

CURRICULUM VITAE

Nombre: Gerardo Enrique Guillen Nieto

Fecha de Nacimiento: Abril 17, 1963

Dirección: Centro de Ingeniería Genética y Biotecnología
Ave 31 e/ 158 y 190 Apdo. 6162. Cubanacan.
La Habana. Cuba.



Título: Master en Ciencias en Química, 1986, Universidad de Odessa, URSS.

Doctor en Ciencias Biológicas, 1995, Universidad de La Habana, Cuba.

Cargos:

1986-1992 Aspirante a Investigador CIGB

1992-1996 Investigador Agregado CIGB

1996-2001 Investigador Auxiliar CIGB

1986- 2010 Investigador, proyecto vacuna recombinante contra *N. meningitidis*

1992- hasta la fecha, Jefe del proyecto CIGB: Vacuna recombinante contra el dengue

1993- 2001 Jefe de la División de Vacunas CIGB

1993- 2011 Coordinador del proyecto Panhepatitis.

1998- hasta la fecha, Director de Investigaciones Biomédicas CIGB

1999- 2003 Jefe del proyecto CIGB: Vacunas conjugadas

2001- Investigador Titular CIGB

2001- 2003 Coordinador del proyecto Vacuna contra el neumococo.

POSTGRADOS

1986- Idioma Ruso. Univ. de Odessa. URSS.

1987- Biología Molecular. CIGB.

1987- Idioma Inglés. CIGB.

1987- Genética de Levaduras. CNIC.

1988- Idioma Francés. CNIC.

1989- Sistema de expresión en Baculovirus. Univ. de Helsinki. Finlandia.

1990- Sistema de expresión en Bacillo subtilis. NPHI. Finlandia.

1993- Virología. Univ. de la Habana.

1994- Hepatología. CIGB.

1995- Tecnología de la obtención de Liposomas. Univ. de la Habana.

2001- Curso Avanzado de Vacunología. Fundación Merieux. Francia.

2001- Adiestramiento en "Papel de la Alta Gerencia en las Normas de la Familia ISO 9000".
Oficina Nacional de Normalización.

2001- Curso de Inmunología en Enfermedades Infecciosas, impartido por profesores de la
Universidad de Harvard. IPK.

2003 – Curso "Nasal Drug Delivery" Management Forum LTD. Londres. Inglaterra

2004 – Protección de la información comercial y de negocios. IDICT. Cuba.

2004 – Refrescamiento Avanzado en Inmunología, Vaccinología y Biotecnología. OMS.
Cuba.

- 2004 – Herramientas para la protección de la información comercial y de negocios. Biomundi. Cuba.
- 2005 – Curso de Interpretación de la Norma ISO 9001-2000. Buro Veritas. La Habana. Septiembre.
- 2007 – Curso Formación de Personal con Base a los Cambios Regulatorios Internacionales. Terra Farma. Mayo 2007
- 2010 – Curso ISO 9000. Principios fundamentales. Interpretación de la Norma ISO 9000:2008. CIGB. La Habana. Julio.
- 2010 – Curso de Bioseguridad en áreas biomédicas. La Habana. Noviembre.
- 2011 – International Advanced Immunology Course. May 10-13. ALAI. La Habana.
- 2012 - 9th John Humphrey Advanced Immunology Course “Adaptive and Innate Immunity”: March 19-21. Fundación del Nuevo Cine Latinoamericano. La Habana.
- 2015 – Curso Pedagogía. Universidad de la Habana.

CONGRESOS CIENTIFICOS Y CARTELES

- 1985 - Characterization of the reaction product from chlorodeoxygenation of 5,6-dichloroacenaftilenequinone.
IV Conferencia Interuniversidades. Octubre 2-4. Kuibishev. URSS.
- 1987 - **Primera Teleconferencia Panamericana sobre SIDA. La Habana.**
- 1989 - Producción de columnas de afinidad con anticuerpos monoclonales para inmunopurificación de Interferon alfa-2- recombinante Humano.
- Diagnóstico del virus de la Hepatitis B por el método de hibridación de ácidos nucleicos.
I Congreso Iberoamericano de Biotecnología. Abril 17-22.
- 1989 - Empleo de sondas no radioactivas en hibridación de colonias, in situ, Southern y dot.
I Simposio Nacional de Técnicas Médicas y II Seminario Nacional de Bioingeniería. Diciembre 7-9. La Habana.
- 1990 - Desarrollo de un sistema no radioactivo para el marcaje de sondas de ADN y su empleo en técnicas de Hibridación.
-Purificación y caracterización de la Streptavidina.
Segundo Congreso Latinoamericano de Biotecnología. Agosto 7-11. La Habana. Cuba.
- 1990 -Presence of a high molecular weight protein in different strains of *Neisseriaceae*.
Seventh international Pathogenic *Neisseria* Conference. Septiembre 9-14. Berlin. RFA.
- 1990 -New approaches for rapid diagnosis of Hantavirus infections.
IV Congreso de Virología. Heidelberg. Alemania.
- 1991 -A new high molecular weight outer membrane protein present in different strains of *Neisseria meningitidis*.
Symposium Frontiers in Vaccine Research. Sept. 9-11. Espoo.Finlandia.
- 1992 -Comparison of DNA sequence of nine class 1 outer membrane protein from different strains of *N. meningitidis*.
-Cloning and expression of the class 1 major outer membrane protein of *N. meningitidis* strain B:4:P1.15 in *E.coli*.

- Enhancement of the immunogenicity of recombinant PM-6 and HBsAg by double experimental vaccines.
- Cloning and expression of a fusion protein (PM6-P1.15) from *Neisseria meningitidis* in *Escherichia coli*.
- Biotechnology Havana'92. Junio 8-12. Habana. Cuba.**
- 1992 -Enhancement of the immunogenicity of recombinant PM-6 and HBsAg by double experimental vaccines.
- Cloning and expression of a fusion protein (PM6-P1.15) from *Neisseria meningitidis* in *Escherichia coli*.
- Cloning and expression in *E.coli* of a high molecular weight protein (PM-6) from the *N.meningitidis* strain B:4:P1.15. Evaluation of the bactericidal activity of antibodies raised against the recombinant protein.
- Comparison of DNA sequence of nine class 1 outer membrane protein from different strains of *N.meningitidis*.
- Cloning and expression of the class 1 major outer membrane protein of *N. meningitidis* strain B:4:P1.15 in *E.coli*.
- Eight international pathogenic *Neisseria* conference. Octubre 4-9. Cuernavaca. Mexico.**
- 1992 -The combination of the HBsAg and PM-6 outer membrane protein of *Neisseria meningitidis* enhances both, the antibody response against the hepatitis B virus and *N. meningitidis*.
- XIII International Congress of Tropical Medicine and Infectious Diseases. Nov.29-Dic.4. Pataya. Tailandia.**
- 1992 -**Workshop on Pathogenesis of DHF.Dec.5.Bangkok.Thailand.**
- 1992 -Presence of a high molecular weight protein (PM-6) in different strains of *Neisseriaceae*. Evaluation of the immunogenicity and bactericidal activity of antibodies raised against the recombinant protein.
- International symposium on Recombinant and Synthetic Vaccines. December 7-11. Nueva Deli. India.**
- 1993 -Clonaje y expresión en *E.coli* de la proteína 5C de *N.meningitidis*
V Congreso de la sociedad cubana de Ciencias Farmacéuticas. Hospital "Frank País" 12-16 de abril.
- 1993 -Secuencia nucleotídica de los genes prM-M, E y NS1 de la cepa cubana de Dengue 2 en *E.coli*.
- Clonaje, expresión y caracterización de la proteína Tbp1 de *N.meningitidis*.
- Caracterización de genes porB de *N.meningitidis*.
- Clonaje y expresión en *E.coli* de la proteína de membrana externa 5C de *N. meningitidis*. Caracterización inmunológica.
- Obtención de mutantes de *N.meningitidis* para las proteínas de membrana externa de clase 1 y PM-6.
- I Congreso de Medicina Tropical. IV Congreso cubano de Microbiología y parasitología. Octubre 27-29. La Habana.**
- 1994 -**IV annual simposium "Vaccination and World Health". LSHM. abril 17-20. Londres. Inglaterra.**
- 1994 -The combination of the HBsAg and PM-6 outer membrane protein of *Neisseria meningitidis* enhances both, the antibody response against the hepatitis B virus and

N. meningitidis.

NATO ASI: "Vaccines: New - Generation Immunological Adjuvants". 24 de Junio al 5 de Julio. Cape Sounion Beach. Grecia.

- 1994 -Characterization of *Neisseria meningitidis* by polymerase chain reaction and restriction endonuclease digestion of M-6 gene.
-Cloning and sequencing of DnaK homologue from *Neisseria meningitidis*.
-Cloning and expression of the *opc*, the gene encoding the outer membrane protein 5C from *Neisseria meningitidis*. Purification and immunological characterization of the recombinant polypeptide.
-Construction and analysis of meningococcal mutants for the P64k antigen.
-Cloning and expression of the gene encoding the class 1 outer membrane protein from *Neisseria meningitidis*. Purification and immunological characterization of the recombinant polypeptide.
The Ninth International Pathogenic Neisseria Conference. Winchester, Inglaterra. 26-30 de Septiembre.
- 1994 **Conferencia:** Clonaje, expresion y caracterizacion de la proteina P64k de la membrana externa de la *Neisseria meningitidis*.
Se presentaron además los mismos carteles que en el Copngreso anterior.
Biotecnología Habana'94. La Habana. Cuba. 28 de nov. al 3 de diciembre.
- 1995 - **Congreso de vacunas. 22-23 de Septiembre, Franche Comte, Francia.**
- 1995 - **"Vaccines: One hundred years after Louis Pasteur". 24-28 de Septiembre. Intituto Pasteur, París. Francia.**
- 1995 - **International Symposium on Pertussis vaccine trials. 30 de Octubre al 1 de Noviembre, Roma. Italia.**
- 1995 - **Congreso Biotecnología Habana'95. CIGB, CUBA.**
- 1995 **Conferencia:** Clonaje, expresión y caracterización de la membrana externa de la proteína P64k de *Neisseria meningitidis*.
-Cloning and expression of the *porA*, the gene encoding the class 1 OMP from *N. meningitidis*. Purification and immunological chracterization of the recombinant polypeptide.
-Characterization of *N. meningitidis* by PCR and restriction endonuclease digestion of the *lpdA* gene.
-Monoclonal antibodies specific to a 64kDa protein from *N. meningitidis*.
-Cloning and expresion of the *opc*, the gene encoding the OMP 5C from *N. meningitidis*. Purification and immunological chracterization of the recombinant polypeptide.
6to.Congreso de la Sociedad Cubana de Ciencias Farmacéuticas.
- 1996 **Conferencia:** Avances en un proyecto Panhepatitis
I Jornada Científica. Avances en enfermedades infecciosas. Hosp. Juan M. Marquez 23-25 Abril.
- 1996 -Characterization of the P64k antigen of *Neisseria meningitidis*.
7th International Congress of Infectious Diseases. June 10-13, Hong-Kong.
- 1996 - Recombinant Opc reconstituted into liposomes elicits opsonic antibodies.
-Molecular analysis of *Neisseria meningitidis* class 3 outer membrane protein in the strains rcognized by the Monoclonal antibody CB-Nm.2

- Sequence analysis of the structural *tbpA* gene: protein topology and variable regions within neisserial receptors for transferrin iron acquisition.
- X International Pathogenic *Neisseria* conference. Septiembre 8-13. Baltimore. USA.**
- 1996 - Caracterización del gen *lpdA* de *N. meningitidis* por "PCR-RFLP"
XIII Congreso Latinoamericano de Microbiología. Noviembre 5-9. Caracas, Venezuela.
- 1996 - Análisis molecular de la proteína de clase 3 de la membrana externa de *Neisseria meningitidis* en las cepas reconocidas por el anticuerpo monoclonal CB-Nm.2
I Congreso cubano de Infectología. ORTOP 20-22 Nov.
- 1996 - Análisis molecular de la proteína de clase 3 de la membrana externa de *Neisseria meningitidis* en las cepas reconocidas por el anticuerpo monoclonal CB-Nm.2
I Jornada Nacional de Inmunología. I. Finlay-CIGB 6-7 Dic
- 1997 - Actividad inmunopotenciadora del extracto acuoso total de *Aloe barbadensis* Miller y fracciones del mismo.
 - Obtención y caracterización de clones de *P. pastoris* transformados con el plasmidio que contiene la información genética que codifica para la E truncada del virus Dengue serotipo 2.
 - Efecto inmunopotenciador del *Aloe barbadensis* Miller en preparados vacunales con el HBsAg en ratones Balb/C.
 - Efecto del Algammulin como ayuvante del HBsAg.
 - Immunization of mice with DNA encoding the E protein from D2 virus.
- V Congreso Latinoamericano de Medicina Tropical. IPK 3-7 Marzo**
- 1997 - **I Taller nacional de Hepatitis Virales**
- 1997 **Conferencia:** Use of the P64k protein as a carrier for vaccine formulations
Comparison of P64k and tetanus toxoid as a carrier of a DEN-2 M protein synthetic peptide.
 - Immune response against the capsular polysaccharide of *Neisseria meningitidis* serogroup C conjugated to the P64k protein.
 - Enhanced immunogenicity of human EGF displayed in a fusion protein made in *E. coli*.
 - Induction of immune recognition of self-EGF: characterization of the antibody response and use of a fusion protein.
 - Cloning and expression of the gene coding for the NspA protein of *N. meningitidis*.
 - High level expression of the recombinant class 1 protein from *N. meningitidis* produced in *E. coli*, and refolding into phospholipid vesicle and detergent.
 - Evaluación del efecto inmunopotenciador de un extracto acuoso de *Aloe vera* Linne, usando como modelo el antígeno de superficie del virus de la hepatitis B.
 - Immunoblotting of specific antibodies against recombinant OMP from *N. meningitidis* in Antimeningococcal human immunoglobulin.
 - Evaluación del efecto inmunoestimulante de un extracto natural de *Aloe vera* Linne.
 - A novel Vaccine Composed by human recombinant EGF linked to a carrier protein: Report of Pilot Clinical trial.
- Congreso Biotecnología Habana'97. CIGB 2-6 de Diciembre**
- 1998 - **Cuban-Canadian Workshop on Cancer Immunotherapy. CIM. Havana, February 17-19.**

- 1998 **Conferencia:** New DNA recombinant Vaccines
International Workshop on Vaccine Development and production. Rio de Janeiro, Brazil, April 14-16.
- 1998 - **Immunotherapy in the nineties III. CIM, Havana, April 20-24.**
- 1998 - **3rd Latin-American Meeting on Plant Biotechnology. REDBIO'98. Havana, Cuba, June 2-5.**
- 1998 **Conferencia:** Recombinant Vaccines.
-Estudio de preformulación de un candidato vacunal de P64k contra *Neisseria meningitidis*
-Estudio de estabilidad de una vacuna combinada de Difteria, tetanos, pertussis y Hepatitis B (DPT-H)
VII Congreso de la Sociedad Cubana de Ciencias Farmaceuticas. Havana, October 26-30.
- 1998 - **Congreso Biotecnología Habana'98. CIGB 1-6 de Diciembre**
- 1999 - **III Simposio Nacional de Hepatitis Virales, CIGB, Habana, Cuba, Marzo 29-31.**
- 1999 - **I Encuentro de Expertos Cubano-Venezolano. Actualización en Alergia, Infectología, Pediatría y Neumología. Hotel Nacional, Habana, Cuba, Mayo 6-9.**
- 1999 - **III Taller Nacional de Biotecnología Sancti Spiritus' 99. Cuba, Mayo 12-14.**
- 1999 - **Taller Nacional de Biotecnología X Aniversario CIGB de Camaguey' 99. Cuba, Junio.**
- 1999 - **Conferencia:** Modificación genética de microorganismos.
Taller Nacional Organismos Modificados Geneticamente. CIGB 6-9 de Julio.
- 1999 - **Conferencia:** Use of P64k as a vaccine in vaccine formulations.
IX International Congress of Bacteriology and applied Microbiology. Agosto 15-20, Sydney, Australia
- 1999- Development of peptide vaccine against dengue virus.
XI International Congress of Virology, Agosto 9-13, Sydney, Australia.
- 1999 - **Seminario Iberoamericano de Propiedad Industrial y Transferencia Biotecnológica. CIGB 8-10 de Septiembre.**
- 1999 - Expresión de la proteína de la emboltura (E) truncada del virus del Dengue serotipo 4 en *Pichia pastoris*.
-Humoral and Protective Response in Mice to Synthetic Peptides of dengue virus PrM Protein.
-Evaluation of the immune response against the capsular polysaccharide of *Neisseria meningitidis* serogrope C conjugated to P64k protein.
-Purification of the recombinant NspA protein of *Neisseria meningitidis*.
-Characterization of the humoral immune response of human volunteers immunized with two and three doses of VA-MENGOC-BC.
-Effect of different immunization routes on the serum IgG response to Hepatitis B surface antigen – Acemannan formulation.
-Effect of Acemannan on the serum IgG response to different antigens after nasal administration.
-Intranasal immunization using HBsAg Acemannan formulations: Kinetics and duration of serum IgG responses.
-Intranasal immunization using HBsAg Acemannan formulations.

- Estudio de seroprevalencia de títulos de anticuerpos contra el Virus de la Hepatitis B en niños de 1 a 5 años.
 - Efecto de los adyuvantes de Freund y alumina en ratones inmunizados con la proteína de la envoltura recombinante del virus dengue 4.
 - Immunological evaluation of the recombinant envelope protein from dengue 4 virus.
 - EGF based active immunotherapy for the treatment of tumors from epithelial origin against cancer.
 - Empleo de leucocitos de animales vírgenes a los antígenos de empleo habitual en la técnica de inhibición de la migración leucocitaria.
- Congreso Biotecnología Habana'99. CIGB Noviembre 28 al 2 de Diciembre**
- 2000 - **I Taller Nacional sobre Mediadores de la Inflamación. CQF Febrero 24-25.**
- 2000 - **9 International Congress of Infectious Diseases. Buenos Aires. Abril 10-13.**
- 2000 - **“Standardization and control of protein-based vaccines against serogroup B meningococcal disease”. Petropolis. Brazil. Mayo 11-12.**
- 2000 - Unprocessed recombinant dengue 4 virus truncated E glycoprotein expressed in *Pichia pastoris* confers partial protection against virus challenge.
- Human sera from Cuban individuals react with dengue 4 truncated E glycoprotein expressed in *Pichia pastoris*.
 - Cloning and expression of truncated dengue 4 virus enveloped protein in *Pichia pastoris*. Comparison of two steps of affinity chromatography in the purification process of a recombinant envelope protein from dengue 4 virus.
- CONFERENCE:** Neutralizing epitopes in prM protein as a vaccine candidates against dengue virus.
- “The First International Conference on Dengue and Dengue Haemorrhagic Fever. 20-24 November. Chiang Mai, Thailand”**
- 2000 - Reunión anual del Comité de Expertos de la OMS de vacunas de Dengue y Encefalitis Japonesa 19 de Noviembre. **Chiang Mai, Thailand**
- 2001 - **Taller Pugwash No.259. Investigaciones Médicas y Biotecnológicas en Cuba: Fortalecimiento de la Cooperación Internacional. Hotel Nacional. La Habana. Febrero 15-18.**
- 2001 - Effect of conjugation methodology p64K recombinant protein on the immune response to N. meningitidis serogroup capsular polysaccharide. L. Canán; L. Rodés; T. Carmenate; A. Alvarez; M. Delgado; G. Guillén.
- Comparison of the immune response in mice against meningococcal group C polysaccharides conjugate to three carrier proteins. A. Alvarez; L. Canán; T. Menéndez; T. Carmenate; D. Delgado; L. Rodés; G. Guillén
 - Influence of the conjugation condition method on the antibody response against polysaccharide conjugates. T. Carmenate; L. Canán; A. Alvarez; M. Delgado; T. Menéndez; L. Rodés; G. Guillén
- IV Congreso Internacional de Química, Abril 16-21, 2001 en el Palacio de las Convenciones.**
- 2001 - Combined formulation of Hepatitis B Virus antigens as a nasal vaccine candidate. Aguilar JC, Lobaina Y, Muzio V, Pentón E, Urquiza D, Pichardo D, Guillén G.
- Nasal monovalent vaccine formulation of HBsAg against Hepatitis B Virus infection. Aguilar J, Lobaina Y, Muzio V, Pentón E, UrquizaD, Pichardo D, Guillén G

International Mucosal Immunity Congress. Island, June 28-30 (Participant: Julio C. Aguilar)

- 2001 - Characterization of P64k as a carrier protein. S Gonzalez, R. Silva, A Alvarez, G Guillen, E Caballero, A Perez, Z Cinza, A Ruiz, F Dickinson, C Nazabal, KVS Rao, G Sardinias, T Serrano, J Sosa, D Guzmán, O Gutierrez.
- Comparison of the immune response in mice against meningococcal group C polysaccharide conjugate to three carrier proteins. Alvarez A, Canaan L, Carmenate T, Menendez T, Delgado D, Rodes L, Guillén G.
 - Immunization with a peptide séquence derived from Neisseria meningitidis using different vaccine formulations. Menendez T, Cruz Y, Coizeau E, Garay H, Carmenate T, Alvarez A, Guillén G.
 - Effect of conjugation methodology on the immunogenicity and protectibve efficacy of meningococcal group C polysaccharide-P64k protein conjugates. Carmenate T, Canaan L, Alvarez A, Delgado D, Gonzalez S, Menendez T, Rodes L, Guillén G.
 - Combined formulation of Hepatitis B Virus antigens as a nasal vaccine candidate. Aguilar JC, Lobaina Y, Pichardo D, Sanchez J, Garcia D, Iglesias E, Aleman R, Urquiza D, Penton E, Falcon V, De la Rosa MC, Alvarez F, Muzio V, Guillen G.
 - Effect of acemannan and calcium salts on the immune response against different antigens. Perz A, Aguilar JC, Herrera AM, Urquiza D, Muzio V, Penton E, Leal MJ, Guillen G.
 - Nasal monovalent vaccine formulation of HBsAg against Hepatitis B Virus infection. Muzio V, Aguilar JC, Crombet L, Leal MJ, Constante Y, Iglesias E, Lobaina Y, Pichardo D, Penton E, Urquiza D, Guillen G.
 - Mucosal immunogenicity of HBcAg, a carrier protein. Lobaina Y, Aguilar JC, Cruz LJ, Abreu N, Urquiza D, Cabrales A, Muzio V, Guillen G.
 - Algammulin as adjuvant of the HBsAg IN Balb/c mice. Z Cinza, MJ Gonzalez Griego, A Ortega, G Guillen, G Garcia, M Echevarria.
 - Evaluation of the recombinant envelope protein from dengue-4 virus formulated in two different adjuvants. L Hermida, R Rodriguez, C Lopez, L Lazo, G Marquez, J Garcia, R Espinosa, R Paez, MG Guzman, G Guillen.
- 1st International and 2nd National Workshop on Vaccine Adjuvants. Havana. December 5-8.**
- 2001 - **V Simposio Nacional sobre Hepatitis Virales. CIGB 8-11 Mayo.**
- 2001 - **Second Global Vaccine Research Forum Global Alliance for Vaccine Immunization. Montreux, Suiza, Junio 12-14.**
- 2001 - **Meeting: Accelerating the development and introduction of a dengue vaccine for poor children. Ciudad Ho Chi Minh, Vietnam, 5-9 de Diciembre.**
- 2002 - **10th International Congress on Infectious Diseases. Singapore, March 11-14.**
- 2002 - **WHO Conference on Biotechnology and Genomics for improvement of health in developing countries, La Habana, March 25-27.**
- 2002 - **Therapeutic Vaccine Congress. London, June 27-29.**
- 2002 - **Taller Nacional de Cancer. CIGB, La Habana. Julio 11.**
- 2002 **Conferencia:** Immunologic evaluation of a DPT-Hepatitis B vaccine formulation for nasal administration. JC Aguilar, R Aleman, Y Lobaina, JC Alvarez, E Iglesias, D Garcia, V Muzio, E Hardy, E Penton, D Urquiza, N Exposito, G.Guillen.

- Conferencia: Combined formulation of hepatitis b virus antigens as a nasal therapeutic vaccine candidate. Aguilar JC, Lobaina Y, Muzio V, Pentón E, Urquiza D, Pichardo D, Guillén G.
- Increased immunogenicity and cross-reactivity induced by conjugation of v3 based multiple antigen peptides to carrier proteins. E Iglesias, JC Aguilar, O Reyes and G. Guillén.
- Dengue 4 virus envelope glycoprotein expressed in *Pichia pastoris* induces neutralizing antibodies and provides partial protection from viral challenge in macaques/fascicularis.
- Immune response to synthetic peptides of dengue virus preM protein

XII International Congress of Virology and X International Congress of Bacteriology. Paris, July 27- August 1.

2002 - **World Vaccine Congress. Lyon. -0 Sept – 2 Oct.**

2002 - **Biotecnología Habana 2002. La Agrobiotecnología en el nuevo milenio/Agro-Biotech in the New Millennium. La Habana. 24-29 de Noviembre.**

2002 - **Conference on Vaccines, Prevention and Public Health: A Vision for the Future. Washington. 25-27 November.**

2002- **Conferencia:** Immunologic evaluation of a DPT-Hepatitis B and DPT-Hepatitis B-Haemophilus influenzae vaccine formulations for nasal administration. JC Aguilar, R Aleman, Y Lobaina, JC Alvarez, E Iglesias, D Garcia, V Muzio, E Hardy, E Penton, D Urquiza, N Exposito, **G.Guillen.**

- Effect of acemannan and calcium salts on the immune response against different antigens. A Perez, JC Aguilar, AM Herrera, D Urquiza, V Muzio, E Penton, JM Leal, G Guillen.

- Influence of different adjuvants in the immunological response against dengue 2 virus with a fusion protein. C Lopez, R Rodriguez, L Hermida, L Bernardo, J Martin, I Guerra, L Lazo, A Zulueta, G Guillen, G Guzman.

- Immunologic evaluation of a DPT-Hepatitis B vaccine formulation for nasal administration. JC Aguilar, R Aleman, Y Lobaina, JC Alvarez, E Iglesias, D Garcia, V Muzio, E Hardy, E Penton, D Urquiza, N Exposito, G.Guillen.

- IgG but not IgM from dengue 2 immune human sera reacts with dengue 4 truncated E Glycoprotein expressed in *Pichia pastoris*. R Rodriguez, M Mune, S Vazquez, G Marquez, L Hermida, B Sierra, G Guillen, MG Guzman.

- Evaluation of mice sera immunized with synthetic peptides of dengue 2 virus using antibody dependent cellular cytotoxicity assay. MC Montalvo, AB Perez, G Garcia, S Vazquez, MC Arango, G China, O Reyes, G Guillen, MG Guzman.

- Immunological evaluation of two different constructs of dengue 1-P64k chimeric proteins. L Hermida, R Rodriguez, L Lazo, L Bernardo, R Silva, A Zulueta, C Lopez, J Martin, I Valdes, D Rosario, G China, MG Guzman, G Guillen.

- Characterization and immunological evaluation of two variants of the envelope dengue 2 protein. L Lazo, L Hermida, R Rodriguez, A Zulueta, C Lopez, R Silva, G China, J Martin, MG Guzman, G Guillen.

- The recombinant den 2 envelope B domain elicits a strong serotype specific lymphoproliferative response in mice. B Sierra, R Rodriguez, L Lazo, L Hermida, G Guillen, MG Guzman.

- A DNA Vaccine or recombinant proteins but not HCV inoculums induced both cellular and humoral immune responses in macaca irus. A Viña, S Dueñas, R Martinez, JC Alvarez, J Marante, B Gras, I Gonzalez, L Alvarez, G Martinez, EG Rodriguez, G Guillen, K Cosme, J Morales.
- Selection of phage-displayed mimotope of Neisseria meningitidis serogroup B capsular polysaccharide. T Menendez, Y Cruz, E Coizeau, H Garay, T Carmenate, A Alvarez, G Guillen.
- Comparison of the immune response in mice against meningococcal group C polysaccharides conjugate to three carrier proteins. A Alvarez, L Canaan, T Carmenate, T menendez, D Delgado, L Rodes, R Silva, G Guillen.
- Memory response generated in African Green Monkeys against polysaccharide C conjugate. Carmenate T, M Guirola, A Alvarez, ECaballero, S Gonzalez, T Menendez, L Canaan, G Guillen.

VI Congreso Latinoamericano de Inmunología. III Congreso Cubano de Inmunología. La Habana. 9-13 de Diciembre.

- 2002- -Characterization of recombinant P64k as a carrier protein.
 -Memory response generated in AGM against PS-conjugated.
 -Assessment of consistency and process reproducibility of the Cuban vaccine VA-MENGOC-BC by SDS PAGE and mass-spectrophotometry.
 -Intranasal immunization with meningococcal OMP induce a protective immune response in mice.
 -Selection of phage displayed mimotope of *N. meningitides serogroup B* capsular polysaccharide.

XIII International Neisseria Vaccine Congress. Oslo. Noruega. 1-6 Septiembre.

- 2002- **Centennial Vaccine Congress. PAHO. Washigton. 5-7 de Diciembre.**

- 2003- Conferencia: La Biotecnología en Cuba.

Taller Cuba Alemania. Sttugart. Alemania. 26 de Marzo.

- 2003- **Congreso "The Future of Vaccines". Semmering. Austria. 10-13 de Abril.**

- 2003- **Genomic and Diagnostic Meeting. Brixnton, Cambridge. Inglaterra. 6-8 de Octubre.**

- 2003- **Conferencia:** Overview of Development of Immunopotentiators and Adjuvants at CIGB.

- Amino acid changes in the recombinant DEN3 enveloped domaine III that increases the immunogenicity in mice.
- Recombinant fusion proteins P64k-domaine III from dengue E protein elicit a long lasting immune response in BalbC mice.
- Cloning, expression, characterization and immunological evaluation of truncated enveloped protein from dengue virus expressed in *Pichia pastoris* yeast.
- Immunological evaluation of DRP-HB vaccine formulation for nasal administration.
- T cell priming by recombinant proteins P64k-domaine III from dengue E protein.
- Seguridad y res´puesta immune de la vacuna DPT-HB (Trivac HB).
- Immunoenhancing and immunomodulatory effect of HBcAg on co-delivered protein antigens.
- Application of genomics and proteomics for identification of bacterial gene products as potential vaccine candidates.

Congreso Biotecnología Habana 2003. La Habana. 23-28 de Noviembre.

- 2003- Ponente en Mesa redonda: problemas en la divulgación de la Ciencia
Taller de Divulgación de la Ciencia. Instituto Superior de Ciencias y tecnologías nucleares. La Habana. 19 de Noviembre.
- 2004- **Conferencia:** Biomedical Research at CIGB.
Conferencia chino-cubana de Biotecnología biomédica. Beijing. China. 3-5 de Febrero.
- 2004- **IV Taller Nacional sobre Inflamación. Sociedad cubana de Farmacología. CQF. La Habana. 26 y 27 de Febrero.**
- 2004- **Simposio Internacional Hepatología 2004. CIMEQ. La Habana. 10-12 de Marzo.**
- 2004- **Conferencia:** Particulated antigens as adjuvant formulations against hepatitis B.
Adjuvant 2004. Hotel Club Amigo. Varadero. Cuba. 11-15 de Abril.
- 2004- **Global Vaccine Research Forum. Royal Plaza Hotel. Montreux. Suiza. 7-10 de Junio.**
- 2004- **International Congress on Dengue and Yellow Fever. Palacio de las Convenciones. La Habana. Agosto.**
- 2004- **Genomic and Diagnostics Meeting. The Wellcome Trust. Cambridge. Inglaterra.**
- 2004- **Taller de Ganmaglobulina. CIGB. La Habana. 21 al 23 de Septiembre.**
- 2004- **Conferencia:** Situación del desarrollo de Vacunas en Cuba.
5to Congreso Nacional de Patología Clínica. CIGB. 25 de Septiembre.
- 2004- **I Forum Tecnológico Especial de la Ciencia de los Animales de Laboratorio. CENPALAB. Bejucal. Cuba. 7 al 9 de Octubre.**
- 2004- **Conferencia:** Development of vaccines in the Center for Genetic Engineering and Biotechnology.
II International Symposium on Biochemistry and Molecular Biology. Palacio de las Convenciones. La Habana. 19 de Octubre.
- 2004- **IV Jornada Nacional de Genética Médica. Anfiteatro ISCM Victoria de Girón. 1 al 4 de Diciembre.**
- 2004- **Ministerial Summit on Health Research. Sheraton Maria Isabel. Mexico D.F. 16-18 de Noviembre.**
- 2004- **5th Internacional Fructan Symposium. CIGB. La Habana. 5 –9 de Diciembre.**
- 2004- **Reunión anual de la Comisión y la Sociedad cubana Cerebrovascular. Camara de Representantes del Museo Palacio de Gobierno de La Habana. 10 de Diciembre.**
- 2005- **1er Seminario Internacional Sobre Diseño y Desarrollo de los Parques Tecnológicos y Científicos. Hotel Palco. La Habana. 4-6 de Abril.**
- 2005- **Conferencia:** CIGB Profile on therapeutic vaccines against hepatitis B and C.
Immunotherapy in Viral Hepatitis B and C / Vacunas terapéuticas contra la Hepatitis B y C. Varadero. 27-29 de Abril.

2005- **Internacional Workshop on TB vaccines 2005. Varadero. 8-12 de Mayo.**

2005- **Conferencia:** Hepatitis B formulations for therapeutic use.

- Immunological Characterization of the recombinant domain III from two Dengue 3 virus strains.
- Respuesta de anticuerpos y protección en ratones Balb/c inmunizados con una formulación vacunal tetravalente de subunidades proteicas recombinantes de dengue.
- Characterization and immunological evaluation of a truncated envelope protein from dengue 2 virus expressed in pichia pastoris yeast.
- Two variants of DEN-1-P64k chimeric proteins induce a functional immune response in mice.
- P64K is required for inducing a functional immune response in mice immunized with dengue fusion proteins.
- Envelope protein domain III of Dengue 2 can bind to the Microsomal Fraction of CHO cells.
- Evaluación de la proteína recombinante de fusión expresada en *E. coli* que contiene al Dom III de la proteína de la envoltura del virus dengue 1 en primates no humanos empleando Freund e hidróxido de Aluminio como adyuvantes.

14th International Scientific Congress CNIC 2005. Palacio de las Convenciones. La Habana. 27 -30 de Junio.

2005-**Taller de Bioinformática. Estrategia de impacto en la Biotecnología y las tecnologías de información en Cuba. La Habana. CIM. 7 de Septiembre.**

2005- CD8+ memory cells play a crucial role in the defense of mice against intracerebral challenge with homologous dengue virus.

- Characterization of four recombinant fusion proteins formed by P64k and an envelope fragment from dengue viruses 1, 2, 3 and 4
- Does a purification procedure determine the immunogenicity of a recombinant dengue E fragment fused to the P64k protein?
- Cloning, characterization and immunological evaluation of a truncated envelope protein from dengue virus expressed in Pichia pastoris yeast

2nd Asian Regional Dengue Research Network Meeting. Singapore. 28-30 September.

2005- **Conferencia:** Development of Cuban Biotechnology.

2nd International Workshop on Genomic Research. Varadero. 8-11 Noviembre.

2005- **Congreso Biotecnología Habana 2005. CIGB. La Habana. 27-2 Diciembre.**

2006- **Hepatología 2006. CIMEQ. La Habana. 15 – 17 Marzo.**

2006- **5th International Symposium on Pneumococci and Pneumococcal Diseases (ISPPD5). Alice Springs, Australia. 2-6 April.**

2006- **Cancer Immunotherapy Workshop. 15 Abril. NCI Cancer Hospital. Kuala Lumpur. Malasia.**

- 2006- **Taller OPS. Investigación y Desarrollo de Nuevas Vacunas. La Habana. Hotel palco 1 – 2 Agosto.**
- 2006- **3rd Internacional Workshop on Genomic Research. Varadero. Hotel Varadero 1920 4-11 Noviembre.**
- 2006- **Conferencia:** Are mice and Monkeys actual models for dengue vaccine candidates?
Congreso Biotecnología Habana 2006. Palacio de las Convenciones. La Habana. 13-16 Noviembre.
- 2006- **Congreso Worl's AIDS Day China 2006. Tianjin, China, 1-3 Diciembre.**
- 2007- **XVI Forum Nacional de Ciencia y Técnica. Jurado, La Habana 23-25 de Enero.**
- 2007- Identification and immunological evaluation of molecular mimetics of capsular polysaccharides from *N. meningitides*.
 - OMV from *N. meningitides* as an adjuvant for dengue chimeric proteins.
Congreso Neisseria Vaccines 2007. Varadero, Cuba, 15-20 Abril.
- 2007- **Congreso Angiocaribe 2007. Palacio de las Convenciones, La Habana, Cuba, 23-27 Abril.**
- 2007- **Evento Patología Gastroenterohepática y Helicobacter, CIMEQ, La Habana, Cuba, 17-19 Mayo.**
- 2007- A novel anti-HIV Vaccine Strategy Based on the Adjuvant Effect of HBsAg and HBcAg on Cellular Immunity and Cross-reactive Antibody Response.
1st Internacional Symposium on Genetic and Immune Correlatos of HIV Infection and Vaccine-Induced Immunity
- 2007- **Simposium Dengue. IPK, La Habana, Cuba, 9-14 Agosto.**
- 2007- Amino acid changes in the recombinant Dengue 3 Envelope domain III determine its antigenicity and immunogenicity in mice.
 - A recombinant fusion protein containing the domain III of the dengue-2 envelope protein is immunogenic and protective in nonhuman primates.
 - A recombinant capsid protein from Dengue-2 induces protection in mice against homologous virus.
 - American Green Monkeys as a model for Dengue-2 virus infection
Third Asian Regional Dengue Research Network Meeting, Taiwan, 22-24 Agosto.
- 2007- **II Jornada Territorial de Reumatología Dr. Manuel Lombas García. Servicio Nacional de Reumatología. Hotel Las Praderas. 1-2 de Noviembre.**
- 2007- Conferencia: Desarrollo de nuevas vacunas en el CIGB.
Congreso de Higiene y Epidemiología. Palacio de las Convenciones. La Habana 9 de Noviembre.
- 2007- Conferencia: Desarrollo de nuevos productos Biomédicos en el CIGB.
Congreso Biotecnología Habana, CIGB, Hotel Melia Habana, La Habana, 5-9 de Noviembre.
- 2007- Conferencia: Las investigaciones Biomédicas en el CIGB.

- Congreso MPSA. Proteomics in Cancer and Infectious Diseases, Varadero, 10-13 de Noviembre.**
- 2007- **Taller Científico Conmemorativo de la ACC con motivo del X Aniversario del Hallazgo e Identificación del Comandante Ernesto Che Guevara y su Destacamento de Refuerzo.**
- 2007- Conferencia: Development of Biopharmaceutical at the Center for Genetic Engineering and Biotechnology.
Congreso Pharmacology Havana 2007, Hotel Nacional, 11-14 de Diciembre.
- 2008- Conferencia: Programa Nacional de Ciencia y técnica en Vacunas.
Taller GEPROT. Acuario Nacional, 31 de Enero.
- 2008- **Hepatología 2008. CIMEQ, 19-21 de Marzo.**
- 2008- Conferencia: Cuban Biotechnology and the Center for Genetic Engineering and Biotechnology: Developing a new industry in a developing country.
II International Symposium on Immunotherapy in Viral Hepatitis B and C. Hotel Club Amigos. Varadero. 30 de Abril – 3 de Mayo.
- 2008- **Dengue Vaccine Meeting. Belem. Brasil. 23-25 Abril.**
- 2008- **Taller Nacional sobre Cáncer. CIGB. La Habana. 30 y 31 de Mayo.**
- 2008- Phase IV with Cuban pentavalent vaccine.
13th International Congress on Infectious Diseases. Kuala Lumpur, Malaysia, 19-22 Junio.
- 2008- Improved immunogenicity of a group B OMV based vaccine after the incorporation of a recombinant antigens.
Sequence and antigenic characterization of peptides mimetics of capsular polysaccharide from Neisseria meningitides serogroup B.
Epitope mapping of anti-human transferrin monoclonal antibodies: potential uses for transferrin-transferrin receptor interaction studies in bacteria and humans.
16 International Pathogenic Neisseria Conference. Rotterdam, Holland, 7-12 September.
- 2008- **2do Seminario Internacional de nanociencias y Nanotecnologías. La Habana, 14-17 de Noviembre.**
- 2008- **Congreso Biotecnología Habana 2008. Agrobiotecnología 1-5 Diciembre.**
- 2009- Conferencia: The Cuban approach towards nanobiotechnology: a new step on scientific development of the Country.
Conferencia: Virus Like Particles as a vaccine antigens and immunopotenciators.
V Congreso Internacional de Moscú: Biotecnología situación y perspectivas de desarrollo. Moscow, 16-20 de Marzo.
- 2009- **Hupo 3rd Human Proteome Project Workshop. Moscow, March 20-21**
- 2009- Panel: The tech transfer gap – what challenges remain and how do we address them?
i-Techpartner. Healthcare Biotech. Rome, March 30-31
- 2009- Conferencia: Vaccine candidates against Neisseria meningitides identified at the Center for Genetic Engineering and Biotechnology
Neisseria Vaccines 2009. Varadero 17-22 de Mayo.
- 2009- Increased immunogenicity and cross-reactivity induced by conjugation of V3 based Multiple Antigen Peptides to carrier proteins

- 5th IAS Conference on HIV Pathogenesis, Treatment and Prevention. Cape Town 19-22 de Julio.**
- 2009- Conferencia: Virus Like Particles as a vaccine antigens and immunopotenciators. T-cells Immune Regulation in Multiple Sclerosis. Effect of C-Phycocyanin and its combination with alfa Interferon
Congreso Biotecnología Habana 2009, Palacio de las Convenciones, La Habana 2-5 de Noviembre.
- 2009- Conferencia: Research activities and scientific collaboration at the Center for Genetic Engineering and Biotechnology.
Congreso Biotecnología Habana 2009, Sattelite Workshop Palace O´Farrill, La Habana 6-7 de Noviembre.
- 2009- Conferencia: Virus Like Particles based vaccine.
Global Vaccine Research Forum. La Amitie Hotal, Bamako, Mali. 6-9 de Diciembre.
- 2010- Conferencia: Vaccines based on Virus Like Particles.
 Conferencia: Impac of Cuban pentavalent vaccine.
4th World Vaccine Congress Asia 2010. Hyat Hotel. Singapur. 9-11 de Junio.
- 2010- Conferencia: Vaccines based on nanoparticles.
3er Seminario Internacional de Nanociencias y Nanotecnologías. La Habana Junio.
- 2010- **Congreso Biotecnología Habana 2010, Palacio de las Convenciones, La Habana 20-22 de Octubre.**
- 2010- **Immunotherapy 2010. Rupture and Restauration of Self Tolerance, Hotel Riviera, La Habana 15-19 de Noviembre.**
- 2010- **4th International Congress of Pharmacology and Therapeutic, Hotel Melia Habana, La Habana 13-16 de Diciembre.**
- 2011- Conferencia: Biomedical Research at CIGB: Products and Projects Pipeline.
III International Coference of Oxidative Stress. Havana Redox 2011, La Habana 27-29 de Enero.
- 2011- Conferencia: Therapeutic Hepatitis B vaccine – Heberprovac.
5th Annual World Vaccine Congress Asia 2011. Hyat Hotel. Singapur. 21-24 de Junio.
- 2011- Conferencia: Development of Therapeutic vaccines against Hepatitis B vaccine.
Global Vaccine Research Forum. Congress Palace, Geneva. 26-29 de Junio.
- 2011- Panelist at **Workshop on enhancing Global Workforce Vaccine Manufacturing (WEGWVM) Crystal Tower Hotel, Cape Town, 30-2 de Diciembre.**
- 2012- Conferencia: Vaccines against dengue based on recombinant proteins.
 Conferencia: Virus Like Particle based adjuvants.
 Conferencia: Clinical experience with NASVAC.
 Evaluation of VSSP to increase the immune response to GnRH in rats immunized with peptide GnRHm1-TT.
 Analysis of cell proliferation and gene expression profile in different tumor cell lines treated with EGF.
 Effect of Human Epidermal Growth factor on the tumor cell line A431: in vivo analysis of tumor growth inhibition and gene expression.

Novel peptide selected from an Ala-scanning regulates the oncogenic activity of NFkB in cancer cells.

Clinical evaluation of a gonadotrophin based vaccine formulation in prostate cancer patients.

Bases for the quantitative study of the evolution of foot lesions by Magnetic Resonance Imaging.

Administration of CIGB-500 in healthy volunteers. Phase I study of up scaling dosages.

Levels of soluble IL-15, IL-6, TNF α and IL-15R α in synovial fluid and membrane bound IL-15 on synovial cells from patients with rheumatoid arthritis and osteoarthritis.

Low cost Real Time PCR system to quantify VHB-DNA from human serum.

Obtaining and antigenic characterization of potential dengue vaccine candidates based in capsid and domain III envelope proteins of the four serotypes of dengue virus.

The purified and highly aggregated chimeric protein DIIC-2 induces a functional immune response in mice.

Identification and evaluation of IL-15 antagonist peptide that prevents arthritis in two animal models.

Development of an anti-IL-15 vaccine.

Gene expression profile of brain cells in response to C-Phycocyanin treatment in the experimental autoimmune encephalomyelitis model.

Congreso Biotecnología Habana 2012, Palacio de las Convenciones, La Habana, 5-8 de Marzo.

2012- **9th John Hunphrey Advance Immunology Course “Adaptative and Innate Immunity”, La Habana, 19-21 de Marzo.**

2012- Conferencia: Development of vaccines based on VLPs.

Humboldt Kolleg 2012 “Challenges and Frontiers of Physics and Chemistry to Modern Biology”. La Habana, 18-22 de Marzo.

2012- Conferencia: Developing a synthetic polysaccharide, genetically modified and VLP vaccines in collaboration with Asian pharmas.

World Vaccine Congress Asia 2012. Singapur, 12-13 de Junio.

2012- **Nano 4. International Seminar on Nanosciences and nanotechnologies. Palacio de las Convenciones, La Habana, 17-21 de Septiembre**

2012- Conference: Therapeutic vaccines in HBV.

3rd APASL Single Topic Conference on hepatitis B, Dhaka, Bangladesh October 6-7

2012- Conference: Nanovaccines: Virus Like Particles and Nucleoparticles as a vaccine candidates

The 6th International Workshop on Advanced Materials Science IWAMSN 2012, Halong-Vietnam, 30 Oct 2 Nov 2012

2012- Conference: Cuban Biotechnology.

Bioinformatics 2012, December 8-11.

2012- **Adjuvant 2012, Varadero, May 6-11.**

2012- **Heberport P 2012, Varadero, Diciembre 12-15.**

2013- **Technical Consultation on STI vaccine development and introduction**

- WHO/Geneva: 24-26 April.**
- 2013- Conference: Cuban Biotechnology.
Bioinformatics, June 5-7, Hotel Cayo Santa Maria, Cuba.
- 2013- Conference: Development of drug peptides and peptide bases vaccines.
Simposio Internacional de Quimica, June 4-7, Hotel Cayo Santa Maria, Cuba.
- 2013- **DCVN meeting 2013, October 7-8, Intercontinental Weslake Hotel, Hanoi, Vietnam.**
- 2013- Conference: Development of therapeutic hepatitis B vaccine: NASVAC.
LATINFARMA, Octubre 21-25, Palacio de las Convenciones, La Habana, Cuba.
- 2014- Conference: Biotechnology and Hepatitis B research at CIGB.
I Symposium on Viral Hepatitis, April 29-May 2. Memories Varadero, Cuba.
- 2014- Conference: Cuban Biotechnology.
IV International Conference of Oxidative Stress. CUBA-REDOX 201, May 13-15. Melia Habana, Cuba.
- 2014- **Viral Hepatitis Congress, Octubre 9-11, Sheraton Frankfurt Airport Hotel & Conference Center, Frankfurt, Germany.**
- 2014- **Technical Meeting with Specialists and Health Administrators for the Prevention and Management of Ebola Epidemic, Octubre 29-30, Palacio de las Convenciones, La Habana, Cuba.**
- 2014- Conference: Biomedical Research at CIGB.
OMICs 2014, Octubre 28-31. Memories Varadero, Cuba.
- 2014- **Immunoherapy 2014, November 10-14, Hotel Nacional de Cuba, La Habana, Cuba.**
- 2014- **Heberprot P 2014. Controlando la Diabetes y sus complicaciones más severas. Diciembre 10-12, Hotel Melia Marina, Varadero, Cuba.**
- 2015- **APASL, Asian Pacific Association for the Study of the Liver. March 12-15, Istanbul, Turkey.**
- 2015- Conference: Cuban Biotechnology and CIGB
International Symposiums on Neuroprotection and Peptide Synthesis. April 8-10, Hotel Melia Marina, Varadero, Cuba.
- 2015- **V International Meeting CIMAvox-EGF. May 12-13, Palacio de las Convenciones, Havana, Cuba.**
- 2015- Conference: Virus Like Particles and nucleoparticles as Vaccine Candidates
Immunopharmacology – Vaccipharma 2015, Melia Marina Varadero, June 14-19, Matanzas, Cuba.
- 2015- Conference: nanotechnology projects at the center for GeneticEngineering and Biotechnology.
International Seminar on Nanoscience and Nanotechnology, Nano 5, September 14-18, Palacio de las Convenciones, Havana, Cuba.
- 2015- Conference: Development of Novel Therapeutic Hepatitis B Vaccine.
APASL, Single Topic Conference Focus on the Virus Hepatitis B. Oct. 3-6, Yerevan, Armenia.
- 2016- Assessment of the B. pertussis BPCNIC0311 strain as a producing strain of genetically detoxified toxoid (PTG), Filamentous Hemagglutinin (FHA)
11th International Bordetella Symposium, April 5th-8th, Buenos Aires, Argentina.

2016- Conference: Cuban Biotechnology and the Center for Genetic Engineering and Biotechnology. Challenges in chronic hepatitis B
Conference: HeberNasvac Therapeutic Vaccine: from Bench to Clinical Trials. First approval of the marketing authorization dossier of the therapeutic vaccine against chronic Hepatitis B: HeberNasvac.
II International Symposium on Viral Hepatitis, Hepatitis 2016, May 19-23. Varadero.

PROYECTOS INTERNACIONALES / GRANTS

03.2004 – 12.2006 SECYT-CITMA. Obtención de polisacáridos capsulares de *Streptococcus pneumoniae* para el desarrollo de una vacuna conjugada contra la enfermedad neumocócica invasiva. CU/PA/03-SXIV/005. Osvaldo Yantorno, M. Eugenia Rodríguez. CINDEFI – CONICET. Fac Cs Exactas. UNLP. Gerardo Guillén Nieto CIGB - La Habana, Cuba. Programa de cooperación argentino-cubano.

South African – Cuba Scientific collaboration on HPV and Rotavirus. National Research Foundation – South Africa. 1.04.2007 – 2013.

Proyectos Cuba – Venezuela VII Mixta 2007.

07.2012 – 07.2015 Centro Binacional Cuba Argentina. Proyecto Pertussis. Osvaldo Yantorno, M. Eugenia Rodríguez. Fac Cs Exactas. Universidad de La Plata. Gerardo Guillén Nieto CIGB - La Habana, Cuba.

PUBLICACIONES

- 1,2-Derivatives of acenaphtilene. IV. Characterization of the reaction product from chlorodeoxygenation of 5,6-dichloroacenaphtilen-1,2-dione. **1986. Journal Organicheskaya Jimiya.** Academy of Science U.S.S.R. 12:2596-2600.
- 1,2-Derivatives of acenaphtilene. V. Synthesis of oxide 5,6-dichloroacenaphtilen-1,2-dione. **1986. Journal Organicheskaya Jimiya.** Academy of Science U.S.S.R. 10:2204-2208.
- 1,2-Derivatives of acenaphtilene. VI. Synthesis and characterization of 4-, 3.5-, 5.6-, and 3,5,6-bromoderivatives of 1,2-dihydroacenaphtilen-1,2-diol. **1988. Journal Organicheskaya Jimiya.** Academy of Science U.S.S.R. 1:174-181.
- 1,2-Derivatives of acenaphtilene. X. Characterization of the reaction product from chlorodeoxygenation of 5,6-dibromoacenaphtilen-1,2-dione. **1988. Journal Organicheskaya Jimiya.** Academy of Science U.S.S.R. 7:1517-1521.
- Empleo de marcadores no radioactivos: Fotobiotina y Peroxidasa, en la hibridación de ADN. **1993. Biotecnología Aplicada.** 10: 142-145.
- Comparison of the DNA sequence of nine different genes for the class 1 outer membrane protein from *Neisseria meningitidis*. **1993. Biotecnología Aplicada.** 10: 108-113.

7. Cloning and expression of the *Neisseria meningitidis* 5C outer membrane protein. **1995. Acta Biotechnologica.** 15(1): 97-106.
8. Enhancement of the immunogenicity of recombinant PM-6 and HBsAg by double experimental vaccines. **Pathobiology and Immunobiology of Neisseriaceae.** INS. **1994.** Memorias de la VIII Conferencia Internacional de Neisserias Patógenas. Octubre 4-9/1992. Cuernavaca. México.
9. Cloning and expression of a fusion protein (PM6-P1.15) from *Neisseria meningitidis* in *Escherichia coli*. **Pathobiology and Immunobiology of Neisseriaceae.** INS. **1994.** Memorias de la VIII Conferencia Internacional de Neisserias Patógenas. Octubre 4-9/1992. Cuernavaca. México.
10. Cloning and expression in *E.coli* of a high molecular weight protein (PM-6) from the *N.meningitidis* strain B:4:P1.15. Evaluation of the bactericidal activity of antibodies raised against the recombinant protein. **Pathobiology and Immunobiology of Neisseriaceae.** INS. **1994.** Memorias de la VIII Conferencia Internacional de Neisserias Patógenas. Octubre 4-9/1992. Cuernavaca. México.
11. Comparison of DNA sequence of nine class 1 outer membrane protein from different strains of *N.meningitidis*. **Pathobiology and Immunobiology of Neisseriaceae.** INS. **1994.** Memorias de la VIII Conferencia Internacional de Neisserias Patógenas. Octubre 4-9/1992. Cuernavaca. México.
12. Cloning and expression of the class 1 major outer membrane protein of *N.meningitidis* strain B:4:P1.15 in *E.coli*. **Pathobiology and Immunobiology of Neisseriaceae.** INS. **1994.** Memorias de la VIII Conferencia Internacional de Neisserias Patógenas. Octubre 4-9/1992. Cuernavaca. México.
13. Cloning, expression and characterization of P64K outer membrane protein from *N. meningitidis*. **1995. Biotecnología Aplicada** 12(2): 72
14. Expression in *Escherichia coli* and immunological characterization of a hybrid class 1-P64k protein from *Neisseria meningitidis*. **1996. Biotecnología Aplicada** 13(4): 271-275
15. Cloning and expression of the *porA* gene of *Neisseria meningitidis* strain B:4:P1.15 in *Escherichia coli*. Preliminary characterisation of the recombinant polypeptide. **1996. Acta Biotechnologica.** 16(2-3): 165-173.
16. Molecular analysis of *Neisseria meningitidis* class 3 outer membrane protein in strains recognized by the Monoclonal antibody CB-Nm.2. **1997. Biotecnología Aplicada** 14(1): 23-30
17. Pajon R, China G, Marrero E, Gonzalez D, Guillen G. Sequence analysis of the structural *tbpA* gene: protein topology and variable regions within neisserial receptors of transferrin iron acquisition. **1997. Microbial Pathogenesis** 23: 71-84
18. Induction of immune recognition of self epidermal growth factor-II: characterization of the antibody response and the use of a fusion protein. **1997. Vaccine Research** 6(2):91-100
19. Clonación, expresión y características de proteínas quiméricas de *Neisseria meningitidis* en *Escherichia coli*. **1997. microbiología e infectología** 4 (1): 8-14

20. Guillen G, Alvarez A, Silva R, Morera V, Gonzalez S, Musacchio A, Besada V, Coizeau E, Caballero E, Nazabal C, Carmenate T, Gonzalez LJ, Estrada R, Tambara Y, Padron G, Herrera L. Expression in *Escherichia coli* of the *lpdA* gene, protein sequence analysis and immunological characterization of the P64k protein from *Neisseria meningitidis*. **1998. Biotechnolo. Appl. Biochem** 27: 189-196
21. Gonzalez G, Crombet T, Catala M, Mirabal V, Hernandez JC, Gonzalez Y, Marinello P, Guillen G, Lage A. A novel cancer vaccine composed of human-recombinant epidermal growth factor linked to a carrier protein: Report of a pilot clinical trial. **1998. Annals of Oncology** 9:431-435
22. Guillén G. Vacunas contra la hepatitis A y B como componentes de vacunas combinadas. En **Bases moleculares para el estudio de las hepatitis virales**. Editor: Guillermo J. Padrón. Elfos Scientiae. La Habana, Cuba. **1998**. 281-296
23. Silva R, Menendez T, Alonso LM, Iglesias E, Musacchio A, Leal MJ, Alvarez A, Coizeau E, Martin A, Herrera L, Guillen G. Characterization of the *lpdA* gene from *Neisseria meningitidis* by polymerase chain reaction, restriction fragment length polymorphism and sequencing. **1999. FEMS Microbiology Letters** 174: 191-199
24. Guillén G. Modificación genética de microorganismos. **1999. Biotecnología Aplicada** 15(4).
25. Néstor Expósito Raya · Marissa Mestre Luaces · Ricardo Silva Rodríguez · Consuelo Nazábal Gálvez · Maxlenin Peña Rivero · Nieves Martínez de la Puente · Milagros Font Batista · Gerardo Guillén Nieto. Preformulation study of the vaccine candidate P64k against *Neisseria meningitidis*. **1999. Biotechnolo. Appl. Biochem** 29: 113-117
26. Guillén G. New DNA Recombinant Vaccines. **1999**. Proceedings of the International Workshop on Vaccine Development and Production. **Vaccine Development: new challenges**. Editor Akira Homma. Rio de Janeiro. Finep.
27. Gonzalez S, Alvarez A, Caballero E, Vina L, Guillen G, Silva R. P64k Meningococcal Protein as Immunological Carrier for Weak Immunogens. **2000. Scandinavian Journal of Immunology**; 52(2): 113-116
28. Niebla O, Alvarez A, Martin A, Rodriguez A, Delgado M, Falcon V, Guillen G. Immunogenicity of recombinant class 1 protein from *Neisseria meningitidis* refolded into phospholipid vesicles and detergent. **2001. Vaccine**; 19: 3568-3574
29. Perez A, Dickinson F, Cinza Z, Ruiz A, Serrano T, Sosa J, Gonzalez S, Gutierrez Y, Nazabal C, Gutierrez O, Guzman D, Diaz M, Delgado M, Caballero E, Sardinias G, Alvarez A, Martin A, Guillen G, Silva R. Safety and preliminary immunogenicity of the recombinant outer membrane protein P64k of *Neisseria meningitidis* in human volunteers. **2001. Biotechnology and Appl. Biochem**; 34: 121-125
30. Tozawa K, Broadhurst RW, Raine AR, Fuller C, Alvarez A, Guillen G, Padron G, Perham RN. Solution structure of the lipoyl domain of the chimeric dihydrolipoyl dehydrogenase P64k from *Neisseria meningitidis*. **2001. European Journal of Biochemistry** 268 (18): 4908-4917.
31. Vázquez S, Guzmán MG, Guillen G, Chinea G, Pérez AB, Pupo M, Rodríguez R,

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