

Franck Lemiale, Pharm.D., Ph.D.

Founder & Principal Consultant

Lighthouse BioSolutions

franck@lighthousebiosolutions.com

[LinkedIn: linkedin.com/in/francklemiale](https://www.linkedin.com/in/francklemiale)

Profile

Accomplished biopharmaceutical leader with extensive immunology experience, applied to vaccine, immunotherapy, gene- and cell-therapy research and development.

- ❖ Scientific expert: preclinical/clinical development of vaccines, gene therapies and various biologics. Development and implementation of immunology assays for monitoring vaccine and immunotherapy clinical trials.
Breadth of R&D experience spans early-stage and translational research, project management, clinical trial design, patients' immune monitoring, regulatory strategies.
- ❖ Leader: has overseen scientific, technical, operational units, along with business development and corporate growth strategies. Proactive and resourceful. Excellent interpersonal and communication skills, complemented with leadership skills in managing multidisciplinary teams.
Big picture thinker with ability to delve into levels of technical details necessary to make informed decisions. Effective at developing relationships and communicating at all levels of an organization. Track record of leadership experience in building, inspiring, mentoring and managing multi-disciplinary teams to successfully meet the most aggressive scientific and corporate goals.

Strengths include:

- Extensive scientific expertise. Immunology / virology / infectious diseases / Cell & Gene Therapies background.
- Management and scientific oversight of vaccines, cancer immunotherapies, cell/gene therapies and monoclonal antibodies preclinical/clinical development programs.
- Executive leadership. Combination of deep scientific mindset and business acumen to drive long term organizational growth. Strategic thinking. Implementing change across organization.
- Managing research/development collaborations between biotech, academic and external laboratories (CROs / CMOs).
- Working experience from biotech industry, CRO, academia/Gov't, non-profit organizations.
- Establishing, negotiating, and managing external research collaboration partnerships, including large multipartite international research consortia.
- Effectively interfacing within and outside of organizations.
- Recruiting, management and development of personnel.
- Compliance: cGMP biologics manufacturing, GLP, GCLP.

Professional experience

Lighthouse Biosolutions **Gaithersburg, MD**

April 2023- Present

- **Founder and President**

- Provides preclinical / clinical strategies and solutions to early-to-late-stage companies and academic investigators developing vaccines, cell & gene therapies, monoclonal antibodies and other biologics.

Advanced Bioscience Laboratories **Rockville, MD**

June 2017- Sept. 2023

- **Vice President & Division Head, Immunology**

March 2022– Sept. 2023

- Led and grew ABL's Contract Research Services by designing and implementing key strategic initiatives. Transformed operational practices, improved efficiency, brought innovative scientific platforms. Successfully revamped business development activities to further drive the unit's growth.
- As part of ABL's Senior Executive Leadership, drove the overall long-term strategic growth of the organization. Responsible for establishing, and adhering to, budgets, business plans, global strategic initiatives.
- Acted as Principal Investigator and provided scientific and technical leadership in a broad range of Immunology studies in support of preclinical and clinical development of vaccines, cancer immunotherapies, CAR T / CAR NK cell therapy approaches, monoclonal antibody-based therapies and numerous AAV- and other viral vector-based gene therapy studies.

- **Vice President, Immunology**

January 2019– March 2022

- **Senior Director, Immunobiology**

June 2017 – December 2018

PATH Malaria Vaccine Initiative **(PATH Center for Vaccine Innovation and Access)** **Washington, DC**

October 2012- May 2017

- **Senior Program Officer**

- Served as project lead for a large international novel vaccine target identification consortium focused on generation, manufacturing and testing of monoclonal antibodies for experimental medicine.

- Served as project lead for the immunology study of RTS,S, the first and only phase 3 malaria vaccine trial to date. Study aimed at identifying immune correlates of protection: design of novel immune monitoring assays and their implementation for the testing of phases 1, 2 and 3 clinical trial samples.
- Served as Responsible Project Manager and scientific lead for a portfolio of preclinical vaccine development projects.

VIRxSYS Corporation
Gaithersburg, MD

March 2004- September 2012

- **Senior Director, Vaccines and Immunology** February 2010 – September 2012
- **Director, Vaccines & Immunology.** February 2007- January 2010
- **Associate Director, R&D Immunobiology.** February 2005- February 2007
- **Senior Scientist. Immunology expert.** March 2004- February 2005

- Designed, initiated, and directed the HIV vaccine program at VIRxSYS. Led the program from early research through preclinical development, IND-enabling studies, study protocol development and regulatory submission. Planned and executed a vaccine development program by effectively interacting with broad range of internal and external collaborators.
- Established, equipped, staffed, and managed the immunology department for HIV gene therapy and vaccine programs. Developed broad range of immunology platforms multicolor flow cytometry, ICS, Elispot, Elisa and neutralization assays, in addition to multiplexed cytokine profiling and other functional assays.
- Grew the department to include all R&D efforts at VIRxSYS.
- Designed, then directed the monitoring of safety and efficacy for phases 1 and 2 LV-based gene therapy clinical trials, including QC/release testing of autologous cellular products.
- Designed and implemented three programs for non-human primate testing of HIV vaccine candidates in prophylactic and therapeutic settings.
- Provided scientific leadership on a wide range of topics related to gene therapy, immunology, viral escape, antiretroviral therapies, QC, preclinical / clinical monitoring.
- Interacted and presented results and future strategies at all levels of management, board of Directors and Medical and Scientific Advisory Boards.
- Acted as the company spokesperson at scientific conferences, professional forums and key meetings with strategic partners.

Vaccine Research Center, NIH
Bethesda, MD

January 2001- February 2004

- **Research Fellow**

- Construction and in vitro testing of adenovirus-based vaccine vectors.
- Preclinical immunogenicity testing of DNA- and viral vector-based HIV vaccine candidates. Systemic/mucosal immunogenicity and biodistribution studies of adenoviral vectors.
- IND filing of mucosally-administered adenoviral vectors.

Education

Ph.D. 2000

School of Medicine (University of Tours, France)

Research topics: Semliki Forest virus- vectored HIV vaccines: Antigenic and immunogenic characterization of various vaccine candidates.

Master's Degree in Fundamental Virology 2000

Institut Pasteur (Paris, France).

Pharm.D. 1997

School of Pharmacy (University of Tours, France)

Thesis topic: Antigenicity of HIV-1 envelope glycoproteins expressed by using the Semliki Forest Virus expression system.

Post-graduate diploma in Microbiology 1994

School of Pharmacy, University of Paris XI (Paris, France)

Research topic: viral-vectored vaccines against HIV: construction and antigenic characterization of envelope-based immunogens.

Additional information provided in addendum

- 19 peer-reviewed scientific publications.
- International scientific conferences: 29 posters and 16 oral presentations.
- NIH grants and research funding
- Patents
- Professional affiliations

Addendum

Scientific publications

Z.Sagawa, C.Goman, A.Frevol, A.Blazevic, J.Tennant, B.Fisher, T.Day, S.Jackson, **F.Lemiale**, L.Toussaint, I.Kalisz, J.Jiang, L.Ondrejcek, R.Mohamath, J.Vergara, A.Lew, A.M.Beckmann, C.Casper, D.Joft, C.Fox. *Safety and Immunogenicity of a thermostable formulation of the ID93+ GLA-SE tuberculosis vaccine candidate in healthy adults*. **Nature Communications**. 2023; 14 (1138).

D. Oyen¹, J.L. Torres, P.C. Aoto, Y. Flores-Garcia, S. Binter, T. Pholcharee, S. Carroll, S. Reponen, R. Wash, Q. Liang, **F. Lemiale**, E. Locke, A. Bradley, C. R. King, D. Emerling, P. Kellam, F. Zavala, A. B. Ward, I. A. Wilson. *Structure and mechanism of monoclonal antibody 667 and 668 binding to the junctional epitope of Plasmodium falciparum circumsporozoite protein*. **PLoS Pathogens**. 2020; 16(3).

Stephen W. Scally, Brandon McLeod, Alexandre Bosch, Kazutoyo Mirura, Qi Liang, Sean Carroll, Sini Reponen, Ngan Nguyen, Edgar Giladi, Sebastian Raimisch, Vidadi Yusibov, Allan Bradley, **Franck Lemiale**, William R. Schief, Daniel Emerling, Paul Kellam, C. Richter King, Jean-Philippe Julien. *Molecular definition of multiple sites of antibody inhibition of malaria transmission-blocking vaccine antigen Pfs25*. **Nature Communications**. 2017; 8(1).

Sidhartha Chaudhury, Jason Regules, Christian Darko, Sheetij Dutta, Anders Wallqvist, Norman C. Waters, Erik Jongert, Norman Walters, **Franck Lemiale** and Elke Bergmann-Leitner. *Delayed fractional dose regimen enhances an IgG4 response that inhibits serum opsonophagocytosis in the RTS,S/AS01 malaria vaccine candidate*. **Scientific Reports**, 2017; 7(1)

Sidhartha Chaudhury, Christian Ockenhouse, Jason Regules, Sheetij Dutta, Anders Wallqvist, Erik Jongert, Norman Walters, **Franck Lemiale** and Elke Bergmann-Leitner. *The biological function of antibodies induced by the RTS,S/AS01 malaria vaccine candidate is determined by their fine specificity*. **Malaria Journal** 2016; 15:301

Kristina Radin, Frederic Clement, Erik Jongert, Yann G-J. Sterckx, Christian Ockenhouse, Jason Regules, **Franck Lemiale** and Geert Leroux-Reels. *A monoclonal antibody-based immunoassay to measure the antibody response against the repeat region of the circumsporozoite protein of Plasmodium falciparum*. **Malaria Journal**. 2016; 15(1): 543

Franck Lemiale, Benyam Asefa, Delia Ye, Christopher Chen, Nikolay Korohov and Laurent Humeau. *An HIV-Based Lentiviral Vector as HIV Vaccine Candidate. Immunogenic Characterization*. **Vaccine** (28); 2010: 1952-61.

Ben Asefa, Nikolay Korokhov and **Franck Lemiale**. *Heterologous HIV-based lentiviral/adenoviral immunizations result in enhanced HIV-specific immunity*. **Vaccine**. 2010; Jan 4.

Franck Lemiale and Nikolay Korokhov. *Lentiviral Vectors for HIV Disease Prevention and Treatment*. **Vaccine** 2009; Feb.6.

Franck Lemiale, Hedi Haddada, Gary J. Nabel, Douglas E. Brough, C. Richter King and Jason D. Gall. *Novel adenovirus vaccine vectors based on the enteric-tropic serotype 41*. **Vaccine** 2007; 25 (11): 2074-2084

Bruce L. Levine, Laurent M. Humeau, Jean Boyer, Rob-Roy MacGregor, Tessio Rebello, Xiaobin Lu, Gwendolyn Binder, Vladimir Slepushkin, **Franck Lemiale**, John R. Mascola, Frederic D. Bushman, Boro Dropulic, and Carl H. June.

Gene transfer in humans using a conditionally replicating lentiviral vector.

PNAS 2006; 103(46): 17372-17377.

Laurent Humeau, Reuben Cohen, Tony Encinas, Yelena Skripchenko, **Franck Lemiale**, Kris Andre, Arvind Chopra, Tessio Rebello and Vladimir Slepushkin

Design and Implementation of VRX496 Phase II Cell Processing for cGMP Production of Multiple Doses of Lentivirally Transduced Autologous HIV Infected CD4+ T Lymphocytes

Molecular Therapy 2006 : 13, S427

Franck Lemiale, Wing-pui Kong, Levent M. Akyurek, Michael Eckhaus, Elizabeth G. Nabel and Gary J. Nabel.

Enhanced mucosal IgA response of intranasal adenoviral vector HIV vaccine and localization in the central nervous system.

Journal of Virology 2003; 77(18):10078-87.

Sarah Lebigot, Philippe Roingeard, Gilles Thibault, **Franck Lemiale**, Bernard Verrier, Francis Barin and Denys Brand.

The transmembrane protein of HIV-1 primary isolates modulates cell surface expression of their envelope glycoproteins.

Virology 2001; 290(1): 136-42.

Franck Lemiale, Denys Brand, Sarah Lebigot, Bernard Verrier, Laurence Buzelay, Sylvie Brunet and Francis Barin.

Immunogenicity of recombinant envelope glycoproteins derived from T-cell line-adapted isolates or primary human immunodeficiency virus type 1 isolates: a comparative study using multivalent vaccine approaches.

Journal of AIDS 2001; 26(5): 413-422.

Christophe Hourieux, Denys Brand, Pierre-Yves Sizaret, **Franck Lemiale**, Sarah Lebigot, Francis Barin and Philippe Roingeard.

Identification of the gp41TM cytoplasmic tail domains of human immunodeficiency virus type 1 that interact with pr55^{Gag} particles.

AIDS Res Hum Retroviruses 2000 ;16(12):1141-7.

Denys Brand, **Franck Lemiale**, Gilles Thibault, Bernard Verrier, Philippe Roingeard, Laurence Buzelay, Sylvie Brunet and Francis Barin.

Antigenic properties of recombinant envelope glycoproteins derived from T-cell line-adapted isolates or primary human immunodeficiency virus isolates and its relationship to immunogenicity.

Virology 2000 ; 271(2) : 350-362.

Franck Lemiale, Denys Brand, Francis Barin.

The expression system derived from the Semliki Forest Virus.

Virologie 1999; 3: 209-16.

Denys Brand, **Franck Lemiale**, Isabelle Turbica, Laurence Buzelay, Sylvie Brunet and Francis Barin. *Comparative analysis of humoral immune responses to HIV type 1 envelope glycoproteins in mice immunized with a DNA vaccine, recombinant Semliki Forest Virus RNA, or recombinant Semliki Forest Virus particles.* **AIDS Res.Hum.Retroviruses** 1998; 14: 1369-1377.

Presentations at meetings (posters)

1. Stephen Jackson, Leon Toussaint, Irene Kalisz, Ramón Castillo II, Cristina Goman, Raodoh Mohamath, Prabha Chandrasekaran, Christopher Fox, and **Franck Lemiale**. *A new thermostable, lyophilized ID93+GLA/SE TB vaccine candidate elicits robust, sustained Th1-type cellular and antibody responses in phase I clinical trial.* World Vaccine Congress 2023. Washington, DC.
2. Sidhartha Chaudhury, Christian Ockenhouse, Jason Regules, Sheetij Dutta, Anders Wallqvist, Erik Jongert, Norman Walters, **Franck Lemiale** and Elke Bergmann-Leitner. *The biological function of antibodies induced by the RTS,S/AS01 malaria vaccine candidate is determined by their fine specificity.* American Society of Tropical Medicine and Hygiene 2016. Atlanta, GA.
3. Sean Carroll, Qi Liang, Diego Espinosa, Fidel Zavala, Ginny Price, Emily Locke, Glenn Friedrich, Allan Bradley, Daniel Emerling and **Franck Lemiale**. *Protective anti-malarial human antibodies identified from P.falciparum CSP-immunized Kymice using Immune Repertoire Capture Technology.* The Gordon Research Conference on Antibody Biology and Engineering. Galveston, Texas, March 2016.
4. Kristina Radin, Frederic Clement, Erik Jongert, Yann G-J. Sterckx, Christian Ockenhouse, Jason Regules, **Franck Lemiale** and Geert Leroux-Reels. *A monoclonal antibody-based immunoassay to measure the antibody response against the repeat region of the circumsporozoite protein of Plasmodium falciparum.* BIOMALPAR 2016. Heidelberg, Germany.
5. Benyam Asefa, Lindsay Shovlin, Nikolay Korokhov and **Franck Lemiale**. *A VSV-G-pseudotyped lentiviral vector-based vaccine candidate elicits minimal vector neutralizing activity, and repeated administration does not impair vaccine immunogenicity.* Keystone Symposia 2012: HIV vaccines (Keystone, CO), March 2012
6. **Franck Lemiale**, Anthony Cristillo, Lindsay Shovlin, Nikolay Korokhov and Laurent Humeau. *A lentiviral vector HIV vaccine candidate protects macaques from high dose SIV intrarectal challenge: vaccine responders achieve functional cure.* International AIDS Society 2011 meeting (Rome, Italy). July 2011
7. **Franck Lemiale**, Anthony Cristillo, Lindsay Shovlin, Nikolay Korokhov and Laurent Humeau. *Highly immunogenic lentiviral vaccine provides control of viral load, preservation of the CD4 compartment and survival advantage post-SIV challenge.* AIDS Vaccine 2010 (Atlanta, GA). September 2010
8. Benyam Asefa, Delia Ye, Nikolay Korokhov, Laurent Humeau and **Franck Lemiale**. *A lentiviral HIV vaccine candidate elicits long-term humoral and cellular HIV-specific immunity and minimal neutralizing activity.* American Society of Gene and Cell Therapy (Washington, DC). May 2010.
9. **Franck Lemiale**, Anthony Cristillo, Lindsay Shovlin, Matthew Morrow, Nikolay Korokhov, David Weiner and Laurent Humeau. *Lentiviral vector-based anti-HIV-1 vaccination in macaques induces strong T-cells and antibody responses post-immunization, significant recall responses post-SIVmac251 challenge and controls viral replication during setpoint and chronic phases.* Keystone Symposia 2010: HIV Vaccines (Banff, Alberta). March 2010.

10. Benyam Asefa, Nikolay Korokhov and **Franck Lemiale**. *Heterologous immunizations with a novel HIV-based lentiviral vector elicit strong and durable cell-mediated and humoral immune responses*. Keystone Symposia 2009: HIV prevention (Keystone, CO). March 2009.
11. **Franck Lemiale**, Benyam Asefa, Nikolay Korokhov, Christopher Chen, Gary McGarrity and Laurent Humeau. *Highly immunogenic HIV-based lentiviral vectors elicit long-term anti-HIV immunity in mice*. American Society of Gene Therapy annual meeting (Boston, MA, USA). May 2008.
12. Jenice D'Costa, Andrew Worden, Nikolay Korokhov, **Franck Lemiale**, James L. Riley and Laurent Humeau. *Large scale purification of CD4+ T cells by negative or positive selection methods does not affect their growth in wave bioreactor or their engraftment potential as tested in immunodeficient NOD/LtSz-RAG1 Null mice*. American Society of Gene Therapy annual meeting (Boston, MA, USA). May 2008.
13. Lindsay Shovlin, Yongjun Ye, Jenice D'Costa, Benyam Asefa, Nikolay Korokhov, Laurent Humeau and **Franck Lemiale**. *Immunization with HIV-based lentiviral vectors results in minimal anti-vector neutralization activity*. American Society of Gene Therapy annual meeting (Boston, MA, USA). May 2008.
14. Benyam Asefa, Nikolay Korokhov, Yongjun Ye, Christopher Chen, Laurent Humeau and **Franck Lemiale**. *Heterologous immunizations utilizing a novel HIV-based lentiviral vector enhance the immunogenicity of an Ad5 HIV vaccine candidate and circumvent vector neutralization*. American Society of Gene Therapy annual meeting (Boston, MA, USA). May 2008.
15. Andrew Worden, Jenice D'Costa, Nikolay Khorokov, **Franck Lemiale**, James L. Riley and Laurent Humeau. *Purification of CD4+ T cells by negative selection or positive selection methods does not affect their growth in vitro or their engraftment potential in immunodeficient NOD/LtSz-RAG1 Null mice*. International Society of Cell Therapy annual meeting (Miami, FL, USA). May 2008.
16. **Franck Lemiale**, Benyam Asefa, Nikolay Korokhov, Christopher Chen, Gary McGarrity and Laurent Humeau. *An HIV-based lentiviral vector elicits strong and sustained anti-HIV cellular and humoral immunity in mice*. Keystone Symposia 2008: HIV vaccine development (Calgary, Alberta). March 2008.
17. Laurent Humeau, Reuben Cohen, Tony Encinas, Yelena Skripchenko, **Franck Lemiale**, Kris Andre, Arvind Chopra, Tessio Rebello and Vladimir Slepishkin. *Design and Implementation of VRX496 Phase II Cell Processing for cGMP Production of Multiple Doses of Lentivirally Transduced Autologous HIV Infected CD4+ T Lymphocytes*. American Society of Gene Therapy 2006 Annual Meeting (Baltimore, MD, USA). May 2006.
18. Brian Paszkiet, Saran Bao, **Franck Lemiale**, and Laurent Humeau. *Utilization of Soluble CD3/CD28 Tetrameric Antibody Complexes to Mediate Activation of Human Primary CD4+ T Lymphocytes and Subsequent HIV-1 Based Vector Transduction*. International Society for Cellular Therapy annual meeting (Vancouver, Canada). May 2005.
19. **Franck Lemiale**, Mario Pereira, Laurent Humeau and Boro Dropulic. *Transduction and expansion of HIV+ CD4 T cells with an HIV-1 based lentiviral vector and immobilized CD3/CD28 antibodies maintains the diversity of the TCR V β repertoire*. American Society of Hematology 46th Annual Meeting (San Diego, USA). December 2004.
20. Brian Paszkiet, Andrew Worden, Yajin Ni, Saran Bao, **Franck Lemiale**, Boro Dropulic and Laurent Humeau. *CD86 and CD54 co-expression on VSV-G pseudotyped HIV-1 based vectors improves transduction and activation of human primary CD4+ T lymphocytes*. American Society of Hematology 46th Annual Meeting (San Diego, USA). December 2004.
21. **Franck Lemiale**, Wing-pui Kong, Levent M. Akyurek, Michael Eckhaus, Elizabeth G. Nabel and Gary J. Nabel. *Immunogenicity and biodistribution of mucosally administered adenoviral vector vaccines against HIV*. AIDS Vaccine 2003 (New York City, USA). September 2003.
22. **Franck Lemiale**, Wing-pui Kong, Levent M. Akyurek, Michael Eckhaus, Elizabeth G. Nabel and

- Gary J. Nabel. *Immunogenicity and biodistribution of mucosally administered adenoviral vector vaccines against HIV*. Keystone Symposia 2003: HIV vaccine development : immunological and biological challenges (Calgary, Alberta). March 2003.
23. Laurent Dacheux, **Franck Lemiale**, Yasmine Ataman-Onal, Bernard Verrier, Denys Brand and Francis Barin. *Antigenicity of recombinant envelope glycoprotein derived from a primary isolate of HIV- 1 collected during primary infection*. AIDS Vaccine 2001 (Philadelphia, USA). September 2001.
 24. Francis Barin, Sylvie Brunet, Florence Damont, Denys Brand, **Franck Lemiale**, Francois Simon, Robert Peyre. *Cross-clade neutralization of HIV- 1 using an assay based on Hela cells expressing both CD4 receptor and CXCR4/CCR5 coreceptors*. 6th European Conference on Experimental AIDS Research (Edinburgh, Scotland). June 2001.
 25. **Franck Lemiale**. *Antigénicité de glycoprotéines d'enveloppe recombinantes du VIH-1 dérivées d'isolats primaires ou de souches adaptées sur lignées T*. Fifth scientific meeting of the School of medicine, University of Tours (Tours, France). May 1999.
 26. **Franck Lemiale**, Denys Brand, Gilles Thibault, Bernard Verrier, Laurence Buzelay, Sylvie Brunet and Francis Barin. *Antigenicity and immunogenicity of HIV-1 envelope glycoproteins derived either from primary isolates or T-cell line adapted strains*. 6th Conference on Retroviruses and Opportunistic Infections (Chicago, USA). February 1999.
 27. **Franck Lemiale**, Denys Brand, Gilles Thibault, Bernard Verrier, Laurence Buzelay, Sylvie Brunet et Francis Barin. *Antigénicité et immunogénicité de glycoprotéines d'enveloppe du VIH-1 dérivées d'isolats primaires ou de souches adaptées sur lignée T*. XI^e colloque Biotechnocentre (Seillac, France). October 1998.
 28. Denys Brand, **Franck Lemiale**, Laurence Buzelay, Sylvie Brunet and Francis Barin. *Comparative analysis of immune responses to HIV-1 envelope glycoproteins in mice immunized respectively with a DNA vaccine, a recombinant Semliki Forest Virus RNA, and recombinant Semliki Forest Virus particles*. 5th Conference on Retroviruses and Opportunistic Infections (Chicago, USA). February 1998.
 29. Denys Brand, **Franck Lemiale**, Laurence Buzelay, Sylvie Brunet et Francis Barin. *Analyse comparative des réponses immunes contre les glycoprotéines d'enveloppe du VIH-1 obtenues chez des souris immunisées respectivement avec un vaccin ADN, un vaccin dérivé de l'ARN du Virus de la Forêt Semliki recombinant et des particules du Virus de la Forêt Semliki recombinantes*. X^e colloque Biotechnocentre (Seillac, France). October 1997.

Oral presentations

1. **Franck Lemiale**. *First-in-class HIV Vaccine Candidate Achieves Functional Cure in the Non-Human Primate Model: From Bench to Clinic With a Lentiviral Vector*. Invited speaker at the Immunotherapeutics and Vaccine Summit, "Clinical Development of Therapeutic Vaccines" (Boston, MA). August 2011.
2. **Franck Lemiale**. *HIV Immunotherapies*. Invited speaker at the HIV DART 2010, "Frontiers in Drug Development for Antiretroviral Therapies" (Los Cabos, Mexico). December 2010.
3. **Franck Lemiale**, Lindsay Shovlin, Kris Andre, Gerard McGarrity, Tessio Rebello and Laurent Humeau. *Repeated autologous infusions of cells modified with VSV-G-pseudotyped lentiviral vector VRX496 can induce anti-VSV-G humoral response in humans without clinical consequence or effect on modified cells persistence: findings from Lexgenleucel-T phase 2 clinical trial*. American Society of Gene and Cell Therapy (Washington, DC). May 2010.
4. **Franck Lemiale**, Matthew Morrow, Lindsay Shovlin, Nikolay Korokhov, David Weiner and Laurent M. Humeau. *Lentiviral Vector-Based Anti-HIV-1 Vaccine Induces Strong T-cell and Antibody Responses in*

- Macaques, With and Without DNA Priming*. 17th Conference on Retroviruses and Opportunistic Infections (CROI) (San Francisco, CA). February 2010.
5. **Franck Lemiale**. *Satisfying the Need for Innovative HIV Vaccine Strategies: A Novel Lentiviral Vector Vaccine Candidate*. Invited speaker at the Vaccine Development Forum 2009 (Boston, MA). September 2009.
 6. **Franck Lemiale**. *DNA Prime, Lentiviral Vector Boost Vaccination Strategies*. Invited speaker at the DNA Vaccines 2008 conference (The International Society of DNA Vaccines), (Las Vegas, NV). December 2008.
 7. **Franck Lemiale**. *Lentiviral Vectors, from Gene Therapy to Vaccines*. Invited speaker at the Sixth World Congress on Vaccines, Immunization and Immunotherapy (The Infections Control World Organization), (Milan, Italy). September 2008.
 8. **Franck Lemiale**. *Engineered HIV-based lentiviruses as HIV Vaccine Vectors*. Invited speaker at the NIH Vaccine Research Center Seminar Series (Bethesda, MD, USA). May 2008.
 9. Arvind Chopra, **Franck Lemiale**, Kris Andre and Vladimir Slepishkin. *Quality Control of Autologous T Cells for the Treatment of HIV Infected Patients*. Wilbio's 3rd Annual Meeting on Characterization and Comparability for Complex Biological Products (San Francisco, IL, USA). February 2006.
 10. **Franck Lemiale**. *The use of adenoviral vectors for vaccine purposes*. Invited speaker at the Vecteurotrain Conference (Evry University, France). June 2004.
 11. **Franck Lemiale**. *Recombinant Adenoviruses as Vaccine Vectors : Promises and Challenges*. Vaccine Research Center Seminar Series (NIH, Bethesda, USA). June 2003.
 12. **Franck Lemiale**. *Mucosal immunity to Adenoviral vaccines*. Vaccine Research Center Scientific Retreat (Annapolis, MD). November 2002.
 13. **Franck Lemiale**. *HIV vaccines : different routes, different responses ?* Vaccine Research Center Seminar Series (NIH, Bethesda, USA). April 2002.
 14. **Franck Lemiale**, Denys Brand, Karine Rolland, Gilles Thibault, Bernard Verrier, Yasmine Ataman-Onal, Sylvie Brunet, Francis Barin. *Antigenicity of recombinant envelope glycoproteins derived from primary isolates of HIV-1, clades A to G*. 6th European Conference on Experimental AIDS Research (Edinburgh, Scotland). June 2001.
 15. **Franck Lemiale**. *Antigénicité de glycoprotéines d'enveloppe recombinantes du VIH-1 dérivées d'isolats primaires ou de souches adaptées sur lignées T*. Forum de l'Ecole Doctorale (Tours, France). May 1999.
 16. **Franck Lemiale**. *Antigénicité de glycoprotéines d'enveloppe recombinantes du VIH-1 dérivées d'isolats primaires ou de souches adaptées sur lignées T*. Francophone meeting of Virology (Paris, France). April 1999.

Fellowships

1. **American Association for Advancement of Science** Biovision Fellowship 2003
2. Fellowship from the National Institute of Health's **Fogarty International Center** 2001, 2002, 2003.
3. French **National Agency for Research against AIDS** (Agence Nationale de Recherche sur le Sida) Fellowship 1997, 1998, 1999.
4. **Ensemble contre le Sida / Sidaction** (Paris, France) Fellowship 2000.

NIH grants

1. R44-AI541908-02 March 2004-February 2007
SBIR Phase II Grant, "HIV-1 vector mediated gene therapy for HIV-1 infection".

This grant supports development of cell processing, and examination of vector integration, and the effect on immunity.

2. U19 AI066290-01 August 2005-July 2009
Novel HIV therapies: IPCP, "Lentivirus-based immunogene therapy for HIV infection"

This grant supports two Phase I trials for evaluation of novel lentivirus-based immunotherapy for HIV infected individuals. (~\$4.6 M over the 5 years of funding).

Patents

United States patent application no. 60/691,631 filed on June 16, 2005, entitled "Antibody Complexes"

United States patent application no.61/040,581 filed on March 28, 2008, entitled "Lentivirus-based immunogenic vectors"

United States [provisional] patent application filed on August 2, 2010, entitled "HIV vaccine therapy with concomitant antiviral monotherapy"

Other experience & professional affiliations

2012-Present Member, American Society of Tropical Medicine and Hygiene

2011-2013 Member, International AIDS Society

2010-2013 Member, American Society of Gene and Cell Therapy

2008-2012 Academic Advisory, the International Society of DNA Vaccines

Dec. 2008 Chairman "New Technologies" session at the DNA Vaccines 2008 conference in Las Vegas, NV.

2005-2008 Executive Committee, Forum for Collaborative HIV Research. Washington, DC