

## ***CURRICULUM VITAE***

### **JAVED KHAN, M.D**

Deputy Branch Chief  
Senior Investigator  
Attending Pediatric Oncologist  
Oncogenomics Section, Genetics Branch  
National Cancer Institute, National Institutes of Health  
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URL: <https://ccr.cancer.gov/javed-khan>

### **Education:**

1972-1980	Mill Hill School, London, UK.
1981-1984	B.A. with Honors in Pathology, Immunology and Parasitology Queens' College, Cambridge University, UK.
1984-1986	M.B.B.Chir., (M.D.) Queens' College, Cambridge University, UK.
1989	M.A., Pathology, Immunology and Parasitology Queens' College, Cambridge University, UK.
1990	Membership of the Royal College of Physicians, (USA Pediatric Boards equivalent), UK.
2005	General Pediatric Boards Certification, USA.
2009	Pediatric Hematology Oncology Boards Certification, USA
May 2008	Achieved tenure at NIH

### **Current Appointment:**

<b>Date</b>	<b>Place</b>	<b>Position</b>
05/14-present	Oncogenomics Section, Genetics Branch National Cancer Institute, NIH, Bethesda, MD	Senior Investigator Deputy Branch Chief Attending Physician
05/14-present	CCR-Genomics Core Genetics Branch National Cancer Institute, NIH, Bethesda, MD	Director
05/14-present	ClinOmics Program Genetics Branch	Co-Director

National Cancer Institute, NIH,  
Bethesda, MD

### **Previous Appointments:**

05/01-05/14	Oncogenomics Section, Pediatric Oncology Branch National Cancer Institute, NIH, Bethesda, MD	Senior Investigator Attending Physician
1996-5/01	Cancer Genetics Branch NHGRI, NIH, Bethesda, MD	Visiting Fellow
07/95-06/98	Pediatric Oncology Branch CCR, National Cancer Institute, NIH, Bethesda, MD	Fellow, Hematology Oncology
1994-1995	The Sanger Center, Wellcome Trust Genome Campus, Hinxton, Cambridge, UK	Visiting Scientist
08/93-05/95	Pediatric Oncology Department Cambridge University, UK	Clinical Lecturer, General Pediatrics
02/91-07/93	Pediatric Oncology Department Addenbrooke's Hospital, Cambridge, UK	Fellow, Leukemia Research Fund
07/90-01/91	The Hospitals for Sick Children Great Ormond Street, London, UK	Resident, Infectious Diseases Immunology, Dermatology & Neurosurgery
08/89-07/90	Queen's Medical Centre Nottingham, UK	Resident, General Pediatrics Neonatology, General Pediatrics, Oncology & Endocrinology
02/88-07/89	Birmingham Children's Hospital Sorrento Maternity Hospital Birmingham, UK	Resident, Pediatric Cardiology Neonatology , Nephrology & General Pediatrics
08/87-01/88	Addenbrooke's Hospital Cambridge, UK	Intern, Internal Medicine
02/87-07/87	Peterborough District Hospital Peterborough , UK	Intern, General Surgery

## Honors, Awards and Grants:

- 1991 Entrance Exhibition Award, Queen's College, Cambridge University, UK
- 1994 Addenbrooke's Hospital Endowment Fund Research Grant, Cambridge, UK
- 1995 Allen & Hanbury Research Travel Award
- 1998 Merit Award, National Institutes of Health, Bethesda, MD, USA
- 1998 Outstanding Oral Presentation Award  
National Human Genome Research Institute, National Institutes of Health, Bethesda, MD, USA
- 2001 Scholar in Training Award, American Association of Cancer Research, USA
- 2001 National Cancer Institute, Intramural Research Award.
- 2002 Hope Street Kids, Pediatric Cancer Research Grant
- 2004 Children's Cancer Foundation, Pediatric Genome and Expression Database
- 2005 Hope Street Kids, Pediatric Cancer Research Grant
- 2005 Office of Rare Diseases of the National Institutes of Health (NIH) to organize an international meeting of Translational Genomics in Neuroblastoma (TGiN) conference
- 2005 National Cancer Institute, Intramural Research Award for TGiN Conference
- 2005 National Cancer Institute, Intramural Research Award  
Identification of prognostic signatures for high risk neuroblastoma using high resolution comparative genomic hybridization.
- 2006 Office of Rare Diseases of the National Institutes of Health (NIH) to organize the second international meeting of Translational Genomics in Neuroblastoma (TGiN) conference
- 2006 National Cancer Institute, Intramural Research Award for second TGiN Conference
- 2006 National Cancer Institute, Director's Intramural Innovation Award  
Sensitive and Specific Detection of miRNA using Luminex Beads and Locked Nucleic Acid.
- 2007 Therapeutically Applicable Research to Generate Effective Treatments (NBL-TARGET) Initiative to identify targets for neuroblastoma. A collaboration between NCI, Children's Hospital of Philadelphia, Children's Hospital Los Angeles and the Children's Oncology Group
- 2007 NCI Award for development of NanoBioSensor for the detection of nucleic acid hybridization using carbon nanotube and silicon nanowire transistors.  
Collaboration between University of Maryland and NASA.
- 2007 CCR Federal Technology Transfer Award.
- 2007 Children's Cancer Foundation, Pediatric Genome and Expression Database: Grant
- 2008 Children's Cancer Foundation, Pediatric Genome and Expression Database: Grant
- 2008 Office of Rare Diseases of the National Institutes of Health (NIH) to organize the second international meeting of Translational Genomics in Neuroblastoma (TGiN) conference
- 2008 National Cancer Institute, Intramural Research Award for third TGiN Conference
- 2008 CCR Federal Technology Transfer Award.
- 2008 Translational Genomics in Neuroblastoma, an International Collaborative Study:  
High Throughput siRNA Screening of Neuroblastoma: Grant

2009	CCR Federal Technology Transfer Award.
2010	Next Generation Sequencing of the Rhabdomyosarcoma Genome, CCR, NCI, Intramural Grant, Principal Investigator (Award amount \$5M)
2010	Next Generation Sequencing of the Osteosarcoma Genome, NIH, Intramural Grant, co- Principal Investigator (Award amount
2010	CCR Federal Technology Transfer Award.
2011	CCR Federal Technology Transfer Award.
2012	QuadW, Fellow in Personalized Therapy for Sarcoma.
2012	QuadW Support for 2 <sup>nd</sup> Pediatric Cancer Translational Genomics (PCTG)
2012	St Baldrick's Support for 2 <sup>nd</sup> Pediatric Cancer Translational Genomics (PCTG)
2014	CCR Federal Technology Transfer Award.

### Honors, Awards and Grants by Fellows

2004	FARE (Fellows Award for Research Excellence), NIH. <b>“Cancer Genome Investigations using Comparative Genomic Hybridization on cDNA Microarrays.”</b> awarded to Dr Sven Bilke
2004	FARE (Fellows Award for Research Excellence), NIH. <b>“A combinatorial unsupervised and supervised approach identifies gene expression profiles that correlate with prognosis in neuroblastoma.”</b> awarded to Dr Alexei Krasnoselsky
2008	Best paper. <b>“The MYCN Oncogene is a Direct Target of miR-34a”</b> awarded to Dr Jun Wei at Advances in Neuroblastoma Research, Japan
2009	FARE (Fellows Award for Research Excellence), NIH. <b>“The identification of activating mutations in the Fibroblast Growth Factor Receptor 4 promotes metastasis in rhabdomyosarcoma”</b> awarded to Dr Adam Cheuk
2010	American Association for Cancer Research AACR-Aflac, Incorporated Scholar-in-Training Award <b>“Next Generation Sequencing of Whole Transcriptome Analysis of Identifies Multiple Protein Disrupting Mutations in Neuroblastoma”</b> awarded to Dr Tom Badgett, Washington DC
2010	Best paper. <b>“Identification of Multiple Protein Disrupting Mutations in Stage 4 Neuroblastoma Using Next Generation Sequencing Transcriptome Analysis”</b> awarded to Dr Tom Badgett at Advances in Neuroblastoma Research, Stockholm, Sweden
2010	FARE (Fellows Award for Research Excellence), NIH. <b>“Identification of Multiple Protein Disrupting Mutations in Stage 4 Neuroblastoma Using Next Generation Sequencing Transcriptome Analysis”</b> awarded to Dr Tom Badgett
2013	Jack Shern, SARC
2013	Baskar, St Baldricks
2013	UMD-NCI

### Patents:

- 2002 **Methods for analyzing high dimensional data for classifying, diagnosing, prognosticating, and/or predicting diseases and other biological states**  
*United States Patent Application*
- 2002 **Selections of genes, methods of using the same for diagnosis of select cancers, and methods of targeting the therapy of select cancers.**  
*United States Patent Application*
- 2004 **Selections of genes, methods of using the same for diagnosis and prediction of prognosis, in neuroblastoma.**  
*United States Patent Application*
- 2006 **Apparatus for Microarray Binding Sensors Having Biological Probe materials Carbon Nanotube Transistors.**  
*United States Patent Application E-056-2007/0-EP-04*
- 2008 **Overexpression and mutation of a tyrosine kinase receptor FGFR4 in tumors.**  
*U.S. Provisional Patent Application No. 61/044,875*
- 2010 **Synthetic Analogs of RGD And NGR Cyclic Peptides, Methods of Making, and Methods of Use Thereof**  
*U.S. Provisional Patent Application No. E-130-2010/0-US-01*

## Cooperative Research and Development Agreement (CRADA)

Title: Development of Polyvalent Liposomal Nanoparticles for Imaging and Targeted Delivery of Drugs and siRNAs

Collaborating organization: NanoValent Pharmaceuticals, InC. (<http://www.nanovalent.com/>)

Title: Development of Intervention Insights, Inc.'s OncInsights™ Bioinformatics Software Platform for Molecular Oncology Research and for Use in the Treatment of Cancer

Collaborating organization: Intervention Insight

## Teaching Experience:

Dates	Title & Program	Position
08/93-05/95	General Pediatrics Medical Students & Nurses Cambridge University, UK	Clinical Lecturer
1994-95	Internal Medicine Medical Students Cambridge University, UK	Clinical Supervisor
2001-	Pediatric Hematology Oncology Fellowship Training	Lecturer & Attending

## Current Staff Trainee and Graduate Student

<b>Name</b>	<b>Position</b>	<b>Section</b>	<b>Duration</b>
Jun Wei	Staff Scientist	Molecular Biology	05/01-current
Young Song	Technician	Molecular Biology	02/05-current
Catherine House	Technician	Molecular Biology	11/08-current
Hongling Liao	Contractor	Molecular Biology	02/10-current
Laura Hurd	Contractor	Molecular Biology	08/11-current
Jack Shern	Clinical Fellow	Molecular Biology	07/11-current
Andrew Brohl	Clinical Fellow	Molecular Biology	01/12-current
Xinyu Wen	Programmer Analyst	Bioinformatics	05/06-current
Jianbin He	Programmer Analyst	Bioinformatics	01/09- current
Jianjun Wang	Programmer Analyst	Bioinformatics	02/11-current
Rajesh Patidar	Bioinformatician	Bioinformatics	06/1-current
Li Chen	Bioinformatician	Bioinformatics	09/11-current
Shile Zhang	PhD graduate student, Boson University, Graduate partnership Program	Bioinformatics	05/10-current
Dominik Bogen	PhD graduate student, Vienna University, Austria, Graduate partnership Program	Biologist	01/11-current

### **Trainees: Past**

<b>Name</b>	<b>Position</b>	<b>Duration</b>	<b>Current Position</b>
Alicia Faller	Pre-IRTA	06/98-07/99	Physician, Maine
Lao Saal	Technical-IRTA	04/98-07/00	M.D. Ph.D. student, Assistant Professor, University of Lund, Sweden Columbia University
David Clendenin	Pre-IRTA	09/00-11/00	Pediatric Anesthesiologist Boston, MA
Jun Wei	Post Doctoral Fellow	10/99-05/01	Staff Scientist since 2009
Len, Hua	Post Doctoral Fellow	06/02-02/04	Optometry Student, The New England College of Optometry
Nicola Cenacchi	Post Doctoral Fellow	06/01-08/04	Fellow Imperial College, London
Roberta Sartini	Post Doctoral Fellow	08/01-12/01	Post Doctoral Fellow, Italy
Chang-gue Son	Post Doctoral Fellow	04/02-08/04	Associate Professor, Daejeon University, Korea
Alexei Krasnoselsky	Post Doctoral Fellow	08/02-08/04	Staff Scientist, Fred Hutchinson Cancer Center, Seattle
Craig Whiteford	Biologist	05/01-12/04	Senior Scientist, BD Diagnostics
Braden Greer	Programmer-SAIC	31/02-08/05	Pastor, Gaithersburg, MD
Quangeng Zhang	Post Doctoral Fellow	05/05-12/06	Associate Professor, Capital

Sven Bilke	Post Doctoral Fellow	07/02-01/07	Medical Uni., Beijing, China, Staff Scientist, NCI, NIH
Steffen Durinck	Post Doctoral Fellow	06/06-06/07	Post Doc., Lawrence Livermore, UC Berkley
Christopher Benjamin	Pre Doctoral Fellow	06/07-11/07	Physician assistant program
Jinesh Gheeya	IRTA-Pre doctoral	10/07-07/09	MD PhD program
Wesley Beckstead	Pre-Doc, PhD Student	07/08-08/09	Medical Leave
Shashi Kumar	Post Doctoral Fellow	02/10-06/10	Residency program, Lansing, MI.
Jharna Barman	Pre Doctoral Fellow	03/08- 08/10	In India
Susan Yeh	Technician	03/09-08/10	Nursing School, MD
Belhu Metaferia	Research Fellow	08/07-08/10	Research Biologist, NIDDK
Xiang Guo	Programmer Analyst	05/08- 09/10	Scientist II, MedImmune
Jonathan Leffman	Post Doctoral Fellow	04/09-09/10	Research Biologist, Army Corps of Engineers
Qingrong Chen	Post Doctoral Fellow and Technician, Bioinformatics	01/02-02/11	Staff Scientist Equivalent GS14, CBIIT, NCI
Peter Johansson	Post Doctoral Fellow	09/07-02/12	Bioinformatic Specialist, Queensland Institute of Medical Research, Brisbane, Australia
Patricia Tsang	Research Fellow	07/06-06/11	Research Fellow, Radiation Oncology Branch, NCI
Tom Badgett	Clinical Fellow	07/08-04/12	Assistant Professor, Department of Pediatrics, Division of Hematology/Oncology, Kentucky Children's Hospital, KY
Adam Cheuk	Post Doctoral Fellow	07/05-	07/05-current
Sam Q Li	IRTA	06/12-06/14	Medical Student, Case Western

### **Administrative, Evaluative and Editorial Positions:**

1999-2001	Protocol Review Committee, Pediatric Oncology Branch, NCI, NIH
02/2001- 02/2002	Institutional Review Board, NHGRI, NIH
02/2001- 2002-	Microarray Steering Committee, National Cancer Institute, NIH The Bioinformatics, Biostatistics, and Computational Biology Steering Committee
2004-	Pediatric Drug Development Group (PedDDG) of Pediatric Preclinical Testing Program (PPTP)
2004-	Research Technology Program Review Committee, National Cancer Institute.
2005-2007	Associate Editor, Cancer Research
2005-06	CCR Grand Rounds Planning Committee
2006	Fellows Award for Research Excellence (FARE) Judge, NIH

2006	AACR Program Committee (Gene Regulation and Transcription Factors Subcommittee of the Cellular and Molecular Biology Section
2006	Co-Chair Mini-symposium Gene Regulation and Transcription Factors: Gene and RNA Networks
2006	Quinquennial Review of Institute of Cancer Research, London, UK. Site Visit Team, Reviewer.
2006	Reviewer and moderator at Advances in Neuroblastoma Research, Molecular Cell Biology, Plenary Session, LA, USA
06/2007	2007 ASCO Annual Meeting Faculty, Scientific Discussant Pediatric Cancers
2007	AACR Program Committee Member
2007-2010	TCGA Data Access Committee
2005-2007	Dissertation Committee for Gabriel S. Eichler, Ph.D. Candidate in Bioinformatics, Boston University
2007	Strategic Planning Committee to Interrogate the Molecular Genetics of Cancer for Center for Cancer Research, NCI
2007-current	The Center of Excellence in Integrative Cancer Biology and Genomics Steering Committee. Co-Chair of Integrative Systems Biology and Bioinformatics Subcommittee, NCI
2007-current	Adjunct Investigator, Center for Cancer Research Nanobiology Program
2007- 2009	Advances in Neuroblastoma Research Advisory Board
2008-current	International Panel Member of Cancer Research UK* Translational Research in Clinical Trials Committee (TRICC)
2008	Chair of Workshop on Translational Omics in Neuroblastoma, Chiba, Japan
2010	Expert Panel: St. Baldrick's Research Priorities Summit. NY, USA
2009	Chair of Power Computing: Genomics and Systems Medicine Subcommittee, NIH
2009-current	COG STS Committee
2010	Chair of Bioinformatic Review Panel for Staff Scientists at CCR, NCI
2010	Site visit review panel for the Laboratory of Molecular Technology and the Sequencing Facility in the Advanced Technology Program, SAIC Frederick.
2010-current	SAIC-Frederick Performance Evaluation Board, Frederick, MD, USA.
2010-current	ATP Technology Development Advisory Committee, Advanced Technology Program, Frederick, MD, USA.
2010-current	Scientific Advisors and Grant Reviewers, St Baldricks Foundation
2011	NHGRI Promotion & Tenure Committee
2011	Stadtman Genetics and Genomics Selection Committee
2012	Stadtman Computation Biology Selection Committee
2012--current	Adolescent Young Adult (AYA) Biology Working Group
2012--current	HTP Molecular Data working group
2012--current	CCR Core Facilities Task Force
2012	Reviewer for NCI Innovation Award
2014	Stadtman Selection Committee
2014	Deputy Branch Chief, Genetics Branch

2014	JCO Editorial Board
2014	Member and session chair of the AACR Think Tank on the Future of Pediatric Cancer Research and Care
2014	Stadtman's Genomics Subcommittee
2014	NHGRI Tenure Track Search Committee

### **Core Directorship**

2104-current	Core director of CCR-Genomics Core. Core functions to bring new genomics technologies to the CCR, NCI
2014-Current	Joint Co-Director of ClinOmics Core. Core functions to enable CLIA exome germ line and tumor, RNAseq and other genomic technologies to enable precision therapy for patients enrolled on CCR clinical protocols

### **Mentorship; Tenure Track Mentoring Committee**

1. Douglas Stewart, Investigator, Clinical Genetics Branch, Division of Cancer Epidemiology and Genetics, NCI
2. Kevin Brown, Investigator, Laboratory of Translational Genomics, Division of Cancer Epidemiology and Genetics, NCI
3. Ludmila Prokunina, Investigator, Laboratory of Translational Genomics, Division of Cancer Epidemiology and Genetics, NCI
4. Rosie Kaplan, Investigator, Pediatric Oncology Branch, CCR, NCI
5. Isaac Brownell, Investigator, Dermatology Branch, CCR, NCI
6. Ashish Lal, Investigator, Genetics Branch, CCR, NCI
7. Udayan Guha, Investigator, Cancer Signaling Networks Section, Thoracic and Gastrointestinal Oncology Branch, CCR, NCI

### **Book Editor**

The Applications of Bioinformatics in Cancer Detection (2004)  
Editors: Asad Umar, Izet Kapetanovic, and **Javed Khan**  
Annals of New York Academy Of Sciences

### **Reviewer for Books & Journals:**

Cancer Research, Clinical Cancer Research, Molecular Cancer Therapeutics, Genomics, Cytometry, Genes Chromosomes and Cancer, Human Molecular Genetics, Cytogenetics and Cell Genetics, Genome Research, EMBO reports, Oncogene, Medical Pediatric Oncology, Journal of the National Cancer Institute, Journal of Clinical Oncology, New England Journal of Medicine  
Cancer Cell

**Grant Reviews:**

1999	NIH, Seed Grant
2000	New Zealand Medical Research Council
2000	Fonds zur Förderung der wissenschaftlichen Forschung Austria
2001	Samantha Dickson Research Trust, UK
2001	Cancer Research Campaign, UK
2003	SSS-Y-92S, NIH Study Section Reviewer
2005	Wellcome Trust
2006	Samantha Dickson Research Trust, UK
2006	Wellcome Trust
2006	ZRG1 GGG-T, NIH Study Section Reviewer
2007	Cancer Research UK
2008	Neuroblastoma Society, United Kingdom
2008	National Research Grant Proposal, Singapore
2009	Fondation Fournier-Majoie pour l'Innovation (FFMI)
2009	Peer Reviewed Medical Research Program (PRMRP)
2009	Recovery Act Limited Competition: NIH Challenge Grants in Health and Science research.
2010	Alex's Lemonade Stand
2010	201008 ZRG1 OBT-A (55) R ARRA Grant reviewer
2010	St Baldrick's Grant Reviewer
2010	GCAT study section.
2010	The Netherlands Organization for Health and Research Development.
2011-current	CADP Clinical Assay Development Program
2011	RO1 Reviewer panel
2011	St Baldrick's Grant Reviewer
2012	The Neuroblastoma Society, UK
2012	CCR's US-China.
2012	Alex's Lemonade Stand Reviewer
2012	St Baldrick's Grant Reviewer
2012	Great Ormond Street Hospital Children's Charity
2012	K99 review for NHGRI
2012	Study Section Genomic Medicine NHGRI
2013	Alex's Lemonade Stand
2013	Children with Cancer UK
2013	ZHG1 HGR-M (J4)_2013_Genomic Medicine
2013	NCI Innovation Award
2013	Cure Search
2013	St. Baldricks
2013	CCRI, Vienna, Austria, Next Generation Sequencing
2013	CARISA, Cancer Research Initiative, South Africa
2014	AACR-Aflac, Inc. Career Development Award for Pediatric Cancer Research

2014	Cancer Research UK
2014	SNPRC Pilot Research Program
2014	St. Baldricks
2014	Alex's Lemonade Stand
2014	MD Anderson, Moon Shots

### **Investigator on Protocols of the Intramural Program, NIH:**

1999	Protocol 99-C-0125: Associate Investigator "Osteosarcoma: Outcome of therapy based on histological response. A collaborative effort of the POB/NCI, Texas Children's Hospital and University of Oklahoma".
2000	Associate Investigator "A Phase I Trial and Pharmacokinetic Study of R115777 in Pediatric Patients with Refractory Leukemias"
2007	Associate Investigator "A pilot study of tumor vaccination in patients with neuroblastoma and pediatric sarcomas and altered t cell homeostasis"
2009	NCI protocol. Comprehensive Omics Analysis of Pediatric Solid Tumors and Establishment of a Repository for Related Biological Studies. Principal Investigator.
2009	NCI protocol. A Feasibility Trial Using of Molecular Profiling to Guide Treatment for Pediatric Malignancies. NCI Principal Investigator
2009	AOST10B3 Genomic Study of Metastatic Osteosarcoma Using Next-Generation Sequencing Technology. COG Study Chair

## **PROFESSIONAL ACTIVITIES**

### **Society Membership**

Member of the Royal College of Physicians, UK (Equivalent to Boards for Pediatrics)  
Member of American Association of Cancer Research

### **Organization of Conference**

2005	International Conference on Translational Genomics in Neuroblastoma (TGIN).
2007	International Conference on Translational Genomics in Neuroblastoma-2 (TGIN2) and Therapeutically Applicable Research to Generate Effective Treatments (TARGET) Initiative.
2009	International Conference on Translational Genomics in Neuroblastoma-3 (TGIN3)
2010	1st Childhood Bone Sarcoma Genomics Consortium Meeting, DC, USA
2010	2nd Childhood Bone Sarcoma Genomics Consortium Meeting, Paris, France
2012	Pediatric Cancer Translational Genomics (PCTG), Phoenix, AZ
2012	NCI Second Center of Excellence in Integrative Cancer Biology and Genomics (CEICBG) Symposium, Bethesda, MD
2115	Targeting Rhabdomyosarcoma

## COLLABORATIONS

### 1. Carol J. Thiele Ph.D.

Head, Cell & Molecular Biology Section. Pediatric Oncology Branch, CCR, NCI

- **Investigation of epigenetic dysregulation in neuroblastoma**

### 2. Udayan Guha, M.D., Ph.D.

Cancer Signaling Networks Section, Thoracic and Gastrointestinal Oncology Branch, CCR, NCI, Bethesda, MD

- **Phospho proteomic mass spectroscopy to identify novel targets for therapy for pediatric cancer**

### 3. Stephen Chanock M.D.

Head, Genomic Variation Section, Pediatric Oncology Branch, Advanced Technology Center, CCR, NCI

- **SNP analysis of pediatric cancers**
- **Comparison of sequencing technologies**

### 4. Chand Khanna, DVM, Ph.D.

Senior Scientist, Pediatric Oncology Branch, CCR, NCI

- **Evaluation of metastatic potential of mutated oncogenes**

### 5. Stephen Hewitt, M.D., Ph.D.,

Head Tissue Array Research Program (TARP). Advanced Technology Center, Laboratory of Pathology, CCR, NCI

- **Investigation of pathway disruption by novel somatic mutations**
- **Identification of cell surface antigens as immunotargets in pediatric cancers**

### 6. Malcolm Smith, M.D., Ph.D., CTEP, NCI & Peter Houghton, PhD.

St Jude's Children's Research Hospital

- **Pediatric Pre-Clinical Testing Program (PPTP)**

### 7. William A. Weiss MD-PhD

Associate Professor, Department of Neurology, UCSF, California

- **Molecular characterization of neuroblastoma tumors from the MYCN transgenic model**

### 8. Daniel Catchpole, Ph.D.

Tumour Bank, The Children's Hospital at Westmead, Westmead, Australia

- **Genomic analysis of the small round blue cell tumors of childhood**
- **Next generation sequencing of pediatric malignancies**

### 9. Jason Shohet, MD, PhD

Assistant Professor, Texas Children's Cancer Center, Baylor College of Medicine Houston, Texas

- **The effect of MYCN on microRNA and mRNA expression profiles**

### 10. National Center for Advancing Translational Sciences (NCATS)

- **Identification of synergizers to cytotoxic chemotherapy and tyrosine kinase inhibitors in neuroblastoma and rhabdomyosarcoma**

### 11. Children's Oncology Group (COG) Soft Tissue Sarcoma Committee

- **Next generation sequencing of rhabdomyosarcoma**

## Invitations to Lecture

- 1991           **“Widespread Gas Gangrene in a Child with T-Cell Acute Lymphoblastic Leukaemia”**  
Medical Grand Round, Addenbrooke’s Hospital, Cambridge, UK
- 1992           **“Emergencies in Paediatric Oncology”**  
Regional Study day in Oncology, Shared Care Hospitals East Anglia, UK.
- 1992           **“Accuracy of The Detection of Immunity to Chicken Pox and Measles in Childhood Malignancies”**  
United Kingdom Childhood Cancer Study Group, Newcastle, UK
- 1993           **“Prophylactic Antibiotics in Profound Neutropaenia”**  
United Kingdom Childhood Cancer Study, Cardiff, UK
- 1995           **“Comparative Genomic Hybridization a New Tool for the Molecular Biologist”**  
Scientific Plenary Session, British Paediatric Association Annual Meeting  
University of York, UK
- 1998           **“Elucidation of Gene Expression Profiles in Cells Containing the Tumor Specific Chromosome Translocation t(2;13)(q35;q14) using cDNA Microarrays”**  
AACR 89<sup>st</sup> Annual Meeting, New Orleans, Louisiana, USA
- 1998           **“Gene Expression Profiling of Alveolar Rhabdomyosarcoma with cDNA Microarrays”**  
National Human Research Institutes, Annual Scientific Retreat, Airlie, Virginia, USA
- 1988           **“Elucidation of Gene Expression Profiles in Cells Containing the Tumor Specific Chromosome Translocation t(2;13)(q35;q14) Using cDNA Microarrays”**  
DNA Microarrays. Current Technology and Future Application Workshop  
Food and Drug Administration, Bethesda, MD, USA
- 1998           **“Elucidation of Gene Expression Profiles in Human Disease using cDNA Microarrays”**  
CRC Human Cancer Genetics Group, Cambridge University, UK
- 1999           **“Elucidation of Gene Expression Profiles in Cells Containing the Tumor Specific Chromosome Translocation t(2;13)(q35;q14) Using cDNA Microarrays”**  
AACR 90<sup>st</sup> Annual Meeting Philadelphia, PA, USA.

- 03/1999      **“cDNA microarray analysis of human cancer”**  
The Academy of Finland, Helsinki, Finland.
- 04/1999      **“Functional Genomics and DNA Chip Technology; cDNA Microarray Analysis of Human Cancer”**  
Korean Society of Medical Biochemistry and Molecular Biology, Seoul, Korea.
- 04/1999      **“cDNA microarray analysis of cancer”**  
Hematopoiesis & Immunology Society, Johns Hopkins University School of Medicine, Baltimore. MD, USA.
- 10/1999      **“cDNA microarrays detect activation of a myogenic transcription program by the Pax3-Fkhr fusion oncogene”**  
Minisymposia into the Natural History of Human Disease by Microarray Analysis. NIH Research Festival on Gene Therapy and Imaging, NIH, Bethesda, MD, USA.
- 12/1999      **“cDNA Microarray Analysis of Human Cancer”**  
Howard University Cancer Center, Washington DC, USA.
- 2/2000      **“DNA Microarray Technology: The Anticipated Impact on the Study of Human Disease”**  
21st Lorne Genome Conference, Lorne, Victoria, Australia.
- 05/2000      **“CDNA Micro Array Analysis of NYMC Over-Expressing NB Cells and Retinoic Acid Treated NB Cells with Decreased NMYC Reveals Novel Putative NYMC Regulated Genes”**  
Advances in Neuroblastoma Research 2000, Philadelphia, PA, USA
- 05/2000      **“Analysis of Gene Expression”**  
Eli Lilly workshop on Recombinant DNA technology. Emerging paradigms in biotechnology. Indianapolis, IN, USA.
- 06/2000      **“Molecular Classification of Human Cancer using cDNA Microarrays”**  
7th Workshop and Conference on Human Leucocyte Differentiation Antigens, Harrogate, UK.
- 07/2000      **“Molecular Classification of Human Cancer using cDNA Microarrays”**  
Gene Expression and Genomics Interest Group, NIA, NIH, Baltimore, USA.
- 10/2000      **“Molecular Classification and Gene Expression Profiling of Paediatric Malignancies Using cDNA microarrays”**  
32<sup>nd</sup> Meeting International Society of Paediatric Oncology, Amsterdam, Netherlands.

- 11/2000      **“Development of a Molecular Taxonomy of Small Blue Round-cell Tumors using cDNA microarrays”**  
National Human Research Institutes, Annual Scientific Retreat, Airlie, Virginia, USA
- 12/2000      **“Development of a Molecular Taxonomy of Paediatric Malignancies using cDNA microarrays”**  
United Kingdom Childhood Cancer Study Group Annual Scientific Retreat  
London, UK.
- 1/2001        **“Development of a Molecular Taxonomy of Pediatric Malignancies using cDNA microarrays”**  
Hematology and Oncology, Children’s Hospital of Philadelphia, PA, USA
- 3/5/2001     **“Diagnostic Classification of Cancers Using cDNA microarrays and Artificial Neural Networks”**  
6<sup>th</sup> Joint Meeting of the Board of Scientific Advisors and Board of Scientific Counselors, NCI, NIH, Bethesda, MD, USA.
- 03/2001      **“Large Scale Gene Expression Profiling in Cancer Research”**  
Educational Session, AACR 92<sup>nd</sup> Annual Meeting. New Orleans, Louisiana, USA.
- 11/2001      **“Classification and Diagnostic Prediction of Cancers using Gene Expression Profiling and Artificial Neural Networks”**  
16<sup>th</sup> Annual Meeting of the Society of Biological Therapy, Bethesda, MD, USA.
- 04/2002      **“Classification and Diagnostic Prediction of Cancers using Gene Expression Profiling and Artificial Neural Networks”**  
Annual Meeting of the Radiation Research Society, Reno, Nevada, USA.
- 04/2002      **“Molecular Characterization of Cancers with Microarrays”**  
Children’s Oncology Group, Jacksonville, FL, USA
- 04/2002      **“Classification and Diagnostic Prediction of Cancers using Gene Expression Profiling and Artificial Neural Networks”**  
Macroresults through Microarrays 2, Boston, MA, USA
- 08/2002      **“Characterization and Diagnosis of Cancer Using DNA Microarrays and Artificial Neural Networks”**  
Applications of Bioinformatics in Early Cancer Detection, National Cancer Institute, Bethesda, MD, USA.
- 02/2003      **"Past, Present and Future Technologies for Cancer Research"** Genomic & Proteomic Technological Advances in Cancer Research Microarrays, Mass

Spectrometry, Imaging and SNP Analysis in Cancer Diagnosis, Prognosis, Prevention and Treatment. Bethesda, MD, USA.

- 03/2003 **“Molecular Mining of Data Generated from Gene Expression Profiling”**  
Gordon Research Conference on Aging in Venture CA, USA
- 01/2004 **“Application of Genomics and Artificial Neural Networks for the Investigation of Cancers”**. Medical College of Wisconsin, Department of Pediatrics, Children’s Hospital of Wisconsin, WI, USA
- 06/2004 **“Application of Genomics for the Investigation of Pediatric Cancers”**.  
University of Bologna, Italy
- 06/2004 **“ Application of Genomics and Artificial Neural Networks for the Investigation of Cancers”**. Birmingham Children’s Hospital, Birmingham, UK
- 06/2004 **“Application of Genomics and Artificial Neural Networks for the Investigation of Cancers”**. Birmingham University, Birmingham, UK
- 06/2004 **“CGH and Prognostic Prediction using cDNA Microarrays in Neuroblastoma”**. Dept of Child Health, The Royal Victoria Infirmary, Newcastle, UK
- 06/2004 **“ Application of Genomics and Artificial Neural Networks for the Investigation of Cancers”**. Institute of Cancer Research, Royal Marsden Hospital, Sutton, UK
- 02/2005 **“The Applications of Microarrays and Artificial Intelligence for Diagnosis, Predicting Prognosis and Selection of Therapeutic Targets”**. Center for Cancer Research, National Cancer Institute, NIH, Bethesda, MD, USA
- 03/2005 **“ Oncogenomics Section Database Development”** COG-BTRC Task Force, San Diego, CA, USA
- 04/2005 **“Inferring Tumor Progression Models Using Array CGH Data”**. Agilent CGH Workshop, Anaheim, CA, USA
- 05/2005 **“The Applications of Microarrays and Artificial Intelligence for Diagnosis and Predicting Prognosis”**. Educational Session, American Society of Clinical Oncology (ASCO) Annual Meeting, FL, USA
- 09/2005 **“Inferring Tumor Progression Models from Genomic data”**. 1<sup>st</sup> National Cancer Research Institute - Cancer Conference, Birmingham, UK

- 09/2005 **“The Applications of Microarrays and Artificial Intelligence for Diagnosis and Predicting Prognosis”**. SIOP 2005: 37th Congress of The International Society Of Paediatric Oncology. Vancouver, Canada
- 09/2005 **“Translational Genomics in Neuroblastoma”**. Texas Children’s Hospital, Baylor School of Medicine.
- 03/2006 **“Translational Genomics in Neuroblastoma”**. USCF, San Francisco, CA, USA
- 04/2006 **“Cancer Genomics”**. Surgeons Travel Club, Bethesda, MD, USA.
- 05/2006 **“Expression Profiling for Prognostication; Translation of Genomics into Clinical Practice”**. Advances in Neuroblastoma Research, Los Angeles, CA, USA
- 07/2006 **“Neuroblastoma; An Enigmatic Lethal Tumor”**. Targeted Therapeutic Workshop, UICC, Washington DC, USA
- 07/2006 **“The Applications of Microarrays and Artificial Neural Networks for Diagnosis, Predicting Prognosis and Selection of Therapeutic Targets”**. National Cancer Advisory Board, NCI, Bethesda. MD, USA
- 10/2006 **“Translational “Omics” in Cancer”**. Grand Round, Center for Cancer Research, National Cancer Institute, NIH, Bethesda, MD, USA
- 10/2006 **“DNA copy number changes as potential markers for prognostication”**. The SIOP European Neuroblastoma Research Network, Stockholm, Sweden
- 10/2006 **“What we can learn from gene expression microarray data”**. The SIOP European Neuroblastoma Research Network, Stockholm, Sweden
- 12/2006 **“Translation of Genomics to the Clinic”**. Presentation to NIH director Dr Zerhouni’s visit to the CCR, NCI
- 12/2006 **“Molecular Diagnosis of Cancer in the 21st Century and Beyond: From Genes to Nanochips”**. Presentation to Senator Kennedy’s Visit to NIH
- 01/2007 **“Neuroblastoma; an Enigmatic Lethal Tumor”**. St. Baldrick’s Foundation, New York, USA
- 02/2007 **“The NanoBioSensor Initiative: Thinking Outside of the Box.”** Graduate and Undergraduate Program, Department of Electrical and Computer Engineering University of Maryland, College Park, MD, USA

- 09/2007      **“Translational “Omics” in Pediatric Cancer; What next?”** Children's Cancer Research Institute University of Texas Health Science Center at San Antonio, TX, USA
- 11/2007      **“mRNA as Biomarkers in Cancer ”.** EORTC-NCI-ASCO Meeting , Belgium
- 12/2007      **“Translational “Omics” in Pediatric Cancer”.** Greehey Children's Cancer Research Institute University of Texas Health Science Center at San Antonio
- 12/2007      **“Translational “Omics” in Neuroblastoma”.** St. Jude Children's Research Hospital, Memphis, Tennessee, USA
- 01/2008      **“Translational “Omics” in Neuroblastoma”.** Visit by French Delegation to NIH, representative of CCR.
- 02/2008      **“The NanoBioSensor Initiative”.** Nanobiology Seminar Series, NCI, Frederick, MD
- 03/2008      **“Translational Genomics in Neuroblastoma. The Vision”.** International Neuroblastoma Symposium. Texas Children’s Hospital, Texas,USA
- 05/2008      **“Translational Omics in Neuroblastoma”** Advances in Neuroblastoma Research 2008. Chiba, Japan.
- 05/2008      **“MYCN is a direct target of microRNA 34a”.** Chosen for plenary session lecture and received best paper award. Chiba, Japan
- 10/2008      **“Translational Omics of Cancer”** Genomics and Proteomics Interest Program, GWU, MD, USA
- 10/2008      **“Translational Omics in Cancer”** The Translational Research in Clinical Oncology (TRACO) course, Bethesda, MD, USA
- 12/2008      **“Translational Genomics of Pediatric Cancers”** 2008-2009 NIH Directors Seminar Series, Bethesda, MD, USA
- 02/2009      **“Translational Genomics of Cancers”** Advanced Technology Program. Frederick, MD, USA
- 04/2009      **“Translational Genomics of Cancers”** CBER Genomics and Proteomics Interest Group (CGPIG), Bethesda, MD, USA
- 05/2009      **“Translational Omics: A Systematic Approach to Identify Novel Biomarkers and Therapeutic Targets for High-Risk Pediatric Cancers. Vision for Pediatric Oncology in the 21st Century”** Texas Children's Cancer Center, USA

- 06/2009 **“Translational Genomics of Pediatric Cancers”** Children's Hospital of Wisconsin, WI, USA
- 07/2009 **“A Systematic Approach to Identify Novel Biomarkers and Therapeutic Targets for High-Risk Pediatric Cancers. Vision for Pediatric Oncology in the 21st Century”** Van Andel Research Institute, MI, USA
- 09/2009 **“Next Generation Sequencing of the Cancer Genome”** Children’s Oncology Group, Dallas, TX, USA
- 10/2009 **“Integrated Analysis of the Cancer Genome”** Children's Medical Research Institute, Sydney, Australia
- 10/2009 **“Integrated Analysis of the Cancer Genome”** Australasian Microarray Associated Technologies Association (AMATA), Sydney, Australia
- 10/2009 **“Integrated Analysis of the Cancer Genome”** Radiation Oncology Branch Seminar Series, NIH, Bethesda, MD, USA
- 11/2009 **“Integrated Analysis of the Cancer Genome”** 2<sup>nd</sup> Annual Retreat of the Center of Excellence in Integrated Cancer Biology (CEICBG). Bethesda, MD, USA
- 02/2010 **“Integrated Analysis of the Cancer Genome: Towards Personalized Medicine in Cancer”** Genetics & Biology of Childhood Cancer Symposium, Children's Cancer Research Institute University of Texas Health Science Center at San Antonio, TX, USA
- 02/2010 **“Pediatric RMS Genome Project”** Children’s Oncology Group, CA, USA
- 04/2010 **“Integrated Analysis of the Cancer Genome: Towards Personalized Medicine in Cancer”** BC Cancer Research Centre, Vancouver, Vancouver, Canada
- 04/2010 **“Pediatric EWS/OS Genomes Project”** 1st Childhood Bone Sarcoma Genomics Consortium Meeting, DC, USA
- 05/2010 **“Integrated Analysis of the Cancer Genome: Towards Personalized Medicine in Cancer”** Pediatric Academic Societies Annual Meeting, Canada
- 06/2010 **“Genomic and Proteomic Study of microRNA in Pediatric Cancers”** Advances in Neuroblastoma Research (ANR) 2010 Stockholm, Sweden, talk given by Dr Jun Wei
- 06/2010 **“Genomic Portrait of Tumor Progression Using Next-Generation Sequencing”** Advances in Neuroblastoma Research (ANR) 2010 Stockholm, Sweden, talk given by Dr Jun Wei

- 06/2010 **“Identification of Multiple Protein Disrupting Mutations in Stage 4 Neuroblastoma Using Next Generation Sequencing Transcriptome Analysis”** Advances in Neuroblastoma Research (ANR) 2010 Stockholm, Sweden, plenary talk given by Dr Tom Badgett
- 06/2010 **“Genomic and Proteomic Study of microRNA in Pediatric Cancers”** Advances in Neuroblastoma Research (ANR) 2010 Stockholm, Sweden, talk given by Dr Jun Wei
- 06/2010 **“Combined massively parallel sequencing and synthetic lethal screening identifies multiple druggable targets in neuroblastoma”** Advances in Neuroblastoma Research (ANR) 2010 Stockholm, Sweden, talk given by Dr Qingrong Chen
- 06/2010 **“Integrated Analysis of the Cancer Genome: Towards Personalized Medicine in Cancer”** CHILDREN'S CANCER RESEARCH INSTITUTE, Wien, Austria
- 06/2010 **“Integrated Analysis of the Cancer Genome: Towards Personalized Medicine in Cancer”** Lund University, Sweden
- 06/2010 **“Next Generation Sequencing of Pediatric Cancer Genomes The Oncogenomics Section Experience”** Advances in Neuroblastoma Research (ANR) 2010 Stockholm, Sweden
- 06/2010 **“Next Generation Sequencing of the Pediatric Cancer Genome”** Next Gen Analysis Jamboree Meeting (NGAJ), La Jolla, California, USA
- 10/2010 **“Update: Genomic Study of Rhabdomyosarcoma Using Next-generation Sequencing Technology”** Children’s Oncology Group, STS Committee, Texas, USA
- 10/2010 **“RMS Transcriptome/Exome Sequencing”** Children’s Oncology Group, STS Biology Breakout, Texas, USA
- 10/2010 **“Integrated Analysis of the Cancer Genome: Towards Personalized Medicine in Cancer”** The Translational Research in Clinical Oncology (TRACO) course, Bethesda, MD, USA
- 10/2010 **“Integrated Analysis of the Cancer Genome: Towards Personalized Medicine in Cancer”** Sidney Kimmel Comprehensive Cancer Center, Johns Hopkins, MD, USA
- 11/2010 **“Bone Sarcoma Genomics and Biology Initiatives/Efforts in North America”** 2nd Childhood Bone Sarcoma Genomics Consortium Meeting, Paris, France

- 11/2010 **“Integrated Analysis of the Cancer Genome: Towards Personalized Medicine in Cancer”** UCL Institute of Child Health, London, UK
- 12/2010 **“Integrated Analysis of the Cancer Genome: Towards Personalized Medicine in Cancer”** Plenary Speaker, Sequencing at the Tipping Point, San Diego, CA, USA
- 12/2010 **“Biomedical Research in the Future”** Expert panel discussant, Sequencing at the Tipping Point, San Diego, CA, USA
- 01/2011 **“Comprehensive Analysis of the Cancer Genome Towards Individualized Therapy in Cancer”**. Grand Round, Center for Cancer Research, National Cancer Institute, NIH, Bethesda, MD, USA
- 01/2011 **“Next Generation Sequencing Enabling Next Generation Medicine: The Promise and the Challenges”**. NCI Annual Principal Investigator Retreat Bethesda, MD, USA
- 03/2011 **“Neuroblastoma TARGET Project Update”**. AACR 102<sup>nd</sup> Annual Meeting, Orlando, FL, USA
- 03/2011 **“Next generation sequencing and integrated analysis of the cancer genome”**. United States and Canadian Academy of Pathology (USCAP) 100<sup>th</sup> Annual Meeting, San Antonio, TX, USA
- 03/2011 **“Translational Omics: A Systematic Approach to Identify Novel Biomarkers and Therapeutic Targets for High-Risk Pediatric Cancers: “Vision for Pediatric Oncology in the 21st Century”**. Children’s National Medical Center, DC, USA
- 09/2011 **“How Science Conducted in the Lab is Changing the Structure of Clinical Trials”**. 58th Meeting of the National Cancer Institute Director’s Consumer Liaison Group (DCLG), Bethesda, MD, USA
- 09/2011 **“Targeting FGFR4 for Rhabdomyosarcoma Therapy AP24534/Ponatinib”**. , Children’s Oncology Group Meeting, Soft Tissue Sarcoma Committee, Atlanta Fall Meeting, GA, USA
- 10/2011 **“Translational Omics: A Systematic Approach to Identify Novel Biomarkers and Therapeutic Targets for High-Risk Pediatric Cancers”**. , TRACO, Bethesda, MD, USA
- 12/2011 **“Next Generation Genomics Enabling Next Generation Medicine: The Promise and the Challenges”**. Georgetown University Medical Center, DC, USA

- 02/2012 **“Identifying Novel Therapeutic Targets via a Comprehensive Characterization of the Rhabdomyosarcoma Genome”**. Pediatric Cancer Translational Genomics (PCTG), Phoenix, AZ
- 03/2012 **“Comprehensive Analysis of the Cancer Genome: Towards Precision Therapy in Cancer”**. NCI Second CEICBG Symposium, Bethesda, MD
- 05/2012 **“Next Generation Sequencing Enabling Next Generation Medicine: the Promise and the Challenges”**. Cancer 2015 Symposium, Melbourne, Australia.
- 05/2012 **“Next Generation Sequencing Enabling Next Generation Medicine: the Promise and the Challenges”**. Murdoch Children’s Institute and The Royal Children’s Hospital, Melbourne, Australia.
- 05/2012 **“The application of genomics to identify diagnostic biomarkers, drivers and therapeutic targets for pediatric cancers”**. Children's Medical Research Institute, Sydney, Australia.
- 09/2012 **“Congressional Childhood Cancer Caucus 3<sup>rd</sup> Annual Summit; Update on Pediatric Cancer Genomics**. Library of Congress, Washington DC
- 11/2012 **“The application of genomics to identify diagnostic biomarkers, drivers and therapeutic targets for pediatric cancers”**. Beijing Tiantan Hospital. China
- 11/2012 **“The application of genomics to identify diagnostic biomarkers, drivers and therapeutic targets for pediatric cancers”**. Beijing Children’s Hospital, China
- 12/2012 **“Translational Genomics”**. , TRACO, Bethesda, MD, USA
- 03/2013 **“The application of genomics to identify diagnostic biomarkers, drivers and therapeutic targets for pediatric cancers”**. , Knight Cancer Institute, OHSU,OR USA
- 04/2013 **“Next Generation Genomics Enabling Next Generation Medicine The Promise and the Challenges Pediatric Solid Tumors”**, AACR, Cancer Genomics in the Clinic Educational Session, DC, USA
- 11/2013 **“Ewing's sarcoma oncoprotein EWS-FLI1: the perfect target without a therapeutic agent”**, Rett Nearburg International Ewing’s Sarcoma Symposium . San Diego, CA, USA.
- 11/2013 **“The application of genomics to identify diagnostic biomarkers, drivers and therapeutic targets for pediatric cancers”**, Pediatric Cancer at the Crossroads: Translating Discovery Into Improved Outcomes. San Diego, CA, USA

- 12/2013      **“The application of genomics to identify diagnostic biomarkers, drivers and therapeutic targets for pediatric cancers”**, Lily's Garden Endowed Lecture in Childhood Cancer, Vanderbilt University, School of Medicine, Department of Pediatrics, USA
- 04/2014      **“Translating genomics into theranostics for patients with pediatric cancers”**, AACR, Pediatric Cancer Working Group, San Diego, CA, USA
- 05/2014      **“The application of Omics to identify novel targets and treatments for rhabdomyosarcoma”**, Rhabdomyosarcoma A Critical Review of Research Implication Cold Spring Harbor, USA
- 06/2014      **“Identifying the Mutational Landscape of Sarcomas”**, Exploring the Spectrum of Sarcoma Genome Clinical Science Symposium, ASCO, Chicago, USA
- 06/2014      **“Cancer Genomics to Identify Novel Biomarkers and Drivers and to Enable Precision Therapeutics”**, Institute of Cancer Research, Sutton, London, UK
- 07/2014      **“The application of Omics to identify novel targets and treatments for rhabdomyosarcoma”**, Rhabdomyosarcoma Workshop, Zürich, CH
- 09/2014      **“Genomic Landscape of Rhabdomyosarcoma and Ewing’s sarcoma”**, Combined Sarcoma Biology Session, COG Fall Group Meeting, Dallas, TX
- 09/2014      **“Large Scale Clinical Sequencing For Patients With Relapsed Cancers”**, Precision medicine session, COG Fall Group Meeting, Dallas, TX
- 10/2014      **“Comprehensive Analyses of the Rhabdomyosarcoma and Ewing’s Sarcoma Genome to Identify Novel Biomarkers, Drivers and Therapeutic Targets”**, Texas Children’s Hospital, Houston, TX
- 10/2014      **“Bioinformatics”**, Session chair and speaker. AACR Think Tank on the Future of Pediatric Cancer Research and Care, AACR headquarters, Philadelphia, PA

## **Publications**

### **Research Articles**

1. **Khan, J.**, Broadbent, V.A. (1993). **Tumour lysis syndrome complicating treatment of widespread metastatic abdominal rhabdomyosarcoma.** *Paediatric Haematology and Oncology.* 10:151.
2. Coleman, N., Spiers, G., **Khan, J.**, Broadbent, V.A., Warren, R. (1993). **Clostridium tertium neutropaenic enterocolitis.** *Journal of Clinical Pathology.* 46:180-183.

3. Stephenson, T. and **Khan, J.** (1993). **A new technique for the placement of central venous catheters in small infants.**  
*Journal of Parenteral and Enteral Nutrition.* 17,5: 479-481.
4. Park, M.K., **Khan, J.**, Stock, F., Lucey, D.R., (1997). **Successful treatment of Stomatococcus mucilaginosus meningitis with intravenous vancomycin and intravenous ceftriaxone.** *Clinical Infectious Diseases.* Feb;24(2):278.
5. **Khan, J.**, Parsa, N.Z., Harada, T., Meltzer, P.S. and Carter N. (1998). **Detection of Gains and Losses in 18 Meningiomas by Comparative Genomic Hybridization**  
*Cancer Genetics Cytogenetics.* 102: 1-5.
6. **Khan, J.**, Simon, R., Bittner, M., Chen, Y., Leighton, S.B., Pohida, T., Smith, P.D., Jiang, Y., Gooden, G.C., Trent, T.M. and Meltzer PS. (1998). **Gene Expression Profiling of Alveolar Rhabdomyosarcoma with cDNA Microarrays**  
*Cancer Research* 58, 5009-5013.
7. **Khan, J.**, Bittner, M.L, Saal, L.H, Azorsa, D.A., Teichman, U., Pavan, W., Trent, J.M., Meltzer, P.S. (1999). **cDNA microarrays detect activation of a myogenic transcription program by the Pax3-FKHR fusion oncogene.**  
*Proceedings of the National Academy of Sciences* 96 , 23, 13264-13269.
8. Heiskanen, M.A., Bittner, M.L., Chen, Y, **Khan, J.**, Adler, K. E., Trent, J.M. and Meltzer PS. (2000). **Detection of Gene Amplification by Genomic Hybridization to cDNA Microarrays.**  
*Cancer Research* 60, 799-802.
9. Dupont, J., **Khan, J.**, Qu, B.H., Meltzer, P., Helman., L. LeRoith, D. (2001). **Insulin and IGF-1 Induce Different Patterns of Gene Expression in Mouse Fibroblast NIH-3T3 Cells: Identification by cDNA Microarray Analysis.**  
*Endocrinology* 142(11): 1512-9
10. Khanna, C., **Khan, J.**, Nguyen, P., Prehn, J., Caylor, J., Yeung, C., Trepel, J., Meltzer, P., and Helman, L. (2001). **Metastasis Associated Differences in Gene Expression in a Murine Model Osteosarcoma .***Cancer Research* 61, 3750-9.
11. **Javed Khan,** Jun S. Wei, Markus Ringnér, Lao H. Saal, Marc Ladanyi, Frank Westermann , Frank Berthold, Manfred Schwab, Cristina R. Antonescu, Carsten Peterson, and Paul S. Meltzer. (2001). **Classification and Diagnostic Prediction of Cancers using Gene Expression Profiling and Artificial Neural Networks**  
*Nature Medicine.* Vol. 7,6; 673-679
12. Dickens DS, Kozielski R, **Khan J.** Forus A, Cripe TP. (2002). **Cyclooxygenase-2 Expression in Pediatric Sarcomas.**  
*Pediatr Dev Pathol* May 24;5(4)

13. Rice AM, Currier MA, Adams LC, Bharatan NS, Collins MH, Snyder JD, **Khan J**, Cripe TP.(2002). **Ewing sarcoma family of tumors express adenovirus receptors and are susceptible to adenovirus-mediated oncolysis.**  
*J Pediatr Hematol Oncol Oct;24(7):527-33*
14. Zuyi Wang, Yue Wang, Jianping Lu, Sun-Yuan Kung, Junying Zhan<sup>1</sup>, Richard Lee, Jianhua Xua<sup>1</sup>, Javed Khan and Robert Clarke (2003) **Discriminatory Mining of Gene Expression Microarray Data.** *Journal of VLSI Signal Processing System.* 35;3 Pages: 255 - 272
15. Bompreszi R, Ringner M, Kim S, Bittner ML, **Khan J**, Chen Y, Elkahloun A, Yu A, Bielekova B, Meltzer PS, Martin R, McFarland HF, Trent JM (2003). **Gene expression profile in multiple sclerosis patients and healthy controls: identifying pathways relevant to disease.**  
*Hum Mol Genet.* Sep 1;12(17):2191-9.
16. Yu Y, **Khan J**, Khanna C, Helman L, Meltzer PS, Merlino G. (2004). **Discriminatory Expression profiling identifies the cytoskeletal organizer ezrin and the developmental homeoprotein Six-1 as key metastatic regulators.** (Equal first author).  
*Nature Medicine* 2004 Jan 4, Vol. 10(2):175-81
17. Richard Despar, **Javed Khan**, and Alejandro Schaffer (2004). **Tumor Classification Using Phylogenetic Methods on Expression Data.** *J Theor Biol.* Jun 21;228(4):477-96.
18. Richard D Williams, Sandra Hing, Braden T Greer, Craig C Whiteford, Jun S Wei, Rachael Natrajan, Anna Kelsey, Simon Rogers, Colin Campbell, Kathy Pritchard-Jones and **Javed Khan**. (2004). **Prognostic Classification of Relapsing Favourable Histology Wilms Tumour using cDNA Microarray Expression Profiling and Support Vector Machines.** *Genes Chromosomes and Cancer.* Sep;41(1):65-79.
19. Jun S. Wei, Braden T. Greer, Frank Westermann, Seth M. Steinberg, Chang-Gue Son, Qing-Rong Chen, Craig C. Whiteford, Sven Bilke, Alexei L. Krasnoselsky, Nicola Cenacchi, Daniel Catchpoole, Frank Berthold, Manfred Schwab, and **Javed Khan** (2004). **Prediction of clinical outcome using gene expression profiling and artificial neural networks for patients with neuroblastoma.**  
*Cancer Research Oct 1, 2004; 64(19).*
20. Chen QR, Bilke S, Wei JS, Whiteford CC, Cenacchi N, Krasnoselsky AL, Greer BT, Son C, Westermann F, Berthold F, Schwab M, Catchpoole D, **Khan J**. (2004). **cDNA array-CGH profiling identifies genomic alterations specific to stage and MYCN-amplification in neuroblastoma.** *BMC Genomics*, 5:70
21. Sven Bilke, Qing-Rong Chen, Craig C. Whiteford, **Javed Khan**. (2005). **Detection of low level genomic alterations by comparative genomic hybridization based on cDNA micro-arrays.** *Bioinformatics* 21 (7): 1138-1145 Apr 1

22. Alexei L. Krasnoselsky, Craig C. Whiteford, Jun S. Wei, Sven Bilke, Frank Westermann, Qing-Rong Chen, and **Javed Khan** (2005). **Prognostic Classification of Relapsing Altered expression of cell cycle genes distinguishes aggressive neuroblastoma** *Oncogene. Feb 24;24(9):1533-41..*
23. Chang Gue Son, Sven Bilke, Sean Davis, Braden T. Greer, Jun S. Wei, Craig C. Whiteford, Qing-Rong Chen, Nicola Cenacchi, and **Javed Khan** (2005). **Database of mRNA Gene Expression Profiles of Multiple Human Organs** *Genome Res 15 (3): 443-450 Mar*
24. Kim HS, Choi EH, **Khan J**, Roilides E, Francesconi A, Kasai M, Sein T, Schaufele RL, Sakurai K, Son CG, Greer BT, Chanock S, Lyman CA, Walsh TJ. (2005). **Expression of genes encoding innate host defense molecules in normal human monocytes in response to Candida albicans.** *Infect Immun. Jun;73(6):3714-24.*
25. Jun S. Wei, Craig C. Whiteford, Nicola Cenacchi, Chang Gue Son, and **Javed Khan**. (2005). **BBC3 Mediates Fenretinide-Induced Cell Death in Neuroblastoma.** *Oncogene. 2005 Aug 8*
26. Amir A. Jazaeri, Christopher S. Awtrey, Gadisetti V. R., Chandramouli, Yao Eric Chuang, **Javed Khan**, Christos Sotiriou, Olga Aprelikova, Cindy J. Yee, Kristin K. Zorn, Michael J. Birrer, J. Carl Barrett, and Jeff Boyd. (2005) **Gene Expression Profiles Associated with Response to Chemotherapy in Epithelial Ovarian Cancers.** *Clin Cancer Res. 2005 Sep 1;11(17):6300-10*
27. Sven Bilke, Qing-Rong Chen, Frank Westerman, Manfred Schwab, Daniel Catchpoole, and **Javed Khan** (2005) **Inferring a Tumor Progression Model for Neuroblastoma From Genomic Data** *Journal of Clinical Oncology Oct; 23:7322-31*
28. Henrich KO, Fischer M, Mertens D, Benner A, Wiedemeyer R, Brors B, Oberthuer A, Berthold F, Wei JS, **Khan J**, Schwab M, Westermann F. (2006) **Reduced expression of CAMTA1 correlates with adverse outcome in neuroblastoma patients.** *Clin Cancer Res. 2006 Jan 1;12(1):131-8.*
29. Qingrong Chen, Sven Bilke, Jun S. Wei, Braden T. Greer, Seth M. Steinberg, Frank Westermann, Manfred Schwab, and **Javed Khan** (2006) **Increased WSB1 Copy Number Correlates with its Over-expression which Associates with Increased Survival in Neuroblastoma. Genes Chromosomes and Cancer.** *Genes Chromosomes Cancer. 2006 Sep;45(9):856-62.*
30. Houghton PJ, Morton CL, Tucker C, Payne D, Favours E, Cole C, Gorlick R, Kolb EA, Zhang W, Lock R, Carol H, Tajbakhsh M, Reynolds CP, Maris JM, Courtright J, Keir ST, Friedman HS, Stopford C, Zeidner J, Wu J, Liu T, Billups CA, **Khan J**, Ansher S, Zhang J, Smith MA (2007). **The pediatric preclinical testing program: Description of models and early testing results.** *Pediatr Blood Cancer. 2007 Dec;49(7):928-40.*

31. Craig C. Whiteford, Sven Bilke, Braden T. Greer, Qingrong Chen, Till A. Braunschweig, Nicola Cenacchi, Jun S. Wei, Malcolm A. Smith, Peter Houghton, Christopher Morton, C. Patrick Reynolds, Richard Lock, Richard Gorlick, Chand Khanna, Carol J. Thiele, Mikiko Takikita, Daniel Catchpoole, Stephen M. Hewitt and **Javed Khan** (2007). **Credentialing Preclinical Pediatric Xenograft Models Using Gene Expression and Tissue Microarray Analysis.** *Cancer Res.* 2007 Jan 1;67(1):32-40.
32. Qing-Rong Chen, Gordon Vansant, Kahuku Oades, Maria Pickerin, Jun S. Wei, Young K. Song, Joseph Monforte and **Javed Khan** (2007) **Diagnosis of the Small Round Blue Cell Tumors using Multiplex PCR.** *J Mol Diagn.* 2007, 9:80-88.
33. Jin Zheng, M. Eric Kohler, Qingrong Chen, James Weber, **Javed Khan**, Bryon D Johnson, Rimas J Orentas (2007) **Serum from mice immunized in the context of Treg inhibition identifies DEK as a neuroblastoma tumor antigen.** *BMC Immunology*, 8:4 (30 March 2007)
34. Jianhua Xuan, YueWang, Yibin Dong, Yuanjian Feng, BinWang, **Javed Khan**, Maria Bakay, Zuyi Wang,, Lauren Pachman, SaraWinokur, Yi-Wen Chen, Robert Clarke, and Eric Hoffman (2007) **Gene Selection for Multiclass Prediction by Weighted Fisher Criterion.** *EURASIP Journal on Bioinformatics and Systems Biolog.* Volume 2007, Article ID 64628,
35. FrankWestermann, Kai-Oliver Henrich, Jun S.Wei, Werner Lutz, Matthias Fischer, Rainer Koinig, Ruprecht Wiedemeyer, Volker Ehemann, Benedikt Brors, Karen Ernestus, Ivo Leuschner, Axel Benner, **Javed Khan**, and Manfred Schwab (2007). **High Skp2 Expression Characterizes High-Risk Neuroblastomas Independent of MYCN Status.** *Clinical Cancer Research* Aug 15;13(16):4695-703. Epub 2007 Jul 25.
36. Catchpoole D, Lail A, Guo D, Chen QR, **Khan J.** (2007). Gene expression profiles that segregate patients with childhood acute lymphoblastic leukaemia: **An independent validation study identifies that endoglin associates with patient outcome.** *Leuk Res.* 2007 Dec;31(12):1741-7. Epub 2007 Jun 18.
37. Geoffrey Neale, Xiaoping Su, Christopher L. Morton, Doris Phelps, Richard Gorlic, Richard Lock, C. Patrick Reynolds, John M. Maris, Henry S. Friedman, Jeffrey Dome, Joseph Khoury, Timothy J. Triche, Robert C. Seeger, Richard Gilbertson, **Javed Khan**, Malcolm A. Smith, Peter J. Houghton (2008). **Molecular Characterization of the Pediatric Preclinical Testing Panel.** *Clinical Cancer Research* 2008 Jul 15;14(14):4572-83
38. J S Wei, Y K Song, S Durinck, Q-R Chen, A T C Cheuk, P Tsang, Q Zhang, C J Thiele, A Slack, J Shohet and **J Khan** (2008). **The MYCN oncogene is a direct target of miR-34a.** *Oncogene.* . 2008 Sep 4;27(39):5204-13. Epub 2008 May 26
39. Kowalska A, Brunner B, Bozsaky E, Chen QR, Stock C, Lörch T, **Khan J**, Ambros PF

- (2008). **Sequence based high resolution chromosomal CGH.** *Cytogenet Genome Res.* 121(1):1-6. Epub 2008 May 7.
40. Sven Bilke, Qing-Rong Chen, Jun S. Wei, and **Javed Khan** (2008). **Whole Chromosome alterations predict survival in high risk neuroblastoma without MYCN amplification.** *Clinical Cancer Research.* 2008 Sep 1;14(17):5540-7
41. Qing-Rong Chen, Young K. Song, Jun S. Wei, Sven Bilke, Shahab Asgharzadeh, Robert C. Seeger and **Javed Khan** (2008). **An Integrated Cross-Platform Prognosis Study on Neuroblastoma Patients.** *Genomics.* 2008 Oct;92(4):195-203. Epub 2008 Jul 30.
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