

Statistical Center Update

Wendy Leisenring

CCSS Investigator Meeting

June 7-8, 2012

Williamsburg, VA

FRED HUTCHINSON
CANCER RESEARCH CENTER

A LIFE OF SCIENCE

Statistical Center sites

Primary:

- 
A LIFE OF SCIENCE

Wendy Leisenring
Seattle ~4 FTE



Satellites:

- 
EDMONTON · ALBERTA · CANADA

Yutaka Yasui
Edmonton ~1.5 FTE



- 
St. Jude Children's
Research Hospital
ALSAC · Danny Thomas, Founder
Finding cures. Saving children.

Kumar Srivastava
Memphis ~3 FTE



Work hard to ensure uniformity of analyses via communication between sites.

Key Activities

- Statistical Analyses
- Proposal Development
- Database Management
- Weekly Conference Call with all Statisticians, Coordinating Center and Radiation Dosimetry Center

- **Ever:**
 - Published manuscripts: **165**
- **Last Grant period:**
 - Published manuscripts: **117**
- **Current:**
 - Submitted Manuscripts: **8**
 - Manuscripts in Preparation: **20**
 - Analyses Ongoing: **34**
 - Approved Projects in Queue: **3**
 - Proposals under Development: **8**

Selected Recent Key Projects

Topic	Journal Published
GI Outcomes	Gastroenterology
Auditory complications	Pediatric Blood and Cancer
Multiple SMNs	JCO
Employment/Occupation (2)	CEBP and Cancer
Pain	Pain
Wilms Tumor Overview	Pediatric Blood and Cancer
Post-traumatic Stress	General Hospital Psychiatry
Leukemia growth and endocrine	Pediatric Blood and Cancer
Radiation risk for BCC	JNCI
GI malignancies	Annals of Internal Medicine
Scarring and QOL	JCO

Proposals, Ancillary studies

- Assist with development of all analysis proposals
 - More this evening on process during “CCSS 101”
- Collaborate on ancillary study grant proposals
 - To date have been involved in 15+
- Please include us early in process

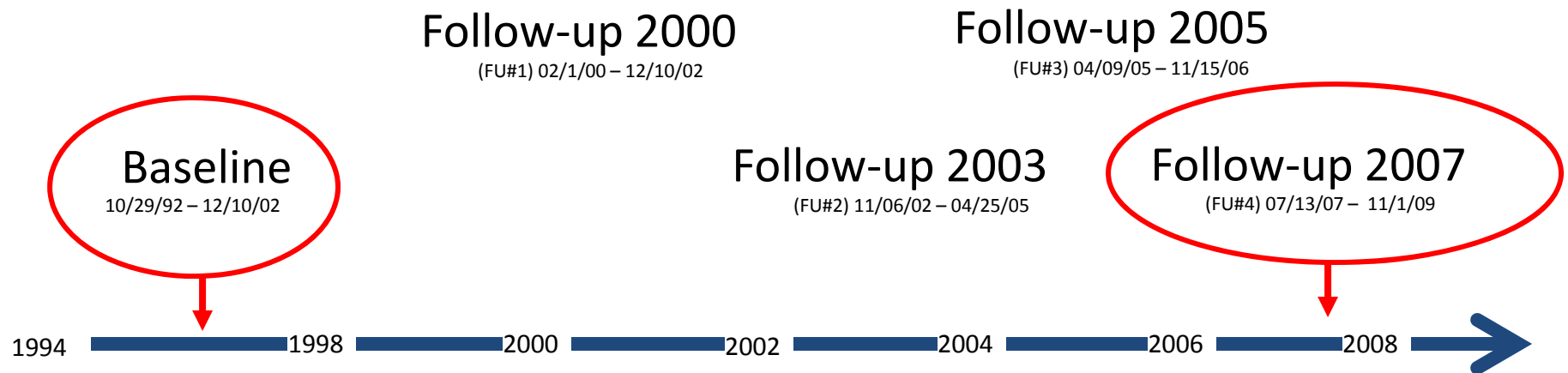
Priorities emphasized in grant include:

- Aging among survivors
 - Utilizes longitudinal data

- Comparisons between Expansion and Original Cohort
 - Plan ahead for these projects

- Genetic Studies
 - GWAS data

Longitudinal Analyses



- Common Elements between Baseline and Follow-up 2007 (and other questionnaires)
- Invites longitudinal analyses of data

- Longitudinal Health Care Use
- Longitudinal Assessment of Physical Activity
- Longitudinal Health Status
- Chronic Health Conditions with Aging
- Chronic Health and Employment Transitions

Different types of analyses utilize “Longitudinal Data”

1. Compare difference in rates (or means) between two calendar time points (e.g. Baseline vs. FU2007)
2. Evaluate pattern of outcomes as a function of age using data from multiple questionnaires
3. Time-to-first event analyses utilizing data from all completed questionnaires per subject.

Expansion vs. Original Cohort

- Expansion Cohort to finish accruing Dec 2013.
- Begin to consider hypotheses and relevant associated analyses
- Statistical Center thinking about issues:
 - Data set structuring for analyses
 - Consider where secular trends unrelated to treatment changes may confound comparisons

Short term Priorities and Challenges

- **Primary:** Maintain productivity on analytic projects underway
- **Expansion Cohort data cleaning:** Initial programming and planning
- **Genetic Study facilitation:** Work with St Jude and Cincinnati on structure and flow of specimen availability data
- **Documentation:** Produce a full set of summary documentation for data from key questionnaires.

Long term Priorities and Challenges

- **Primary:** Maintain productivity on analytic projects underway
- **Expansion Cohort:** Completion of the data freeze for Expansion cohort in time for key analyses during this grant cycle
- **SMN Data:** Carrying out a conversion of ICD0-2 to ICD0-3 for SMN data
- **ICD-9 – ICD-10 Switch:** Consider switching coding of diagnostic and procedure codes from ICD-9 to ICD-10 for next survey (2013) - with input from coders.