

SYMPOSIUM AGENDA

4TH International LFS Association Symposium

WEDNESDAY, APRIL 25

6:00-9:00PM

REGISTRATION AND WELCOME RECEPTION: GALLERY, PGCRL, THE HOSPITAL FOR SICK CHILDREN, TORONTO, CANADA

THURSDAY, APRIL 26

8:00-9:00: REGISTRATION AND BREAKFAST: GALLERY, PGCRL, THE HOSPITAL FOR SICK CHILDREN, TORONTO, CANADA, ROBERT SALTER AUDITORIUM, PETER GILGAN CENTRE FOR RESEARCH AND LEARNING

9:00-9:15: DR. DAVID MALKIN, HOSPITAL FOR SICK CHILDREN, AND LIFE CONSORTIUM CHAIR

9:15-9:25: DR. TREVOR YOUNG, DEAN, FACULTY OF MEDICINE, UNIVERSITY OF TORONTO

9:25-9:30: DR. MICHAEL APKON, PRESIDENT AND CEO, THE HOSPITAL FOR SICK CHILDREN, TORONTO, CANADA

9:30-9:35: DR. RONALD COHN, PEDIATRICIAN-IN-CHIEF, THE HOSPITAL FOR SICK CHILDREN, CHAIR, DEPARTMENT OF PEDIATRICS, UNIVERSITY OF TORONTO

9:35-9:40: DR. JIM WHITLOCK, DIRECTOR, GARRON FAMILY CANCER CENTRE AND CHIEF, DIVISION OF HEMATOLOGY/ONCOLOGY, THE HOSPITAL FOR SICK CHILDREN

9:40-9:45: JAMIE HIGGINS AND CAMERON BLOCK, 'PATIENT PERSPECTIVES'

9:45-10:00: DR. ROBERT LUFKIN, MEDICAL DIRECTOR, LFSA/ JENN PERRY, PRESIDENT, LFSA

10:00-10:45: KEYNOTE ADDRESS: PROF. SIR DAVID LANE, A*STAR, SINGAPORE

Mutant p53: regulation of expression in normal tissues and in tumours

10:45 -11:15: BREAK

SESSION 1: MODELING LI-FRAUMENI SYNDROME – I

11:15-11:35: DR. JOSHUA SCHIFFMAN, HUNTSMAN CANCER CENTER, SALT LAKE CITY, UT

Exploring elephant p53 (EP53) as a mechanism for cancer resistance

11:35-11:55: PROF. DAVID LANGENAU, MASSACHUSETTS GENERAL HOSPITAL, BOSTON, MA

Fishing for insights into LFS using p53-deficient zebrafish

11:55-12:15: DR. JASON BERMAN, DALHOUSIE UNIVERSITY, HALIFAX, CANADA

Fishing for clues: preventing disease progression in cancer predisposition syndromes using zebrafish

12:15-12:35: DR. GERRY ZAMBETTI, ST. JUDE CHILDREN'S RESEARCH HOSPITAL, MEMPHIS, TN

The hypomorphic Brazilian mutant TP53-R337H and variable tumor susceptibility: identification of a genetic modifier

12:35-1:40: LUNCH

SESSION 2: MODELING LI-FRAUMENI SYNDROME – II

1:40-2:00: DR. ADAM SHLIEN, HOSPITAL FOR SICK CHILDREN, TORONTO, CANADA

Signatures and timing of mutations in sporadic and inherited childhood cancers

2:00-2:20: MR. BEN BREW, HOSPITAL FOR SICK CHILDREN, TORONTO, CANADA

Using methylation to predict early cancer onset in patients with Li-Fraumeni syndrome

2:20-2:40: PROF. DAVID THOMAS, SYDNEY, AUSTRALIA
Whole genome analysis of 1141 patients with sarcoma: Li-Fraumeni syndrome and beyond

2:40-3:00: DR. WENYI WANG, MD ANDERSON CANCER CENTER, HOUSTON, TX

Cancer risk assessment and penetrance estimation for deleterious mutations in TP53 using a multi-centre consortium

3:00-3:30: BREAK

THURSDAY, APRIL 26 (continued)

3:30-3:50: PROF. GARETH BOND, OXFORD UNIVERSITY, UNITED KINGDOM

Common genetic variants in p53 pathway affect cancer risk in the general population and LFS families, but could benefit cancer management strategies

3:50-4:10: PROF. GIGI LOZANO, MD ANDERSON CANCER CENTER, HOUSTON, TX

Mutant p53 activities in tumor development

4:10-4:30: PROF. CAROL PRIVES, COLUMBIA UNIVERSITY, NEW YORK, NY

Are the opposite roles of wild-type and mutant p53 regulation of the mevalonate pathway relevant to treatment options for LFS patients?

4:45-6:00: CONCURRENT LFS FAMILY MEMBER WORKSHOPS

(SELECT 1):

- 1. CHALLENGES WITH SURVEILLANCE: LEADS:** MALKIN, SAVAGE, RAYMOND KIM
- 2. THE SCIENCE OF P53: LEADS:** LANE, BOND, PRIVES
- 3. PSYCHOSOCIAL ASPECTS OF LFS: LEADS:** YOUNG, WAKEFIELD, VILLANI
- 4. THERAPIES AND LFS: LEADS:** WIMAN, HWANG
- 5. GENETIC COUNSELING IN LFS FOR MEDICAL PROVIDERS: LEADS:** KATHERINE SCHNEIDER, BAILEY GALLINGER AND HARRIET DRUKER

6:30: LFSA FAMILY & FRIENDS "FUN IS OUR DNA" PUB NIGHT AT THE MONARCHS PUB, CHELSEA HOTEL & TORONTO BLUE JAYS VS. BOSTON RED SOX

FRIDAY, APRIL 27

7:30-8:30: BREAKFAST

SESSION 3: LI-FRAUMENI SYNDROME – THE HUMAN PHENOTYPE AND GENOTYPE – I

8:30-8:40: DR. LOUISE STRONG, MD ANDERSON CANCER CENTER, HOUSTON, TX

The evolving cancer risk in Li-Fraumeni syndrome

8:40-9:00: DR. KIM NICHOLS, ST. JUDE CHILDREN'S RESEARCH HOSPITAL, MEMPHIS, TN

Looking into the crystal ball: impact of germline TP53 status on presentation and prognosis for children with acute lymphoblastic leukemia

9:00-9:20: DR. CHRISTIAN KRATZ, UNIVERSITY OF HANNOVER, GERMANY

A new LFS/cancer predisposition registry based in Germany

9:20-9:40: PROF. LAURENCE BRUGIERES, GUSTAVE ROUSSY, FRANCE
Pediatric sarcomas associated with LFS: clinical characteristics, response to treatment, and outcomes

9:40-10:00: DR. MARIA ISABEL ACHATZ, NATIONAL CANCER INSTITUTE, BETHESDA, MD

How frequent is Li-Fraumeni Syndrome and pathogenic variants in the TP53 gene in the general population

10:00-10:30: BREAK

SESSION 4: LI-FRAUMENI SYNDROME – THE HUMAN PHENOTYPE AND GENOTYPE – II

10:30-10:50: DR. JUDY GARBER, DANA-FARBER CANCER INSTITUTE, BOSTON

Evolving phenotype of Li-Fraumeni Syndrome: data from panel testing

10:50-11:10: DR. PATRICIA PROLLA, PORTO ALLEGRE, BRAZIL
Mechanisms of cancer predisposition in R337H carriers: new insights

11:10-11:30: DR. SHARON PLON, HOUSTON, TX

Efforts to improve the molecular diagnosis of LFS in childhood cancer

11:30-11:50: DR. GARETH EVANS, MANCHESTER UNIVERSITY, UNITED KINGDOM

Germline TP53 mutations in the United Kingdom: Whole-Body MRI and other considerations

11:50-12:10: PROF. CHANG CHAN, RUTGERS UNIVERSITY, BRUNSWICK, NJ

Tumorigenesis and penetrance in Li-Fraumeni syndrome

FRIDAY, APRIL 27 (continued)

12:10-12:30: DR. JEFFREY WEITZEL, CITY OF HOPE, DUARTE, CALIFORNIA
The conundrum of somatic interference in germline testing and post-zygotic mosaicism for TP53

12:30-2:00: LUNCH AND POSTER SESSION, GALLERY, PETER GILGAN CENTRE FOR RESEARCH AND LEARNING, THE HOSPITAL FOR SICK CHILDREN

2:15-3:30: CONCURRENT WORKSHOPS (SELECT 1)

- 1. CHALLENGES WITH SURVEILLANCE: LEADS:** KRATZ, SAVAGE, CARON
- 2. THE SCIENCE OF P53: LEADS:** LANE, LEVINE, HARRIS
- 3. PSYCHOSOCIAL ASPECTS OF LFS: LEADS:** YOUNG, WAKEFIELD
- 4. THERAPIES AND LFS: LEADS:** RÖTTER, WIMAN, HWANG
- 5. CONVERSATIONS, CHOICES AND CONCERNS ABOUT LFS: A GENETIC COUNSELOR-LED WORKSHOP FOR FAMILIES: LEADS:** CARLY GRANT, WENDY KOHLMANN

3:30-4:00: BREAK

SESSION 5: LI-FRAUMENI SYNDROME – THE HUMAN PHENOTYPE AND GENOTYPE – III

4:00-4:20: DR. PAYAL KHINCHA, NATIONAL CANCER INSTITUTE, BETHESDA, MD
Reproductive factors and breast cancer risk in women with Li-Fraumeni Syndrome

4:20-4:40: DR. THIERRY FREBOURG, UNIVERSITY OF ROUEN, FRANCE
How can we optimize TP53 detection in suggestive presentations and reduce the risk of secondary cancers in mutation carriers?

4:40-5:00: DR. MICHAEL WALSH, MEMORIAL SLOAN-KETTERING, NEW YORK, NY
The Memorial-Sloan Kettering Cancer Center LFS genotype/phenotype experience

5:00-5:20: PROF. PIERRE HAINAUT, UNIVERSITY GRENOBLE, GRENOBLE, FRANCE
Diversity of TP53 mutations and age-dependent risk patterns in germline mutation carriers

**7:30: SYMPOSIUM RECEPTION & DINNER
THE HOCKEY HALL OF FAME, 30 YONGE STREET**

SATURDAY, APRIL 28

7:30-8:30: BREAKFAST

SESSION 6: SURVEILLANCE IN LI-FRAUMENI SYNDROME

8:10-8:30: DR. ANITA VILLANI, HOSPITAL FOR SICK CHILDREN, TORONTO, CANADA
The "Toronto Protocol": A Toronto perspective

8:30-8:50: DR. OLIVIER CARON, GOUSTAVE ROUSSY CANCER CENTRE, FRANCE
Evaluation of whole-body MRI for early detection of cancers in germline TP53 mutation carriers: results of the LIFESCREEN study

8:50-9:10: DR. PHUONG MAI, UNIVERSITY OF PITTSBURGH, PITTSBURGH, PA
Findings at baseline surveillance in LFS

9:10-9:25: DR. MARY-LOUISE GREER, HOSPITAL FOR SICK CHILDREN, TORONTO, CANADA
Whole-body MRI in surveillance of LFS and other cancer predisposition syndromes

9:25-9:40: DR. ANDREA DORIA, HOSPITAL FOR SICK CHILDREN, TORONTO, CANADA
Genotype and phenotype of cancers developing in LFS patients: an 18-year review in a tertiary pediatric hospital

9:40-10:00: DR. JUNNE KAMIHARA, DANA-FARBER CANCER INSTITUTE, BOSTON, MA
Cancer screening in LFS: the Dana-Farber experience

10:00-10:20: PROF. TREVOR PUGH, PRINCESS MARGARET CANCER CENTRE, TORONTO, CANADA
Circulating tumor DNA as a molecular monitor for hereditary cancers

SESSION 7: METABOLISM AND IMMUNITY IN LI-FRAUMENI SYNDROME

10:20-10:40: DR. AYELET EREZ, WEIZMANN INSTITUTE OF SCIENCE, ISRAEL
Implications from cancer metabolism to immunity

SATURDAY, APRIL 28 (continued)

10:40-11:00: DR. CURTIS HARRIS, NATIONAL CANCER INSTITUTE, BETHESDA, MD

Aging and cancer: p53 isoforms

11:00-11:20: DR. PAUL HWANG, NATIONAL CANCER INSTITUTE, BETHESDA, MD

Insights into p53 biology by modeling a unique LFS mutation

11:20-11:45: BREAK

SESSION 8: PSYCHOSOCIAL AND COUNSELING ASPECTS OF LFS

11:45-12:05: PROF. CLAIRE WAKEFIELD, SYDNEY CHILDREN'S HOSPITAL, AUSTRALIA

Li-Fraumeni syndrome through the lens of pediatric practice: a review, and audit and family and professional perspectives

12:05-12:25: DR. JENNIFER YOUNG, NATIONAL INSTITUTES OF HEALTH, BETHESDA, MD

Couples living together with LFS: coping styles and partner roles

12:25-12:45: MS. KATHERINE SCHNEIDER, DANA-FARBER CANCER INSTITUTE, BOSTON, MA

Current genetic counseling dilemmas: dealing with the increasing complexity of TP53 results

12:45-1:45: LUNCH AND POSTER SESSION, GALLERY, PETER GILGAN CENTRE FOR RESEARCH AND LEARNING, THE HOSPITAL FOR SICK CHILDREN

1:45-2:45: CONCURRENT WORKSHOPS (SELECT 1):

- 1. CHALLENGES WITH SURVEILLANCE: LEADS:** MALKIN, MAI, RAYMOND KIM
- 2. THE SCIENCE OF P53: LEADS:** LANE, LEVINE
- 3. PSYCHOSOCIAL ASPECTS OF LFS: LEADS:** YOUNG, WAKEFIELD, VILLANI
- 4. THERAPIES AND LFS: LEADS:** RÖTTER, WIMAN, HWANG
- 5. FOR TEENS ONLY: LEADS:** DILLER, KAMIHARA, SCHIFFMAN

2:45-3:00: BREAK

SESSION 9: THERAPEUTIC OPPORTUNITIES IN LFS

3:00-3:20: DR. VARDA RÖTTER, WEIZMANN INSTITUTE OF SCIENCE, ISRAEL

Role of wild-type p53 in normal stem cell regulation and mutant p53 deregulation in cancer stem cells – lessons from the LFS model

3:20-3:40: DR. RAN KAFRI, HOSPITAL FOR SICK CHILDREN, TORONTO, CANADA

Cancer prevention pharmacology: drug screen identifies candidates for cancer prevention in LFS

3:40-4:00: DR. KLAS WIMAN, KAROLINSKA INSTITUTE, STOCKHOLM, SWEDEN

Novel cancer therapy by targeting missense and nonsense mutant p53

SESSION 10: CLOSING PLENARY

4:00-4:45: KEYNOTE ADDRESS: DR. ARNOLD LEVINE, INSTITUTE OF ADVANCED STUDIES, PRINCETON, NJ

A role for immunotherapy in p53 mutant cancers?

4:45-5:00: CLOSING SCIENTIFIC REMARKS – DR. DAVID MALKIN, HOSPITAL FOR SICK CHILDREN, TORONTO, CANADA

**7:00: SYMPOSIUM WRAP PARTY
JAZZ BISTRO, VICTORIA STREET, TORONTO**

SUNDAY, APRIL 29

8:00-9:00: BREAKFAST

9:00-11:00: OPEN Q AND A NETWORKING SESSION FOR LFSA FAMILIES WITH FACULTY MODERATORS.

CONFERENCE CLOSING REMARKS – JENN PERRY, PRESIDENT, LFSA/ DR. DAVID MALKIN, HOSPITAL FOR SICK CHILDREN, TORONTO, CANADA

GOOD BYE AND SAFE TRAVELS!