, Chair CCG Scientific Agenda Subcommittee ACTG 04/00.
32. **HIV infection in Incarcerated Women** Invited Speaker. (CME lecture to physicians and health care practitioners attending HIV Update Course). University of Texas Medical Branch (Galveston Texas). 10/00, 08/01, 10/01.
33. **HIV Behind Bars** Director, CME accredited course for Correctional HIV providers, 06/01, organized by Montefiore Medical Center.
34. **HIV Management of Incarcerated Women**, Invited Speaker, Federal Bureau of Prisons Annual Nursing Conference, Raleigh, N.C., 04/02.
35. Organizer and Plenary Speaker, **Real Life Examples: Managing Infectious Disease in Corrections**. NCCHC annual conference, HEPP Preconference Symposium, 10/02.
36. **Post Exposure Prophylaxis of HIV infection**. HIV Minifellowship. University of Texas Medical Branch (David Paar, Host). Galveston, TX. 02/03.
37. Organizer and Plenary Speaker, "**Texas MiniFellowship**" for **Correctional HIV Providers**, 09/03. Providence, Rhode Island,
38. Organizer and Plenary Speaker, **Infectious and Transmissible Diseases in Correctional Settings**. NCCHC 10/03. Austin Texas. HEPP Report pre-conference symposium.
39. TB in Corrections. Prevention and Treatment of Infectious Disease in Corrections. **What Corrections-Based Staff Need to Know**. 12/03. (RIDOC and RI Brotherhood of Correctional Officers)
40. Emerging Issues in the Management of HIV Disease in Women (Rush U. Medical Center): **The Forgotten Many: HIV –seropositive Women in Prison, IDU and Adolescents**. Lecture and preparation of a monograph. 01/04. (Kim Smith MD, Rush UMC, host).
41. Incarcerated Women and HIV. Half-day seminar (3 lectures). **Women and HIV Overview, Mother to Child Transmission Prevention**, and **HIV: African Realities**. UTMB Galveston, 03/04. (David Paar, MD, host).
42. Incarcerated Women and HIV. **Women and HIV Overview, Mother to Child Transmission Prevention**. UTMB Galveston, 06/05. (David Paar, MD, host).
43. Incarcerated Women and HIV. **Women and HIV Overview**. UTMB Galveston, 06/06. (David Paar, MD, host).
44. Incarcerated Women and HIV. **HIV in Women Conference; Texas-Okla. AETC** Dallas, 04/08.

(no further work in HIV/Prison since April 2008 – no further talks)

Grants: Principal Investigator (NIH and Foundation grants for research)**Total NIH funding to date: >\$26 Million Cumulative Directs and Indirects with U19 Award (\$13M)**

| Currently Funded Research | | |
|--|---------------------------|-----------------------|
| 2R44DK081261-03A1 (PI A.S. De Groot) 03/31/2014 | | 04/01/2012- |
| NIDDK Phase II SBIR: \$1.5M Dir/Indir. <i>Preclinical studies of Tregitope Delivery and Mechanism of Action in T1D</i> The goal of this Phase II project is to advance the development of novel tolerance-inducing peptides (Tregitopes) to prevent and/or treat Type 1 diabetes (T1D) by optimizing the clinical delivery vehicle and treatment protocol, and by identifying correlates of efficacy in preparation for Phase 1 clinical trials. | | |
| 1R43HL114308-01 (PI A.S. De Groot) 03/31/2014 | | 04/01/2012- |
| SBIR Phase I – FVIII-ASATI : \$775K Combined Factor VIII Replacement and Tolerance Therapy for Hemophilia A. The goal of this new SBIR program is to develop a tolerizing FVIII molecule that will combine replacement therapy and FVIII-specific tolerance induction to prevent hemophiliacs from developing neutralizing antibody ‘inhibitors’ against the very therapy they need. | | |
| 1R21AI09035 9-01A1 | PI: A. S. De Groot | 5/01/2011 – 4/30/2013 |
| NHLBI SBIR Phase I \$750K Dir/Indir. Title: Novel H1N1 influenza protection via cross-reactive immunity The specific aims for this project are to: (1) analyze the HA and NA sequences of known isolates of H1N1 and design highly conserved “immunogenic consensus sequence” (ICS) Class II restricted T cell epitopes; (2) validate the ICS epitopes designed in AIM1 by demonstrating promiscuous MHC binding in-vitro and antigenicity in ex-vivo T cell restimulation assays using peripheral blood leukocytes from TIV exposed, seasonal influenza-exposed and novel H1N1-exposed human subjects. Finally, in collaboration with Dr. Richard Webby, we plan to (3) evaluate the effect priming with ICS epitopes has on immunogenicity and protective efficacy in HLA transgenic mouse vaccinated with TIV and challenged with novel H1N1. We expect to find that antibody titers are higher and manifestations of influenza are attenuated in mice primed with the cross-reactive epitopes, compared to mice not primed. We expect the results of these studies to demonstrate that conserved influenza sequences, which are important to viral fitness, may also be of immunological value in that they may contribute to protection against morbidity and to universal influenza vaccine design, leading to re-evaluation of alternative approaches to “priming” influenza immune responses, attenuating illness and preparing for the next pandemic. | | |
| 1U19AI08264 2-01 | PI: A. S. De Groot | 7/20/2009 – 6/30/2014 |
| \$13M Program Project in Collaborative Centers for Human Immunology Program, NIAID Title: <i>Translational Immunology Research and Accelerated [vaccine] Development (TRIAD)</i> | | |
| The goal of this application is to promote the use of immunoinformatics tools to accelerate the design and development of vaccines for emerging infectious diseases and biowarfare agents. Dr. De Groot is the overall PI of this project. | | |
| 1R43HL08883 4-01 | PI: A. S. De Groot | 5/01/2007 – 4/30/2011 |
| Title: <i>Epitope-driven deimmunization of Factor VIII</i> The goal of this project is to modify the constituent epitopes of FVIII so that it is a less immunogenic and more effective therapy. 12,000 Americans have the blood clotting disorder Hemophilia A, and as such are susceptible to a host of complications from chronic bleeding of the joints to life threatening blood loss due to traumatic injury. This SBIR describes a plan to produce an improved clotting protein (Factor VIII) that could be used to treat hemophiliacs since the current treatment is often rejected by the body. The reengineered protein will be evaluated in mice that have hemophilia as well as in mice that have a human-like immune system. In the first phase of the projects, we | | |

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| demonstrated that deimmunization does work as expected; further funding in the form of an SBIR Phase II or I-II will be sought. The technology is currently being evaluated by a large Pharma for incorporation into their FVIII therapy. | | |
| 1R43AI07583 0-01 | PI: A. S. De Groot | 9/01/2007 – 8/31/2011 |
| Title: <i>Optimization of a Multivalent Tuberculosis Vaccine</i> The goal of this project is to optimize methods of adjuvanting and delivering (dose, route) an epitope based vaccine for TB. Unfunded extension. | | |
| 1R43DK0812 61-01 | PI: A. S. De Groot | 8/01/2008 – 7/31/2010 |
| (SBIR Phase II Submitted and under review) Title: <i>T1D Tolerance Induction with Natural Treg Epitopes</i> The purpose of this project is to develop a therapeutic to treat and prevent Type 1 Diabetes. NIDDK supported EpiVax through an SBIR grant to reach proof-of-principle for a drug that will focus on the natural “regulatory T cells” and their protective role in the diabetes patient. The studies are anticipated to show that the drug reduces harmful immune responses to insulin-producing cells, preserving the body’s ability to make its own insulin. The approach used by EpiVax is called “Antigen-Specific Adaptive Tolerance Induction (ASATI™)”; it specifically targets and reduces undesirable immune responses. A study that will explore the formulation of the epitopes is currently being supported by NIDDK. The latter program (PTP) is highly competitive, and we credit our SBIR with the ability to secure this translational funding from the NIH. | | |
| 1R21AI07880 0-01 | PI: A.S. De Groot | 9/30/2008 – 8/31/2011 |
| Title: <i>Optimization of HIV Vaccine Subunit Delivery</i> The goal of this project is to optimize delivery of a multi-epitope HIV vaccine | | |
| Funded Supplements | | |
| 1U19AI082642- 01 S1 | PI: A. S. De Groot | 12/1/2009 – 04/30/2011 |
| Title: <i>Translational Immunology Research and Accelerated [vaccine] Development (TRIAD) (Parent)</i> <i>iVAX - Vaccine and Diagnostic Design Toolkit for CCHI funded programs (Discretionary Funds) (Supplement)</i> The goal of this project is to make a set of tools and techniques accessible to CCHI funded investigators | | |
| 1U19AI082642-01 S1 | PI: A. S. De Groot | 2010 – 06/30/2011 |
| Title: <i>Translational Immunology Research and Accelerated [vaccine] Development (TRIAD) (Parent)</i> <i>NTD@TRIAD - Application of TRIAD Toolkit (iVAX) to NTD Vaccine Research and Development</i> The goal of this project is provide iVAX tools and techniques training to researchers pursuing NTD vaccines. | | |
| 3R21AI078800- 02 S2 | PI: A. S. De Groot | 9/27/2011 – 8/31/2012 |
| Title: <i>Optimization of HIV Vaccine Subunit Delivery (Supplement)</i> The goal of this project is to optimize delivery of a multi-epitope HIV vaccine | | |
| Previously Funded | | |
| 1R21NS0547 | PI: A. S. De Groot | 3/1/2007 - 2/28/2010 |
| NINDS Title: <i>Development of De-Immunized Botulinum Neurotoxin Type A for Dystonia</i> The goal of this project is to develop safe and effective De-immunized botulinum neurotoxin Type A for patients diagnosed with Dystonia. | | |
| 5R43A105832 6-02 | PI: A. S. De Groot | 9/01/2004 – 8/31/2007 |
| NIH/NIAID: Small Business Biodefense Program (SBIR Phase I) Title: <i>A Genome-Derived, Epitope-Driven Tularemia Vaccine</i> The goal of this project is to develop a vaccine of highly immunogenic F <i>tularensis</i> epitopes. A Phase II application has been submitted and is currently under review. The goal of this project is to develop a vaccine of highly immunogenic F tularensis epitopes. A Phase II application has been submitted and is currently under review. The second-generation vaccine is a viable vaccine candidate; this product will be further developed with in collaboration with the Department of Defense (NMRC at Walter Reed) and | | |

brought to the clinic as soon as possible. This vaccine would be safer than current vaccines for tularemia and suitable for use in civilian populations as part of strategic defense against WMD.

7R01AI05052

8-04 **PI: A. S. De Groot**

5/01/2002 – 4/30/2008

NIAID

Title: Epitope Driven HIV Vaccine Development

The goal of this project is to develop a vaccine of highly immunogenic conserved HIV epitopes.

5R43AI05837

6-02 **PI: A. S. De Groot**

5/26/2005 – 5/31/2009

NIH/NIAID (SBIR Phase I)

Title: Novel Smallpox Vaccine Derived from VV/VAR Immunome

The goal of this project is to develop a novel and safer smallpox vaccine derived from immunogenic T cell epitopes conserved in both VV and Var proteomes. A Phase II application has been submitted and is currently under review.

Whole organism vaccines provide more information than the immune system needs for protection, thereby presenting unnecessary safety risks for activation of undesired immune reactions. Whole subunit vaccines may not provide adequate information and therefore fail to protect. A genomes-to-vaccine approach aims to identify the minimal, essential information from multiple antigens that will achieve protection, while avoiding unintended and dangerous effects. In this SBIR we proposed to develop a safe, new smallpox vaccine based on T cell epitopes conserved between the genomes of vaccinia virus (VV) and Variola (VAR). The initial study showed 100% protection by the vaccine. The next phase of this work is underway – a strategic collaboration with USAMRIID (Department of Defense). This type of vaccine (epitope-driven) is anticipated to have fewer side effects than the existing smallpox vaccine (DryVax) and would be safe for use in lower risk populations such as civilians, as compared to the existing smallpox vaccine.

5R43AI05832

6-02 **PI: A. S. De Groot**

9/01/2004 – 8/31/2007

NIH/NIAID: Small Business Biodefense Program (SBIR Phase I)

Title: A Genome-Derived, Epitope-Driven Tularemia Vaccine

The goal of this project is to develop a vaccine of highly immunogenic F tularensis epitopes. A Phase II application has been submitted and is currently under review.

7R01AI05052

8-04 **PI: A. S. De Groot**

5/01/2002 – 4/30/2008

Title: Epitope Driven HIV Vaccine Development

The goal of this project is to develop a vaccine of highly immunogenic conserved HIV epitopes.

5R43AI06503

6-02 **PI: A. S. De Groot**

5/26/2005 – 5/31/2008

NIH/NIAID (SBIR Phase I)

Title: A Genome-Derived, Epitope-Driven H. Pylori Vaccine

The goal of this project is to develop safe and effective H pylori vaccine derived from conserved immunogenic epitopes.

Despite considerable effort, an effective Helicobacter pylori vaccine remains elusive. Advances in predictive in silico modeling and epitope-based vaccination afford novel approaches to H. pylori vaccine development. The goal of this SBIR Phase I research program was to develop a T-cell epitope-based, therapeutic vaccine against H. pylori and to when delivered mucosally as a multi-epitope DNA vaccine, can be shown to protect from H. pylori infection and gastric cancer. Initial studies carried out with SBIR funding resulted in the development of a viable vaccine candidate; this product will be out-licensed to a strategic partner and brought to the clinic as soon as possible.

JDRF Industry **PI: A. S. De Groot**

12/01/08 – 11/31/2009

JDRF

Title: Antigen-Specific Tolerance Induction (ASATI) for the prevention and treatment of T1D

The goal of this project is to develop a treatment for Type 1 Diabetes.

| Collaborations | | |
|---|--------------|-------------------------|
| 1R21AI078355- | PI: L. Moise | 12/01/2009 – 11/30/2011 |
| NIH/NIAID | | |
| <i>Title: Novel Function of Complement C3d as a Helper T-cell Target.</i> | | |
| The goal of this project is to investigate a newly discovered auxiliary pathway of immune activation. | | |

Previous Grants (Chronological)

01/01/92-06/30/92. **Reactivation Tuberculosis in HIV Infection**

NIH: K08 AI 01068.

Total Direct Costs \$68,000, Indirect Costs \$40,500.

PI: De Groot (Brown University)

1/1/93-12/31/93 Rhode Island Foundation (title not available)

Rhode Island Foundation RIF 4238.

Total Direct Costs \$4,822 (no indirects).

PI: De Groot (Brown University)

07/01/92-06/30/94 **Natural and predicted antigens for TB immunotherapy**

NIH: R01 AI 35271

Total Direct Costs Year 1 (continuation of K-08) Direct Costs \$174,813, Year 2 \$171,904; Indirects Year 1, \$40,366, Year 2 \$43,676.

PI: De Groot (New England Medical Center and Brown University)

7/1/93-6/30/94 **Heiser Program for Research in Leprosy and Tuberculosis**

Heiser Foundation.

Total Direct Costs \$16,659; Indirect Costs \$3,332.

PI: De Groot (Brown University)

1/1/94-12/31/94 Rhode Island Foundation (title not available)

Rhode Island Foundation RIF 3192

Total Direct Costs \$4,840 (no indirects).

Gabriel Meister PI, De Groot Co-investigator (Brown University)

9/01/95-7/01/95 **Recognition of putative TB vaccine epitopes by sub Saharan Africans**

NIH: R03 TW00552-03 S1USAID Supplement.

Total Direct Costs \$ 20,000; Indirect Costs \$0.

PI: De Groot (Brown University)

8/21/97-5/31/99 **Sequencing the Mtb Genome**; Supplement EpiMatrix analysis of Mtb Genome

NIH: R01 AI 40125

Total Direct Costs \$82,694; Indirect Costs \$41,381.

PI: De Groot (Brown University)

10/1/98-6/30/99 **Epitope-based Vaccines and Therapeutics, accelerating design and delivery**

Rhode Island Center for Cellular Medicine Phase I grant.

Total Direct Costs to TBHRL: \$75,000; Indirect Costs \$24,894

PI: De Groot, M. Gonzalez Co-investigator at TBHRL(Brown University)

10/01/95-09/30/99 **TB peptide epitope project, MRC Laboratories, The Gambia**

NIH: R03 TW00552

Total Direct Costs \$68,000; Indirect Costs \$40,500.

PI: De Groot (Brown University)

0/1/99-03/1/00 **Epitope-driven HIV vaccine targeting dendritic cells**

NIH: SBIR Phase 1 R43 AI 46212. Subcontract to Brown.

Total Direct Costs to TBHRL: \$29,684; Indirect Costs \$16,920

PI: De Groot, Dr. M. Gonzalez Co-investigator at TBHRL (Brown University)

03/01/00-12/31/00. CFAR Pilot Project. **Validation of candidate HIV vaccine T cell epitopes**

NIH: CFAR Pilot Project

Total Direct Costs \$13,005. 30,000; Indirect Costs 7,500

PI: De Groot, Dr. M. Gonzalez Co-investigator at TBHRL (Brown University)

10/01/99-09/30/01 **A Cross-Clade Approach to HIV Vaccine Development**

NIH: R21 AI 45416

Total Direct Costs \$446,047; Indirect Costs \$147,383

PI: De Groot (Brown University)

07/01/01-12/30/01 **Diagnostic Reagents for Emerging Infectious Diseases**

NIH/NIAID: **SBIR** Phase I to EpiVax

TBHRL Total Direct Costs \$40,000; Indirect Costs \$22,000 (total grant \$100,000)

PI: De Groot (Brown University) (Formerly PI at EpiVax; current PI at EpiVax is Bill Martin)

4/1/98-03/31/02 HIV-1/HIV-2 Epitope project, The Gambia, West Africa

NIH: R03 TW00973

Total Direct Costs \$70,569; Indirect Costs \$41,431.

PI: De Groot (Brown University)

7/0/97-06/30/02 HIV Evolution and Cellular Immune Response

NIH: R01 AI 40888

Total Direct Costs \$899,249; Indirect Costs \$283,029.

PI: De Groot (Brown University)

12/30/01-08/30/02 Epitope-driven HPV Vaccine Targeting Dendritic Cells

PI: De Groot (Brown University) (PI at EpiVax is Bill Martin)

NIH/NCI: **SBIR** Phase I to EpiVax

TBHRL Total Direct Costs \$67,382; Indirect Costs \$32,708 (total grant to TBHRL \$100,090)

03/01/99-04/30/03. Immunoregulatory Defects in Hemophilia

NIH: R01 HL 042257

Year Two Total Direct Costs \$13,416; Indirect Costs \$8,049

PI: John Sullivan, UMass Worcester, De Groot, subcontractor (Brown University)

05/01/03 – 08/01/03 GAIA Vaccine Project –Bamako, Mali West Africa

PI Marcon (Brown) / Koita (FAST, Bamako Mali)

Campbell Foundation (to A. De Groot at GAIA Vaccine Foundation)

Total Direct and Indirect Costs \$75,000.

3/1/00-03/1/03 Bringing Epitope Driven Vaccines into Phase I Trials

Sequella Global TB Foundation **SGTBF Core Scientist Award**

PI: De Groot (EpiVax)

Total Direct Costs \$900,000 to EpiVax

TBHRL Subcontract: Total Direct Costs: \$300,000 (expected/3 years); Indirect \$150,000.

03/01/04-03/01/05 Collaborative for Vaccine Research and Design (CVRD)

PI De Groot (Brown)

Office of the Vice President of Research, Brown University

Research seed Funding (\$75,000).

9/1/2004 – 8/31/2007. **A Genome-Derived, Epitope-Driven Tularemia Vaccine**

NIH: **5R43A1058326-02**

PI: **A.S. De Groot**

Total Direct Costs: \$716,957 Indirect Costs: \$114,965

5/01/2002 - 4/30/2008. **Epitope Driven HIV Vaccine Development**

NIH: **7R01AI050528-04**

PI: **A.S. De Groot**

05/26/2005 - 05/31/2008. **A Genome-Derived, Epitope-Driven H. Pylori Vaccine**

NIH: **5R43AI065036-02**

PI: **A.S. De Groot**

05/26/2005 - 05/31/2009. **Novel Smallpox Vaccine Derived from VV/VAR Immunome**

NIH: **5R43AI058376-02**

PI: **A.S. De Groot**

Other Grants (Co-investigator or subcontract)

1993-1994 **TB Cure Rate at a Public Hospital in Massachusetts**

(mentor for Massachusetts Nursing Association Award/ Nellie Castillo R.N.) (New England Medical Center)

1992-1993 CPCRA Study of **TB prophylaxis for HIV-seropositive patients**

(TB/PPD+, 004) (subcontractor to Boston Department of Health and Hospitals/CDC) (NEMC)

1998-2002 **CD8⁺ T-Cell Response in Resistance to Tuberculosis**

PI Dr. Yuri Bushkin, Public Health Research Institute, NYC, NY (Brown University)

Patents

- 1) Brown University Research Foundation reference 1994-14; "**HIV Vaccine Candidate Peptides**" This application claims an HIV vaccine and includes 672 peptide sequences. Filed as a provisional July 10, 1998 (60/092,346) and as a full utility application July 9, 1999 (09/351,036). Most recent action was a response to USPTO on July 10, 2001. No foreign filings. Inventors are Meister, Roberts, Berzofsky and DeGroot.
- 2) Brown University Research Foundation reference 1998-22; "**Human T Cell Response to MHC-Binding Motif Clusters**" This application claims a TB vaccine and includes a list of 28 peptides.

Filed as a provisional March 20, 2000 (60/190.834) and as a full utility application (09/813,333) March 20, 2001. Filed as PCT (foreign) application on March 20, 2001. Inventor is DeGroot.

- 3) Brown University Research Foundation reference 1998-34; **"A Regional HIV Vaccine for India"** Filed as a provisional application (60/115,145) on January 8, 1999. Combined with (1) above when utility application was filed.
- 4) Brown University Research Foundation reference 1999-09: **"A "World-clade" HIV-1 Vaccine"** Filed as a provisional application (60/130,677) on April 23, 1999. Combined with (1) above when utility application was filed.
- 5) Brown University Research Foundation reference 2000-32; **"Methods of Determining West Nile Virus Epitopes and Method of Using the Same"** Filed as provisional application (60/272,132) on 02/2001. 20050048073 - Methods of determining west nile virus epitopes and method of using the same.
- 6) USPTO Patent Application 02721225.7 2119 US0206314; Date of Filing 01 03 02 **Immunogenic HIV peptides for use as reagents and vaccines.** (Janet McNicoll, CDC).
- 7) USPTO Patent Application 20090018067, Regulatory t cell epitopes, compositions and uses thereof. **Issued Feb 11, 2011**

University Teaching Roles

Undergraduate/Graduate Courses

| | | |
|-------------------------|---|---|
| Brown U. Medical School | Pathology of Infectious Diseases | 1997, 1999. |
| Bio 160 Brown U. | Vaccines for Infectious Disease with Paul Knopf, Ph.D. | Co-course leader Spring1995,1997, 1999, 2000, 2004, 2005, 2006, 2007 |
| MTC594, URI | Vaccines for Infectious Disease with Lenny Moise, Ph.D. | Co-course leader Spring 2008, 2009, 2010, 2011, 2012 |
| Biotechnology | Vaccine Development | For Prof. Lysaght/Hawrot1998, 1999, 2001,2002, 2003,2004 2005,2006,2007,2008 |
| Immunology (Bio 53) | HIV vaccine development | For Prof. Knopf Fall 1998-2002, For Prof. Yap, Fall 2003, 2005,2006,2007,2008 |

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Women's Health

HIV among women in prison
For Prof. Lapan Fall 1997

FLASC Summer Fellowship

Wendee Gozansky, M.D. MPH Tufts University Class of 1995,

Epidemiology of Toxoplasma
Reactivation In HIV seropositive
patients

Schwietzer Fellowship

Lisa A. Pratt, Class of 1997 M.D., MPH Tufts University

Discharge planning for HIV +
Incarcerated women

Brown University Undergraduate Senior Honors Thesis, Primary Mentor

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| Jessica Stevens | 1994 | HIV/Women Epidemiology Res. |
| Kimberly Fisher | 1994 | HIV Immunology Res. |
| Caroline Roberts | 1994 | HIV/Vaccines Immunology |
| Brian Edelson | 1995 | TB/Vaccines Immunology Howard Hughes Fellow |
| Tamar Renaud | 1995 | Prisons Epidemiology Howard Hughes Fellow |
| Stephanie Gampper | 1996 | TB/HIV Epidemiology Research Undergraduate Teaching and Research Award |
| Lieschen Quiroz | 1996 | TB/Vaccines (Philippines) Undergraduate Teaching and Research Award |
| Michelle Ferdinand | 1996 | HIV Epidemiology Research |
| Neal Muni | 1996 | Biotech Applications |
| James Robert Schafer | 1997 | HIV vaccine research Saihou Sabelleh HIV Res. Fellowship |
| Igor Brichkov | 1998 | TB vaccine research |
| Jean David Barnea | 1998 | HIV vaccine research (India) |
| Tony Breu | 2000 | TB vaccine research (summer) |
| Natasha Chinai | 1998-2001 | HIV vaccine research |

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| Kara Chew | 2000-2001 | India/ HIV2) Summer Howard Hughes Fellow TB vaccine research UTRA 2000 |
| Brian Tuch | 2000-2001 | HIV evolution, UTRA 2000 |
| Andrew Girvin | 2000-2001 | DNA vaccines, UTRA 2000 |
| Ankanksha Mehta | 2001-2002 | DNA vaccines UTRA 2001 |
| David Heller | 2001-2002 | HIV evolution, UTRA 2001 |
| Basim Khan | 2001-2002 | Dendritic Cells UTRA 2001 |
| Nicole Pattamanuch | 2002-2003 | Dendritic Cells/HPV |
| Rebecca Doctors | 2002-2003 UTRA 2004 | EBV epitopes/UTRA 2002, |
| Shirley Chan | 2003-2005 | Testing a DNA based HPV vaccine. UTRA 2002,03 |
| Sangeeta Tripathi | 2003-2004 | KAP related to Vaccines, Bamako, Mali |
| Delphine Huang | 2004 | MTCT in Bamako, Mali Barbara Anton Internship Grant. (Pembroke Center) |
| Sara Kimball | 2004-2005 | EBV epitope mapping |
| Shuyi Zhang | 2004-2005 | Listeria-vectored vaccines |
| Jessica Beckerman | 2004-2005 | KAP related to Vaccines, Bamako, Mali (Royce) |
| Caitlin Cohen, Brendan Pelsue, Alexa Lafaunce | 2005-2006 | KAP study in Bamako Markets Bamako, Mali (Royce) |
| Erica Trauba, Rebecca Fox, Alexandra Dick. | 2005-2006 | Oral History Project, Sikoro Women's Group, Bamako Mali |
| Kathleen Bernard | 2005-2006 | Standard of Care in Prisons Comparison to Community SOC Providence (IDCR) 2006 |
| Madeline DiLorenzo (Brown 2008) | | Smoke Fellowship Five Finger Peer Ed Program Bamako, Mali 2006 |
| Bay Hudson (Harvard 2007) | | Five Finger Peer Ed Program Bamako, Mali 2006 |
| Erica Trauba, Hong Troung, Megan Billman, Fiona Heckscher (Brown 2008) | | HIV testing and Counseling Bamako, Mali 2006 |
| Jared Meshekow and Victoria Albina (BU, 2008) | | Electronic Medical Records |

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| Katie Fletcher (Mt Holyoke, 2007) | (Labtracker Project) Sikoro Clinic, Bamako, Mali, 2006 Immunoinformatics and Immunology Internship EpiVax, Inc. TB Bolo Project Bamako Mali HIV Adherence Hope Center Clinic Bamako Mali Looking for Tregitopes In EBV |
| Binny Chokshi , Brown -08 (Columbia Med School) | Immunoinformatics, Heterologous Immunity |
| Olivier Bardol (University of Bordeaux Med Student) | Business Development Intern 2009 |
| Tobias Cohen (Brown 2009 – became EpiVax employee -2010) | TB Knowledge, attitudes and practices in Sikoro, Mali. 2009 C3d and auto-immune response |
| Sanjay Trehan (Brown 2009) | HPV ledge, attitudes and practices in Sikoro, Mali. 2010 |
| Katie Harty (Brown 2009) | Evaluation of MTCTP program, Sikoro, Mali, 2010 |
| Julie Caplow (Brown 2009), Lauren Pischel (Brown 2011) | GAIA AIDS Vaccine Research |
| Lauren Levitz (Brown U. 2010) | Evaluation of MTCTP program, Sikoro, Mali, 2010 |
| Emily Kossow (Wesleyan 2011), Tonhu Huang (Concord Academy) | Evaluation of MTCTP program, Sikoro, Mali, 2011 |
| Christina Gomez Mira (University of Texas, Medical School) | Evaluation of HIV Care program, Sikoro, Mali, 2011 |
| John Rozenhal (Brown 2009 – became URI employee) | Comm. Health Clerkship, 2011 |
| Natasha Rybart (Med/Peds Resident, Brown University) | HPV KAP and WTP, Sikoro, Mali |
| Julia Toffoli (Columiba Masters in Public Health, 2011) | Immunoinformatics, URI, 2011 |
| Nick Platt , American University of Paris, undergraduate | HPV KAP at CEHC, 2011 |
| Salman Khan, MSIV Brown U. Medical School | HPV KAP at CEHC, 2012 |
| Danielle Poole (Brown Masters in Public Health, 2012) | |
| Andres Nunez Gutierrez , University of Cayetano Heredia | |
| Tania Medieros , Masters in Public Health | |
| Jeff Chau , URI Pharmacy | |

Foreign Study Fellowship, Brown University Independent Study, Primary Mentor

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|---------------------|---------------|---|
| Krista Dong | PLME 2000 | TB/Vaccines Immunology The Gambia, W. Africa, 1995 |
| Tevis Howard | Class of 2007 | Kenya – Malaria - 2006 |

Fogarty AIDS Research Training Program (International Health Institute) Trainees

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| Mario O. Santiago | | U. Philippines 1995 HIV evolution/ EpiMer Algorithm |
| Julius Hafalla | | U. Philippines 1995 TB vaccines; MHC PCR/ EpiMer |
| Winston Banya | | MRC Research Labs 1998 HIV 2 vaccine development |
| Ousmane Toure | (Visiting Fellow from Tulane U) | AIDS Vax Conservation in Mali |

Other Visiting Fellows

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| Constanze Weber , Ph.D. Candidate | University of Frieberg 2008-09 Hendrik Veelkens, Sponsor Dec205 Deimmunization project |
| Ben Aboubacar , M.D. Takemi Fellowship | HIV/AIDS Care in Bamako Mali |
| Kotou Sangare (LBMA, FAST, Bamako Mali) | GAIA Vaccine Research 2009 |

Organizational responsibilities: panels and conferences

(NCCHC 1) 2nd Generation AIDS behind Bars, at the National Commission on Correctional Health Care Conference, San Antonio, Texas, Nov 9, 1997: Set agenda, invited speakers, hosted.

NE Regional Symposium on HIV infection among incarcerated women Brown AIDS Program/ NEAETC Providence RI, Nov 5, 1997. Course Director. Raised funding, set agenda, invited speakers, hosted, published proceedings.

Current Strategies for the Management and Prevention of HIV in Corrections, HEPP (HIV Education/ Prison Project) at the Brown AIDS Program /Yale HIV/Prison Program, New York City, NY October 20-21 1998: Course Director (with Dr. Rick Altice). Raised funding, set agenda, invited speakers, hosted.

HIV Treatment Update for Prisons and Jails, HEPP (HIV Education/ Prison Project) at the Brown AIDS Program/NEAETC, Cambridge, MA, March 11, 1998: Course Director. Raised funding, set agenda, invited speakers, hosted.

- Clinical Trials in Correctional Settings**, HEPP (HIV Education/ Prison Project) at the Brown AIDS Program, Yale HIV/Prison Program and Center for Interdisciplinary Research on AIDS, Course Director. October 12-14, 1999. Raised funding, set agenda, invited speakers, hosted.
- (NCCHC 2) 2nd Generation AIDS behind Bars**, at the National Commission on Correctional Health Care Conference, Fort Lauderdale, Florida, Nov 6 1999: Set agenda, invited speakers, hosted.
- (NCCHC 3) HIV/AIDS behind Bars**, at the National Commission on Correctional Health Care Conference, St. Louis, MO, Sept 7-9 2000: Set agenda, invited speakers, hosted.
- TB Vaccine 2000**. Sequella Global TB Foundation, November 3- 5, 2000. Set agenda, invited speakers, hosted.
- (NCCHC 4) Bridging the Gap**, at the National Commission on Correctional Health Care Conference, Albuquerque, New Mexico, Nov 10, 2001: Set agenda, invited speakers, hosted.
- (NCCHC 5) Real Life Examples, Managing Infectious Diseases in Corrections**, at the National Commission on Correctional Health Care Conference, Nashville Tennessee, October, 2002: Set agenda, invited speakers, hosted.
- (NCCHC 6) Managing Infectious and Contagious Disease in the Correctional Setting**. at the National Commission on Correctional Health Care Conference, sponsored by HEPP Report (Infectious Diseases in Corrections), Brown University AIDS Program. Austin, Texas, October 4, 2003. Set agenda, invited speakers, Hosted.
- (NCCHC 7)** at the National Commission on Correctional Health Care Conference, sponsored by HEPP Report (Infectious Diseases in Corrections), Brown University AIDS Program. New Orleans, October 2004. Set agenda, invited speakers, Hosted.
- Rencontre des Specialistes VIH/SIDA a Bamako**. GAIA Vaccine Foundation / Fondation Merieux Jan 7, 8 2004. Organization, Invitation, Hosting, and Support (GAIA VF).
- Rencontre des Specialistes II**. GAIA Vaccine Foundation / Fondation Merieux Jan 11,12 2005 Organization, Invitation, Hosting, and Support (GAIA VF).
- 2nd International IIMMS Symposium** Sponsors: Brown University and Boston University. Held at Boston University, March 8,9,10 2005. Organization, Invitation, Hosting, and Support (IIMMS/CVRD)
- 1st Annual Vaccine Renaissance, Rhode Island**. June 7,8, 2005. Sponsored by the Collaborative for Vaccine Development, Brown University and Tech Collective. Organization, Invitation, Hosting, and Support (CVRD)
- (NCCHC 8)** at the National Commission on Correctional Health Care Conference, sponsored by Infectious Diseases in Corrections. Denver, October 2005. Set agenda, invited speakers, Hosted.
- 3eme Journees de VIH Bamako**. GAIA Vaccine Foundation / Esther/Solthis. Jan 16, 17, 18, 2006 Organization, Invitation, Hosting, and Major Financial Support (GAIA VF).
- WCVII 2006 Montreal**. New Vaccines and Immunotherapeutics. The Fourth World Congress on Vaccines, Immunisation, and Immunotherapy. Board of Scientific Advisors.
- 2nd Annual Vaccine Renaissance, Rhode Island**. June 7-9, 2006. Sponsored by the Collaborative for Vaccine Development, Brown University and Tech Collective. Organization, Invitation, Hosting, and Support (CVRD).
- WCVII 2007 Dubai**. New Vaccines and Immunotherapeutics. The Fifth World Congress on Vaccines, Immunisation, and Immunotherapy. Board of Scientific Advisors.

(NCCHC 9) at the National Commission on Correctional Health Care Conference, sponsored by Infectious Diseases in Corrections. Atlanta, October 2006.

4eme Journees de VIH Bamako. GAIA Vaccine Foundation / Esther/Solthis. Jan 17, 18, 19, 2006 Organization, Invitation, Hosting, and Major Financial Support (GAIA VF).

WCVII 2008 ITALY. New Vaccines and Immunotherapeutics. The Sixth World Congress on Vaccines, Immunisation, and Immunotherapy. Board of Scientific Advisors.

Vaccine Renaissance III. Anne S. De Groot, Denice Spero, co-organizers, Institute for Immunology and Informatics. Providence, RI October, 2009.

Immunogenicity (PEGS Boston) Anne S. De Groot, Invited speaker and session organizer. Testing for Immunogenicity. Christina Lingham, host. PEGS Boston (CHI), February 12th 2009. Boston.

Vaccine Technologies III (Barry Buckland, others, Organizing Committee); Engineering Conferences International; Mexico, June 2010

Vaccine Renaissance IV Anne S. De Groot, Denice Spero, co-organizers, Institute for Immunology and Informatics. Providence, RI October, 2010

Immunogenicity: Determinants and Correlates. Anne S. De Groot, Denice Spero, Naren Chirmule (Amgen), Bonnie Rup (Pfizer), Eric Furfine (Eleven, Boston), Eric Wakshull (Genentech), co-organizers, Institute for Immunology and Informatics. **May 2011, Providence RI.**

Computational Vaccinology Workshop, Co-organizer with France Terry, EpiVax, Oliver He, University of Michigan, David Koelle, University of Washington, Bill Kwok, Benaroya Institute. **International Vaccine Society World Congress on Vaccines, Seattle Washington, October 2011.**

Vaccine Renaissance V Anne S. De Groot, Denice Spero, co-organizers, Institute for Immunology and Informatics. Providence, RI October, 2011.

Applied Immunoinformatics for Neglected Tropical Diseases. Scheduled for June 2012, Providence RI.

Vaccine Renaissance VI Anne S. De Groot, Denice Spero, co-organizers, Institute for Immunology and Informatics. Providence, RI October, 2012.

Journal Reviews (Ad Hoc)

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|--|-----------------------|
| Journal of Infectious Diseases | 1994, 2009 |
| Human Immunology | 1995 |
| AIDS | 1995 |
| Tubercle (International Union Against TB and Lung Disease) | 1997 |
| Nature Biotechnology | 1999-2006 |
| Bioinformatics | 2000-2006 |
| Proteins: Structure, Function and Genetics | 2001 |
| AIDS Reader | 2001-2008 |
| AIDS Education and Prevention | 2001 |
| Trends in Genetics | 2002 |
| Emerging Infectious Diseases | 2002-present (Editor) |

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|---|----------------|
| Trends in Immunology | 2003 |
| Immunogenetics | 2005 |
| Viral Immunology | 2005 |
| Medicine and Health Rhode Island (Editor Vaccine Issue) | 2007 |
| Lancet | 1999- present |
| Vaccine | 2000- present |
| Clinical Immunology | 2009- present |
| PLOS-One | 2010 - present |

Grant Reviews, NIH Study Sections

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| Special Review Committee for NIAID: National Cooperative Drug Discovery Group for the treatment of Opportunistic Infections and AIDS | June 1993 / March 1994 |
| Review Committee, Program Project U19 AI 40972 (Heifits, PI) | 1998-2000 |
| Global Challenges (Gates Foundation) | 2007 |
| Welcome Foundation (Parasitology) | 2008 |

Press Articles and Interviews

Clad Against All Clades: Can vaccinomics build a world HIV vaccine? *The Scientist* Interview by Tom Hollon, September 18, 2000

The Price of Punishment *National Public Radio* Interview by Jennifer Schmidt, WBUR Prison Series, (WBUR, Boston) interview on Hepatitis C in Prison. December 20, 2000.

The Zealot. *Inc. Magazine* Interview by Thea Singer. Start Up Issue, January 2001.

R.I. lab veers from convention in AIDS study. *Providence Journal.* Front Page Interview by Felice Freyer, May 18, 2001

Brown scientist at work on AIDS vaccine. *Providence Journal Providence, R.I.* May 14, 2002. Felice Freyer, May 14, 2002.

Interview “**Amazing Women**”. WPRO, (FM Radio Talk Show) October 26, 2003. Deb Ruggiero, Host.

“**Best and the Brightest 2003**” (Science and Industry). *Esquire Magazine*, December 2003. “My AIDS Vaccine” as told to Rebecca Dorr.

“**The Code Breaker**”. *Rhode Island Monthly Magazine.* Profile by Ellen Lieberman. June 2004.

“**Amazing women**” *Women in Science.* March 23, 2005. PBSRI Interviewed by Deb Ruggiero about President Summer’s remarks on Women in Science.

Featured in *University Magazine: Smith College Alumnae Quarterly* (2010); *University of Rhode Island Quandrangles* (2011).

Press Quotes and Brief Interviews

New Rules Offered For Inmate Medical Tests. New York Times. October 16, 1999

A panel member, Dr. Anne S. De Groot, said prisoners with AIDS must be given access to cutting-edge clinical tests but also protected from possible abuses. The panel recommended that prisons where research is done must have quality medical care already available, so inmates do not feel coerced into research programs simply to get proper care.

Published: October 16, 1999 Computers Aid Vaccine Design, *Science Magazine*, Featured interview in story by Michael Hagmann, *Science* 2000 October 6; 290: 80-82. (in News)

A Health Danger From a Needle Becomes a Scourge Behind Bars *New York Times*, Front Page. Featured interview in story by David Rohde. August 6th, 2001.

TB in prison. *TB Monitor*. Featured interview in story Alice Alexander. Fall 2000.

HIV Testing of State Prisoners Not Mandatory. Indianapolis Star (10.21.01) - Wednesday, October 24, 2001 Mike Ellis

Hepatitis C has higher incidence among inmates. Many prisons opting to withhold treatment. September 5, 2001 Associated Press

A Health Danger From a Needle Becomes a Scourge Behind Bars. New York Times (New York Report) August 6, 2001. David Rhode

Hepatitis C Spreads Mostly Unchecked in Prisons. Reuters. April 5 2001. Alan Elsner, National Correspondent.

HIV Testing of State Prisoners Not Mandatory. Indianapolis Star (10.21.01): Mike Ellis.

Alabama Prison at Center of Suit Over AIDS Policy. *New York Times* (National News Section). October 26, 2003. Adam Liptak.

Top For 2003 (Providence Monthly's third annual ten people you don't know now, but soon will). *Providence Monthly*, 2003.

Can HIV Care Click in the Clink? *Poz Magazine*. April 2004.

Mass Biotech News // Biotechnology publications – Press reports about **Smallpox, Tularemia vaccines 2004-2007.**

Boston Herald story on not-for profit work of Professor Annie De Groot , October 2009“ The power of one” <http://tinyurl.com/herald-story>

Providence Business News: *URI's De Groot wins \$13M NIH grant, July 28, 2009*

Aug 2, 2009 A \$13 million National Institutes of Health grant awarded to vaccine researcher Anne S. De Groot is expected to move a slew of projects from the basic-science stage to preparations for clinical trials, advancing the fight against tick-borne diseases, hepatitis C, ulcers and more <http://tinyurl.com/I-Cubed2009>

Institute for Immunology and Informatics – opening of the new Institute, story in the Providence Journal: <http://tinyurl.com/13M-Validation-Epi-Technology>

Providence Journal article on L. J. De Groot and A. S. De Groot - Father Daughter Collaboration at URI <http://tinyurl.com/father-daughter-2009>

Modeling the bug, the host, the world: Computational Biology catches the FLU, by Katherine Miller
16 BIOMEDICAL COMPUTATION REVIEW Summer 2006 . Article describing our work on influenza (and the work of others who are using computational biology to model the flu:

<http://www.biomedicalcomputationreview.org>

Providence Business News: Dec 2, 2009 EpiVax signs deal with drug giant Roche . EpiVax Inc. said Tuesday it has signed a research deal with the giant Swiss drugmaker Roche Holding AG to evaluate the biotechnology firm's main product candidate.

Providence Business News: Feb 26, 2011 Research taking bite out of tick-borne diseases

A \$200,000 grant from the R.I. Science and Technology Advisory Council allows University of Rhode Island researchers to work on continued development of an anti-tick vaccine, but now the vaccine would be delivered through the use of a transdermal patch. . . .

Providence Business News: Feb 19, 2011 Rewarding innovation in vaccine research

A nearly \$200,000 grant from the Rhode Island Science and Technology Advisory Council allows researchers, including EpiVax Inc. founder Annie De Groot, above, to continue work on an anti-tick vaccine delivered through the use of a transdermal patch. De Groot has been working with University of Rhode Island researchers on the vaccine, which remains years away from the marketplace. The grant allows Isis Biopolymer Inc. to join in the project, to help develop a delivery system for the vaccine. more

Providence Business News Jan 25, 2011: EpiVax receives \$458,000 NIH grant to develop universal influenza vaccin. EpiVax Inc. said Tuesday it has received a \$458,000, two-year grant to develop a universal influenza

Providence Business News Nov 13, 2010 PROVIDENCE – Clinica Esperanza has new Providence home. With the help of numerous volunteers, Clinica Esperanza/Hope Clinic moved into permanent space at 60 Valley St. on Nov. 5.

Providence Business News: July 18, 2010 - URI hires 14 researchers for vaccine fellowship from stimulus act grant. Biotech entrepreneur and researcher Anne De Groot has won a \$212,000 grant through the American Recovery and Reinvestment Act, allowing her University of Rhode Island lab to hire 14 students and recent graduates as summer research fellows. . . .

Providence Business News: May 26, 2010 Pharma scientists give award to EpiVax. EpiVax Inc. has received the Innovation in Biotechnology award from the American Association of Pharmaceutical Scientists for the company's research on Tregitopes, or t-cell epitopes. . . .

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