

CURRICULUM VITAE AND BIBLIOGRAPHY

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EDUCATION

Undergraduate:

1979	DVM	Veterinary Univ., Brno, Czech Rep.
1982	B.SC.	University of Toronto, Canada

<u>Medical School and/or Graduate School (for graduate degrees note field or discipline)</u>		
1992	M.D.	McMaster University, Canada

POSTDOCTORAL TRAINING

Internship and Residencies:

07/92-06/93	Intern in Pediatrics	Hospital for Sick Children, University of Toronto
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07/93-06/96	Resident in Pediatrics	Hospital for Sick Children, University of Toronto
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Fellowships:

07/95-06/97	Clinical Fellow	Hospital for Sick Children, Pediatric Hematology/Oncology University of Toronto
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07/97-06/01	NCIC Post-Doctoral Research Fellow	Cancer Biology, Sunnybrook & Women's College HSC, University of Toronto
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07/01-05/02	Senior Post-Doctoral Fellow	Molecular and Cellular Biology, Sunnybrook & Women's College HSC, University of Toronto
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07/02-06/03	Clinical Fellow Pediatric Neuro-Oncology	Dana Farber Cancer Institute, Harvard University
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LICENSURE AND CERTIFICATION

1992- present	Ontario Registered Physician	#65591
1996-present	Royal College of Physicians and Surgeons of Canada (Pediatrics)	#481278
2003-present	Massachusetts Registered Physician	#219313
2006-present	American Board of Pediatrics	#163004

ACADEMIC APPOINTMENTS

06/2003-01/2009	Instructor, Pediatric Hematology/Oncology Harvard Medical School, Boston, MA
06/2009-2015	Assistant Professor, Dept of Medicine Tufts University School of Medicine, Boston, MA
2016-	Associate Professor, Dept of Pediatrics, Tufts University School of Medicine, Boston, MA

Employment (chronologically)

07/99-2014	Attending in Pediatrics St. Joseph's Hospital, Toronto, Canada
07/04-01/09	Attending in Pediatric Hematology/ Oncology Children's Hospital, Boston, Massachusetts
08/04-01/09	Attending in Pediatric Hematology/Oncology Dana Farber Cancer Institute, Boston, MA
08/09-07/17	Attending in Pediatric Hematology/Oncology Floating Hospital for Children, Boston, MA
10/09-07/17	Director of Rare Tumors and Vascular Anomalies Center Floating Hospital for Children, Boston, MA
03/12-07/17	Director of Personalized Cancer Care Program Floating Hospital for Children, Boston, MA
08/13-07/17	Chief, Research and Academic Affairs, Pediatric Hem/Oncology Floating Hospital for Children, Boston, MA
08/2017- present	Chief Medical Officer, CSTS Health Care, Toronto, On
01/2018-present	Attending Pediatrics, St. Joseph's Health Center, Toronto, On

AWARDS AND HONORS

1991	Tisdale Award for Excellence in Research	University of Toronto
1997-2001	Terry Fox Fellowship in Cancer Research	National Cancer Institute of Canada
2010-2014	RO1, NIH, National Cancer Institute of General Medical Sciences	

HOSPITAL, MEDICAL SCHOOL, OR UNIVERSITY COMMITTEE ASSIGNMENTS:

2003-2009 *Disease specific Attending for Vascular Anomalies, Dana-Farber Cancer Institute. The role integrated clinical application of novel anti-angiogenic agents with education about the development and testing of experimental therapeutics as they applied to pediatric malignancies, benign tumors and pathologic vascular growths. Within*

this role a new clinical paradigm of using low-dose chemotherapy in combination with targeted agents was developed. Since its original publication in April 2001, the work has resulted in numerous clinical trials around the world and in numerous NIH sponsored cancer treatment initiatives.

2006-2009 Member, Non-Oncology Chemotherapy Leadership Task Force, Children's Hospital Boston. Responsibilities included the development of new protocols for investigational and "off label" use of newly approved biological or chemotherapeutic agents, review of existing non-investigational and investigational protocols, non-oncology use of chemotherapeutic agents etc. Particular emphasis was placed on computerized order sheets development, safety procedures, consents and assignment of responsibilities.

2009-2017 Director, Rare Tumors and Vascular Anomalies Program, Pediatric Hematology/Oncology, Floating Hospital for Children. The program provided diagnosis, treatment and management recommendations for children with rare cancers or cancer predisposing syndromes, as well as the diagnosis, management and long term anticipatory care for children with benign vascular tumors. This is a very specialized service involving development of novel therapeutic approaches for previously untreated patient populations with Bannayan Riley Ruvalcaba, Cowdens, APC, infiltrating papillomatosis, Fibrodysplasia Ossificans Progressiva, Dermatofibromatosis protruberance etc. The Program represented a referral center for hemangiomas, Kaposiform Hemangioendotheliomas, Klippel Trenaunay and Weber syndromes, PHACES and other vascular anomalies. The educational component of this assignment incorporated the teaching of residents and medical students within the setting of hematology/oncology clinic, in hospital care, consult service and Bone Marrow Transplant unit. Patient Load: 10-15/week

2010 - 2017 Member, Institutional Review Board, Tufts Medical Center and Tufts University Health Sciences. Responsibilities included reviewing new applications for research involving human subjects with special emphasis on findings regarding ethical considerations, scientific merit, and adherence to federal regulations as well as IRB policies and procedures. Ensuring compliance with the terms of the Federal Wide Assurance (FWA) as well as with Tufts University and Tufts Medical Center's policies and procedures, and state and local laws related to the human research.

2014 – 2017 Tufts Cancer Center Research Executive Committee. The committee meet monthly and had responsibility for general administration and superintendence of all matters relating to research at Tufts Medical Center. It provided strategy development for Tufts Cancer Center and reviews local, regional and national coalitions. The Executive Committee meetings typically included topics such as development of interdisciplinary research initiatives, education, student, fellow and faculty recruitment, sponsorship of research, financial assistance for investigators and planning. The Committee devoted substantial time to discussions of budget processes, financial planning, and the management and enhancement of Tufts Cancer Center resources.

2012 – 2015 Director, Personalized Cancer Care Institute, Floating Hospital for Children, Boston, MA. The program was initiated through a philanthropic donation from Charlie Newman, and its mission was to provide innovative therapies for children who had failed standard therapeutic options, or for whom no reasonable therapeutic options existed. The team created, evaluated and validated latest methods for molecular tissue analysis, and generated combinations of therapeutics that, using the latest scientific knowledge, targeted the revealed molecular pathways involved in the child's cancer. A particular emphasis of the program lied in collecting the outcome data from these individualized

treatments in order to evaluate the therapeutic efficacy of the approach. The program focused on developing strategies children with malignant brain and solid tumors, leukemias / lymphomas and for prevention of tumor development in cancer syndromes. There was a strong educational component of this assignment which reflected the novelty of the field and incorporated teaching of interns, residents and medical students within the setting of hematology/oncology clinic, in hospital care, consult service and Bone Marrow Transplant unit. It included at least 2 general pediatrics and two subspecialty grand rounds
Patient Load: 15-20/week

2015 – 2017 Co-Director, Tufts Cancer Center Personalized Cancer Care Program, Boston, MA. The mission of this program was to educate physicians and oncologists using targeted therapies and to develop standardized approaches to the use of molecular information. The program provided: a) an educational series, a tumor board, and a forum for collaborative research in pre-clinical and clinical setting, b) weekly consult clinic for patients with no standard therapeutic options who still desired treatment. These patients were evaluated for molecularly based therapies and enrolled in a prospective observational trial.

2017- present Chief Medical Officer of CSTS Health Care, an artificial intelligence company with the mission to improve precision medicine approaches, standardize the selection of best combinations of agents for individual patients and collect data to inform future decision. The “aiomic”, an AI-enabled clinical decision support tool assisting in interpretation of genomic information is based on my research and patents.

OTHER MAJOR COMMITTEE ASSIGNMENTS:

(International,National, regional)

Grant Panel reviewer:

2004, 2008	The German Israeli Foundation For Scientific Research and Development (G.I.F)
2006-	American Cancer Society, member of Cell Structure and Metastasis (ACS/CSM) Study Section
2008-	Cancer Research UK
2009-	Canadian Blood Services (CIHR)
2014	CSTI Tufts Medical Center
2015-	American Cancer Society, ad hoc member of Development, Differentiation and Cancer (ACS/DDC)
2015-	Czech Health Research Council and Czech Science Foundation
2015-	Institut National du Cancer, France (INCa)

TRAINING OF GRADUATE STUDENTS/POST DOCTORAL FELLOWS

2003-2006	David Cervi, PhD	Post-doctoral fellow
2006-2008	Flavia Cassiola, PhD	Post-Doctoral Fellow
2006-2007	Quian Liu, MD	Post-Doctoral Fellow
2005-2007	Abdo Abou-Slaybi	Undergraduate Student
2011-2014	Bonnie Lau	Pediatric Hematology/Oncology Fellow
2013-2014	Nancy Kaddis	Hematology/Oncology Fellow
2012-2015	Olga Dashevsky	Post-Doctoral Fellow
2012-2015	Jennifer Afrani-Sakyi	Graduate Student
2014-2015	Abdo Abou-Slaybi	Graduate Student

TEACHING RESPONSIBILITIES

Formal Teaching Responsibilities:

- 2007 *Senior lecturer, Cellular Biology Bio 4246, Northeastern University
Responsibility: Organizing the course objectives and tasks, weekly lectures
(Wednesday evenings 17:50-19:50), exams and assignments and student support.*
- 2004-2009 *Fellow Teaching Series at Dana-Farber Cancer Institute and Children's Hospital
Boston
Supervision of two research fellows for 200 hrs/year as well as clinical attending
supervision of hematology oncology fellows at Harvard Medical School for
additional 100 hr/year*
- 2001-2012 *4-7 Residents for ~150 hrs/year, attending on wards and ambulatory clinics,
St. Joseph's Hospital, Toronto, Canada*
- 2012-2017 *annual educational workshops on precision medicine as reflected in lectures and
seminars.*
- 2009-2017 *Residents and Tufts University School of Medicine medical students for ~300
hrs/year as attending on wards and in ambulatory clinics,
2- 3 seminars/year to residents and medical students at Floating Hospital for
Children at Tufts Medical Center, Boston, USA
Annual educational series (update on pediatrics) at Lowell General Hospital
Annual grand rounds at Floating Hospital for Children at Tufts Medical Center,
Boston, USA*
- 2018- *Residents and medical students for ~300hrs/year as attending in ambulatory clinics
and on wards.
2- 3 seminars/year to residents and medical students at Floating Hospital for
Children at Tufts Medical Center, Boston, USA
2-3 lectures as part of formal teaching of pediatric residents.
Annual Grand rounds to community health care providers, faculty, residents,
nurses and medical students.*
- 2018-present *4-7 Residents for ~150 hrs/year, attending on wards and ambulatory clinics at
St. Joseph's Hospital, Toronto, Canada*

Leadership in Education Seminar Series:

- 2008 & 2009 *"The rationale for using anti-angiogenic therapy in neuroblastoma", Dana-Farber
Neuroblastoma Translational Research Group*
- 2007-2008 *"Early Tumor Detection Using Platelet Uptake of Angiogenesis Regulators, Dana-
Farber Cancer Institute*
- July 17-20, 2012 Co-chair, *"Systems Biology Underlying Metronomics: The dynamics of dose,
timing and Microenvironment" workshop, NCIC Integrative Cancer Biology
Program Educational Outreach*
- Sept 21-23, 2012 Co-Chair, *"Consortium for Personalized Targeted Cancer Therapy" workshop,
Newman-Lakka Institute, Boston*

May 14, 2016 *"Omics 101", First Annual Precision Medicine Workshop: Applying Precision Medicine to the Treatment of Hematologic Diseases, Tufts University School of Medicine.*

Oct 27, 2016 *"Future Paradigms for Precision Oncology", Inaugural Tufts Cancer Symposium: Precision Medicine: New Paths to Cancer Therapies Through Convergent Research. Tufts University School of Medicine.*

April 8th, 2017 *"How Can We Optimally Leverage OMICs Testing for Cancer Patients?" Second Annual Tufts Cancer Center Precision Medicine Workshop*

PROFESSIONAL SOCIETIES

1992-present *The College of Physicians and Surgeons of Ontario, Member*
1992-present *Ontario Medical Association, Member*
1992-present *American Academy of Pediatrics, Member*
1994-present *Canadian Pediatric Society, Member*
1996-present *The Royal College of Physicians and Surgeons of Canada, Fellow*
1998-present *American Society of Hematology, member*
2001-present *American Association for Cancer Research, Member*
2001-present *International Society for the Study of Vascular Anomalies, member*

OFFICE AND COMMITTEE ASSIGNMENTS IN PROFESSIONAL SOCIETIES

2007 *New York University School of Medicine Vascular Anomalies 2007: Update on Research and Controversies in Clinical Management*
2008-2011 *American Cancer Society Cell Structure and Metastasis (CSM) Peer Review Committee [ad hoc member]*
2011-present *American Cancer Society Cell Structure and Metastasis (CSM) Peer Review Committee [full member]*
2015-present *American Cancer Society - Development, Differentiation and Cancer (DDC) Peer Review Committee [ad-hoc member]*

MAJOR RESEARCH INTERESTS

My basic science laboratory focuses on microenvironment as it pertains to pathologies such as cancer, wound and cardiovascular diseases. The work is divided into two main streams: i) the development of novel therapeutic paradigms, and ii) understanding the role of platelets in tumor angiogenesis.

- i) The development of novel therapeutic paradigms for cancer has led to creation of a startup company in 2015, and to becoming a CMO of the company at the end of 2017. Our prototype biological modeling platform - *aiomic* –is a systems biology grounded framework, which is able to cumulatively incorporate multiple types of molecular data, build a computational model of the underlying biology, identify the disease drivers, and design the best therapeutic approach. *aiomic* is continuously updated and allows a quick deploy the newest scientific discoveries.
- ii) The basic science discoveries made in my lab and enabling this research include:
 - i) the finding that angiogenesis regulators do not circulate free in plasma, but are instead actively sequestered and concentrated in platelet alpha-granules, ii) the

finding that this sequestration occurs early in the disease and can be used as early diagnostic marker, iii) the finding that angiogenesis regulators are organized into functional compartments of platelet alpha granules, iv) the discovery that platelet clots form a provisional growth factor rich matrix rich in growth factors and v) the finding that the release stimulators and inhibitors of angiogenesis is spatially and temporary controlled by sequential activity of tissue proteases.

The basic science is continuously fed into the business and clinical practice in the form of novel medical therapies with life-threatening or untreatable vascular anomalies and cancers.

RESEARCH SUPPORT

1 R01 GM093050-01A1 (Klement) 04/01/10 – 08/31/14 3.6 calendar
NIH/NIGMS \$1,000,000 direct Principal Investigator
Title: *The Role of Platelets in Tumor Growth, Wound Healing and Other Angiogenesis Related Diseases*

The goal of the program was to investigate the mechanism of uptake and release of angiogenesis regulators from platelets in tumor setting, and the possible application of this phenomenon to cancer therapy.

2009241 (Klement) 10/01/10 – 09/30/14 as needed
Binational Science Foundation \$86,956 direct (Tufts MC portion) US site PI
Title: *Delivery of angiogenesis regulators to tumor environment by platelets and platelet derived microparticles.*

The goal of the program was to investigate the mechanism of microparticle formation and platelet aggregation in tumor setting, and the possible application of this phenomenon to cancer therapy.

Note: No salary support allowed for PI.

Newman-Lakka Cancer Foundation (Klement)
06/02/2012-06/02/2015 as needed
\$2, 500, 000 Principal Investigator

Title: *Newman-Lakka Institute for Personalized Cancer Care*

The primary goal of this program is to develop novel therapeutic strategies using combinations of metronomic chemotherapy and targeted biologic response modifiers, and to validate platelet biomarkers of therapeutic response. Secondary aims include the development of tools for statistical analysis of outcomes of these individualized therapies and tools for physician oncologists who use this therapeutic approach.

1 U54 CA149233-01 (Hlatky) 05/01/10 – 02/28/15 0.5 calendar
NIH/NCI \$5,515,731 direct Co-Investigator
Title: *Intercellular Interactions Modulate Carcinogenesis Course: A Dynamic System Study*

The goal of this program is to develop quantitative, mechanistic, predictive human carcinogenesis models. A comprehensive interdisciplinary team will focus more attention on intercellular interactions and on systems biology than has been given in earlier approaches emphasizing time-development of a single somatic cell lineage evolving almost autonomously toward cancer.

- 2004-2005 *Breast Cancer Research Foundation, Mechanism of Tumor Dormancy by Blocked Neovascularization in Breast Cancer*
Role: Collaborator
- 2004-2009 *"Prevention of the Angiogenic Switch in Human Breast Cancer"*
D.O.D., W81XWH-04-1-0316
Role: Collaborator
- 2004-2009 *"Solid Tumor Risk Estimation: Incorporating Intercellular Interaction Effects; Project I: Mouse Models for Assessing Solid Tumor Risk"*
NASA, NRA NNH04ZUU002N
Role: Collaborator
- 2007-2008 *"The use of Platelet Angiogenesis Proteome for early cancer detection"*
Company Sponsored Research, Ortho Clinical Diagnostics
\$800,000
Role: Principal Investigator
- 2008-2009 *"The use of Platelet Angiogenesis Proteome for early cancer detection"*
Company Sponsored Research, Ortho Clinical Diagnostics
\$200,000
Role: Co-Investigator
- 2009-2014 *"Multi-Scale Systems Biology of Low-Dose Carcinogenesis Risk"*
U.S. Department of Energy
\$584,795
Role: Associate Investigator

EDITORIAL BOARDS AND ACTIVITY:

Associate Editor for the following Journals:

Journal of Pediatric Hematology Oncology
Austin Journal of Cancer and Clinical Research

Reviewer for the following Journals:

Science Translational Medicine
British Journal of Hematology
Pediatric Blood and Research
Pediatric Blood and Cancer
PLOS
Oncotarget
Journal of Experimental Pathology
Oncology
Platelets
Angiogenesis
Cancer Letters
International Journal of Cancer
Clinical Cancer Research
Journal of Thrombosis & Haemostasis
Arteriosclerosis, Thrombosis, and Vascular Biology
Computational Biology and Chemistry

BIBLIOGRAPHY

a) Refereed (i.e., peer-reviewed) papers

1. Klement P, del Nido PJ, Mickleborough L, MacKay C, **Klement G**, Wilson GJ. Technique and postoperative management for successful cardiopulmonary bypass and open-heart surgery in dogs. *J Am Vet Med Assoc.* 1987; 190(7): 869-74.
2. Klement P, Feindel CM, Scully HE, Mesher E, **Klement G**, Del Nido P, Wilson GJ. Mitral valve replacement in dogs. Surgical technique and postoperative management. *Vet Surg.* 1987; 16(3):231-7.
3. Leenen FH, **Klement G**. Dietary sodium restriction and blood pressure response to alpha-receptor blockade in young spontaneously hypertensive rats. *J Hypertens Suppl.* 1988; 6(4): S202-4.
4. Leenen FH, **Klement G**. Dietary sodium restriction and blood pressure response to sympathetic blockade in young versus adolescent spontaneously hypertensive rats. *Can J Physiol Pharmacol.* 1990;68(1):46-50.
5. Leenen FH, **Klement G**, Yuan B. Dietary sodium restriction and pressor responsiveness to tyramine in spontaneously hypertensive rats. *J Hypertens.* 1992; 10 (9):929-37.
6. Klement P, Augustine JM, Delaney KH, **Klement G**, Weitz JI. An oral ivermectin regimen that eradicates pinworms (*Syphacia* spp.) in laboratory rats and mice. *Lab Anim Sci.* 1996;46(3):286-90.
7. Rak J, **Klement G**. Impact of oncogenes and tumor suppressor genes on deregulation of hemostasis and angiogenesis in cancer. *Cancer Metastasis Rev.* 2000;19(1-2):93-6.
8. **Klement G**, Baruchel S, Rak J, Man S, Clark K, Hicklin DJ, Bohlen P, Kerbel RS. Continuous low-dose therapy with vinblastine and VEGF receptor-2 antibody induces sustained tumor regression without overt toxicity. *J Clin Invest.* 2000;105(8):R15-24.
9. Kerbel RS, Vitoria-Petit A, **Klement G**, Rak J. 'Accidental' anti-angiogenic drugs. anti-oncogene directed signal transduction inhibitors and conventional chemotherapeutic agents as examples. *Eur J Cancer.* 2000;36(10):1248-57.
10. Rak J, Yu JL, **Klement G**, Kerbel RS. Oncogenes and angiogenesis: signaling three-dimensional tumor growth. *J Investig Dermatol Symp Proc.* 2000;5(1):24-33.
11. Kerbel RS, Yu J, Tran J, Man S, Vitoria-Petit A, **Klement G**, Coomber BL, Rak J. Possible mechanisms of acquired resistance to anti-angiogenic drugs: implications for the use of combination therapy approaches. *Cancer Metastasis Rev.* 2001;20(1-2):79-86.
12. Mayer B, **Klement G**, Kaneko M, Man S, Jothy S, Rak J, Kerbel RS. Multicellular gastric cancer spheroids recapitulate growth pattern and differentiation phenotype of human gastric carcinomas. *Gastroenterology.* 2001;121(4):839-52.
13. Kerbel RS, **Klement G**, Pritchard KI, Kamen B. Continuous low-dose anti-angiogenic/ metronomic chemotherapy: from the research laboratory into the oncology clinic. *Ann Oncol.* 2002;13(1):12-5.
14. **Klement G**, Huang P, Mayer B, Green SK, Man S, Bohlen P, Hicklin D, Kerbel RS. Differences in therapeutic indexes of combination metronomic chemotherapy and an anti-VEGFR-2 antibody in multidrug-resistant human breast cancer xenografts. *Clin Cancer Res.* 2002;8(1):221-32.
15. Yu JL, Rak JW, **Klement G**, Kerbel RS. Vascular endothelial growth factor isoform expression as a determinant of blood vessel patterning in human melanoma xenografts. *Cancer Res.* 2002;62(6):1838-46.
16. Gesundheit B, **Klement G**, Senger C, Kerbel R, Kieran M, Baruchel S, Becker L. Differences in vasculature between pilocytic and anaplastic astrocytomas of childhood. *Med Pediatr Oncol.* 2003;41(6):516-26.

17. Marxen M, Thornton MM, Chiarot CB, **Klement G**, Koprivnikar J, Sled JG, Henkelman RM. MicroCT scanner performance and considerations for vascular specimen imaging. *Med Phys*. 2004;31(2):305-13.
18. Cervi D, **Klement G**, Stempak D, Baruchel S, Koki A, Ben-David Y. Targeting Cyclooxygenase-2 Reduces Overt Toxicity toward Low-Dose Vinblastine and Extends Survival of Juvenile Mice with Friend Disease. *Clin Cancer Res*. 2005;11(2 Pt 1):712-9.
19. Shaked Y, Cervi D, Neuman M, Chen L, **Klement G**, Michaud CR, Haeri M, Pak BJ, Kerbel RS, Ben-David Y. The splenic microenvironment is a source of pro-angiogenesis / inflammatory mediators accelerating the expansion of murine erythroleukemic cells. *Blood*. 2005.
20. Voskas D, Jones N, Van Slyke P, Sturk C, Chang W, Haninec A, Babichev YO, Tran J, Master Z, Chen S, Ward N, Cruz M, Jones J, Kerbel RS, Jothy S, Dagnino L, Arbiser J, **Klement G**, Dumont DJ. A Cyclosporine-Sensitive Psoriasis-Like Disease Produced in Tie2 Transgenic Mice. *Am J Pathol*. 2005;166(3):843-855.
21. Prasad V, Fishman SJ, Mulliken JB, Fox VL, Liang MG, **Klement G**, Kieran MW, Burrows PE, Waltz DA, Powell J, Dubois J, Levy ML, Perez-Atayde AR, Kozakewich HP. Cutaneovisceral Angiomatosis With Thrombocytopenia. *Pediatr Dev Pathol*. 2005.
22. Kieran MW, Turner CD, Rubin JB, Chi SN, Zimmerman MA, Chordas C, **Klement G**, Laforme A, Gordon A, Thomas A, Neuberg D, Browder T, Folkman J. A Feasibility Trial of Antiangiogenic (Metronomic) Chemotherapy in Pediatric Patients With Recurrent or Progressive Cancer. *J Pediatr Hematol Oncol*. 2005;27(11):573-581.
23. Christison-Lagay ER, Burrows PE, Alomari A, Dubois J, Kozakewich HP, Lane TS, Paltiel HJ, **Klement G**, Mulliken JB, Fishman SJ. Hepatic hemangiomas: subtype classification and development of a clinical practice algorithm and registry. *J Pediatr Surg*. 2007;42(1):62-7; discussion 67-8.
24. Aivado M, Spentzos D, Germing U, Alterovitz G, Meng XY, Grall F, Giagounidis AA, **Klement G**, Steidl U, Otu HH, Czibere A, Prall WC, Iking-Konert C, Shayne M, Ramoni MF, Gattermann N, Haas R, Mitsiades CS, Fung ET, Libermann TA. Serum proteome profiling detects myelodysplastic syndromes and identifies CXC chemokine ligands 4 and 7 as markers for advanced disease. *Proc Natl Acad Sci U S A*. 2007;104(4):1307-12.
25. Cervi D, Yip TT, Bhattacharya N, Podust VN, Peterson J, Abou-Slaybi A, Naumov GN, Bender E, Almog N, Italiano JE Jr, Folkman J, Klement GL. Platelet-associated PF-4 as a biomarker of early tumor growth. *Blood*. 2008 Feb 1;111(3):1201-7. Epub 2007 Oct 3.
26. **Klement GL**, Yip TT, Cassiola F, Kikuchi L, Cervi D, Podust V, Italiano JE, Wheatley E, Abou-Slaybi A, Bender E, Almog N, Kieran MW, Folkman J. Platelets actively sequester angiogenesis regulators. *Blood*. 2009 Mar 19;113(12):2835-42. Epub 2008 Nov 25. PMID: 19036702
27. Italiano JE, Richardson JL, Patel-Hett S, Battinelli E, Zaslavsky A, Short S, Ryeom S, Folkman J, **Klement GL**. Angiogenesis is regulated by a novel mechanism: Pro- and anti-angiogenic proteins are organized into separate platelet {alpha}-granules and differentially released. *Blood*. 2008; 111 (3): 1227-1233.
28. Gesundheit B, Moser A, Or R, **Klement G**. Successful antiangiogenic therapy for neuroblastoma with thalidomide. *J Clin Onc*. 2007;25(33):5321-4.
29. Flaumenhaft R, Dilks JR, Richardson J, Alden E, Patel-Hett SR, Battinelli E, **Klement GL**, Sola-Visner M, Italiano JE Jr. Megakaryocyte-derived microparticles: direct visualization and distinction from platelet derived microparticles. *Blood*. 2009 Jan 29;113(5):1112-21. Epub 2008 Sep 18. PMID: 18802008.

30. Pietramaggiore G, Scherer SS, Cervi D, **Klement G**, Orgill DP. Tumors stimulate platelet delivery of angiogenic factors in vivo: an unexpected benefit. *Am J Pathol.* 2008 Dec;173(6):1609-16. Epub 2008 Nov 6. PMID: 18988799
31. Burrows PE, Mulliken JB, Fishman SJ, **Klement GL**, Folkman J. Pharmacological Treatment of a Diffuse Arteriovenous Malformation of the Upper Extremity in a Child. *J Craniofac Surg.* 2009 Jan 29.
32. Prochazka V, Gumulec J, Chmelova J, Klement P, **Klement GL**, Jonszta T, Czerny D, Krajca J. Autologous bone marrow stem cell transplantation in patients with end-stage chronic critical limb ischemia and diabetic foot. *Vnitr Lek.* 2009 Mar;55(3):173-8. PubMed PMID: 19378841.
33. Prochazka V, Gumulec J, Jaluvka F, Salounova D, Jonszta T, Czerny D, Krajca J, Urbanec R, Klement P, Martinek J, **Klement GL**. Cell Therapy, a New Standard in Management of Chronic Critical Limb Ischemia and Foot Ulcer. *Cell Transplant.* 2010 Jun 7. [Epub ahead of print] PubMed PMID: 20529449.
34. Peterson JE, Zurakowski D, Italiano JE Jr, Michel LV, Fox L, **Klement GL**, Folkman J. Normal ranges of angiogenesis regulatory proteins in human platelets. *Am J Hematol.* 2010 Jul;85(7):487-93. PubMed
35. Gesundheit B, Parkin P, Greenberg M, Baruchel S, Senger C, Kapelushnik J, Smith C, **Klement GL**. The Role of Angiogenesis in the Transformation of Plexiform Neurofibroma into Malignant Peripheral Nerve Sheath Tumors in Children With Neurofibromatosis Type 1. *J Pediatr Hematol Oncol.* 2010 Aug 3. [Epub ahead of print] PubMed PMID: 20686424.
36. Almog N, **Klement GL**. Platelet Proteome and Tumor Dormancy: Can Platelet Content Serve as Predictive Biomarker for Exit of Tumors from Dormancy? *Cancers* 2010 2(2):842-858. Doi: 10.3390/cancers2020842.
37. **Klement GL**, Kamen BA. Nontoxic, fiscally responsible, future of oncology: could it be beginning in the Third World? *J Pediatr Hematol Oncol.* 2011 Jan;33(1):1-3. doi: 10.1097/MPH.0b013e3182024918. No abstract available. PMID: 21164359
38. Etulain J, Lapponi MJ, Patrucchi SJ, Romaniuk MA, Benzaón R, **Klement GL**, Negrotto S, Schattner M. Hyperthermia inhibits platelet hemostatic functions and selectively regulates the release of alpha-granule proteins. *J Thromb Haemost.* 2011 Aug; 9 (8): 1562-71. doi: 10.1111/j.15387836.2011.04394.x. PMID: 21649851
39. **Klement GL**. Platelet biomarkers in tumor growth. *Current Proteomics.* 2011. 2011 8(3) 169-180
40. Downing SR, **Klement GL**. Isolation and proteomic analysis of platelets by SELDI-TOF MS. *Methods Mol Biol.* 2012;818:153-70. doi: 10.1007/978-1-61779-418-6_12. PMID: 22083823
41. Etulain J, Negrotto S, Carestia A, Pozner RG, Romaniuk MA, D'Atri LP, **Klement GL**, Schattner M. Acidosis downregulates platelet haemostatic functions and promotes neutrophil proinflammatory responses mediated by platelets. *Thromb Haemost.* 2012 Jan;107(1):99-110. doi: 10.1160/TH11-06-0443. Epub 2011 Dec 8. PMID: 22159527
42. Pilatova K, Zdrzilova-Dubská L, **Klement GL**. The role of platelets in tumour growth. *Klin Onkol.* 2012;25 Suppl 2:S50-7. PMID: 23581017
43. Peterson JE, Zurakowski D, Italiano JE Jr, Michel LV, Connors S, Oenick M, D'Amato RJ, **Klement GL**, Folkman J. VEGF, PF4 and PDGF are elevated in platelets of colorectal cancer patients. *Angiogenesis.* 2012 Jun;15(2):265-73. doi:10.1007/s10456-012-9259-z. Epub 2012 Mar 9. PMID: 22402885
44. **Klement GL**, Goukassian D, Hlatky L, Carrozza J, Morgan JP, Yan X. Cancer Therapy Targeting the HER2-PI3K Pathway: Potential Impact on the Heart. *Front Pharmacol.* 2012; 3: 113. Published online 2012 June 27. doi: 10.3389/fphar.2012.00113 PMCID: PMC3384262

45. Mayer EL, Isakoff SJ, **Klement G**, Downing SR, Chen WY, Hannagan K, Gelman R, Winer EP, Burstein HJ. Combination antiangiogenic therapy in advanced breast cancer: a phase 1 trial of vandetanib, a VEGFR inhibitor, and metronomic chemotherapy, with correlative platelet proteomics. *Breast Cancer Res Treat.* 2012 Nov;136(1):169-78. doi: 10.1007/s10549-012-2256-5. Epub 2012 Sep 23. PMID: 23001754
46. Hahnfeldt P, Hlatky L, **Klement GL**. Center of cancer systems biology second annual workshop--tumor metronomics: timing and dose level dynamics. *Cancer Res.* 2013 May 15;73(10):2949-54. doi: 10.1158/0008-5472.CAN-12-3807. Epub 2013 Mar 14. PMID: 23492368
47. Pilatova K, Greplova K, Demlova R, Bencsikova B, **Klement GL**, Zdrzilova-Dubska L Role of platelet chemokines, PF-4 and CTAP-III, in cancer biology. *J Hematol Oncol.* 2013; 6: 42. Published online 2013 June 24. doi: 10.1186/1756-8722-6-42
48. Tracy JC, **Klement GL**, Scott AR. Interdisciplinary management of congenital infiltrating lipomatosis. *Int J Pediatr Otorhinolaryngol.* 2013 Dec;77(12):2071-4. doi:10.1016/j.ijporl.2013.08.008. Epub 2013 Aug 22. PMID: 24035641
49. Prochazka V, Klosova H, Stetinsky J, Gumulec J, Vitkova K, Salounova D, Dvorackova J, Bielnikova H, Klement P, Levakova V, Ocelka T, Pavliska L, Kovanic P, **Klement GL**. Addition of platelet concentrate to Dermo-Epidermal Skin Graft in deep burn trauma reduces scarring and need for revision surgeries. *Biomed Pap Med Fac Univ Palacky Olomouc Czech Repub.* 2013 Sep 27. doi: 10.5507/bp.2013.070. [Epub ahead of print] PMID: 24108222
50. McDonald JT, Briggs C, Szelag H, Peluso M, Schneider D, Perepletchikov A, **Klement GL**, Tuerk I, Hlatky L. Chronic Low Dose-Rate Radiation Down-Regulates Transcription Related to Mitosis and Chromosomal Movement Similar to Acute High Dose in Prostate Cells. *Int J Radiat Biol.* 2014 Jan 8. [Epub ahead of print], pub March 20th, 2014
51. Kareva I, Waxman DJ, **Lakka Klement G**. Metronomic chemotherapy: An attractive alternative to maximum tolerated dose therapy that can activate anti-tumor immunity and minimize therapeutic resistance. *Cancer Lett.* 2014 Dec 23. PubMed PMID: 25541061. Epub 2014/12/30. Eng.
52. Afranie-Sakyi JA, **Klement GL**. The toxicity of anti-VEGF agents when coupled with standard chemotherapeutics. *Cancer Lett.* 2015 Feb 1;357(1):1-7. PubMed PMID: 25449430. Epub 2014/12/03. Eng.
53. Benzekry S., Tuszyński JA, Rietman EA, **Lakka Klement G**. Design principles for cancer therapy guided by changes in complexity of protein-protein interaction networks. *Biol Direct.* 2015; 10: 32. Published online 2015 May 28. doi: 10.1186/s13062-015-0058-5, PMCID: PMC4445818
54. Rössler J, Saueressig U, Kayser G, von Winterfeld M, **Lakka Klement G**. Treatment of Gorham Stout Disease with a combination of sunitinib and taxol. *J Pediatr Hematol Oncol* 2015; 37 (8), e481
55. **Lakka Klement G**. Eco-evolution of cancer resistance. *Sci. Transl. Med.* 8, 327fs5 (2016). DOI: 10.1126/scitranslmed.aaf3802
56. Rietman EA, Platig J, Tuszyński JA, **Lakka Klement G**. Thermodynamic measures of cancer: Gibbs free energy and entropy of protein–protein interactions. *J Biol Phys*, Epub March 24th, 2016, DOI 10.1007/s10867-016-9410-y.

57. **Lakka Klement G**, Arkun K, Valik D, Roffidal C, Hashemi A, Klement C, Carmassi P, Rietman E, Slaby O, Mazanek P, Mudry P, Kovacs G, Kiss C, Norga K, Kostadinov D, André N, Slavic I, van Den Berg H, Kolenova A, Kren L, Tuma J, Skotakova J, Sterba J. Future paradigms for precision oncology, *Oncotarget*, May 2016, DOI: 10.18632/oncotarget.9488
58. Fassel HL, Tracy D, Louer K, **Lakka Klement G**. Insulin-like Growth Factor 1 Receptor (IGF1R) Inhibition as Maintenance Therapy for Metastatic Ewing Sarcoma, *Journal of Pediatric Hematology Oncology*, *J Pediatr Hematol Oncol*. 2016 Oct;38(7):563-9. doi: 10.1097/MPH.0000000000000616.
59. Rietman EA, Scott JG., Tuszyński JA, **Lakka Klement G**. Personalized Anticancer Therapy Selection using Molecular Landscape Topology and Thermodynamics, *Oncotarget*. 2017 Mar 21;8(12):18735-18745. doi: 10.18632/oncotarget.12932.
60. Kareva I, Abou-Slaybi A, Dodd O, Dashevsky O, **Klement GL** (2016) Normal Wound Healing and Tumor Angiogenesis as a Game of Competitive Inhibition. *PLoS ONE* 11(12): e0166655. doi:10.1371/journal.pone.0166655
61. Lim YJ, Rosmarin D, **Klement GL**, Au SC. (2017) Klippel-Trenauney syndrome with axillary hyperhidrosis. *Dermatol Online J*. Jun 15;23(6). pii: 13030/qt9448f90f. PMID: 28633736
62. Kyr M, Polaskova K, Kuttnerova Z, Merta T, Neradil J, Berkovcova J, Horky O, Jezova M, Veselska R, **Lakka Klement G**, Valik D, Sterba J. (2019) Individualization of Treatment Improves the Survival of Children With High-Risk Solid Tumors: Comparative Patient Series Analysis in a Real-Life Scenario. *Front Oncol*. 2019; 9: Article 644., Published online Jul 17. <https://doi.org/10.3389/fonc.2019.00644>, PMCID: PMC6650566, PMID: 31380281
63. Polaskova K, Merta T, Martincekova A, Zapletalova D, Kyr M, Mazanek P, Krenova Z, Mudry P, Jezova M, Tuma J, Skotakova J, Cervinkova I, Valik D, Zdrzilova-Dubska L, Noskova H, Pal K, Slaby O, Fabian P, Kozakova S, Neradil J, Veselska R, Kanderova V, Hrusak O, Freiberger T, **Lakka Klement G**, Sterba J. (2020) Comprehensive Molecular Profiling for Relapsed/Refractory Pediatric Burkitt Lymphomas—Retrospective Analysis of Three Real-Life Clinical Cases—Addressing Issues on Randomization and Customization at the Bedside. *Front. Oncol.*, 07 February 2020 Vol 9, Article 1531 | <https://doi.org/10.3389/fonc.2019.01531>, PMCID: PMC6650566, PMID: 31380281
64. Brant EJ, Rietman EA, **Lakka Klement G**, Cavaglia M, Tuszyński JA (2020). Personalized therapy design for systemic lupus erythematosus based on the analysis of protein-protein interaction networks. *PLoS ONE* 15(3): e0226883. <https://doi.org/10.1371/journal.pone.0226883>
65. Kyr M, **Lakka Klement G**, Zdrzilova-Dubska L, Demlova R, Valik D, Slaby O, Slavic I, Sterba J. Editorial: Precision/Personalized Pediatric Oncology and Immune Therapies: Rather Customize Than Randomize. *Front. Oncol.*, 24 March 2020, Vol 10, Article 377 | <https://doi.org/10.3389/fonc.2020.00377>
- 66.

b) Other papers presenting primary data

Patents:

1. Judah Folkman; **Giannoula Klement**; Children's Hospital. PLATELET BIOMARKERS FOR THE EARLY DETECTION OF DISEASE. 20060204951. 2004 Apr 26.

2. Judah Folkman; **Giannoula Klement**; Joseph Italiano. METHODS FOR MODULATING ANGIOGENESIS. 701039-059030-P. 2006 Dec 8.
3. Dennis Orgill; Giorgio Pietramangiori; David Cervi; **Giannoula Klement**. THERAPEUTIC PLATELET COMPOSITIONS AND METHODS. Pub no: WO2009002811 A2, Pub Date: Dec 31 2008.
4. Jon Peterson; **Giannoula Klement**; Joseph Italiano; Sean Downing. NORMALIZATION OF PLATELET NUMBERS USING ACTIN. Pub. No.: US 2013/0177928 A1, Pub. Date: Jul. 11, 2013
5. **Giannoula Klement**; Abdo Abou Slaybi; Nandita Bhattacharya. PLATELET COMPOSITIONS AND USES THEREOF. Pub. No. WO2014055949, Pub.Date: April 10 2014
6. **Giannoula Lakka Klement**; Edward Rietman. THERMODYNAMIC MEASURES ON PROTEIN-PROTEIN INTERACTION NETWORKS FOR CANCER THERAPY. Filing Date: July 2015, Attorney Docket No.: 17719/048001; PDR27791. Publication# WO 2016187708 A1.
7. **Giannoula Lakka Klement**; Ali Hashemi; Thomas Getgood; Christos Klement; Edward Rietman. BIOMARKER-DRIVEN MOLECULARLY TARGETED COMBINATION THERAPIES BASED ON KNOWLEDGE REPRESENTATION PATHWAY ANALYSIS. Filing Date: July 17th, 2015, ATTORNEY DOCKET NO. 17719/049001, Publication number: WO2016187711 A1

c) Book chapters/Invited reviews

1. **Giannoula Klement**. Chapter 12: Hematology. In: Residents Handbook of Pediatrics. St. Louis, Missouri: Mosby-Year Book, Inc.;1997. p. 182-198.
2. **Giannoula Klement**, MD and Robert S. Kerbel, PhD. Chapter 19: Targeting Oncogenes in Pediatric Malignancies. In: Oncogene-Directed Therapies. Totowa, NJ.: Humana Press Inc. ;2003. p. 383-408.
3. Robert S. Kerbel and **Giannoula Klement**. Chapter 18: Low-Dose Metronomic Antiangiogenic Chemotherapy: Preclinical and Clinical Applications in Breast Cancer. In: Breast Cancer Management. Philadelphia, PA: Lippincott Williams & Wilkins;2003. p. 261-271.
4. **Giannoula Klement** and Steven J. Fishman. Chapter 130: Vascular Anomalies: Hemangiomas and Malformations. In: Pediatric Surgery. Philadelphia, PA: Mosby Elsevier; 2006. p. 2094-2110.
5. Sean Downing and **Giannoula Lakka Klement**. Platelets as a substrate for proteomic analysis. In Proteomics. Humana Press. (PubMed Index: Methods Mol Biol. 2012;818:153-70., PMID:22083823)
6. **Giannoula Lakka Klement**, Ela Shai and David Varon. Chapter 24: The Role of Platelets in Angiogenesis. In: Platelets. Philadelphia, PA: Mosby Elsevier; 2012, pp 487-502

d) Published abstracts

1. **Giannoula Klement**, Lena Kikuchi, Mark Kieran, Nava Almog, Tai-Tung Yip, Judah Folkman. Early Tumor Detection Using Platelet Uptake of Angiogenesis Regulators. Blood. 2005;104(11).

2. **Klement GL**, Cervi D, Italiano JE, Bhattacharya N. PLATELET-FACILITATED DELIVERY OF ANGIOGENESIS REGULATORS IS CONTROLLED BY TISSUE PROTEASES. J Thromb Haemost 2007; 5 Supplement 2: P-W-360
3. Polaskova K, Martincekova A, Krenova Z, Valik D, Noskova H, Slaby O, Kanderova V, Hrusak O, **Klement GL**, Neradil J, Veselska R, Sterba J. Customized or randomized trials for relapsed refractory pediatric Burkitt lymphomas? A retrospective analysis of two clinical cases with comprehensive molecular profiling: Possible explanation for different treatment outcomes after similar targeted therapies. Ann Oncol, 2018, Vol 29 Supplement 6, doi:10.1093/annonc/mdy314 | vi31

e) Posters

1. **Lakka Klement G**. A Decade Experience managing Bannayan Riley Ruvalcaba Syndrome. 21st workshop of The International Society for the Study of Vascular Anomalies, Buenos Aires, Argentina, April 26th-29th, 2016
2. **Lakka Klement G**. Denosumab for lymphatic malformation in Gorham Disease of the cervical spine. 21st workshop of The International Society for the Study of Vascular Anomalies, Buenos Aires, Argentina, April 26th-29th, 2016

f) Invited lectures

Regional

2000- "The Concept of Anti-angiogenic Chemotherapy Scheduling: A Shift in Paradigm" CME Educational Series, Yale University [Invited Lecture]

2009 "New biologic agents in cancer therapy and other diseases," Grand Rounds February 3, 2010, Tufts Medical Center, Boston, MA

2010 "How to Starve Cancer: Angiogenesis and Anti-Angiogenic Treatments. NASA Educational Series, October 3rd, 2010, St Elizabeth's Medical Center, Boston, MA [Public Education Series]

2013- "Platelet-mediated pro- and anti-angiogenic signaling in cancer and health." MORI, Tufts Medical Center, Boston, MA

2013- "Platelets in Cancer." Fellows Seminar, October 17th, 2013, Floating Hospital for Children, Boston, MA

2014- "Vascular Anomalies", Holy Family Hospital & Medical Center, Methuen, MA, February 19, 2014

2014- "Principles of Metronomic Chemotherapy", Cummings School of Veterinary Medicine at Tufts University, Grafton, Massachusetts, October 24th, 2014

2014- "Changes in Clinical Oncology", Floating Hospital for Children at Tufts Medical Center Grand Rounds, November 5th, 2014

2014- "The role of platelets in tumor angiogenesis", Cell, Molecular & Developmental Biology Program, Sackler School of Graduate Biomedical Sciences, November 25, 2014

2015- "The role of platelets in tumor microenvironment", Boston Angiogenesis Meeting, November 4th, 2015 [Invited Lecture]

2016 – "Update in Pediatric Malignancies: The Latest Miracles", Lowell General Hospital Pediatric Grand Rounds, June 28th, 2016 [Invited lecture]

2016 – "Future Paradigms in Precision Oncology". Tufts Cancer Symposium, TUSM, October 27th, 2016 [Invited lecture]

2017 – "How can we optimally leverage OMICS testing for cancer patients?" Second Annual Tufts Cancer Center Precision Medicine Symposium, Tufts University School of Medicine, April 4th 2017, [Invited lecture]

National

2013 – “Platelet-mediated pro- and anti-angiogenic signaling in cancer”. Meeting of the Principal Investigators of NCI’s Integrative Cancer Biology Program (ICBP), January 25, 2013, NY, NY

2013- “The role of platelets in tumor angiogenesis: The relevance to clinical oncology.” Children’s Hospital of Detroit Grand Rounds, November 8th, 2013, Detroit, MI

2014- “Platelet angiogenesis regulators as biomarkers of therapeutic response”. Georgia Regent University Cancer Center, December 2nd, 2014

2016- “Implementing precision medicine in pediatric oncology”, Oracle Industry Connect, Orlando, Florida. April 11, 2016 [Invited Lecture]

2016 – “Regimen Choice based on tumor profile: Can “omics” be helpful in clinical practice? Moonshot 2020, Radiation & Immunology Working Group, ASCO Satellite Mtg, Chicago, June 4th 2016

International

2001 “Metronomic Low Dose Anti-angiogenic Chemotherapy”, The Judith & George Goldman Symposium on Innovative Research in Multiple Myeloma. [Plenary Presentation]

2001 “Vascular Development and Anti-angiogenic Strategies for Cancer Treatment”, American Academy of Pediatrics [Invited Lecture]

2001 “Metronomic low dose anti-angiogenic chemotherapy” Conference on Mechanisms of Cell Death and Disease: Advances in Therapy, MD Anderson Cancer Center [Invited Lecture]

2001 “Metronomic anti-angiogenic chemotherapy” Biological Therapy of Cancer Conference, University of Munich [Invited Lecture]

2002 “Antiangiogenic Therapy in Leukemia and Multiple Myeloma”, Hematology Congress, Athens, Greece [Plenary Presentation]

2003 “A Primer in the Principles, Perils and Promises of Antiangiogenesis Therapy”, American Association of Cancer Research [Invited Lecture]

2008 “The role of platelets in tumor angiogenesis”, McGill University, Montreal, Canada [Invited Lecture]

2008 “Platelets as markers for early tumor detection”, University of Ostrava, Czech Republic [Invited Lecture]

2008 “The role of platelets in tumor angiogenesis”, University of Patras, Greece [Invited Lecture]

2009 “The Role of Platelets in Angiogenesis: Using platelet protein profiles in cancer diagnosis and therapy, April 4, 2009, Glaxo Smith Kline, [Invited Lecture]

2009 “The Role of Platelets in Angiogenesis”, Symposium on Advanced Wound Care April 26-29, 2009, Dallas Texas [Invited Lecture]

2009 “Platelet markers in human breast and colon cancer “, 7th Annual International M. Judah Folkman Conference on Angiogenesis October 12-14, 2009, Boston, MA [Invited Lecture]

2009 “Platelet Role in Tumor Angiogenesis”, October 25-26, 2009, Hadassah University, Israel [Invited Lecture]

2009 “Platelets as therapeutic target for anticancer therapy”, December 1-4, 2009, Tsagournis Medical Research Facility; Ohio University, Ohio [Invited Lecture]

2009 “Platelet Role in Tumor Angiogenesis”, December 3-4, 2009, University of California, San Francisco [Invited Lecture]

2009 “The Role of Platelets in Angiogenesis: Using platelet protein profiles in cancer diagnosis and therapy”, Glaxo Smith Kline educational series, April 6th, 2009, Philadelphia [Invited Lecture]

2009 “The Role of Platelets in Wound Healing”, SAWC, April 26th, 2009, Houston, Texas [Invited Lecture]

2010 “Metronomic therapy in the era of biologic response modifiers.”, International Center for Cell Therapy & Cancer Immunotherapy (CTCI), May 12th, 2010, Tel Aviv, Israel. [Invited Lecture]

2010 "Platelet content of angiogenesis regulators and tumor growth modulation by platelets". Platelet Symposium (Bi-Annual), May 17, 2010, Ma'ale Hachamicha, Israel [Invited Lecture]

2010 "Clinical markers in the platelet proteome", 8th Annual International M. Judah Folkman Conference on Angiogenesis October 8-9, 2010, Boston, MA [Invited Lecture]

2011 "The Role of Platelets in Tumor Angiogenesis", The 13th International Symposium on Anti- Angiogenic Agents, Feb 2-5, 2011, San Diego [Invited Lecture]

2011 "The Role of Platelets in Tumor Angiogenesis", Seminar University of Pennsylvania, March 5th, 2011, Philadelphia [Invited Lecture]

2011 "The role of platelets in post-natal angiogenesis", Biogen Idac, May 5th, 2011, Boston [Invited Lecture]

2012 "The mechanism of platelet uptake of angiogenesis regulators" Platelet International Symposium, June 10th 2012, Eddicott College, Boston [Invited Lecture]

2012 "Platelet-mediated control of pro- and anti-angiogenic activity in tissue repair", American College of Wound Healing and Tissue Repair, July 27th 2012 Chicago [Invited Lecture]

2012 "Platelet-mediated pro- and antiangiogenic signaling in cancer and health", 10th Annual International M. Judah Folkman Conference on Angiogenesis October 6-7, 2012, Boston, MA [Invited Lecture]

2012 "Platelet proteins as biomarkers of metronomic chemotherapy", RECAMO, November 22, 2012, Brno, Czech Republic [Invited Lecture]

2013- "Angiogenesis in Pediatric Oncology: Where are we now?" German Pediatric Hematology/ Oncology Society, November 23rd, 2013, Frankfurt, Germany [Invited Lecture]

2014- "PTEN related vascular lesions", ISSVA 20th international Workshop on Vascular Anomalies, March 28th – April 7th, Melbourne, Australia

2014- "Incorporating molecular Information in Clinical Oncology, Regional Center for Applied Molecular Oncology, September 18, 2014, EU Center Brno-Bohunice, Czech Republic [Invited Lecture]

2015- "Targeted therapies in pediatric oncology" CEPOETA Meeting, October 16, 2015, Brno, Czech Republic [Invited Lecture]

2015- "Targeted therapies in pediatric oncology" XXVth Meeting of Czech & Slovak physicians, October 17th, 2015, Brno, Czech Republic [Invited Lecture]

2016 – "Precision Medicine in Pediatric Oncology", Boston Oncology Leaders Discussion Forum, Marriott Hotel | Cambridge, Boston, US, April 6th, 2016

2017 – "The use and interpretation of available 'omics' information in precision oncology" Seminario del Martedì del Niguarda Cancer Center, February, 28th 2017, Niguarda Cancer Center, Università Degli Studi di Milano, Milano, Italy [Invited Lecture]

2017 – "The use and interpretation of available 'omics' information in precision oncology" Seminario del Martedì del Niguarda Cancer Center, February, 28th 2017, Niguarda Cancer Center, Università Degli Studi di Milano, Milano, Italy [Invited Lecture]

2017 – "Omic-driven clinical thinking for oncology", 10th International Symposium on Translational Research in Oncology, September 28-30th 2017, Herbert Park Hotel, Ballsbridge Dublin Ireland [Invited Lecture]

2018 – "Artificial Intelligence for Cancer", Centre hospitalier universitaire Vaudois (CHUV), August 27, 2018, Lausanne, Switzerland [Invited Lecture]

2018 – "Artificial Intelligence (AI)- enhanced Combination Metronomic Chemotherapy", 6th International Meeting on Metronomic Chemotherapy in Oncology, October 1-2, 2018, Michigan State University, Grand Rapids Research Center, Grand Rapids, Michigan, US [Invited Lecture]