

CONNECTION

A newsletter for healthcare providers



National Jewish Health®

Science Transforming Life®

Lung Cancer Center Opens

Tuberculosis was the number one medical problem in the 19th century and the reason our doors opened in 1899. Since then, not only have we developed the expertise to diagnose and treat this disease with unparalleled success, but we also expanded into other cardiothoracic and immune system diseases. As a result, we've been ranked as the #1 Respiratory Hospital in America since 1998 (*U.S. News & World Report*).

Today, lung cancer replaces tuberculosis as a top health threat. It is the *third leading cause* of all deaths and the *leading cause of cancer deaths* in our country, and, therefore, warrants substantial focus and new approaches. We have been diagnosing and treating lung cancer for years, but now are thrilled to announce the opening of our Lung Cancer Center that expands the scope of our services to your patients.

This center will utilize our institutional strengths — proficiency in pulmonology, oncology, research, and advanced diagnostics; world-class clinicians, scientists and dedicated staff — with our whole-person, individualized patient-care model. We will lead the fight against lung cancer today and into the future.

We look forward to collaborating with you to the benefit of your patients with lung cancer.

Michael Salem, MD, FACS
President and CEO



In this issue:

<i>Program Description</i>	3
<i>Diagnosis in Days</i>	4
<i>FAQs</i>	5
<i>Educational Opportunities</i>	6
<i>How and When to Refer</i>	6
<i>Meet the Team</i>	7

NJHealth.org
800.652.9555

Introduction

Dear Colleague,

I would like to personally introduce you to the National Jewish Health® Lung Cancer Center. This newsletter will explain the capabilities of our center and our approach to diagnosing, staging and monitoring thoracic cancer for your patients.

The Lung Cancer Center at National Jewish Health opened in April. It builds on the existing strengths of this institution — pulmonology, immunology, imaging, pathology, genomics, and basic and clinical research — while providing personalized treatment that considers each patient's tumor type, the genetic fingerprint of tumors (when relevant) and their underlying medical problems and physiology.

I've been a pulmonologist for more than 20 years and have focused my career intensely on pulmonary oncology. Prior to joining National Jewish Health, I was the Chief of Pulmonary, Critical Care and Sleep Medicine at Case Western Reserve University. I helped build the nationally recognized thoracic oncology program there and at the University of Iowa. My research interests are focused on tumorigenesis of the pulmonary epithelium, specifically on growth factor receptors and regulation of cell growth, and molecularly targeted pharmacotherapy.

I am currently the Editor of *Lung Cancer Frontiers* and formerly on the Editorial Boards for the *Journal of Laboratory and Clinical Medicine* and the *Journal of Investigative Medicine*.

My professional affiliations include:

- American Thoracic Society
- American College of Chest Physicians
- Central Society for Clinical Research
- American Association for the Advancement of Science
- American Association of Cancer Research

On behalf of the entire Lung Cancer Center team, we look forward to collaborating with you in the care of your patients and welcome the opportunity to consult with you.

Best Regards



Jeffrey Kern, MD, FCCP



Jeffrey Kern, MD, FCCP
Professor of Medicine
Vice Chairman, Department of Medicine
Chief, Division of Oncology
Director, Lung Cancer Center

Please feel free to contact us at
800.652.9555

Lung Cancer Center Overview

Personalized Lung Cancer Care

Improved lung cancer outcomes require early diagnosis and intervention of a multidisciplinary team of pulmonologists, radiologists, pathologists, medical oncologists, radiation oncologists, and thoracic surgeons. Our program offers an expedited visit and diagnosis, within days for most patients, the full range of treatment options that consider genetics and patient physiology, and multidisciplinary input.

Patient-Centered Care

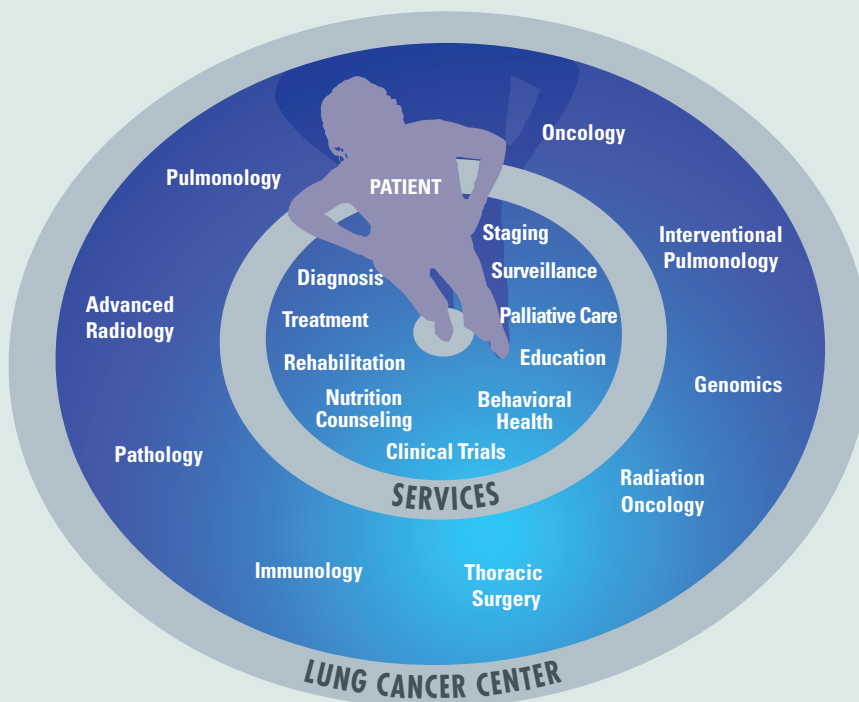
When you refer patients to our Lung Cancer Center all the necessary specialists and testing revolves around them at one location. This enables patients to obtain rapid results through the coordination of care without delays (which can be weeks outside of National Jewish Health for appointments with multiple specialists).

Program Services Overview:

- Personalized evaluation and staging with cutting-edge diagnostics: Bronchoscopy; Chest X-Ray; CT; CT-guided Fine Needle Aspiration; MRI; PET/CT; Pulmonary Function Test; Thoracentesis
- Diagnoses including staging and second opinions
- Treatment plans that consider genetics and patient physiology — chemotherapy, radiation therapy* and surgery*
- Comprehensive long-term management strategies — ongoing therapy, surveillance, airway management, pleural effusion care and palliative care
- Access to novel diagnostics, radiation techniques and chemotherapy drugs through ongoing clinical research trials will soon be available
- Behavioral health care for the patient and the whole family
- Onsite, full service rehabilitation program
- Palliative procedures and counseling
- Nutrition counseling

*These services will be coordinated with the University of Colorado Hospital, Rose Medical Center and other local hospitals.

Unique Patient Care Model



National Jewish Health is a multispecialty center dedicated to cardiothoracic and immune system diseases. Our patient care model allows unequalled patient-provider time and the resources necessary to provide the most accurate diagnoses leading to early and effective interventions. We have assembled a program of the nation's most preeminent pulmonary and oncology specialists so your patients are in the best hands throughout their cancer care.

Lung Cancer Center

Diagnosis Within Days

Many cancer centers typically treat cancer after a diagnosis has already been made. The time leading up to treatment can stretch into weeks due to scheduling appointments with multiple specialists for imaging, diagnosis and staging. Additional waiting for treatment can compound the anxiety associated with the word, “cancer” and fears of therapy, its impact on the patient’s quality of life, and expected treatment outcomes.

The National Jewish Health Lung Cancer Center has the clinical resources onsite and the ability to coordinate care among its many specialists to diagnose lung cancer in a matter of days depending upon the patient’s situation.

A Patient Scenario

A patient is referred for evaluation of an abnormal chest x-ray that shows a 3 cm lung nodule. No previous CT scan of this nodule exists. The patient is scheduled for an evaluation within days of the initial referral call to the National Jewish Health Physician Line.

Initial Evaluation – with the Oncology Team

1. Risk factors are assessed—history, age, smoking status, occupational history and exposure
2. Further evaluation —the patient is sent to the Institute for Advanced Biomedical Imaging® for CT scan within 24 hours (or same day if possible) for further anatomic definition and initial staging information.

CT Scanning at National Jewish Health

Limiting exposure to radiation is one of our goals. Our Seimens Somatom Sensation 128 slice CT can visualize the smallest of nodules with 0.33 mm isotropic resolution at the fastest acquisition speed and the lowest possible radiation dose.

3. If indicated, a PET/CT is scheduled within 24 hours to further help in diagnosis and staging.

PET/CT Scanning at NJH

Seeing molecular changes before anatomical changes appear helps us stay ahead of the cancer. We use the Seimens Biograph 40 PET/CT scanner which collects 78% more data in half the time and with 50% less dosage for increased patient safety.

4. Diagnosis and Pathologic Staging is done via Interventional Pulmonology (bronchoscopy, navigation bronchoscopy, endobronchial ultrasound) or Thoracic Radiology (CT-guided fine needle aspiration). Pathology services are ready for cytology and histology evaluations. Together they provide diagnosis and initial stage, if cancer, according to the American Joint Committee on Cancer (AJCC) TNM (tumor, nodes, metastasized) staging system.
5. The patient’s case is sent for review at the University of Colorado National Cancer Institute designated Comprehensive Cancer Center Thoracic Oncology Tumor Board to confirm treatment options with the input from multiple physicians including radiology, pathology, radiation oncology, pulmonology and thoracic surgery.
6. Treatment recommendations and anticipated outcomes are discussed with the patient and referring physicians, and include:
 - a. Surgical resection – minimally invasive endobronchial procedures performed at National Jewish Health and invasive surgical procedures performed at partner hospitals
 - b. Chemotherapy in the National Jewish Health new Chemotherapy Infusion Center
 - c. Radiation therapy at the University of Colorado Cancer Center (and partner hospitals)
 - d. Ongoing surveillance by National Jewish Health oncologists and other specialists
7. Our Medical Oncologist implements and manages treatment of diagnosed lung cancer, and upon completion of therapy, surveillance is provided by oncologists and pulmonologists.
8. When appropriate, we will perform molecular testing for mutations that may not respond to routine cancer treatment.

Frequently Asked Questions

Do you treat metastases from other cancers to the lung?

We can certainly help with the diagnosis of metastases with our imaging center and advanced diagnostic procedures. However, we initially are only providing treatment for primary lung cancers.

What cancers typically metastasize to the lungs?

Common metastatic cancers to the lung include breast, colon, head and neck, and prostate.

How do you monitor pulmonary nodules?

We use the Fleischner Society Guidelines (see website link) for pulmonary nodule surveillance.

Can I send my patient for a second opinion?

Yes, we are happy to confirm a diagnosis and provide opinions regarding treatment plans, or provide a consultation for any other reason you or your patient require a second opinion.

How do you determine tissue mutational status?

Most mutations present in specific patient histories - younger age, non-smokers, and often women. When there is a suspicion of a mutation and it will affect therapy, we will analyze the tissue for mutations that predict response to specific chemotherapeutic drugs.

How do you limit radiation exposure?

We always use the lowest possible dose to yield the exact information we need for diagnosis. We can also request a CT scan of just the exact area where the nodule is located, instead of imaging the entire chest.

What is Interventional Pulmonology (IP) and what is Dr. Musani's expertise?

Interventional Pulmonology uses advanced bronchoscopic and pleuroscopic techniques to diagnose and treat structural airway disorders and pleural diseases. This area of medicine has seen advances in technology and the development of new procedures to bring a higher level of non-invasive diagnostic techniques and therapy for lung cancer as well as other diseases, such as asthma and COPD.



Ali I. Musani, MD, FCCP, FACP

Ali I. Musani, MD, FCCP, FACP is one of the nation's few Interventional Pulmonologists fully trained in all aspects of IP. He has an international reputation for expertise in the latest technologies for early lung cancer diagnosis and treatment and endobronchial disease management. He can navigate to 85% of the lungs with the Super Dimension Navigation bronchoscopy (as opposed to only 10% with standard bronchoscopy) and can diagnose many nodules without having to resort to surgery. He provides a wide spectrum of minimally invasive diagnostic, therapeutic and palliative airway procedures including:

- Identification, diagnosis, and staging of pulmonary nodules and lung cancer
- Diagnosis and treatment of airway obstructions from benign and malignant diseases
- Airway recanalization
- Airway stent implantation and removal
- Balloon dilation of airways
- Pleural procedures including indwelling pleural catheters
- Removal of foreign bodies

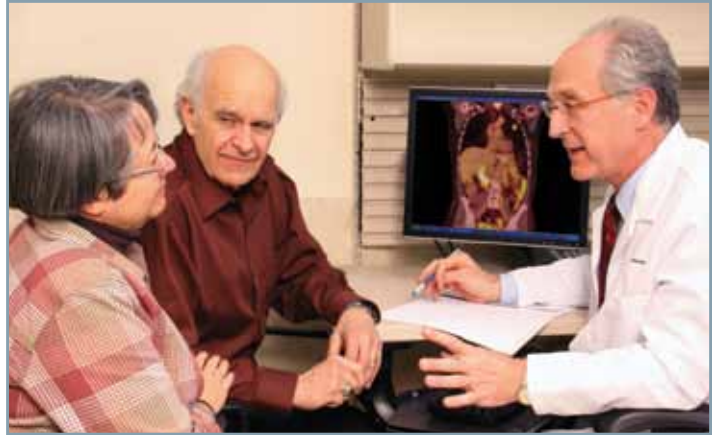
Referrals

How and When to Refer

Please call our Physician Line at 800.652.9555 or visit njhealth.org when you need to consult or refer a patient.

Physician Line nurses will complete the patient intake for our Program Coordinator. The Program Coordinator will:

- Coordinate referrals and consultations
- Answer patient-specific questions regarding treatment planning, and symptom management
- Synthesize patient information for team review
- Relay observations, comments and specific recommendations back to referring providers



Please feel free to contact us at
800.652.9555

SCHEDULE OF UPCOMING 2010 CME ACTIVITIES

Presented by The Office of Professional Education at National Jewish Health

The world-class faculty and staff at National Jewish Health set national treatment guidelines and provide exceptional professional education, fellowships and other education programs, which serve to elevate the standard of patient care and teach the next generation of health professionals.

LIVE COURSES - ADVANCE REGISTRATION IS REQUIRED

For more information or to register visit www.njhealth.org/proed or call 800.844.2305

EOSINOPHILIC ESOPHAGITIS*

Thursday Evening, July 15

FUNDAMENTAL CRITICAL CARE SUPPORT COURSE*

Wednesday-Thursday, September 29-30

THE DENVER TB COURSE*

(The longest running TB course in the US)
Wednesday-Saturday, October 13-16

All activities are subject to change. Courses held in the Molly Blank Conference Center on the National Jewish Health campus, unless otherwise noted.
1400 Jackson Street | Denver, CO 80206

ONLINE COURSES -

AVAILABLE AT WWW.CMELOGIX.ORG

RECOGNITION AND MANAGEMENT OF COPD*

AN EVALUATION OF RESTLESS LEG SYNDROME (RLS)*

OBESITY AND ASTHMA: CAUSE OR EFFECT?*

EXCESSIVE DAYTIME SLEEPINESS*

DIAGNOSING, MANAGING AND TREATING COPD*

ROLE AND MECHANISMS OF CONTROLLER MEDICATIONS FOR ASTHMA*

FOOD ALLERGIES - PRINCIPLES AND PRACTICES*

*This activity has been approved for AMA PRA Category 1 Credit™.

The Lung Cancer Center Team

Our team includes pulmonologists, oncologists, immunologists, radiologists, and surgeons who are dedicated to lung cancer and who are experts at predicting, diagnosing, treating, managing and tracking it. Complete biographical sketches are at njhealth.org.

Jeffrey Kern, MD, FCCP

Pulmonologist

Board Certified: Internal Medicine, Pulmonology
One of the few lung cancer pulmonologists in the country with over 20 years of expertise in lung cancer and a focus on mutation analysis and interpretation.

Laurie Carr, MD

Medical Oncologist

Board Certified: Internal Medicine, Medical Oncology
Highly specialized in lung, and head and neck cancers.

Ali I. Musani, MD, FACP, FCCP

Interventional Pulmonologist

An internationally recognized expert in interventional thoracic procedures.

Bronwyn Long, DNP, MBA, RN

Program Coordinator

Certifications: Advanced Certified Hospice and Palliative Nurse, (ACHPN), Clinical Nurse Specialist in Adult Health (ACNS-BC), and Oncology Certified Nurse (OCN)
With an extensive background in palliative care and oncology, she can help you and your patients every step of the process.

David Bekelman, MD, MPH

Palliative Care Physician

Board Certified: Internal Medicine, Hospice and Palliative Care Medicine, Psychiatry and Psychosomatic Medicine
Counsels, treats and helps patients and their family caregivers with the physical and psychological aspects of advanced disease.

David Lynch, MD

Thoracic Radiologist

Board Certified: Diagnostic Radiology
An internationally known thoracic radiologist with extensive lung cancer experience.

Steve Groshong, MD, PhD

Pathologist

Board Certified: Anatomic Pathology, Clinical Pathology
Nationally known for his subspecialty in lung disease.

Rosane de Oliveira Duarte Achcar, MD

Pathologist

Board Certified: Anatomic Pathology, Clinical Pathology
A fellowship-trained thoracic pathologist with expertise in lung cancer.

David Schwartz, MD

Genetics Specialist

Board Certified: Internal Medicine, Occupational Medicine, Pulmonary Medicine
One of the nation's foremost experts in pulmonary disease genetics.

Jill Slansky, PhD

Immunologist

Respected Colorado researcher and leader in basic immunology and tumor/cancer immunology.

National Jewish Health®

CONNECTION

National Jewish Health
1400 Jackson Street
Denver, CO 80206

Non-Profit Org.
U.S. Postage
PAID
Permit No. 1541
Denver, CO



Spring 2010

National Jewish Health®

CONNECTION

A newsletter for healthcare providers

Physician Line (consultations, referrals, resources) **800.652.9555**
Clinical Studies **303.270.2222**
ADx Laboratories www.njlabs.org. **800.550.6227**
Professional Education www.CMELogix.org. **303.398.1000**
800.844.2305

National Jewish Health Connection is published quarterly for physicians and healthcare providers. Please email the editor if you would prefer to receive it electronically.

Editor Cyndy Mitchell, mitchellc@njhealth.org