

CURRICULUM VITAE

Michael Kron MD

**Director, Professor
Department of Medicine
Division of Infectious Disease**

OFFICE ADDRESS:

Clinical Cancer Center
9200 W Wisconsin Ave
Milwaukee, WI 53226

EDUCATION:

1972 - 1976 BSc., University of Notre Dame; Notre Dame, IN
1976 - 1980 M.D., Northwestern University School of Medicine; Chicago, IL
MSc

POSTGRADUATE TRAINING AND FELLOWSHIP APPOINTMENTS:

1980 - 1983 Internship and Residency, Northwestern Memorial Hospital; Dept of Medicine, Chicago, IL
1980 Government General Hospital; Clinical Clerkship in General medicine under Dr. K.V. Thiruvengadam,
Chief of Medicine, Chennai (Madras), India
1983 - 1984 MSc. Clinical Tropical Medicine Program, London School of Tropical Medicine, University of
London, UK
1985 - 1989 Clinical and Research Fellow, University Hospitals, Case Western Reserve University and Wade
Park VA Hospital, Division of Infectious Diseases and Geographic Medicine, Cleveland, OH

FACULTY APPOINTMENTS:

1983 - 1984 Consulting Assistant Professor, N.I.H. Sudan Medical Parasitology Research Program Project
Grant; Michigan State University, Dept. of Microbiology, MI
1987 Clinical Research Instructor with Dr. Bruce Greene (Case Western Reserve University), Liberia
1989 - 1993 Assistant Professor (joint appointment) Dept. of Pathology, MSU, MI
1989 - 1996 Assistant Professor, Department of Medicine, Michigan State University, MI
1990 - 1999 Adjunct professor, the University of Guayaquil and National Vector Borne Disease, Control
Program, Ecuador
1991 - 2005 Core Faculty (MSU): Latin American & Caribbean Studies Center; Genetics Program, and the
IIH, MI
1991 - 2005 Staff Physician Sparrow Hospital and Ingham Medical Centers, MI
1993 - 1994 Consultant; Molecular Biology Core Unit; NIH-Brown University Tropical Medicine Research
Center Program Grant (TMRC); Manila, Philippines
1994 - 1995 Visiting Scientist, Department of Biochemistry, Michigan State University, MI
1996 - 2001 Associate Professor, Dept. of Medicine, Michigan State University, MI
1997 - 2000 Visiting Professor, College of Medicine, University of Guayaquil, Ecuador
2001 Professor, Division of Infectious Diseases, MSU, MI
01/2004 Tenure, College of Human Medicine, Michigan State University, MI
10/2004 - 2005 Director, Institute of International Health (IIH), Michigan State University (MSU), MI
2004 - Present Adjunct Professor, University of the Philippines, Dept. of Biochemistry and Molecular
Biology; Manila, Philippines
09/2005 - Present Director, Program in International Health for Dept of Medicine & Core faculty, MCW
Biotechnology and Bioengineering Center, WI
09/2005 Staff, Department of Medicine, Froedtert Hospital and Clinics, Milwaukee, WI

ADMINISTRATIVE APPOINTMENTS:

1984 Assistant Director, Admitting and Emergency Room Services, Wade Park VA Medical Center, Cleveland, OH
 1995 - 1998 Advisor, Michigan State University-Olin Health Center Travel Health and Immunization Clinics (MSU), MI
 2002 - 2003 Interim Chief, Division of Infectious Diseases, MSU, MI
 07/2003 - 2004 Acting Director, IIH, MSU, MI
 07/2004 - 2005 Director, Institute of International Health (IIH), MSU, MI

HOSPITAL STAFF PRIVILEGES:

09/2005 - Present Froedtert Memorial Lutheran Hospital, Milwaukee, WI

SPECIALTY BOARDS AND CERTIFICATION:

<u>Board Certified</u>	<u>Issue Date</u>	<u>Expiration</u>
National Board of Medical Examiners	1980	None
American Board of Internal Medicine	1983	None
Infectious Disease Specialty	1996	05/2019

<u>Certificates</u>	<u>Issued By</u>	<u>Issue Date</u>	<u>Expiration</u>
HERCULES (Higher European Research Course for Users of Large Experimental Stations)		09/2004	10/2004

<u>Licensure</u>	<u>Number</u>	<u>Issue Date</u>	<u>Expiration</u>
Illinois(valid,inactive)		1983	1991
Ohio License		1985	1995
Michigan License	4301055474	1996	2009
Wisconsin	49069	2006	2011

AWARDS AND HONORS:

1972 - 1976 Notre Dame Scholar, Academic Scholarship
 1976 Alpha Epsilon Delta, Honors Society
 1989 Finalist, Young Investigator Award, American Society of Tropical Medicine
 1991 - 1996 N.I.H. Physician - Scientist Award
 1992 - 1993 Visiting Scientist, Brown University, NIH, Tropical Disease Research Unit; Manila, Philippines
 1994 Finalist, American Assoc. Advancement of Science "Fellowship in Science and Diplomacy"
 1994 Assessor-Coordinator, Rural Primary Health Care in Esmeraldas Ecuador, by action of the Ecuadorian National Congress, Special Commission on Health
 1995 First place award Doctor as Photographer Competition, American College of Physicians
 1996 - 2002 5 patents awarded related to recombinant filarial and human tRNA synthetases
 1996 First Place, MSU Photography competition.
 1997 First Place, MSU Photography competition.
 1997 Phi Beta Delta, International Scholars Honors Society
 1997 Sigma Xi, Research Honors Society, MSU Chapter
 1998 International Studies Photography Competition, Second place, Faculty category
 2002 Sponsor for Winner of the Minority Research Forum Undergraduate Category-Angela Hendrick MIRT scholar and MSU Howard Hughes Undergrad Scholarship awardee (Michigan State University).
 2002 - 2003 MIRT Professor, Mentor Award for students working in the Philippines-International Studies
 2002 - 2003 Fellowship, International Human Frontiers in Science Program; Strasbourg, France.3-month

research project in collaboration with EMBL Grenoble: Structural biology of aminoacyl-tRNA synthetase; ligand complexes.
2007 Wisconsin ACP Mentor Recognition Award
FACP

MEMBERSHIPS IN HONORARY AND PROFESSIONAL SOCIETIES:

American College of Physicians
American Federation of Medical Research
American Society of Tropical Medicine and Hygiene

EDITORSHIPS/EDITORIAL BOARDS/JOURNAL REVIEWS:

Journal Review
PLOS Neglected Tropical Diseases
Journal of Diseases in Developing Countries
Journal of Molecular Biology
Journal of Travel Medicine
J Clinical Pharmacology
American Journal of Medicine
American Journal of Tropical Medicine and Hygiene
Trends in Parasitology
Journal of Infectious Diseases

LOCAL/REGIONAL APPOINTED LEADERSHIP AND COMMITTEE POSITIONS:

1989 MSU-Sparrow Hospital Community Pathology Planning Committee
06/1990 CME Accreditation Committee for American society of Parasitology; National Meeting
1990 MSU Medical Education Committee; Department of Pathology; Block II curriculum development group
1991 Science Advisory Committee, Representative of Cornell School to the Okemos Public School System
1991 N.I.H. - Basic Science Research Initiation Grant (BRSG) and All University Research Initiation (AURIG) Grant Review Committees, MSU
1992 AIDS/Zimbabwe Research Planning Committee. MSU
1993 Strategic Planning Committee for Lyme Disease. MSU
1993 USAID University Development Linkage Grant Committee: Michigan State University -Ecuador Ad Hoc Research Review Committee; Research Advisory Council, College of Osteopathic Medicine
07/12/1994 Michigan Health and Environment Scientific Advisory Committee: Advisory board for the use of biological control agents in the human living environment.
2000 External review of the Institute of International Health, MSU
2000 - 2003 Medical Grand Rounds Speaker Selection Committee; Department of Medicine, MSU
05/2002 - 2004 MSU University of Biosafety Committee
05/2002 - 2004 MSU University Advisory Committee to Center for Latin American and Caribbean Studies Center
05/2002 - 2004 MSU University Advisory Committee representative for the International Health Institute (IIH)
05/2002 - 2004 MSU Credentialing committee, MSU Health Team, Faculty Group Practice

NATIONAL ELECTED/APPOINTED LEADERSHIP AND COMMITTEE POSITIONS:

05/1993 USA Coordinator, International Congress of Tropical Medicine and Parasitology; Guayaquil, Ecuador.
1998 - 1999 American Federation of Medical Research (AFMR) Infectious Diseases subcommittee.
1998 - 2007 Member, product development group, World Health Organization; Geneva, Switzerland
1999 - 2001 AFMR Public Policy Committee.
2001 - 2002 NIH-Minority International Research Training Scholars Program (Valentine Nforsam, Tricia Punsulan and Richard Ferguson, 2001. Angela Henrick, Kyordea Kemp, Maddona Madeles, and Don Custodio, 2002; Additional 27 students participating in program between 2002-2005)
10/2002 NIAID special emphasis study section. Novel Partnerships for Anti-infective, Diagnostics and Vector Control Strategies.
12/2002 NIAID special emphasis study section; Program Project Grant review-Arming the Immune System against Agents of Bioterrorism

10/2003 NIH-Fogarty International Center Minority International Research Training Program study section.
 12/2003 NIH-NIAID Tropical Disease Research Unit Program Project Study section
 2003 - 2004 University of the Philippines, Dept. of Biochemistry and Molecular Biology, external reviewer for PhD Advisory Committees and MS Advisory Committees
 2003 - 2004 University of the Philippines, Dept. of Biochemistry and Molecular Biology (Leslie Dalmacio, MSc Candidate; Grace Yu, PhD Candidate; Badong Caoli, PhD. Candidate; Vito Butardo, MSc Candidate)
 2006 - 2007 Member, WHO Genomics & Drug Discovery advisory group
 2006 Ad hoc grant reviewer, Singapore Agency for Science and Technology Biomedical Research Council.

RESEARCH GRANTS/AWARDS/CONTRACTS/PROJECTS:

Prior

Peer Review

Title: Characterization of an antigen gene of possibly protective value from *Onchocerca volvulus*.
 Source: World Health Organization.
 Role & Effort: Post-doctoral fellow salary and research support in the laboratory of Bruce Greene, Division of Geographic Medicine; Case Western University.
 Dates: 1987 - 1989
 Direct Funds: \$75,000

Title: Sudan Parasitology Project, N.I.H. Program Project Grant.
 Source: NIH NIAID
 Role & Effort: Immunology and molecular biology of onchocerciasis, support for research supplies.
 Dates: 1989 - 1990
 Direct Funds: \$185,000 (yearly)

Title: "New Diagnostic Techniques for Lyme Disease".
 Source: MSU Foundation
 Role & Effort: P.I.
 Dates: 1989 - Present
 Direct Funds: \$12,327

Title: "Characterization of a genomic clone from *Onchocerca volvulus*"
 Source: Basic Science Research Initiation Grant
 Role & Effort: P.I.
 Dates: 1989 - 1990
 Direct Funds: \$6,900

Title: "Onchocerciasis in Ecuador"
 Source: All University Research Initiation Grant, Michigan State University.
 Role & Effort: P.I.
 Dates: 1991
 Direct Funds: \$8,990

Title: "Strengthening proficiency in Spanish"
 Source: International Studies and Programs,

Role & Effort:	Michigan State University. Foreign Language Capacity Grant (Spanish). P.I.
Dates:	1991
Direct Funds:	\$2,000
Title:	"Immune responses to Onchocerca volvulus in Ecuador".
Source:	N.I.H. Physician Scientist Award (K11)
Role & Effort:	Principal investigator
Dates:	1991 - 1996
Direct Funds:	\$471,000
Title:	International Studies and Programs, MSU
Source:	University Linkage Grant for University of Guayaquil/Ecuadorian officials to visit MSU campus for planning activities.
Role & Effort:	P.I.
Dates:	1992
Direct Funds:	\$45,000
Title:	"Expression and Crystal Structure Analysis of a Recombinant Filarial AsnRS."
Source:	State of Michigan, Biotech. Trust, Res Excellence Fund
Role & Effort:	Principal Investigator
Dates:	1993 - 1994
Direct Funds:	\$12,000
Title:	Visiting Scientist Grant
Source:	N.I.H. Brown University, Tropical Disease Research Unit; Manila, Philippines.
Role & Effort:	Principal Investigator
Dates:	1993 - 1994
Direct Funds:	\$50,000
Title:	Special Foreign Travel Grant, for Plane ticket/funds to support presentation at the Latin-American Congress of Tropical Medicine, Guayaquil, Ecuador.
Source:	International Studies and Programs (MSU)
Role & Effort:	Principal Investigator
Dates:	1993
Direct Funds:	\$1,500
Title:	Collaborative Research Travel Grant.
Source:	NATO
Role & Effort:	Principal Investigator
Dates:	1996 - 1999
Direct Funds:	\$9,000
Title:	"Neutralizing antibody to nematode

Source:	asparaginyl-tRNA synthetase (AsnRS)"
Role & Effort:	N.I.H. Physician Scientist Award (K11)
Dates:	Principal Investigator
Direct Funds:	1997 - 2002
	\$511,915
Title:	Training in Epidemiology in Community Settings
Source:	NIH training Grant for Clinical Research Development K30 HL-4113
Role & Effort:	Executive committee member (5% salary support) for translational research issues.
PI:	Dr. Nigel Panneth
Dates:	1999 - 2004
Direct Funds:	\$185,000 (year)
Title:	"Toward the design of an anti-aminoacyl tRNA synthetase (aaRS) macrofilaricide"
Source:	W.H.O. Drug Development Grant
Role & Effort:	Principal Investigator
Dates:	2000 - 2004
Direct Funds:	\$220,000
Title:	"Detection of filarial aminoacyl tRNA synthetases"
Source:	N.I.H.-Fogarty International Research collaboration Award (FIRCA), Fogarty International Center.
Role & Effort:	Principal Investigator, Co-investigator is Bernadette Ramirez PhD, Vice Chair for Research, University of the Philippines, Manila.
Dates:	2000 - 2004
Direct Funds:	\$150,000
Title:	"Macrofilaricidal Aminoacyl tRNA Synthetase Inhibitors"
Source:	N.I.H. NIAID
Role & Effort:	Principal Investigator (UO1)
Dates:	07/2002 - 06/2008
Direct Funds:	\$3,200,000
Title:	Minority International Research Training
Source:	N.I.H. Fogarty International Center.
Role & Effort:	Program Director
Dates:	2002 - 2005
Direct Funds:	\$800,000
Title:	International Fellow: Travel fellowship, International Human Frontiers
Source:	Science Program
Role & Effort:	Principal Investigator
Dates:	2002 - 2003
Direct Funds:	\$6,700 (for travel, per diem)
Title:	"International Collaborative Biodiversity

Role & Effort: Program" network.
 Principal Investigator
 Dates: 09/01/2004 - 01/30/2007
 Direct Funds: \$300,000

Title: "High throughput profiling of plant
 extracts using engineered heart tissues".
 Source: N.I.H. STTR
 Role & Effort: Co-Principal investigator with T.
 Wakatsuki
 Dates: 12/2006 - 11/2007
 Direct Funds: \$136,000

Title: Post Doctoral Training Grant (T32)
 "Mechanisms of inflammation and injury
 in congenital and acquired
 cardiovascular disease."
 Source: NIH-NHLB
 Role & Effort: Clinical Program Coordinator
 PI: A. Greene
 Dates: 07/01/2009 - 06/30/2010
 Direct Funds: \$1,200,000

Non-Peer Review

Title: Multiple patent applications
 Source: Michigan State University, Office of
 Intellectual Property
 Role & Effort: Inventor
 Dates: 1995 - 1999
 Direct Funds: \$80,000

Title: "Survey of attitudes regarding
 ciprofloxacin for treatment of Traveler's
 Diarrhea"
 Source: Bayer Pharmaceuticals
 Role & Effort: Principal Investigator
 Dates: 1996
 Direct Funds: \$6,000

INVITED LECTURES/WORKSHOPS/PRESENTATIONS:

International

Ghalib HW, Williams JF, Mackenzie CD, Elkhailifa MY, Ayuya JM, and Kron MA; "Onchocerciasis in Eastern Sudan- A Prospective Study of Prevalence and Disease Manifestations." International Congress of Infectious Diseases ;Cairo, Egypt, 04/20/1985 - 04/24/1985
 J.F. Williams, H.W. Gjalib, C.D. Mackenzie, M.Y. Elkhailifa, J.M. Ayaya, and M. A. Kron; "Cell Adherence to Microfilariae of Onchocerca Volvulus: A Comparative Study"; C.I.B.A. Foundation Symposium; Singapore, 1986
 M. Kron and M. Hag Ali;"Characterization of a Repeated DNA Element from Different Geographic Strains of O. volvulus in Sudan"; International Congress of Infectious Diseases. Nairobi, Kenya, 07/1992
 Kron, M., "Clinical Research in Onchocerciasis in Ecuador"; Pan American Health Organization (2nd Inter-American Conference on Onchocerciasis Invited Participant). Quito, Ecuador, 09/1992
 Kron, M., "Application of Molecular Biological Techniques to Diagnosis of Tropical Parasitic Diseases", IV Latin American Congress of Tropical Medicine; Guayaquil, Ecuador, 05/15/1993
 Kron, M., "Characterization of an asparaginyl-tRNA synthetase in the human filarial parasite"; European Molecular biology Laboratory, Grenoble Outstation, 02/1994
 B. Ramirez, J. Gabriel, P. Seignon, P. Arias, E. Abeto, P. Peters and M. Kron., "Acridine Orange Staining of

- Microfilaria: a Rapid and Highly Sensitive Technique for the Detection of Microfilariae Cases in a Filariasis Endemic Community"; 5th Scientific Exhibit on Health and Related Technologies; Manila, Philippines, 07/16/1994 - 07/22/1994
- Kron, M., "Advances in the Therapy of Tropical Diseases-Ivermectin"; Ecuadorian Society of Pharmacology, International Congress; Guayaquil, Ecuador, 07/20/1994
- Kron, M., "Lymphatic Filariasis in the Philippines"; NIH Tropical Medicine Research Center, Scientific Advisory Committee Meeting; Manila, Philippines, 08/11/1994 - 08/12/1994
- Kron, M., 'Primera Reunion de los Chachi Cuaranderos'; MSU-University of Guayaquil. Zapallo Grande, Ecuador, 11/02/1995 - 11/03/1995
- Kron, M., "Update on AsnRS"; European Molecular Biology Laboratory; Grenoble, France, 02/1996
- Kron, M., "Participation of Women in a USA-based Overseas Study Program"; Fifth International Conference on Travel Medicine; Geneva, Switzerland, 03/03/1997
- Kron, M., "Update on AsnRS of B. malayi AsnRS", European Molecular Biology Laboratory Grenoble Outstation Seminar Series; Grenoble, France, 03/1997
- M. Beaulande, M. Hartlein, M. Kron, Epitope Mapping of the Human Cytoplasmic AsnRS". EMBO workshop on AARS. Strasbourg, France, 10/11/1998
- Kron, M., "Aminoacyl-tRNA synthetases as new molecular targets for filariasis". World Health Organization Steering Committee on Drug Development; Geneva, Switzerland, 11/02/1998 - 11/03/1998
- Kron, M., "Structure Function Studies of Human and Parasite AsnRS - Medical Implications for Drug Design", 04/08/2000 - 04/12/2000
- Kron, M. International-American Onchocerciasis Control Program (OCP), Guayaquil, Ecuador. Invited participant on behalf of Ecuadorian OCP, 11/06/2000 - 11/10/2000
- M. Kron, M. Beulande, C. Berthet, S. Cusack, M. Hartlein; Cambridge University (UK) 18th tRNA Workshop, 2000
- Kron, M., "AARS in Biology and Disease"; University of the Philippines, Dept. Biochemistry and Molecular Biology, 08/2001
- Kron, M., "Update on Alternative Functions of Parasite AARS", University of the Philippines, Dept. Biochemistry and Molecular Biology, 03/2002
- Kron, M., "Update on Alternative Functions of Parasite AARS", University of the Philippines, Dept. Biochemistry and Molecular Biology, 07/2002
- Kron, M., "Strategies for Anti-filarial Drug Discovery", International Congress of Parasitology; Vancouver, BC; Invited Subplenary speaker, 08/05/2002
- Kron M., "Multifunctional AARS", UP Manila School of Medicine, 07/2003
- T. Crepin, M. Hartlein, M. Kron et al; "Structure-based design of antiparasitic drugs". 20th International tRNA Workshop, Banz, Germany, 2003
- Kron M., "International Biodiversity Program and Rural Livelihood" projects in Bataan, Luzon, Philippines. Bataan Biotechnology Park, Philippines, 01/15/2004
- Danel, Walle, Kron, Hartlein, Cusack; "Pre-transfer editing in Brugia malayi asparaginyl Trna synthetase". International Workshop on Aminoacyl tRNA Synthetases; Seoul, Korea; Page (2004), 07/03/2004 - 07/07/2004
- Crepin, Cusack, Hartlein, Kron; "Structural studies on B. malayi AsnRS". Seoul, Korea, 07/03/2004 - 07/07/2004
- Evangelista K, BC Abesamis, M. Kron and BL Ramirez.2004.Detection of Hepatitis B Virus (HBV) infection using three HBV markers: HBV DNA, HBV surface antigen and antibody to HBV core antigen. Poster presentation: 8th National Genetics Symposium, DL Umali Hall, International Rice Research Institute (IRRI), Los Baños, Laguna, Philippines, 10/21/2004 - 10/22/2004
- Evangelista K, BC Abesamis, M. Kron and BL Ramirez. 2004. Detection of Hepatitis B Virus (HBV) infection using three HBV markers: HBV DNA, HBV surface antigen and antibody to HBV core antigen. Poster presentation: 31st Annual Convention of the Philippine Society for Biochemistry and Molecular Biology, Siliman University, Dumaguete, Philippines, 12/2004
- Ramirez B, HF Dong, T Edamatsu, G Ping, M Hartlein, JJ Oppenheim, OMZ Howard and M Kron. 2004. Brugia malayi asparaginyl tRNA synthetase induces leukocyte chemotaxis and binds G-protein coupled receptors, CXCR1 and CXCR2. Invited lecture, 31st Annual Convention of the Philippine Society for Biochemistry and Molecular Biology, Siliman University, Dumaguete, Philippines, 12/2004
- Kron, M., Marine Science Institute, UPDiliman. AsnRS and biology of invertebrate-host interactions, 2004
- Kron MA. "Multiple functions for a filarial asparaginyl-tRNA synthetase" 10th International tRNA

- Symposium, Bangalore, India, 2005
- Kron, M. World Health Organization Expert Group consultation on drug discovery for helminthiasis; Meeting secretary and rapporteur. Tokyo, Japan, 03/2006
- Kron M. "Teaching Biotechnology and Molecular Biology", Invited Speaker: Philippines Society of Biochemistry Annual Meeting, Iloilo City, Panay, Philippines, 12/04/2006
- Kron, M. "NMR Structure of the N terminus of *Brugia malayi* asparaginyl-tRNA synthetase. 7th International Symposium on Aminoacyl tRNA synthetases, Annecy, France, 09/10/2008
- Kron M. "Lymphatic Filariasis and Lemonade: Hopeful lessons from the immunology of human filariasis." Institute Laue Langevin, Grenoble, France, 09/12/2008
- Kron, MA "Advances in ant-infective drug discovery - the oxaborole story. Medical Grand Rounds, University of the Philippines, Manila, Philippines, 10/08/2008
- Kron, MA. "Infectious Disease Emergencies." National University of Malaysia, Kuala Lumpur, Malaysia, 10/08/2008
- Kron MA. "Biotechnology and anthelmintic drug discovery". Philippines National Institutes of Health, Institute of Biotechnology and Molecular Biology, Manila, Philippines, 10/12/2008
- Kron, MA. "Update on the structure-function relationship in a parasite AsnRS" Department of Biochemistry, University of the Philippines, Manila, 10/2009

National

- M. A. Kron, D. M. Shlaes, A. A. Medeiros, and C. Currie-McCumber, "The Molecular Epidemiology of the Ohio-1 Beta-Lactamase", International Conference on Antimicrobial Agents and Chemotherapy New Orleans, LA, 09/28/1987 - 10/02/1987
- M. Kron, K. Erttmann, B. Green, and T. Unnash, "Molecular Cloning and Expression of a Potentially Protective Antigen Gene from *Onchocerca volvulus*", American Federation of Clinical Research National Conference, Washington, DC, 04/30/1988
- DM Shaes, CA Currie-McCumber, and M. Kron, "The Ohio-1 B-Lactamase is Related to LEN-1 and TEM", American Society of Microbiology National Conference New Orleans, LA, 05/14/1989 - 05/18/1989
- M. Kron, K. Erttmann, T. Unnash and B. Greene, "Characterization of a Genomic Clone from *O. volvulus* which is Homologous to a Protective Protein Gene in *B. malayi*", American Society of Tropical Medicine and Hygiene National Conference. Honolulu, Hawaii, 12/1989
- T.W. Shillhorn, Van Veen, A. J. Murphy and M. Kron, "Analysis of two commercial ELISA assays, a fluorescent antibody test, a western blot and a PCR assay in the diagnosis of Lyme disease in dogs". First National Congress on Lyme Disease Testing. Dearborn, MI, 10/31/1990 - 11/02/1990
- T. W. Shillhorn, Van Veen, M. Kron, et al, "Lyme Disease Testing in Animals". First National conference on Lyme Disease Testing; Dearborn, MI, 11/1990
- M. Kron, "Identification of *Borrelia burgdorferi* by PCR". American Society of Parasitology National Conference. East Lansing, MI, 1990
- M. Kron and G. Ferenchek. Workshop "Primary Prevention and International Travel". Midwestern Society of General Internal Medicine. Chicago, 1990
- M. Kron, "Racial Differences in the Immune Response to *O. volvulus*", Wood's Hole Marine Biological Laboratory, Symposium: Protective Immunity and Prospects for Vaccine Development in Onchocerciasis. Sponsored by the Edna McConnell Clark Foundation. New York, NY, 04/07/1991 - 04/10/1991
- M. Kron et al. "Differential Antibody Responses to *O. volvulus* in Ecuador". American Society of Tropical Medicine National Conference; Boston, MA, 12/01/1991 - 12/05/1991
- M. Kron; "Onchocerciasis in Ecuador", Immunology Research Seminar, Department of Pathology. University of Connecticut Health Center. Farmington, 1991
- M. Kron; "Cloned Aminoacyl tRNA-synthetase from human filarial parasites are potential targets for pharmacological and immunological interventions". Palo Alto Institute for Molecular Medicine Conference: Epitope selection strategies for pharmaceutical design. Palo Alto, CA, 02/01/1993 - 02/02/1993
- M. Kron. Research in tropical medicine in Ecuador. Medical Grand Rounds, University of New Mexico, Santa Fe, New Mexico, 1993
- M. Kron, JR Guzman, M Jurado, J Pandey and M Ammunariz, "Hyperimmunoglobulinemia E in Ecuadorian Huorani Indians", American Federation of Clinical Research National Conference, Washington DC, 05/04/1994
- I Padmalayam, B. Anderson, B. Baumstark, M. Kron et al. "Isolation of Clones Expressing 75 kD and 30 kD

- Antigens of *Bartonella bacilliformis*." National Congress of Rickettsial and Viral Zoonosis. Atlanta, GA, 09/17/1994
- M. Kron, J. McMillan, M Hirakata, I Targoff, S Price and R Leberman; "Asparaginyl-tRNA Synthetase of *Brugia malayi*" American Federation of Clinical Research National Meeting. Washington, DC, 05/03/1996
- M. Kron; Keystone Symposium: "tRNA Synthetases in Biology and Disease". Title: *B. malayi* ASNRS; Taos, New Mexico, 02/01/1997
- B. Ramirez, M. Kron, (abstract) "Lymphatic Filariasis in the Philippines: A Five-Year Update". American Society of Tropical Medicine Annual Meeting; San Juan, Puerto Rico, 10/1998
- Kron, M., "Student Health and Safety During Study Abroad, Programs", National Association of Foreign Students and Teachers (NAFSA). Invited workshop: - confronting the Stereotype. San Diego, California, 05/2000
- Kron, M., "Medical Applications of Asparaginyl-tRNA synthetase inhibitors"; Asilomar Conference on AARS in Biology, Medicine, and Evolution. Asilomar, California, 2001
- L. Saravolitz, M. Kron et al. Parvovirus Infection Presenting with Necrotizing Mediastinitis. IDSA Chicago, IL, 2002
- M. Kron., "Strategies for Antiparasitic Drug Development"; University of Pennsylvania Infectious Diseases Grand Rounds, 04/2003
- M. Kron., Benefit Sharing with Developing Country Partners"; Fogarty International Center Workshop for ICBG PIs - Bethesda, MD, 12/2003
- M. Dhananjeyan, Y. Milev, M. Kron and M. Nair; "Synthesis of Antifilarial Anthroquinones". International Congress on Natural Products Research. Atlanta, GA, 07/31/2004
- Kron, M., "Discovery of antimalarial compounds and biodiscovery in the Philippines"; ICBG & MR4 MEETING; Bethesda, 10/12/2004
- C. Sukuru, Sameer Arora, M. Zavotsky, M. Kron and L Kuhn; "Flexible Protein Structure Based Screening and Docking: Applications to Anti-filarial Drug Design". Symposium on Protein, Structure, Function and Disease; East Lansing, MI, 2004
- Kron M US State Department, Dept of Oceans and Environment, Washington DC. Title: Procedures for Biodiversity Research Certification in the Philippines, 07/2005
- Kron M. Smithsonian Institute, Dept of Zoology. Title: Biodiscovery in the Philippines and Executive Order 247, 11/14/2005
- Kron M. Anacor Pharmaceuticals, Palo Alto, CA. Title: Filariasis- Biology and Approaches to Treatment, 08/07/2009
- Y. Freund and M Kron et al. Title: Novel boron containing molecules as a new class of Anti-infective agents. ASTMH Annual meeting, 11/29/2009
- Kron M. Co-Chair and speaker, ASTMH Symposium on Global Health education. Title: Development of a new global health education pathway in Milwaukee. ASTMH Annual meeting, 11/29/2009
- M Kron. US Department of State, Washington DC, 03/01/2010
- M. Kron, Bill Frederick, Laurie Hartjes. Forum on Education Abroad. Standards Institute: Beyond Health, Safety and Security. Charlotte, NC, 03/22/2010
- M Kron, B Shen, Z Zhaou, S Vodanovic, et al. Antifilarial tirandamycins. Am Soc Tropical medicine annual meeting, Philadelphia, PA, 12/11/2011

Local

- M. Kron, "Lyme Disease in Michigan - Facts and Myths" WJR (Detroit, Michigan) Radio Interview by J.P. McCarthey, 1989
- M. Kron, "Molecular Biology and *Borrelia burgdorferi*" Michigan Department of Public Health, Bureau of Laboratory Medicine and Epidemiology; Seminar Series, 1989
- M. Kron, T. Unnasch, and B. Greene, "Characterization of a Genomic Clone from *O. volvulus*, and Comparison with Related Genes in *Saccharomyces* and *Brugia*". Phi Zeta Research Day; Michigan State University, 06/1990
- M. Kron, "PCR and Lyme Disease: Emerging Biotechnologies and Clinical Microbiology", Michigan Society of Medical Technologists, Lansing, MI, 06/03/1991
- M. Kron, "Unusual GI Parasites", Gastroenterology Conference, Ingham Medical Center, 11/1991
- M. Kron, "Identification of Lyme Disease", Medical Grand Rounds; St. Mary's Hospital; Grand Rapids, MI. Pathology Residency Research Seminars; Butterworth Hospital; Grand Rapids, MI, 1991
- M. Kron, "Approaches to Filariasis Control and Prevention", Infectious Diseases Research Seminar;

Northwestern Memorial Hospital; Northwestern University. Chicago, IL, 02/1992

M. Kron, "Molecular Biology and Internal Medicine", Ingham Medical Center Grand Rounds, 07/1992

M. Kron, "Update on Lyme Disease in Michigan", Hurley Medical Center and Ingham Medical Center, Michigan, 02/1993 - 03/1993

M. Kron, Medical Scientist (MD-PhD) Training Program; Michigan State University Featured Speaker. "Research in Molecular Parasitology", 01/1994

M. Kron, C. Banda, J. Pandey, J. Rumba, and M. Jurado, "Elevated IgE in Ecuadorian Huaorani Indians", American College of Physicians - Michigan Chapter, 04/29/1994

M. Kron, "Clinical Research in the Philippines and Ecuador", MSU International Health Project Lecture Series, 09/1995

M. Kron, "Managed Care Approach to Community Acquired Pneumonias" MSU Department of Medicine Grand Rounds, 11/1995

M. Kron, B. Sachtev, R. Watson, G. Moore, "Chronic Renal Failure and Ingestion of Asian Herbal Tea", American College of Physicians Michigan Chapter, 1995

M. Kron, Orientation for new faculty course directors of Study Abroad Programs at MSU - yearly, 1995 - 2000

M. Kron, MSU Study Abroad Program, General Travel Health Orientation for students - yearly, 1995 - 2000

M. Kron, "Lyme Disease in Michigan", Olin Health Center (MSU) Continuing Education Seminars, 02/28/1996

M. Kron, "Molecular Biology Applications to Cardiovascular Research", Cardiology Research Conference, MSU Dept of Medicine, 03/06/1996

M. Kron, "Primary Health Care in Ecuador: Issues and Perspectives", Center for International Studies (MSU) Latin American and Caribbean Studies Center Seminar Series, 04/04/1996

M. Kron, "Primary Health Care in Ecuador", MSU Department of Family Practice, 04/08/1996

M. Kron, "Seroepidemiology of Bartonellosis in Manabi, Ecuador", Michigan Chapter, American College of Physicians, 09/1996

M. Kron, "Antisynthetase Antibodies in Patients with Autoimmune Interstitial Lung Disease", American College of Physicians Michigan Chapter, Lansing, MI, 1996

M. Kron, "Emerging Infectious Diseases: Bartonellosis", Medical Technology Program, MSU, 05/28/1997

M. Kron, "Primary Health Care in Ecuador", MSU Study Abroad Office, Study Abroad Fair. Twice yearly, 1997 - 1999

M. Kron, "Health Care in Ecuador and the Philippines", International Health Project Lecture Series-yearly, 1997 - 2000

T. Kollar, P. Church, M. Kron et al, "Osteoarticular Sporotrichosis" American College of Physician Michigan Chapter, 03/1998

M. Kron, "Emerging Infectious Diseases: Bartonellosis", Medical Technology Program, MSU, 05/1998

M. Kron, "AARS as Targets for Rational Drug Design", Structural Techniques Group, Dept. Biochemistry, MSU, 09/17/1998

M. Kron, "AARS in Biology and Disease", Medical Grand Rounds; Michigan State University, 10/27/1998

M. Kron, "AARS in Parasitology", MSU Department of Microbiology special seminar, 10/1998

M. Kron, "Update on Travel Medicine", Ingham Medical Center Infectious Disease Update: Lansing, MI, 11/20/1998

M. Kron, "AARS in Infectious and Autoimmune Disease" and, "Filariasis in the Philippines", Michigan Infectious Disease Society, 03/1999

M. Kron, "Update on Travel and Immunization Clinics", MSU Olin Health Center, CME Series, 04/22/1999

M. Kron, "Structure Based Design of Aminoacyl-tRNA Synthetase Inhibitors", Theoretical and Applied Biology workshop, Dept. of Physics and Biochemistry, MSU, 04/24/1999

M. Kron, "Imported Parasitic Diseases", Michigan Infect Control Society, 04/30/1999

G. Renshaw and M. Kron, "Unusual Presentations for Pulmonary Blastomycosis". MSU Department of Medicine Research Day, 2000

M. Kron, Medical Grand Rounds, Michigan State University, yearly, 2000 - 2005

M. Purdy, M. Kron et al, "Serratia marcescens fasciitis and Temporary Remission of Chronic Lymphocytic Leukemia", MSU Research Day, 2000

M. Kron, "Parasite AARS as Drug Targets"; Michigan Infectious Disease Society, Ann Arbor, MI, 03/2001

M. Kron, J. Tiedje, F. Gifford, Bioethics Conference at MSU. Sponsored by MSU office of VP for Graduate Studies. Terry May - organizer, 02/2002

M. Kron, "AARS as Molecular Targets for Drug Discovery", MSU Center for Biological Modeling, Spring

Symposium, 06/10/2002
Sukuru, Kron, Grotli, Danel, Cusack and Kuhn, "Design and Development of AARS Inhibitors using Structure Based Screening". MSU Center for Biological Modeling 2002 Symposium, 10/18/2003
M. Kron. MCW Research Conference "Aminoacyl-tRNA synthetases in Biology and Disease, 02/2006
M. Kron, "International Health in the Philippines", Department of Pediatrics, MCW Global Health Seminar Series, 02/2007
M. Kron, "Microbial Cytokines" Microbiology Research Conference, MCW, 2007
M. Kron, "Febrile Illness in the Returning Traveler". Medical Grand Rounds, St Agnes Medical Center, Fond du Lac, WI, 07/2008
M Kron, "International Health Training at MCW". Global Health Interest Group seminar series, 08/2008
M. Kron, "Structural studies and discovery of new antiparasite treatments" Brown Deer High School, Milwaukee School of Engineering SMART Team orientation, Milwaukee, WI, 11/21/2008
M. Kron, "Update on Structure function studies of parasite aminoacyl tRNA synthetases" Infectious Disease Research Conference, 2008
M. Kron, "Update on Structure function studies of parasite aminoacyl tRNA synthetases" Infectious Disease Research Conference, 2009
M Kron, MCW Biotechnology Center Research Update, 08/16/2011
M Kron, MCW Infectious Disease Research Conference. Title: High throughput screening for AsnRS inhibitors, 09/11/2011
M Kron, University of Wisconsin Madison, Graduate Program in Molecular and Cellular Parasitology. Seminar title: Parasite AARS - Insights into biology, immunology and drug discovery, 09/17/2011

COMMITTEE SERVICE:

Medical College of Wisconsin

10/2005 - Present Dept of Medicine designated advisor to all students and present residents interested in global health training, including all students and residents inquiring about participation in Dept sponsored international electives in Philippines.
2005 - Present Advisor, Global Health Interest Group
2005 - 2008 Advisor and Board of Directors, WiCare.
2005 - Present Advisor, Center for International Health
11/10/2006 Department of Medicine Research Day (organizer) Guest speaker: Dr. Adel A.F. Mahmoud MD PhD, Executive Director, Gates Foundation's International HIV Vaccine Initiative.
09/2008 - Present Advisor/mentor, Milwaukee School of Engineering "SMART "Team (with Brown Deer High School)

MCW TEACHING ACTIVITIES:

Medical Student Education

2007 Teaching attending, General Internal Medicine Service (2007), Froedtert Lutheran Memorial Hospital.
2011 - 2012 TBL Med Micro
Resident, interns, students on clinical infectious disease rotation
Departmental seminars - Biochemistry, Infectious Disease
Advisor, Froedtert International Travel and Immunization Clinic
Clinic Manager.
Consultant, Adult infectious disease service, Froedtert Hospital.
Medical parasitology lectures (n=8) for M2 Med Micro standard curriculum
COSI advisory committee, Dept Biochemistry, as needed
Director, Global Health Pathway curriculum
Biochemistry problem based learning, as needed

EXTRAMURAL TEACHING:

Medical Student Education

1996 - 1998 Michigan State University, Mentor for group of seven first year medical students
Michigan State University, I.D. Inpatient consultation Service

Michigan State University, Block II Curriculum Lectures
Michigan State University, Small group leader, yearly, Infectious Disease, Immunology (HM605),
Development and Human Behavior, Pulmonary Disease and Renal Disease, Hematology/Oncology
domains
Michigan State University, Block II Program, CHM
Michigan State University, Clinical Skills: Neurological Examination
Michigan State University, Teaching attending: Internal Medicine Service, Residents and Students
Michigan State University, Molecular Pathology, (Pathology 891) Guest lecturer. Title: Infectious Disease
Diagnosis and Applied DNA Technology.
Michigan State University, Internal Medicine Residency Core Curriculum: Upper Respiratory Tract
Infections, Adult Immunizations, Infectious Disease Emergencies, Agents of Bioterrorism

Resident and Fellow Education

1996 - 1998 Michigan State University, Internal Medicine Resident Clinic. Faculty preceptor, Ingham
Medical Center

Continuing Medical Education

07/1989 - 06/1991 Michigan State University, Research Coordinator: Tropical and Infectious Disease
Laboratory: responsibilities for assisting with multiple research projects by visiting professors,
research assistants, and graduate students
Michigan State University, Olin Student Health Center and Office of International Studies. Medical
Advisor: Travel Medicine clinic and Office of Study Abroad. Advisor and teacher for students, faculty
and staff
Michigan State University, Medical Entomology: (NS491) Guest lecturer
Michigan State University, Family Practice (MED 850) "Primary Health Care in Developing Countries"
Guest lecturer

MCW STUDENTS, FACULTY, RESIDENTS AND CLINICAL/RESEARCH FELLOWS MENTORED:

Medical Students

2005 - Present Global Health Interest Group members, individual and group discussions, MCW
2006 - 2007 Participants in Philippines electives: 7 M4s, MCW
02/2009 20 M4s, MCW
2009 - 2010 Participants in Philippines electives: 25 M3, M4 students, MCW
Six applicants for NIH-FIC Fogarty Ellison International Clinical Research Awards, MCW
Kristen Berg, MCW

Clinical/Research Fellows

2006 - 2007 Diraj Kotwal, MCW
2007 - 2008 Sun Park, MD, MCW

Residents

2007 - 2008 Participants in Philippines electives: Four Residents, MCW

EXTRAMURAL STUDENTS, FACULTY, RESIDENTS, AND CLINICAL/RESEARCH FELLOWS MENTORED:

High School Students

1998 Deepak Mistry, Honors Program, Michigan State University
2000 Nikki Tsang, Honors Program, Michigan State University
2001 Chris Ryan, Honors Program, Michigan State University

Undergraduate Students

Levi Boldt, Michigan State University
Ying Wang, Michigan State University
Joshua Vanderlugt, Michigan State University
Robyn Englehardt, Michigan State University

Wendy Xiao, Michigan State University
Kristine Marquard, Michigan State University

Graduate Students

PhD Committees

Quio Tan Xiao, Michigan State University
Scott Boley, Michigan State University
C. Sukuru, Michigan State University
Chi Lei, Michigan State University
Bob Kennewel, Michigan State University
B. Pascutti, Michigan State University
Jamie Blow, Michigan State University
Robert Ebersson, Michigan State University
Mark Huntington, Michigan State University
Kati Loeffler, Michigan State University
Cindy Nelson, Michigan State University
M. Petridis, Michigan State University
Robert Garrison, Michigan State University

MS Committees

Kerry Cullen, Michigan State University
Nino Soave, Michigan State University
Huang Che, Michigan State University
Wenyue Huang, Michigan State University
Jose Santiago, Michigan State University
Heidi Long, Michigan State University
Valentine Nforsam, Michigan State University
Tracy Smith, Michigan State University

Residents

Bharti Scahdev, Clement Banda, Suganda Lohim, Amit Chose, Margaret Purdy, Advisory Committee,
Michigan State University

PROGRAMMATIC DEVELOPMENTS:

Educational Programs

Student

1996 - 2000 Course Director: "Primary Health Care in Ecuador", MED 645: Four-week course held in Ecuador with the collaboration of the University of Guayaquil School of Medicine
03/2001 Program Co-course Developer, "Spanish for Health Professionals" Sponsor/advisor. In collaboration with the Romance and Classical Language Dept (MSU), Latin American&Caribbean Studies, Dept. of Medicine
2006 - Present MCW Department of Medicine, International Elective for M4's (311-M4181). In collaboration with the University of the Philippines College of Medicine, Manila.
2006 - Present MCW Departments of Medicine and Pediatrics, International elective for residents In collaboration with the University of the Philippines College of Medicine, Manila.
07/2009 - Present MCW Global Health Education pathway (Director) for M1-M4 curriculum
2009 - Present MCW Department of Medicine, International Electives for M3's (Approved 10/2008 to begin in 2009). In collaboration with the University of the Philippines College of Medicine, Manila.
On-line Certificate Program in Travel and Tropical Medicine (Concept approved by American Society of Tropical Medicine and Hygiene, summer 2006, not implemented.)

COMMUNITY SERVICE ACTIVITIES:

1988 - 1991 Medical advisor (voluntary) Children's Ballet Theater; Lansing, MI

11/1995 Produced and Directed "Primary Health Care in Ecuador" post-production editing of a 45 minute orientation video for students/faculty with international health interests

1996 Introduction video for new patients attending the Travel and Immunization Clinic, MSU Olin Health Center

2003 - 2005 Board of Directors (2003-2005) Children's Ballet Theater of Michigan

2004 International Travel advisor, Okemos Public School Orchestra trips to Europe

2005 - Present Advisory committee, Center for International Health, Milwaukee WI

2006 International Travel Advisor volunteer (2006) Planned Milwaukee Youth Symphony Orchestra trip to China

07/2007 Medical Chaperone, Milwaukee Youth Symphony's Concert Tour of China (July 2007) Okemos Public School District, and Greater Lansing Ballet Company. Freelance Photographer

BIBLIOGRAPHY

Refereed Journal Publications/Original Papers

1. M Kron and R. Hedger (1984). Hepatitis-A Induced Remission of Minimal Change Nephropathy. *Archives of Internal Medicine*: 144;2279.
2. Mackenzie CD and M Kron (1985). Diethylcarbamazine: A Review of its Action in Onchocerciasis, Lymphatic Filariasis and Inflammation. *Tropical Diseases Bulletin*: 82;R1-37.
3. M. Sands, M. Kron and R. Brown (1985). Pentamidine. *Reviews of Infectious Diseases*: 7(5)625-34
4. M. Kron and Clement Hsu (1985). Praziquantel and Clonorchiasis. *Archives of Internal Medicine*: 145;1002-1003.
5. D.M. Shlaes, A.A. Medeiros, M. Kron, C. Currie-McCumber, E. Papa, and C.V. Vartian (1986). Novel Plasmid Mediated Beta-Lactamase in Members of the Family enterobacteriaceae from Ohio. *Antimicrobial Agents and Chemotherapy*: 30(2);220-224.
6. M. Kron, David M. Shlaes, Charlotte Currie-McCumber and Antonne A. Medeiros (1987). Molecular Epidemiology of Ohio-I Beta-Lactamase. *Antimicrobial Agents and Chemotherapy*: 31(12).
7. J.F. Williams, H.W. Ghalib, C. D. Mackenzie, J.M. Ayuya, and M. Kron. (1987) Cell Adherence to *Onchocerca volvulus*: A Comparative Study. C.I.B.A. Foundation Symposium, Vol 134.
8. H.W. Ghalib, C. D. Mackenzie, M. Kron, J. F. Williams, M. Elkhalfia and H. Elsheikh (1987). Severe Onchocercal dermatitis in the Ethiopian border region of Sudan. *Ann Trop Med Parasitol*.
9. M. Kron and J. J. Ellner, (1998). *N Engl J Med* (letter) 318:(9)
10. Michaela Gallin, Ming Tan, M. Kron, Bruce M. Grene, Henry S. Newland, Albert T. White, Hugh R. Taylor and Thomas R. Unnasch (1989). *Onchocerca volvulus* Recombinant Antigen: Physical Characterization and Clinical correlates with Serum Reactivity. *J Infect Dis*. 160(3): 521-529
11. M. Kron and C. D. Mackenzie (1990). Surface Area Calculations for Microfilariae of *Oncocerca volvulus*. *Trop Med Parasit*. 42: 151-152
12. D. M. Shlaes, A. Hull, I. Bellau and M. Kron (1990). The Ohio-I Beta-lactamase is part of the SHV-1 family. *Ant Agents Chemotherapy*, 34(8):1570-6.
13. M. Kron, A Gupta, and C. D. Mackenzie. Identification of a DNA Sequence Common to *Borrelia burgdorferi* and two strains of *Leptospira interrogans* using the Polymerase Chain Reaction. (1991) *J. Clin Micro*. 29(10):2338-40.
14. M. Kron, R. Guderian, A. Guervarra and A. Hidalgo (1991). Abdominal Sparganosis in Ecuador. *Am J Trop Med*. 44(2):146-190
15. M. Kron, R. Guderian, A. Guevarra (1992). Primary myiasis caused by *Cochliomyia hominivorax* in Ecuador. *J Am Acad Dermatology*. 27(2): 264-65.
16. M. Kron, K. Erttmann, T. Unnasch and B. Greene (1992). Characterization of a possible tRNA-synthetase gene from *O. volvulus*. *Molec Biochem Parasitol* 52:289-92.
17. M. Kron, r. Guderian, M. Chico, H. Jurado, J. Rumbea, and CD Mackenzie (1993). Antibody responses to *Onchocerca volvulus* in Ecuadorian Blacks and Amerindians. *Trop Med. Parasitology* 44:152-54.
18. M. Kron and M.H. Ali (1994) Characterization of a Variant Tandem Repeat in Sudanese *Onchocerca volvulus* *Trop Med Parasitol*. 44:113-115.
19. M Kron, J. Pandey, J. Guzman (1994). Immunoglobulin Allotypes in Ecuadorian Cayapa Amerindians. *Human Genetics*. 3:517-19.
20. M. Kron, K. Marquard, R. Leberman, et al. (1995). An immunodominant antigen from *Brucia malayi* is an asparaginyl-tRNA synthetase *FEBS Letters*: 394;122-125.

21. J. Guzman, M. Jurado and M. Kron. (1995). Infectious Disease in Ecuador. *J. Travel Medicine*, 2:89-95
22. M. Kron, Substandard primaquine phosphate for US Peace Corp Personnel. *Lancet*, November 23, 1996
23. I. Padamalyan, Burt Anderson, M. Kron et al (1997). Characterization of a 75 kDa cell division protein cloned from *Bartonella bacilliformis*. *J Bacteriology*: 179(14):4545-4552.
24. M. Kron, and J Rumbea (1997). Threat of Dengue Hemorrhagic Fever after YF Vaccination. *The Lancet*, June 21, 1997
25. J. Amano, J. Rumbea, J. Olsen, J. Knobloch and M. Kron (1997). Bartonellosis in Ecuador: Serosurvey and Current Status of Cutaneous Verrucous Disease. *Am J Trop Medicine* 57(2):174-179.
26. J. Lazdins and M Kron 1999. New molecular Targets for Filariasis. *Parasitology Today* 15(8):305-307.
27. M. Kron, B. Ramirez, J. Pandey (1999). Immunoglobulin allotypes in the Bicolano of Sorsogon Province, Philippines: Implications of phenotypes for filariasis. *Experimental and Clinical Immunogenetics* 16:65-71.
28. M. Hirikata, M. Kron et al. (1999). Characterization of anti-KS: autoantibody against human cytoplasmic AsnRS. *J. Immunology* Feb 15; 162(4):2315-20.
29. M. Kron et al. (2000) Hyperimmunoglobulinemia E in the absences of filariasis: The Huaorani of Ecuador. *Asthma Allergy Proceedings*. 21(6):335-341.
30. M. Kron, E. walker, B. Ramirez, L. Hernandez (2000). Lymphatic Filariasis in the Philippines. *Parasitology Today*. 16(8):329-333
31. M. Kron and E. Walker. (2000) Myiasis and Helminthiasis - Diagnostic Challenge. *Cortland Forum*, June, 2000.
32. M. Beulande, M. Kron, M. Hartlein (2001). The autoantibody KS increases the Affinity of AsnRS for tRNA. *FEBS Letters* 494:35-39
33. Howard OM, Dong HF, Yang D, Rabin N, Nagaraju K, Rosen A, Kron M, Plotz PH, Oppenheim JJ. (2002) Histidyl tRNA synthetase and asparaginy 1 tRNA synthetase, autoantigens in myositis, activate chemokine receptors in T lymphocyte and immature dendritic cells. *J Exp Med* Sept. 16:196(6):781-91
34. M. Kron, L. Kuhn, S. Cusack, M. Hartlein. (2003) Strategies for Antifilarial Drug Development. *J. Parasitology* 89:S226-235.
35. M. Kron et al. (2003). Expression and localization of asparaginy-tRNA synthetase in *Brugia malayi*. *Molec Biochem Parasitol* 129:33-39
36. B. Ramirez, M. Kron, (2004) Contrasting Microfilarial Rates in Neighboring Rural Philippines Villages with Lymphatic Filariasis. *Am J Tropical Medicine*, July;71(1):17-23
37. D. Whitby, M. Kron et al (2004) Genotypic characterization of Kaposi's sarcoma associated with herpes virus in asymptomatic infected subjects from Isolated Populations. *J General Virology* 85:155-163
38. Kron MA, Petridis M, Haertlein M, Libranda-Ramirez B, Scaffidi LE. (2005) Do tissue levels of autoantigenic aminoacyl-tRNA synthetase predict clinical disease? *Med Hypotheses*. 65(6): 1124-7. Epub 2005 Aug 8.
39. Dhananjeyan MR, Milev YP, Kron MA, Nair MG (2005). Synthesis and activity of substituted anthraquinones against a human filarial parasite, *Brugia malayi*. *J Med Chem*. Apr 21;48(8):2822-30.
40. Ramirez BL, Howard OM, Dong HF, Edamatsu T, Gao P, Hartlein M, Kron M. (2006). *Brugia malayi* asparaginy-transfer RNA synthetase induces chemotaxis of human leukocytes and activates G-protein-coupled receptors CXCR1 and CXCR2. *J Infect Dis*. 15;193(8):1164-71.
41. Sukuru SC, Crepin T, Milev Y, Marsh LC, Hill JB, Anderson RJ, Morris JC, Rohatgi A, O'Mahony G, Grotli M, Danel F, Page MG, Hartlein M, Cusack S, Kron MA, Kuhn LA (2006) Discovering New Classes of *Brugia malayi* Asparaginy-tRNA Synthetase Inhibitors and Relating Specificity to Conformational Change. *J Comput Aided Mol Des*. Apr 28;
42. B. Motin, L. Cruz, F. Gifford, Michael Kron. (2006). A Modified Socio-Culture Development Index (SCDI) for the Aytas of Kanawan, Morong, Bataan, Philippines. *Indigenous Perspectives*
43. Dalmacio L, B Ramirez, JR Ricaforte, EO Domingo and M Kron (2007). Molecular epidemiology of Hepatitis G Virus (HGV) infection among risk groups. *Acta Medica Philippina* 52:212-217.
44. Dalmacio L, OB Findji, BL Ramirez, T Schmidt and M Kron (2007). Molecular identification and phage sensitivity of bioluminescent bacteria isolated from the coastal waters of Woodshole, Massachusetts. *Asia Life Sciences Journal* 23:34-39.
45. M Kron, F. Yousin and Bernadette Ramirez (2007). Capacity building in anthelmintic drug discovery. *Expert Opinion Drug Discovery* 2(S1):1-8.
46. Kron M, Leykam J, Kopaczewski J, Matus I. (2007) Identification of diadenosine triphosphate in *Brugia malayi* by reverse phase high performance liquid chromatograph and MALDI mass spectrometry. *J Chromatography B*. Sep 1;856(1-2):234-8.

47. Kron M, Cichanowicz S, Leykam J, Kuhn L (2008). Using structural analysis to generate parasite specific monoclonal antibodies. *Protein Science* 17(6):983-989.
48. Tunistra, R., Peterson F, Kutlesa, S, Kron, M, Volkman B. (2008). Interconversion between two unrelated protein folds in the lymphotactin native state. *Proc Natl Acad Sci*105(13):5057-62.
49. Wenkert D, Ramirez B, Shen Y, Kron M (2010) In Vitro activity of Geldanamycin derivatives against *Schistosoma japonicum* and *Brugia malayi*. *J. Parasitology Research*.
50. Danel F, Caspers P, Nuoffer C, Härtle M, Kron M, Page MG. (2010) Asparaginyl-tRNA Synthetase Pre-transfer Editing Assay. *Curr Drug Discov Technol*. 2010 Nov 24. [Epub ahead of print] PMID: 21091430
51. Crepin T, Peterson F, Haertlein M, Jensen D, Wang C, Cusack S, Kron M (2010). A hybrid structural model of the complete *Brugia malayi* asparaginyl-tRNA synthetase. *J Mol Biol*. 2010 Dec 4. [Epub ahead of print] PMID: 21134380.
52. Artero JB, Teixeira SC, Mitchell EP, Kron M, Forsyth VT, Haertlein M (2010). Crystallization and preliminary X-ray diffraction analysis of human cytosolic seryl-tRNA synthetase. *Acta Crystallogr Sect F Struct Biol Cryst Commun*. 2010 Nov 1;66(Pt 11):1521-4. Epub 2010 Oct 29. PMID: 21045311.
53. Crepin, Peterson, Haertlein, Jensen, Wang, Cusack and Kron. 2010. A hybrid structural model of the complete *Brugia malayi* cytoplasmic asparaginyl-tRNA synthetase. *J Molec Biology*.
54. Yu, Jankovic, Ledebouer, Huang, Rajska, Kron and Shen. 2011. Tirandamycins from *Streptomyces* sp 17944 inhibit the parasite *Brugia malayi* asparaginyl tRNA synthetase. *Organic Letters*, April 2011.
55. T. Punsalan, M. Kron, et al. Knowledge and Attitudes of Filariasis among the Mangyan of Mindoro, Philippines.
56. M. Kron, T. Pinlac, M. Haertlein, T. Crepin, O.M. Zack Howard. *S. japonicum* asparaginyl tRNA synthetase chemoattracts monocytes and immature dendritic cells.
57. M. Kron, L. Kuhn and O.M. Zack Howard. Mechanism and consequence of CXCR1 and CXCR2 chemokine receptor activation by *Brugia malayi* asparaginyl tRNA synthetase.
58. M Kron et al, New AsNRS inhibitors from Actinomycetes and Fungal fermentation broths
59. MSc Thesis. Title: "An in vitro model of eosinophil adherence to microfilariae of *Brugia pahangi* and the side effects of diethylcarbamazine". Research in the Wolfson Tropical Pathology Unit, London School of Hygiene and Tropical Medicine; London, England, 1984

Books, Chapters, and Reviews

1. Ramirez B, L Hernandez and MA Kron, (2006) Lymphatic Filariasis in the Philippines: History, Early Reported Cases and Early Surveys. In *Filariasis in Asia*. Eisaku Kimura, editor.
2. Dalmacio, LM, Ramirez B, L Hernandez and MA Kron. (2006). Lymphatic Filariasis in the Philippines: Epidemiology and Geographic Distribution. In *Filariasis in Asia*. Eisaku Kimura, editor.
3. Hernandez L, Ramirez B and MA Kron. (2006). Lymphatic Filariasis in the Philippines: The National Filariasis Elimination Program. In *Filariasis in Asia*. Eisaku Kimura, editor.
4. Kron MA and Ramirez B. (2006). Lymphatic Filariasis in the Philippines: Basic Research on Filariasis. In *Filariasis in Asia*. Eisaku Kimura, editor.
5. Book Review: (2004). M. Kron. *Familial Medicine in Vietnam*, for *J. Asian Studies*
6. Book Chapter: (2004). M. Kron and M. Haertlein, "Aminoacyl tRNA Synthetases and Disease", in *The Aminoacyl tRNA Synthetases*, Editors: Chris Franklyn, M. Ibba, and S. Cusack. Landes Bioscience.
7. *Medical Entomology* (2000) Chapter: "Onchocerciasis and Lymphatic Filariasis, by J.Lok. E. Walker, et al. (Eldridge and Edman Publishing). My contribution: Photographs of onchocerciasis patients in South America and Africa.
8. *Encyclopedia of Rheumatology*, (1999) Microbiology section. NTC Works, Chicago, IL.
9. *Test Yourself Genetics*, (1998). M. Kron, contributing editor, NTC Works, Chicago, IL
10. *Pediatric Emergency Medicine*, (1991) Saunders. Chapter by Maria Patterson to which I contributed original photomicrographs of helminth ova indigenous to Michigan.

Editorials, Letters To Editor, Other

1. W.H.O. Internal Technical Report- Product Development Group (WHO-TDR): J. Lazdins and M. Kron, eds (1999). *The Mandate for Macrofilariocides*