

# Exfoliated Cells, Bioactive Food Components and Cancer Prevention

## Agenda

8:00	Registration	
8:15-8:20	Introduction and Purpose	<i>C. Davis, NSRG</i>
8:20-8:25	Welcome	<i>P. Greenwald, DCP</i>
8:25-8:30	Welcome	<i>J. Milner, NSRG</i>

### Overview Speakers:

8:30-8:55	Bioactive food components in cancer prevention: limitations of serum concentrations as a predictor of response.	<i>R. Rivlin Am. Health Foundation</i>
8:55-9:20	Molecular pathologies in exfoliated cells: Applications in clinical prevention.	<i>D. Ahlquist Mayo Clinic</i>

*Session I: What are the practical issues regarding the collection of exfoliated cells: yield, quality of cells, difficulty in obtaining samples?*

9:20-9:45	Detecting gene mutations from exfoliated lung epithelial cells obtained in sputum or from bronchioalveolar lavage fluid.	<i>S. Ahrendt Univ. Rochester</i>
9:45-10:10	Predicting breast cancer risk by mammary epithelium sampling techniques.	<i>S. Khan Northwestern Memorial Hospital</i>

10:10-10:30 **Discussion Session I**

10:30-10:45 Break

*Session II: What have we learned from studies with exfoliated cells?*

10:45-11:05	Biomarkers that are being analyzed from nipple aspirate fluid and ductal lavage in cancer chemoprevention trials.	<i>S. Prindiville NCI</i>
11:05-11:25	Dynamics of carotenoid turnover in exfoliated colonic epithelial cells	<i>P. Nair Johns Hopkins University</i>
11:25-11:50	Changes in gene expression in exfoliated cells: role of bioactive food components.	<i>R. Chapkin Texas A &amp; M University</i>
11:50-12:10	Cytologic and methylation changes in exfoliated bronchial cells predict lung cancer, but why?	<i>T. Byers Univ. Colorado</i>

12:10-12:30 **Discussion Session II**

12:30-1:15 Lunch

*Session III: Are dietary induced changes in biomarkers that are measured in exfoliated cells indicative of changes in target tissues or are they representative of global changes within the body?*

1:15-1:35 Tissue specificity: comparison of lycopene accumulation and DNA damage in exfoliated human lung epithelial cells and lymphocytes. *S. Steck Stock  
Univ. North Carolina*

1:35-1:55 Relationship between DNA methylation in exfoliated cells and target tissues *C. Piyathilake  
Univ. Alabama*

1:55-2:15 Effect of dietary components on micronuclei formation in exfoliated cells. *J. Mumford  
EPA, North Carolina*

2:15-2:40 **Discussion Session III**

2:40-2:55 Break

2:55-3:45 **Future Directions:** Setting research priorities in the utilization of exfoliated cells in nutrition and cancer studies *C. Davis  
NSRG*

3:45 Adjourn