

Originally Processed With FOIA(s):

S

FOIA Number:

S

FOIA MARKER

This is not a textual record. This is used as an administrative marker by the George Bush Presidential Library Staff.

Record Group/Collection: Donated Historical Materials
Collection/Office of Origin: Frieden, Lex, Collection
Series: Related Materials
Subseries: Conferences

OA/ID Number: 52080
Folder ID Number: 52080-004

Folder Title:
NCMRR [National Center for Medical Rehabilitation Research] Oct 22-23 '92 - Bethesda

Stack:

Row:

Section:

Shelf:

Position:

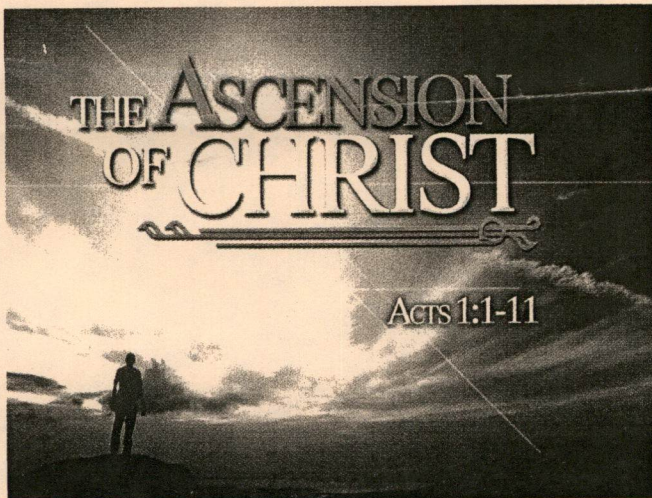
The First Word Newsletter

A publication of The First United Methodist Church
626 College Avenue, Alva, Oklahoma 73717 • 580/327-2571 • Parsonage: 327-1105
1stumc@sbcglobal.net; Pastor: terrmar2@yahoo.com; website: www.alvafumc.com

BIG NEWS

- A Mid-Week Reminder -

May 16, 2012



"Following Without Seeing"

"But you will receive power when the Holy Spirit has come upon you; and you will be my witnesses in Jerusalem, in all Judea and Samaria, and to the ends of the earth." When he had said this, as they were watching, he was lifted up, and a cloud took him out of their sight. Act. 1:8-9.

Each year, on the Sunday before Pentecost, we celebrate Ascension Sunday. As we look back to this scripture from Acts, Luke tells us of the last post-resurrection experience Jesus had with the disciples. After telling the disciples what they were to be about in his absence, Jesus ascends into the heavens right before their very eyes. Jesus was trying to prepare them for how to be disciples and ultimately how to be the church when he no longer walked in their midst. What a time of soul-searching and faith-inventory for the disciples. Can we really do this without him?

Essentially, we ask ourselves the same kinds of questions. How do we remain disciples of one we do not see? How do we follow someone that we can't see leading us? Are we just on our own to fend for ourselves? These are some of the questions we'll explore this Ascension Sunday as we conclude the sermon series, "Where do we go from the empty tomb?" Sunday's topic will be *Following Without Seeing*. I do hope you'll plan to be in church to join your family in worshipping our ever-loving God. It is good to gather together as God's people! And be sure to tell your kids, grandkids, neighbors and everyone else about Vacation Bible School beginning this Sunday evening. It's going to be great!!!

Please pray for peace.

Shalom,



JOIN THE FUN ON PROMISE ISLAND!

at First United Methodist Church of Alva
Sunday, May 20-Thursday, May 24
5:30 – 8:00 p.m.

for children age 4 through 5th grade

family meal served Monday through Thursday at 5:30 p.m.

ATTENDANCE SUNDAY, MAY 13, 2012

Worship Service 205; Sunday School 83

May Events at First Church—

Sunday, May 20 – Confirmation Class 9:30 am

Piano Recital by Alycen Yoder's students 1-4 pm

Vacation Bible School, "Adventures on Promise Island," 5:30-8 pm for all children age 4 through 5th grade

Monday through Thursday, May 21-24 – VBS with dinner 5:30 pm

Thursday, May 24 – Methodist Men have Service at Beadles 6:15 pm

Sunday, May 27 – Confirmation Sunday

Guest speaker John Eisenberg, missionary to Paraguay

Annual Conference, Tulsa's Boston Avenue UMC; ends Wednesday

*Amanda Lynn Lunderville and David Joseph Molby
together with their parents*

Bonnie & Todd Bothwell and Marvinna Rae

request the honor of your presence

as they exchange wedding vows

on Saturday, May 26th, 2012

at 2:00 p.m.

First United Methodist Church

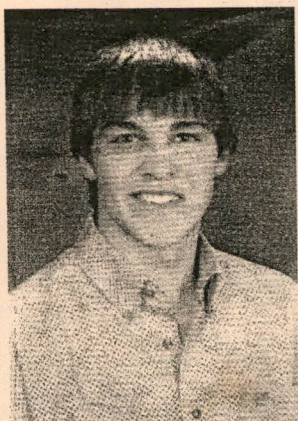
626 College Ave., Alva, OK 73717

Reception to follow

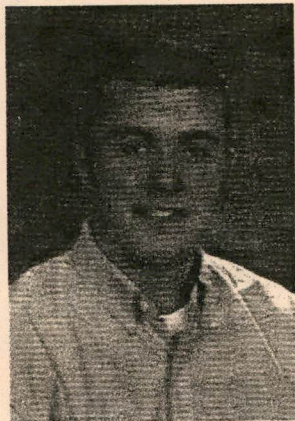


CONGRATULATIONS to our 2012 GRADUATES

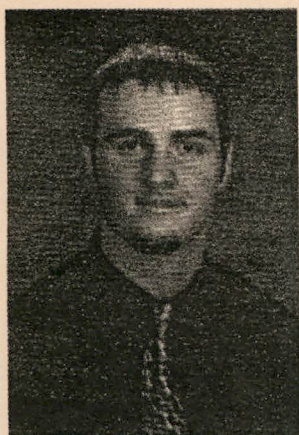
Alva High School, Saturday, May 19



Kolby Deitz



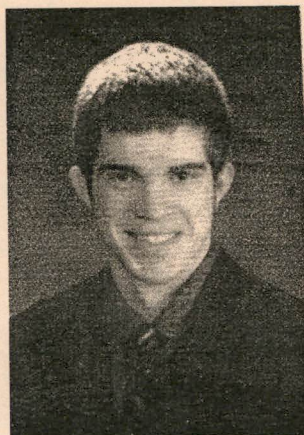
Colton Foote



Garrett Lahr



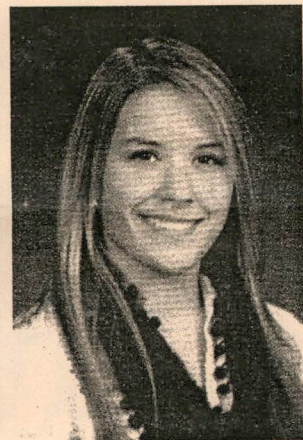
Blake Lehl



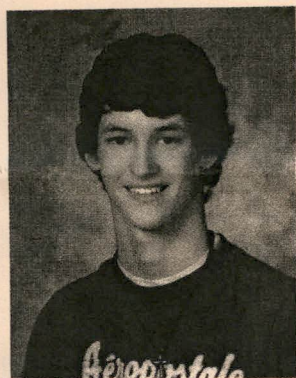
Dylan Manning



Brooke Nation



Rylie Swanson



**Ardmore High School,
Friday, May 25**
Marek Payton Stein
(Jim & Diana Stein's son)

Decatur, Arkansas High School, Friday, May 11
Malissa Corr (Paul & Deb Corr's granddaughter)

May Birthdays

- 17—Randy Hamilton, Drue Washburn
- 19—Jodi Ann Ackerman, Lisa Franz
- 20—Karin Brown, Margaret Keeney, Danielle Williams
- 21—Micah Reiman, Cory Washburn, Hannah Malzahn
- 22—Janice Beran, Ali Kelly, Caylie Gallon, Sheila Short
- 23—Nicole Towns, Adam Holder
- 24—Shawn Lehr, James Bowen, Gracie Reiman
- 25—Shawn Decker, Gary Murrow, Stephen Davis, Marcus Heald
- 26—Christofer Kramp, Parker Bricklyn Grimsley (2 years old!)
- 27—Audrey Presnall, Jacob Ellis, Brand Rackley, Tatum Cresswell,
Reece Ann McMurphy (1 year old!)
- 28—Bob Case, Linda Pfeider, Wayne Kinzie, Rita Wilcoxson, Bailey Gentry,
Loni Staats, Jodie Boyd, Ethan Swanson, Brickman Bradt, McCelvie Herrington
- 30—Whitney Bowen, Joe Brown, Ira Dale Campbell, Amy Ryerson
- 31—Kristi Borth, Chance TeLinde

THE FIRST UNITED METHODIST CHURCH

626 COLLEGE AVE, ALVA, OK 73717

www.alvafumc.com ~ youth: www.umyalva.weebly.com

Rev. Terry N Martindale, Pastor

Phone 580/327-2571; Parsonage 580/327-1105; Terry's cell: 405-919-5205

Church new e-mail: alvafirstumc@att.net; Pastor's e-mail: termmar2@yahoo.com

Bishop.....Robert E Hayes
 District Superintendent.....David Burris
 Director of Music.....Irene Messoloras
 Organist.....Alycen Yoder
 Pianist.....Joan Fisher

Editor/Secretary.....Judy Throckmorton
 Director of Youth.....Christi Vickers
 Nursery.....Paige Chandler, Darbi Hinde
 Custodian.....Lewis Wilt
 Sanctuary Custodian.....Kate Nickel

First United Methodist Church
 626 College Ave.
 Alva, OK 73717
 RETURN SERVICE REQUESTED

NON-PROFIT ORG.
 U.S. POSTAGE
PAID
 ALVA, OK
 PERMIT NO. 9



NOTES FROM FRED

Some 45 years ago, Lex Frieden, Jim Shepherd, Jim Highful, Alan Corr, all high school seniors, sang in our choir every Sunday. Those four, as well as others, would come to my house once in a while on Saturday night and play Tripoli, a card table game. While doing this through the winter months, we all agreed to go to Acapulco the next summer. Well, that fall, in November, Lex Frieden was in a car accident in a convertible. It turned on its side and Lex, as well as other OSU students, fell out. All got up except Lex. The back of his neck hit an overhead bar and smashed his number five vertebrae. He is the only one who got hurt, and he was totally paralyzed from his neck down. We all decided to go visit him at St. Anthony Hospital in Oklahoma City one cold January night. On the top floor of the hospital, we all played Tripoli, and we all agreed that we were still going to go to Acapulco—even Lex, flat on his back with his head hooked up to a weighted harness. On the way home we all agreed that no way would we go to Acapulco. Lex, not being an ordinary person, insisted, and we all did go to Acapulco.

The hardship of a paraplegic in a wheel chair was something else. I could write many stories of how we managed the trip. When we got back from Acapulco, the seed for the idea of all the ramps, wide doors to the public and hotel restrooms, elevators like our church has and they have at our University, was planted. The ideal originally came from Lex, and spread all over the United States and led to the Americans with Disabilities Act and all the changes in making the United States accessible to people with disabilities. Lex wound up getting things done at the White House with Presidents Ronald Regan and George Bush. Forty-five years ago, things all over the U.S. began to change for wheelchair people. At Tulsa University, students would lift Lex up and down all the stairs. One class that he was in was moved from the upper floors down to the ground level for Lex. He began to campaign for change, and spoke in the U.S. and internationally, all over the world. One summer he was sent to Communist China to consult with one of their highest officials regarding the man's son who had broken his neck diving into a swimming pool. In 1967, Jim Holder, Jim Highfill, Bob Reneau, Alan Corr, Bobby Wilson, and I were invited and flew to Washington, D.C. for a big-time dinner party in the Library of Congress for Lex Frieden. He received an award and a check for \$50,000. In his acceptance speech, Lex honored us from Oklahoma, and mentioned how we influenced his life.

I visited him where he now lives in Houston. In his office I saw that all the walls are covered with plaques and awards, and glass showcases are full of really nice engraved honors and dates on crystal for his ADA work. Lex has taught and still works and teaches in the medical field at the University of Houston.

What got me started on all this is that he recently called to tell me about a story that Fox Television in Houston ran about his life. The film starts with Lex as an Eagle Scout, Valedictorian, and many years later AHS Commencement speaker. The video can be seen on the internet. Judy showed it to me on our church computer, and I'm trying to get a DVD copy. If you want to see it, call Judy and she will forward the link to you. I could write a couple more pages of my times with Lex Frieden. Again, it all started right here in our church!

COLLEGE GRADUATES

Northwestern Oklahoma State University, Saturday, May 5

Summa Cum Laude: Wade Schwerdtfeger, BS Biology

Magna Cum Laude: Joseph Martin, BS Biology

Kyle Murrow, Bachelor of Science Agriculture

Lexie Cooper, BS (Charles & Lola Heaton's granddaughter)

Karmen Almgren Andrews, Bachelor of Social Work

Marcus Mead, Master of Education

Kaylyn Hansen, Master of Education

University of Central Oklahoma, Saturday, May 5

Allison Paige Rathgeber, Bachelor of Arts Public Relations

Oklahoma City University, Saturday, May 5

Andrew Holder, BA Mass Communications, Public Relations & Broadcasting

Oklahoma State University, Saturday, May 5

Matthew Sutter, BS Business Administration & Finance

Blair Sutter, BS Political Science (accepted to OU Law School)

University of Oklahoma

Tom Bishop, BS Aviation (Karen & Byron Koehn's nephew)

University of Tulsa

Elliott Ridgway, BS Computer Science (Alycen Yoder's grandson)

Truman State University

Tanner McMillin, BS Justice Systems (Alycen Yoder's grandson)

Hayes College

Miriam Watts, Bachelor of Science (Rose Elmore's granddaughter)

Baker University

Sarah Watts, Master of Education Admin. (Rose Elmore's granddaughter)

In Our Prayers...*CHILDREN'S HOSP., OKC:* Skyler Molby (had surgery Wednesday). *LITTLE ROCK:* Betty Jo Pangburn. *BASS HOSPITAL ICU, ENID:* Margaret Keeney (had by-pass surgery Tuesday). *McBRIDE, OKC:* Don Waters. *CALUMET:* C.J. Hansen. *JUPITER, FL:* David Perfect. *PORT ST. LUCIE, FL:* Carmen Pittinaro. *PORTLAND:* Ray Paris. *ARLINGTON, KS:* Ron Borth. *HOUSTON:* Darrell McKenzie. *PITTSBURGH:* Betty Cooley, Kathryn Miller, Betty McSurdy, Jean Angotti. *DAYTON:* John & Sis Cooley, Cindy Cooley. *EDMOND:* Margery Shorter. *THE COMMONS:* Hazel White. *BEADLES HOME:* Joretta Buckles, Lynn Hoskins. *SHARE HOME:* Joan Fisher, Dorothy Meisenheimer, Bud Nichols, Edith Tate, Heather Kline, Mary Williams, Letha Hull. *HOMESTEAD:* Virginia Hubbard, Doris Blue, Clara Tiberghin. *HOME/CONTINUING CONCERN:* Bradley Gilbert, Max Benningfield, Barbara Rockenbach, Frances Kirkham, Mildred Johnson, Keri Kalka, Ruby Nelson. *AFGHANISTAN:* Steve Ford. *IRAQ:* Wes Layton.

We Sympathize with Melissa & Trent Heaton and family in the death of Melissa's brother, Mark Rennie, of Ponca City. He died Saturday, May 12, as the result of a tragic fall; funeral is Saturday, May 19, 3 p.m., at Odd Fellows Cemetery, Ponca City.

Altar Flowers Sunday are a memorial to Lyle Washburn by Carol Lee Washburn and family.

Sunday's Radio Broadcast is sponsored by Lee & Peggy Mackey. Our morning service airs Sundays at 9:45 a.m., on KALV.

Sunday's Liturgist, Children's Time, Ushers: United Methodist Youth

Sept. 9, 2011

Mr. Frieden,

In April I called you in regard for my son making his first trip in the 8 years--after he was paralyzed. This is to thank you for phoning me back, after you got my message. Especially helpful was Roxanne's (your secretary) (within a few days) phoning my daughter-in-law, Melodie in CA.

The family made it to our Grandson's Basic

training graduation at
San Antonio. Then they
came here to Kingwood
(Westminster Home) to be
with us.

I can't tell you what
an important time it was
for our family.

Please know that
we are grateful for your
help & encouragement.

Lois & Jim Miller

P.S. You may know of
someone who needs a place
such as our Westminster
Home - "uniquely independent
living with assisted living
available" - a wonderful place.

ASBURY
408 SOUTH VAN PELT STREET
PHILADELPHIA, PENNSYLVANIA 19146

Dear Lex —

Good Grief — 2 more professorships in addition
to all you continue to do rationally — Hope all
is going well, and Congratulations on these
latest appointments. with continued best wishes
Lambert



National Institutes of Health
Bethesda, Maryland 20892
Room 450W, EPS
NCMRR, NICHD
6120 Executive Blvd.
Rockville, Maryland 20852
(301) 402-2242
FAX (301) 496-8678

May 28, 1992

Mr. Lex Frieden
Senior Vice President
TIRR (The Institute for Rehabilitation Research)
1333 Moursund
Houston, Texas 77030

Dear Lex:

Thank you for the time and effort you devoted to all the activities that took place in year one of the National Advisory Board on Medical Rehabilitation Research. The enclosed *Report and Plan for Medical Rehabilitation Research* reflects your leadership. You have a talent for bringing together people with disparate points of view. Everyone has the right to feel that they contributed to this document. This unity is directly attributable to your leadership. The presentation that you and Dr. Cole made to the Advisory Board made a very positive impression on those who have responsibility for funding grant applications. The field hearings were beneficial to the better understanding of the need for medical rehabilitation research. The Texas field hearing was especially well organized and the testimony was cogent.

I look forward to working with you in developing new directions for the Board.

Sincerely,

David B. Gray, Ph.D.
Acting Deputy Director

Enclosure

THE NATIONAL CENTER FOR MEDICAL REHABILITATION RESEARCH ADVISORY BOARD

Advisory Board Members

✓ Peter W. Axelson, M.S., M.E.
Executive Director of Research
and Development
Beneficial Design Inc.
✓ 5858 Empire Grade
Santa Cruz, California 95060
(408) 429-8447
(408) 423-8450 FAX

✓ Carolyn M. Baum, M.A., O.T.R.,
F.A.O.T.A.
Elias Michael Director and Assistant Professor
in Occupational Therapy and Neurology
✓ Washington University School of Medicine
Program in Occupational Therapy
4567 Scott Avenue - Internal Box 8066
St. Louis, Missouri 63110
(314) 362-6911
(314) 362-0182 FAX

✓ Carol Bennett, M.D.
Chief of Urology
Rancho Los Amigos Medical Center
7601 East Imperial Highway HB 132
Downey, California 90242
(310) 940-7437
(310) 940-7576 FAX

✓ Henry Betts, M.D.
Medical Director and Chief Executive Officer
Rehabilitation Institute of Chicago
✓ Room 1573
345 East Superior Street
Chicago, Illinois 60611
(312) 908-6017
(312) 908-4300 FAX

✓ John H. Bowker, M.D.
Professor
Department of Orthopaedics
and Rehabilitation
University of Miami
School of Medicine
P.O. Box 016960 (D-27)
Miami, Florida 33101
(305) 585-6371
(305) 324-7658 FAX

✓ Suzann K. Campbell, Ph.D., P.T.
Professor

✓ Department of Physical Therapy
College of Associated Health Professions
The University of Illinois at Chicago
1919 W. Taylor Street, M/C 898
Chicago, Illinois 60612
(312) 996-1502
(312) 996-3807 FAX

✓ Edmund Yee-Su Chao, Ph.D.
Director
Orthopedic Biomechanics Laboratory
✓ Mayo Clinic
200 First Street, S.W.
Rochester, Minnesota 55905
(507) 284-2588
(507) 284-5392 FAX

✓ Theodore Cole, M.D.
Professor
Department of Physical Medicine and
Rehabilitation
University of Michigan Hospitals
University of Michigan
1500 E. Medical Center Drive
Ann Arbor, Michigan 48109-0042
(313) 936-7190
(313) 936-6121 FAX

✓ Robert E. Cooke, M.D.
Professor Emeritus of Pediatrics
State University of New York
at Buffalo
✓ Director Emeritus
Robert Warner Rehabilitation Center
865 Painted Bunting Lane
Vero Beach, Florida 32963
(407) 234-1707

Lex Frieden
Senior Vice President
TIRR
Baylor College of Medicine
1333 Moursund
Houston, Texas 77030
(713) 797-5283
(713) 799-7095 FAX

✓ Dorothy L. Gordon, D.N.Sc., R.N., F.A.A.N
Associate Dean of Graduate Affairs
The Johns Hopkins University
School of Nursing
600 North Wolfe Street
Baltimore, MD 21205
(410) 955-7758
(410) 955-0466 FAX

✓ Carl Granger, M.D.
Professor of Rehabilitation Medicine
State University of New York
82 Farber Hallm, South Campus
Buffalo, NY 14214
(716) 829-2076
(716) 829-2080 FAX

✓ Judith Heumann M.P.H.
Vice President
National and International Affairs
World Institute on Disability
510 16th Street - Suite 100
Oakland, California 94612
(510) 763-4100
(510) 763-4109 FAX

✓ Rebecca Ogle
Adult Program Coordinator
Spina Bifida Association of America
4590 MacArthur Boulevard, N.W.
Suite 250
Washington, D.C. 20007
(202) 944-3285
(202) 944-3295 FAX

✓ Herbert Schaumburg, M.D.
Chairman of Neurology
Albert Einstein College of Medicine
1300 Morris Park Avenue
Bronx, New York 10461
(212) 430-3166
(212) 931-2476 FAX

✓ Peter W. Thomas, Esq.
General Council
White, Verville, Fulton and Saner
Suite 1100
1156 15th Street, N.W.
Washington, D.C. 20005
(202) 659-2900
(202) 659-2909 FAX

✓ Roberta B. Trieschmann, Ph.D.
Consulting Psychologist
President RBT Association, Inc.
P.O. Box 5566
Scottsdale, Arizona 85261
(602) 998-5844
(602) 998-5840 FAX

✓ George A. Zitnay, Ph.D.
President/CEO
National Head Injury Foundation, Inc.
1776 Massachusetts Avenue, N.W.
Suite 100
Washington, D.C. 20036
(202) 296-8850
(202) 296-8850 FAX

Ex-Officio Members

✓ Duane Alexander, M.D.
Director
National Institute of Child Health
and Human Development
National Institutes of Health
Room2A04, Building 31
9000 Rockville Pike
Bethesda, Maryland 20892
(301) 496-3454
(301) 402-1104 FAX

Praxedes Belandres, M.D.
Physical Medicine Department
Walter Reed Army Medical Center
Department of Defense
6900 Georgia Avenue
Washington, D.C. 20307
(202) 576-1368
(202) 576-2478 FAX

Larry Burt
Manager
Disability Prevention Program
Center for Disease Control
4770 Buford Highway
F29
Atlanta, Georgia 30341
(404) 488-7080
(404) 488-7075 FAX

Nell Carney
Commissioner
Rehabilitation Services
Administration
Office of Special Education and
Rehabilitative Services
U.S. Department of Education
Room 3028, M.E. Switzer Building
330 "C" Street
Washington, D.C. 20202
(202) 732-1331
(202) 732-1372 FAX

James Cooper, M.D.
Director
Cardiovascular Section
National Institute on Aging
Gateway Building, Room 3E327
Bethesda, MD 20892
(301) 496-6761
(301) 402-1784 FAX

Judith A. Cooper, Ph.D.
National Institute on Deafness and
Other Communication Disorders
National Institute of Health
EPS, 400B
6120 Executive Boulevard
Rockville, MD 20892
(301) 496-5061
(301) 402-6251 FAX

Timothy R. Dillingham, M.D.
Director of Research for Physical Medicine
Walter Reed Army Medical Center
6900 Georgia Avenue, N.W.
Washington, D.C. 20307
(202) 576-1368
(202) 576-2478 FAX

Leslie Ford, M.D.
Chief
Community Oncology
and Rehabilitation Branch
National Cancer Institute
EPN, Room 300 D
Rockville, MD 20852
(301) 496-8541
(301) 496-8667 FAX

Peter Frommer, M.D.
Deputy Director
National Heart, Lung and Blood
Institute
National Institutes of Health
Building 31, 5A49
9000 Rockville Pike
Bethesda, MD 20892
(301) 496-1078
(301) 402-0299 FAX

John Goldschmidt, M.D.
Director
Rehabilitation R&D Services (117A)
Department of Veteran Affairs
810 Vermont Avenue N.W.
Washington, D.C. 20420
(202) 535-7278
(202) 535-7497 FAX

Murray Goldstein, D.O.M.P.H.
Director
National Institute of Neurological
Disorders and Stroke
Building 31A, Room 8A52
9000 Rockville Pike
National Institute of Health
Bethesda, MD 20892
(301) 496-9746
(301) 496-0296 FAX

Patricia A. Grady, Ph.D.
Assistant Director
National Institute of Neurological
Disorders and Stroke
National Institutes of Health
Bldg. 31, Room 8A52
Bethesda, Maryland 20892
(301) 496-3167
(301) 496-0296 FAX

William H. Graves, Ed.D.
Director
National Institute on Disability and
Rehabilitation Research
Office of Special Education and
Rehabilitative Services
U.S. Department of Education
400 Maryland Avenue, S.W.
Washington, D.C. 20202-2572
(202) 205-8134
(202) 205-8997 FAX

Ada Sue Hinshaw Ph.D. RN
Director
National Center for Nursing Research
National Institutes of Health
Room 5B03, Building 31
9000 Rockville Pike
Bethesda Maryland 20892
(301) 496-8230
(301) 480-4969 FAX

✓ Laura James, Ph.D. RN
Nurse Scientist Administrator
National Center for Nursing Research
National Institutes of Health
Room 754, Westwood Bldg.
5333 Westbard Avenue
Bethesda, MD 20816
(301) 402-3290
(301) 402-2402 FAX

Dov Jaron, Ph.D.
Director
Biological and Critical Systems Division
National Science Foundation
1800 "G" Street, N.W.
Room 1132
Washington, D.C. 20550
(202) 357-9545
(202) 357-9803 FAX

Katherine D. Seelman, Ph.D.
National Council on Disability
800 Independence Avenue, S.W.
Suite 814
Washington, D.C. 20591
(202) 267-3846
(202) 453-4240 FAX

Lawrence E. Shulman, M.D.
Director
National Insitute of Arthritis and
Musculoskeletal and Skin
Diseases
National Institute of Health
9000 Rockville Pike
Room 4C32, Bldg. 31
Bethesda, MD 20892
(301) 496-4353
(301) 480-6069 FAX

James B. Snow Jr., M.D.
Director
National Insitue on Deafness and
Other Communication Disorders
National Institute of Health
Bethesda, MD 20892
(301) 496-6595
(301) 402-1590 FAX

Pamela Starke-Reed, Ph.D.
Director
Physical Functioning and Performance Section
National Insitue on Aging
Gateway Building, Room 3E327
Bethesda, MD 20892
(301) 496-6761
(301) 402-1748 FAX

THE NATIONAL CENTER FOR MEDICAL REHABILITATION RESEARCH ADVISORY BOARD

Advisory Board Members

Peter W. Axelson, M.S., M.E.
Executive Director of Research
and Development
Beneficial Design Inc.
5858 Empire Grade
Santa Cruz, California 95060
(408) 429-8447
(408) 423-8450 FAX

Carolyn M. Baum, M.A., O.T.R.,
F.A.O.T.A.
Elias Michael Director and Assistant Professor
in Occupational Therapy and Neurology
Washington University School of Medicine
Program in Occupational Therapy
4567 Scott Avenue - Internal Box 8066
St. Louis, Missouri 63110
(314) 362-6911
(314) 362-9862 FAX

Carol Bennett, M.D.
Chief of Urology
Rancho Los Amigos Medical Center
7601 East Imperial Highway HB 132
Downey, California 90242
(213) 940-7437
(213) 843-6145 FAX

Henry Betts, M.D.
Medical Director and Chief Executive Officer
Rehabilitation Institute of Chicago
Room 1573
345 East Superior Street
Chicago, Illinois 60611
(312) 908-6017
(312) 908-4300 FAX

John H. Bowker, M.D.
Professor
Department of Orthopaedics
and Rehabilitation
University of Miami
School of Medicine
P.O. Box 016960 (D-27)
Miami, Florida 33101
(305) 585-6371
(305) 324-7658 FAX

Suzann K. Campbell, Ph.D., P.T.
Professor
Department of Physical Therapy
College of Associated Health Professions
The University of Illinois at Chicago
1919 W. Taylor Street, M/C 898
Chicago, Illinois 60612
(312) 996-1502
(312) 996-3807 FAX

Edmund Yee-Su Chao, Ph.D.
Director
Orthopedic Biomechanics Laboratory
Mayo Clinic
200 First Street, S.W.
Rochester, Minnesota 55905
(507) 284-2588
(507) 284-5392 FAX

Theodore Cole, M.D.
Professor
Department of Physical Medicine and
Rehabilitation
University of Michigan Hospitals
University of Michigan
1500 E. Medical Center Drive
Ann Arbor, Michigan 48109-0042
(513) 936-7190
(513) 936-6121 FAX

Robert E. Cooke, M.D.
Professor Emeritus of Pediatrics
State University of New York
at Buffalo
Director Emeritus
Robert Warner Rehabilitation Center
865 Painted Bunting Lane
Vero Beach, Florida 32963
(407) 234-1707

Lex Frieden
Senior Vice President
TIRR
Baylor College of Medicine
1333 Moursund
Houston, Texas 77030
(713) 797-5283
(713) 799-7095 FAX

Dorothy L. Gordon, D.N.Sc., R.N., F.A.A.N
Associate Dean of Graduate Affairs
The Johns Hopkins University
School of Nursing
600 North Wolfe Street
Baltimore, MD 21205
(410) 955-7758
(410) 955-0466 FAX

Carl Granger, M.D.
Professor of Rehabilitation Medicine
State University of New York
82 Farber Hallm, South Campus
Buffalo, NY 14214
(716) 831-2076
(716) 831-2080 FAX

Judith Heumann M.P.H.
Vice President
National and International Affairs
World Institute on Disability
510 16th Street - Suite 100
Oakland, California 94612
(510) 763-4100
(510) 763-4109 FAX

Rebecca Ogle
Adult Program Coordinator
Spina Bifida Association of America
4590 MacArthur Boulevard, N.W.
Suite 250
Washington, D.C. 20007
(202) 944-3285
(202) 994-3295 FAX

Herbert Schaumberg, M.D.
Chairman of Neurology
Albert Einstein College of Medicine
1300 Morris Park Avenue
Bronx, New York 10461
(212) 430-3166
(212) 931-2476 FAX

Peter W. Thomas, Esq.
General Council
White, Verville, Fulton and Saner
Suite 1100
1156 15th Street, N.W.
Washington, D.C. 20005
(202) 659-2900
(202) 659-2909 FAX

Roberta B. Trieschmann, Ph.D.
Consulting Psychologist
President RBT Association, Inc.
P.O. Box 5566
Scottsdale, Arizona 85261
(602) 998-5844
(602) 998-5840 FAX

George A. Zitnay, Ph.D.
President/CEO
National Head Injury Foundation, Inc.
1776 Massachusetts Avenue, N.W.
Suite 100
Washington, D.C. 20036
(202) 296-8850
(202) 296-8850 FAX

Ex-Officio Members

Duane Alexander, M.D.
Director
National Institute of Child Health
and Human Development
National Institutes of Health
Room 2A04, Building 31
9000 Rockville Pike
Bethesda, Maryland 20892
(301) 496-3454
(301) 402-1104 FAX

Praxedes Belandres, M.D.
Physical Medicine Department
Walter Reed Army Medical Center
Department of Defense
6900 Georgia Avenue
Washington, D.C. 20307
(202) 576-1368
(202) 576-2478 FAX

Larry Burt
Manager
Disability Prevention Program
Center for Disease Control
4770 Buford Highway
F29
Atlanta, Georgia 30341
(404) 488-7080
(404) 488-7075 FAX

Nell Carney
Commissioner
Rehabilitation Services
Administration
Office of Special Education and
Rehabilitative Services
U.S. Department of Education
Room 3028, M.E. Switzer Building
330 "C" Street
Washington, D.C. 20202
(202) 732-1331
(202) 732-1372 FAX

James Cooper, M.D.
Director
Cardiovascular Section
National Institute on Aging
Gateway Building, Room 3E327
Bethesda, MD 20892
(301) 496-6761
(301) 402-1784 FAX

Judith A. Cooper, Ph.D.
National Institute on Deafness and
Other Communication Disorders
National Institute of Health
EPS, 400B
6120 Executive Boulevard
Rockville, MD 20892
(301) 496-5061
(301) 402-6251 FAX

Timothy R. Dillingham, M.D.
Director of Research for Physical Medicine
Walter Reed Army Medical Center
6900 Georgia Avenue, N.W.
Washington, D.C. 20307
(202) 576-1368
(202) 576-2478 FAX

Leslie Ford, M.D.
Chief
Community Oncology
and Rehabilitation Branch
National Cancer Institute
EPN, Room 300 D
Rockville, MD 20852
(301) 496-8541
(301) 496-8667 FAX

Peter Frommer, M.D.
Deputy Director
National Heart, Lung and Blood
Institute
National Institutes of Health
Building 31, 5A49
9000 Rockville Pike
Bethesda, MD 20892
(301) 496-1078
(301) 402-0299 FAX

John Goldschmidt, M.D.
Director
Rehabilitation R&D Services (117A)
Department of Veteran Affairs
810 Vermont Avenue N.W.
Washington, D.C. 20420
(202) 535-7278
(202) 535-7497 FAX

Murray Goldstein, D.O.M.P.H.
Director
National Institute of Neurological
Disorders and Stroke
Building 31A, Room 8A52
9000 Rockville Pike
National Institute of Health
Bethesda, MD 20892
(301) 496-9746
(301) 496-0296 FAX

Patricia A. Grady, Ph.D.
Assistant Director
National Institute of Neurological
Disorders and Stroke
National Institutes of Health
Bldg. 31, Room 8A52
Bethesda, Maryland 20892
(301) 496-3167
(301) 496-0296 FAX

William H. Graves, Ed.D.
Director
National Institute on Disability and
Rehabilitation Research
Office of Special Education and
Rehabilitative Services
U.S. Department of Education
400 Maryland Avenue, S.W.
Washington, D.C. 20202-2572
(202) 205-8134
(202) 205-8997 FAX

Dov Jaron, Ph.D.
Director
Biological and Critical Systems Division
National Science Foundation
1800 "G" Street, N.W.
Room 1132
Washington, D.C. 20550
(202) 357-9545
(202) 357-9803 FAX

Katherine D. Seelman, Ph.D.
National Council on Disability
800 Independence Avenue, S.W.
Suite 814
Washington, D.C. 20591
(202) 267-3846
(202) 453-4240 FAX

Lawrence E. Shulman, M.D.
Director
National Institute of Arthritis and
Musculoskeletal and Skin
Diseases
National Institute of Health
9000 Rockville Pike
Room 4C32, Bldg. 31
Bethesda, MD 20892
(301) 496-4353
(301) 480-6069 FAX

James B. Snow Jr., M.D.
Director
National Institute on Deafness and
Other Communication Disorders
National Institute of Health
Bethesda, MD 20892
(301) 496-6595
(301) 402-1590 FAX

Pamela Starke-Reed, Ph.D.
Director
Physical Functioning and Performance Section
National Institute on Aging
Gateway Building, Room 3E327
Bethesda, MD 20892
(301) 496-6761
(301) 402-1748 FAX

Butler Heads AAMC Committee

Baylor President Dr. William T. Butler was appointed by the Association of American Medical Colleges to chair its advisory committee for Project 3000 x 2000.

The goal of this AAMC project is to increase to 3,000 the number of underrepresented minority medical students by the year 2000.

Frieden Chairing Advisory Board

Lex Frieden was elected chairman of the National Center for Medical Rehabilitation Research Advisory Board this year. Frieden, Baylor assistant professor, Physical Medicine & Rehabilitation, is senior vice-president at The Institute for Rehabilitation and Research (TIIR).

The National Center for Medical Rehabilitation Research, located at the National Institute of Child Health and Human Development, was mandated by congressional legislation in 1990. Its purpose is to conduct and support studies in medical rehabilitation, to support research training programs, and to further research on prosthetic devices and other assistive technology.



BAYLOR MEDICINE

NOVEMBER 1991

BAYLOR COLLEGE OF MEDICINE • ONE BAYLOR PLAZA, HOUSTON, TEXAS 77030 • VOL. XXII, NO. 10

AIDS Research Center Organized

Basic science and clinical researchers will join forces against 'this catastrophic disease,' Shearer says.

With nearly \$10 million in funding for both basic scientific studies and clinical testing of therapies for AIDS patients, Baylor has established a new AIDS Research Center.

"This is a tremendous opportunity for the researchers at Baylor to join forces and share their diverse knowledge about all aspects of the AIDS phenomenon," said Dr. William T. Shearer, professor, Pediatrics. "The center also welcomes input from AIDS-oriented groups within the community and other researchers within the Texas Medical Center. This effort is solid proof of Baylor's commitment to solving the mysteries of this catastrophic disease."

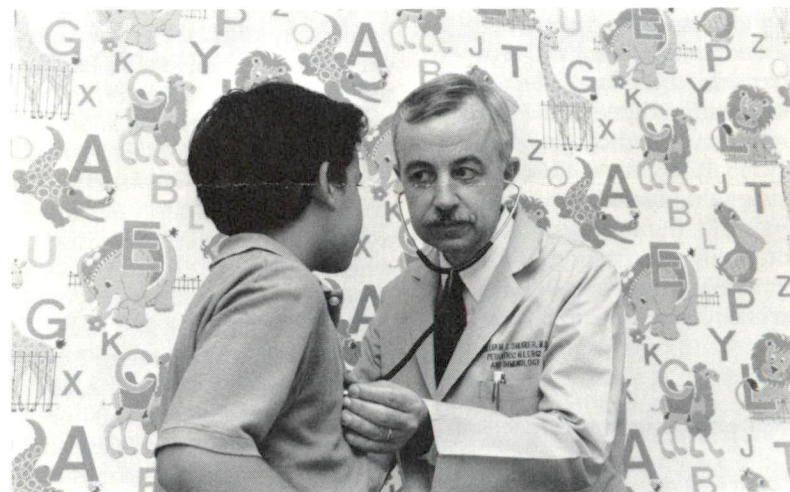
Funding for Baylor's AIDS research has increased to \$9.4 million for 1991 from \$20,000 in

an outpatient facility for HIV/AIDS patients.

As chief of the section of pediatric allergy and immunology at Baylor and of the allergy and immunology service at Texas Children's Hospital, Shearer oversees \$3 million in AIDS diagnostic and treatment programs this year for pediatric patients.

AIDS-related research at Baylor includes gene-therapy approaches to stop the growth of the human immunodeficiency virus in infected patients; studies at the molecular level of how the virus behaves; potential treat-

(Continued on page 4)



Shearer with a patient.

Photo by Lindsey Kingston Lampp

Jones Named to Brown Chair

The center's advisory board helps set research policy and goals. It also reviews federal research priorities, activities, and findings related to medical rehabilitation research.

Two Foundations Honor DeBakey

Dr. Michael E. DeBakey received the Lifetime Achievement Award from the Foundation for Biomedical Research at the organization's 10th anniversary gala. DeBakey is Baylor's chancellor and chairman of the Department of Surgery.

The award recognizes DeBakey's contributions to medicine and to the improvement of human health through years of medical research, education, and surgical practice.

These accomplishments also have brought DeBakey, along with corecipient Mary W. Lasker of the Albert and Mary Lasker Foundation, the Fourth Maxwell Finland Award from the National Foundation for Infectious Diseases. Previous recipients include Dr. C. Everett Koop, former Surgeon General of the United States, and Dr. Anthony S. Fauci, director of the National Institute of Allergy and Infectious Diseases, National Institutes of Health.

1982. The AIDS Research Center is administered by Shearer and codirector Dr. Janet S. Butel, professor and head, Molecular Virology.

A faculty advisory committee oversees the center's efforts in basic and clinical research and in community-outreach programs, such as the Thomas Street Clinic,

Chair is one of five endowed by The Brown Foundation at Baylor.

Dr. Dan B. Jones has been named to The Margaret Root Brown Chair of Ophthalmology by Baylor President Dr. William T. Butler.

Jones is the Sid W. Richardson professor and chairman, Oph-

thalmology.

"Dr. Jones is well-known for his expertise in the diagnosis and management of infectious diseases of the eye, particularly the treatment of bacterial and fungal infections of the cornea," Butler

said. "His accomplishments as a researcher, clinician, and department chairman merit the appointment to The Margaret Root Brown Chair of Ophthalmology."

Jones

Jones joined the Baylor faculty in 1972 as an associate professor. He previously held positions at the Vanderbilt University School of Medicine and the University of Miami School of Medicine.

Along with his colleagues at Baylor, Jones developed an animal model for studying endogenous candida endophthalmitis, a fungal infection of the inner structures of the eye, and other models of corneal infection. He currently is principal investigator of a national collaborative clinical

(Continued on page 4)

Baylor Prostate Center Created

Four departments will sponsor studies of the prostate gland, including cancer, abnormal enlargement, and other diseases.

The most common cancer in American men will be studied at a new multidisciplinary research center at Baylor College of Medicine.

The Baylor Prostate Center will promote clinical and basic research on the anatomy and physiology of the normal pros-

tate gland. Research also will focus on the understanding and treatment of diseases of the prostate gland, such as prostate cancer and benign prostatic hyperplasia (BPH), or abnormal enlargement of the prostate.

"Prostate disease is a much understudied field," said Dr. Pe-

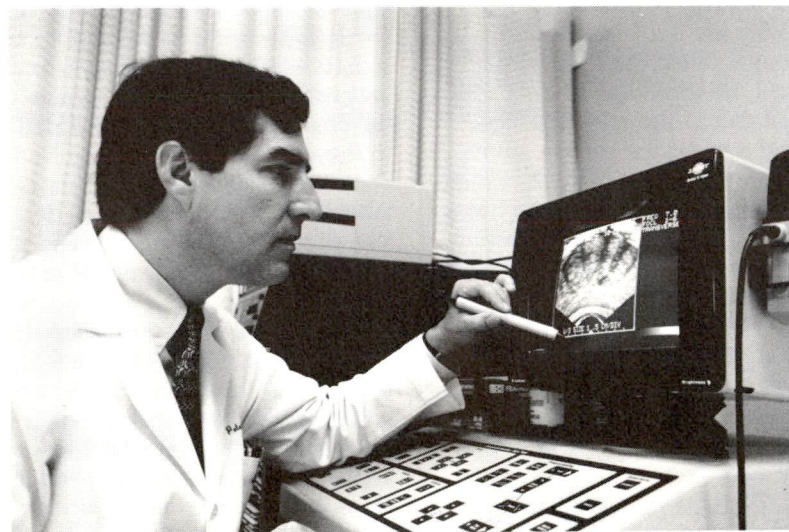
ter T. Scardino, professor and chairman, Urology, who will be director of the center.

"This new center will help Baylor meet the explosive demand by patients for access to new diagnostic tests and treatments," Scardino said. "It also will help the College compete for prostate-disease-related research grants, which have grown tremendously."

One such award is a Special Program of Research Excellence (SPORE) in Prostate Cancer, which Baylor will apply for in January. This National Cancer Institute grant for more than \$2 million a year requires institutional support of comprehensive state-of-the-art research in the biology, prevention, diagnosis, and treatment of prostate cancer through collaborations among basic and clinical scientists.

The departments of Urology, Pathology, Cell Biology, and Medicine jointly sponsor the Baylor Prostate Center.

(Continued on page 2)



Scardino reviews a prostate ultrasound.

Photo by Lindsey Kingston Lampp

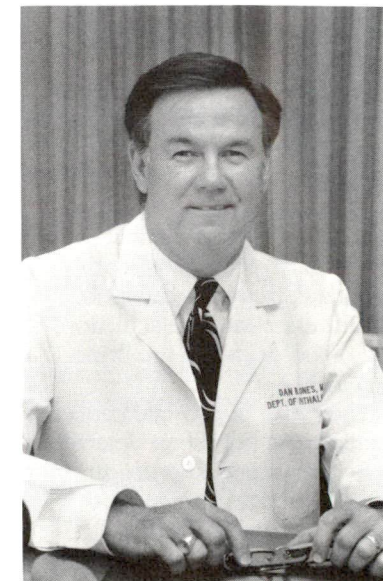


Photo by Bharat Parikh

Jones

an abnormally enlarged prostate. It sponsors educational programs for presentation of research results and helps develop special resources, such as tissue and blood samples for research. Another function of the center is the recruitment of residents and other investigators for the field of prostate research.

Members of the Scientific Advisory Committee to the Baylor Prostate Center are Dr. Michael W. Lieberman, professor and chairman, Pathology; Dr. Bert W. O'Malley, professor and chairman, Cell Biology; and Dr. Timothy C. Thompson, assistant professor, Urology and Cell Biology.

The Prostate Gland

Located below the bladder and above the rectum, the prostate gland is about the size of a walnut. As part of the male genitals and urinary system, the prostate gland produces semen and requires the male hormone testosterone for normal functioning.

Prostate cancer affects nearly 122,000 men and kills more than 32,000 annually, making it the second leading cause of cancer death among American men. Symptoms of prostate cancer may include the inability to urinate, frequent urination, painful urination or ejaculation, and blood or pus in the urine or semen.

The cause of prostate cancer is unknown, but when detected in its early stages, the cancer often is curable with surgery and/or medication. ■

By B.J. Almond

Algae Help Track Amino Acids in Body

Study could indicate best time to give infants essential proteins.

Algae may help a Baylor researcher at the Children's Nutrition Research Center (CNRC) determine if and when amino acids need to be added to an infant's diet.

Dr. Heiner Berthold, postdoctoral fellow, Pediatrics, believes this discovery may pinpoint which amino acids need to be supplied during periods of development and growth. He predicts that someday infant-formula makers could fine-tune their products to the precise needs of infants during the first few months of life.

Amino acids, the building blocks of proteins, are important for vital processes, such as fighting infection, controlling muscle function, renewing cells, and producing hair.

For his research, Berthold uses a special form of algae called Spirulina. To transform the Spirulina into a tracking device, he substitutes carbon dioxide for the plant's normal carbon content.

This enriched carbon, called ^{13}C , is heavier than a body's naturally occurring carbon and is easy to identify in the laboratory. Once the normal carbon atom takes on the ^{13}C content, it is considered a labeled food source.

Berthold compares the tracking process to attaching a micro-

scopic video camera to each amino acid and following its travels through the body.

Amino acids are classified as essential, nonessential, or conditionally essential. The essential type comes from the diet. Nonessential amino acids are naturally produced by the body. Conditionally essential amino acids are produced by the body under certain circumstances.

"It has not been easy to determine what these circumstances are, especially in children," Berthold said. "The traditional method of determining essentiality has been to eliminate an amino acid from the diet. Obviously, this method is not appropriate on infants."

To see if a labeled food source could track an amino acid, Berthold fed a hen a special diet of the enriched algae and tracked the carbon atoms.

He discovered that the amino acid proline, found in the hen's tissues, contained the heavy atoms, as did the whites of the hen's 23 eggs.

"That meant the proline came from the feed, and this implies that it is an essential amino acid instead of nonessential, as poultry experts have long believed," he said.

The two-year study gives researchers a base of information about amino-acid production,



Photo by Lindsey Kingston Lampp

Berthold prepares amino-acid samples for analysis.

and conditions where nonessential amino acids should be added to the diet.

Results also indicate that the labeled algae can be used to detect all the body's amino acids, as well as fatty acids, sugars, and vitamins.

Berthold considers Spirulina an ideal choice to label because it is edible, it can be grown in a controlled environment, it is rich in protein, and it has a well-balanced amino-acid makeup similar to milk protein, casein, and egg white.

"The advantage of this tech-

nique is that it is safe to use in humans, including premature infants, since the labeled atoms can be identified in waste products such as urine and breath," Berthold said.

But before scientists attempt to use the method on infants, Berthold will continue his work by examining adults who have received a dose of the labeled algae.

Berthold's findings were published in *Proceedings of the National Academy of Sciences*. ■

By Lynn Foltin

Harvard Professor Is Featured at First Lectureship

An internationally renowned pathologist inaugurated the first Dennis T. Woznicki Lectureship for Baylor's Department of Pathology.

Dr. Ramzi S. Cotran, a pathology professor at Harvard Medical School and the head of the Department of Pathology at Brigham and Women's Hospital, spoke on "Endothelial Activation: Its Role in Inflammation and Vascular Injury."

The lectureship, which will be held annually, pays tribute to the late Dr. Dennis T. Woznicki, a Baylor College of Medicine graduate and assistant professor of pathology who died in 1989. The lectureship was made possible by Lavonne Woznicki, the honoree's wife; her family and friends; and members of Baylor's Department of Pathology.

Prostate

(Continued from page 1)

The center provides core support facilities for design and analysis of research protocols, including a large data base of patients with prostate cancer or

AV Materials on Spinal-Cord Injury Noted

Data base at TIRR will provide free list of videos, films, and audiotapes on selected topics.

Videotapes about the special needs of persons with spinal-cord injury aren't as accessible as copies of *Home Alone* and *Dances with Wolves*, but researchers at Baylor College of Medicine and The Institute for Rehabilitation and Research (TIRR) have made it a lot easier for these persons to find out what's available—and where.

"Most people with spinal-cord injury and health professionals don't even know these materials exist," said Linda Herson, Baylor senior project coordinator, Physical Medicine & Rehabilitation. "The films and videos that have been made are available in so many locations around the country that it's been hard to know where to look."

Now persons with spinal-cord injury, their families, and health-care providers just have to look one place—TIRR, a Baylor Affiliated Teaching Hospital. The first national data base of audiovisual educational materials geared toward the subject of spinal-cord injury has been developed there.

If you want to know whether there are videos or audiotapes about sit-skiing, the dangers of pressure sores caused by sitting in a wheelchair for too long, or



Photo by Lindsey Kingston Lampp

Herson checks on a video listed in the data base.

spots, you can write or call the data base at TIRR. Within 48 hours, by telephone or mail Herson will provide you with a free list of materials available on the topic in which you're interested.

Each item on the list will include a brief description of the content, the address and phone number of the business or institution from which the material can be purchased or rented, the cost, the audience to whom the material is targeted, the length of the program, the date the material was produced, the availability

er practical details.

The data base compiled by Herson over the past year consists of approximately 175 films, videos, and audiotapes. Among the entries in the data base are materials produced at TIRR—including resources translated into Spanish. Topics range from sexuality and aging issues to vocational counseling and home modifications for wheelchair accessibility. Also available are tapes about safe driving and safe diving that are geared toward the prevention of spinal-cord injury.

in the United States have a spinal-cord injury, so there's a major need for instructional materials of this type, according to Dr. William H. Donovan, a Baylor professor of clinical physical medicine & rehabilitation, who serves as project codirector for the data base.

The idea for the data base was conceived by Dr. Karen A. Hart, Baylor assistant professor of physical medicine & rehabilitation, and TIRR vice-president for education. Pilot funding was obtained from the American Spinal Injury Association, along with support from TIRR and Baylor. During 1990-91, a grant from the Education and Training Foundation of Paralyzed Veterans of America supported further development of the data base. During 1991-92, the data base will be expanded to include written materials not available in libraries, such as pamphlets, booklets, and home-care manuals prepared for patients by hospitals.

To retrieve information from the data base, call Herson at 713-797-5945, or write to the Division of Education, The Institute for Rehabilitation and Research, 1333 Moursund, Houston, Tex., 77030. ■

Red-Cell Mystery Solved

Baylor investigators explain how astronauts' blood is affected in outer space.

Why do astronauts have fewer red blood cells when they return from a space flight?

Baylor researchers found the answer by analyzing blood samples taken from scientists aboard the *Columbia* during its June flight.

"Since the earliest space flights, astronauts have been modestly anemic when they return from even very short periods of weightlessness," said Dr. Clarence P. Alfrey, Baylor professor, Medicine. The late Dr. Philip

C. Johnson, who was a Baylor clinical professor, Medicine, was the first to observe this change years ago, Alfrey said.

Alfrey was the principal investigator who planned the blood studies for NASA's Spacelab Life Sciences 1 mission on the *Columbia* this year.

Four biological scientists were part of the astronaut crew on the *Columbia* flight. Before they left, the scientists received injections of red blood cells that had been labeled with a radioactive substance. By measuring the number of marked cells that remained in blood drawn at intervals during the spaceflight, researchers determined the rate at which red blood cells were destroyed. Radiolabeled iron injected in space indicated the rate at which the body was producing new cells.

During the flight, the scientists took daily blood samples from themselves. "Drawing blood samples in space was a problem for the scientists," Alfrey said, "because, in the absence of gravity, the veins are not naturally distended, or filled with blood." Tourniquets had to be applied to create enough blood pressure for an adequate blood withdrawal from veins in the arm.

aged by senior research assistant Theda B. Driscoll, compared all the blood samples.

A Lesson in Blood

About 45 percent of normal human blood consists of millions of cells—mostly red cells, which carry oxygen; the other 55 percent is plasma—the liquid portion of blood in which cells are suspended.

It takes four to five days for the body to make a red cell. Normal red cells survive about 120 days and then are constantly replaced by newly produced cells. More than two million red cells are destroyed each second, and the iron in them is reused in the bone marrow to make the same number of new cells. Only about one percent of the body's red cells is destroyed each day.

What Happened in Space?

Studies of the blood samples from the *Columbia* passengers revealed that the number of red cells began dropping within the first few days of flight. After about a week, the decrease leveled off; by this time, the scientists had 10 to 15 percent fewer red cells—the equivalent of one to two units of blood. The normal



Alfrey (left) with Driscoll.

Photo by Bharat Parikh

cells at the normal rate. The body also continued to make new red cells in the bone marrow—as evidenced by the disappearance of radiolabeled iron from the plasma. However, new red cells with the radiolabeled iron did not show up in the blood.

"The factory apparently continued to make new red cells, but it stopped releasing them into the blood," Alfrey said.

Sensors in the kidney maintain the body's blood volume by controlling the production of red cells. Gravity causes all veins that are below the level of the heart to be filled with blood. The lack of gravity in space causes the blood to move to the central part of the body from the peripheral

marrow has the capacity to close its gate and not let any new cars out until the volume on the outside lots is down," Alfrey said.

The body develops a new optimal blood volume for weightlessness, he explained. "This fine control of blood volume is something we've not seen before."

The National Aeronautics and Space Administration funded the research. Dr. Mark M. Udden, Baylor assistant professor, Medicine, was Alfrey's coinvestigator.

For future space flights, Alfrey will be studying ways to regulate the blood volume. When astronauts return to an atmosphere with gravity, their veins are suddenly filled with the two units of blood they lost during weightlessness, causing dizziness and impairing their mobility. This

Alfrey Honored

Dr. Clarence P. Alfrey and the other principal investigators for the Spacelab Life Sciences 1 mission have been chosen for the 1992 Jeffries Medical Research Award.

The American Institute of Aeronautics and Astronautics gives the award in recognition of outstanding contributions to space biology and medicine that have resulted in significant advancements in understanding basic physiologic mechanisms and the effects of weightlessness on human physiology.

The award is named after

the American physician who made the earliest recorded scientific observation from the air.

After the scientists returned to earth, more daily blood samples were taken.

Alfrey's lab, which is man-

level of red cells was restored to 10 to 14 days after the return to earth.

During the spaceflight, the body continued to destroy red

areas: when this happens, the sensors in the kidney perceive that there is too much blood and stop the release of new red cells.

"We've learned that the bone

could be a problem if a quick evacuation is needed, Alfrey noted. ■

By B.J. Almond

The Nose Knows

Some diseases can be detected by odor.

Today's physicians may be neglecting vital tools in their diagnostic arsenal—their noses.

Certain diseases that affect metabolism can cause the body to emit smells similar to familiar odors like maple syrup, cat urine, sweaty socks, and rotten fish (see chart).

"Some of the diseases can kill infants within the first few weeks or months of life," said Dr. Edward McCabe, professor, Molecular Genetics and Pediatrics. "An alert doctor or parent can help offset major health problems, since most of these metabolic diseases are highly treatable."

Such inherited diseases occur in about one in 10,000 births. Many can now be detected through prenatal and postnatal screening and are often treated with special diets.

Various Smells

Maple Syrup Urine Disease causes the urine to smell like maple syrup, burnt caramel, or curry. Although it has a funny name, the disease can be life-threatening in some forms if not detected early.

While most odor-causing diseases are rare, some are more common, such as diabetes mellitus and phenylketonuria (PKU).

"Diabetes mellitus produces a sweet, fruity smell in the urine

and was so-named in the days when physicians used to both smell and taste the urine," McCabe said. Mellitus is derived from the Latin word *meli* (honey).

PKU, which can result in severe mental retardation, affects one in 15,000 births. The musty or mousy odor that sufferers emit does not begin until 3 to 6 months of age, and since babies are now routinely screened for the disease and given treatment, few develop symptoms.

Besides health problems, some odor-causing diseases can be painfully embarrassing, such as trimethylaminuria.

"Children with this disorder are sometimes treated like social outcasts," McCabe said. "They are often accused of not bathing because their sweat and urine smell like rotten fish."

Baylor's metabolic-disease specialists receive inquiries on such unusual disorders from around the world, McCabe said. He advises parents and physicians to request genetic screening tests if there is prior knowledge of susceptibility to the diseases. They also should inquire about what tests were done at birth. And, he says, they should use their noses. ■

By Ron Gilmore

Metabolic Diseases that Cause Odors

Disease	Odor	Symptoms
Beta-Methylcrotonylglycinuria	Cat urine	High acid levels, feeding problems, vomiting, irritability.
Diabetes Mellitus	Fruity, sweet	Elevated blood-sugar levels, sugar in urine, excessive thirst, itching frequently around genitals; untreated, can cause a variety of medical problems, including blindness, and can be fatal.
Hypermethioninemia	Rancid butter or rotten cabbage	Varied—may include liver abnormalities, muscle disease, developmental delay.
Isovaleric Acidemia*	Sweaty feet, dirty socks	Lethargy, lack of appetite, high acid levels, seizures, coma.
Maple Syrup Urine Disease	Maple syrup, burnt caramel, curry	Lethargy, lack of appetite, high acid levels, seizures; severity of symptoms varies depending on type of MSUD (several forms).
Methionine Malabsorption Syndrome (Oasthouse Syndrome)	Brewery, hops, yeast, dried celery	Diarrhea, convulsions, rapid breathing, white hair; can cause mental retardation; also known as Smith-Strang disease.
Phenylketonuria (PKU)	Mouse urine, musty odor	Most common of odor-causing metabolic diseases; not life-threatening but can cause mental retardation; routine screening at birth prevents most cases.
Trimethylaminuria	Rotten fish, fishy odor	May be clinically normal except for odor or may have significant psychological problems such as depression.
Tyrosinemia	Musty odor	Low phosphate levels in blood; can cause liver disease, kidney problems, rickets.

* A similar condition, glutaric acidemia, is nearly always fatal.

Rare Skin Disorder Found

Researchers are making progress in their studies of a hereditary cancer syndrome known as MEN 2A, or Sipple's syndrome.

Baylor scientists have identified a variant of a rare hereditary cancer syndrome. They hope to use information gained from studies of this disorder to more accurately diagnose which children of an affected family will inherit the mutated gene.

The cancer syndromes known as "multiple endocrine neoplasia (MEN)" cause a variety of endocrine tumors. These include tumors of the pituitary, parathyroid, thyroid, and adrenal glands and the portion of the pancreas

responsible for insulin production. Some tumors associated with these hereditary diseases are malignant.

MEN 2A, or Sipple's syndrome, is a type of MEN associated with thyroid cancer and adrenal tumors, which can result in heart irregularities and sudden death, said Dr. Robert F. Gagel, associate professor, Medicine and Cell Biology.

Children born to parents affected with MEN 2A have a 50-50 chance of inheriting the diseased gene, Gagel said. About 10,000 people worldwide have been identified with this syndrome, which has been linked to chromosome 10.

During their studies of MEN 2A, Gagel and his colleagues dis-

causes intense itching.

Gagel and Dr. Donald T. Donovan, associate professor of clinical otorhinolaryngology & communicative sciences, presented their research at the Fourth International Workshop on Multiple Endocrine Neoplasia hosted by Baylor and The Methodist Hospital.

They are comparing the genes of the families that have MEN 2A to those of families with other types of MEN to pinpoint the location of the mutated gene on chromosome 10. Localizing the MEN 2A gene may be important for understanding the molecular mechanism of common cancers.

"Cancer is likely to be a collection of abnormalities at key points or switches in the DNA," Gagel said. "It's also likely there are only a finite number of switches. By identifying the abnormal switch in a hereditary cancer, we can find information that will be relevant in treating other cancers."

Gene-carrier status in affected families at risk for MEN 2A now can be determined with a greater than 95 percent certainty with molecular-genetic techniques, Gagel said. That certainty, however, is not high enough to re-

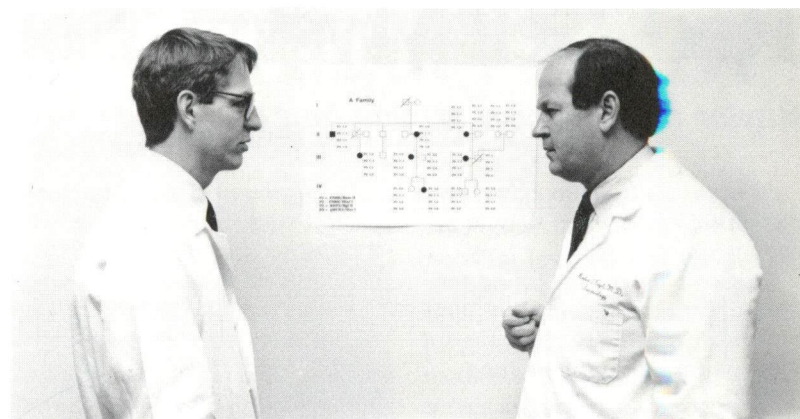


Photo by Bharat Parikh

Donovan (left) and Gagel review the family tree of a group identified with MEN 2A.

able until the person at risk develops one of the manifestations of the syndrome. The abnormal gene may be detected by measuring the level of calcitonin in the blood. A positive test result, however, is not likely to occur before the age of five, Gagel said.

As a model for how clinicians can deal with this disease, Donovan presented the case history of a two-year-old who was identified

by genetic-screening techniques as a gene carrier for MEN 2A. After her carrier status was confirmed by blood test, the child was cured of an early-stage thyroid cancer by surgery.

Current dependence on blood testing for diagnosis of MEN 2A will end with the availability of more closely linked DNA markers of the abnormal gene, or its identification, Gagel predicted. ■

By James Russell

Jones

(Continued from page 1)

cal trial sponsored by the National Eye Institute on the treatment of herpes simplex eye disease.

Jones is chief of the ophthalmology service at The Methodist Hospital and at Ben Taub General Hospital.

He is a member of the boards of the American Academy of Ophthalmology, Association of University Professors of Ophthalmology, Lions Eye Bank Foundation, and William C. Conner Foundation. He also is past

"By identifying the abnormal switch in a hereditary cancer, we can find information that will be relevant in treating other cancers."

In Memoriam: Greer

Trustee emeritus S. Marcus Greer died Oct. 29. He was 92.

"Mr. Greer was a devoted and longtime trustee of Baylor Col-



chairman of the Board of Directors of the American Board of Ophthalmology. He currently serves as Secretary for Instruction for the American Academy of Ophthalmology.

Prior to Jones' appointment, The Margaret Root Brown Chair was occupied by Dr. David Patton, former chairman, Ophthalmology.

Brown Chair

The Margaret Root Brown Chair was established in 1970 through a gift from The Brown Foundation Inc. of Houston. The nonprofit, charitable foundation was established in 1951 by Herman and Margaret Root Brown and George R. and Alice Pratt Brown for the betterment of humanity.

Other chairs at Baylor endowed by The Brown Foundation are The E.L. Wagner, MD, Volunteer Faculty Chair of Internal Medicine, The Olga Keith Wiess Chair of Otorhinolaryngology, The Lodwick T. Bolin Chair of Biochemistry, and The L.F. McCollum Chair in Molecular Physiology and Biophysics. ■

By Mark Seegers

covered a skin disorder associated with the cancer. They have identified eight families worldwide with this abnormality, which produces brown skin lesions over the upper back and

ever, is not high enough to recommend removal of the thyroid in a child for presumed thyroid cancer without independent confirmation of the cancer gene.

Confirmation of gene-carrier status for MEN 2A rarely is avail-



Photo by Lindsey Kingston Lampp

All in the Family

Second-year medical student Erik Torgerson gives an anatomy lesson to a tour group on Family Day. Sponsored by the Office of Alumni Affairs, the Family Day program included an orientation session, lab demonstrations, and a luncheon for parents, grandparents, spouses, and siblings of first-year medical students. The program focused on establishing the foundation for a close-knit and enduring College family. About 270 family members and first-year medical students attended. ■

lege of Medicine," said board chairman James A. Elkins Jr. "His contributions will always be appreciated and remembered."

Greer joined the Baylor Board of Trustees in 1969 after the medical college separated from Baylor University in Waco and became an independent institution. The following year he applied his financial expertise as vice-chairman of the College's first endowment campaign, which raised more than \$30 million. He also chaired the Advisory Council to the Neurosensory Center Campaign. He was named trustee emeritus in 1984.

The Methodist Hospital, a Baylor Affiliated Teaching Hospital, also benefited from Greer's talents. For at least 20 years he chaired the hospital's finance committee.

During his banking career, Greer served as president of First City National Bank when it was Houston's largest bank. He also had been chairman of the board of directors of the San Felipe National Bank, and had served on the board of directors of the Moody National Bank and of the Terrell State Bank of Terrell. In



Greer

Photo by Gittings

1985 he retired as chairman of the Tanglewood Bank National Association.

Greer had been chairman of The Moody Foundation in Galveston and had served as a member of various other corporate boards.

He graduated from The University of Texas in 1921 with a BBA degree in finance. He received UT's Distinguished Alumnus Award in 1963. ■

AIDS

(Continued from page 1)

ments for tuberculosis and other AIDS-related complications that include eye disease, AIDS-caused pneumonia, and lung and heart problems.

Educational and preventive efforts include screening procedures, AIDS prevention among high-risk adolescents, and a program to train volunteers and foster families to work with children with AIDS.

Houston is the fourth leading metropolitan area in numbers of AIDS patients. Only New York, Los Angeles, and San Francisco have higher incidences. ■

By Ron Gilmore

Baylor Medicine

Office of Public Affairs, room 159B
One Baylor Plaza
Houston, Texas 77030

ADDRESS CORRECTION REQUESTED

Vice-President	D. Gayle McNutt
Dir., Publications and Internal Communications	Sara Jo Thompson
Editor	B.J. Almond
Editorial Assistants	Dana Morrison
	James Russell
	Diana Wren
Production Artist	Medical Illustration & Audiovisual Education
Production	

Baylor Medicine is published 11 times a year for the College's friends and supporters, board, alumni, faculty, students, housestaff, and staff.

Non-Profit Org.
U.S. POSTAGE
PAID
Houston, Texas
Permit 1492