All functions will be held in BROOKWOOD WEST unless noted otherwise.

### Friday, September 13

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Location</th>
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<tbody>
<tr>
<td>7.00 to 8.00 am</td>
<td>Registration</td>
<td>Rocky Mountain Ballroom</td>
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<tr>
<td>7.00 to 8.00 am</td>
<td>Breakfast buffet with Exhibitors</td>
<td>Prefunction Area</td>
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<tr>
<td>8.00 to 10.00 am</td>
<td>Case presentations, Guest discussants</td>
<td>Rocky Mountain Ballroom</td>
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<tr>
<td>10.00 to 10.30 am</td>
<td>Break with Exhibitors</td>
<td>Rocky Mountain Ballroom, Prefunction Area</td>
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<tr>
<td>10.30 to 12.30 pm</td>
<td>Case presentations, Guest discussants</td>
<td>Rocky Mountain Ballroom</td>
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<tr>
<td>12.30 to 5.30 pm</td>
<td>Lunch (on your own) and free time</td>
<td>Lake Terrace Dining Room, Broadmoor Main</td>
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<tr>
<td>5.30 to 7.00 pm</td>
<td>Reception with complimentary hors d'oeuvres, cash bar</td>
<td>Lake Terrace Dining Room, Broadmoor Main</td>
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### Saturday, September 14

<table>
<thead>
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<td>Rocky Mountain Ballroom</td>
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History of the Penrose Cancer Conference

In the early 1940's, pathologist Lauren Ackerman and oncologist/radiotherapist Juan del Regato, both from Ellis Fischel Cancer Hospital in Columbia, Missouri, published their classic book, *CANCER, Diagnosis and Treatment*. Their book became the foundation for informal conferences attended by such medical greats as Arthur Purdy Stout, the acknowledged founder of surgical pathology as a specialty. Dr. del Regato often discussed clinical, radiologic and radio-therapeutic data with visiting professionals, laying the groundwork for future cancer conferences.

In January of 1949, at the request of Julie Penrose, Dr. del Regato became the Director and Radiotherapist at Penrose Cancer Hospital, a part of The Glockner-Penrose Hospital. Dr. del Regato decided to develop a more formal conference, primarily for pathologists from the Rocky Mountain area. Although not a pathologist himself, he felt that the Conference would have a more universal appeal with this focus. Under the co-sponsorship of the Colorado Society of Clinical Pathology, the Penrose Cancer Seminar debuted on September 10, 1949 in the Little Theater of the Broadmoor Hotel.

Prior to the first formal conference, the only one which focused on a variety of cases rather than on one organ or one major disease. Dr. del Regato sent slide sets of 16 cases to 120 pathologists for their opinions. Conference faculty, Arthur Purdy Stout, M.D., and Lauren Ackerman, M.D., jointly discussed breast, skin, salivary gland, etc. cases. Drs. Stout and Ackerman disagreed on the diagnosis of only three out of the 16 cases submitted. Diagnoses from the other pathologists were more varied. One of the purposes of the Conference, which drew over 500 participants, from both coasts, was to show how frequently good pathologists justly differ in the diagnoses of difficult cases on the basis of morphology alone. Proceedings of the Conference were published in *Cancer Seminars, Vol. I, No. 1*, September 1950.

The second seminar, held on September 9, 1950, concentrated on bone tumors. Dr. Phillip Hodes, Professor of Radiology at the University of Pennsylvania was added to the faculty and continued the following year in that capacity. Dr. Ackerman served as pathologist for this seminar as well as for the third and fourth events. From that point on, pathologists and radiologists equally shared in conference presentations.

At the sixth conference in 1954, a clinician was added. Usually a surgeon, this new faculty component added yet another dimension to the conference. Since 1954, pathologists, radiologists and clinicians serving as guest speakers have been national leaders in their specialties.

The conferences continued annually at the Broadmoor Hotel. As attendance grew, their location moved from the Little Theater to the Ballroom and finally to the International Center. Dr. del Regato led 24 seminars until his departure from Penrose Hospital in 1972. The Pathology Department continued to coordinate the Conference for an additional five years, until they ended the conferences in 1977.

The Penrose Cancer Seminars were unique. They united the country's premiere pathologists and radiologists in a forum to discuss perplexing problems in diagnosis.
Opinions of the guest speakers, other world experts, and numerous attendees were published annually. The contributions and failures of both tissue morphology and imaging techniques, as well as the utilization of all modalities to arrive at a correct diagnosis, were important lessons for all.

The Penrose Cancer Center, a member of Penrose-St. Francis Health System, revived the Penrose Cancer Seminars after a 16 year hiatus, and in September, 1993, the Penrose Cancer Conference debuted. In the tradition of the earlier conferences, the 1993 conference was again held in the Little Theater of the Broadmoor Hotel. Conference participants - comprised of pathologists, radiologists and clinicians - focused their diagnostic skills on the difficult diagnoses of breast and ovarian neoplasms. A total of 91 participants attended. In 1994 and 1995 the number of attendees has increased.

Today, the Penrose Cancer Center is pleased and proud to continue the tradition of excellence in clinical education as an expression of its mission to manage the most complex malignancies and to assist in the eradication of this disease.
<table>
<thead>
<tr>
<th>Year</th>
<th>Topic</th>
<th>Authors</th>
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<tr>
<td>1949</td>
<td>Miscellaneous Tumors</td>
<td>A.P. Stout, L.V. Ackerman</td>
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<td>1950</td>
<td>Bone Tumors</td>
<td>Hodes, L.V. Ackerman</td>
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<td>Thoracic Tumors</td>
<td>L.V. Ackerman</td>
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<tr>
<td>1952</td>
<td>Gastric Tumors</td>
<td>L.V. Ackerman</td>
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<td>1953</td>
<td>Tumors of the Small Intestine</td>
<td>Swenson, Meissner</td>
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<td>1956</td>
<td>Intracranial Tumors</td>
<td>Pendergrass, Kernohan</td>
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<td>1957</td>
<td>Cancer in Children</td>
<td>Neuhauser, Landing</td>
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<td>1958</td>
<td>Bone Tumors</td>
<td>Hodges, L.V. Ackerman</td>
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<td>1959</td>
<td>Tumors of Soft Tissues</td>
<td>Hodges, A.P. Stout</td>
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<td>Felson, Lattes</td>
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<td>Schatzki, Meissner</td>
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<td>Intracranial Tumors</td>
<td>Tavers, Zimmerman</td>
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<td>Tumors of the Small and Large Intestines</td>
<td>Welin, Castelman</td>
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<td>Tumors of the Urinary Tract</td>
<td>J.A. Evans, L.M. Franks</td>
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<td>1965</td>
<td>Malignant Tumors in Children</td>
<td>J.A. Kilpatrick, J.M. Kissane</td>
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<td>1966</td>
<td>Malignant Tumors of the Lymphoid Structures</td>
<td>H. Mellins, H. Rappaport</td>
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<td>1967</td>
<td>Bone Tumors</td>
<td>J. Edeiken, H.J. Spiut</td>
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<tr>
<td>1968</td>
<td>Thoracic Tumors</td>
<td>M. Viamonte, Jr., A.A. Leibow</td>
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<td>1969</td>
<td>Gastrointestinal Tumors</td>
<td>R.D. Moseley, M.H. McGavran</td>
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<td>1970</td>
<td>Tumors of the Central Nervous System</td>
<td>H.O. Peterson, L.J. Rubinstein</td>
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<td>1971</td>
<td>Tumors of the Urinary Tract</td>
<td>A.F. Lalli, W.C. Bauer</td>
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<td>1972</td>
<td>Pediatric Tumors</td>
<td>J.C. Dumbar, H.S. Rosenberg</td>
</tr>
<tr>
<td>Year</td>
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<td>1974</td>
<td>Neoplastic and Non Neoplastic Diseases of the Chest</td>
<td>N. Goodman, M. Kuschner</td>
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<td>1975</td>
<td>Diseases of the Hepato-biliary and Pancreatic Ducts, Ampulla of Vater and Duodenum</td>
<td>A. Moss, T. Kent</td>
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<td>1976</td>
<td>Breast Lesions</td>
<td>L.M. Kalisher, R.W. McDivitt</td>
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<td>1996</td>
<td>Head and Neck Tumors</td>
<td>S. Mills, A. Mancuso, R. Weber</td>
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<td>1997</td>
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Clinician:

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Editor-in-Chief, *Modern Pathology*

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Clinical Presentation: FG is a 49 year old Filipino male with polyostotic fibrous dysplasia who presented with a one-month history of a progressive foul smell from a mass in the oral cavity. Exam is noteworthy for the dramatic facial and skull abnormalities typical of fibrous dysplasia. A 4 cm necrotic mass was present on the left mandible with well-defined margins. The patient was seen one week later with marked increase in the size of the mass to approximately 10 cm. As a child, while growing up in Manila, he was treated for a draining dental abscess with external beam radiation therapy.

Treatment: He underwent a partial mandibulectomy and tracheostomy with local mucosal reconstruction. Mandible reconstruction was not attempted.

Follow-up: He subsequently developed a recurrence in the remaining right mandible and underwent a condyle-to-condyle mandibulectomy with titanium bar reconstruction and postoperative radiation therapy. He developed a single pulmonary nodule, which has been resected. He is alive, decannulated, eating orally and employed four years after presentation.

Gross Pathology: The left hemimandibulectomy specimen contained a 5.5 cm soft, focally gritty, gelatinous, tan to gray tumor which eroded through the medial, lateral, and superior mandibular cortex. Representative sections were submitted.

Submitted Material:
1. H & E slide
2. Head CT and MRI; Lung CT

Diagnosis:
Figure 1: Axial CT, maxilla and mandibular ramus.

Figure 2: Axial MRI, same level as first CT.
Figure 3: Axial CT, Skull

Figure 4: Axial CT, lung apices
Clinical Presentation: NL is a 42 year old male with a two month history of a preauricular mass on the left side. No cervical lymphadenopathy was present and facial nerve function was intact. Fine-needle aspiration biopsy suggested a benign process.

Treatment: He underwent an excision of the left mandibular condyle with prosthetic reconstruction of the temporomandibular joint. Clear surgical margins were obtained.

Follow-up: He is free of disease with a near normally functioning left temporomandibular joint at 18 months after presentation.

Gross Pathology: The left mandibular condyle was expanded by a 2.3 cm pink mass containing multiple foci of pale yellow to white, chalky material. The tumor penetrated the medial cortex and invaded adjacent soft tissue. Representative sections were submitted.

Submitted Material:
1. H & E slide
2. Plain film and CT

Diagnosis:
Figure 1: Left mandibular X-ray

Figure 2: Coronal CT slice, bone window, left mandible
Clinical Presentation: CY is an 87 year old male who presented with generalized deterioration. Exam revealed a large tongue base neoplasm with polypoid features said to produce two-thirds obstruction of the oropharynx. Bilateral lymphadenopathy and subcutaneous submental nodules were present. Work-up revealed multiple pulmonary nodules.

Treatment: Partial glossectomy was undertaken at which time positive surgical margins were noted.

Follow-up: The patient expired three months after presentation.

Gross Pathology: The polypoid specimen measured 4.5 x 3.7 x 2.8 cm and had a fleshy, pale tan to pink cut surface with foci of necrosis and cystic change. Representative sections were submitted.

Submitted Material:
1. H & E slide
2. Head CT and MRI

Diagnosis:
Figure 1: Post contrast Axial CT, mandibular ramus level

Figure 2: Axial CT, tip of epiglottis
Figure 3: Axial CT, supraglottic larynx

Figure 4: Midsagittal T1 weighted MRI
Contributed by: Guy E. Nichols, MD, PhD and Paul A. Levine, MD
University of Virginia Health Sciences Center, Charlottesville, Virginia

Clinical Presentation: SR is a 60 year old female presenting with a five month history of bilateral nasal congestion. Examination revealed a dark-colored mass in the right nasal cavity. No cervical lymphadenopathy or cranial nerve deficits were present.

Treatment: She underwent a midfacial degloving procedure with right medial maxillectomy followed by external beam radiation therapy.

Follow-up: She is free of disease six months after diagnosis.

Gross Pathology: The 4.5 cm in maximal diameter, lobulated, light brown tumor contained small foci of hemorrhage and was adherent to bone. Representative sections were submitted.

Submitted Material:
1. H & E slide
2. Head MRI

Diagnosis:
Figure 1:
$T_2$ weighted coronal MRI

Figure 2:
$T_2$ weighted coronal MRI
Figure 3: $T_1$ weighted coronal MRI

Figure 4: Post contrast $T_1$ weighted coronal MRI
Clinical Presentation: DM is a 24 year old female with a two-month history of an enlarging mass in the left buccal mucosa. No lymphadenopathy was present. Normal chest x-ray was obtained. Biopsy was then performed.

Treatment: Chemotherapy was initiated with ifosfamide, VP-16 and Vincristine. She then underwent transoral resection. Microscopically positive margins were determined. Radiation to the operated area was initiated. Significant trismus ensued.

Follow-up: A 2x2 cm cervical node adherent to the mandible developed, which, on fine-needle aspiration biopsy, confirmed recurrent tumor. She underwent a left modified neck dissection, partial mandibulectomy, infratemporal fossa dissection and titanium plate reconstruction of the mandible with rectus abdominus muscle free flap to the infratemporal fossa. Postoperative external beam radiation therapy to the left neck was undertaken. She is now one year post completion of treatment and is free of disease.

Gross Pathology: A 2.7 cm firm, white mass was present within the left buccal mucosa. The mucosa overlying the tumor was focally ulcerated. Representative sections were submitted.

Submitted Material:
1. H & E slide
2. Head MRI and CT

Diagnosis:
Figure 1:
Axial $T_2$ weighted MRI, maxillary alveolar ridge

Figure 2:
Post contrast Axial $T_1$ weighted MRI, same level
Figure 3:
Same sequence, 5 mm cephalad

Figure 4:
Axial CT, bone window, same level
Contributed by: Guy E. Nichols, MD, PhD and Paul A. Levine, MD
University of Virginia Health Sciences Center, Charlottesville, Virginia

Clinical Presentation: Kl is a 27 year old female with a five year history of left nasal obstruction. Examination revealed an exophytic mass emanating from the left middle meatus. She underwent a left Caldwell-Luc procedure for presumed hyperplastic sinus disease. All cranial nerves were intact. No cervical lymphadenopathy was present.

Treatment: She was treated with Cytoxan, Adriamycin and Vincristine followed by a craniofacial resection and external beam radiation therapy.

Follow-up: No data available.

Gross Pathology: The tumor was light tan and measured 2.5 cm in maximal diameter. Representative sections were submitted.

Submitted Material:
1. H&E slide
2. Head MRI

Diagnosis:
Figure 1: 
T2 weighted
coronal MRI

Figure 2:  
Post contrast
T1 weighted
coronal MRI
Figure 3: Post contrast T<sub>1</sub> weighted coronal MRI

Figure 4: Post contrast T<sub>1</sub> weighted coronal MRI
Clinical Presentation: DM is a 48 year old male with long-standing nasal obstruction who on exam had a septal deformity to the right side, bony mass of the septum impinging on the left side and polypoid tissue posteriorly. No cervical adenopathy was present and cranial nerve function was intact.

Treatment: The patient underwent a resection via midfacial degloving with a septectomy, left ethmoidectomy, left antrostomy and bilateral sphenoidotomy with biopsy. Clear surgical margins were obtained. Postoperative external beam radiation therapy was delivered.

Follow-up: The patient requires frequent nasal cavity clearing, but is free of disease two years after diagnosis.

Gross Pathology: The tumor measured 3.6 x 2.6 x 1.7 cm and had a rubbery consistency. The cut surface was gray-pink and exuded a mucinous-type of material. Representative sections were submitted.

Submitted Material:
1. H & E slide
2. Head CT

Diagnosis:
Coronal CT slices, Anterior to Posterior, Figures 1 through 6

Figure 1

Figure 2
Clinical Presentation: TN is a 47 year old male with right facial pain, facial nerve paresis and a parotid mass. Fine-needle aspiration biopsy was undertaken. No cervical lymphadenopathy was present. The carotid artery was studied preoperatively.

Treatment: He underwent a right total parotidectomy, balloon occlusion of the carotid artery with carotid artery resection and right radical neck dissection with intraoperative external beam radiation therapy.

Follow-up: The patient suffered a cerebrovascular accident perioperatively, but is alive and without tumor recurrence one year after presentation.

Gross Pathology: The specimen included the right parotid gland, portions of the right carotid artery and temporal bone, and a right radical neck dissection. A 5.5 cm light tan, lobulated mass with infiltrative borders was centered within the parotid gland. Representative sections of the tumor were submitted.

Submitted Material:
1. H & E slide
2. Head MRI and CT

Diagnosis:
Figure 1: Axial $T_1$ weighted MRI, upper parotid gland level

Figure 2: Axial $T_1$ weighted MRI, lower parotid gland level
Figure 3: Coronal T₁ weighted MRI, carotid sheath level
Figure 4: Axial CT, pre needle biopsy
Clinical Presentation: KW is a 26 year old male with bilateral progressively enlarging neck masses over a four-month period. The largest mass was in the left neck and measured 11x6 cm. Open incisional biopsy was undertaken. The nasopharyngeal exam revealed a large mass lesion and biopsies of this mass were performed.

Treatment: The patient received external beam radiation therapy to the nasopharynx and both necks with concomitant administration of cisplatin.

Follow-up: He is free of disease four months after presentation.

Gross Pathology: Multiple irregular fragments of variably maroon to tan tissue measuring 1.5 x 1.5 x 0.5 cm in aggregate were obtained. These were entirely submitted.

Submitted Material:
1. H & E slide
2. Head MRI and CT

Diagnosis:
Figure 1:
Axial $T_2$ weighted MRI, nasopharynx

Figure 2:
Post contrast Axial CT, nasopharynx
Figure 3: Axial $T_1$ weighted MRI, nasopharynx

Figure 4: Post contrast Axial $T_1$ weighted MRI
Figure 5: Mid sagittal $T_1$ weighted MRI

Figure 6: Post contrast coronal $T_1$ weighted MRI
Clinical Presentation: BM was a 23 year old female with a nine month history of left-sided otalgia, 25 pound weight loss and a sense of fullness in her throat. She had refused laryngeal exam on numerous occasions over this period. Examination revealed an extremely anxious thin young woman who on fiberoptic laryngoscopy had an exophytic mass lesion involving the epiglottis. Visualization of the glottis was difficult. No cervical lymphadenopathy was present. Panendoscopy was performed and biopsies obtained. Because of airway compromise, a tracheostomy was positioned.

Treatment: She balked at further treatment for three weeks during which time a palpable lymph node appeared in the left neck. She underwent a supraglottic laryngectomy with left modified neck dissection followed by external beam radiation therapy.

Follow-up: She developed extensive mediastinal metastases and died nine months after diagnosis.

Gross Pathology: A 2.8 cm light tan mass was arising in and destroying the epiglottis. Representative sections were submitted.

Submitted Material:
1. H & E slide
2. Head MRI

Diagnosis:
Figure 1: Axial T₁ weighted MRI, hypopharynx.

Figure 2: Post contrast Axial T₁ weighted MRI, same level.
Figure 3:
Sagittal, post contrast, $T_1$ weighted MRI

Figure 4:
Coronal, post contrast, $T_1$ weighted MRI
Clinical Presentation: MN is a 75 year old female with a two-month history of hoarseness. Past history is significant for surgically treated stage I adenocarcinoma of the breast in 1987, with no known recurrence. Forty-plus year smoking history is also present. Fiberoptic laryngoscopy revealed a submucosal lesion involving the left false vocal cord with reduced mobility of the true vocal cord on that side. No palpable cervical lymphadenopathy was present. Panendoscopy was taken and biopsies procured.

Treatment: The patient was then treated with a total laryngectomy and left modified neck dissection followed by the administration of cisplatin and VP-16.

Follow-up: MN has tolerated treatment well and is alive, without disease, nine months post presentation.

Gross Pathology: The laryngectomy specimen contained a 1.5 cm soft, tan mass immediately superior to the left vestibular fold. Representative sections were submitted.

Submitted Material:
1. H & E slide
2. Neck CT

Diagnosis:
Post contrast, Axial CT superior to inferior larynx, Figures 1 through 4
Clinical Presentation: JL is a 59 year old male with a two-month history of painful swelling in the right upper alveolar ridge. No other mucosal lesions were noted. Cranial nerve function was complete. No cervical adenopathy was present.

Treatment: Biopsy was performed. This was followed by total palatectomy, partial septectomy with dissection posteriorly to the pterygoid plates.

Follow-up: The patient is alive without recurrence four months postoperatively.

Gross Pathology: The palatectomy specimen contained a 2.5 x 2.0 x 2.0 cm tan tumor which grossly invaded bone. Representative sections were submitted.

Submitted Material:
1. H & E slide
2. Head MRI

Diagnosis
Figure 1: Coronal $T_2$ weighted MRI, anterior palate

Figure 2: Coronal $T_2$ weighted MRI, mid palate
Figure 3: Axial T<sub>2</sub> weighted MRI, base of nasal airway

Figure 4: Axial T<sub>2</sub> weighted MRI, palatine level
Dear Doug:

Thanks for sending me a set of slides from the 1996 Penrose Cancer Hospital. You managed to put together quite a collection. Enclosed please find my diagnostic impressions and comments. I do not mind for them to given “individual attribution,” which is a polite way of saying that I do not mind making a fool of myself. In all fairness, though, I hope you will mention that these diagnoses are based on the examination of a single (and not always optimal) slide, without the benefit of immunohistochemistry, or other special studies. In other words, it is not a real-life situation, or even a situation comparable to that of the discussant.

I was curious to see that the 1997 Conference will be on chest and mediastinal tumors. Who will give it? By the way, I am already looking forward to the one I hope I will be able to in 1999.

I thought it was a very nice idea to publish the dates, topics, and discussants of the previous cancer conferences. As you may know, I have all but one of them (a gift from Dr. Ackerman), and I even re-enacted the very first at a recent meeting of the New York Pathology Society, with Dr. Berthrong in attendance. However, it is very distressing for an inveterate collector like myself to be missing one. Therefore, I thought of letting you know about it in the unlikely event that there is an extra set lying around your Department or in somebody’s home. I am referring to the 1977 Seminar on Diseases of the Reticuloendothelial System.
I hope you will not mind my filling out the blanks in your list (see enclosed). Also, would you allow me to make a small suggestion? I think it would be fairer and more accurate for the pathologist to be listed first in this table. I realize that the radiologists, clinicians, and surgeons may have contributed to these exercises (particularly the former), but there is no question in reading the proceedings (which I religiously have, every one of them) and from my attendance at a single meeting (1968) that this has always been a pathology-centered seminar (whether Del Regato would acknowledge it or not), and that the brunt of the presentation and discussion was always on the pathologist.

Sincerely yours,

Juan Rosai, M.D.
1996 PENROSE CANCER SEMINAR

DR. JUAN ROSAI'S DIAGNOSTIC IMPRESSIONS AND COMMENTS

1. Pleomorphic high-grade sarcoma arising from polyostotic fibrous dysplasia, c/w osteosarcoma.

2. Chondroblastoma, with a greater degree of cartilaginous metaplasia than usual.

3. High-grade spindle cell neoplasm (sarcoma vs. sarcomatoid carcinoma, favor latter because of location.

4. High-grade malignant tumor with rhabdoid features. Need immunohistochemistry to distinguish between melanoma, carcinoma, and sarcoma.

5. Spindle cell sarcoma. Need immunohistochemistry to subclassify (favor leiomyosarcoma).

6. Esthesioneuroblastoma, with well-formed rosettes.

7. Chordoma.

8. Acinic cell carcinoma with high-grade ("dedifferentiated") component.

9. Undifferentiated carcinoma with lymphoid stroma (so-called lymphoepithelioma).


11. High-grade neuroendocrine carcinoma, small cell carcinoma type. (Not atypical carcinoid!)

12. This is an adenoid cystic carcinoma. Do not let anybody call it a polymorphous low-grade carcinoma!
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<thead>
<tr>
<th>Year</th>
<th>Topic</th>
<th>Authors</th>
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<tr>
<td>1949</td>
<td>Miscellaneous Tumors</td>
<td>A.P. Stout, L.V. Ackerman</td>
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<td>1950</td>
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<td>1952</td>
<td>Gastric Tumors</td>
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<td>1953</td>
<td>Tumors of the Small Intestine</td>
<td>R. Golden, R. Horn</td>
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<td>1954</td>
<td>Tumors of the Large Bowel</td>
<td>F. Hodges, F. Mostofi</td>
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<td>Tumors of the Urinary Tract</td>
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<td>Neuhauser, Landing</td>
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<td>1957</td>
<td>Cancer in Children</td>
<td>Hodgges, L.V. Ackerman</td>
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<td>1958</td>
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<td>1959</td>
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<td>Schatzki, Meissner</td>
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<td>Tavares, Zimmerman</td>
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<td>1962</td>
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<td>Welin, Castleman</td>
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<td>1963</td>
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<td>J.A. Evans, L.M. Franks</td>
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<td>1964</td>
<td>Tumors of the Urinary Tract</td>
<td>J.A. Kilpatrick, J.M. Kissane</td>
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<td>1965</td>
<td>Malignant Tumors in Children</td>
<td>H. Mellins, H. Rappaport</td>
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<td>1966</td>
<td>Malignant Tumors of the Lymphoid Structures</td>
<td>Edeiken, H.J. Spjut</td>
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<td>1967</td>
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<td>M. Viamonte, Jr., A.A. Leibow</td>
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<td>1968</td>
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<td>R.D. Moseley, M.H. McGavran</td>
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<td>1969</td>
<td>Gastrointestinal Tumors</td>
<td>H.O. Peterson, L.J. Rubinstein</td>
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<td>Tumors of the Central Nervous System</td>
<td>A.F. Lalli, W.C. Bauer</td>
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<td>J.C. Dumbar, H.S. Rosenberg</td>
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<td>1972</td>
<td>Pediatric Tumors</td>
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October 1, 1996

Juan Rosai, M.D.
Chairman, Department of Pathology
Memorial Sloan-Kettering Cancer Center
New York, New York 10021

Dear Dr. Rosai:

Thank you for reviewing the slides from the 1996 Penrose Cancer Conference and submitting your diagnoses. It was emphasized at the conference that the expert reviewers had only one glass slide and no immunohistochemistry. Despite these unrealistic limitations, each of the experts was remarkably accurate. The conference participants greatly appreciated your opinions, and the experts often raised unique differential diagnostic possibilities. The expert panel is a valuable part of the Penrose Cancer Conference, and I am grateful for your participation.

I am enclosing the diagnoses of Dr. Mills as well as those of each of the experts. Case 2 generated the most disagreement. The differential was between chondroblastoma and low-grade chondrosarcoma. Dr. Mills favored chondrosarcoma, but four members of the expert panel favored chondroblastoma. Case 3 was a leiomyosarcoma. The tumor cells were immunoreactive for desmin and muscle-specific actin, and they were negative for cytokeratin. Case 5 was also extremely difficult without the benefit of immunohistochemistry. The tumor cells were immunoreactive with muscle-directed antibodies, including myoglobin, and the diagnosis was spindle-cell rhabdomyosarcoma. There was fairly good agreement on the remaining cases.

I also wanted to thank you for your corrections to the list of previous Penrose Cancer Conferences. I did not know this list was being compiled, and it was not included in the rough draft of the syllabus I reviewed. I first saw it as a page in the final syllabus. I was embarrassed that some names were misspelled and some dates were incorrect.

Finally, I have put out the word that you are looking for a slide set from the 1977 conference. As soon as we locate one, I will send it to you.

Best regards,

Douglas W. Franquemont, M.D.
1996 Penrose Cancer Conference Diagnoses- Stacey E. Mills, M.D.

Case 1- Osteosarcoma arising in fibrous dysplasia
Case 2- Chondrosarcoma
Case 3- Leiomyosarcoma
Case 4- Malignant melanoma
Case 5- Spindle-cell rhabdomyosarcoma
Case 6- Olfactory neuroblastoma with myospherulosis
Case 7- Chordoma
Case 8- Dedifferentiated acinic cell carcinoma
Case 9- Lymphoepithelioma (undifferentiated nasopharyngeal carcinoma)
Case 10- Carcinosarcoma (malignant mixed tumor)
Case 11- Neuroendocrine carcinoma, moderately differentiated
Case 12- Adenoid cystic carcinoma
Case 1

Dr. Barnes: Osteosarcoma arising in fibrous dysplasia
Dr. Chan: Osteosarcoma arising in fibrous dysplasia
Dr. Fechner: Osteosarcoma arising in fibrous dysplasia
Dr. Rosai: Osteosarcoma arising in fibrous dysplasia
Dr. Weidner: Osteosarcoma arising in fibrous dysplasia
Dr. Wenig: Osteosarcoma arising in fibrous dysplasia
Dr. Wick: Osteosarcoma

Case 2

Dr. Barnes: Chondroblastoma
Dr. Chan: Chondroblastoma
Dr. Fechner: Chondrosarcoma- ? neoplastic spindle cells, possible spindle cell component of chondroblastoma
Dr. Rosai: Chondroblastoma
Dr. Weidner: Chondroblastoma
Dr. Wenig: Favor low grade chondrosarcoma
Dr. Wick: Chondroblastic osteosarcoma
<table>
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<tbody>
<tr>
<td>Dr. Barnes:</td>
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<td>Dr. Chan:</td>
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<td>Dr. Rosai:</td>
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<td>Dr. Weidner:</td>
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<td>Dr. Wenig:</td>
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<tr>
<td>Dr. Barnes:</td>
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<td>Dr. Rosai:</td>
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<td>Dr. Weidner:</td>
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<td>Dr. Wenig:</td>
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<td>Dr. Wick:</td>
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Case 5

Dr. Barnes: Leiomyosarcoma- r/o malignant Schwannoma, spindle variant of rhabdomyosarcoma

Dr. Chan: Fibrosarcoma

Dr. Fechner: Sarcoma- leiomyosarcoma, fibrosarcoma, rhabdomyosarcoma, synovial sarcoma

Dr. Rosai: Spindle cell sarcoma, favor leiomyosarcoma

Dr. Weidner: Spindle cell sarcoma- favor monophasic synovial sarcoma, immuno to exclude other types of sarcoma

Dr. Wenig: Spindle cell sarcoma, favor leiomyosarcoma

Dr. Wick: Monophasic synovial sarcoma

Case 6

Dr. Barnes: Olfactory neuroblastoma

Dr. Chan: Olfactory neuroblastoma

Dr. Fechner: Olfactory neuroblastoma

Dr. Rosai: Esthesioneuroblastoma

Dr. Weidner: Olfactory neuroblastoma

Dr. Wenig: Olfactory neuroblastoma

Dr. Wick: Olfactory neuroblastoma
Case 7

Dr. Barnes: Chordoma vs chondroid chordoma
Dr. Chan: Chordoma
Dr. Fechner: Chordoma
Dr. Rosai: Chordoma
Dr. Weidner: Pleomorphic adenoma, consider chordoma
Dr. Wenig: Mucinous (colloid) adenocarcinoma
Dr. Wick: Chordoma vs myxoid chondrosarcoma, favor chordoma

Case 8

Dr. Barnes: Anaplastic carcinoma vs. dedifferentiated acinic cell carcinoma
Dr. Chan: Undifferentiated carcinoma
Dr. Fechner: Adenocarcinoma with divergent differentiation, ? neuroendocrine component
Dr. Rosai: Acinic cell carcinoma with high-grade ("dedifferentiated") component
Dr. Weidner: Acinic cell carcinoma with high-grade, poorly differentiated carcinoma
Dr. Wenig: Poorly differentiated carcinoma- high-grade adenocarcinoma, NOS, high-grade mucoepidermoid carcinoma
Dr. Wick: Dedifferentiated acinic cell carcinoma
Case 9

Dr. Barnes: Nasopharyngeal carcinoma, undifferentiated type

Dr. Chan: Undifferentiated carcinoma of lymphoepithelioma-like type

Dr. Fechner: Lymphoepithelioma

Dr. Rosai: Undifferentiated carcinoma with lymphoid stroma (so-called lymphoepithelioma)

Dr. Weidner: Undifferentiated nasopharyngeal carcinoma

Dr. Wenig: Nasopharyngeal undifferentiated carcinoma

Dr. Wick: Nasopharyngeal carcinoma (Regaud type)

Case 10

Dr. Barnes: Carcinosarcoma- ? true malignant mixed tumor, r/o malignant teratoma

Dr. Chan: Teratoid carcinosarcoma

Dr. Fechner: Carcinoma with features of basaloid squamous carcinoma plus sarcomatous transformation (chondrosarcoma).

Dr. Rosai: Carcinosarcoma- did not see features of teratocarcinosarcoma

Dr. Weidner: Carcinosarcoma- consider teratocarcinosarcoma, laryngeal blastoma

Dr. Wenig: Carcinosarcoma vs. malignant teratoma

Dr. Wick: Carcinoma ex pleomorphic adenoma
Case 11

Dr. Barnes: Neuroendocrine carcinoma, moderately differentiated
Dr. Chan: Small cell neuroendocrine carcinoma
Dr. Fechner: Carcinoma, most likely neuroendocrine
Dr. Rosai: High-grade neuroendocrine carcinoma, small cell carcinoma type
Dr. Weidner: Neuroendocrine carcinoma, poorly differentiated
Dr. Wenig: Neuroendocrine carcinoma, poorly differentiated
Dr. Wick: High-grade neuroendocrine carcinoma

Case 12

Dr. Barnes: Adenocarcinoma, ? adenoid cystic
Dr. Chan: Adenoid cystic carcinoma
Dr. Fechner: Adenoid cystic carcinoma
Dr. Rosai: Adenoid cystic carcinoma
Dr. Weidner: Polymorphous low-grade adenocarcinoma
Dr. Wenig: Polymorphous low-grade adenocarcinoma
Dr. Wick: Adenoid cystic carcinoma
Case #1. Mandible: Fibrous Dysplasia with Secondary Osteosarcoma.

Case #2. Mandible: Low-grade Chondrosarcoma.

Case #3. Tongue: Leiomyosarcoma.

Case #4. Sinonasal: Malignant Melanoma.
5. Fitzgibbons PL, Chaurushiya PS, Nichols PW, Chandrasoma PT, Martin SE. Primary mucosal malignant melanoma: an immunohistochemical study of 12 cases with comparison to cutaneous and metastatic melanomas. Hum Pathol 1989;20:269-72.
6. Franquemont DW, Mills SE. Sinonasal


Case #5. Buccal mucosa: Spindle-cell Rhabdomyosarcoma.


Case #6. Olfactory Neuroblastoma with Myospherulosis.


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**Myospherulosis**


**Case #7. Nasal cavity: Chordoma.**

6. Rutherfordorod GS, Davies AG. Chordomas -


Case #8. Parotid gland: Acinic Cell Carcinoma with "Dedifferentiation."


Case #10. Epiglottis: Carcinosarcoma.

Case #11. Larynx: Neuroendocrine Carcinoma.
Case #12. Palate: Adenoid Cystic Carcinoma.


