

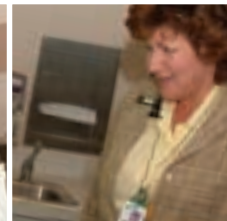
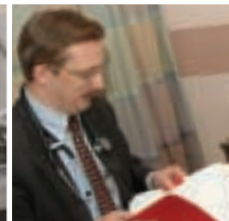
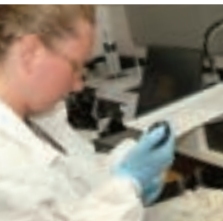
The Adult Blood and Marrow Stem Cell Transplant Program

THE CANCER CENTER AT
HACKENSACK UNIVERSITY MEDICAL CENTER

THE
CANCERCENTER
AT HACKENSACK UNIVERSITY MEDICAL CENTER



R E F E R R I N G P H Y S I C I A N G U I D E





Committed to a
partnership with you.

**THE ADULT BLOOD AND MARROW
STEM CELL TRANSPLANT PROGRAM**

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I N T R O D U C T I O N

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Enclosed we are pleased to provide the experience and outcomes of our Adult Blood and Marrow Stem Cell Transplant Program to assist you and your patients in need of our services. Over the past 15 years it has been our privilege to work with you in caring for your patients. We realize that the information contained below is crucial for you to have as you advise your patients regarding their need for a transplant and to recommend a transplant program. Our Blood and Marrow Stem Cell Transplant Program, staffed by recognized national authorities in the field, has grown in volume of transplants performed annually to be among the top six nationally and the largest in New Jersey. We have focused on service excellence, research, and quality resulting in numerous accreditations and awards. Over the years we have become recognized industry leaders internationally for introducing new programs and technology aimed to improve outcomes and the quality of the transplant patient experience. Our program staff, research efforts, and state-of-the-art-facilities have been constructed to offer you and your patients access to the best medical science has to offer and the highest quality patient care experience.

If we can provide you with additional information or help with a patient, please do not hesitate to contact us at 201-996-5849.

Overall Numbers

→ ADULT PROGRAM (PEDIATRICS PROGRAM)

Year(s)	Number of Transplants		Autologous ¹		Allogeneic (total) ¹		Sibling ^{1,2} Donors		Unrelated ^{1,2} Donors		Cord ² Blood	
1990-2000	1142	(161)	986	(61)	156	(100)	103	(56)	32	(18)	21	(26)
2001	170	(32)	96	(7)	74	(25)	38	(15)	24	(6)	12	(4)
2002	185	(21)	100	(5)	85	(16)	42	(7)	40	(7)	3	(2)
2003	217	(23)	152	(6)	65	(17)	35	(7)	27	(9)	3	(1)
2004	236	(26)	166	(7)	70	(19)	35	(8)	28	(9)	7	(2)
Total	1950	(263)	1500	(86)	450	(177)	253	(93)	151	(49)	46	(35)
Combined Program Total	2213		1586		627		346		200		81	

¹ Bone marrow and blood stem cells

² Matched and mismatched

2004 Adult Volumes

ADULT PROGRAM VOLUMES BY DISEASE TYPE

Donor Type	Myeloma/ Amyloid	Lymphoma (NHL/HD)	Leukemia	MDS/MPD Testicular	Totals
Autologous	107	52	5	2 ¹	166
Allogeneic	3	3	49	15	70
Total	110	55	54	17	236

¹ One each: myelofibrosis and testicular cancer

T R A N S P L A N T S T A F F

Five Foundation for Accreditation of Cell Transplantation (FACT)-accredited transplant physicians with 75 years of clinical and laboratory stem cell transplant experience and 50 transplant-dedicated professionals staff our adult program. The stem cell transplant physician group meets weekly with the entire transplant team to develop a treatment plan for all new patients and existing patients with stem cell transplant-related complications. Collectively, our physician group has been directly involved in the care of over 3,000 blood and marrow stem cell autologous and allogeneic transplant recipients.



Physicians



Scott Rowley, M.D., FACP

**Director, Adult Blood and Marrow
Stem Cell Transplant Program**

Twenty-one years of clinical and laboratory stem cell transplant experience. Previously director of clinical services for blood and blood components and associate member of the Fred Hutchinson Cancer Research Center, Seattle, WA. Former president of the International Society of Cellular Therapy (1997–1999). Board of Directors of the American Society for Blood and Marrow Transplantation (1995–1997, 2005). Editorial board: *Cytotherapy* and *American Society for Blood and Marrow Transplantation*. Inspector, Foundation for Accreditation of Cell Transplantation. Clinical associate professor of medicine, UMDNJ–New Jersey Medical School. **For referrals, please call 201-996-3872 or e-mail srowley@humed.com.**



Andrew Pecora, M.D., FACP

**Chairman and Director,
The Cancer Center at
Hackensack University Medical Center**

Twenty-one years of clinical and laboratory stem cell transplant experience. Previously founder and director of the Adult Blood and Marrow Stem Cell Transplant Program, Hackensack University Medical Center (1990–2000). Board of Directors of the International Society of Cellular Therapy (1993–1998). Board of Directors of the American Society for Blood and Marrow Transplantation (2001–2004). Member of the Joint National Heart, Lung and Blood Institute/National Cancer Institute State of the Science Committee: Transplantation Medicine. Editor of *American Society for Blood and Marrow Transplantation* e-news. Editorial Board of *Blood and Marrow Stem Cell Transplantation*. Professor of medicine, UMDNJ–New Jersey Medical School. **For referrals, please call 201-996-5814 or e-mail apecora@humed.com.**

Physicians (continued)



Stuart Goldberg, M.D.

Division Chief, Leukemia Service

Fourteen years of clinical and laboratory stem cell transplant experience. Previously assistant director of the Bone Marrow Transplant Program, Temple University Hospital, Philadelphia, PA. Board of Trustees of the Leukemia and Lymphoma Society (current). Clinical associate professor of medicine, UMDNJ-New Jersey Medical School. **For referrals, please call 201-996-5817 or e-mail sgoldberg@humed.com.**



David Siegel, M.D., Ph.D.

Division Chief, Myeloma Service

Fifteen years of clinical and laboratory stem cell transplant experience. Previously assistant professor of medicine, Myeloma and Transplant Research Center, University of Arkansas. ASCO Young Investigator Award (1992). **For referrals, please call 201-996-5890 or e-mail dsiegel@humed.com.**



Andre Goy, M.D.

Division Chief, Lymphoma Service

Sixteen years of clinical and laboratory stem cell transplant experience. Previously assistant professor of medicine, Department of Lymphoma/Myeloma, MD Anderson Cancer Center. Journal reviewer for Blood, Cancer, American Journal of Hematology, Leukemia and Lymphoma, and Clinical Lymphoma. **For referrals, please call 201-336-8957 or e-mail agoy@humed.com.**



Jack Hsu, M.D.

Member, Transplant Service

Four years of clinical and laboratory stem cell transplant experience. Previously fellowship training in bone marrow transplantation, Sidney Kimmel Cancer Center at Johns Hopkins Hospital, Baltimore, MD. **For referrals, please call 201-996-3060 or e-mail jhsu@humed.com.**

Nursing

Sixteen advanced practice nurses, research nurses, case managers, and leukapheresis specialists are fully dedicated to the outpatient portion of our transplant program. Many of our nurses have over 10 years of transplant and leukapheresis experience.

Support Services

Thirty-four transplant-dedicated support staff members complement our outpatient transplant team. Transplant-dedicated professionals include a pharmacist, geneticist, social workers, dietitians, and clerical support staff.

Research

Robert Korngold, Ph.D., division chief of research for The Cancer Center at Hackensack University Medical Center, leads our transplant program's basic science initiative. Dr. Korngold, an internationally recognized expert in transplant immunology, and his associate Thea Friedman, Ph.D., have developed novel approaches in animal models to prevent graft-versus-host disease without affecting graft-versus-tumor effects. Our program is conducting translational research from phase I through III trials. Current active protocols include various trials to refine and improve the transplant process in patients with leukemia, lymphoma, multiple myeloma, and myelodysplastic syndromes.

FACILITIES



Hackensack University Medical Center is a major university-based teaching and research center with 683 beds, 7,100 employees, and nearly 1,400 physicians on staff. It is one of New Jersey's largest healthcare institutions and is affiliated with the UMDNJ–New Jersey Medical School. The medical center's Cancer Center is the largest, most comprehensive center in the state.

The Benito and Carmen Lopez Stem Cell Transplantation Center, located on the eighth floor of the Hackensack University Medical Plaza, contains 19 private bedrooms, two of which are isolation rooms. All patient rooms are large and allow for family care. Each room's amenities include a large 37-inch interactive plasma screen television for patient education and entertainment, a built-in desktop writing/work surface, a guest sleeper chair, storage cabinets, and a full height wardrobe for patient use. Each room has a handwash sink within the bedroom as well as its own exclusive toilet/shower room.

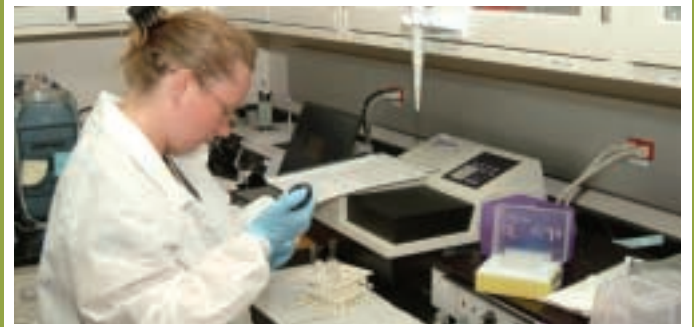
Because patients remain on the unit for many weeks, the physical environment of The Benito and Carmen Lopez Stem Cell Transplantation Center is designed for a high level of infection control and cleanliness – allowing for patient mobility throughout the unit. Some of the features that enhance and contribute to the unit's physical environment include HEPA filtration for the entire unit, multiple air changes as prescribed by code, air pressure monitoring, airtight-sealed partitions, sheet vinyl flooring, and sealed, washable ceilings.

The Cellular Therapy Laboratory has been engineered to meet with access, containment, and air quality specifications consistent with the current Good Manufacturing Practices (cGMP) typically observed in the pharmaceuticals industry. These specifications meet the highest standards of air quality, directional flow, and cleanliness required for the performance of a range of clinical laboratory activities, including standard cell processing through the most sophisticated cellular manipulations.

Off-Site Housing. The outpatient program enables patients to step out of the hospital environment and away from potential infections while they undergo their outpatient therapy. Patients and their caregivers live in specially designed apartments located in Hackensack near the medical center. Each day they go to the outpatient center for monitoring, infusion services, and supportive care. Each evening they return to the apartments to spend the night. Registered nurses and transplant physicians are on call should patients need to consult with them while they are living in the apartments.

CONTRIBUTIONS TO THE FIELD

The physicians and nurses of The Blood and Marrow Stem Cell Transplant Program actively contribute to the field of knowledge in blood and marrow stem cell transplantation. Collectively, members of our group have a publication record of 221 peer-reviewed articles, 41 book chapters, and over 300 abstracts, the majority of which have been accepted for presentation at professional meetings.



Our physicians participate on numerous prestigious national advisory boards/committees (National Cancer Institute, National Heart, Lung and Blood Institute, Food and Drug Administration, American Association of Blood Banks, American Society for Blood and Marrow Transplantation, ISCT, Myelodysplastic Syndromes Foundation, ASH, Bone Marrow Foundation, Blue Cross and Blue Shield Centers for Excellence and the Foundation for Accreditation of Cell Transplantation), helping to set regulatory policy, determine the state of the science and research direction for the field, reviewing and accrediting transplant programs, and advising insurance companies regarding reimbursement. In addition, members serve on several corporate scientific advisory boards and as reviewers and editors of journals in the field (*Blood*, *JCO*, *BBMT* and *Cytotherapy*).

In the past two years our group has participated in important studies that:

- **Defined the role of autologous and allogeneic transplant in lymphoblastic lymphoma** (*Blood* 2003; 101: 2476-2482)
- **Defined the role of autologous and allogeneic transplant in follicular lymphoma** (*Blood* 2003; 102: 3521-3529)
- **Defined the role of allogeneic transplant in patients who relapse after autologous stem cell transplantation for lymphoma** (*Blood* 2004; 104: 3797-3803)
- **Defined the causes of MDS post autologous transplant** (*Blood* 2003; 101: 2015-2023)
- **Reduce the risk of graft-versus-host disease in allogeneic transplant** (*BBMT* 2004; 10: 784-793)
- **Describe the treatment of chronic graft-versus-host disease with extracorporeal photochemotherapy** (*BBMT* 2003; 31; 291-294)
- **Defined infection vaccination policy post transplant** (*Oncology* 2003 17: 539-559)
- **Defined the role of bortezomib in relapsed, refractory myeloma** (*New England Journal of Medicine* 2003; 348; 2609-2617)

OUTCOMES

1990-2003 Survival Outcomes (%)

Disease Type	AUTOLOGOUS		ALLOGENEIC			
	100 Day ¹	3 Year ²	Sibling		Unrelated	
			100 Day ¹	3 Year ²	100 Day ¹	3 Year ²
AML						
In remission	94	27	86	67	58	26
Relapse	–	–	50	14	50	25
CML						
Chronic phase	–	–	91	81	63	42
Accelerated/blast	–	–	40	20	59	33
ALL						
In remission	–	–	88	53	70	35
Relapse	–	–	67	0 ³	36	18
CLL	–	–	100	71	67	42
MDS/MPD	–	–	79	39	46	25

Aplastic Anemia	–	–	75	75		
NHL						
In remission	96	69	–	–	–	–
Relapse	85	49	71	34	36	23
Hodgkin's						
In remission	100	60	–	–	–	
Relapse	92	71	100	67	67	67 ⁴
Myeloma						
In remission	100	81	–	–	–	–
Relapse	96	61	–	–	–	–
Testicular	100	38	–	–	–	–

¹ Actual

² Probability

³ N = 3

⁴ One year probability of survival

R E C O G N I T I O N S

FACT. The Adult Blood and Marrow Stem Cell Transplant Program is accredited by the Foundation for Accreditation of Cell Transplantation, which ensures that the program meets rigorous criteria for safety, efficacy, breadth of services, cleanliness, and professionalism. Accreditation by FACT is the highest achievement a stem cell transplantation program can garner and acknowledges that the program provides the highest quality services available.



Preferred contracts. The Adult Blood and Marrow Stem Cell Transplant Program is a national network provider for Cigna, Aetna, and URN. Network providers are chosen based on transplant volume and quality outcomes.

Centers of Excellence. Hackensack University Medical Center delivers comprehensive state-of-the-art care in centers of excellence. These include The Colon Cancer Prevention Center, The Prostate Cancer Institute of New Jersey, The Betty Torricelli Institute for Breast Care, and The Institute for Radiosurgery. Regional and tertiary care services at Hackensack University Medical Center include The Adult Blood and Marrow Stem Cell Transplant Program, oncology, neonatology and maternal-child medicine, renal transplantation and dialysis, The Tomorrows Children's Institute for Cancer and Blood Disorders, comprehensive cardiac services including cardiac surgery, orthopedics, and a level II regional trauma center with helipad.

A Leader in Quality Care.

Number objective sources have named Hackensack University Medical Center as a national leader in quality care. Some of these include:

- **J.D. Power and Associates Distinguished Hospital Program for outstanding patient experience**
- **Quality New Jersey's Governor's Gold Award for Performance Excellence**
- **HealthGrades Distinguished Hospital Award for Clinical Excellence (three consecutive years)**
- **National Premier Patient Services Innovator Award for Overall Excellence**
- **Consumer Choice Award for "Bergen Passaic's Most Preferred Hospital for Overall Quality and Image (nine consecutive years)**

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