

Center for Cancer Research

Reducing the burden of cancer
through exploration, discovery and
translation

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Associate Director for Science



Outline

- **Introduction to the Center for Cancer Research at the NCI**
- **Ongoing Research and Priorities**
- **Training opportunities**
- **Sabbatical opportunities**

Center for Cancer Research, NCI

An Intramural Cancer Center established in March, 2001 by merging the Division of Basic Sciences and the Division of Clinical Sciences to foster Translational Research

- 54 Laboratories /Branches
- 300 Principal Investigators
- 3200 Employees

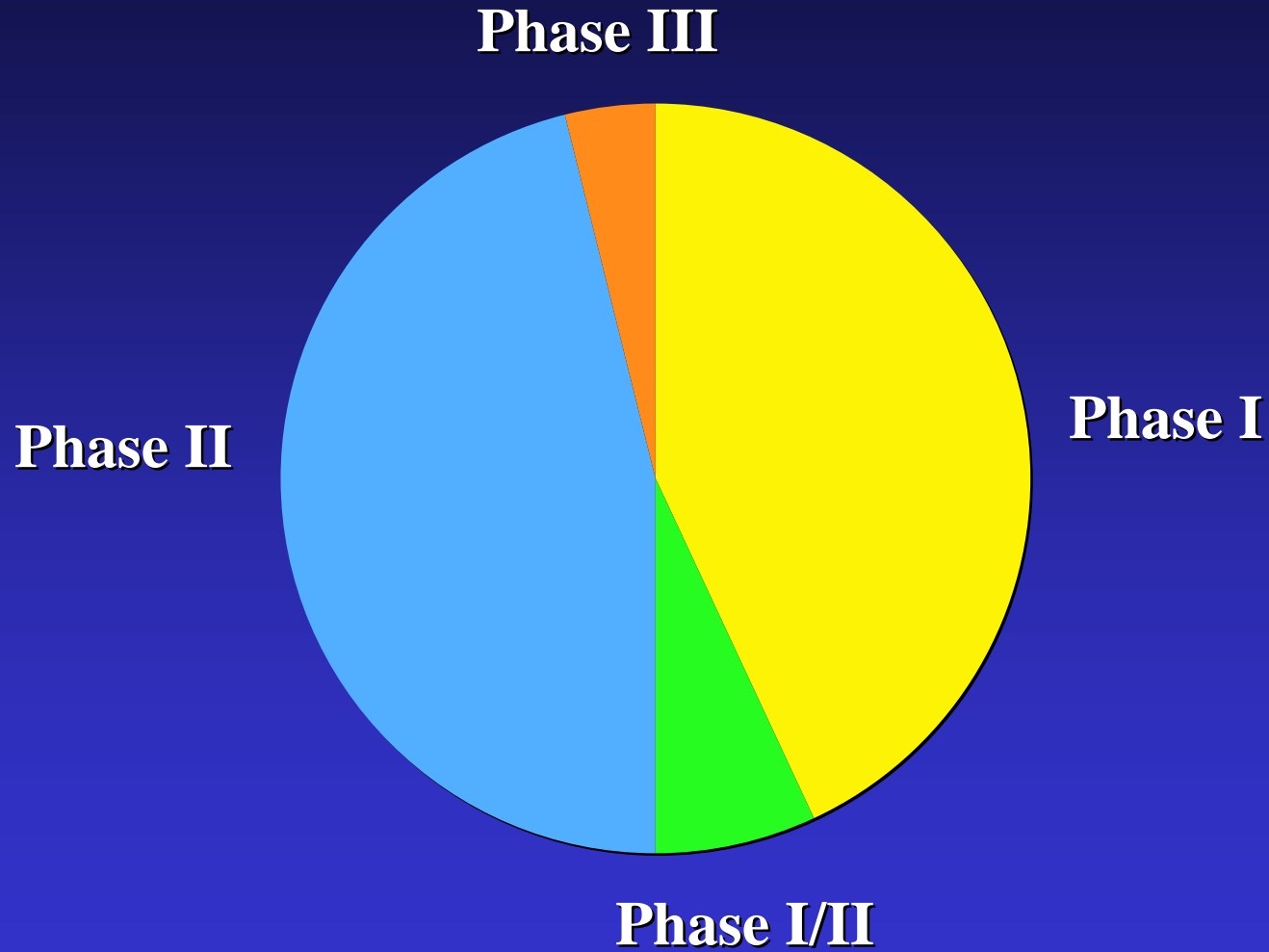
CCR Mission

- Foster interdisciplinary research to control or eliminate cancer
- Facilitate translational and clinical research
- Expedite technology development
- Enhance training, particularly in interdisciplinary and translational research
- Build partnerships within NCI and with other NIH Institutes, Federal agencies, academia, biotechnology companies, and the pharmaceutical industry

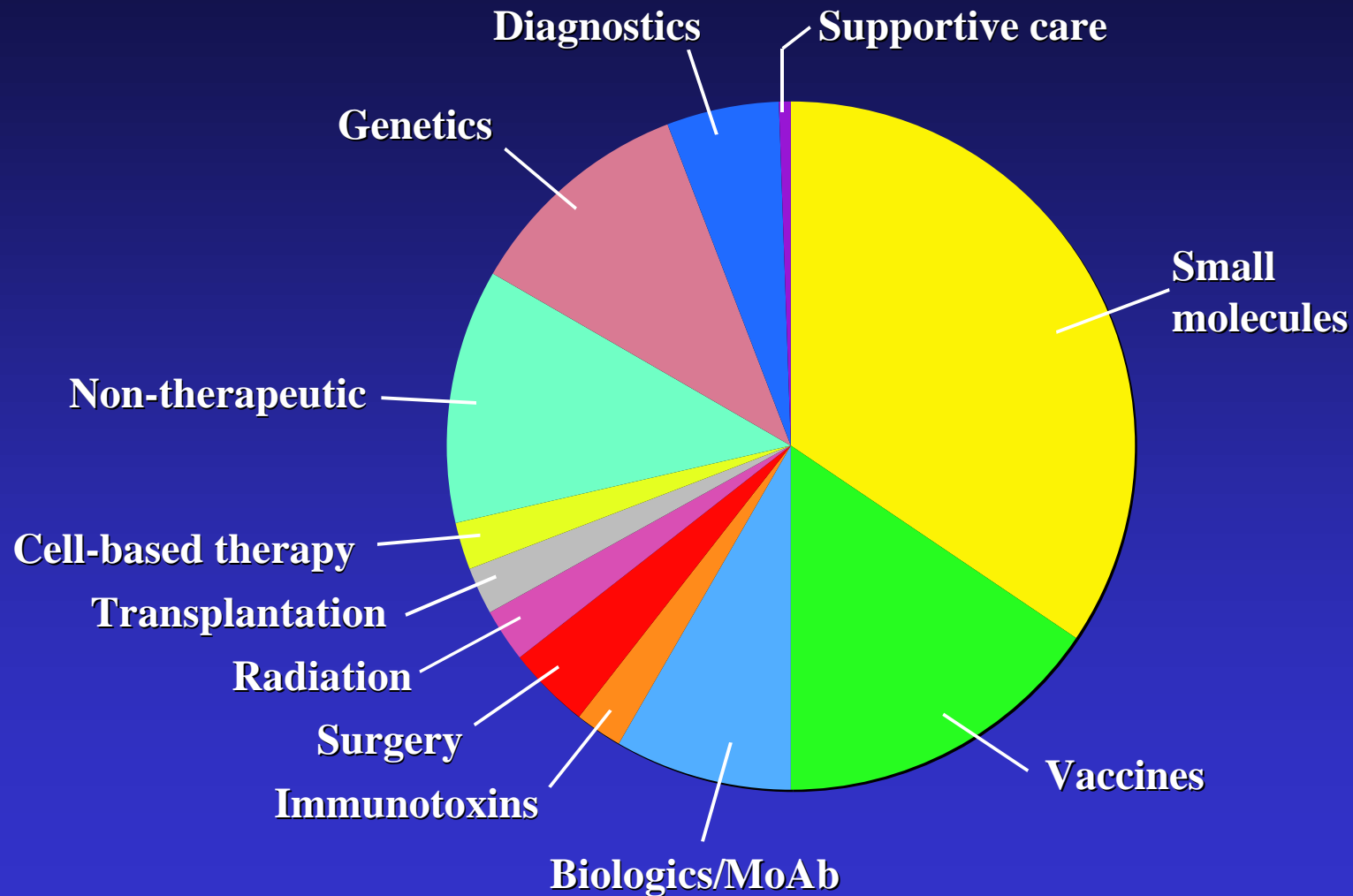
CCR Clinical Mission

- Conduct concept-based (science-driven) clinical trials that evaluate new therapies rather than testing existing ones
- Emphasize understudied diseases and cancers with increasing incidence or involving special populations
- Discover and develop molecularly targeted agents and combinations of agents for use in clinical trials
- Develop novel approaches to early cancer detection and prevention
- Develop and deliver novel technologies for molecular diagnosis of cancer
- Develop better preclinical models and methods to expedite development of novel interventions for cancer

Treatment Trials by Phase



Types of Clinical Trials



Patient Care Expenses for NCI Intramural Trials

- Protocol-related care is provided by the NIH Clinical Center at no cost to the patient.
- General medical care is provided by the referring physician
- The patient pays for his/her first trip to the clinical center. Subsequent trips and small housing allowances are paid for by the NIH.

Information about Intramural Trials: 1-888-NCI-1937
<http://bethesdatrials.cancer.gov>

NCI Center for Cancer Research

Discovery Development Delivery

- **Excellence in Basic Science**
- **Biomedical Technology Development and Application**
- **Translational Research**
 - **Molecular Oncology**
 - **Tumor Immunology and Vaccines**
- **Clinical Research**
- **Molecular Epidemiology**
- **Partnerships**

Intramural Faculties and Working Groups

Discipline Based

Immunology
HIV and Virology
Cancer Prevention
Cellular and Molecular Developmental
Biology
Chemistry and Structural Biology
Epidemiology and Carcinogenesis
Stem Cell Working Group
Clinical Immunology Working Group

Disease Based

Breast Cancer
Gynecologic Oncologic
Malignancies
Genitourinary Malignancies
Lung Cancer and Aerodigestive
Disease
Cutaneous Carcinogenesis
Lymphoid Malignancies
Gastrointestinal Working Group

Approach Based

Genetics, Genomics, and Proteomics
Bioinformation, Biostatistics and Computational Biology
Molecular Targets
Vascular Biology
Vaccine Working Group
Metastasis Working Group

Trainees within CCR

- **121 Clinical Fellows**
- **661 Postdoctoral CRTAs and Visiting Fellows**
- **175 Pre-Doctoral CRTAs**
- **226 Summer Interns**

Summary of Training Activities

- Twelve Clinical Fellowship Programs
 - Three ACGME accredited Residency Programs
 - Four ACGME accredited Clinical Fellowship Programs
 - Five additional Clinical Fellowship Programs
- Six Fellowships Focused Towards Translational Research
- Two Basic Science Fellowship Programs
- CCR Postdoctoral Retreat
- Course/Workshop Development
- K22 Career Development Awards to Facilitate the Transition to Independence
- Graduate Partnership Program to attract interactions with Extramural Institutions (TU2 Funding Mechanism)
- Summer Intern Program

Internships at the Center for Cancer Research

- **Summer Intern Program**
 - For students from High School to Graduate School
- **Summer Research Fellowship Program**
 - For Medical and Dental Students
 - To Register go to: www.training.nih.gov
- **Postdoctoral Fellowships at CCR**
<http://ccr.nci.nih.gov/careers/positions.asp>

NIH and NCI Training Opportunities

The NCI Office of Diversity and Employment Programs:
Identifies and implements programs designed to foster
diverse, supportive workplace environments that
promote discovery and research

<http://camp.nci.nih.gov/odep/>

Student Programs

High School, College, Graduate....

<http://www.training.nih.gov/>

Graduate Program Partnerships

Program initiated to foster NIH-University partnerships
increasing the number of graduate students on campus
and fostering interactive collaborations

<http://gpp.nih.gov/>

CCR Training and Education Contact Information

Jonathan S. Wiest, Ph.D.

Associate Director for Training and Education

Office of the Director

Center for Cancer Research

National Cancer Institute

Bethesda, MD

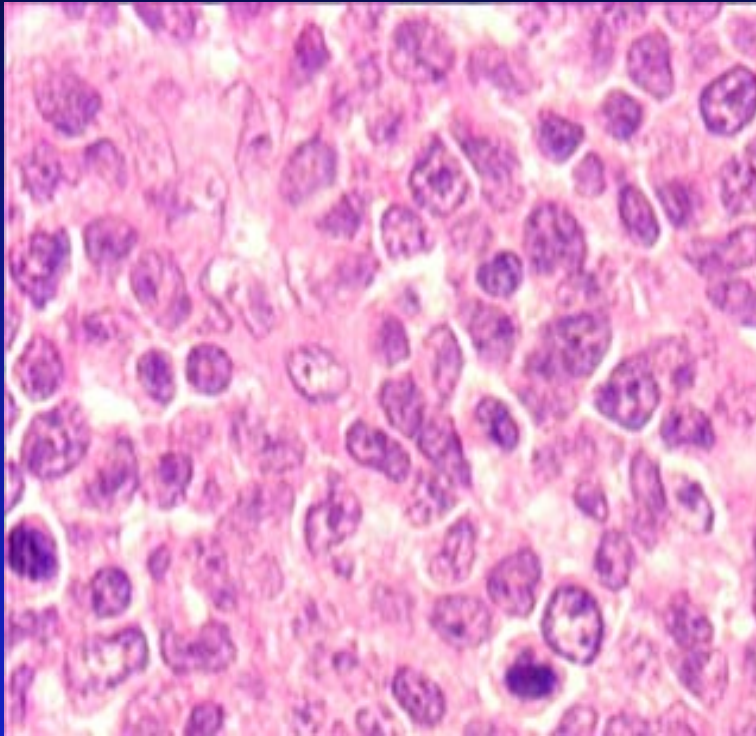
http://ccr.nci.nih.gov/careers/training_office.asp

Create an IRP “Without Walls”...

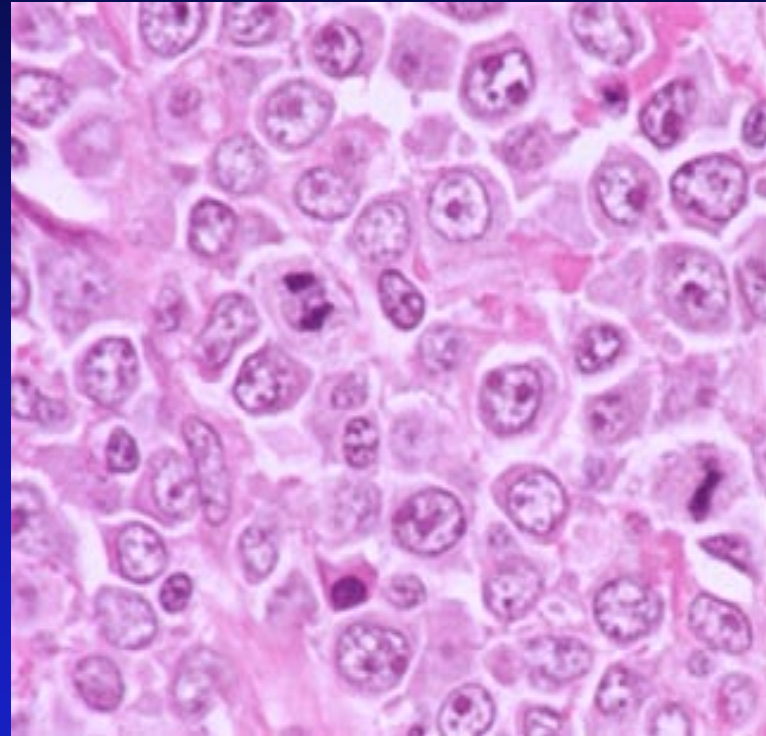
The objective is to foster the exchange of ideas among intramural and extramural scientists and clinicians

- *Consortium Development (LLMPP, Glioma, etc...)*
- *Sabbatical Opportunities:*
 - *For Clinicians, Basic and Translational Scientists*
 - *Clinical Development Partnerships*
 - *Advanced Technology Program*
 - *Faculty/Working Group Sponsored*
 - *NCI PI Sabbaticals*

Diffuse Large B-Cell Lymphoma: One Diagnosis, Many Diseases?

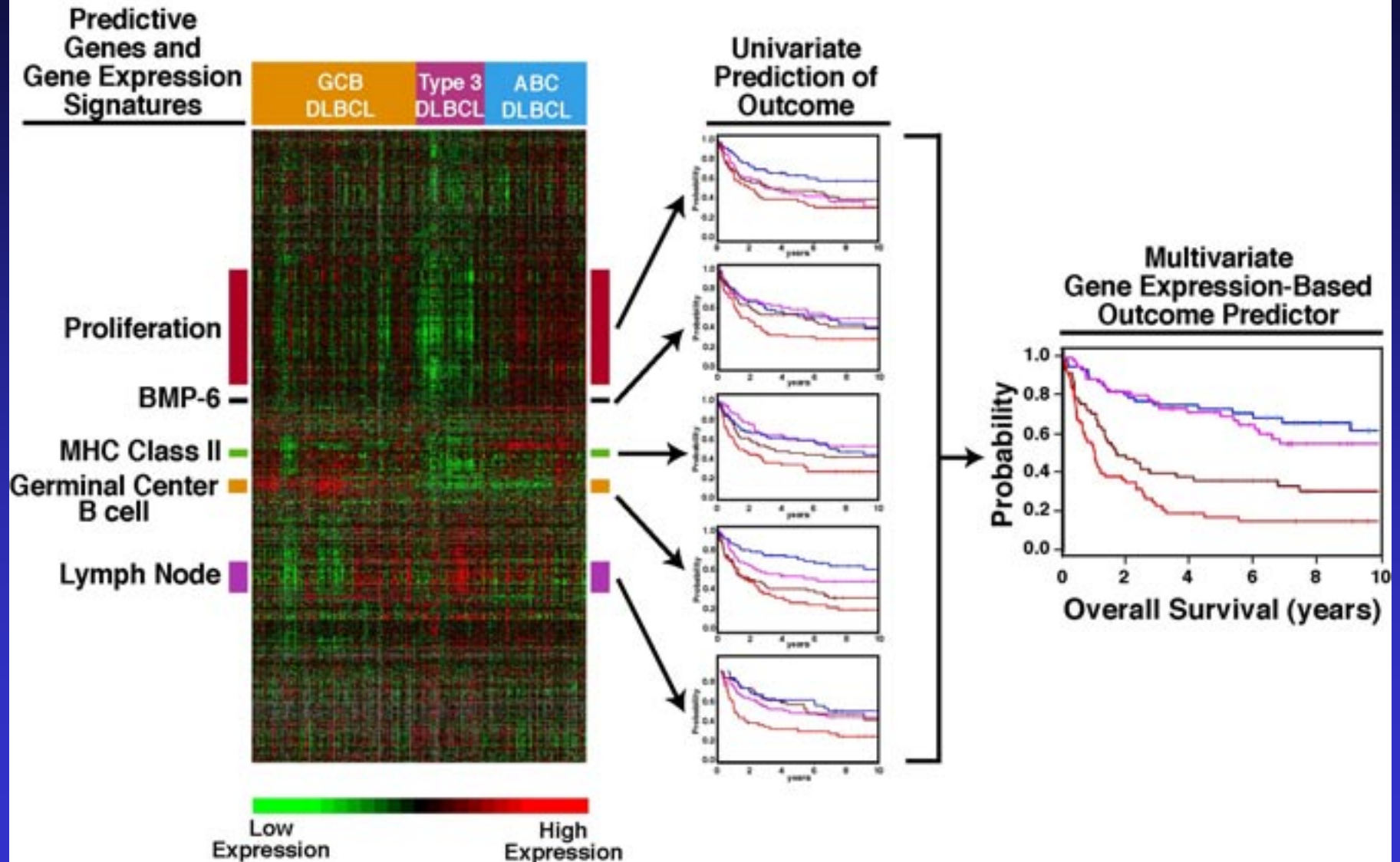


Patient 1



Patient 2

Building a Gene Expression-Based Outcome Predictor for Diffuse Large B-cell Lymphoma

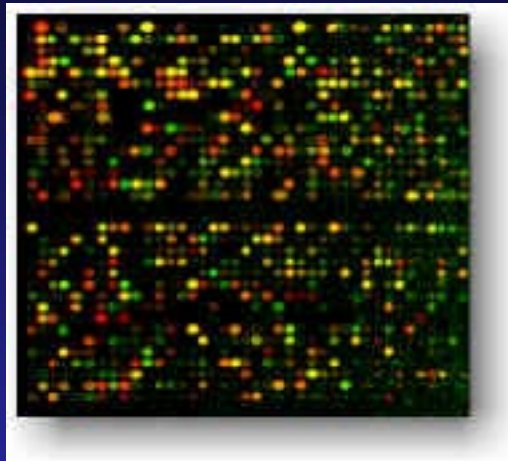


Microarray-based Treatment Decisions for Cancer Patients



biopsy
→

Lymphoma
Patient #1

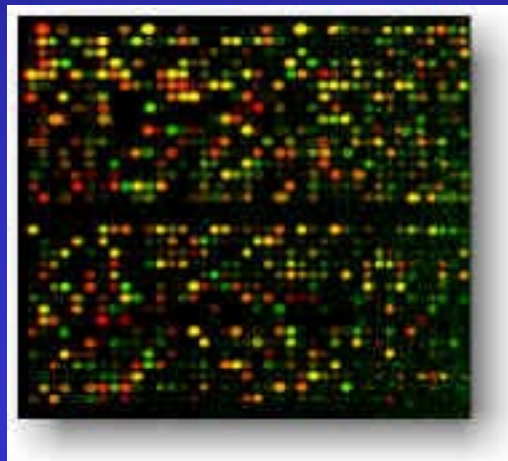


Multi-agent
Chemotherapy
(EPOCH)



biopsy
→

Lymphoma
Patient #2



Upfront bone
marrow
transplant?

New molecular
targets?

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<http://ccr.cancer.gov/>

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