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FINAL ANNOUNCEMENT

of

PTCOG VII MEETING

**TO BE HELD AT LOMA LINDA ON
October 12th (Monday), 13th and 14th, 1987**

This is the final announcement of the seventh PTCOG meeting, which will be held at Loma Linda University, in conjunction with the Second International Charged Particle Dosimetry Workshop, on October 12th (Monday), 13th and 14th 1987.

Meeting Arrangements

The meeting will be held in the auditorium of the Randall Visitors Center at the Loma Linda University Medical Center – with the exception of PTCOG working group meetings, which will be held in the Shuman Pavilion.

The agenda for the meeting is attached. The meeting features a number of formal presentations – primarily of material submitted to the dosimetry workshop. In addition, there are blocks of time for discussion of broad topics, which will follow the more casual PTCOG format. In addition, a parallel session has been scheduled for the PTCOG clinical working group on Tuesday morning, the agenda for which is also attached.

Hotel Arrangements

A block of rooms has been held at the Inland Empire Hilton, 285 E. Hospitality Lane, San Bernadino, CA 92408 in the name of “PTCOG”. If you have not already done so, call them immediately at (714) 889-0133 to make reservations (rooms held until 6 pm only unless guaranteed using credit card). The deadline for making reservations is September 18th.

Travel Arrangements

If you are flying in, try to go to the Ontario Airport. The Hilton has limousine service to this airport. If you do not see their van, call 8890-0133 for a pick up. Transportation will be provided each day between the hotel and the meeting. Plan not to drive your car to the Loma Linda Medical Center as parking there is harder than building a proton accelerator.

Financial Arrangements

Registration will be held Monday morning at the Randall Visitors Center. There will be a \$50 registration fee which will defray the costs of lunch each day, coffee breaks, and a banquet on Tuesday night. In addition, copies of the facilities group report will be available, and the registration fee will be \$75 (i.e. \$25 additional) for members who want a copy of it (which, we assume, means all of you). Payment should be made at the meeting and may be by

cheque (personal or otherwise), cash, travelers cheque or any other form of legal tender. Of course, the registration fee does not cover all expenses, and we are grateful to Dr. Slater and the Loma Linda Medical Center for their support of the meeting.

Establishing your intentions

It would greatly help our planning if those of you who will be attending any part of the meeting would either fill in the following form and sent it as soon as possible to Ms. Dianne Ross, Radiation Oncology, LLUMC, 11234 Anderson St, Loma Linda, CA 92354 – or call Ms. Ross at (714) 824-4578 and give her the equivalent information.

PRELIMINARY PROGRAM

**SECOND INTERNATIONAL CHARGED PARTICLE THERAPY WORKSHOP
AND MEETING OF THE
PROTON THERAPY CO-OPERATIVE GROUP**

October 12, 13, 14
Loma Linda University Medical Center
Loma Linda, California

Alfred R. Smith, Ph. D.
Director, Medical Physics
Department of Radiation Therapy
Hospital of the University of Pennsylvania
3400 Spruce Street
Philadelphia, PA 19104

PROGRAM

OCTOBER 12, MONDAY

7:30 – 8:15 am	Registration – Randall Visitors Center
8:15 – 8:30 am	<u>Opening Remarks</u> Jim Slater John Lyman Mike Goitein
	<u>Plenary Session</u> Al Smith, Moderator
8:30 – 9:00 am	“Heavy Charged Particle Therapy: An Overview” M.R. Raju – Los Alamos National Laboratory
9:00 – 9:30 am	“Fast Neutron Radiation Therapy: Implications for Heavy Charged Particle Treatment” Tom Griffin – University of Washington Hospital
9:30 – 10:00 am	“Antiprotons as Simulators of Charged Particle Therapy” T.E. Kalogeropoulos – Syracuse University
10:00 – 10:15 am	Coffee Break
	<u>Treatment Planning Session</u> Mike Goitein, Moderator
10:15 – 10:30 am	“Experience with 3-D Conformation Therapy with Pions and Intercomparison with other Techniques” Blattmann, Greiner, Karasawa, Coray – Swiss Institute for Nuclear Research
10:30 – 10:45 am	“A Precision Correlation Technique for Multi-Modality Imaging Studies of the Brain” Chen, Pelizzari, Spelbring, Halpern, Awan, Weischelbaum – Michael Reese/University of Chicago
10:45 – 11:00 am	“Treatment Plan Optimization: Determination of Beam Weights” Lyman – Lawrence Berkeley Laboratory
11:00 – 11:15 am	“Treatment Planning Program Requirements for Clinical Implementation of the Raster Scanner Beam Delivery System” Henderson, Lyman, Collier, Petti, Renner, Chu, Blakely, Curtis, Rodrigues – Lawrence Berkeley Laboratory
11:15 – 11:30 am	“Treatment Planning of Juxtaspinal Tumors with Helium Ions” Collier, Henderson, Petti, Pitluck, Kessler, Castro – Lawrence Berkeley Laboratory
11:30 – 11:45 am	“Patient Immobilization for Particle Therapy: Historical Perspective” Zink – National Cancer Institute
11:45 – 12:00 noon	Discussion
12:00 – 1:30 am	Lunch

Clinical Reports

Jim Slater, Moderator

- 1:30 – 1:50 pm “Proton Therapy in Moscow Medical Centers”
Minakova – Burdenko Neurosurgical Institute Academy of Medical Science of the USSR
- 1:50 – 2:10 pm “Results in Pion Dose Escalation Studies at TRIUMF”
Goodman – Cancer Control Agency of British Columbia
- 2:10 – 2:30 pm “Clinical Results of Helium and Heavy Ion Therapy”
Castro – University of California Lawrence Berkeley Laboratory
- 2:30 – 2:50 pm “Development of Adjuvant Treatment in Support of Proton Therapy”
Larsson – Uppsala University, Sweden
- 2:50 – 3:10 pm “Experience with Proton Therapy at MGH/Harvard”
Mary Austin-Seymour – Massachusetts General Hospital
- 3:10 – 3:30 pm “Clinical Status of SIN Pion Project”
Greiner – Swiss Institute for Nuclear Research
- 3:30 – 3:50 pm “Pion Dose Response Intercomparisons: :LAMPF, SIN, TRIUMF”
Carl von Essen – Southwood Community Hospital, Norfolk, Massachusetts
- 3:50 – 4:05 pm Coffee Break

Facility Progress Reports

Dan Miller, Moderator

- 4:05 – 5:00 pm Progress on Loma Linda Machine
Progress on University of Michigan Machine
Progress on other Machines

OCTOBER 13, TUESDAY

- 8:00 – 12:00 noon PTCOG Clinical Working Group (meet in Shuman Pavilion)
Comparative Planning Studies
Protocol Design

Beam Defining Systems

Bill Chu, Moderator

- 8:00 – 8:20 am “Physical and Biological Characterization of the Heavy Charged-Particle Beams
Delivered by the Wobbler System”
Renner, Blakely, Chu, Rodriguez – Lawrence Berkeley Laboratory
- 8:20 – 8:40 am “Use of the Uppsala Synchrocyclotron in Radiotherapy and Radiosurgery”
Larsson – Uppsala University
- 8:40 – 9:00 am “Proton Radiotherapy Nozzle”
Gottschalk – Harvard Cyclotron Laboratory
- 9:00 – 9:20 am “Effects of Beam Scanner and Accelerator Pulse Structure on Proton Treatment Times”
Dan Miller – Loma Linda University

9:20 – 9:40 am Discussion

9:40 – 10:00 am Coffee Break

10:00 – 12:00 noon Treatment Control and Safety Systems
Bill Chu, Lawrence Berkeley Laboratory and others

12:00 – 1:00 pm Lunch

1:00 – 2:00 pm PTCOG Business Meeting

2:00 – 3:00 pm Commissioning the Loma Linda Accelerator

3:00 – 3:30 pm Coffee Break

3:30 – 4:00 pm Loma Linda Proton Medical Facility Assembly Plans

4:00 – 5:00 pm PTCOG Accelerator Working Group
(Shuman Pavilion – Room #605)
PTCOG Facility Working Group
(Shuman Pavilion – Board Room)

7:00 – 7:30 pm Social Hour – No Host Bar – Hilton Hotel

7:30 Dinner – Hilton Hotel

OCTOBER 24, WEDNESDAY

Basic Physics

Peter Fessenden, Moderator

9:00 – 8:15 am “Toward a Better Understanding of the Penetration of Protons in Matter”
Bichsel – Seattle, Washington

9:15 – 9:30 am “Thick Target Proton Multiple Scattering Angles”
Koehler, Sisterson, Schneider* – Harvard Cyclotron Laboratory and *American Science
and Engineering

9:30 – 9:45 am “Studies of the Multiple Coulomb Scattering of Heavy Charged Particle Beams”
Schimmerling, Wong, Phillips, Ludewigt, Curtis, Tobias – Lawrence Berkeley
Laboratory

9:45 – 10:00 am Discussion

10:00 – 10:30 am Coffee Break

Beam Characterization

John Lyman, Moderator

10:30 – 11:00 am “AAPM Microdosimetry Intercomparison of Clinical Facilities using Heavy Charged
Particles”
Dicello, Lyman, Fessenden, Koehler, McDermott, McDonald, Verhey – Clarkson
University, Lawrence Berkeley Laboratory, Harvard University, Batelle Northwest
Laboratory, and Massachusetts General Hospital

10:45 – 11:00 am	“Autoradiographic Detection of Pion Star Distribution” Shirato, Kornelsen, Harrison, Lam* – Cancer Control Agency of British Columbia and *TRIUMF
11:00 – 11:15 am	“Proportional Counter Dosimetry and Microdosimetry in Negative Pion Beam” Menzel, Schuhmacher, Blattman – Universitat des Saarlandes
11:15 – 11:30 am	Discussion
11:30 – 1:00 pm	Lunch
	<u>Dosimetry</u> Sandra Zink, Moderator
1:00 – 1:15 pm	“Treatment Technique and Dosimetry for Dynamic Therapy with Pion at SIN” Coray, Blattman, Pedroni – Swiss Institute for Nuclear Research
1:15 – 1:30 pm	“Determination of Dosimetric Parameters in Medical Beams from Dubna Phasatron” Zielczynski, Savchenko, Molokanov, Cherevatenko – Joint Institute for Nuclear Research
1:30 – 1:45 pm	“Physical and Technical Aspects of Proton Therapy at the ITEP Synchrotron” Lomanov – Swiss Institute for Nuclear Research
1:45 – 2:00 pm	“Absolute Dosimetry in a Clinical Proton Therapy Beam using Calorimetry, Ionization Chambers and a Faraday Cup” Verhey, Lyman, McDonald –Massachusetts General Hospital, Lawrence Berkeley Laboratory, Batelle-Northwest Laboratory
2:00 – 2:15 pm	Discussion
2:15 – 2:30 pm	Coffee Break
2:30 – 3:00 pm	“Commissioning the Loma Linda University Medical Center Proton Therapy Facility: Dosimetry Plans” Awschalom, DeLuca, Dicello, Robertson – Fermilab, University of Wisconsin, Clarkson University
3:00 – 4:00 pm	Discussion & Concluding Remarks
4:00 pm	Adjourn Meeting



Agenda for the Clinical Working Group's Session

Tuesday, October 13th, 1987

8:00 – 12:00 noon

Comparative Treatment Planning:

Lung Carcinoma
Nasopharyngeal carcinoma

Jerry Slater, LLUMC
Andrew Brown, MGH

Dose-Volume Effects and Normal Tissue Tolerance

Two perspectives

Lionel Cohen, Michael Reese MC
John Archambeau, LLUMC

Patterns of Failure

LLUMC group