Dr. Hwa A. Lim, Ph.D., MBA Confidential Document

Dr. Hwa A. Lim

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Motto In Life:

Work hard, play well, and enjoy life to the fullest

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BUSINESS PAPERS	
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SCIENTIFIC PAPERS: (1990, Cumulative ~ 150 papers since 1985)	10
Stem Cells and Regenerative Medicine:	
Green Technology:	10
Biotechnology:	10
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Bioinformatics:	10
Database Search and Analysis:	10
Software:	11
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EDUCATION:

1986: Ph.D. (science), University of Rochester, Rochester, New York, USA.

1997: MBA (strategy, business laws), University of Phoenix; University of California, USA.

1982: M.A. (science), University of Rochester, Rochester, New York, USA.

1981: B.Sc. (Hons.), A.R.C.S., Imperial College of Science, Technology & Medicine, The Royal College of

Science, University of London, U.K.

PROFESSIONAL EXPERIENCE:

2022-	Reviewer, European Research Council, Brussels, Belgium.
2020-2022	International Consultant, Yayasan Tunku Kassim, Kedah, Malaysia.

Founding Board Member, Silicon Valley International Investment & Development Corporation, Silicon

Valley, California, USA.

2015-2019 Pro member, <u>United Nations Educational</u>, <u>Scientific</u>, and <u>Cultural Organization</u> (UNESCO), *Conseil*

International de la Danse (CID, cid-17961).

2010- : Board member, AHSA World, Fremont, California, USA.

2009-2010: Board member, Cosmos Health Center, Mountain View, California, USA.

2008-2010: CEO, MIRAHI Biotech, Inc., San Jose, California, USA.

2004-2016: Advisor, Macnalink Resources Sdn Bhd, (304399-W), Kuala Lumpur, Malaysia.

2002-2006 Adjunct Professor, Molecular & Cell Biology; and Mathematical Sciences, University of Texas at Dallas.

2002-2007: Advisory Council of the Office of the Vice President for Research & Graduate Education, The University of

Texas at Dallas, Texas, USA.

2002-2004: Secretary-General, Ivy 25 – a committee of experts to integrate science and literature, and to promote science

in Asia, Silicon Valley, California, USA.

2002-2006: Co-Founding Director, NanoBiotech Sdn. Bhd. (425296-M), Kuala Lumpur, Malaysia.

2000-2004: Chairman of Board, GeneGo, Inc., St. Joseph, Michigan 49085, USA.

- Secured \$1.64 million in 2003; supported by SBIR, U.S. National Institutes of Health.

- Acquired by Thomson-Reuters.

2000-2004: Chairman, AbMetrix, Inc., Union City, California, USA; now NovoDiax, Hayward, California, USA.

2000- : Visiting Professor:

Institute of Genetics, Beijing, China; Sun Yat-sen University, Guangzhou, China;

Peking University, Beijing, China.

1998-2004: Scientific Advisory Board Member, LifeSensor, Inc., Malvern, Pennsylvania, USA.

1997-2004: Chairperson & CEO, D'Trends, Inc., Santa Clara, California 95051, USA.

- Founder.

- Secured private funding.

1996-1997: Vice President, Science & Technology, Pangea Systems Inc., Oakland, California 94612, USA.

- Secured venture funding (>US\$10 Million).

- Filed for IPO in September 2000. Company (renamed DoubleTwist) raised ~\$50 million but withdrew

from IPO in March 2001 after the downturn of economy.

1995-1996: Director of Bioinformatics, Hyseq Inc., Sunnyvale, California 94086, USA.

- Merged with Variagenics, Inc (January 2003) and Nuvelo, Inc. (Ticker: NUVO).

- Went public (Ticker: HYSQ) in August 1996.

- Secured venture funding (US\$12.5 Million).

- Secured federal funding (US\$2.0 Million)

1993- : Bioinformatics Expert, United Nations Food and Agricultural Organization (FAO).

- Helped set up biotech parks and bioinformatics centers worldwide, especially along Pacific Rim nations.

- Project UNDP ROK095.

1987-1995: Faculty (tenured state-line), Program Director, Computational Genetics & Biophysics, Supercomputer

Computations Research Institute, Florida State University, Tallahassee, Florida 32306-4052, USA.

-Funding (>\$250,000 per annum from federal; >\$100,000 per annum from the state of Florida).

1986-1987: Faculty, Laboratory for Laser Energetics, Rochester, New York 14627, USA.

1985-1986: Medical Fellow, Strong Memorial Hospital, New York, USA.

1981-1986: Research & Teaching Fellow, University of Rochester, New York, USA.

1979-1980: Research Fellow, Blackett & Rutherford Laboratory, London SW7 2AZ, England.

- Assembled scintillators for the UA1 experiment in CERN. Nobel Prize (1984) awarded to UA1 Experiment

(Carlo Rubbia and Simon van der Meer).

ACHIEVEMENTS:

- Initiated Computational Genetics & Biophysics at Supercomputer Computations Research Institute, Florida, 1991.
- Initiated a conference series "Bioinformatics & Genome Research", the very first international bioinformatics conference (still ongoing), 1990.
- Started with short stints at the Strong Memorial Hospital, New York, and later computational work using computers at the John von Neumann Center at Princeton University, Dr. Lim launched his career. One of the milestones in his accomplished career is when he coined the neologism "bioinformatics" in 1986, initiated in 1990 and chaired the first 10 of the International Conference series "Bioinformatics & Genome Research", which was later acquired by Cambridge Healthtech. The Conference series helps set the direction of instrumentation improvement, biodata accumulation (thus big data) and genome research, leading to the current state of rapid, affordable genome sequencing.
- For these cumulative contributions in establishing and shaping the field of bioinformatics Dr. Lim is regarded as one of the "Father of Bioinformatics."
- Author/editor of seventeen titles in English; one in Chinese (translated). Kingstone Best-selling Author.

UNITED NATIONS (UN) AFFILIATIONS:

- Pro Member, United Nations Educational, Scientific, and Cultural Organization (UNESCO), (CID 17961).
- Bioinformatics Expert, <u>United Nations</u>, <u>F</u>ood and <u>Agricultural Organization</u> (FAO), (UNDP ROK095).

HONORS AND AWARDS: (1990 - present)

- Men of Achievement, International Biographical Centre, Cambridge, England, 1995.
- Who Is Who In the South and Southeast, 1993; Who Is Who In America, 1994; Who Is Who In the World, 1994; Who Is Who In Healthcare and Medicine, 1995; Who Is Who In the West, 1996; National Who Is Who In Executives and Professionals, 1999.
- Elected Member of the New York Academy of Sciences, Elected 1990-.

SUPERCOMPTER AFFILIATIONS:

- Program Director, Supercomputer Computations Research Institute (SCRI), Florida State University, Tallahassee, Florida, USA, 1989-1996.
- Use of John von Neumann Center (JVNC) supercomputers, cellular automata projects, Princeton University, 1986-1988.

REVIEW PANELIST AND PUBLIC SERVICES: (1990 - present)

- Scientific Reviewer:
 - 1. National Science Foundation, USA: computer information science engineering;
 - 2. National Cancer Institute, USA: anti-AIDS, anti-cancer databases; breast cancer, colon cancer registries; innovative technologies for molecular analysis of cancer.
 - 3. National Institutes of Health, USA: biomedical instrumentation.
- Member of International Expert Panel, BioValley Malaysia Initiative (2003-2004), appointed by the Ministry of Sc., Tech, and Environment (MOSTE).
- Consultant (case basis) for McKinsey, Prudential, VAXA, Eli Lilly and Company, Monsanto and Company, Dupont CR&D, Robertson Stephens, governments and institutions in overseas countries.

MEMBERSHIPS, AND CITATIONS: (1990 - present)

- Cited in "Malaysia-China Business Magazine", Vol. 19, March 2006, 3 articles, pages 22-27.
- Written in "The History of the State of Kedah", by Tan Hong Chew, 2005, pages 401-403, and a photo page, 553 pages.
- Advisory Council and Founding Advisor, Internet Biologists/Bioscience Resource on the Internet, (NetBio) (1997-present).
- TV Interviews, radio interviews on Genome Project & Diseases. Featured regularly in newspapers and circulars.
- Member, Global University in the USA, a Divisional Activity Global Systems Analysis and Simulation Association in the U.S.A., 1992-.
- Active Member of the International Human Genome Organisation (HUGO) (Nominated 1992 by C.R. Cantor and C. Fields).
- Life Member of the Society of Chinese Bioscientists in America (Nominated 1992 by Joseph Li).
- Member of the American Association for the Advancement of Science (AAAS).
- Member of the International Association for Mathematical and Computer Modeling, 1989-.

ORGANIZING COMMITTEE / CHAIR OF COMMITTEE: (1990 - present)

• Chair of Session, 7th International Conference of Veterinary Research, Development of Animal Wealth: Challenges and Solutions, National Research Center, Dokki, Cairo, Egypt, December 5-7, 2017.

- Chair of Session, The 50th World Congress, UNESCO CID, July 5 8, 2017, Athens, Greece.
- Chairman of 10 conferences, Scientific Advisor of 3 conferences in a Conference Series:

 Chairman of The 1st (1990, Florida State Conference Center, Tallahassee, Florida), 2nd (1992, TradeWinds Hotel, St. Petersburg Beach, Florida), 3rd (1994, Augustus Turnbull III Florida State Conference Center, Tallahassee, Florida), 4th (1995, Hotel Nikko, San Francisco, California), 5th (1996, Baltimore Inner Harbor Marriott, Baltimore, Maryland), 6th (1997, The Fairmont Hotel, San Francisco, California), 7th (1998, The Copley Plaza Hotel, Boston, Massachusetts), 8th (1999, Hotel Nikko, San Francisco, California), 9th (2000, The Fairmont Hotel, San Francisco, California), 10th (2001, The Fairmont Hotel, San Francisco, California), and Scientific Advisor of the 11th (2002, Hilton San Diego, San Diego, California), 12th (2003, San Diego Concourse and Civic Theatre, San Diego, California), and 13th (2004, The Fairmont Hotel, San Francisco, California) *International Conference on Bioinformatics & Genome Research*, USA.
- Organizing Committee Member of 3 conferences in a Conference Series:
 Organizing Committee, Current Trends in Drug Discovery Research, CTDDR 2002, and CTDDR 2004, CTDDR 2007, Lucknow, India.
- International Advisory Committee Member of 5 congresses in a Congress Series: International Advisory Committee of The 9th (1997, Brisbane, Australia), 10th (1999, Beijing, China), 11th (2001, Stockholm, Sweden), 12th (2003, Berlin, Germany), 13th (2005, Shanghai, China) *International Congress on Genes, Gene Families, and Isozymes*.
- International Program Committee, *The Second International Conference on Bioinformatics of Genome Regulation and Structure*, August 7-14, 2000, Novosibirsk, RUSSIA.
- Scientific Committee, The 2nd Indo-US Workshop on Mathematical Chemistry: application in molecular design and hazard assessments of chemicals, May 30- June 3, 2000, Duluth, MN, USA.
- Workshop co-Chair (with Ralf Hofestädt), Molecular Informatics, The ACM International Conference on Supercomputing, Vienna, AUSTRIA, 1997.
- Committee of "Informatik in den Biowissenschaften" of the German Society of Computer Science (GI), Leipzig, May 1995.
- Organizing Committee Member of four conferences in a Conference Series:
 Organizing Committee of The 8th (1991, University of Maryland, College Park, Maryland), 9th (1993, University of California at Berkeley, California), 10th (1995, University of Missouri, St. Louis) and 11th (1997, Georgetown University Conference Center, Washington, DC) *Int'l Conference on Mathematical and Computer Modeling*, USA.
- Organizing Committee and Co-Chair of The 1st International Conference on Mathematical & Computational Analysis of the Human Genome and Its Mutation Load, Szeged, HUNGARY, 1992.
- Initiator of the conference series on *Bioinformatics & Genome Research*, 1990-.

NOTABLE KEYNOTE SPEECHES & PANEL DISCUSSIONS:

- Keynote Speaker, "Exploring biodata behind big, open data for whealth", ICMCB 2019, Singapore, October 25-27, 2019.
- Keynote Speaker, "Bioinformatics: From data, digital, discovery to diseases", 2nd Golden Gate Life Science Forum, San Francisco, USA, March 30, 2019.
- Keynote Speaker, "Big, open, biodata in health and wealth", ICMAC2018, Xiamen, China, July 6-7. 2018.
- Keynote Speaker, "The biodata behind big, open data", 7th International Conference of Veterinary Research, Development of Animal Wealth: Challenges and Solutions, National Research Center, Dokki, Cairo, Egypt, December 5-7, 2017.
- Keynote Speaker, "From biodata to bigdata", Fortune 500 Summit, Changchun, Jilin, China, September 29, 2016.
- Keynote Lecture at the 1st International Conference on Biotechnology and Environmental Safety, National Research Center, April 14-16, 2009, Cairo, Egypt.
- Keynote Lecture at the Bay Area Chamber of Commerce, "Nanotechnology: Development, business and prospects", September 6, 2005, Santa Clara Marriott Hotel, Santa Clara, California, USA.
- Keynote Lecture, Association of the Chinese Chamber of Commerce in Malaysia, "Nanotechnology: Business development and opportunities", August 4, 2005, Menara Promet, Kuala Lumpur, Malaysia.
- Plenary Lecture. "Informatics, Bioinformatics, and Bininformatics", International Meeting on Frontiers of Physics, the Year of Physics to commemorate the centennial years of Einstein's 1905 breakthrough paper on relativity, July 25 29, 2005, The Mines, Kuala Lumpur, Malaysia.
- Distinguished Speaker, "Binformatics informatic of biotechnology, information technology, and nanotechnology", Saudi Bio2004 International Conference, May 10-12, 2004, Jeddah, Saudi Arabia.
- Keynote Lecture, "Nanotechnology in diagnostics and drug delivery", Current Trends in Drug Discovery Research, February 17-20, 2004, Lucknow, India.
- Plenary Lecture, "Applications of nanotechnology in biotechnology", International Conference on Bioinformatics, September 7-10, 2003, Hotel Shangri-la Rasa Sayang, Penang, Malaysia.

 Plenary Lecture, BioMalaysia 2002, "Biochip Technology Utilizing Fluorescent Nanocrystals", Oct 1-4, 2002, Putra World Trade Center, Kuala Lumpur, Malaysia.

- Jeddah, Saudi Arabia:
 - Distinguished Speaker, "Diagnostics system utilizing nanocrystals", April 6, 2002, Hyatt Hotel at SaudiBio2002.
 - Special Lecture, "Nanotechnology", April 7, 2002, to best high school students.
- Keynote Lecture, "Bioinformatics in Drug Discovery", Golden Jubilee *Symposium on Current Trends in Drug Discovery Research*, Feb 11-15, 2001, Central Drug Research Institute, Lucknow, India.
- Colloquium Speaker, "Biochips", HUBS-Drexel University Colloquium, Philadelphia, Pennsylvania, September 21, 2000.
- Panelist, Beyond Bioinformatics: Moving Information to Knowledge, Bio'98 Intl. Biotechnology Meeting & Exhibition, New York, June 14-18, 1998.
- Panelist, The Economics of Drug Discovery, University of Santiniketan, West Bengal, India, Jan 13, 1998.
- Keynote speech at the ACM International Conference on Supercomputing, July 7-11, 1997, Chair: Hans Zima, Vienna, Austria.
- Keynote speech at *The Eleventh International Conference on Mathematical and Computer Modelling* (ICMCM), March 31-April 3, 1997, Chair: Xavier Avula, Georgetown University Conference Center, Washington, DC, USA.
- Panelist, BioMASS, American Association for the Advancement of Science (AAAS), Stanford University, May 3, 1996.
- Keynote speaker at The 1st International Conference on Mathematical & Computational Analysis of the Human Genome and Its Mutation Load, October 20-24, 1992, Hotel Forras, Szeged, Hungary.

LECTURES AND LECTURE SERIES: (1992 - present)

- Speaker, "Brain on Dance", The 50th World Congress, UNESCO CID, July 5 8, 2017, Athens, Greece.
- Speaker, "Robot and Human Dancing", The 50th World Congress, UNESCO CID, July 5 8, 2017, Athens, Greece.
- The 70th Anniversary of UNESCO and 21st General Assembly of CID, December 21, 2015, Palais de l'UNESCO, Paris, France.
- Invited Lecture, "Revival of the Fittest", IET Lecture, Feb 18, 2012, Institution of Engineering and Technology, Kuala Lumpur, Malaysia.
- Workshop Coordinator and Speaker, "Creativity 2.0", PELTAC, Universiti Teknologi Malaysia, Feb 12-17, 2012, Skudai, Johor, Malaysia.
- Speaker, "The future of bioinformatics", TI Auditorium, University of Texas, Dallas, November 2, 2005.
- Workshop Coordinator and Speaker, "Make Your Creative Juices Flow", Universiti Technologi Malaysia, October 30, 2004, Skudai, Johore, Malaysia.
- Lecture Circuit, including:
 - Plenary Lecture, 27th Annual Conference of the Malaysian Biochemistry Society, "Binformatics", Pan Pacific Hotel, Kuala Lumpur, Malaysia.
 - Public Lecture, "AgBiotechnology", Malaysia Agricultural Research & Development Institute (MARDI), September 25, 2002, Kuala Lumpur, Malaysia.
 - Public Lecture, "NanoBiotechnology", University Technology Malaysia, Johore Bahru, Malaysia.
- Bioinformatics: Taking a Closer Look from the Scientific & Business Perspectives, September 24, 2002, J.W. Marriott Hotel, A full day workshop, An Odyssey of the Bioinformatics Kind: "Nanotechnology", "Patent", "Bioinformation for Commercialization", "Bioinformatics Evolution: Biotech Meets Infotech", "Market Structures".
- "Biotechnology 101", BioBoot Camp, February 7, 2002, University of Texas at Dallas, Study and Review to determine best ways to launch a life science initiative in North Texas.
- "Convergence of Biotechnology and Nanotechnology", October 18, 2001, Workshop in Honor Britton Chance on his 88th Birthday, The University of Texas Southwestern Medical Center, Dallas, Texas.
- Father's Day Opening Lecture, The 10th International Bioinformatics & Genome Research Conference, June 17, 2001, Fairmont Hotel, San Francisco, USA.
- May 8, 2001, lecture at the Beijing Genomics Institute, Chinese Academy of Sciences, Beijing.
- Invited lecture at Workshop on Post-Genomics Research, May 3, 2001, University of Texas at Dallas, Dallas, Texas.
- Participant, Eli Lilly & Company, Leadership V Program, May 8, 2000.
- Panelist, Beyond Bioinformatics: Moving Information to Knowledge, Bio'98 Intl. Biotechnology Meeting & Exhibition, New York, June 14-18, 1998.
- Mathematical Characterization of Chemical Structures with Applications in Molecular Design and Hazard Assessment of Chemicals, Jan 9-13, 1998, Visva Bharati University, Santiniketan, West Bengal, India.
- University of Magdeburg, "Knowledge Discovery and Datamining of Biological Sequences", July 13, 1997, Magdeburg, Germany.
- Consiglio Nazionale Delle Recerche, Area Della Ricerca di Genova, "Perspectives of High Performance Computing in Biosequence Analyses", Genoa, Italy, June 28, 1996.

• Consiglio Nazionale Delle Recerche, Area Della Ricerca di Milano, "Gene Classification Using the Technique of Sequencing by Hybridization", Milan, Italy, June 25, 1996.

- Genetic Engineering Research Institute Korean, Institute of Science and Technology, Daejon, A series of six Lectures (Oct 5-15, 1993): 1) "Overview of the Genome Project"; 2) "Homologous Sequence Analysis and Database Compilation"; 3) "Classification of Functional Regions of DNA Sequences"; 4) "Pattern Recognition in Nucleotide and Amino Acid Sequences"; 5) "Structural Aspects of DNA and Proteins"; and 6) "Numerical Simulation of DNA Electrophoresis".
- Korean Advanced Institute of Science and Technology, Daejon, "Informatics Issues in Life Sciences" (Oct 15, 1993).
- National University of Singapore, BioComputing Seminar Series (Nov. 18-20, 1992), organized by Department of Biochemistry, Institute of Molecular and Cell Biology, Singapore Society for Biochemistry and Molecular Biology: 1) "Computer Simulation of Molecular Evolution"; 2) "Challenges for Informatics in the Genome Project"; 3) "Fractal Representation of Nucleotide and Amino Acid Sequences".

CONFERENCES AND VISITS (1990 - present):

- Participant, New Mountain To Climb, An Occasion to mark the 75th Birthday of Alan MacDiarmid, 2000 Chemistry Nobel Prize Laureate, November 5-7, 2002, Dallas, Texas.
- Chair, The 10th International Bioinformatics & Genome Research Conference, June 17-19, 2001, Fairmont Hotel, San Francisco, USA.
- Biotech Domain Lead, and Speaker, The 18th Modern Engineering and Technology Seminar, November 11-18, 2000, Grand Hotel, Taipei, Taiwan.
- Participant, The 2nd International Conference on Bioinformatics of Genome Regulation and Structure. August 7-14, 2000, Novosibirsk, Russia.
- Chair, The 9th International Bioinformatics & Genome Research Conference, June 19-20, 2000, Fairmont Hotel, San Francisco, USA.
- Participant, The Second Indo-US Workshop on Mathematical Chemistry: Applications in drug discovery, environmental toxicology, chemoinformatics and bioinformatics, May 30-June 3, 2000, Duluth, USA.
- Participant, China Beijing International High-Tech Industries Week 2000, May 8-12, 2000, The National Agricultural Exhibition Hall, Beijing, China.
- Speaker, North Center Bioinformatics Discussion Workshop, March 2, 2000, Chair: Qiang Boqin, VP, Chinese Academy of Sciences, Tsinghua University, Beijing, China.
- Participant, Guangdong/Hong-Kong/Macau Industrial Business World Hand-in-Hand into the New Millennium, Grand Five Continental Hotel, Shenzhen, February 25, 2000.
- Participant, The 1st China Hi-Tech Fair, Oct 5-10, 1999, Shenzhen, China.
- Advisory Board, and Speaker, The 10th International Congress on Genes, Gene Families, and Isozymes, Oct 5-10, 1999, Chair: Xue Guoxiong, Institute of Developmental Biology, Chinese Academy of Sciences, Beijing, China.
- Advisory Board, and Speaker, The 12th International Conference on Mathematical and Computer Modelling, August 1-5, 1999, Chair: Xavier Avula, Chicago, USA.
- Chair, The 8th International Bioinformatics & Genome Research Conference, June 14-15, 1999, Hotel Nikko, San Francisco, USA.
- Speaker, Investment Forum, Sept. 9-10, 1998, Howard Plaza Hotel, Taipei, Taiwan, Organizers: Development Center for Biotechnology, Taiwan Venture Capital Assoc.
- Speaker, 1998 International Conference on Science and Business (ICOSB 98), Aug 20-21, 1998, Zhongshan University, Guangzhou, China.
- Speaker, Modeling and Simulation of Gene Regulations and Metabolic Pathways, Dagstuhl, June 21-26, 1998, Chairs: J. Collado-Vides, R. Hofestädt, M. Mavrovouniotis and G. Michal.
- Chair, The 7th Bioinformatics & Genome Research, The Copley Plaza Hotel, Boston, June 15-16, 1998, Chair: Hwa Lim.
- Speaker, Biopartners with Taipei Venture Capital Association, Sheraton Hotel, Frazer, Pennsylvania, April 30-May 1, 1998, organized by Chinese Entrepreneur Association.
- Speaker, Mathematical Characterization of Chemical Structures with Applications in Molecular Design and Hazard Assessment of Chemicals, Jan 9-13, 1998, Chairs: D.K. Sinha and S.C. Basak, Visva Bharati University, Santiniketan, West Begal, India.
- Speaker, University of Magdeburg, July 13-15, 1997, Host: Prof. Dr. Ralf Hofestädt, Magdeburg, Germany.
- Chair, The 6th Bioinformatics & Genome Research, June 11-12, 1997, The Fairmont Hotel, San Francisco.
- Advisory Board, and Speaker, The 9th International Congress on Isozymes, Genes and Gene Families, April 14-19, 1997, Chairs: John R. McCarrey and John L. VandeBerg, Hilton Palacio del Rio Hotel, San Antonio, Texas.
- Advisory Board, The 11th International Conference on Mathematical and Computer Modelling (ICMCM), March 31-April 3, 1997, Chair: Xavier Avula, Georgetown University Conference Center, Washington, DC, USA.
- Participant, The 30th Annual Conference on Isozymes and Gene Families, December 9-13, 1996, Chair: Robert W. Gracy, Spice Island Inn/Blue Horizons Inn, Grenada, West Indies.

 Speaker, The 5th Pacific Rim Biotechnology Conference & BioExpo '96, November 12-15, 1996, Chairs: Sang-ki Rhee, Seoul, Korea.

- Speaker, Computer Science and Biology, German Conference on Bioinformatics (GCB '96), September 30--October 2, 1996, Chairs: Ralf Hofestädt and M. Löffler, University of Leipzig, Leipzig, Germany.
- Participant, Mathematical Molecular Biology Journal Club, Current Opinion on Structural Biology, July 24, 1996, Math. Department, Stanford University.
- Participant, The Second EL.B.A. Foundation Course on Genome, a NATO Advanced Study Institute on Genome Structure and Function, June 13-23, 1996, Marciana Marina, Isle of Elba.
- Chair, The 5th Bioinformatics & Genome Research, June 10-11, 1996, Baltimore Inner Harbor Marriott, Baltimore, Maryland.
- Participant, The 1st Golden Gate Symposium & The Fifth Life Science Symposium, Health Science Building, University of California at San Francisco (UCSF), San Francisco, June 1, 1996.
- Participant, Database/Expo '96, April 15-19, 1996, Moscone Convention Center, San Francisco.
- Participant, HIV Symposium: Insights Into The Molecular Targets of HIV Therapy, May 10, 1996 Stanford University School of Medicine, Division of Infectious Diseases and Geographic Medicine, Center for AIDS Research, Fairchild Auditorium, Chairs: Robert W. Shafer and Thomas C. Merigan.
- Participant, Beckman Center 7th Annual Program in Molecular Genetic Medicine Symposium and 5th Annual Bristol Myers Squibb Cardiovascular Symposium: Molecular Genetics of Complex Cardiovascular & Metabolic Disease, April 8-9, 1996, Stanford University Medical Center, Fairchild Auditorium, Chairs: Victor Dzau, Paul Berg, Pierre Corvol, Graeme Bell, James Scott.
- Participant, Software Development '96, March 26-28, 1996, Moscone Convention Center, San Francisco.
- The 3rd International Conference on Computational Physics (ICCP-3), Molecular Dynamics and Computational Biology Section, November 13-17, 1995, Chair: Samuel C. C. Chang, Chung-Yuan Christian University, Chung-Li, Taiwan.
- Advisory Board, and Speaker, The 8th Int'l Congress on Isozymes, June 25-July 1, 1995, Chair: Roger Holmes, Carlton Crest Hotel, Brisbane, Australia.
- Chair, The 4th International Conference on Bioinformatics and Genome Research, June 5-7, 1995, Hotel Nikko, San Francisco
- Participant, The 11th Annual Meeting of the South-East Nerve Net, March 25, 1995, Chair: Michael Meredith, Supercomputer Computations Research Institute, Florida State University.
- Chair, The 3rd International Conference on Bioinformatics and Genome Research, June 1-4, 1994, Chair: Hwa Lim, Augustus B. Turnbull III Florida State Conference Center, Tallahassee, Florida, USA.
- Speaker, The 1st World Congress On Computational Medicine, Public Health, and Biotechnology, April 24-28, 1994, Chair: Matthew Witten, Hyatt Regency Hotel, Austin, Texas.
- RIKEN, Saitama, and Keio University School of Medicine and Department of Molecular Biology, Shinjuku-ku, November 20-22, 1993 (Hosts: Professor Isao Endo, Head of Chemical Engineering Lab., RIKEN; Professor Nobuyoshi Shimizu, Chairman, Keio University School of Medicine).
- Participant, Human Genome and Mapping Workshop 93, November 14-17, 1993, President: Kenichi Matsubara, International Conference Center, Kobe, Japan.
- Bioinformatics Expert, Food and Agricultural Organisation (FAO), United Nations, Rome, Italy, October 24-27, 1993 (Host: Dr. Pal Hajas, CPO).
- Bioinformatics Expert, Science and Technology Evaluation and Planning Institute (STEPI), Seoul, Korea, October 20-21, 1993 (Host: Moon-hi Han, Director, STEPI).
- Bioinformatics Expert, Korean Institute of Science and Technology, Daejon, October 5-15, 1993 (Host: Dr. Yong-ha Park, National Project Director, Bioinformatics and Systematics).
- The Institute of Applied Physics and Computational Mathematics, Beijing, September 28-29, 1993 (Host: Professor Fu Hong-yuan, Director).
- Speaker, The 2nd International Conference on Computational Physics, Biology Section, September 13-17, 1993, Chair: De-Yuan Li, International Convention Centre, Beijing, China.
- Shanghai Institute of Biochemistry and National Gene Centre, Shanghai, China, September 7-8, 1993 (Host: Professor Gua Fang Hong, Director, National Gene Centre).
- Biotech Research Institute, South China Normal University, Guangzhou, China, September 4-6, 1993 (Professor Lin De-Oiu, Microbiology).
- Session Chair, and Speaker, The 9th International Conference on Mathematical and Scientific Computing, July 26-29, 1993, Chair: Xavier Avula, Berkeley, California, USA.
- Participant, The 1st International Conference on Intelligent Systems for Molecular Biology, July 6-9, 1993, Chair: Lawrence Hunter, National Library of Medicine, Bethesda, Maryland, DC, USA.
- Speaker, The 5th International Symposium and Workshops of the Society of Chinese Bioscientists in American, June 15-20, 1993, Chair: Leroy F. Liu, Baltimore, Maryland, USA.
- Visitor, Malayan University of Science and Technology, Penang, Malaysia, December 2-3, 1992.

• Seminar Series Speaker at National University of Singapore Seminar Series, visit to Bioprocessing Technology Unit (BTU), Singapore General Hospital, Institute of Molecular and Cell Biology, Institute of Systems Science, Department of Biochemistry, November, 18-20, 1992, National University of Singapore, Singapore (Host: Dr. Tan Tin Wee, Biochemistry).

- Institute of Developmental Biology, Academia Sinica, Beijing, China, November 12-13, 1992 (Host: Professor Xue Guo Xiong, Head).
- Citizen Ambassador, US/China Joint Conference on Education, November 10, 1992, The Great Hall of the People, Beijing, China.
- Hong Kong University of Science and Technology, Clear Water Bay, Kowloon, Hong Kong, November 2-7, 1992 (Host: Dr. Xiong Rong).
- Participant, Human Genome '92, October 14-17, 1992, Chairs: Walter Bodmer, Charles Cantor and Jean-Louis Mandel, The Acropolis, Nice, France.
- GraphiCon '92, September 28-October 2, 1992, Keldysh Institute, Moscow, Russia.
- Advisory Board, and Speaker, The 7th International Congress on Isozymes, September 6-13, 1992, Chair: Oleg Serov, Novosibirsk Russia
- Speaker, "Bioinformatics" in: The 9th International Biotechnology Congress, Sponsored by American Chemical Society, August 16--21, 1992, Chair: Daniel I.-C. Wang, Washington, D.C., USA.
- Chair, The 2nd International Conference on Bioinformatics, Supercomputing and Complex Genome Analysis, June 4-7, 1992, Chair: Hwa Lim, The TradeWinds Hotel, St. Petersburg Beach, Florida, USA.
- Participant, A Workshop on High Performance Computing and Grand Challenges in Structural Biology, January 24-27, 1992, Chair: Paul Bash and Hagai Meirovitch, Florida Conference Center, Tallahassee, USA.
- Participant, Senior Project Conference- Bioengineering, April 20, 1992, Chair: Kenneth Lutchen, Boston University, Massachusetts, USA.
- Participant, Human Genome III, October 21-23, 1991, Chair: Walter Bodmer and Charles Cantor, San Diego, USA.
- Session Chair, and Speaker, The 8th International Conference on Mathematical and Computer Modelling, April 1-4, 1991, Chair: Xavier J.R. Avula, College Park, Maryland, USA.
- Participant, DOE Contractor/Grantee Human Genome Workshop, February 17-21, 1991, Chair: Charles Cantor, Santa Fe, USA.
- Participant, Human Genome II, October 22-24, 1990, Chair: Charles Cantor, San Diego, USA.
- Speaker, Converging Approaches in Computational Biology, September 13-16, 1990, Chair: Carmen Mannella, Albany Conference, New York.
- Speaker, The 1st International Conference on Modelling and Computer Methods in Molecular Biology and Genetics, August 27-September 1, 1990, Chair: Nikolay Kolchanov and Vadim Ratner, Novosibirsk, USSR.
- Chair, The 1st International Conference on Electrophoresis, Supercomputing and the Human Genome, April 10-13, 1990, Chair: Hwa Lim, Florida State Conference Center, Tallahassee, USA.
- Participant, The 2nd Biennial Workshop on Molecular Mechanics and Molecular Dynamics, March, 1990, Chair: Delos DeTar, Florida State Conference Center, Tallahassee, USA.
- Speaker, Computer Software of Genome Program, December, 1989, Chair: Alexander Bayev, Pushchino, USSR.
- USSR Academy of Sciences, Ukrainian Academy of Sciences and the Georgian Academy of Sciences, December, 1989,
 USSR (Hosts: Professor Sergey Kurdyumov, Director, Keldysh Institute; Academician Alexander Bayev, Chairman, USSR
 Genome Program; Academician Gennady Kh. Matsuka, Director, Institute of Molecular Biology and Genetics, Ukrainian
 Academy of Sciences; Academician Guivi Sanadze, Vice President, Presidium of the Georgian Academy of Sciences).

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- 4. Nikolay A. Kolchanov and Hwa A. Lim, *Computer Analysis of Genetic Macromolecules: Structure, Function and Evolution*, (World Scientific Pub. Co., New Jersey, 1994), 556 pages.
- 5. Hwa A. Lim, Charles R. Cantor, (eds.), *Bioinformatics and Genome Research*, (World Scientific Pub. Co., New Jersey, 1995), 529 pages.
- Roger S. Holmes, Hwa A. Lim, (eds.), GENE FAMILIES: Structure, Function, Genetics and Evolution, (World Scientific Pub. Co., New Jersey, 1996), 220 pages.
- Ralf Hofestädt, and Hwa A. Lim (Hrsg.), Molecular Bioinformatics- Sequence Analysis, (Shaker Verlag, Aachen, Germany, 1997), 60 pages.

8. John R. McCarrey, John L. VandeBerg, and Hwa A. Lim (eds.), *Genes, Gene Families, and Isozymes*, The Journal of Experimental Zoology, Vol. 282, No. 1/2, (Wiley-Liss, New York, 1998), 283 pages.

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- 14. Hwa A. Lim, Sex Is So Good, Why Clone? Human cloning: To do or not to do? (EN Publishing, Inc., Santa Clara, California, 2004).
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- 22. Hwa A. Lim, Ecofriendlily Yours: Energy, biofuels, green and clean technologies.
- 23. Hwa A. Lim, Hippocratically Yours: Diseases, safety, and wellness.
- 24. Hwa A. Lim, Informatically Yours: Bioinformatics, Computational Biology and Systems Biology.
- 25. Hwa A. Lim, Cranially Yours: Intelligence, mental disorder, and tricks of the brain.
- 26. Hwa A. Lim, Creatively Yours: Creativity, culture, and entrepreneurship.

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- 21. Hwa A. Lim, "Lattice Gas Automata of Fluid Dynamics for Unsteady Flow", Complex Systems, 2, (1988), pp. 45-58.

EXTRA CURRICULAR ACTIVITIES:

- 1. Competitive ballroom dancing (Dancesport), Hustle and Salsa, jogging; politics, customs, culture and love pets.
 - Amateur World Hustle Championships Champion (2007 [New Orleans, Louisiana], 2008 [Miami, Florida], 2009 [San Jose, California], 2010 [Miami, Florida]);
 - Pro-Rising Star Championships World Champions (2011 [Orlando, Florida]).
 - Ballroom dances (5+5) first places http://www.dtrends.com/HAL/Hal_dances.html
 - Certified coach, performer and choreographer http://www.youtube.com/friendsofhal
 - http://www.bravodancestudio.us/Albums/CARnHAL DanceClassVideos.html
- 2. Charity work:
 - "Hope for Haiti Now", Earthquake Relief Effort, March 20, 2010.
 - "Soar to New Heights", for Children with Special Needs, Feb 26, 2011.
 - "Luv & Wish", Christmas present drive for the needy, Dec 21-25, 2012. http://www.ahsaworld.org/HalSpeeches_1.html
- Reports at UNESCO CID 21st General Assembly, & UNESCO 75th Anniversary, Palace de l'UNESCO, Paris, France, December 21, 2015.
- 4. Proud participant of Super Bowl 50 Halftime Show, February 7, 2016 with Beyoncé, Bruno Mars, and Coldplay
 - https://www.youtube.com/watch?v=L Hgh7sPDLM
- 5. Reports at UNESCO CID Pearl Anniversary & 50th World Congress, Athens, Greece, July 5-9, 2017.

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