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## Jefferson Medical College Annual Report, 2005

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# State of the College

The academic year 2004-2005 was a highly productive time for the faculty and students of the Medical College. In nearly all measurable parameters of their efforts, the faculty and students have excelled. In the pages that follow, summaries of their efforts are evident. I will highlight a few key dimensions of the efforts of the faculty during the past year.

## **Undergraduate Medical Education**

The Undergraduate Medical Education (UME) programs continue to improve and excel, and many positive changes and accomplishments took place within UME during the past year. For the first time at the University, Medical College faculty collaborated with faculty from the College of Health Professions to develop an interprofessional pilot program for the teaching of clinical skills to senior nursing students and medical students. This successful first effort has set the stage for a productive collaborative curriculum planning process.

The Curriculum Committee continues to evaluate and recalibrate the curriculum in various ways to improve the educational experience of students throughout the four years they spend at the Medical College. Over the past few years, the Committee has revamped and integrated the preclinical curriculum in the first and second years. The Committee has now turned its attention to the Clinical years, and is currently working on a redesign of the third and fourth years to better prepare students for their residency training and beyond. This year, medical students and faculty met in a series of retreats to begin the redesign phase of this effort.

The mean scores on the United States Medical Licensure Exam (USMLE) Step 1 have continued to rise during these curricular changes and developments. Our performance on the USMLE Step 2 CS (Clinical Skills) has been well above the national average. This examination, in which students evaluate standardized patients and are evaluated on their clinical skills and medical knowledge as well as their communication skills, is graded on a pass-fail basis.

## **Increase in Class size for the Class of 2009**

In 2004, the AAMC called upon medical schools to increase their class sizes to meet an expected shortage of as many as 200,000 allopathically-trained physicians

by the year 2020. The AAMC suggested that medical schools increase their admission rate by 15% over the next decade. Responding to this call of need, JMC has expanded its class size from 223 to 255. This makes Jefferson the largest private allopathic medical college in the U.S., as well as the third largest overall.

The 255 students of the Class of 2009 reflect the diversity seen in matriculants at JMC over the past few years. More than 9% of the class is made up of individuals who are from ethnic groups that are under-represented in medicine. Forty seven percent of the class is female.

The decision to increase class size was not made lightly. The Medical College consulted at length with both faculty and the Liaison Commission for Medical Education (LCME) and conducted a thorough analysis of our resources to provide the best possible educational experience for students.

## **New Centers and Learning Facilities**

In order to meet the needs of our growing student population and to continue to attract the brightest undergraduates, Jefferson must ensure that we have on campus the most modern and sophisticated venues in which to teach our students. In academic year 2004-2005, a number of exciting changes to the college's infrastructure have begun and/or have been completed. Perhaps the most noteworthy has been the announcement of the new \$60 million educational facility and campus green, which will create a new "heart" for the campus. This project was partially funded by a \$25 million donation from Mrs. Dorrance H. Hamilton. It will include a 60,000-square-foot plaza, a 129,000-square-foot, six-story medical education building (The Dorrance H. Hamilton Building) and a 215-space underground garage.

Within the new Dorrance H. Hamilton Building, the Dr. Robert and Dorothy Rector Clinical Skills Center will be an arena for innovative medical education. The center will be a vast expansion of Jefferson's current clinical skills center at 833 Chestnut Street. The center will be constructed with the aid of a \$10 million bequest from the estate of the late Dr. Robert and Dorothy Rector. Dr. Rector was an alumnus from JMC's Class of 1948.

This academic year also saw the conversion of McClellan Hall in the College Building to the new Paul C. Brucker Learning Center, named in honor of Dr. Brucker who retired as JMC president in 2004. The space was planned to accommodate the larger entering medical class this year. The project involved the transformation of a flat auditorium into a tiered 275-seat high-tech lecture theatre. The renovations were funded by a gift from the Foerderer Foundation.

In addition to these planned new teaching and learning facilities, TJUH announced the opening of the Advanced Heart Failure and Cardiac Transplant Center. U.S. News and World Report consistently ranks THUH among America's best hospitals for heart care and heart surgery, and this center will only serve to improve our reputation in this field. Each year more than half million people in the U.S. experience heart failure, and this number is expected to rise as the Baby Boomer generation ages. The Advanced Heart Failure and Cardiac Transplant Center offers access to a full spectrum of life-saving heart care, including drug therapies, state-of-the-art surgical interventions, and cardiac transplantation. The Center extends our well-renowned success in liver, kidney and bone marrow transplantation and will serve to demonstrate our commitment to excellence in clinical performance.

### **New Appointments**

This year, Jefferson witnessed a number of new personnel appointments. The Medical College was pleased to announce the appointment of Charles J. Yeo, MD as the Gross Professor and Chair of Surgery. Dr. Yeo is an internationally known specialist in surgery of the upper gastrointestinal track, with an emphasis on pancreatic cancer. Dr. Yeo comes to Jefferson from Johns Hopkins University of Medicine, where he was chief of the division of general and gastrointestinal surgery.

William M. Keane, MD, Herbert Kean Professor and Chair of the Department of Otolaryngology-Head and Neck Surgery was named physician director of Jefferson University Physicians (JUP). In this role, Dr. Keane is responsible for the oversight of the JUP practice plan

and implementation of new initiatives for the clinical practices.

Jeffrey L. Benovic, PhD, professor of biochemistry and molecular biology was named chair of Jefferson's newly restructured Department of Biochemistry and Molecular Biology. His commitment to the university and its students, as well as his extensive research experience, make him the perfect choice to lead this department.

Tim Manser, PhD, was named chair of the Department of Microbiology and Immunology. Dr. Manser is an outstanding choice to be the new chair of microbiology and immunology. His extensive experience as a researcher and teacher will enable him to provide strong leadership in the department.

Scott A. Waldman, MD, PhD, Samuel M.V. Hamilton Family Professor of Medicine was named chair of Jefferson's newly formed Department of Pharmacology and Experimental Therapeutics. Dr Waldman's expertise and experience in pharmacology and research are widely recognized at Jefferson and across the country, and he is uniquely qualified to lead this new department.

### **The Future**

The past academic year has been a time of growth for the Medical College in terms of the student body, as well as physical resources. This advancement must continue as we move into the future. Jefferson Medical College was built on a foundation of excellence, and this tradition of merit spans the decades. We cannot rest now. The future holds great promise for the Medical College, and we are poised to move into a leadership position among medical schools. The Medical College is initiating a strategic plan that will guide us to our goal of excellence and continued innovation in research, education and clinical care. Our plans for the future are ambitious, and will require the support and commitment of all our constituents.

**Thomas J. Nasca, MD, FACP**  
Senior Vice President, Dean

# The Academic Year 2004 - 2005

## Faculty Honors

The Christian R. and Mary F. Lindback Award for Distinguished Teaching in a Clinical Science.  
Joseph DeSimone, MD, Clinical Associate Professor of Medicine

Dean's Award for Distinguished Teaching in a Clinical Science.  
William Kocher, MD, Clinical Assistant Professor of Pathology, Anatomy and Cell Biology

Blockley-Osler/Dean's Teaching Award for Excellence in Teaching of Clinical Science. To a faculty member of a Jefferson-Affiliated Hospital.

William J. Malone, MD, Clinical Assistant Professor of Pediatrics, Geisinger Medical Center

The Leon A. Peris Memorial Award. To a member of the volunteer faculty for excellence in clinical teaching and superior patient care.

Allan M. Arbeter, MD, Chairman, Department of Pediatrics, Albert Einstein Healthcare

The Leonard Tow Humanism in Medicine Award presented by The Arnold P. Gold Foundation. To an outstanding faculty member demonstrating exemplary compassion in doctor/patient relations.

Steven Rosenzweig, MD, Clinical Associate Professor of Emergency Medicine and Academic Director, Jefferson – Myrna Brind Center of Integrative Medicine

## Portrait

William Kocher, MD, Clinical Assistant Professor of Pathology, presented by the Class of 2005 and friends and colleagues, painted by Bill Ewing.

## Medical College

The Medical College celebrated its 181st anniversary.

## New Divisions, Departments

Department of Microbiology and Immunology  
Department of Pharmacology and Experimental Therapeutics  
Department of Family and Community Medicine

## New Appointments

### Department Chairs

Jeffrey Benovic, PhD, Chair for the Department of Biochemistry and Molecular Biology  
Timothy Manser, PhD, Chair for the Department of Microbiology and Immunology  
Scott Waldman, MD, PhD, Chair for the Department of Pharmacology and Experimental Therapeutics

## Commencement

The 181st Commencement Exercises were held on June 2 at the Kimmell Performing Arts Center. Doctor of Medicine degrees were awarded to 228 candidates, three of whom were simultaneously awarded a Doctor of Philosophy degree.

## Honorary Degrees

Honorary degrees of Doctor of Science were bestowed upon Richard H. Carmona, MD, MPH, FACS, the Surgeon General of the United States Public Health Service; Christine K. Cassel, ND, MACP, the dean of the School of Medicine and vice president for medical affairs at Oregon Health and Science University; and LaSalle D. Leffall, Jr., MD, FACS, the Charles R. Drew Professor of Surgery at Howard University College of Medicine.

# Administrative Staff 2004 - 2005

Thomas J. Nasca, MD, FACP	Dean, Senior Vice President
Clara A. Callahan, MD	The Lillian H. Brent Dean of Students and Admissions
Joseph L. Seltzer, MD	Senior Associate Dean, Continuing Medical Education, and Faculty and Alumni Affairs
Timothy P. Brigham, PhD	Chief of Staff and Associate Dean, Organizational Development
Edward B. Christian, PhD	Associate Dean, Diversity and Minority Affairs
Kristen L. DeSimone, MD	Assistant Dean, Student Affairs and Career Counseling
Karen M. Glaser, PhD	Associate Dean, Undergraduate Medical Education
Steven K. Herrine, MD	Assistant Dean, Undergraduate Medical Education
Bernard L. Lopez, MD	Assistant Dean, Student Affairs and Career Counseling
Phillip J. Marone, MD	Associate Dean, Alumni Relations, Executive Director of the Alumni Association
Karen D. Novielli, MD	Associate Dean, Faculty Affairs and Faculty Development
John Ogunkeye, MS Dean	Executive Director, Jefferson University Physicians, Assistant to the Dean
Luz Ortiz, MA	Assistant Dean, Diversity and Minority Affairs
David L. Paskin, MD	Senior Associate Dean, Graduate Medical Education and Affiliations
Charles A. Pohl, MD	Associate Dean, Student Affairs and Career Counseling
Susan L. Rattner, MD, MS, FACP	Senior Associate Dean, Undergraduate Medical Education

## Administrative Staff at Affiliated Institutions

James F. Burke, MD	Assistant Dean, Medical Education, Main Line Health
Glenn Eiger, MD	Assistant Dean, Medical Education, Albert Einstein Medical Center
Linda Famiglio, MD	Assistant Dean, Medical Education, Geisinger Medical Center
Irv Freeman, PhD	Assistant Dean, Medical Education, Mercy Hospital of Pittsburgh
Brian W. Little, MD	Assistant Dean, Christiana Care
Roy Proujansky, MD	Associate Dean, Chief Executive of the Practice, Nemours Children's

## Department Chairs 2004 - 2005

Anesthesiology	Zvi Grunwald, MD
Biochemistry & Molecular Biology	Jeffrey Benovic, PhD
Dermatology & Cutaneous Biology	Jouni J. Uitto, MD, PhD
Emergency Medicine	Theodore A. Christopher, MD
Family Medicine	Richard C. Wender, MD
Health Policy	David B. Nash, MD, MBA
Medicine	Arthur M. Feldman, MD
Microbiology & Immunology	Timothy Manser, PhD
Neurology	Abdolmohamad Rostami, MD, PhD
Neurosurgery	Robert H. Rosenwasser, MD
Obstetrics & Gynecology	Louis Weinstein, MD
Ophthalmology	William S. Tasman, MD
Orthopaedic Surgery	Richard H. Rothman, MD, PhD
Otolaryngology/Head & Neck Surgery	William M. Keane, MD
Pathology	Fred Gorstein, MD (Interim Chairman)
Pediatrics	Roy Proujansky, MD
Pharmacology and Experimental Therapeutics	Scott Waldman, MD, PhD
Physiology	Marion J. Siegman, PhD
Psychiatry & Human Behavior	Michael J. Vergare, MD
Radiation Oncology	Walter J. Curran, Jr., MD
Radiology	Vijay M. Rao, MD
Rehabilitation Medicine	John L. Melvin, MD
Surgery	Herbert E. Cohn, MD (Interim Chairman)
Urology	Leonard G. Gomella, MD

# Professorial Faculty 2004 - 2005

## Advisory Committee Officers

Chairman	Fred Laucius, MD
Chairman-Elect	Sue Menko, PhD
Secretary	John Spandorfer, MD
Secretary-Elect	Richard Schmidt, PhD

## Advisory Committee Members

2003 - 2005	David Abraham, PhD Gary Brown, MD David Karasick, MD James Plumb, MD Jay Schneider, PhD
2004 - 2006	Jay Greenspan, MD Richard Horn, PhD Jay Rothstein, PhD Peter Sharkey, MD

Howard Weitz, MD Past Chairman Advisory Committee 2003-2004

## Representative to the Executive Council

Clinical Science	Gregory Kane, MD	2003-2005
Basic Science	Leonard Eisenman, PhD	2004-2006

## Representatives to the Committee on Committees

Clinical Science	Howard Field, MD	2003-2005
Basic Science	Catherine Calkins, PhD	2004-2006

# Office of Faculty Affairs

## Mission

The Office of Faculty Affairs (OFA), established in 2001 by Dean Nasca, supports the skill development and career advancement of Jefferson faculty, promotes an academic culture where faculty collegiality, collaboration and scholarly inquiry can thrive and supports the administrative activities and programs central to faculty participation in the operations and governance of the Medical College. The Office of Faculty Affairs accomplishes its mission through its activities and programs, support of the Standing Committees of the Medical College and through its advisory role in the formation and revision of policies affecting the Medical College faculty.

## OFA Programs/Activities

### Faculty Development

Sixty-one faculty development sessions, representing 121 hours of instruction, were provided to Jefferson faculty in 2004-2005. The Faculty Development Program was organized into six general topic areas: effective teaching, research skills, clinical skills, professional development, information management and use of instructional technology. Table 1 provides an overview of the specific sessions presented. Faculty participation in the programs continues to increase with 266 university faculty and post-doctoral fellows attending at least one session over the past year, up from 256 participants last year. Over the past two years, a total of 496 individual participants have attended at least one session and 62 participants have accumulated more than five credit hours of faculty development activities. Table 2 provides an overview of participation in each topic area and the evaluations of each topic area for the 2004-2005 academic year.

Web-based, self-directed learning modules for faculty development in the program area of effective teaching have been created with input from Jefferson faculty, AISR staff and a medical writer. These self-directed learning modules have been well-received by faculty, and allow faculty to access faculty development programs at a time that is convenient for them. Twelve modules have been created to date, and 153 faculty have accessed the self-directed learning modules. These

modules can be found at the faculty development Web site, [www.jefferson.edu/jmc/faculty/fac\\_dev](http://www.jefferson.edu/jmc/faculty/fac_dev).

The individual faculty development sessions continue to be provided through the generous commitment of time and talent by Jefferson faculty and the staffs of the Scott Memorial Library and the Office of Research Administration.

### New Faculty Orientation

The Office of Faculty Affairs provides a two-part orientation program for new faculty that consists of an individual session with the faculty member to welcome him or her and provide individualized career guidance and a full day orientation to the Jefferson community and its resources. The program is given twice each year by members of the Dean's staff. For academic year 2004-2005, the Office of Faculty Affairs provided individual orientation sessions to 47 of the 52 new faculty hires. Thirty-nine of the 52 new faculty participated in the full-day orientation program for new faculty. An evaluation of the orientation program by new faculty participants was completed resulting in highly favorable reviews for both components of the orientation program.

Faculty participation in the programs continues to increase with 266 university faculty and post-doctoral fellows attending at least one session over the past year, up from 256 participants last year.

### Faculty Resignations

The Office of Faculty Affairs invites all faculty who voluntarily resign their faculty appointments for an exit interview. Aggregate data from these confidential interviews provide the administration with feedback that is used to enhance Jefferson's ability to recruit and retain excellent faculty. Seventy-nine faculty (11%) left Jefferson during the 2004-2005 academic year, of which, 53 resigned their appointment for reasons other

than retirement. This turnover rate is consistent with national trends of 8 to 11% for academic medical centers in recent years. Forty-three of the 53 faculty who resigned were interviewed.

### **Faculty Annual Performance Review**

The Office of Faculty Affairs assists the Department Chairs to provide and track the mandated annual performance reviews for faculty. Compliance with this important task has increased significantly over the past few years with 19 of 23 departments completing annual performance reviews in the past two years. Seventy-five percent of faculty reported that they received annual performance reviews in the 2005 faculty satisfaction survey, up from 50% of faculty reporting that they received annual performance reviews in the 2002 faculty satisfaction survey.

### **Faculty Mentoring**

The Office of Faculty Affairs has been working with the Department Chairs to provide support for the mentoring of junior faculty at the department level. Each Department Chair has been asked to appoint a liaison to the Office of Faculty Affairs. The liaison is responsible for developing, implementing and evaluating the department (or division) mentoring plan with assistance from the Office of Faculty Affairs. During the past year, the Department Chairs appointed liaisons who participated in a training session on developing mentoring programs led by Page Morahan, PhD of Drexel University College of Medicine. Currently, liaisons are in the data gathering phase, defining faculty needs and the specific objectives for their department-based mentoring program. Work will continue on this important project during the 2005-2006 academic year with the implementation of pilot programs that will be used to guide the overall effort.

### **Faculty Awards**

The Dean's Citation for the Advancement of Education at Jefferson Medical College and the Dean's Citation for Faculty Mentoring were presented to 46 faculty and 10 faculty, respectively, at the Dean's Annual Reception for Faculty Excellence in Education and Mentoring held at the Union League on May 9, 2005. The names of the 2004-2005 award recipients are listed in Table 3. Nominations for the award are made by the Department Chairs and prior award recipients to the Educational Advisory Committee of the Office of Faculty Affairs which reviews the nominations and makes recommendations to the Dean.

### **Dispute Resolution**

The University Faculty Ombudsperson, Stephen Weinstein, PhD, and the Associate Dean for Faculty Affairs and Faculty Development, Karen Novielli, MD, are available to assist faculty with the informal resolution of disputes and conflicts. Informal assistance is provided in addition to the formal grievance process available to faculty.

### **Faculty Satisfaction Survey**

A Web-based faculty satisfaction survey was administered to faculty in January, 2005. Faculty participation in the survey process was 76%! Results of both the 2005 and the 2002 faculty satisfaction surveys are available to all faculty on pulse (under my organizations, choose JMC faculty). Areas of significant improvement on the survey include: percent of faculty who receive an annual performance review, the percent who find the annual performance review valuable; and the percent of faculty who feel there is unity and collegiality among the faculty both in their department and at the college level. Results of the Faculty Satisfaction Survey will be used to steer multiple initiatives related to improving the work-life of faculty including improving mentoring of faculty, improving the feedback process for faculty and improving the processes that reward faculty for their work.

### **Faculty Policies**

#### **Faculty Grievance Policy**

The University Faculty Grievance Policy was revised to include processes relevant to JCHP and to refer grievance hearings to a sub-committee of the Committee on Faculty Affairs which has authority to hear grievances per the JMC Bylaws. Changes were approved by the Executive Council.

#### **Faculty Appointment and Promotions Guidelines**

Upon the recommendation and approval of the Executive Council, tracks and criteria for faculty appointment and promotion were revised to better reflect and reward the work of the faculty while promoting scholarship, leadership and excellence in teaching, clinical care and research. The new guidelines will be implemented over the coming year with assistance from the Committee on Faculty Appointments and Promotions.

#### **Tenure Policy**

The Tenure Policy and the processes for awarding tenure were reviewed and revised with input from an advisory committee to the Dean composed of faculty, chairs and administration. Changes were adopted to

assist the university's efforts to recruit and retain outstanding research faculty. Key areas of revision are the ability to award tenure at the Associate Professor level, expansion of the probationary period to eight years, the establishment of a tenure committee to recommend the awarding of tenure and to conduct post-tenure reviews of tenured faculty.

## **Faculty Resources**

### **Faculty Handbook**

The Faculty Handbook, which is accessible via the web at the faculty site, [www.jefferson.edu/jmc/faculty](http://www.jefferson.edu/jmc/faculty), has been updated to be more user friendly and to contain more relevant information for faculty. It has also been converted to a pdf format. The Faculty Handbook contains updated faculty policies as well as information about other resources available to faculty.

### **Faculty Bylaws**

Updated Bylaws, reflecting recent changes to the tenure policy and the formation of new departments, are accessible at the faculty Web page (see above).

## **Faculty Committee Initiatives**

### **Education Advisory Committee**

The Education Advisory Committee serves in an advisory function to the OFA around initiatives that improve and reward the teaching mission of Jefferson faculty including the Faculty Development Program, the evaluation of teaching and rewarding teaching. For the upcoming year, the committee will make recommendations to the OFA regarding the requirements and parameters for the educational portfolio and educational scholarship needed for revised promotion guidelines.

## **Standing Committee Support**

The Office of Faculty Affairs provides administrative support to the following Committees and Standing Committees of the Medical College: Committee on Committees, Professorial Faculty Advisory Committee, meetings of the Professorial and General Faculty, Committee on Faculty Affairs, Committee on Bylaws and Rules, Committee on Departmental Review, and the Nominating Committee for the Professorial Faculty. Reports of these committees can be found in the Summary Reports of the Standing Committees of the Medical College.

The Professorial Faculty hosted two Town Meetings this year, one meeting for clinical faculty and one meeting for research faculty. Issues addressed included security on campus, transport of large email files via the Internet, indirect cost share policy for collaborative grants, and support of the teaching mission through mission-based budgeting.

Agenda items for the meetings of the General and Professorial Faculty meetings included Professionalism and the Honor Code, guidelines for relationships with Pharma, Conflict of Interest Policy, Teaching Awards, Faculty Development Program, Faculty Satisfaction Survey, Tenure Policy, and the Strategic Planning Process.

### **Karen D. Novielli, MD**

Associate Dean for Faculty Affairs and Faculty Development

### **Jennifer Jackson**

Administrative Assistant, Office of Faculty Affairs

**Table 1**  
**Faculty Development Sessions for 2004 - 2005**

**Instructional Technology**

- Microsoft Word Advanced Skills
- Microsoft Excel and Spreadsheet Basics
- Personal Digital Assistant (PDA) Basics
- Digital Imaging/Photography
- Photoshop Basics
- PowerPoint 1: Getting Started with PowerPoint
- PowerPoint 2: Working Efficiently with PowerPoint and Other MS Office Products
- PowerPoint 3: Formatting Graphics and Slides in PowerPoint
- PowerPoint 4: Animating Your PowerPoint Presentation

**Information Management**

- Creating Your Own Current Awareness Plan
- Evidence-Based Medicine Resources
- Using Bibliographic Software: Reference Manager
- SPIN, GENIUS and SMARTS Systems
- Using Bibliographic Software: End Note
- Tracking the Cutting Edge of Science
- Copyright and Fair Use Guidelines
- Basics of Library Use: JEFFLINE at Your Workstation
- Searching PubMed
- Advanced PubMed
- Advanced OVID Medline
- Databases for Basic Research – Beyond MEDLINE
- Databases for Clinical Care – Beyond MEDLINE
- Introduction to RefWorks
- Identifying Funding Sources
- University Archives and Special Collections
- Using Bibliographic Software: Reference Manager
- Using Internet Search Engines Effectively

**Effective Teaching**

- The Use of Simulation in Medical and Health Professions Education: Past and Future
- Using Case-Based Teaching Methods in Medical Education
- Teaching and Evaluation Techniques for the Office Preceptor
- Teaching Evidence-Based Medicine at the Bedside
- Bedside Teaching and the USMLE Step 2 Clinical Skills Exam
- Year 1 Video Tape Review
- Providing Effective Feedback
- Evaluation and Feedback
- Can We Teach Professionalism?
- Interactive Techniques for Large Group Presentations
- Techniques for Teaching in a Small Group Format
- Tips for Writing Letters of Recommendation
- Introduction to Problem-Based Learning and PBL Problem Writing

**Teaching Clinical Skills**

- Bedside Teaching and the USMLE Step 2 Clinical Skills Exam
- Teaching Physical Examination of the Upper Extremities: Gross Anatomy, Surface Anatomy, Technique and Outcome
- Teaching with Standardized Patients

(List continued on next

**Building Research Skills**

- Introduction to Sponsored Research
- Grant Writing Seminar (10 Sessions)
- Terms and Conditions of Research Grants and Contracts
- Budgeting on Grant Proposals
- Ethical Conduct of Research
- Use of Animals in Research
- The Physician and Scientist Perspective on Translation via Technology Transfer
- Clinical Trials: Part 1 – Proposal Process
- Clinical Trials: Part 2 – Post-Award Management
- Clinical Trials: Part 3 – Trial Closeout
- The IRB and You: Preparing for a Successful Submission

**Professional Development**

- Fundamental Principles of Scientific Writing
- Negotiation Skills
- Demystifying the Promotions Process
- Understanding Medical School Finances
- Turning your Intellectual Capital into Career Capital: A Professional Development Day for Early and Mid-Career Faculty
- Improve your Speaking Skills
- Responding to Unprofessional Behavior in the Workplace
- Human Resource Issues: Workplace Supervision, Harassment, Discipline
- Strategic Planning for Seasoned Faculty: Reflect, Refocus and Renew
- The Future: How to Get There from Here
- Quality Improvement as Scholarship
- Mentoring Throughout your Career: How to be a Successful Mentor

**Table 2**  
**Faculty Development Program Ratings**

<b>Faculty Development Programs</b>	<b>Number of Participants</b>	<b>Percent of Participants Rating Content Good or Excellent</b>	<b>Percent of Participants Rating Content as Relevant to Faculty Development Needs</b>
Professional Development	157	87%	84%
Information Management	125	90%	93%
Effective Teaching	88	89%	98%
Instructional Technology	63	90%	84%
Research Skills	75	90%	91%
SDL Modules	153	94%	94%

**Table 3**  
**Faculty Award Recipients**

**Dean's Citation for Significant Contributions to the Advancement of Education at Jefferson Medical College**

Alan S. Hilibrand, MD (Orthopaedic Surgery)  
 Bharat Awsare, MD (Medicine)  
 Victor Navarro, MD (Medicine)  
 John Doherty, MD (Medicine)  
 David Wiener, MD (Medicine)  
 Sandra Weibel, MD (Medicine)  
 Susan West, MD (Medicine)  
 Barry Ziring, MD (Medicine)  
 William Morrison, MD (Radiology)  
 Sonia Angelo, MD (Emergency Medicine-Methodist)  
 Javad Parvizi, MD (Orthopaedic Surgery)  
 Mitchell Cohen, MD (Psychiatry)  
 Oksana Baltarowich, MD (Radiology)  
 Christopher Formal, MD (Rehab Medicine- Magee)  
 Abigail Wolf, MD (Ob/Gyn)  
 Michael S. Weinstein, MD (Surgery)  
 Karen Ann Chojnacki, MD (Surgery)  
 Ernest (Gary) Rosato, MD (Surgery)  
 John Moore, MD (Surgery)  
 Joseph DeMichele, MD (Surgery - Methodist)  
 Robert Golub, MD (Surgery - Frankford)  
 Peter Ronner, PhD (Biochemistry)  
 Joseph Montella, MD (Ob/Gyn)  
 Edward A. Jaeger, M.D. (Ophthalmology - Wills Eye)  
 James Spath, Jr., Ph.D. (Physiology)  
 Jonathan Gottlieb, MD (Medicine)  
 Carol Reife, MD (Internal Medicine)  
 Leonard Frank, MD (Urology)  
 Intekhab Ahmed, MD (Endocrine)

Jerome G. Buescher, PhD (Micro/Immunology)  
 David Brock, MD (Neurology)  
 Fred Markham, MD (Family Medicine)  
 Raffi Terzian, MD (Emergency Medicine)  
 Jason B. Lee, MD (Dermatology)  
 Paul J. DiMuzio, MD (Surgery)  
 Wolfgang Vogel, PhD (Biochemistry)  
 George Brainard, PhD (Neurology)  
 Richard Schmidt, PhD (Pathology)  
 William G. McNett, MD (Pediatrics)  
 Jeffrey Malatack, MD (Pediatrics)  
 Edmund Pribitkin, MD (ENT)  
 Andrew B. Lobl, MD (Family Medicine- Mercy Hospital of Pittsburgh)  
 Charles Copeland, MD (Surgery - Mercy Hospital of Pittsburgh)  
 Niraj Mohan, MD (Internal Medicine - Mercy Hospital of Pittsburgh)  
 Andrew J. Sword, MD (Ob/Gyn - Mercy Hospital of Pittsburgh)  
 Steven K. Herrine, MD (Medicine)

**Dean's Citation for Faculty Mentoring**

Donald Mitchell, MD (Radiology)  
 Sergio Jimenez, MD (Rheumatology)  
 Sidney Cohen, MD (Gastroenterology)  
 Rodney Bell, MD (Neurology)  
 Ruth P. Gottlieb, MD (Pediatrics)  
 Robert Perkel, MD (Family Medicine)  
 Michael J. Mastrangelo, MD (Medicine)  
 Bernard Lopez, MD (Emergency Medicine)  
 Stephen Weinstein, PhD (Psychiatry)  
 Barry Goldberg, MD (Radiology)

## Office of Faculty Records

**T**he Office of Faculty Records was established in June 2003 by Dean Nasca to implement additional oversight of the faculty appointments and promotions process.

The office supports the administration of the academic faculty appointments and promotions procedures, the verification procedure for faculty appointment and/or promotion and maintenance of accurate faculty records.

Table 1 on the following page depicts the faculty appointment and faculty promotion processes. Table 2 contains the Faculty Census as of July 2005.

### **Debra Goldstein**

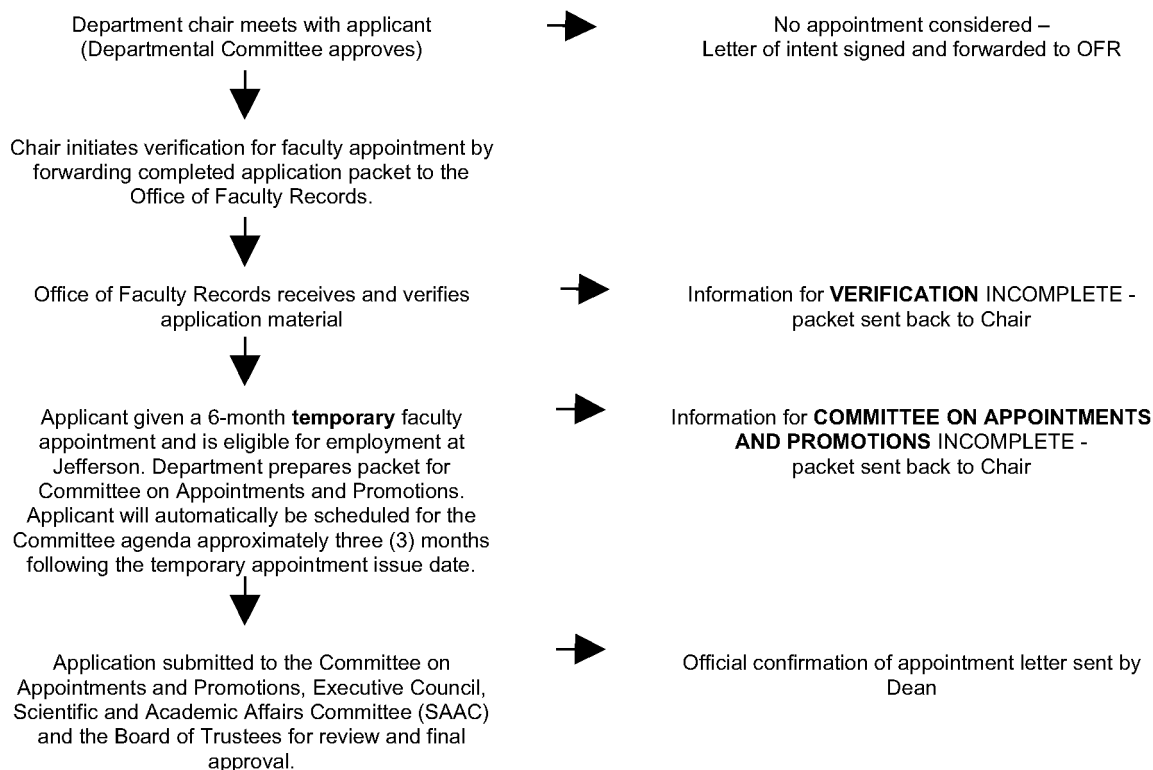
Director, Faculty Records  
Executive Associate to the Dean

### **Denise Fontana**

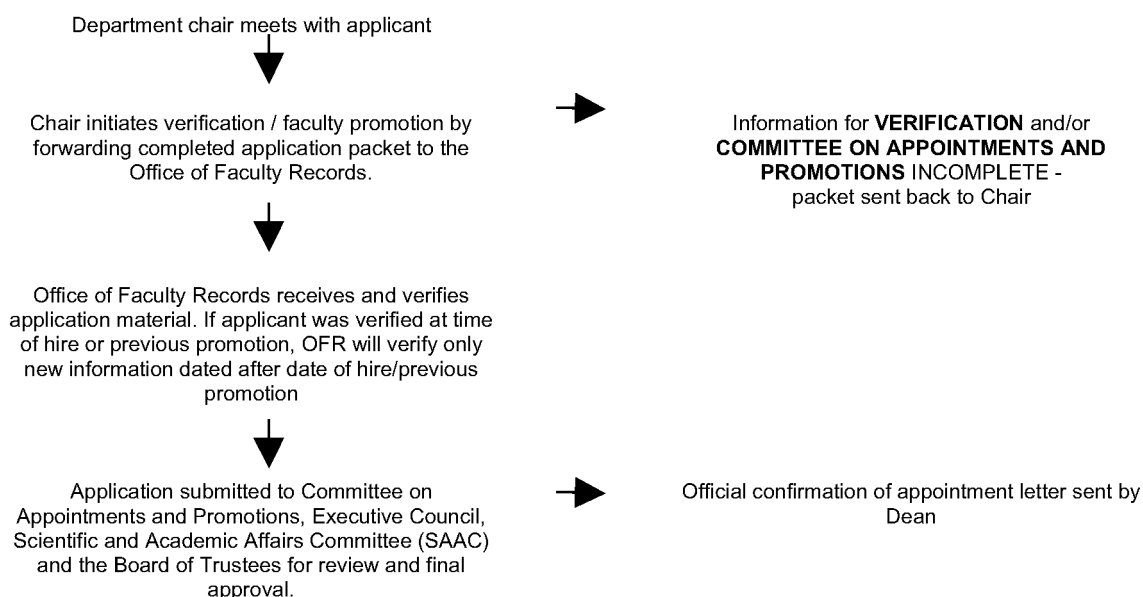
Senior Faculty Records Coordinator

**Table 1**  
**Flowchart for New Faculty Appointment and Promotion**

**Flow Chart for New Appointment**



**Flow Chart for Faculty Promotion**



**Table 2**  
**Faculty Census**

**Faculty Census (July 2005)**

	<b>Fully Salaried</b>	<b>Partly Salaried</b>	<b>Non-Salaried</b>	<b>Total</b>
Professorial	304	10	617	931
General	378	33	1631	2042
<b>Total</b>	<b>682</b>	<b>43</b>	<b>2248</b>	<b>2973</b>
Administration	35	3	5	43
Basic Science	138	5	106	249
Clinical Science	544	38	2142	2724
<b>Total</b>	<b>717</b>	<b>46</b>	<b>2253</b>	<b>3016</b>
Professor	163	9	318	490
Associate Professor	141	1	299	441
Assistant Professor	269	19	822	1110
Instructor	109	14	809	932
<b>Total</b>	<b>682</b>	<b>43</b>	<b>2248</b>	<b>2973</b>
Women	189	24	439	652
Men	493	19	1809	2321
<b>Total</b>	<b>682</b>	<b>43</b>	<b>2248</b>	<b>2973 *</b>
Emeriti Total	48			
Honorary Total	352			

**Previous Statistics**

	<b>1999</b>	<b>2001</b>	<b>2003</b>	<b>2004</b>
Professorial	989	1012	1009	1027
General	2236	2244	2141	2172
<b>Total</b>	<b>3225</b>	<b>3256</b>	<b>3150</b>	<b>3199 *</b>

\*This low number does not indicate a large exodus of faculty from the Jefferson campus. It is due to updating the faculty data base, which includes purging obsolete and/or inaccurate records.

# Office of Admissions

The Office of Admissions supports the efforts of the Committee on Admissions, consisting of 34 faculty and three student members. The dedicated Committee members and first- and second-year students interviewed approximately 850 applicants this year. The Student Admissions Coordinators present an informational program, and first- and second-year students conduct tours of the campus (in addition to submitting written evaluations of each applicant) prior to the faculty interviews. Agreeing to serve on the Committee on Admissions represents an extraordinary commitment of time and effort unequaled by any other committee in this institution. The dedication of the members of this committee to the selection and recruitment of the best and the brightest students deserves the highest praise and the gratitude of the entire Jefferson community.

The number of applicants to medical school continued its upward trend for the third consecutive year. Nationally, 37,197 applications have been certified and submitted to AMCAS vs. 35,741 for the same time last year, a 4% increase. To date, Jefferson has received 7,701 applications compared to the 7,619 last year.

Our “special programs” continue to attract significant interest. The Penn State Accelerated Program received over 400 applications. This highly competitive program requires minimum SAT scores of 1440 and rank in the top 10th percentile of their high school class for consideration. On February 16, 2005, we interviewed 87 highly accomplished candidates from 19 different states, Canada and the Philippines. Eighty-six percent of the applicants interviewed had SAT scores above 1500 and six with perfect SAT scores of 1600. Seventeen students will join the entering class of 2005 this August after completing two or three years at Penn State.

The Physician Shortage Area Program (PSAP) attempts to identify, recruit, and matriculate applicants who agree to pursue a career in family medicine and to practice in a medically underserved area. Last year we saw a tremendous surge in the number of applications, although the vast majority did not meet the PSAP criteria for the program. For the entering class of 2005 we enhanced the JMC secondary application to automatically link to the PSAP application. This decreased the total number of applications but helped identify those applicants truly meeting the PSAP criteria.

To date we have interviewed 13 PSAP applicants, accepted seven for the program, and anticipate six will matriculate with the entering class of 2005.

The Delaware Institute for Medical Education and Research (DIMER) Program continues to flourish at Jefferson. Of the 70 applicants in the National Pool from the state of Delaware, 62 applied to Jefferson (55 from New Castle County, four from Sussex County and three from Kent County). We interviewed 34 applicants, accepted 26, and anticipate 13 matriculants (10 from New Castle, two from Sussex, one from Kent).

Our links with the Post Baccalaureate Pre-Health Programs at the University of Pennsylvania, Bryn Mawr College and Columbia University continue to attract highly qualified applicants who have chosen to change careers. This year’s matriculants include a former navy pilot, three nurses, a high school English teacher, a paralegal, a research assistant, and an investment banker.

The Medical Scholars Program with the University of Delaware, now in its twelfth consecutive year, will matriculate four students for the 2005 entering class. This early linkage program, to date, has graduated 94 students from Jefferson Medical College.

For the entering class of 2005, the combined MD/PhD degree program between Jefferson Medical College and the Jefferson College of Graduate Studies received 139 completed applications for our five fully funded MD/PhD spots. Much of this can be attributed to the recognition of this recently rejuvenated program by the premedical advisors. From the 139 completed applications, 54 candidates were selected to interview at both the graduate and medical schools and 12 offers of acceptance were made.

## Class of 2009

The current first-year class will matriculate 255 students who reflect the diversity seen in matriculants over the past few years. There are 106 colleges and universities represented. The first-year students are from 30 different states, D.C., Puerto Rico, the Bahamas, Canada, Kenya, Korea and Nigeria. More than 9% of the class is from groups identified as under-represented in medicine, and 29% represent nonwhite

ethnic groups. Forty-seven percent of the class is female. The average age is 23 with a range from 18 to 35 years. The diversity in the class is evidenced by the number of students 25 years of age and older, 17%. We continue to encourage applications from students who are studying in this country with student visas who plan to return to their "home" countries to practice medicine. At the current time, we have a total of 21 students at Jefferson with student visas, seven from Canada, four from Malaysia, and three from the United Kingdom, one each from Brazil, Cyprus, Ghana, Kenya, Moldova, Nepal, and Nigeria. A number of foreign students have indicated a desire to attend Jefferson, but have been unable to do so because of the financial limitations imposed. Foreign students are not eligible for federal- or state-subsidized loans and usually cannot obtain loans from U.S. banks to finance their education.

### **Recruitment Efforts**

Attracting outstanding students continues to be the major thrust of the Office of Admissions. The Office hosted its fourth annual "Second Look" recruitment event on April 15, 2005. It was attended by 96 accepted applicants, 13 members of the Committee on Admissions, Dean Nasca, Dr. Barchi and members of his staff, alumni and Jefferson students. On April 16, 2005, the morning's agenda included a welcome orientation by Clara Callahan, MD and Grace Hershtman, MEd, and an overview of Financial Aid and Student Records by Susan Batchelor and David Clawson. Drs. George Brainard, Paul Kolecki, Lindsey Lane, and Richard Schmidt were on hand to demonstrate the many learning resources and educational tools used at Jefferson in teaching the basic sciences and clinical skills. Dr. Patrick McManus and Jefferson students provided an overview of the many community outreach opportunities available to Jefferson students. After lunch, applicants attended mini-workshops: knot tying, hosted by Dr. Philip Wolfson in the Department of Surgery; emergency medicine patient care, demonstrated by Raffi Terzian, MD and Sharon Griswold, MD; a tour of the Department of Orthopedics conducted by Javad Parvizi, MD and Sidney Jacoby, MD; cardiac catheterization demonstrated by Dr. Michael Savage; and pediatric case studies presented by Charles Pohl, MD. Use of the gamma knife was demonstrated by Dr. Robert Rosenwasser. The event concluded with information on international opportunities and cultural diversity presented by Ed Christian, PhD and Luz Ortiz, MA. Of the 96 accepted applicants in at-

tendance, 76 are expected to matriculate on August 1, 2005, a 79% yield.

Recruitment of minority students remains a challenge for all medical institutions. To date we have extended interview invitations to 153 under-represented in medicine students, interviewed 100, accepted 74 and anticipate 24 matriculants. Efforts to provide additional educational and financial support and increased efforts at recruitment by our faculty and students, as well as the efforts of the Office of Diversity and Minority Affairs, have led to an increase in interest in Jefferson.

The vice dean and director participated in the Alpha Epsilon Delta Health Professions Conference hosted at the University of Pennsylvania School of Medicine on October 10, 2004. The Conference attracted more than 250 undergraduate students, 21 pre-health advisors, and participation by the Deans and Directors of Admissions from the area medical schools: Jefferson, Temple, Drexel, Philadelphia College of Osteopathic Medicine, New Jersey Medical School, Pennsylvania State College of Medicine, UMDNJ-Robert Wood Johnson, and the University of Pittsburgh.

During the 2004-2005 calendar year the vice dean and director participated as guest panelists at the following undergraduate institutions: Columbia, Duke, Harvard, Howard, Johns Hopkins, Muhlenberg, Princeton, Villanova, Wilkes, and Yale. The Office of Admissions served as host to students and pre-medical advisors from Bryn Mawr College, Columbia University, Gettysburg College, St. Vincent's College, Scranton University, Union College, the University of Delaware and the University of Pennsylvania.

We continue to participate in sponsored programs for the Northeast Association of Advisors for the Health Professions (NEAAHP) in conjunction with local health profession advisors from colleges and universities in the tri-state area. The purpose of the NEAAHP meetings is to develop and facilitate the exchange of information to advance undergraduate and medical education. The joint meeting of the North East Group on Student Affairs (NEGSA) and NEAAHP was held March 31-April 3, 2005 in Pittsburgh, Pennsylvania. Our involvement with the Northeast Consortium on Medical Education (NECOME), a group consisting of the premedical advisors from Amherst, Bowdoin, Hamilton, Haverford, Holy Cross, Middlebury, Swarthmore, Wesleyan and medical school admissions offi-

cers from Albany, Dartmouth, Harvard, Jefferson, Mt. Sinai, Rochester, University of Connecticut, University of Pennsylvania and the University of Vermont, continues. The 2004-2005 academic year meetings convened at the University of Vermont and Wesleyan.

The admissions process at Jefferson continues to be highly regarded by both applicants and advisors (according to questionnaires returned by accepted applicants who have withdrawn and according to the personal comments offered by the health professions advisors who have visited Jefferson). This almost universally favorable reaction is largely due to the efforts of the Admissions Office staff, the current medical students who conduct the interviews and tours and, most of all, to the enthusiasm, courtesy, and friendliness of the members of the Committee on Admissions who make the interview a conversation rather than a confrontation. Most of the students who choose to

go to other medical schools have written or called to indicate how difficult the decision was and how impressed they were by their visit to Jefferson and by the friendliness of the students and faculty.

The students who matriculate at Jefferson are intelligent, concerned, and dedicated individuals who have chosen medicine, in many cases, in spite of being advised to select another career by family, friends and physicians. I am confident that our students and graduates will continue to provide competent, compassionate medical care to the sick and injured and will be a credit to the profession and to Jefferson.

**Clara A. Callahan, MD**

The Lillian H. Brent Dean of Students and Admissions

# Office of Student Affairs & Career Counseling

The goal of the Office for Student Affairs and Career Counseling (OSACC) is to be available for academic and personal advising, to advocate for student needs, to foster career counseling, and to improve student access to the medical college. The office's Web site (<http://www.jefferson.edu/jmc/osacc/career/>) serves as a vehicle to enhance this mission.

## **Student Affairs Committee and Student Bulletin**

The Student Affairs Committee met monthly to support Jefferson Medical College students and to promote student-faculty interaction. Dr. Charles Pohl staffed the Committee as the Dean's representative. Representatives from pertinent university offices and college departments were encouraged to attend this year in order to provide more comprehensive and cohesive student programming and services. Four editions of the JMC Student Bulletin were published to foster communication between students, faculty, and administration of JMC.

## **Medical Student Orientations**

### **First Year Orientation**

The First Year Orientation provided a comprehensive introduction to all Jefferson students and facilitated their transition into medical school. The orientation program exposed incoming students to a myriad of student life issues including personal and academic support services, the undergraduate curriculum, and student activities. Students also were familiarized with the facilities and resources available to them through Thomas Jefferson University. In addition, the core values of professionalism, the patient-physician relationship, and Hippocratic Oath were emphasized this year. The Freshman Assistance Committee, a group of 25 second-year students, was instrumental in welcoming the new students during orientation and helping them get comfortable in their new roles as medical students. The Big Sib Program, which pairs first-year students with upperclassmen, was continued to improve peer mentorship and to strengthen relationships between the "siblings."

At the conclusion of the orientation week, the students and their families participated in the Jefferson

Medical College Opening Exercises. This event, which was conducted by Dr. Thomas Nasca, incorporated the White Coat Ceremony and the Shared Code of Professional Values. Dr. Clara Callahan, the honorary speaker for the White Coat Ceremony, spoke on the importance of professionalism and humanism in the practice of medicine.

## **Second-, Third-, and Fourth-Year Orientation**

The upper-class orientations prepared the students for their academic year. The programs continued to introduce the respective curriculum to the students as well as the required OSHA regulations. A required HIPAA training was also incorporated into the orientation. In order to improve the visibility of support services at JMC, the students also received information regarding the Office of Student Affairs and Career Counseling, the Student Personal Counseling Center, the services of the learning specialist, and career counseling opportunities. The Shared Code of Professional Values was also shared with the students.

## **Student Clinician's Ceremony**

The Student Clinician's Ceremony, which was supported and partially funded by The Arnold P. Gold Foundation, was initiated at Jefferson this year. Its goal is to enhance the student's transition into clinical medicine. The program was incorporated into the third-year orientation and included a keynote speech by a Jefferson clinician, Dr. Steven Herrine, who has been recognized by the students and faculty as a humanistic role model. As part of the ceremony, six outstanding residents who had been chosen by the outgoing third-year class were recognized and honored with the Gold Foundation's Humanism and Excellence in Teaching Award.

## **Support Systems**

### **"Personal" Dean Assignment**

Needs of students vary depending on the class, the time of year, and individual students. To allow each student to develop an in-depth relationship with someone in the OSACC, each student is assigned a "personal dean." Drs. DeSimone, Lopez, and Pohl took responsibility for a third of each of the four classes. Every student was required to meet with his/her

assigned dean. The purpose of this meeting was to build a mentoring relationship with the student, to facilitate the student's adjustment to the physical and emotional demands of medical school, to identify and monitor students having academic and/or personal difficulty, to help the student develop strategies in career development, and to remove the punitive stigma of the Dean's Office. Drs. DeSimone, Lopez, and Pohl were available by beeper at night and on weekends in the event of an emergency.

### **Alumni Association and the Women in Medicine Society**

The Alumni Association as well as the Women in Medicine Society also had opportunities for students to develop relationships with clinical faculty. The Jefferson Alumni Association continued a program to help foster mentoring at JMC by having Alumni from an array of specialties meet in small groups for lunch with first-year students.

### **Academic Support**

The Deans for the OSACC maintained a proactive stance regarding student academic performance by having annual mandatory meetings with their assigned students. In addition, Drs. DeSimone, Lopez, and Pohl, along with course directors and the Deans for Undergraduate Medical Education, regularly monitored the students' performance and contacted those with academic difficulty early in each block. The students were offered the opportunity to work out a plan to rectify deficiencies. Depending on the situation, the OSACC referred students to other counseling services (e.g., learning skills specialist, the Student Personal Counseling Center, University Student Health, a tutoring service, etc.). A quick reference guide for students with academic issues was printed in the JMC Student Handbook and posted on the OSACC Web site.

### **Transfer Students and Returning MD/PhD Students**

The OSACC monitors students on medical and non-medical leaves of absence and their subsequent re-entry to medical school. The Office coordinated a special program for these students, for students transferring into the third year from another medical school, and for students returning from the PhD phase of the MD/PhD programs. Under the direct observation of a faculty member, students reviewed history-taking and physical examination skills.

### **Personal Counseling**

Jefferson offered several options to students seeking counseling. In addition to the deans of the OSACC and the Jefferson faculty, the students utilized the JMC Student Personal Counseling Center. The counseling center, coordinated by James Youakim, MD of the Department of Psychiatry, was available for confidential evaluation and management of student personal issues, had organized an internal as well as external mental healthcare network, and developed a Wellness seminar series. A member of the Department of Psychiatry was available at nights and on weekends in the event of an emergency. A different student health insurance carrier has been identified to better meet the needs of the community for this coming year.

Efforts have continued to incorporate stress management into the medical school curriculum. Students learned that stress is a normal part of daily life in the "Medical Practice of the 21st Century" course. Many students also participated in stress management programs sponsored by the University Activities Office.

### **Wellness Initiate**

A Wellness Initiate, supported by the Dean for JMC, was expanded this year. This group met on a regular basis and was staffed by key university and college departments, including the JMC Dean's office, the Personal Counseling Center, Office for Diversity, medical students, and the University Activities Office. It performed an inventory of the current campus and city programs and designed a wellness curriculum as well as developed and implemented a JMC Wellness Web site.

### **Career Planning and Clinical Counseling**

The Alumni Association coordinated Career Day held on December 1, 2004. Physicians presented brief reviews and answered questions about their specialty. In addition, Dr. Pohl discussed the residency application process. Career Day was aimed at second-year and third-year students, but all students were invited.

Deans for the Office of Student Affairs and Career Counseling participated in the three sessions held by the University Office of the Registrar to assist second-year and third-year students in planning their upcoming clinical schedules. The workshops offered a curriculum overview and a review session on completing forms. Besides administrative input,

upperclassmen also provided information regarding schedule planning and electives. Graduates also made use of the career-planning resources for second career counseling.

Two booklets were updated and distributed to third-year students as well as posted on the OSACC Web site. One is a collection of descriptions written by each clinical department about its specialty's residencies. It also lists faculty members willing to offer career advice. The other career planning booklet focuses more on the residency application and interview process. On February 11, 2005, Dr. Pohl held a meeting with the Class of 2006 regarding fourth-year curriculum and planning for postgraduate training.

This year, Dr. Timothy Brigham and Dr. DeSimone again organized the Careers in Medicine workshop for first-year medical students in order to enhance the career planning process for students. The program, which is sponsored by the Association of American Medical Colleges (AAMC), provided students with information regarding career decisions. Drs. DeSimone and Lopez facilitated four career workshops for second-year and third-year students. In collaboration with the Learning Resource Center, Dr. Lopez maintained the student research opportunities in a user-friendly Web site.

### **Postgraduate Training**

Twenty-two members of the faculty comprised the Postgraduate Recommendation Committee. They interviewed the "rising" fourth-year students and wrote the Medical Student Performance Evaluations (formerly known as the "Dean's Letters") based primarily on excerpts of course evaluations. Dr. Pohl reviewed and signed all letters for the Committee. All letters included a histogram that plots each student's performance against the aggregate performance of their classmates for each of the core rotations, as well as preclinical and third-year class rank.

### **Match 2005**

The staff of the Learning Resources Center in Scott Memorial Library, the Office of Student Affairs and Career Counseling, and the University Office of the Registrar coordinated the 2005 Match. Students generated their rank lists for postgraduate positions online via the Web. Most residency programs used the Association of American Medical Colleges'

Electronic Residency Application Service (ERAS) in their application process, which made the process less burdensome for students. Match Day was March 17, 2005. On November 3, 2004, the Associate Dean, along with 15 different Program Directors of Thomas Jefferson University, met with the Class of 2005 to provide information regarding residency selection and the interviewing process. Dr. Pohl reviewed the ranking procedure of the NRMP with the senior class on February 9, 2005.

As seen on Table 1, of the 228 senior students (Class of 2005), 214 (94%) participated in the National Resident Matching Program (NRMP). Of the match participants, 16 students (7%) were unmatched (Table 2). Five of the 16 unmatched students, though, had secured a PG-Y 2 position. Nationally, the unmatched rate was six percent. All the unmatched students were subsequently matched to good positions or attained research positions. Fourteen (6%) students elected not to participate in the match either because of a commitment to one of the armed services, acceptance to a position outside of the match, an acceptance to a position in the Advanced Matching Program, or deferment of their training.

The specialties chosen most frequently by the 214 seniors going on to postgraduate training were Internal Medicine (14%), Family Practice (10%), and Pediatrics (10%). Of this year's seniors going onto residency training, 90 (39%) entered primary care specialties including internal medicine, family medicine, pediatrics, medicine-pediatrics or obstetrics and gynecology residency. Sixty-one percent of seniors participating in the NRMP matched at a university program for their PG-1 year. Ninety-five students accepted PGY-1 appointments in Pennsylvania, and 65 students accepted appointments in institutions that are the responsibility of Thomas Jefferson University Hospital or its affiliated hospitals. The NRMP no longer reports the percentage of students at each medical school that gets one of their top choices in the Match.

### **Charles A. Pohl, MD**

Associate Dean for Student Affairs and Career Coun-

**Table 1**  
**JMC Match Program Selected Data**

	2005	2004	2003	2002	2001	2000	1999	1998	1997	1996
# In Match	214	217	184	197	202	201	201	212	201	211
# Unmatched	16	21	11	11	13	13	9	12	12	17
Specialty Preferences of Unmatched Students	2 Anesth 1 Derm 1 EM 1FM 2 Med 1 OB 1Ped 5 PreMed* 2Surg	3 Derm 1 EM 1 Med 4 Ortho 2 Path 1 Plast 2 PreMed 1 Rad 1 Rehab 5 Surg	1 Med 1 No List* 3 Ortho 1 Ped 1 Psych 2 Rad 1 RadOnc 1 Trans*	1 Derm 1 EM 4 Ortho 4 PreMed 1 Rehab	1 Derm 1 FM 1 IM 2 PreMed* 1 PreSurg* 3 Ortho 2 Rad 1 Surg 1 Trans*	1 Derm 2 EM 2 FM 3 Ortho 2 PreMed 1 Rad 1 Surg 1 Trans*	2 Med 1 Ortho 1 Path 1 Peds 1 Psych 2 Rad 1 Urol	2 Derm 1 Med 1 Peds 2 Ortho 4 Surg 2 Trans	1 FM 1 Med 3 OB 4 Ortho 1 PreMed 1 PreSurg 1 Psych	3 EM 2 FM 1 Med 2 Ob/Gyn 1 Path 1 Peds 7 Surg
# Match at Primary Medical School Affiliates **	159	163	140	162	126	141	158	151	116	148

\* These students matched for PG-2 residency position but not for their PG-1 position.

\*\* Includes PG 1 and 2 (if known)

Office of Student Affairs and Career Counseling July 2005

**Table 2**  
**Initially Unmatched Students**

1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
5.5%	8.0%	6.0%	5.7%	4.4%	6.5%	5.9%	5.6%	6.0%	9.6%	7%

\* The unmatched rate for all graduating U.S. seniors was 6% in 2005.

# Office of Diversity and Minority Affairs

## Diversity Mission

The Office of Diversity and Minority Affairs (ODAMA) has as its mission promoting multicultural initiatives that affirm Jefferson's commitment in maintaining a culture of understanding and mutual respect within the Jefferson Community. These initiatives serve to increase awareness amongst the TJU community while helping to open the lines of communication and cooperation. Ongoing efforts to promote diversity and cross-cultural competent healthcare continue to be the focal point for this office.

This year, diversity initiatives continued, and many of the programs were expanded and enhanced. ODAMA sponsored a series of lectures, cultural events, and educational programs. The office was able to reach out to many more students from Jefferson Medical College, the College of Health Professions, and the College of Graduate Studies, in addition to faculty and staff. ODAMA supported all multicultural initiatives and many in the Jefferson community helped in the planning, coordinating, and promoting these programs. Overall attendance this year was excellent and participants enjoyed the programs.

## Diversity/Multicultural Initiatives

### Lecture Series

The lecture series continues to bring in distinguished guest speakers from the fields of medicine and health policy. The lecture series is broken into four categories: Dean's Lecture, Diversity/Cultural Competency Lecture, Open Forum/Hot Topics Lecture, and a Community/Healthcare Disparities Lecture. The lectures focus on the underlying issues concerning diversity, healthcare and healthcare disparities among ethnic groups. In addition, the need for health policies and culturally competent care for all patients is addressed. The lecture series for 2004-2005 is as follows:

Dean's Lecture – Monday, September 13, 2004

Title: "Cultural Competency and Diversity in Medicine"

Guest Speaker: Edward B. Christian, PhD, Associate Dean for the Office of Diversity and Minority Affairs

Cultural Competency Lecture – Thursday, October 14, 2004

Title: "Healthcare Disparities and the Latino Patient"  
Guest Speaker: Iris Reyes, MD, Associate Professor of Emergency Medicine at UPENN

Community/Healthcare Disparities Lecture – Wednesday, January 19, 2005

Title: "A Lifecycle Review of Health Disparities"

Guest Speaker: Denise V. Rodgers, MD, Sr. Associate Dean for Community Health

(Three lectures: Pediatric Grand Rounds; First year medical students; Second year medical students, Nursing staff and Allied Health students, and TJU community)

Open Forum/Hot Topics Lecture – Thursday, May 26, 2005

Title: "Why Advocate for the Consumer with a Disability: One Man's Perspective"

Guest Speaker: Thomas E. Strax, MD, Medical Director, JFK Johnson Rehabilitation Institute Professor and Chairman, Department of Physical Medicine and Rehabilitation at UMDNJ-Robert Wood Johnson Medical School

(Two lectures: Department of Family Medicine Grand Rounds; First year and second year medical students)

### Celebratory Events/Activities

Included in ODAMA's multicultural initiatives were cultural/ethnic events and activities. The lectures took place at noon, and the celebratory events and socials took place during the evening. Both served as a way to further promote diversity and cultural awareness.

This year, the following cultural/ethnic events and activities took place:

Latin Heritage Month

Dates: September 15 – October 15, 2004

Lecture: (Dean's Lecture served as the LHM Lecture)

Evening Social: Latin Heritage Month Dinner Dance

Expressions of Asia

Dates: Month of January

Fund raising for Tsunami victims in Sri Lanka

Date: Thursday, January 13, 2005

Lecture: "Health Care for Asian Immigrants"

Guest Speaker: Walter Tsou, MD

Date: January 13, 2005

Film Festival: "Hero"

Date: January 21, 2005

Expressions of Asia Cultural Evening Extravaganza

Black Heritage Month

Date: February 1, 2005

Open Forum

Facilitator: Edward B. Christian, PhD

Discussion: Black History Month vs. African American Diversity Month

Date: February 11, 2005

Evening Social: Black Heritage Month Cultural Dinner

Diversity Week

Dates: April 18- April 22, 2005

World Maps – "Where are you originally from?"

Flagged pins on country of origin

Date: April 22, 2005

Multicultural Evening/International Day

Desserts from Around the World, 12:00 p.m. – 2:00 p.m.

Evening Social: Multicultural Dinner

### **Jefferson Medical Language Immersion Program (JEFF MED-LIP)**

The Jefferson Medical Language Immersion Program (JEFF MED-LIP) was designed to address the need of today's diverse patient population which consists of people who often have limited English-speaking skills. The program enables our students to learn medical terminology and understand social-cultural norms and nuances, as well as learn about prevalent diseases within the sub-groups. It includes visits to nearby community clinics where students have the opportunity to see patients and get hands-on experience. Community outreach is done on a weekly basis by conducting educational health workshops where students can put into practice the language skills and competencies they have acquired.

### **Medical Spanish**

This course is divided into basic, intermediate and advanced levels. It is offered for an hour once a week for 30 weeks. Students interested in taking the course are given a placement test on the first day of class.

The 2004-2005 enrollment of 130 students participated in Basic 1 (35 students), Basic 2 (25 students) Intermediate (35 students) and Advanced (35 students).

### **Clinical "Immersion" Experience Abroad**

A summer "immersion" experience in a foreign country where that specific language is spoken is offered as part of this program. Students travel abroad for six to eight weeks and experience first-hand that country's healthcare delivery system. Students are able to apply for a limited number of Foerderer Scholarships through the Office of International Exchange Services.

Medical Students and residents participated in the first Clinical "Immersion" experience abroad in Santo Domingo, Dominican Republic at the Universidad Iberoamericana School of Medicine (UNIBE).

On January 31-February 11, 2005, one TJUH Resident in the Department of Family Medicine rotated through the program, and from June 15 – July 29, 2005, five JMC Students and one UMDNJ-NJMED Student attended.

The Universidad Autonoma de Guadalajara School of Medicine in Guadalajara, Mexico (UAG) was chosen as a potential second site. An invitation was sent by UAG to conduct a site visit. The site visit was conducted from May 16-20, 2005.

Formal Linkage Agreements between JMC/UNIBE and JMC/UGA are to be explored, drafted and submitted for appropriate signatures in the coming months.

### **Diversity Council**

The Diversity Council has been very active in helping to plan and promote programs run by the Office of Diversity and Minority Affairs. Fifteen students were members this year, and their active participation in promoting these programs produced a large turnout in all initiatives and insured a highly successful year for ODAMA.

### **Orientation**

The Office of Diversity and Minority Affairs was once again part of the orientation program for incoming first-year medical students. A lecture on the importance of diversity in medicine and information concerning ODAMA's multicultural/diversity initiatives and recruitment/retention programs was presented. Approximately 225 students were in attendance.

### **Minority Affairs**

One of the goals for the Office of Diversity and Minority Affairs was to implement a plan of recruitment to

enhance the diversity within the Jefferson Medical School student body. This year, extensive recruitment took place at graduate and professional recruitment fairs; national, regional and professional conferences; minority medical student organizations and conferences. Recruitment also took place at undergraduate schools with a significant number of underrepresented minority students in attendance, as well as at Hispanic-serving (HSCUs) and Historically Black (HBCUs) colleges and universities.

### **Open House**

For the past three years, ODAMA has hosted a joint Open House with the University of Pennsylvania School of Medicine. Each school offers students a half-day program. At Jefferson, the program included talks by representatives from Jefferson Medical College and the College of Graduate Studies, the Offices of Admissions and Financial Aid, and concurrent sessions for medical students and their pre-health advisors. Students attending the Open House had a session with our current medical students. Some of the topics discussed included students' initial interest in a career in medicine, admission into medical school and experiences as a student at Jefferson. This year 150 students attended the Open House on November 19, 2005 from 9:00 a.m. to 1:00 p.m. at JMC and from 1:30 p.m. to 5:30 p.m. at UPENN.

### **Undergraduate Recruitment and Retention**

Effective recruitment at the undergraduate level is critical because these students are closest to becoming applicants to JMC. Following the initial strategic recruitment plan, active recruitment has taken place throughout the country targeting the Hispanic-Serving and Historically Black Colleges and Universities. Networking has taken place, and strong bonds with pre-health advisors throughout the nation have been established. For a summary of all recruitment trips see Tables I and Ia.

### **K-12 Recruitment**

Recruitment efforts at the K-12 level are imperative since we need to create a "pipeline" of qualified students for the medical school. ODAMA is effectively playing a role in this effort. Enrichment opportunities are provided to encourage students to pursue a career in medicine while offering effective guidance and counseling for successful preparation.

### **Future Docs Pipeline Programs**

Throughout the country, many medical schools have established pipeline programs. To begin a pipeline into the medical school, ODAMA implemented the Future Docs program. This year, the program was expanded to include high school, middle and primary school students.

Roses From the Concrete: The On the Rise SAT Prep Program was incorporated into the Future Docs High School Program. Students were given one hour of SAT prep within the Future Docs Program and an additional hour each week at their respective high schools. The students received a total of 21 hours of SAT prep within the 10-week period.

In the 10-week High School Program, 41 students in grades 11 and 12 participated once a week from 3:30-6:30 p.m. and represented 11 schools (Central HS, Community Academy of Philadelphia, Freire Charter School, Julia R. Masterman HS, Kensington HS, Multicultural Academy Charter School, Strawberry Mansion HS, William Penn Health Academy HS, IMHOTEP Institute Charter HS, Franklin Learning Center, Nueva Esperanza Academy Charter HS).

In the Middle School Program, 14 students in Grades 6, 7, 8 participated with their parents for three Saturdays from 9:00 – 2:00 p.m. and attended 11 schools (Russell O. Brackman-NJ, Hope Church School, Mathematic Civic and Science Charter School, Ethan Allen School, Christian Academy, Andrew Hamilton, St. Mary's Interparochial School, Cornerstone Christian Academy, John J. Jenks, Solis Cohen, ICS).

In the 10-week Primary School Program, 43 students in Grades 4, 5, 6 participated once a week from 3:30-6:00 p.m. and came from one school (TM Peirce Elem. School).

### **SAT Prep Programs**

Roses from the Concrete on the Rise Program  
Fall

- University City High School (20 students)
- Temple Young Scholars (10 students)
- Strawberry Mansion (10 students)
- Kensington (10 students)

Spring

- Jefferson Future Docs (20 students)
- Strawberry Mansion (10 students)
- Temple Upward Bound (15 students)

- Temple Math and Science Scholars (20 students)

### **New Americans Program**

- Recent high school immigrants and refugees
- Spring semester began
- South Philadelphia High School Newcomer Center
- Mentors/speak weekly with mentee
- General Meeting bi-weekly
- Activities: tutoring (homework, English, reading, writing, communication skills, etc.), cultural immersion, movie night, lunch/dinner outside of school, historical tour of the city, resume writing, interviewing skills, job fairs/career development, etc.

### **Recruitment Materials**

ODAMA is currently updating existing recruitment materials.

### **Brochure**

The current brochure is being revised to reflect changes that have occurred within the past year in the office and on the Web site, and admission's data and housing information is being updated.

### **Advertising**

This year, ODAMA placed advertisements in the *Journal for Minority Medical Students*, *Winds of Change Magazine* and the *Latino Medical Student Association Publication* encouraging students to pursue careers in medicine at Jefferson. In the 2005-2006 academic year, advertisements will be placed in conference brochures for the National Hispanic Medical Association, Boricua Latino Health Organization, Student National Medical Association and the AISES National Conference.

### **Web Site**

The ODAMA Web site provides viewers with information about the office, its mission and programs. It is also used for recruitment purposes. The site targets a full spectrum of viewers including prospective students, pre-health advisors, current Jefferson students, and faculty and staff. For fiscal year 2004-2005, there was a dramatic increase in the number of visitors to the Web site (Table 2).

### **Edward Christian, PhD**

Associate Dean for Diversity and Minority Affairs

### **Luz Ortiz, MA**

Assistant Dean for Diversity and Minority Affairs

**Table 1**  
**Recruitment Visits and Professional Development Conferences**  
**2004 - 2005**

<b>DATE</b>	<b>PLACE</b>	<b>EVENT</b>	<b>APPROXIMATE # OF STUDENTS</b>
Sept. 16-21, 2004	Atlanta, GA	NAMME National Conference**	400 students Prof. Dev./Networking
October 11, 2004	Philadelphia, PA	UPENN-Upward Bound	100 students
October 19-24, 2004	Austin, TX	SACNAS Annual Conference	800+ students
October 26, 2004	Philadelphia, PA	Shaw High School	100+ students
October 28-30, 2004	Gainesville, Florida	AMSA-Premedical Annual Conference	300+ students
November 3, 2004	Philadelphia, PA	Nueva Esperanza Academy Charter H.S. Career Day	150 students
November 5-9, 2004	Boston, MA	AAMC Annual Conference	150 students Prof. Dev./Networking
February 3-6, 2005	Ithaca, NY	Cornell University BBMTA Annual Conference	100 students
February 7-13, 2005	Florida Swing – Miami, Tampa	Univ. of Miami, Florida Inter. Univ., Univ. of South Florida	450 students
March 31-April 5, 2005	Los Angeles, CA	NHMA Annual Conference**	150 students Prof. Dev./Networking
April 7-10, 2005	San Diego, CA	LHMA Annual Conference	400+ students
April 21-24, 2005	Syracuse, NY	NAMME NE Regional Annual Conference**	200+ students Prof. Dev./Networking
April 27, 2005	Piscataway, NJ	Rutgers University MAPS Annual Career Day	100 students
April 16-20, 2005	Guadalajara, Mexico	Site Visit JEFF MED LIP Medical Spanish	
May 30-June 5, 2005	New York, NY	NCORE Annual Conference**	Continuing Education Professional Development/Networking

\*\*These conferences also served as Professional Development/Continuing Education

**Table 1a**  
**Recruitment Visits and Professional Development Conferences**  
**2004 - 2005**

<b>DATE</b>	<b>PLACE</b>	<b>EVENT</b>	<b>APPROXIMATE # OF STUDENTS</b>
October 6, 2004	College Park, MD	University of Maryland Minority Recruitment Fair	300 students
October 29, 2004	Saint Davids, PA	Pre Medical Society Information and Recruitment Fair	20 students
October 28, 2004	Philadelphia, PA	University of Pennsylvania Graduate Student Society Discussion on Minorities in Medicine and Recruitment	400 students
March 26, 2004	Bryn Mawr, PA	Pre Medical Society Lecture and Recruitment	100 students
April 4, 2004	Wilkes-Barre, PA	Philadelphia Public Schools Health Care Conference Lecture on opportunities in Medicine	300 students
June 23-25, 2004	Chapel Hill, NC	University of North Carolina and Duke University Minority Recruitment Fair	1,000 students
July 15, 2004	Cleveland, OH	Case Western Reserve Summer Programs Recruitment Fair	350 students

**Table 2**  
**ODAMA Web Site Statistics**  
**2004 - 2005**

<b>ODAMA WEBSITE SECTION</b>	<b>NUMBER OF VIEWERS</b>
/ODAMA/HOME/	923
/ODAMA/	208
/ODAMA/MINAFF/	423
/ODAMA/DIVAFF/	302
/ODAMA/CONTACT/	250

\*These numbers only reflect five of one hundred and eight sections under the ODAMA Website

# Student Council

The Student Council is comprised of elected representatives from each class at Jefferson Medical College. The JMC Student Council is an advocate for the student body and strives to maintain the autonomy and creativity of our student organizations. Responsibilities of the Council include supervision of student organizations, disbursement of university funds, and the dissemination of information on issues pertinent to student life at the Medical College. Furthermore, the Council acts as the liaison between the students, faculty and administration. Council representatives serve with faculty on standing committees in the areas of admissions, affiliations, alumni, research, curriculum, student affairs and technology. As the collective voice of the student body, the Council works continuously with faculty and administration to recommend and implement changes that will positively impact students at the Medical College and within the University community. The following is a sample of the activities and organizations in which the Student Council members and many others participated during the past year.

## **Student Activities and Organizations**

### **JMC Student Noteservice**

One of the most exciting developments this year has been the creation of the free student noteservice in cooperation with the Course Liaisons (Kimmie Pringle and Phil Digiacomio). This was originally the vision of the Technology Faculty Liaisons (Levi Chazen and Allan Simpao) in the Fall of 2004 when the Student Affairs Office purchased mp3 players to record lectures that were downloaded onto the Pulse Web site. The students write a check for \$25 to the Student Council that is destroyed at the end of the school year when the students complete the two to three lectures they are assigned to scribe throughout the school year. Each student is assigned one lecture to scribe which is downloaded to the pulse Web site where everybody can access the notes. If all 255 students participate in the noteservice, then the only obligation to have access to all lectures in Word format, is to scribe a few lectures throughout the school year. This is a change from prior years when a for-profit organization used a similar system, but charged participants several hundred dollars every semester to have notes printed up.

### **JeffHOPE**

The JeffHOPE Homeless Shelter Clinic Project is a student-run health clinic that provides free medical care and education to indigenous populations in Philadelphia. This ambitious program is the most extensive of its kind in the city. The project is sponsored by the Department of Family Medicine (James D. Plumb, MD, advisor). However, faculty from many departments pledge their time, resources and support. For first- and second-year medical students, the clinics provide

**The JMC Student Council is an advocate for the student body and strives to maintain the autonomy and creativity of our student organizations.**

invaluable early exposure to patient care. Third- and fourth-year students have the opportunity to examine and treat the homeless population as well as teach first- and second-year medical students the fundamentals of physical examinations, history taking and the pathophysiology of common diseases. Each week, 10 to 15 students and several faculty treat homeless men at the Salvation Army's Gateway Shelter in North Philadelphia and St. Columba's Shelter in West Philadelphia. JeffHOPE continues to send students to its newest clinic sites, the Women of Change shelter in Center City and Prevention Point (needle exchange site) in North Philadelphia. This year saw the fifth annual JeffHOPE Ball, a formal event held at the Ben Franklin House designed to raise money and awareness of JeffHOPE's cause, as well as to honor faculty who have been integral to JeffHOPE's creation and perpetuation. The ball is a yearly grand event.

### **Freshman Assistance Committee (FAC)**

This organization consists of the two student representatives from the Student Affairs Committee and a select group of students from the second-year class. The purpose of the FAC is to facilitate the integration of JMC first-year students into the Jefferson and local communities through various engaging social activities and informational workshops. The Big-Sib program is under the direct supervision of the FAC,

and this program links first year students with a trained second-year student who volunteers to serve as a student mentor. Group leaders and student advisors are available as a resource to first-year students throughout the year.

### **Jeff Elect**

The students involved in this organization participate in lunchtime visits to Philadelphia high schools to provide relevant health information to pregnant teens and help to facilitate their entry into the health care system. Informal presentations are given to help these teenagers on issues ranging from prenatal nutrition to positive discipline. The teens are actively encouraged to share their own experiences with each other and with the Jefferson educators.

### **American Medical Women's Association (AMWA)**

In addition to promoting female role models and providing a support network for women in medicine, AMWA is also active in community service. AMWA is a permanent participant in the Jefferson Faculty Women's Task Force. Members volunteer at women's shelters, Planned Parenthood activities and events concerning women's issues. This group has served as an excellent resource for women in medicine.

### **Student National Medical Association (SNMA)**

SNMA sponsors a Health Professions Exposure/Recruitment Program to promote health care careers among minorities. Jefferson's chapter targeted the city's tenth and eleventh grade students who are interested in the sciences to help promote interest in the health professions, provide exposure to the Medical College and TJU Hospital, and to offer information about the necessary steps to become a healthcare professional. SNMA students are also active in the recruitment and matriculation of minority students.

### **Ars Medica**

Ars Medica sponsors seminars and talks on alternative medicine (e.g., acupuncture, yoga and folk healing), and on topics such as the influence of literature and music on medicine and healing.

### **Society for Tomorrow's Physicians**

Society for Tomorrow's Physician is dedicated to educating students on the extended roles of physicians in the community, as well improving self-awareness in the evolving medical environment, and has provided lectures including computers in medicine, politics in health care and topics in managed care.

### **International Medicine Society (IMS)**

The IMS investigates opportunities for student electives abroad and has developed exchange programs with international medical schools. It hosts numerous workshops throughout the year to familiarize students with possible research opportunities abroad and how to raise money for travel and expenses. In addition, the steering committee educated students about the process involved to obtain faculty support and credit for international electives.

JMC boasts more than 60 student organizations. (See Table 1 following this report.) In addition to chapters of national organizations and honor societies, numerous career, religious, cultural, athletic and special-interest organizations exist. A complete summary of all organizations, events accomplished, and expectations for the upcoming year can be found in the *Student Organization Annual Report Handbook*.

The JMC Student Council has been extremely active and vocal in attending to the various needs of the student body and greatly appreciates the support given to it by the administration, University departments, and the Office of Student Affairs and Career Counseling.

### **Student Council Officers**

The following students served as Student Council Executive Officers for 2004-2005:

President	Roman Politi, Class of 2007
Vice-President	Stephen David T. Anderson, Class of 2007
Secretary	Neerav Goyal, Class of 2008
Treasurer	Constantinos Ketonis, Class of 2008

**Roman Politi,**  
President, JMC Student Council, 2004-2005

**Table 1**  
**JMC Student Organizations by Category**

<b>Career Oriented</b>	<b>Faculty Advisor</b>	<b>Student Contact</b>
American Medical Association – Medical Student Section	Stephen Schartz, MD	Michael Baratz
American Medical Student Association	Charles Pohl, MD	Audrey Chan
American Medical Women's Association	Karen Novielli, MD	Ashley Harrison
Ars Medica	George Brainard, PhD	Celeste Dean
Dermatology Society	Franzsika Ringpfeil, MD	Franziska Ringpfeil
Edward McGehee Jefferson Geriatrics Society	Christine Arenson, MD	Mea Gentile
Emergency Medicine Society	Paul Kolecki, MD	Kate Fanjoy
Gibbon Surgical Society	John Moore, MD	Onkar Khullar
Hobart Amory Hare Honor Medical Society	Gregory Kane, MD	Jeffrey Weinstein
Internal Medicine Society	David Axelrod, MD, JD	Deepak Pradhan
International Federation of Medical Students' Associations	Janice Bogen	Alex Lee
Internal Medicine Society	James Plumb, MD, MPH	Sue Gerber
J. Marion Sims OB/GYN Society	Abigail Wolf, MD	Tiffany Wong
Jeff SAPHE	James Plumb, MD, MPH	Abbie Schlener
Jeff Y.E.S.	Patrick McManus, MD	Shaun Smith
Medical Innovation Forum	Howard Greenberg, MD, MBA	Robert Anolik
Medical Oncology Society	Bruce Boman, MD, PhD	Christian Davidson
Neurology Society	George Brainard, PhD	
Otolaryngology Society	David Rosen, MD	Cory Rubin
Pediatrics Society	Charles Pohl, MD	Cory Daignault
Peter Amadio, Jr. Family Medicine Society	Fred Markham, MD	Catherine Hurley
Philadelphia Med-Peds Society	Allen Friedland, MD	Benjamin D'Souza
Plastic Surgery Society	James Fox, MD	Joshua Adkinson
Psychiatry Society	Mitchell Cohen, JM, MD	
Public Health Society	James Plumb, MD, MPH	Edna Clogg
Student National Medical Association	Edward Christian, PhD	Vanessa Baptiste
Thomas Duane Ophthalmology Society	Mark Pyfer, MD	Linda Ohsie
Urology Society	Leonard Gomella, MD	

<b>National Honor Societies</b>	<b>Faculty Advisor</b>	<b>Student Contact</b>
Alpha Omega Alpha Honor Medical Society	Clara Callahan, MD	Carson Campe

Special Interest	Faculty Advisor	Student Contact
Activities Office Advisory Committee	Patricia Haas, MBA	
Arrhythmias	Richard Horn, PhD	Katharine Arefiev
Arts Organization	Mitchell Cohen, JM, MD	Justin Belin
Bookstore Advisory Committee	Patricia Haas, MBA	
Choir	Robert Sataloff, MD, DMA	Margaret Baroody
Committee of Student Advisors	Raelynn Cooter, PhD	
Dance Troup	James Plumb, MD, MPH	Tania Mucci
Fitness Center Advisory Committee	Amy Wagner, MEd	
Freshman Follies	Charles Pohl, MD	Cory Daignault
Histones	Richard Schmidt, PhD	Michael Pfeiffer
International Day Steering Committee	Janice Bogen	Melissa Wilson
Jeff Elect	George Datto, MD	MaryAnn Wahba
Jeff Mentors	Patrick McManus, MD	Julia Lou
Jeff Recycles	George Brainard, PhD	Bahar Fazeli
Lambda Alliance	Patrick McManus, MD	Michelle Sperry
Married Students & Significant Other Society	Grace Hershman, MEd	Doriann Lavery
Medical Students for Choice	Carmen Sultana, MD	Neena Desai
Military Medical Students Association	Edward Jaeger, MD	Bryan Newbrough
Move4Health	Patrick McManus, MD	Lou Kolman
Outing Club	Richard Schmidt, PhD	Kimmie Pringle
Students Educating & Advocating for Literacy	Angela Allevi, MD	Betty Picinic
Students for Life	James Youakim, MD	Andrew Archual
Students Organized Against Rape	Ralph Riviello, MD	Rujuta Patel
Wagner History of Medicine Society	Salvatore Mangione, MD	Barry Schlansky

Athletics	Faculty Advisor	Student Contact
Football League	Hector Lopez, MD	Daniel Hernandez
Karate Club	Hideki Kaji, PhD	Diane Scheer
Soccer Club	Matthew DeCaro, MD	Anna Filip
Ultimate Frisbee Club	Fred Markham, MD	Dorothy Wang
Volleyball Club	Johnathan Powell, MD	Eric Wiepert
Water Polo Club	Mark Curtis, MD, PhD	Anne Barmettler

JMC Related	Faculty Advisor	Student Contact
Ambassadors	Grace Hershman, MEd	Erin Cunningham
Big Sibs Program	Charles Pohl, MD	Melissa Wilson
Black and Blue Ball Committee	Charles Pohl, MD	Elizabeth Wassenaar
Freshman Assistance Committee	Charles Pohl, MD	Erin Cunningham
Professional Conduct Committee	Charles Pohl, MD	Anthony Dempsey
Student Admissions Coordinators	Clara Callahan, MD	Amy Hartke
Student Council	Charles Pohl, MD	Roman Politi
The Clinic	Charles Pohl, MD	

<b>Cultural/Religious</b>	<b>Faculty Advisor</b>	<b>Student Contact</b>
African-American Student Society	Jessie Pervall	Bubu Banini
Asian Diversity Enrichment	Cynthia Cheng, MD	Theresa Nguyen
Association of Indians	Salman Akhtar, MD	Zarana Boghara
Borica Latino Health Organization	Luz Ortiz	Luz Ortiz
Chinese Student and Scholar Association	Yi Shi, MD, PhD	Xiaohe Liu
Christian Fellowship	Susan Adeniyi-Jones, MD	Daniel Hernandez
Diversity Council	Luz Ortiz	Luz Ortiz
Islamic Medical Association	Edward Christian, PhD	Feraz Rahman
Jewish Student Association	Allen Zeiger, PhD	Mia Minen
Louis Pasteur Roman Catholic Society	James Youakim, MD	Andrew Archaul
Persian Society	Mohammadreza Hojat, PhD	Soorena Khojasteh

<b>Community Service</b>	<b>Faculty Advisor</b>	<b>Student Contact</b>
Bridging the Gaps	Maria Hervada-Page	Susan Bulman
Clowns for Medicine	Richard Horn, PhD	Benjamin D'Souza
Jeff Cares for Kids	Steven Bachrach, MD	Steven Bachrach, MD
Jeff HELP	James Plumb, MD, MPH	Jennifer Nansteel
Jeff HOPE	James Plumb, MD, MPH	Kristin Cam
Jeff HOPE for Kids	Charles Pohl, MD	Jim Kelly
Jeff Outreach	Charles Pohl, MD	Levi Chazen
Ways and Means	Stephen Kern	Kara George

# University Office of the Registrar

## Overview/Student Demographics

During the 2004-2005 academic year, the University Office of the Registrar reported an opening Fall enrollment of 2,457 students in the combined three academic divisions of the University: 925 in Jefferson Medical College (38 percent), 908 in the Jefferson College of Health Professions (37 percent), and 624 in the Jefferson College of Graduate Studies (25 percent).

Of the 468 men and 457 women comprising total enrollment in Jefferson Medical College, geographic origination was diverse, with 39 states, the District of Columbia, and 10 foreign countries represented.

Consistent with previous years, just fewer than 71 percent of the enrollment came from five states. Pennsylvania residents accounted for 46 percent (423) of the total enrollment, followed by New Jersey (11 percent, 98); Delaware (seven percent, 64); New York (4 percent, 35); and California (3 percent, 31). Five International students originated from Malaysia, with four enrolled as part of our affiliation with the International Medical University, located in Kuala Lumpur, also, Canada with seven students in attendance, and one student each from Nigeria, Brazil, Kenya, Nepal, Cyprus, Korea, Samoa and the United Kingdom.

Special academic programs remained attractive to students with 57 enrolled under the Jefferson/Delaware Medical Education Program, 77 in the Pennsylvania State University Accelerated Program, and 26 in the Jefferson Physician Shortage Area Program. Combined MD/PhD programs in conjunction with the Jefferson College of Graduate Studies accounted for 20 students in either of the two colleges during 2004-2005. Eight students were enrolled in the joint Jefferson/Widener MD/MBA program.

At Commencement exercises on June 2, 2005, the Doctor of Medicine degree was awarded to 227 candidates in the Class of 2005.

## BANNER/Technology and Web Enhancements

With support from JeffIT, the Vice Dean for Academic Affairs, Associate Dean for Student Affairs and Career Counseling, and Senior Associate Dean for Academic Affairs/Undergraduate Medical Education, the

Registrar's Office continued to focus on technology enhancements this year.

With the capabilities inherent to the Banner student system and with joint cooperation among university administrative offices, the requirement that third- and fourth-year students appear for in-person registration was eliminated. The time formerly set aside for this activity was returned to the Office of Student Affairs, allowing for a more focused and comprehensive orientation to the students' respective clinical years. Discussion has been held with regard to extending this feature for the returning second-year class this

Of the 468 men and 457 women comprising total enrollment in Jefferson Medical College, geographic origination was diverse, with 39 states, the District of Columbia, and 10 foreign countries represented.

The office was invited to attend the Admissions Office "Second Look" program held for students accepted to the incoming Fall class. An overview of the online capabilities and services available to students via Banner Web were demonstrated, and allowed students to ask questions related to office services.

Student reaction remains uniformly, and overwhelmingly, positive concerning the ease and convenience of Banner Web-based student processes. This online ability to complete administrative tasks has eliminated much of the need for students to visit our office for routine reasons. We look to extend online abilities in the coming year by introducing a "Forms Center" accessible via the office Web site. Commonly used forms would be made available for download and printing at the students' convenience.

In consultation with the Office of Student Affairs, we continue to "fine tune" the Medical Student Performance Evaluation (MSPE) process, as we learn more about the electronic processes that have been enabled in the past two years. Each letter writer was

provided with electronic copies of the initial baseline letter with specific biographical information completed, as well as clinical evaluations for each of their students. Letter writers without Jefferson network access are routinely provided the same service via portable electronic media. The office produced and mailed approximately 150 Medical Student Performance Evaluation (MSPE) packets to residency programs outside of the AAMC Electronic Residency Application Service (ERAS) for the JMC Class of 2005. Nearly 75 addendum letters were created to include evaluations received after the original MSPE letter was produced. As more residency areas have been added to ERAS, the required paper application support has continued to decrease. Office responsibilities in this process remain critical even with the electronic system. This past year, approximately 275 students' and graduates' information was electronically transmitted to residency programs, comprising an estimated 6,500 documents.

As noted last year, a more robust room reservation scheduling system was investigated and identified. Pending funding approval, we plan to implement this system in the coming year and move from the currently used Corporate Time software. The new system has the ability to partner with Banner to eliminate duplication of effort and reduce the possibility of data entry error, as well as providing more management reporting capabilities for monitoring the use of university classroom resources.

In conjunction with other university service offices, a tracking system was developed to be put in place for the Fall semester to ensure that entering students are in compliance with pre-matriculation requirements in the health records, health insurance and tuition payment areas. We anticipate this process will prove effective in gaining student response and greatly reduce the need for individual follow-up.

We continue to look for ways to modify our processes to take advantage of emerging technology and increase our service efficiencies.

### **Additional Major Services**

Following the most recent Middle State Association accrediting visit, the Student Services Review Com-

mittee members felt there was a great deal of value to continue to meet collectively. The University Student Services Group was formed and meets on a regular basis to discuss areas of common interest and become more familiar with student service systems currently in place in the offices that comprise the committee. As a result of this effort, the compliance procedures noted above were developed. This committee will continue to allow for collaboration between administrative and academic entities of the University to ensure highly effective student service processes.

### **Personnel Changes**

The past year was somewhat of a challenge with multiple front office position vacancies occurring simultaneously in the early portion of the summer. With the dedication and cooperation of existing staff, our services continued without significant interruption until the front office was fully staffed in September. Most notably, in late fall we were able to recruit and hire an extremely competent and dedicated individual for the vacant Commencement Coordinator position.

### **Professional Affiliations**

The University Registrar served on a Middle States Association of Colleges and Schools Accreditation Site Team. The Senior Associate University Registrar continued in a leadership role in the American Association of Collegiate Registrars and Admissions Officers (AACRAO). He is a member of the AACRAO State and Regional Relations Committee serving as a liaison to the national organization for the Middle States, New York/New Jersey, and Utah AACRAO regional organizations. Additionally, he was an invited member of the Integrated Postsecondary Education Data System (IPEDS) Student Unit Record Feasibility Study Technical Review Panel funded by the National Center for Education Statistics.

### **Raelynn Cooter, PhD**

Associate Dean for Administration, JCHP and University Registrar

### **David R. Clawson**

# University Office of Student Financial Aid

The University Office of Financial Aid is responsible for providing educational-financing services to students in all three colleges of Thomas Jefferson University, as well as debt-management counseling for TJU students and Jefferson Health System (JHS) house staff.

## **BANNER and Other Technological Advancements**

The Financial Aid Office continues to assess and expand online services for students. Efforts during the 2004-2005 year focused on further enhancement of the Banner system's functionality, primarily the use of Banner Web and the ability for students to file financial aid application material online.

For the 2004-2005 academic year, approximately 93 percent of JMC students filed their Jefferson Financial Aid Application materials online. This is an increase from the previous year. However, as students' comfort with online processes increase, we expect this percentage to continue to increase next academic year. The online application continues to be refined to improve specifically the user friendliness of the process. No new questions or fields were added this year but may be in the future to better assist in awarding

As technological capabilities are constantly improving, the University Office of Financial Aid intends to take full advantage of more online processes to improve the ease of applying for financial aid and our services to the students we accommodate.

institutional, state, and federal aid programs.

Two online advancements outside of Banner were introduced to our new students in the 2002-2003 academic year and continued to be used successfully in the 2004-2005 year. The first new process was the elimination of the previous "paper" method for students to complete the Federal Stafford Loan Master

Promissory Note (MPN). Working with our lenders, we were able to take advantage of a federal process, which gives students the option of completing the federal MPN online and sending it to the lender with an electronic federal PIN signature. This federal PIN can be used to complete and access many federal applications and personal databases. The second advancement was a Web-based Entrance Interview using a previously established lender site. The federally required Entrance Interview consists of loan counseling for new students prior to disbursement of federal funds. As many new students are not on campus prior to loan disbursement, this new online process has allowed students the ability to complete the requirement and attain the necessary information prior to their arrival at TJU. These two processes continued to work very well for students this year. They made it easy to complete requirements in a timely fashion and surely assisted the "last minute" accepted student allowing for swift turnaround of the delivery of loan funds to students. It worked well for the University Office of Financial Aid as it relieved various administrative duties related to loan processing allowing for enhanced customer service to students.

As technological capabilities are constantly improving, the University Office of Financial Aid intends to take full advantage of more online processes to improve the ease of applying for financial aid and our services to the students we accommodate.

## **Sources of Financing**

Table 1 and Figure 1 show the total aid awarded to Jefferson Medical College students during the 2004-2005 academic year. In reviewing this data, it is important to note additional characteristics regarding the composition of total funding.

Of the \$29,808,795 borrowed during 2004-2005, \$20,618,492 was from unsubsidized sources (Federal Unsubsidized Stafford and private alternative loan programs). The amount shown indicates only the principal borrowed; however, interest accrues to the student's account from the date funds are disbursed. Unsubsidized borrowing has increased from the prior

year largely in part by the decreased cost of borrowing due to historically low interest rates. This issue is discussed further in this report.

Of the \$6,350,794 awarded in grant and scholarship funding, \$2,297,601 was from service-obligation programs (National Health Service Corps, Armed Forces Health Professions Scholarship, and Federal Work Study). Receipt of these funds requires an "in-school" or post-graduation employment obligation.

### **Federal Work Study**

Federal Work Study (FWS) is a program by which students may defray a portion of their educational expenses through employment, either on campus or in the surrounding community. JMC students are employed in research-assistant and community-service positions. The total amount earned during 2004-2005 is shown in Table 1.

As part of this program's community-service efforts, Federal Work Study remains a primary funding source for summer employment through the Bridging the Gaps (BTG) program. During the summer of 2004, Federal Work Study funds sponsored 20 Jefferson Medical College students, six Jefferson College of Health Professions students and one Jefferson College of Graduate Studies student in the BTG program, thus providing support for 63 percent of the BTG payroll.

Starting with the 1999-2000 academic year, the Federal Work Study Program regulations expanded the community service requirement to include at least one literacy program. This requirement has necessitated that at least one FWS student be employed in a "reading tutor/family literacy project." As an initial step in fulfilling this regulatory requirement, the University Office of Financial Aid provided FWS funding for the Department of Pediatrics' "Students Educating and Advocating for Literacy" Program.

During 2001-2002, the literacy portion of the Federal Work Study Program was further expanded through the development of a reading program with the children at a Jeff HOPE homeless shelter and through placement of FWS students in Bright Horizons Day Care centers. Expansion continued during 2004-2005 with 13 JCHP students and seven JCGS students in the Bright Horizons Day Care centers and five JMC students in the Jeff HOPE for Literacy, Eliza Shirley Shelter, ACTS Shelter, and The Village Community Center literacy programs. In addition, six JCGS stu-

dents participated in a literacy program with the St. Elizabeth's Homeless shelter in NJ. This program is sponsored through the Occupational Therapy program. Expansion of these programs will continue during the 2005-2006 academic year.

### **Student Indebtedness**

Table 2 shows the average debt for Jefferson Medical College's graduating class of 2005, with comparative data for the five preceding years (2000-2004). Student borrowing continues to outpace increases in tuition rates, and increases in the consumer price index. This has occurred even though the level of scholarships awarded by JMC has increased, and the family (parental) financial strength has remained relatively consistent among classes. Consistent with trends in recent years, the escalating borrowing patterns of our students can be attributed, at least in part, to the historically low interest rates, and the influence this has had on personal choices related to the cost of borrowing.

Focusing on the interest rates that were in place during the medical school career periods of the Classes of 2003 through 2005, there is strong evidence to support the idea that borrowing decisions are being made based on the lower cost of debt. For the Class of 2003, federal Stafford rates ranged from a high of 6.32% during their freshman year to 3.46% during their senior year. Comparable rates for the Class of 2004 and 2005 were 7.59% and 2.82%, and 5.39% and 2.77%, respectively. This demonstrates that while the overall cost of borrowing was relatively low for all three classes, the cost declined significantly for the Class of 2004 and the Class of 2005.

Due to the current economic environment, beginning with July 2005, the interest rates for Federal Stafford and related consolidation loans have now begun to increase. Even with this increase in interest rates, it is expected that our increasing debt patterns will continue in the near future. With this in mind, Financial Aid's debt management curriculum continues to focus on the importance of "wise-borrowing" and effective debt management practices.

### **Debt Management Programs for JMC Students and JHS Residents**

The Financial Aid Office's long-standing debt-management program for students and JHS residents provides services in the form of seminars, individual counseling and informational publications. In the

past, the Financial Aid Office has held a seminar series in the fall for JCHP and JCGS students, and a seminar series in the spring for JMC and JHS residents. For the second year, one seminar series was offered to all TJU students. The seminar series continues to be widely attended by all students and JHS residents. In the 2004-2005 year, with assistance from the Postdoctoral Affairs and Recruitment Department, the JCGS Post-Doctoral population was also invited to attend the seminar series. The positive evaluations from the population in attendance demonstrate that the seminar series will meet the future needs of the TJU student/resident population.

The seminar series (which includes segments on debt management, insurance planning, investment basics and considerations of signing a hospital, practice or employment contract) continued to receive high praise and requests from the populations we serve for continuation on an annual basis.

The number of JHS residents accessing the individual debt-management counseling services provided by this department continues to increase. The same three factors noted in prior years (increase in the client pool as publication and word-of-mouth efforts have increased awareness of the available service, rising levels of medical-graduate debt, and expanded and somewhat more complex loan repayment options) may still be highlighted as the catalysts prompting this increase.

While requests for individual counseling from house staff have been on a steady incline, a significant change in the economic benefits of federal consolidation prompted an even greater increase in the number of requests from JHS residents and, comprehensively, TJU alumni during the 2004-2005 year.

Interest rates on Federal Stafford Loans, which are established each July 1 for a 12-month period, are calculated as the 52 week t-bill plus 1.7% while in school, grace or deferment and 2.3% while in repayment or forbearance for loans disbursed after July 1, 1998. A similar formula exists for loans disbursed between July 1, 1995 and June 30, 1998 with the corresponding rates of t-bill plus 2.5% while in school, grace or deferment and t-bill plus 3.1% while in repayment or forbearance. Based on the current rate of the t-bill for the second straight year, Federal Stafford Loan rates and related federal consolidation rates, have increased from 2.77% and 3.57% to 4.70% and 5.30% for periods of in-school, grace and deferment. For

those in repayment and/or forbearance, the interest rate has been calculated at 5.50% and 6.10%.

As discussed earlier, the actual interest rate charged to a borrower is determined by the date on which the outstanding loan was disbursed. News of this increase in rates prompted many borrowers to consider consolidation as a means of locking in to a lower rate for the life of the loan prior to the July 1, 2005 rate increase. Concerns about the process, who to consolidate with, what questions to ask consolidation lenders, pitfalls to watch out for, how the weighted average is calculated, etc., prompted a high volume of phone calls, personal appointments and email inquiries from house staff and alumni. Additionally, as prompted by educational loan lenders in April 2005, Department of Education approved lenders to allow students to consolidate their federal loans while in school. This was allowed based on a loophole in the regulations that allows the student to elect to enter into repayment while in school, long enough for the loan to be consolidated. The student is then permitted to defer the loan for the remaining period of enrollment. However, students would give up the right to a 6-month grace period after graduation. This practice was never previously allowed by Department of Education. This change in practice, compounded by a 2% expected increase in the Federal Stafford Loan interest rate caused a fury of action by students and lenders to consolidate and "lock" the interest rate of federal loans before July 1, 2005. To assist all students in this process, a series of information emails were sent and five information sessions were held. It is expected the inquiries will continue at a comparable volume during the upcoming year, especially in light of impending legislation that could change the current federal consolidation parameters from a current fixed interest rate to a variable interest rate, not to exceed 8.25%.

The complicated nature of developing an effective repayment strategy, as well as periodic changes in the educational debt market (such as the interest rate increase noted above) will result in the continued reliance of TJU alumni and JHS house staff on the Financial Aid Office's counseling services. Tracking of utilization patterns, which were initiated three years ago, will continue to determine whether alterations are necessary to insure continued provision of high quality debt-management services.

### **Committee of Student Advisors**

The members of the Committee of Student Advisors (CSA) continued their important role as advisors in the delivery of high-quality services to students in all three colleges. During 2004-2005, this committee was comprised of the University Registrar, Director and Associate Director of Financial Aid, Senior Associate University Registrar, Associate University Registrar, Manager of the Tuition/Cashier's Office and 42 student representatives. At monthly meetings, current campus issues, such as follow up to the Middle States site visit and accreditation process, student email system, wireless system improvements and IT services, were discussed.

Committee activities included student participation in numerous advisory committees, a campus and community book drive, and continued assistance in the development of the FWS literacy program. This committee continues to prove beneficial to both students and the administration by promoting ongoing communication and enhancing important student services. Our goal is to further enhance the effectiveness of this committee for all three administrative areas that serve essential roles in students' academic careers.

### **Legislative Issues**

In addition to the interest rate change discussed previously, the tax legislation signed into law in 2001 continues to have important and positive benefits for our students, alumni and house staff. With the impending final "reauthorization" of the Title IV federal aid programs, a number of legislation proposals currently exist. These include, but are not limited to, proposed legislation to change Federal Stafford Loan interest rates for new borrowers to a fixed interest rate of 6.9% in 2006, changing federal consolidation from a fixed-interest rate parameter to a variable rate not to exceed 8.25%, and possible increase in the annual amounts a student may borrow in Federal Subsidized Stafford Loans. Reauthorization of federal Title IV aid is expected to be finalized by December 2005.

### **Deductibility of Student Loan Interest**

Prior to passage of this legislation, medical graduates were impeded in their ability to access the deductibility of the student loan interest provision that was contained in the Tax Relief Act of 1997. This is because deductibility was restricted to interest payments made on loans in active repayment status and the

(maximum) income levels were lower than starting salaries for all specialties. Consequently the only time medical graduates met the income eligibility cutoff was during residency or fellowship when they were financially ill equipped to maintain "active repayment status." They, therefore, were limited to making voluntary interest payments on unsubsidized debt that was in deferment or forbearance status. These voluntary payments did not qualify for inclusion in the deductibility calculation.

Starting with the 2002 tax year the deductibility provisions have been expanded to include voluntary payments on loans in deferment or forbearance. This provision, coupled with the increase in maximum income levels, should allow more medical graduates to take advantage of this tax benefit. Notice of these provisions was distributed to all of the Class of 2005 during the required small group exit interviews and to new house staff at the TJUH orientation and in the fall Resident Debt Management Newsletter.

As has been the pattern regarding other legislative issues of importance to JMC students and JHS residents, information about these tax provisions will remain a standard segment of publication materials and seminar topics.

### **Personnel Changes**

Again, this year has been one of changes in regard to the Financial Aid Office staff. Most notably, Nya Carter has been hired as Financial Aid Coordinator, replacing Holly Hatfield. In addition, Jacqueline Roundtree has joined the support staff team replacing Lakia Barrett.

**Susan Batchelor**  
Director

**Table 1**  
**Summary of Student Financial Aid**  
**2004 - 2005**

<b>Type of Award</b>	<b>Amount</b>
<b>Institutional Scholarships</b>	<b>\$2,977,504</b>
<b>Institutional Loans</b>	<b>\$1,061,894</b>
<b>Other Scholarships</b>	<b>\$3,373,290</b>
<b>Other Loans</b>	<b>\$28,746,901</b>
<b>Federal Work Study</b>	<b>\$101,541</b>
<b>Total</b>	<b>\$36,261,130</b>

**Table 2**  
**Average Indebtedness\* of Graduating Seniors\*\***

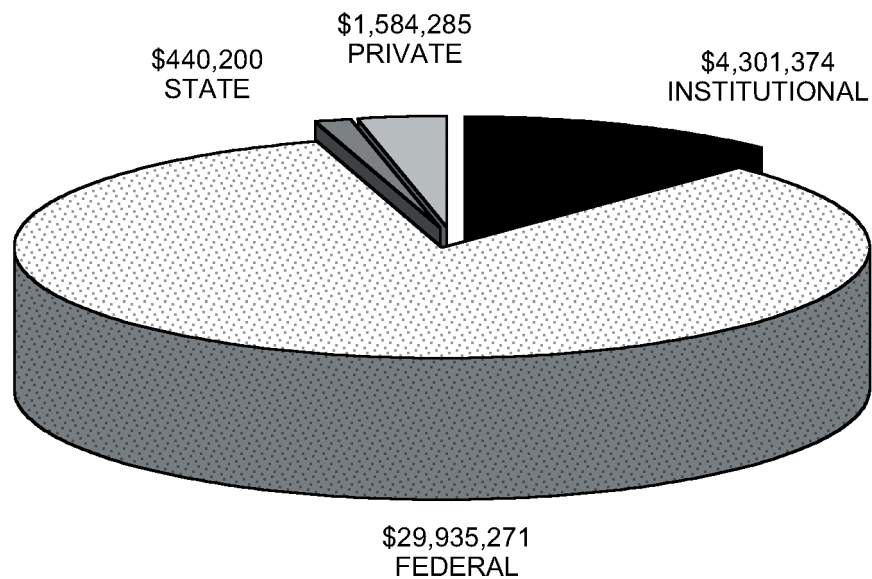
<b>Graduating Class</b>	<b>Average Debt</b>
2005	\$145,472
2004	\$140,916
2003	\$136,439
2002	\$121,819
2001	\$111,176
2000	\$102,616

\* Includes funds borrowed prior to the student entering Jefferson Medical College.

\*\* In calculating the average, the population included only those students with cumulative debt level greater than zero.

**Figure 1**

**Total Financial Aid  
Academic Year 2004-2005  
Distribution By Source**



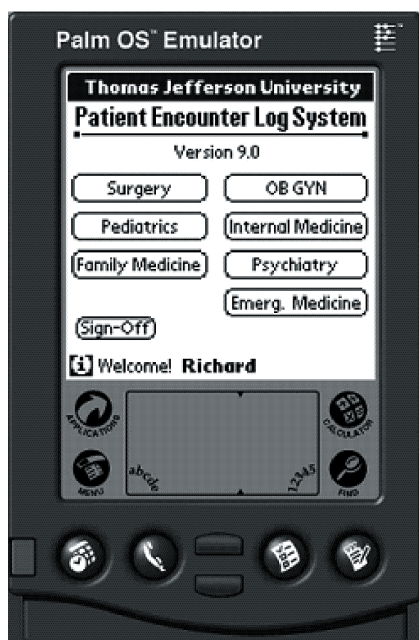
**TOTAL AID \$36,261,130**

# Office of Undergraduate Medical Education

## The Patient Encounter Log System (PELS)

This PDA-based data collection system has now been in place for two years in Surgery, Family Medicine, Pediatrics, Internal Medicine, Obstetrics/Gynecology, Psychiatry and Emergency Medicine. Submission of PELS data has been improved by making it a stated requirement on the Clinical Student Evaluation form. A total of 119,464 patient encounters were reported this year.

Feedback from students, clerkship coordinators and faculty is important for streamlining and focusing the data collection process. Targets for the types of patients each student should evaluate and numbers of histories, physical exams and procedures that each student should perform have been refined and revised with attention to core educational elements of each discipline. Version 9.0 (released in July 2005) represents the ongoing collaboration between JeffIT (Richard Cowan, Michael Mei) and Jefferson Medical College (John Kairys, MD; Susan Rattner, MD; Dan Louis; Carol Rabinowitz; Philip Wolfson, MD; Sherry Weitz; J. Lindsey Lane, MD; Sybil Fullard; Fred Markham, MD; Christine Jerpbak MD; Carolyn Little; Abigail Wolf, MD; Deborah Cini; John Caruso, MD; Tonya Hollaman, Joanne Gotto; Mitchell Cohen MD; James Youakim, MD; Florence Spencer and Paul Kolecki, MD).



The PDA interface for the PELS is shown here.

Web-based summary reports have been generated this year for clerkship directors and coordinators. Reports for individual students will also be available in July 2005. Affiliate reports will be developed for 2005-2006.

## The Dr. and Mrs. Robert D. Rector Clinical Skills Center

The Clinical Skills Center (CSC) relocated in June 2004 to spacious, redesigned space at 833 Chestnut Street. This 9,000-plus square foot facility now houses a 14-room standardized patient suite, classrooms for the high-tech simulators (Harvey and SimMan), two large multipurpose classrooms and support space for mannequins and models, standardized patients (SPs), staff and faculty.

This location will be the home for the clinical skills program until the anticipated opening of the new Dorrance H. Hamilton Building in 2007. In February 2005, a gift to Jefferson Medical College of \$10 million to be used for a clinical skills center in the new education building was made by the family of Robert and Dorothy Rector. The current center now proudly bears the name of the generous patrons and has become a campus highlight for visiting legislators, international guests, prospective students and many others.

Administrative responsibilities for the Center are shared by Dr. Rattner, Katherine Worzala, MD and Ms. Carol Trent. Core faculty include Dale Berg, MD, Salvatore Mangione, MD and Joseph Majden, MD. Support for all technology is provided by AISR and, in particular, by Anthony Frisby, PhD and Ms. Martha Ankeny. Support for testing is provided by Jon Veloski and Mary Robeson from the Center for Research in Medical Education.

Clinical skills teaching and evaluation activities are expanding rapidly. CD-recorded SP histories were done this year by both first and second year medical students. These CDs were used to review communication skills during subsequent discussions in first year MP21 and second year ACM small group sessions. A very popular introduction to physical diagnosis is taught "off site" near the anatomy labs during dissection sessions for the first-year students. The core physical diagnosis course in the CSC for second-year students runs parallel to the organ systems in Foundations of Clinical Medicine and includes sessions with SPs, patients with real physical findings and simulations.

Third-year clinical skills sessions have been incorporated into the curriculum in multiple clerkships. Students in Internal Medicine learn smoking cessation counseling skills with standardized patients and cardiovascular physical diagnosis with Harvey. The obstetrics/gynecology skills session includes use of models/mannequins for instruction on the breast and pelvic exam, cervical dilatation, vaginal delivery, Foley catheter insertion and suturing/knot tying as well as a pelvic examination of a SP. The third year pediatrics sessions include physical diagnosis training with models and children, an asthma treatment module and practice of technical skills (immunizations, blood drawing with mannequins).

Procedures and patient management using SimMan are the focus of sessions with fourth-year students during their Emergency Medicine clerkship. Of note, Internal Medicine conducts mock codes with SimMan for interns/residents and is developing an expanded clinical skills curriculum this year.

A one-station SP exam on interviewing and a two-station physical diagnosis SP exam were conducted with the first- and second-year students, respectively. All third-year students participated in a 10-station OSCE (see below). Dr. Berg teaches an Advanced Physical Diagnosis elective for fourth-year students that includes a geriatrics OSCE. The Center also hosted an OSCE for incoming TJUH surgical residents and for nursing students from Drexel University this year.

One of the most exciting efforts this year has been the first steps of curriculum codevelopment with the College of Health Professions Nursing Program. A pilot teaching session on Interprofessional Education with senior nursing and medical students was held in May, using the death of SimMan and “breaking bad news” to the family (an SP) as the content for the exercise. This initiative was led by Drs. Katherine Worzala and Karen Glaser for JMC and by Drs. Anne McGinley and Agnes Morrison for JCHP. This very successful first effort has set the stage for a productive collaborative curriculum planning process. In addition, the Jefferson Graduate Nursing Department developed and implemented an exam for the nurse practitioners utilizing SPs.

### Committee on Curriculum

The Committee on Curriculum has had a busy and productive year. Chaired by Philip J. Wolfson, MD, the Committee includes representation from course and clerkship directors, faculty-at-large, the Dean's office and from second-, third- and fourth-year JMC classes.

This year's efforts focused on monitoring of the new and existing courses and clerkships and planning for reorganization of the clinical curriculum.

In March, the Curriculum Committee surveyed the Class of 2005 regarding their impressions of how well the Jefferson Medical College Learning Objectives had been met during medical school. This 35-question survey that includes questions about knowledge, attitudes and skills (available on request) was first administered in 2004. There was overall improvement in all areas with 90-98% agreement for 31 of 35 questions. Of note, significant improvement also occurred in four areas of concern that have been the focus of recent curriculum efforts:

<b>I have acquired the skills to:</b>	<b>2004</b>	<b>2005</b>
Identify medico-legal risks and resources	70	86
Perform routine technical procedures	68	86
<b>I have learned about:</b>		
Various approaches to organization, financing and delivery of healthcare	55	75
The process and value of research in the basic and clinical sciences	74	89

### Curriculum Highlights

Three Inter-clerkship Sessions were presented this year on the first days of Blocks 3, 5 and 7. These sessions emphasize interdisciplinary topics with major public health impact. The topics were Nutrition and Obesity, moderated by Fred Markham, MD (Department of Family Medicine); Improving Patient Safety, moderated by David Nash, MD (Department of Health Policy) and Professionalism, moderated by Mitchell Cohen, MD (Department of Psychiatry and Human Behavior). Presentations were made by Jefferson and guest faculty in the mornings of each day, and small group workshops were conducted in the afternoons.

After pilot testing and faculty review, the National Board Subject Examinations (NBME) replaced “in-house” clerkship exams in Surgery, Pediatrics, Psychiatry and Obstetrics/Gynecology this year. This decision was based on several key factors. These examinations are considered to have superior psychometric properties, provide students with a wider range of problem-based

questions written by a national sample of faculty, and may better prepare students for USMLE Step 2. Implementation of this program has been coordinated by Dr. Glaser and Ms. Mary Diehl (Academic Affairs/UME) and Mr. Jon Veloski (Center for Research in Medical Education and Health Care) in collaboration with the clerkship coordinators (Ms. Sherry Weitz, Deborah Cini, Florence Spencer and Sybil Fullard). This transition has been well received by the students. Internal Medicine will begin using the NBME exam in the upcoming year.

An end-of-year Objective Structured Clinical Examination (OSCE) was administered to all third-year students in April and May in the Clinical Skills Center. Students must achieve a passing score as a requirement for graduation. This examination has been implemented to assure minimum competence in basic clinical skills as well as for preparation for the USMLE Step 2CS examination. Students were assessed using 10 standardized patient encounters. The exam evaluates data gathering, communication, and interpersonal skills. The OSCE cases and grading structure were developed by Katherine Worzala, MD; Dale Berg, MD; Salvatore Mangione, MD; Jon Veloski and Mary Robeson in collaboration with Drs. Rattner, Callahan, Caruso, Cohen, Markham, Lane, Wolf and Wolfson.

### **Course Reviews**

Each required course and clerkship is reviewed in detail every one to two years by student liaisons, the course or clerkship director, the Senior Associate Dean for Academic Affairs/UME, and the Chair of the Curriculum Committee. This is followed by a summary review by the full Curriculum Committee. Courses and clerkships reviewed this year included Human Form and Development; Molecular and Cellular Basis of Medicine; Medical Practice in the 21st Century; Systems I; Foundations of Pathology and Pharmacology; Immunity, Infection, and Disease; Foundations of Clinical Medicine; Physical Diagnosis; Surgery; Pediatrics; Obstetrics/Gynecology; Psychiatry; Family Medicine, Internal Medicine and Emergency Medicine.

### **Reorganization of Years 3 and 4**

At the June 2004 Curriculum Retreat, discussions began about trends and controversies in residency education that have impact on undergraduate medical education (UME). The potential framework provided by the ACGME competencies for curriculum reform, for clerkship reorganization and for improving evaluation

processes was highlighted. Over the past year, there has been a series of structured focus meetings to draft medical student learning objectives in each area defined by the ACGME competencies (patient care, medical knowledge, practice-based learning and improvement, interpersonal and communication skills, professionalism, and systems-based practice).

On May 6, 2005 at a day-long retreat, more than 100 medical students and faculty from JMC, affiliated campuses and JCHP met to begin the redesign phase of this effort. The session was opened by Dean Nasca, who delivered a provocative keynote address, "Thoughts on the Future of Medical Education," and urged the group to be forward-thinking and creative. Participants worked through the day in small groups to identify teaching and learning strategies for each competency. There was consensus on the critical importance of designing a curriculum that emphasizes 1) teamwork and the goals/hopes of systems-based care 2) modeling of interpersonal and communication skills 3) building strong bedside skills through frequent observation and feedback and 4) faculty development as well as new UME curriculum in practice-based learning and improvement.

The "redesign team" will develop several new clinical curriculum models for presentation at a follow up retreat in November 2005.

### **Committee on Student Promotion**

The Committee is chaired by Richard R. Schmidt, PhD (Department of Pathology, Anatomy and Cell Biology). The Committee on Student Promotion (COSP) reviewed and took action on more than 168 student issues this year in addition to hearing appeals and administrative review of USMLE results and grade changes.

Ms. Myeshai Brooks is the administrative assistant to the Committee. In addition to preparing the meeting agenda and minutes, she has the responsibility of monitoring and maintaining the computer database, COSPTool. The database allows for easier, more efficient and more accurate record-keeping.

The Committee on Student Promotion has continued to utilize ad hoc subcommittees to address issues of remediation and special programs. These committees are formed specifically to meet with individual students to assess the etiology of the academic problem and to develop individual remedial or curriculum plans. Each subcommittee is comprised of two to three members of the Committee and Dr. Glaser. A small number of students worked with faculty on individualized

remediation programs which allowed them to rectify deficiencies and proceed on with their clinical work.

Many of the subcommittee actions concern poor academic performance on tests in the third and fourth year of medical school. These students make up a very small percentage of the medical student population and receive individual counseling regarding effective study strategies and test-taking.

### **Faculty Development Activities**

This office is pleased to support faculty development efforts of the College. In 2004-2005, the following presentations were made:

#### **Dr. Rattner**

- Teaching Evidence-based Medicine (AEMC- December 2004; Jefferson - March 2005)
- Large Group Teaching Strategies (March 2005)
- Bedside Teaching and the USMLE Step 2CS (April 2005)

#### **Dr. Glaser**

- Can We Teach Professionalism? (October 2004)
- Responding to Unprofessional Behavior in the Workplace (Jefferson - February 2005) AEMC - May 2005

### **Professionalism and the Honor Code**

The Professionalism II Task Force, chaired by Dr. Glaser and this year by Colleen Whitecar (JMC '06), has been meeting regularly to develop plans to further instill professionalism into the culture of Jefferson Medical College. Strategies are being planned that encourage students and faculty to "live" the values in the Honor Code. The student initiatives led to the formation of a Faculty Working Group on Professionalism charged by Dean Nasca to develop a faculty statement of professional ideals. This group (co-chaired by Drs. Karen Glaser and Stan Smullens) was comprised of full-time and volunteer faculty from the medical school, affiliate hospitals and the College of Graduate Studies. The group drafted a document which consists of a statement of professional values and adopted the student Honor Code as a Faculty Honor Code as well. The document was presented and approved at the June meeting of the Executive Council of the Medical College. We are in the process of working with the College of Health Professions to make this a University-wide document.

Colleen Whitecar and the student representatives on the student task force created a new set of peer-reviewed awards for professionalism. Several members of the first-, second- and third-year classes were awarded plaques for their demonstration of professionalism and professional values. These awards will be ongoing and awarded to several students a year.

### **Foundations of Clinical Medicine**

Foundations of Clinical Medicine (FCM) is a multi-disciplinary course designed to prepare second- year students for the third-year immersion in clinical medicine. It has been developed in response to curriculum objectives to teach a unified, interdisciplinary, organ system-based alternative to the traditional discipline-based curriculum. This course includes content from what was formerly taught in discipline-based courses in pathology, pharmacology, physical diagnosis and Introduction to Clinical Medicine. Interactive teaching and large and small group teaching sessions in Application of Clinical Medicine and in the Clinical Skills Center are used to amplify and clarify the didactic content of this course.

Examinations take place approximately every three weeks. Students are required to achieve a passing grade for all organ systems in order to successfully complete the FCM course. A growing database of examination items has been developed to improve the quality of examination items as well as the ability to track the performance of the students from year to year. A very effective student-faculty interface has been developed for this course via the Student Liaison Committee. Class representatives meet with course directors and Drs. Wolfson and Rattner monthly to review student and faculty suggestions and concerns in "real time" as the course is in progress.

Student response to the new curriculum continues to be very positive. A recent comprehensive survey indicates that the integrated organ-based approach has markedly enhanced student satisfaction in the second year.

### **The Longitudinal Primary Care Clerkship (LPCC)**

This educational initiative has now completed its fifth year. It is a collaborative effort between the Dean's Office, the Departments of Medicine, Pediatrics and Family Medicine, and our affiliated programs at DuPont Hospital for Children and Christiana.

The LPCC places students in primary care practices for a half day per week for 24 weeks. Emphasis is on enabling students to see patients in follow-up, as well as on learning about clinical problems and management. This clerkship runs concurrently with the block clerkships in medicine, pediatrics and family medicine; the students will do these rotations consecutively at Delaware affiliates. Fifty-eight students and 17 preceptors have participated to date. It has been highly rated by all participants. Three new preceptors have volunteered to host students and 11 students have enrolled for 2005-2006.

### **Area Health Education Center Initiatives**

#### **The Pennsylvania Area Health Education Center (PA AHEC)**

JMC has now completed its sixth year as medical school liaison to the Northeast Pennsylvania AHEC (NEPA AHEC), a member of what is now the Pennsylvania-Delaware AHEC system (see below). This initiative initially received core funding from HRSA through Penn State University. It is now supported with a combination of state and foundation funds and will be eligible for model federal funding this year.

The NEPA AHEC office, located on the campus of Keystone College in LaPlume, PA, continues to grow under the able direction of executive director Ms. Patricia Lawless. Dr. Michael Rosenthal (Department of Family Medicine) and Dr. Rattner continue to serve on the Board of Directors. Dr. Christine Jerpbak (Department of Family Medicine) was appointed Medical Director for the NEPA AHEC in 2004.

The AHEC is involved in many local health and health education initiatives. Third-year clerkships in family medicine, internal medicine and surgery are in place at the Guthrie Clinic/Robert Packer Hospital in Sayre, PA. A family medicine elective was also offered this year.

#### **The Delaware AHEC**

Delaware is now in its second year as the eighth region in this now interstate model. Drs. Rattner and Rosenthal serve on the Planning Board, and Dr. Rosenthal has been selected as medical director for the DE-PA AHEC. Ms. Melissa Flynn was selected by the Board as executive director in September 2004. Under her

direction, the office has relocated to Dover, DE and core staff has been hired.

#### **JeffMOMS**

JeffMOMS (Maternity Opportunities for Medical Students) continued this year under the direction of Catherine Sewell, MD (Department of Obstetrics and Gynecology). Eight students completed this program. Students are matched to a pregnant woman from the JOGA clinic and support her through prenatal visits, labor and delivery. Students gain clinical experience not only about medical issues, but about the economic, ethnic and cultural circumstances that influence care for this urban population. Patient advocacy is an important role learned during this six to nine month experience.

#### **Bridging the Gaps (BTG)**

This summer internship program continues under the direction of Maria Hervada-Page, MSS. It is a popular summer work option for JMC and College of Health Professions students. BTG is recognized regionally and nationally as a model of inter-institutional statewide collaboration in the area of interdisciplinary community health education and service learning. In 2004-2005, Jefferson was awarded approximately \$41,436 from public and private sponsors for partial support of 24 students and for core faculty support, as well as \$49,261 in Federal Work Study funds for student stipends.

Faculty from family medicine and nursing teamed with community preceptors and supervised community health sites. Students work with children, teens, elderly, the homeless and addicted populations. This work was presented at the fall 2004 Bridging the Gaps symposium. Twenty students have been selected to participate in the summer 2005 program.

#### **Susan Rattner, MD, MSCE**

*Senior Associate Dean for Academic Affairs/  
Undergraduate Medical Education*

#### **Karen Glaser, PhD**

*Associate Dean for Academic Affairs/  
Undergraduate Medical Education*

#### **Steven Herrine, MD**

*Assistant Dean for Academic Affairs/  
Undergraduate Medical Education*

## Division of Graduate Medical Education

The Division of Graduate Medical Education provides oversight, guidance, and support to all Graduate Medical Education programs at Thomas Jefferson University Hospital and the affiliates for which the Hospital is the sponsoring institution. The Division, consisting of David L. Paskin, MD, Senior Associate Dean for Affiliations and GME; Cynthia G. Silber, MD, Associate Dean for GME and Kathleen Piech, Administrative Assistant, work in concert with the Office of House Staff Affairs headed by Debra Cifelli. The Hospital and the Medical School have a common goal of achieving excellence in Graduate Medical Education. The GME division works closely with both the division of Undergraduate Medical Education and with the Office of Faculty Affairs to support a unified educational effort in the continuum of medical education.

The Division continues to serve both evaluative and consultative functions. The internal site visits performed at midcycle are a highly productive tool for ongoing quality improvement in our GME programs. The results are reported to the GME Committee, which continues to increase its involvement in, and oversight of, all aspects of residency education in the hospital. The Division has also begun to offer consultative services to GME programs with upcoming RRC site visits. Over the past four years under the leadership of Dr. Michael Vergare, the Committee has become a dynamic, involved, and dedicated body, and a major resource for the ongoing development and implementation of GME efforts at Jefferson. As we move “from compliance to excellence” in GME, it is anticipated that the GME Committee will be deeply involved in all aspects of GME, and will oversee GME strategic planning for the institution.

The ACGME Outcome Project and the implementation of competency-based education have been initiated in all of our GME programs. Over the past year, these initiatives have included institution-wide educational forums, assistance in outcomes-based curriculum development, pilot programs for the development of new resident and faculty evaluation instruments, and individualized consultation with departments to assist them in implementing the Outcome Project.

The Division is committed to scholarship in the area of GME, and is involved in research on evaluation and assessment of competence.

Jefferson continues to be deeply involved with the Tufts Health Care Initiative. We continue to enroll our GME programs in the Tufts On-Line Learning Campus, allowing our residents to develop competence in the areas of Systems Based Practice and Practice-Based Learning and Improvement. We continue to work with our GME programs in complying with the ACGME Common Requirements for Resident Work Hours, which were implemented by the ACGME as of July 1, 2003. All of our programs are in compliance. We plan to continue monitoring these areas. In addition, the GMEC has developed a policy for those programs wishing to apply for the 10% exemption, and will begin evaluating these requests in the upcoming academic year.

In order to keep up with new information technologies in GME and to facilitate the scheduling of residents, the evaluation of residents and faculty, and the maintenance of procedural logs, the Division selected a software product that was purchased by the Hospital (which will enhance our ability to manage GME data). This will permit all scheduling, evaluation, and duty hours monitoring to be performed online, and will allow us to collect important data about our residents and faculty while enhancing compliance. We anticipate that this data and its feedback to residents and faculty will result in enhanced teaching, education, and research in all areas of the GME programs. Implementation began on June 20, 2005.

The annual retreat was held on January thirteenth. A complete and extensive Residency Program Directors Manual was published by the Division and presented to all programs at the retreat. The competencies of System Based Practice and Practice Based Learning were discussed, and programs were further instructed in the use of the THCI On Line Learning Campus. The GME Toolkit was introduced to our Program Directors by our GME Database Administrator, John Thomas.

The Affiliations Committee met as part of the Affiliations Day program, and the Office of Faculty Affairs

presented a course on feedback. All of the affiliates were represented. Great appreciation was expressed to the representatives of all the affiliates for their very much-appreciated role in providing excellent clinical exposure for our third- and fourth-year medical students. Faculty appointments and promotions of affiliated faculty will now be managed by the Affiliations Division in the Deans Office. This will allow a more rapid and efficient process for our very large and very appreciated affiliated faculty.

Medical students continue to have excellent educational experiences at our affiliated teaching institutions, as indicated by review of clerkship evaluations. The contributions of the faculty and residents throughout our affiliated network remain superior, and are greatly appreciated by the students and the College.

The longitudinal study of residents continues, which provides program evaluations by residents and fellows at each level of training, in addition to annual program director evaluations of each resident and fellow. These evaluation tools are currently being used at all Jefferson Health System institutions that sponsor GME programs. It is hoped that this data will provide new insights into the process of graduate medical education, and supply material for new research in this area.

The mission of the division of Graduate Medical Education is to link undergraduate and graduate medical education at Thomas Jefferson University Hospital and the affiliates in order to promote faculty development, as well as excellence in resident education and teaching. This, in turn, will provide the Jefferson Medical College student with a consistently excellent cadre of teachers, and will deliver outstanding clinical faculty to Thomas Jefferson University Hospital and affiliates.

**David L. Paskin, MD**

Senior Associate Dean for Graduate Medical Education and Affiliations

**Cynthia G. Silber, MD**

Associate Dean for Graduate Medical Education

# Office of Continuing Medical Education

The Office of Continuing Medical Education (OCME) at Jefferson Medical College is part of the Dean's Office and is responsible for Jefferson Medical College's ability to offer continuing medical education credits in pursuit of its overall mission of education, research and patient care. The Office of CME at Jefferson Medical College is nationally accredited as a provider of continuing education for physicians by the Accreditation Council for Continuing Medical Education (ACCME) through its ongoing participation in the Consortium for Academic Continuing Medical Education (CACME). CACME is a unique, nationally recognized organization that develops new continuing education models specific to the medical school environment of CME. Four medical schools in Pennsylvania are accredited as members of this consortium: Jefferson Medical College, Temple University School of Medicine, University of Pittsburgh School of Medicine, and Penn State University School of Medicine. The ACCME awarded CACME a six year accreditation, the highest possible designation. The ACCME further recognized CACME with commendations in the following areas of the ACCME Essential Areas and Standards:

- Planning
- Needs Assessment
- Overall Program Evaluation
- Organizational Structure and Resources
- Standards for Commercial Support

## Leadership

In FY 2005 leadership of the Office of CME transferred from Geno J. Merli, MD, FACP, Ludwig A. Kind Professor of Medicine (JMC '75), Senior Associate Dean for Continuing Medical Education to Timothy P. Brigham, PhD, Acting Associate Dean for CME in November 2004. Both Drs. Merli and Brigham provided a focus on clinically relevant continuing education, and stressed service to the University community.

Jefferson Medical College's Committee on CME, a standing committee of the medical school, is integrally involved in the review and development of appropriate activities certified for AMA Category 1 credit. Chaired by Dr. Richard C. Wender, Alumni

Professor and Chair of the Department of Family Medicine, the Committee on CME is responsible for the review and approval of all Jefferson-sponsored CME activities. The Committee also sets policy and direction for the overall CME program at Jefferson. There are 15 members of the Committee on CME, representing 10 departments/divisions of the Medical College.

Daily operations of the OCME are supervised by the Director, Jeanne G. Cole, MS. She is responsible for JMC's compliance with national accreditation standards, suggesting improvements in educational design, overseeing logistical operations, fund raising, and identifying and securing new opportunities. The combined efforts of the OCME staff secures the required outside funding for many of JMC's CME activities, which provides funds for the OCME operating budget. In addition to the Director, two masters-prepared CME specialists are on staff, and OCME functions are ably supported by administrative and secretarial members. Balancing the tension between efficient staffing and developing new projects continues.

Over the past years the Committee focused its efforts on (1) advancing the role of CME within JMC and (2) developing collaborative relationships with other organizations to identify and fund mutually beneficial educational activities for physicians and other healthcare professionals, and (3) reviewing and understanding new ACCME Standards for Commercial Support, especially as they relate to conflict of interest in CME activities.

In pursuit of these goals, the OCME and the Committee continue to develop the Jefferson Industry Advisory Council (JIAC), which is co-chaired by committee member David B. Nash, MD, MBA and Chair of the Department of Health Policy, and Dr. Merli. The November 22, 2004 JIAC meeting, "Working Together in a Challenging Environment," attracted more than 150 participants and featured presentations by Dr. Arnold Relman and Mr. James G. Sheehan, Esq, on the changing environment in which medical education operates.

The Committee on CME approved a new CME Policy on Conflict of Interest in order for Jefferson program-

ming to remain in compliance with the new Standards for Commercial Support.

### **Mission**

Jefferson Medical College CME considers the lifelong professional development of physicians to be a dynamic, organic process. The Jefferson Medical College Office of CME is dedicated to developing, delivering, and evaluating quality educational experiences and opportunities that stimulate, educate, and empower physicians to provide the highest standard of care throughout a lifetime of professional practice. Drawing upon its combined educational, research, and clinical expertise and strength, the Jefferson Medical College Office of CME endeavors to equip physicians with the knowledge, skills and attitudes necessary to remediate, maintain, and/or enhance their ability to deliver world class medical service across the continuum of care to patients, their families, and the public. Jefferson Medical College CME is an academic enterprise guided by the principles and goals of academic medicine. Jefferson Medical College CME is committed to drawing on its experiences as well as the body of CME theory and research to elevate the effectiveness of its CME program and to advance the

The Jefferson Medical College Office of CME is dedicated to developing, delivering, and evaluating quality educational experiences and opportunities that stimulate, educate, and empower physicians to provide the highest standard of care throughout a lifetime of professional practice.

### **Focus on Educational Effectiveness**

During the past year, the Office of CME utilized a wide variety of educational formats from traditional to innovative to best meet learners' needs and give them opportunities to match their preferred learning style to a spectrum of educational delivery systems. These included "face-to-face" conferences offering lecture-driven meetings, case-based learning groups, experiential learning opportunities and one-on-one educational experiences. In addition, distance learn-

ing opportunities through the Internet and other technologies, instructional materials including print, audio, video, and journals are provided. The OCME successfully partners with other accredited and nonaccredited organizations when appropriate to expand the reach of Jefferson's CME programming. These partnerships provide revenue streams that enable the OCME to contribute to the College's "bottom line" and bring new revenues to those departments and divisions that produce CME activities.

While it is necessary to develop systems and documentation processes to assure our continued status as a nationally accredited CME institution, the Office of CME strives to focus on the educational effectiveness of JMC's CME programming. Evaluation stands at the center of this process as the essential driving force necessary to maintain and/or improve educational quality. Over the past year, evaluation tools and methods were refined in order to enable the OCME to provide timely and worthwhile evaluation data on activities it develops and certifies. As data are gathered from these evaluation activities, we will be able to expand research efforts on the impact of JMC CME activities on participant behavior, and to study what activities are most effective. These research ef-

forts, which distinguish JMC OCME from many other academic CME providers, contribute to quality improvement and enhance the overall Jefferson Medical College CME educational program.

### **Certified CME Activities**

The OCME manages a large variety of CME activities certified for Category 1 credit, including typical medical school activities like Grand Rounds and local/regional symposia. The OCME promotes JMC's reputation outside the Philadelphia area through its certification of national symposia and lecture series and widely distributed enduring materials and selected journals. Increased use of the OCME Web site at <http://jeffline.tju.edu/jeffcme> furthers the reach of JMC's CME programming beyond borders.

During the 2004-2005 academic year the Office of CME certified 135 activities totaling over 3,175 Category 1 credit hours, serving more than 32,000 participants.

### **Achievements**

The academic year ending in June 2005 closed on a very eventful note for the OCME, with significant

advances in many areas as noted following.

### **Educational Activities**

In addition to providing certification services for departmentally sponsored CME, OCME is integrally involved with JMC departments and divisions in developing and implementing cutting edge educational activities for practicing health care professionals.

OCME continues strong partnerships with the Headache Center of the Department of Neurology, the Gastroenterology and Hepatology Division of the Department of Medicine, the Department of Health Policy, Department of Family Medicine, the Division of Ultrasound of the Department of Radiology, and AISR of the Scott Library. Many of these have resulted in growth in long-established CME offerings. For example, the GI Division's 25th Annual Advances in GI program held in June 2005 helped the division maintain its position as the premiere GI educational event in the region; the Family Medicine Department's 28th annual Eastern Shore Medical Symposium sold out all available seats for the third year in a row. The Department of Medicine's Preoperative Evaluation and Post Operative Care course is another example. Held in April 2005, nearly 100 participants from across the country spent two days at Jefferson learning about this topic. The success of these activities not only advances Jefferson's reputation as a resource for physicians who must update their knowledge and skills to provide the best care, they also add to the financial viability of their sponsoring departments by generating revenue.

A unique collaboration between TJUH and OCME continues to bring live surgeries performed at TJUH to a national audience in the form of live and archived Webcasts through the OCME Web site. Webcast topics expanded this year to include Minimally Invasive Treatment Alternatives for Varicose Veins and Computer-Assisted Partial Knee Replacement, bringing the active archive library to eight topics.

In response to new physician licensing requirements, the OCME worked with Thomas Jefferson University Hospital and others at Jefferson to develop and certify CME activities in the area of patient safety, and has developed standard methods for identifying patient safety-related activities that occur as part of grand rounds or other regularly scheduled series. Given that Pennsylvania now requires a specific number of certified hours in patient safety to maintain licensing,

the OCME adapted its online CME transcript retrieval system (JeffETC) to include reports of these activities as a service to our physician community. The OCME also provided assistance in identifying and documenting patient safety related CME credit to those physicians who received audit letters from the Pennsylvania State Medical Board.

The OCME also works in partnership with other JMC departments to facilitate training and educational programs for several pharmaceutical manufacturers for sales representatives. By applying OCME's expertise in program development and management to this area, revenue is generated for the OCME and other departments in support of JMC's educational mission.

### **Academic and Research Activities**

As an educational unit within a leading academic institution, the OCME seeks out opportunities to present its work in CME to a larger audience. Research activities include working with the Consortium for CME (CACME) to examine the validity and reliability of a prospective measure of the impact of commercial support on CME activity management, and a project involving CACME and the National Board of Medical Examiners' question writing process.

### **Technological Activities**

OCME services enhance the design, delivery and evaluation of educational activities sponsored by JMC and its clinical departments. Technological advances are incorporated into the daily practice of the OCME. In the past year, the OCME improved its use of Web-based testing and evaluation, scanning technology, and ARS. Specialized sections of the Web site were developed for the initiative in the Achieving Diabetes Goals project and for a special Headache Center project to administer a one-day clinical preceptorship on the topic of the treatment of headaches.

The OCME Web site at <http://jeffline.tju.edu/jeffcme> continues to be recognized by its listing on Bernard Sklar's Online CME Sites, an Annotated List of Online CME. The Web site continues to grow in depth and scope, and incorporates a calendar of events, online registration capabilities, links to relevant CME sites, and postings of a variety of internet-specific CME activities. The OCME strives to continually improve its administrative processes. Improvements to the OCME Web site included continued development of an online application system for CME activities,

creating a library of resources for those involved with the development of regularly scheduled conferences (grand rounds), and creation of a “Committee Only” section of the Web site to improve communication pathways between the OCME and Committee on CME Committee members. The goals of improving OCME communications with its clients and users, and of realizing cost savings in the delivery of those services are being achieved.

### **Administrative Activities**

Advances in technology serve to improve access and communications between the OCME and various individuals and groups. For example, OCME administers JMC’s Visiting Professor programs in Delaware, Pennsylvania and New Jersey. OCME maintains the “JEFF-ETC” service. Jefferson Electronic Transcripts and Certificates (JEFF-ETC) provides participants in

JMC-sponsored CME activities online access to the documentation of their participation in CME activities. Healthcare professionals can quickly obtain their records on demand in a customer friendly and cost effective manner.

In 2006, the CACME organization, under which Jefferson is accredited for CME, will have its reaccreditation survey. Preparations for this survey have been underway during this year, utilizing the self-study process developed by the ACCME. Both the OCME and CACME have begun a critical self assessment of its mission and functioning in preparation for submitting the reaccreditation application in late 2005.

**Timothy P. Brigham, PhD**

Acting Associate Dean for Continuing Medical Education

**Jeanne G. Cole, MS**

Director

# Office of Scientific Affairs

The Office of Scientific Affairs provides administrative infrastructure and support for the following research programs and Committees:

- Division of Human Subjects Protection (Institutional Review Boards)
- Research Biosafety Program
- Institutional Biosafety Committee
- Select Agents Program
- Volunteer Program
- Special Programs for Medical Student Summer Research
- Institutional Research Committee

## **Division of Human Subjects Protection (Institutional Review Boards)**

Thomas Jefferson University has four IRBs approved under its Federal Wide Assurance (FWA) from the Office of Human Research Protections of DHHS. Three of the IRBs are on campus and the third is at Methodist Hospital Division of Thomas Jefferson University Hospital. The IRBs and their administrative support staffs are organized under the Division of Human Subjects Protection (DHSP) within the Office of Scientific Affairs under a Director. The four IRBs have as their primary responsibility the protection of the welfare of human subjects involved in biomedical and behavioral research. The major work of the IRB consists of the assessment of research related benefit-risk ratios, and assuring that informed consent is properly obtained and documented. IRBs have a responsibility to society, and to the Jefferson community in particular, to review and approve worthwhile studies in a timely fashion while upholding and abiding by the federal regulations that govern human subjects research (DHHS- 45CFR 46, and FDA - 21CFR 50 & 56).

The IRBs review research protocols, consent forms, adverse events, amendments (revisions) to protocols and consent forms, advertisements for research subject recruitment, and all other matters pertaining to the conduct of research on human subjects. A central purpose of the IRBs is to sustain a collaborative and supportive balance among the interests of researchers of Thomas Jefferson University and the requirements of federal regulations. Maintaining

this balance in the face of increased volume of work demands significant effort and time from the faculty who constitute the IRBs, the Chairs, and the administrative staff of the DHSP.

The three on-campus IRBs each have between 30 and 35 members, and the Methodist Hospital IRB has 10 members. The membership includes non-TJU affiliated individuals, non-scientists who may or may not be TJU employees, basic scientists, clinicians, nurses, and others working in medical and scientific fields. The membership has the expertise to review all submitted protocols from both ethical and scientific perspectives. The Chairs of the on campus IRBs are David Brock, MD, George Kalf, PhD, CIP, and Stephen Weinstein, PhD. The chair of the Methodist Hospital IRB is Gregory Mokrynski, MD, CIP.

This report encompasses the time period from July 2004 through June 2005. During this period, the three on-campus IRBs held a total of 70 regular meetings, and reviewed a total of 644 new studies (full review, expedited, exempt, and disapproved). The DHSP staff handled 2,885 transactions. Currently there are 863 active studies on campus, 71% of which are commercially or federally sponsored. In conjunction with the Institutional Biosafety Committee, the IRB reviewed and approved one gene therapy study in the past year.

The TJUH/Methodist Hospital Division IRB reviews predominantly Phase I drug studies for Wyeth but is expanding its workload as more Jefferson faculty begin to participate in sponsored clinical research done at Methodist. The Methodist Hospital IRB held 13 meetings and reviewed 13 new submissions and completed a total of 69 transactions during the reporting period.

The human subjects protection program at TJU is large and complex by any standard. The Director of DHSP, the Executive Secretary of the IRBs, and the IRB Chairs wish to acknowledge with sincere thanks the concerted effort of the IRB members, and the DHSP administrative staff. These are all dedicated individuals who perform fundamentally important work for TJU. Without them our high quality and nationally recognized human subjects protection program would not be possible.

There were important changes in the OSA/DHSP during the reporting period. George Kalf, PhD, CIP, retired in January 2005 as Associate Dean for Scientific Affairs and Director, Office of Scientific Affairs. He provided leadership for the OSA, its Research Biosafety Program and the DHSP/IRBs since 1997. The OSA and TJU owe a large debt of gratitude to Dr. Kalf for the many positive changes he effected. During his tenure, the OSA was established as a research support office separate from the Office of Research Administration (ORA). Subsequent to that, the OSA along with its Research Biosafety and Human Subjects Protection programs, moved to their current location in Suite 1100, 1015 Chestnut Street. The program expanded from a single IRB to three on-site IRBs plus one at Methodist Hospital, and the staff grew from five to 14 persons (now at 11). At TJU the total number of IRB transactions increased from 1,368 in 1997 to 2,885 in 2004. Dr. Kalf continues to work part time in the OSA as the Director for Special Projects and as chair of one of our IRBs (formerly the "Smith IRB"). In addition to chairing an IRB, his other major mission is to shepherd TJU through the process and application to obtain national accreditation for our human subjects protection program. Successful completion of this arduous task will help insure that TJU remains a leader in the world of human subjects protection programs.

J. Bruce Smith, MD, CIP became Associate Dean for Scientific Affairs and Director of the OSA and the DHSP on January 1, 2005. Dr. Smith is Professor of Medicine and Professor of Microbiology and Immunology. He has been a TJU faculty member since 1981 and has a long history of basic and clinical research. He has been intimately involved in the human subjects protection program for the past 10 years

During the year, there were also several changes in the administrative staff of the DHSP. Latesh Boyd was appointed Adverse Events Coordinator, Neely Tang was appointed secretary to the Brock IRB and Jennifer Alexander was appointed secretary to the Smith (now Kalf) IRB. Justina Rosario was appointed coordinator of the Quality Improvement Program and also works as an administrative secretary handling continuing reviews and final reports. Currently there are 11 full time personnel in the DHSP, including the executive secretary of the IRBs and the Director. The Methodist Hospital IRB has also had personnel changes. Judy Genniro resigned as Secretary to the IRB and Christine Haines-Smith was appointed to that position, and

TJUH is now represented on the Methodist Board by Keith Stroup, Esq.

The quality improvement team conducted 14 site visits during the reporting period. The mission of the DHSP Quality Improvement/Education Program is to augment and facilitate continuing review of ongoing clinical trials, enhance protection for research subjects, and ensure compliance with regulations and ethical guidelines. The program's goal is to develop a collegial relationship with clinical investigators and study coordinators and to assist them in developing effective procedures to conduct and monitor all aspects of their human subjects research. In this way DHSP encourages a culture of compliance within the institution and a partnership between the research community and the DHSP. As a result of the QI visits, five faculty attended hearings concerning human subjects violations (down from nine during the previ-

At TJU the total number of IRB transactions increased from 1,368 in 1997 to 2,885 in 2004.

ous reporting period), and although all were found to have violated federal human subjects regulations, none resulted in compromise of subject welfare.

The Division of Human Subjects Protection (DHSP) has continued the two-day course entitled "The Clinical Research Coordinator: Learning the Basics." This course is required by DHSP and the Department of Human Resources for all individuals holding the position of clinical research coordinator I, II or III; clinical research assistant; clinical research project manager; and clinical research nurse I, II, or III. Human Resources has updated the job descriptions for these positions to include this requirement. Certificates of completion have been issued to 111 individuals, and feedback from students has been generally positive.

The federal government mandates formal training regarding the ethics and regulations that govern human subjects research for all those engaging in research involving humans. The number of investigators and key personnel who have completed the certification program in order to be eligible to conduct human subject research continues to expand. In the past year, 995 individuals completed our Web-based

self-study training program and passed the certifying examination. Of these, 337 were recertifications and 658 were certified for the first time. Certification is for three years. Individuals who were certified in 2002 will be required to be recertified during 2005. Annual Web-based updates for investigators and key personnel, a requirement for maintaining certification, were completed by 446 individuals. In addition, 669 faculty and key personnel completed our online HIPAA training.

The Director of DHSP participates in numerous educational activities for TJU faculty and staff regarding protection of human subjects in research. These include participation in on-going faculty improvement seminars, the new faculty orientation program, presentations to coordinator groups and the Departmental Administrators Discussion Group. Dr. Smith, Dr. Kalf and Deborah Moretti, research coordinator for the Division of Gastroenterology, participated on the planning committee for an Office of Research Integrity (ORI)-sponsored conference on responsible conduct of research that was directed primarily at research coordinators. The two-day conference took place in June, 2005. Drs. Kalf and Smith and Ms. Moretti all spoke at the plenary sessions and participated in workshops. The conference received very high marks from all attendees. Dr. Smith also directs a 12-week summer course in the College of Graduate Studies entitled "Regulatory Issues in Human Subjects Research."

Kyle Conner, Executive Secretary of the IRBs, presented lectures on human subjects protection and the IRB process to the Maternal-Fetal Medicine fellows, faculty in the College of Health Professions, Family Medicine fellows and summer students. He also presented a lecture on human subjects protection in the CGS Masters Degree Program in Pharmacology course entitled, "Regulatory Issues in Human Subjects Protection" that is directed by Dr. Smith, and he also lectured in the mandatory research coordinators course.

### **Research Biosafety Program**

The Research Biosafety program involves the inspection and certification of laboratories and investigators conducting research with risk group 2 or higher agents that require biosafety level 2 or higher laboratory physical containment conditions. All proposals for research using the above listed agents are reviewed and approved by the Institutional Biosafety Committee prior to the start of the research.

The Institutional Biosafety Officer (BSO, a member of the IBC), conducts laboratory inspections, certifies investigators for work in the BL-3 laboratories, conducts biosafety training, reviews protocol submissions and acts as a resource person for investigators. Sue Gotta, MS was appointed as the Biological Safety Officer in August 2004, replacing Sue Souder.

All individuals conducting research involving an agent that potentially causes disease and for which there is an immunization must register with OSA, and obtain a permission slip for the specific immunization required to be administered by University Health Services.

As can be seen by the IBC report, the Research Biosafety Program is closely interwoven with the Institutional Biosafety Committee activities.

### **Institutional Biosafety Committee**

Under the NIH Guidelines for Research Involving Recombinant DNA Molecules, each institution conducting or sponsoring recombinant DNA research covered by these Guidelines is responsible for ensuring that the research is undertaken in full conformity with the provisions of the Guidelines. The institution must establish and implement policies that provide for the safe conduct of recombinant DNA research and ensure compliance with the Guidelines. The institution must also establish an Institutional Biosafety Committee (IBC) whose responsibilities need not be restricted to recombinant DNA. If the institution is engaged in recombinant DNA research requiring biosafety level-3 (BL-3) containment, it must appoint a Biological Safety Officer who shall be a member of the IBC.

Under the Occupational Safety and Health Agency (OSHA) Bloodborne Pathogens Standard (29 CFR 1910.1030), the University is obliged to insure that employees whose work requires them to come into contact with human blood or other potentially infectious material shall be adequately protected. The IBC inspects and monitors those research laboratories conducting research using human blood and tissues and body fluid contaminated with human blood.

The IBC is also responsible for working with the Institutional Animal Care and Use Committee (IACUC) to ensure that animal experiments in which biohazardous agents are used are conducted in a manner commensurate with the above guidelines and/or regulations.

The IBC is also responsible for interacting with the University Health Services to ensure that investigators conducting research involving biohazardous agents are offered immunization against the agent being studied, in so far as, immunization is available.

On behalf of the Institution, the IBC is responsible for:

- Reviewing recombinant and pathogens research for compliance with the NIH Guidelines for Research Involving Recombinant DNA Molecules and the NIH/CDC Guidelines for Biosafety in Microbiological and Biomedical Laboratories and approving those research projects that are in conformity.
- Reviewing research and inspecting laboratories using human blood, cells or tissues for conformity with the provisions of the OSHA Bloodborne Pathogens Standard.
- Keeping abreast of mandated guidelines and other sources of good safety practice (GSP).
- Establishing laboratory compliance and inspection guidelines that facilitate documentation that the IBC has met GSP requirements.
- Making an independent assessment of the containment levels required for the proposed research and of the facilities, procedures and practices of the investigator proposing to carry out the research.
- Setting containment level.
- Initially, and periodically, inspecting and certifying the laboratories conducting research which requires containment and practice at the BL-2 level or higher.
- Adopting emergency plans covering accidental spills and personnel contamination resulting from such research.
- Reporting to the appropriate institutional official and to the NIH Office of Biotechnology Activities any significant problems with/or violations of the Guidelines, and any significant research-related accidents or illnesses.
- Review of animal protocols submitted to IACUC, for biosafety issues.
- Review of protocols submitted to the Institutional Review Board involving gene therapy, for biosafety issues.
- Serving as a resource and guidance source for investigators who are designing their biosafety plans.

The IBC comprises 16 members so selected that they collectively have experience and expertise in recombinant DNA (RCDA) technology and/or pathogenic organisms, biological safety and physical containment and the capability to assess the safety of experiments utilizing recombinant DNA and/or pathogens and any risk to public health and to the environment.

Two of the members are not affiliated with the Institution and represent the interests of the surrounding community with respect to health and protection of the environment. The Biological Safety Officer (BSO) is a member and Vice Chair of the IBC.

This past year, the IBC reviewed and classified a total of 20 new and revised research proposals. The review of the above protocols resulted in 17 inspections by the Biosafety Officer to certify laboratories for work at the BL-2 containment level or higher. Laboratories functioning at the BL-2 level are re-inspected annually, and those at the BL-3 level are reinspected biannually.

During this year, one new human gene transfer protocol was reviewed and approved by an IBC/IRB ad hoc Committee, and pending clarifications subsequently submitted for review by the IBC and IRB, respectively.

The IBC met to review the TJU vaccinia vaccination policy. Members of the IBC as well as TJU research personnel who work with vaccinia were invited to speak on whether or not the current policy on voluntary vaccination should remain in place. The consensus of those present was that the vaccination should remain voluntary. It was also decided that we do not need to change our procedure for informing individuals about the vaccine. All personnel are offered the vaccinia vaccination, and for those who decline, a declination form is kept on file with University Health Services.

The IBC continued to improve the comprehensive OSA-11 University internal form for submission of studies to the IBC. Submission of the OSA-11 may now be done electronically.

Working in conjunction with the IBC, Dr. Jungkind pursued a contract with Chem-Tel to provide the 24-hour emergency line when infectious substances are shipped. Dr. Jungkind, a member of the IBC and Director of Clinical Microbiology, is a major shipper of infectious substances at the University. In addition to covering his shipments, other members of the research community, who ship less frequently

will also be able to use Chem-Tel for their infectious goods shipments.

### **Volunteers in Research Laboratories**

Individuals such as high school and college students volunteering to work in the research laboratories of the Medical College and any individual (such as a post doctoral fellow or other researcher) whose salary is not paid by the University must register with the Office of Scientific Affairs and have their project reviewed by the IBC if their research involves biohazardous agents. This is required for risk management. During the year, the IBC and OSA have processed 82 volunteers.

In conjunction with the TJUH volunteer services director, a new screening form was developed to better assist volunteer office personnel in redirecting volunteers as needed to the Office of Scientific Affairs.

### **Select Agent Program**

The "Public Health Security and Bioterrorism Preparedness Response Act of 2002" requires that the United States improve its ability to prevent, prepare for, and respond to bioterrorism and other public health emergencies. Congress designated the CDC as the responsible agency to oversee 42 CFR Part 73, Possession, Use and Transfer of Select agents and Toxins. This document builds on and greatly strengthens the earlier Select Agents Regulations presented in 42 CFR 72 for the possession, use and transfer of select biological agents.

Implementation of these new regulations required that TJU be registered once again to hold, use and transfer select agents. This new regulation requires registration of the institution, a security risk assessment, safety and emergency response plans, training, transfers, record keeping, inspections and fingerprinting and vetting by the FBI of all investigators involved with select agents as well as the Responsible University Official (RO; Associate Dean for Scientific Affairs) and the Alternate RO (University Biosafety Officer). An ad hoc committee of IBC members developed safety and emergency response. A special physical security plan involving new construction to implement double key card access and video monitoring of areas where laboratories work with select agents has been implemented in the Division of Infectious Diseases. The CDC conducted a site visit to the facility on April 21, 2004. After minor changes in policies and standard operation procedures, Jefferson is now

in complete compliance with the Final Rule, which became effective in April.

### **Special Programs for Medical Students Summer Research**

The Director of Special Programs, Karen Novielli MD, (Associate Dean for Faculty Affairs and Faculty Development) coordinates five medical student summer research programs (Basic Cancer, Translational Cancer, Heart, Lung and Blood, General Medicine and Computer) that provide 10 week research experiences for medical students in basic science, translational or clinical research. Each student in a research program works directly with a senior faculty researcher. The primary goal of the programs is to stimulate interest in physician/scientist careers among medical students by exposing the students to state-of-the-art biomedical research and outstanding research mentors.

Programs in Basic Cancer and Translational Cancer are funded through the National Cancer Institute of the National Institutes of Health. In the Basic Cancer Program, eight positions were filled by first-year medical students, five by prematriculant students and two by undergraduate minority college students. Ten positions in the Translational Cancer Program were filled by first-year medical students. The Heart, Lung and Blood program, funded through the Heart, Lung and Blood Institute of the National Institutes of Health supported six medical students.

Finally, programs in General Medicine (five students) and Computer (three students) are supported by the Office of the Dean of Jefferson Medical College. All of the student research programs receive primary administrative support through the Office of Scientific Affairs. They provide an important and enriching experience for Jefferson Medical College students and are important venues for student-faculty interaction.

The first-year medical student body continues to express a high level of interest in these programs.

Using suggestions from past students the Medical Student Seminar Series was modified to address the questions and concerns regarding how physician/scientists balance their professional and personal lives, what motivates them to do research, and the opportunities and career trajectories available to the young physician/scientist. As evidenced by the interactions between the students and faculty presenters and stu-

dent evaluations of the program, the Seminar Series was interesting and helpful to the students.

### **Committee on Research**

The Committee on Research is administratively supported by the Office of Scientific Affairs. The principal responsibility of the Committee on Research is to provide assistance to the Dean of Jefferson Medical College regarding the formulation of research policy and to encourage further development of the research capabilities of the College.

The Committee may be called upon to review all research programs and to assist the Office of Scientific Affairs to assure that research activities at Jefferson Medical College are carried out in compliance with governmental and institutional rules and regulations. The Committee distributes information about sources of research funds and makes recommendations concerning disbursement of funds for the Jefferson Intramural Research Awards. The members of the Committee also devote a considerable amount of time serving on the various standing subcommittees, as well as ad hoc committees formed on an as-needed basis. These subcommittees administer the review and awarding of intramural and extramural research grants, the awarding of research prizes, the conduct of student research programs, and compliance with Thomas Jefferson University's policy on allegations of misconduct in science. The subcommittees report to the full Committee, which then forwards its recommendations to the Dean. The full Committee on Research meets monthly.

Funds for the Jefferson Intramural Research Awards (which was increased by \$100,000 making \$200,000 available to support Thomas Jefferson Medical College's research community) are generously funded through the Office of the Dean.

The Pilot Research Award is entering its third year of funding. Applications for this award continue to increase with significant success in obtaining extramural funding for the approved projects. This award was established to fund innovative research by both established and young researchers who are developing new research programs. Priority is given to grants with collaborations between investigators (clinical-basic, clinical-clinical and basic-basic), but is not limited to collaborations. Research with the goal of translation to the clinic is encouraged. The objective of this grant

funding of \$15,000 is to provide a stepping-stone to grant support by a national agency.

The Committee also oversees the Reapplication Enhancement Award. These intramural funds are intended for faculty who have received a critique on a National Institutes of Health or other nationally funded grant application but did not receive funding. This grant provides faculty with the support necessary to conduct experiments in order to provide additional preliminary data resulting in an enhanced grant re-submission. This program has been very successful and often results in a large return on a relatively modest investment by the school of \$10,000 per project. This continues to be an excellent source of interim funding for Thomas Jefferson University faculty. The Committee on Research extends its gratitude to the Dean for his continuing support for both of these programs.

The Committee on Research oversees the administrative aspects of this program through its Reapplication Enhancement Award and Pilot Research Award Subcommittees. The Committee reviews applications three times a year, with submission deadlines of May 15, September 15 and January 15.

Faculty interested in applying for these awards can obtain the necessary information from the Office of Scientific Affairs or its Web page. The guidelines that were originally established by the Committee have been reviewed throughout the year and changes made, as appropriate, to assist the researcher in the application process. Two key changes to the Jefferson Intramural Research Awards is the monetary increase of the Reapplication Enhancement Award and the Pilot Research Award to \$20,000 (an increase of \$10,000 and \$5,000, respectively).

The Student and Faculty Awards Subcommittee solicits and receives nominations for several Medical College awards, and is responsible for publicizing the awards, receiving and reviewing nominations, and selecting finalists for consideration by the full Committee. These prizes include the Bodine Award (given at Sigma Xi Research Day to a student who has completed the fourth year and has shown the greatest tenacity and dedication in research), the Menduke Prize (given on Class Day to a senior who has demonstrated excellence in research), and the Volunteer Faculty Research Award (given to a junior or senior who has done excellent clinical research).

Publicity about these awards results in the receipt of numerous nominations, and while the selection of a winner is often difficult, this is in fact a positive sign about the high level of both the quantity and quality of scholarly research among Jefferson Medical College students.

The Research Committee is often asked to assist the Dean's Office in the development of policies for research-related activities and it frequently invites presenters from various internal departments to committee meetings so the concerns of the research community may be addressed. This past year the Committee had the honor of welcoming Robert Bar-chi, MD, PhD, President, Thomas Jefferson University; J. Bruce Smith, MD, PhD, Associate Dean and Director/Office of Scientific Affairs and Division of Human Subjects; Lisa Kozlowski, PhD, Associate Dean, Post Doctoral Affairs and Ms. Phyllis Fisher, Director, Public Relations and Mr. Steven Benowitz, Science Writer, Public Relations.

The Research Committee is often called upon on an ad hoc basis to assist with a variety of research-related activities. Certain extramural research award programs permit only a limited number of faculty applications per institution, and the Committee provides internal review of applications for these programs. These programs include the Howard Hughes Research Award, Searle Scholars Program Charles E. Culpepper Scholars, Damon Runyon Cancer Research Award, W.W. Smith Foundation Awards in Heart Disease, Aids and Cancer Research, Pew Foundation Fellowship,

and Burroughs Welcome Fund. There continues to be a great deal of interest in these awards due to the more targeted approach in disseminating information regarding deadlines and guidelines for these foundation grants to the research community.

Jefferson Medical College policies and guidelines for dealing with allegations of scientific misconduct provide for the appointment by the Dean of an ad hoc inquiry committee to review such matters as needed. These committees are composed of the Chairman of the Committee on Research as chairperson and other members of the Research Committee and the faculty at large as deemed necessary.

The Committee looks forward to working with Dr. Steven McKenzie, Vice President of Research, in improving the atmosphere for the research community at the Institution as well as increasing the diversification of the University's research portfolio.

#### J. Bruce Smith, MD, CIP

Director, Office of Scientific Affairs

Director, Division of Human Subjects Protection

#### Karen Novielli, MD

Director, Special Programs

# Center for Research in Medical Education & Health Care

**T**he Center for Research in Medical Education and Health Care is involved in a wide range of medical education, health services, and policy research projects serving the Jefferson community, as well as national and international organizations. Highlights for 2004-2005 are described below, followed by brief summaries of specific Center projects.

The Jefferson Longitudinal Study is one of the most comprehensive databases of its kind supplying important information to JMC administration and faculty as well as supporting research projects addressing key issues in medical education. The Jefferson Scale of Physician Empathy, and the Jefferson Scale of Physician Lifelong Learning have been widely used at Jefferson and by medical educators and researchers in the U.S. and internationally.

We were especially pleased with the grant from the National Board of Medical Examiners Edward J. Stemmler, MD Medical Education Research Fund which helped fund a psychometric analysis of the Jefferson Scale of Physician Lifelong Learning. The Center has now been awarded additional support by the NBME Stemmler Medical Education Research Fund Invitational Grant program to continue for two years our research on predictors and outcomes of physician lifelong learning.

The Jefferson Scale of Physician Empathy (JSPE) enjoyed continued national and international attention. We have received more than 150 inquiries and requests for permission to use this scale from researchers in the U.S. and 26 other countries. Because of the increasing demand for the JSPE, the Center developed computer-readable forms and scoring services that are offered to researchers to insure the integrity of scoring and statistical analyses.

In academic year 2004-2005, the Center received a two-year extension to a major series of projects being performed in collaboration with the Regional Health Care Agency of the Emilia-Romagna Region of Italy. These projects address a wide range of issues in health care organization, financing, and quality improvement activities. Ongoing activities include: development of a longitudinal, population-based, health

care utilization database including the four million residents of the region; refinement and validation of a method for assessing the timelines and appropriateness of acute hospitalization; risk adjustment models to assist in health care planning and financing at the local level; assessment of appropriateness of outpatient prescription use; and analysis of the impact of prescription drug co-payments on patterns of drug use and patient outcomes.

**The Jefferson Scale of Physician Empathy (JSPE) enjoyed continued national and international attention. We have received more than 150 inquiries and requests for permission to use this scale from researchers in the U.S. and 26 other countries.**

Center faculty continue teaching responsibilities in the Health Policy and Biostatistics modules of Medical Practice for the 21st Century (MP-21) and contribute to faculty development through multiple joint publications with JMC faculty. Center staff continue to publish and present Center projects in both U.S. and international journals and for scientific and professional meetings.

## **Medical Education**

The Center's medical education activities include services to the Dean's Office, academic departments and faculty, and research related to the Longitudinal Study, evaluation of educational programs, written examinations, clinical skills assessment and ad hoc surveys.

## **Longitudinal Study**

The Jefferson Longitudinal Study includes academic and career outcome data that span all medical school classes since 1964 and house staff at the University Hospital since the first intern entered in 1909. Core data for each physician include demographics, board

scores, and residency program directors' ratings of trainees' clinical performance. Follow-up data include career outcomes from the American Medical Association's national data file, faculty appointments from the Association of American Medical Colleges, board certification from the American Board of Medical Specialties, and periodic alumni surveys.

### **Undergraduate Medical Education**

Extensive data for 9,034 Jefferson medical students since 1964 comprise the backbone of the Longitudinal Tracking System. Student data include demographics, responses to Jefferson's matriculation and graduation questionnaires, records of academic performance in medical school, personal qualities, ratings of clinical competence in residency, and follow-up surveys throughout their professional career. This component which supports the Dean's Office, academic committees, and faculty development, has yielded more than 160 peer-reviewed publications since 1976.

The Longitudinal Study database is used as a tool for academic management of the outcomes assessment requirements of the LCME for the medical school, the ACGME for residency programs, and the Middle States Commission on Higher Education for the University. In reporting on the findings of its accreditation visit to Thomas Jefferson University in 2004, the Middle States team noted the Longitudinal Study and commended the Center for its support of the evaluation of Jefferson's educational programs.

### **Graduate Medical Education**

In addition to the Longitudinal Study of residents, Center staff collect and manage other GME data on behalf of the Senior Associate Dean for Graduate Medical Education. Since 1998 program directors at the University Hospital have submitted annual performance ratings of their residents and fellows. The trainees also submit annual evaluations of the quality of their GME programs on standard forms that cover the University Hospital and affiliated sites. These data are used for internal review and for reports to the ACGME and Residency Review Committees. The measurement properties of the annual performance rating form, which had been redesigned to address the six ACGME competencies, were described in an article published in *Academic Medicine* in 2004.

### **Jefferson Scale of Physician Lifelong Learning**

Supported by a grant from the National Board of Medical Examiners (NBME) Edward J. Stemmler, MD

Medical Education Research Fund, a project to develop a psychometrically sound instrument for measuring physicians' lifelong learning was completed in 2003-2004. Psychometric analyses of the **Jefferson Scale of Physician Lifelong Learning (JSPLL)** provided support for its reliability and validity. Higher mean scores were observed for those physicians who were involved in professional activities that require continuous learning (e.g., publication, research activities, training awards). The mean score was also higher for physicians who also had earned PhD degrees, and specialists scored higher than generalists. The JSPLL is supported by strong psychometric evidence and can be used for empirical studies of the development and correlates of physician lifelong learning. The Center has been awarded additional support by the NBME Stemmler Medical Education Research Fund Invitational Grant program to continue the research in the next two years on predictors and outcomes of physician lifelong learning.

### **Measurement of Professionalism in Medicine**

The American Board of Internal Medicine Foundation provided support for a systematic review of the literature on professionalism, which was published in *Academic Medicine* in early 2005. Center researchers worked with a national panel of testing and measurement experts, including medical school faculty from multiple schools, as well as researchers at the National Board of Medical Examiners, the Accreditation Council for Graduate Medicine Education and the Association of American Medical Colleges. The team reviewed 134 articles to locate evidence on reliability and validity. The reviewers also provided global evaluations of the strength of validity evidence, the practicality of each tool and the implications for future research and development. Subsequently, we were invited to contribute a chapter on the measurement of professionalism in medicine in a book edited by Dr. David Stern of the University of Michigan which describes the three scales developed in the Center (**Jefferson Scale of Physician-Nurse Collaboration**, **Jefferson Scale of Physician Empathy**, and **Jefferson Scale of Physician Lifelong Learning**) as operational measures of elements of professionalism. The book will be published in 2005 by the Oxford University Press.

### **Jefferson Scale of Physician Empathy**

The **Jefferson Scale of Physician Empathy (JSPE)** developed at the Center enjoyed continued national and international attention in 2004-2005. We have

received more than 150 inquiries and requests for permission to use the JSPE from researchers in the U.S. and 26 other countries around the globe. Because of the increasing demand to use the JSPE, the Center developed in the past year computer-readable forms and scoring services that are offered to researchers to insure scoring integrity and appropriate statistical analyses. Our findings of a decline in empathy in the third year of medical school, which were published in *Medical Education*, prompted us to undertake a longitudinal study on changes of empathy during the course of medical education (from first year of medical school to the end of the first residency year). We received a grant from the Pfizer Medical Humanities Initiative, Pfizer, Inc., New York to conduct a longitudinal study of the development, stability and changes in empathy during the course of medical education. Factors that contribute to changes in empathy at different levels of medical education will be examined in this longitudinal project. Researchers in the U.S. and abroad are conducting several other studies in which the JSPE is used. Researchers in the Family Medicine and Internal Medicine residency programs at the University Hospital conducted studies to examine relationships between scores of the JSPE and patients' perceptions of their physician empathy. Three new studies were conducted on long-term predictive validity of empathy, correlates of the JSPE with other measures of empathy, and relationship between empathy, personality and perceptions of early relationships with parents. These will be published in the forthcoming issues of the *Journal of Social Psychology*, *Medical Teacher*, and *Personality and Individual Differences*.

### **Unprofessional Behavior and Disciplinary Action by Medical Boards**

The University of California – San Francisco obtained support from the NBME Stemmler Medical Education Research Fund for a joint study with Jefferson and the University of Michigan on students' unprofessional behavior. This case-control study investigated the relationship between unprofessional behavior in medical school and subsequent disciplinary action against practicing physicians. Cases were graduates of three medical schools who were subsequently disciplined by a state medical board. Control physicians were matched by medical school and graduation year. Predictor variables from medical school included narratives describing unprofessional behavior, grades, standardized test scores and demographic character-

istics. When completed in mid-2005, the analysis will address the question of whether unprofessional behavior as a medical student is associated with future disciplinary action among practicing physicians.

### **Jefferson's Patient Encounter Log System (PELS)**

The decentralization of clinical teaching networks requires a systematic way of documenting medical students' clinical and educational experiences across clerkships. In addition to being one of the LCME accreditation standards, this information is important for assuring the quality of our clinical affiliation network, for clerkship planning, and for helping students and faculty assess individual student clinical experiences. Jefferson Medical College has long been a leader in documenting our students' clinical experiences. Beginning with the Department of Family Medicine in 1997, and then adding other core clinical clerkships, all JMC third-year students have been required to record their patient encounters using computer scanned cards. The PALM-based Jefferson PELS system, which replaced the manual system, was fully implemented in the 2003-2004 academic year in all core third-year clinical clerkships and in the emergency medicine fourth-year clerkship. Students and faculty can now review a summary of each student's experiences, compared to clerkship-specific targets, at the push of a button. Center staff, collaborating with the senior associate dean, undergraduate medical education, Jeff-IT, and the clinical clerkship directors, are instrumental in the design, operation, and continuing improvement of PELS. (More information about PELS is available at: [Jefferson PULSE/Organizations/JMC PELS Users](#).)

### **Education in Tobacco Cessation**

Center researchers continued to collect evaluation data for a program developed by faculty from the Department of Medicine with support from the Pennsylvania Area Health Education Center. Third-year medical students received special training during the internal medicine clerkship to enable them to help patients stop smoking. Although measuring changes in knowledge and attitudes involves conventional tests and attitude scales, Jefferson's Patient Encounter Log System (PELS) and the third-year Clinical Skills Assessment are being used to assess clinical experiences and clinical skills related to tobacco cessation.

### **Timing of USMLE Step 2 Test Dates**

Center researchers worked with the Offices of Student Affairs and Academic Affairs to determine whether

the elapsed time between completion of the third-year curriculum and the test date alters a student's score on USMLE Step 2. The mean scores for students who completed the exam early in their senior year between June and September exceeded those who took the exam later in the year. This study provides valuable information that can be used to counsel students about test scheduling. The study was published in *Academic Medicine* in 2004.

### **Clinical Clerkship Review**

Center staff collect systematic data from third- and fourth-year students to monitor clinical clerkships at the University and affiliated hospitals. Established in 1982, the clerkship database includes students' self-reports of their educational experiences at each site, scores on written examinations, faculty ratings of the students' clinical performance, and student reports of the clerkship's impact on their career plans. Staff members provide periodic reports to the Curriculum Committee, Dean's Office and individual departments to enable the faculty to assess the quality of the educational program across sites.

### **Computer Test Item Databases**

Development in this area has been a result of close cooperation with the directors of the Family Medicine, Foundations of Clinical Medicine, Emergency Medicine and Immunity, Infection and Disease courses. Center staff provide support for the development and maintenance of test item databases, prepare tests, track the performance of items, and provide periodic reports to faculty members.

### **Clinical Skills Assessment**

Center staff worked with the Clinical Skills Center to develop new software to analyze the checklists completed by standardized patients, compute students' subtest scores, aggregate student performance across cases, set passing standards and report results by email for the clinical skills assessment (OSCE) at the end of the third year. Data collection systems were also developed for the second-year physical diagnosis course and the longitudinal assessment of Interpersonal/Communication Skills.

### **Test Scoring and Item Analysis Services**

Medical school faculty employ a variety of testing formats (e.g., multiple choice, extended matching, uncued tests) depending on the content being assessed. Center staff provided essential support ser-

vices for these testing and examination needs. Center staff scanned, key-validated, scored and analyzed more than 400 written examinations and evaluation questionnaires during this academic year.

### **Surveys**

Center staff provided support to the faculty and administration for conducting a variety of ad hoc surveys using optical character recognition (OCR), optical mark recognition (OMR), and Web-based surveys. For the seventh consecutive year, staff worked with the Hand Rehabilitation Foundation to create and analyze evaluations of their dual symposiums for therapists and surgeons. Other examples during 2004-2005 included the annual Snapshot Survey of the student body, the Wills Eye Hospital's 15th Biennial Cornea Conference, a symposium on tobacco cessation programs, elections of the Executive Council of the Medical Staff Office, and annual patient satisfaction surveys for medicine residents.

### **Health Care**

The Center's health care activities include projects related to health care organization and financing, quality and outcomes of care, education of patients with asthma, and assessment of caregiver needs.

### **Collaboration with the Health Care Agency, Emilia-Romagna Region, Italy**

In academic year 2004-2005, the Center received a two year extension to a major series of projects being performed in collaboration with the Regional Health Care Agency of the Emilia-Romagna Region of Italy. These projects address a wide range of issues in health care organization, financing of the health care system, and quality improvement activities. Ongoing activities include:

- Development of a longitudinal, population-based, health care utilization database including the four million residents of the region.
- Refinement and validation of a method for assessing the timelines and appropriateness of acute hospital use.
- Risk adjustment models to assist in planning and financing at the local level.
- Assessment of appropriateness of outpatient prescription use.

- Analysis of the impact of prescription drug co-payments on patterns of drug use and patient outcomes.

Each of these projects is briefly described below.

### **Longitudinal Health Care Utilization Database**

In collaboration with the Agenzia Sanitaria Regionale of the Emilia-Romagna Region of Italy, JMC's Center for Research in Medical Education and Health Care has constructed a population-based longitudinal health care database for the region. We assembled a comprehensive database to describe and explain patterns of care and profiles of population health in Regione Emilia Romagna (RER). The database was developed from encounter-based records of an individual's interaction with the health care system using administrative data from RER, capable of individual and geographic levels of analyses. In addition, data include clinical and financial indicators such as diagnoses, utilization of services, and costs from tariffs. These data can be used to estimate health care financing and risk adjustment models, health care planning, and profiling specific clinical and/or demographic sub-groups, and geographically based management of services.

### **Assessment of Timeliness and Appropriateness of Acute Hospital Use**

The Center has developed a method to assess potentially inappropriate acute hospital admissions (patients who could be effectively and safely treated in alternative, less costly settings) as well as "late" hospital admissions (patients who could have benefited from diagnosis and treatment at an earlier stage of their disease). This methodology, developed with input from the Jefferson clinical faculty, uses standard hospital discharge abstract data to evaluate the severity of a patient's principal diagnosis, using the Disease Staging classification, the presence and severity of comorbid disease, and the nature of surgical procedures performed. The method has been reviewed by a panel of Italian physicians which confirmed the validity of the approach. The revised criteria will be applied to all hospital admissions for residents of the Regione Emilia-Romagna and used by the region, local health units, and hospitals as a part of the planning process designed to efficiently meet the health care needs of the population.

### **Risk Adjustment and Population-Based Financing of Health Care**

Italian law mandates that healthcare funds should be directed at the local level and allocated according to the National Health Service (NHS) values of equity and solidarity. Consistent with these values, Center researchers have designed an approach to developing budgets for health districts in the Regione Emilia-Romagna that capture the health care needs of the local population to enable a fair allocation of budgets across districts. The first round of risk adjusters predicts future hospital and pharmacy costs for each individual based on clinical information from inpatient and outpatient hospital episodes, prescription drug files, and demographic data. The risk adjuster assigns individuals into clinical groupings designed by Center researchers to predict high resource use: Disease Staging Groups, Chronic Condition Drug Groups, and Body System-Etiology Groups. In the coming year, the Parma Local Health Unit will implement a demonstration of the budgeting approach. Center researchers will provide technical assistance and training in implementing the risk adjusters. Additional work will include (1) refining the risk adjuster to capture clinical information from ambulatory data, specialty data, and clinical data from several prior years; and (2) developing risk adjusters for other healthcare costs, including ambulatory, specialty, and home care.

### **Potentially Inappropriate Medication Prescribing for Elderly Ambulatory Patients in Emilia Romagna, Italy**

The elderly consume, by far, the largest amount of drugs per capita and, therefore, represent the segment of the population at highest risk for adverse drug effects. Given that the population in developed countries is aging at an accelerated rate, adverse drug effects in the elderly remain a critical challenge to health care systems. Inappropriate medication use has been found to be one of the most prominent causes of adverse drug effects in the elderly. Information from outpatient prescription claims and demographic data from the Regione Emilia Romagna are being used to investigate the prevalence of potentially inappropriate medication prescribing among elderly residents by using published, widely used explicit criteria and by examining factors associated with inappropriate prescribing. The awareness of the prevalence of inappropriate medication prescribing

and associated determinants may be useful in designing and implementing effective programs targeting outpatient practitioners to reduce inappropriate prescribing. (Vittorio Maio, PharmD, MSPH, Department of Health Policy is collaborating with Center Staff on this project.)

### **Impact of the Abolition of a Cost-Sharing Drug Policy on Drug Consumption and Medical Care Utilization**

Patient cost-sharing such as co-payments are used worldwide to control drug expenditures and to promote appropriate use of medications. A possible untoward effect, however, is that these initiatives may also limit access to needed medications. As a result, implementing cost sharing measures may produce short-term drug cost savings but inadvertently increase overall utilization and health care expenditures. The existence of comprehensive, linkable databases on drug and health care use in Emilia-Romagna provides an opportunity to evaluate the impact of a co-payment abolition – which occurred in Italy in January 2001 – on the use and costs of select medications and medication classes and determine the effect on the rate of serious adverse events (hospitalization and mortality) associated with variations in drug use before and after the implementation of the new drug policy. (Vittorio Maio, PharmD, MSPH, Department of Health Policy is collaborating with Center Staff on this project.)

### **Collaboration with the National School of Public Health, Lisbon, Portugal**

Center staff are collaborating with researchers from the National School of Public Health in Lisbon, Portugal to apply the methodology for assessment of appropriateness of hospital admissions to a database of Portuguese hospitals. Results of this project will be used to identify variations by hospital ownership and location in the context of changes in the system of hospital financing in Portugal.

### **Clinical Benchmarking**

Center staff are collaborating with physicians and management of “A. Gemelli” Hospital, the teaching hospital of Università Cattolica del Sacro Cuore in Rome, Italy in the design, analysis and presentation of clinically relevant hospital benchmarking reports. Disease Staging is used in reports that take into account the severity of illness while measuring quality and resource use outcomes. Additional analyses

explore how internal organizational features affect departmental performance and patient outcomes and how patterns of care have changed over time.

### **Jefferson Cardiac Care Database**

In collaboration with the JMC Department of Medicine, Center staff are building a Jefferson cardiac care database that links information from existing administrative data (e.g., hospital discharge abstract data and physician billing data) and clinical information (e.g., laboratory results). These data will be used to assess variations in practice patterns, use of clinical practice guidelines such as those developed for Project CARE, as well as to support faculty and house staff research projects. Initial analyses will focus on patients admitted to TJUH for congestive heart failure.

### **Feedback and Physician Performance**

With support from the American Board of Internal Medicine Foundation, Center researchers completed a review of the literature between 1966 and 2003 on the impact of feedback on physicians’ clinical performance. Policy makers have long expressed concern about unexplained practice variation that is inconsistent with evidence-based professional standards and new research findings. Although the findings of previous reviews on the question of whether feedback enhances physicians’ clinical performance have been equivocal, the Center’s review provides new information about the efficacy of feedback and the issues that need to be addressed.

### **Evaluation of Outreach to Caregivers of the Chronically Ill**

Researchers are working with WHYY, Philadelphia’s public broadcasting station, to evaluate the effectiveness of television programs to heighten awareness of the needs of caregivers and provide opportunities for hope and healing during the caregiving process. The three half-hour television programs were evaluated using focus group methodology, which allows for an in-depth investigation of issues and themes that arose for viewers and the assessment of programming impact. Four different audiences were studied: a group of family caregivers, the general public, professional care providers (such as physicians, nurses, home health aides), and a minority group (Latino). Results of this study have been presented at the American Society on Aging meeting, and have contributed to a better understanding of caregiver concerns and needs.

### **The AsthmaBus©**

This public service education project is being conducted in collaboration with the Philadelphia Health Department, the Philadelphia School District, and the Philadelphia Asthma Task Force. A double-decker London-style bus has been remodeled as a moving asthma education vehicle and features cartoon characters, the AsthmaBusters©. Its aim is to increase asthma awareness among Philadelphia schoolchildren, and to provide screening for this disease. The Bus also participates in a Tobacco Education Program sponsored by the City Health Department and conducted in collaboration with the Health Promotion Council.

### **Treating Childhood Asthma in Philadelphia: Linking asthmatic children with high absenteeism to health care services and resources**

Children with untreated asthma, in addition to having an unattended medical condition, experience poor school performance due to high absenteeism rates. This program aims to identify children with unrecognized asthma among those with high rates of absenteeism; to connect these children and their families with appropriate medical professionals; and to educate them about preventive measures that

could be taken to care for this chronic disease. This school year, the AsthmaBus has screened more than 1,000 sixth grade children; of these children, 450 had one or more asthma symptoms in the past year. Working with the School District of Philadelphia, we identified 170 of the 450 children as having three or more unexcused absences. This project, funded by the Aetna Foundation, is a collaboration among researchers at Thomas Jefferson University, the School District of Philadelphia and the Child Asthma Link Line, a nonprofit organization working to improve health outcomes.

**Joseph S. Gonnella, MD**  
Director

**Daniel Z. Louis, MS**  
Managing Director

**J. Jon Veloski, MS**  
Director, Medical Education Research

**Mohammadreza Hojat, PhD**  
Director, Longitudinal Study

# Office of Animal Resources

The Office of Animal Resources provides professional oversight and management of the University's laboratory animal care and use program, including all research and educational activities using laboratory animals.

## Guidelines for Humane Care

Animals used in research must be provided with humane care and an environment conducive to their welfare for both ethical and scientific reasons. The Office oversees a comprehensive animal care and use program designed to provide this in support of the research mission of the University. It is responsible for management and operation of centralized animal-research facilities of 39,000 square feet located at four campus sites. A staff of animal caretakers and technical personnel provides daily care of laboratory animals. Veterinarians with special training and credentials in laboratory animal medicine oversee the veterinary-care program.

The Office provides professional guidance and administrative support to the Institutional Animal Care and Use Committee (IACUC), which are charged with reviewing all research protocols involving laboratory animals. The Office's goals and legal obligations are to ensure that all activities involving laboratory animals are carefully reviewed and conducted in accordance with the highest standards of humane care for the animals used by its scientists in pursuit of medical advances. Currently, 474 protocols have an "Approved" status, with 156 Principal Investigators associated with these protocols.

## Occupancy

Approximately 99 percent of the animals used in research are rodents, a percentage that reflects the national trend for species used in biomedical research and education. There has been a 17% decrease in occupancy over the past fiscal year. Our average occupancy for the 12-month period ending June 30, 2004 was 8,613 cages. Our average occupancy for the 12-month period ending June 30, 2005 was

7,150 cages.

## Accreditation

The animal care and use program and facilities at Jefferson are accredited by the Association for Assessment and Accreditation of Laboratory Animal Care (AAALAC International). Accreditation is recognition of the high standards maintained by Jefferson. We also receive periodic unannounced inspections by the United States Department of Agriculture to enforce

Animals used in research must be provided with humane care and an environment conducive to their welfare for both ethical and scientific reasons.

## Preparing for the Future

The research needs at Jefferson continue to pose challenges. Although the population of transgenic mice has not grown significantly in the past year, it is anticipated that current recruitment of investigators will undoubtedly affect the animal facility. To help meet the needs of the investigators, Jefferson continues to commit capital resources to provide continued service for the investigators. Space to house mice under barrier conditions was created in the College/Curtis Animal Facility. The autoclave in the Biosafety Area of the Bluemle Life Science Building was rebuilt. A cold room was refurbished in Jefferson Alumni Hall to provide quality housing for cold-blooded species. This commitment will allow us to meet the immediate needs of scientists. Long-term growth will continue to be a significant issue at Jefferson. The Office continues to find ways to provide continued support and maintain high animal care standards as mandated by federal law and accreditation requirements.

Judith S. Daviau, DVM

Director, Office of Animal Resources

# Academic and Instructional Support & Resources

The operational units of Academic and Instructional Support and Resources (AISR) include:

- Scott Memorial Library
- Medical Media Services
- Learning Resources
- AISR Education Services

University-level planning became a major focus for AISR during the past year. The Director and several staff members were actively involved in the President's Strategic Planning process mid-year. In addition, much time has been devoted to planning for the facilities on campus. Three major activities are underway in this area: planning for the Hamilton Education Building, planning for the new auditorium in the Medical College, and planning for the upgrading of approximately 20 small group rooms in three buildings with new educational technology.

A very significant amount of staff time was devoted to the creation of the new Clinical Skills Center and Simulation Center. This involved the implementation of a system to manage the digital recording of the clinical skills of medical students. Staff from AISR's Educational Services, Media Services and Learning Resources divisions were involved in implementation and continue to provide daily support for these facilities.

## Scholarly Resources

The Library continued with its goal to make the majority of its resources available digitally. In consultation with the University Library Committee, a decision was made to reduce the number of journals in print format to less than 500 by January 2006. Surviving print items will include journal titles not produced in electronic format, as well as some classic titles, such as the New England Journal of Medicine or Lancet, which readers might still enjoy reading on paper.

During the year the Library acquired approximately 500 journals in electronic format. It also added more electronic books as well as several new databases. Most significant among these is SCOPUS, an abstracting and indexing database in medicine and the sciences which also provides important information on

the citation activity for each scholarly publication. This resource replaces the Science Citation Index which had become much too expensive to retain and was cancelled several years ago.

The Library introduced a new personal bibliographic management system to the University, RefWorks, which is Web-based. Providing this will save our students and faculty significant money each year on personal subscriptions.

All told, the Library added 6,350 print volumes, withdrew 1,728, which left the current collection total at 208,412 volumes. The Library has also contracted with the Online Computer Library Consortium (OCLC) for an objective analysis of its collections. OCLC will provide comparative data on the collections of five peer libraries. This should assist in identifying any weakness in the current collection.

## JEFFLINE

The use of JEFFLINE remains very high. There were a total of 10 million hits on JEFFLINE pages during the year, a 43% increase from the previous year. Hits on the JEFFLINE homepage increased by 13% for a total of 1,972,000 hits. Analysis of where users of JEFFLINE originated from indicates that 73% is from the jefferson.edu domain and 6% is referred from google.com, 4% from jeffersonhospital.org, and 4% from yahoo.com.

New developments for JEFFLINE during the year included the creation of a ThomCat Quick Search function which allows users to search the catalog of Scott Library's books, journal titles and audiovisuals directly on the homepage. A version of JEFFLINE was developed to accommodate the small screens of handheld devices with wireless Internet capabilities. Mobile JEFFLINE, or mJEFFLINE, is now available for this purpose.

## Jefferson Digital Commons

In the spring of 2004 the Library began studying issues related to the creation of doctoral dissertations by our graduate students. New technologies had surfaced which could improve the review process by faculty advisors and which might increase the citation rates for these scholarly works. At the same time, the

Library was tracking the activity of other universities to make the scholarly work of their faculty more universally available. By the fall a decision was made to commit to bringing a new service to the campus: an institutional repository (IR). The IR would provide a permanent, safe, public space where students and faculty could deposit their works. It would meet international standards for open access, which would allow its content to be freely indexed by search engines such as Google and Yahoo!. After a thorough review of software products for this purpose the Library selected a product from a commercial vendor, ProQuest.

In February AISR initiated access to an IR for the University which it named the Jefferson Digital Commons (JDC). Based on the ProQuest software, the JDC not only serves as an archive, it also provides a system for editorial processes, such as review of manuscripts, and for the easy creation of new electronic journals by Jefferson faculty. Meetings have been held with faculty groups and the Dean of the College of Graduate Studies to demonstrate this service, a mailing has been sent to all fulltime faculty, and the system is slowly becoming populated with new content. It is gratifying to see that this content is now being discovered by users on the Internet and downloaded regularly.

### **Use of AISR Resources**

Use of the print collections continues to slowly decline as the Library moves toward a digital model for resources. Total circulation (internal and external) of print materials was at about 100,000 items. However, the digitization of the collection has also led to an increase in laser printing and 220,708 laser prints were made last year, a 6% increase over the previous year. In addition, 408,738 photocopies were made on library machines.

The use of electronic databases grew substantially, growing 20% during the year. Growth occurred across all of the databases AISR provides. The most dramatic growth was in the use of electronic journals provided through the Ovid interface. These experienced more than 200%, with more than 81,000 uses logged. The use of electronic books via the Stat!Ref interface increased by 83%.

Use of computers was heavy with 309,940 individual logins taking place on AISR computers in the Library, Edison and Jefferson Alumni Hall.

### **Teaching and Software Development**

AISR staff did a significant amount of teaching in all three colleges, including faculty development – 3,125 participants attended 191 different sessions. Knowledge management was integrated into the Medical Practice for the Twenty-First Century curriculum, and AISR staff were assigned to work with all small groups. The staff also taught IDEPT 425, a computer science elective. Additionally, staff were responsible for five hours of instruction in GC550, the Graduate School's required course for doctoral students. Knowledge management was integrated into approximately 15 courses in the three colleges with staff teaching and grading assignments.

Educational software development continued for commercial publishers. AISR produced *The History Taking Encounter* for Lippincott Williams & Wilkins. The University receives royalties from the sale of such products. In addition, AISR produced the third edition of *Resident Resources: Cardiovascular Medicine* through a grant from Bristol Myers Squibb. It will be nationally distributed to 14,000 primary care residents. A new virtual tour of the medical school was developed and loaded onto the University Web site for prospective students.

A virtual microscope software program was loaded on an AISR server to support teaching in both JMC and JCHP. This technology simulates a microscope by offering multiple magnifications of digitized slides. Based on the effectiveness of this technology, medical students will not be required to lease microscopes in 2006.

### **Learning Resources**

The Scott Learning Resources Center was upgraded to accommodate the preferred learning style of many students. Within the facility study carrels with computers were replaced with tables and a single computer. This allows students to study in a group, utilizing the latest technology and having AISR staff available for technical assistance, but not disturbing readers in the rest of the library.

More than 120 computers were replaced during the year, including laptops and classroom computers. All public computers were upgraded to the Windows XP operating system. A video production workstation, used by both faculty and students was upgraded to a high-end Macintosh.

AISR implemented a new networked video solution during the year. This will allow users to view videos either on AISR public computers or off campus. Licenses and networked versions of existing videos are being acquired as the budget permits.

Many new models and simulation devices were added to the collection during the year including: NG tube and trach care simulator, central line simulators, lumbar puncture simulator, female cauterization pelvis simulator, fundus skills simulator, etc. With the advice of faculty many anatomical models were acquired also, such as larynx, ear, and kidney.

### **Preserving and Promoting Our Historical Heritage**

The University Archives continues with its goal of digitizing important historical content as funding is available. During the past year the very rare book *Anatomy of the Breast*, published in 1840, was scanned and converted to both a PDF and searchable ASCII file. This was then loaded into the new Jefferson Digital Commons for free use worldwide. Within a period of only three months portions of the work have been downloaded nearly 3,000 times. Additionally, a collection of very large original anatomical drawings created for teaching at JMC between 1910 and the 1960s are in the process of being photographed and digitized.

Five motion picture films were returned to TJU after being discarded in the early 1960s. These were made from 1949-1953 by Dr. B.J. Miller, a principal researcher in the development of the heart-lung bypass machine and features animal surgeries. AISR has transferred these to digital and VHS formats and they are currently being edited and interpreted by Dr. Miller. They will be added to the JDC.

Dr. Serge Duckett, PhD continued his generous contributions to the Archives/Special Collections. During the past year he donated 54 rare medical books, the oldest dating back to 1679. Through its small endowment, the Schepartz Fund, the Library was able to acquire a photograph from 1896 of the JMC football team and a transcript of a trial involving Dr. George McClellan.

### **Art Exhibits**

The Scott Library mounted a number of exhibitions of art on campus. During the fall and winter it mounted "Aerobics for the Spirit", an exhibition of art kites,

paintings by Mary Anne Bartley and also featuring the poetry of Dr. Emanuel Garcia. Late winter and early spring featured "Life's Simple Shapes", exhibiting the work of Ilaria Arpino, an Italian artist transplanted to Philadelphia. Late spring featured the photography of Laura Jean Zito on "Nomads of the Sinai". The goal of these exhibitions is to promote the library in its role as a cultural center for the campus and to provide our students, faculty and staff with experiences of beauty that inspires.

### **Goals for 2005-2006**

AISR staff will pursue a number of significant goals during the next fiscal year, including:

The Jefferson Digital Commons will be further populated with faculty publications and graduate student dissertations. A decision has been made to also convert the *Manual of Battlefield Surgery* written by Samuel D. Gross and its Confederate equivalent. We will also be pursuing grant funding to digitize other original content held in the University Archives.

A plan to better reward volunteer faculty of JMC with access to JEFFLINE will be presented to the Dean.

In collaboration with faculty, AISR staff will design and implement new educational technology in the teaching on the fifth floor of Jefferson Alumni Hall. This will allow students in Histology and other courses to view high resolution images at multiple magnifications rather than using a microscope. This technology may also be utilized for teaching other courses, such as Neuroscience and Microbiology.

AISR staff will continue to work on planning for the new Hamilton Education Building.

As part of its goal to improve the "Library as Place," a number of changes will be made. This will begin with the installation of new carpeting on the second floor, painting the facility, the installation of a new marine aquarium and continuation of the art exhibits.

The Library will assemble an advisory group to identify more clinical decision support software. This is in response to requests from students for access to the Up to Date system and the discontinuation of publishing of the MedWeaver system.

Planning will continue on a mechanism for allowing AISR's professional staff to have faculty appointments. This would further integrate librarians and other professionals into the academic life of the University.

**Edward W. Tawyea**

Director: Academic and Instructional Support and Resources/University Librarian

# Alumni Association

The major goals of the Alumni Association are as follows:

- Strengthening ties with the alumni and post graduate alumni to foster greater involvement with Jefferson.
- Introducing the students and residents to the work of the Alumni Association through programs and events to encourage them to become active alumni after they leave.
- Increasing both the participation rate and the dollar amount contributed to Annual Giving in support of the College by alumni and postgraduate alumni.

The Alumni Association's programs, events and publications are designed to accomplish these goals.

Alumni Reunion Weekend was held in the fall on October 22, 23 and 24, 2004. The Alumni Banquet was held on Friday evening at the Union League during which the Alumni Achievement Award was presented to James D. Heckman, MD '69 and Paul M. Weinberg, MD '69. The postgraduate alumni held their reunion dinner at the banquet. The Saturday morning program included the Women's Forum Breakfast, an Eakins Gallery Dialogue and 12 clinic presentations. The Dean's luncheon followed. On Saturday evening, 10 reunion dinners were held at the Park Hyatt at the Bellevue, and two were held in Jefferson Alumni Hall.

During the year, the Alumni Association holds receptions for alumni to bring them together in a social setting to hear the latest news about Jefferson from members of the administration or faculty. One regional reception was held on May 4, 2005 in Scranton, PA. Phillip J. Marone, MD '57, Clara Callahan, MD PD '82, and William Farrell, MD '61, were the hosts at the event. Alumni receptions were held during the annual meeting of the American Medical Association in Chicago on June 18 and during the annual meeting of the Association of American Medical Colleges in Boston, MA. on November 8. In addition, the Alumni Association helped to arrange 10 alumni receptions at specialty meetings in various cities across the country.

The Alumni Association sponsors many events for our medical students throughout the year. Incoming freshmen and their parents were welcomed with coffee and danish on August 6 during Orientation Week. At Opening Exercises, the freshmen received their white coats, a symbol of the physician, as a gift from the Alumni Association.

A Beef and Brew reception for the freshmen, held on January 19, gave them the opportunity to meet Jefferson alumni in an informal setting. The freshmen also had a chance to talk with our alumni during small luncheons in the Faculty Club hosted throughout the year by Dr. Marone. The Mentor Program links freshmen and sophomores with local alumni who offer practical career advice.

**During the year, the Alumni Association holds receptions for alumni to bring them together in a social setting to hear the latest news about Jefferson from members of the administration or faculty.**

For senior students who are traveling across the country for postgraduate program interviews, the Host Program arranges overnight accommodations in the homes of local alumni. During Class Day on the eve of graduation, the senior with the highest cumulative record is awarded the Alumni Prize. This year the recipient was Laura Skoczylas. Later that day, seniors and their guests were feted at a reception hosted by the Alumni Association.

The Alumni Association was one of the sponsors of the AOA spring banquet, the Jeff HOPE charity ball, the 2004 Clinic and the Black and Blue Ball.

Career Day for sophomore and junior students was held on December 1. After an explanation of the match process, students had the opportunity to choose five presentations from among the 33 specialties offered. Later, students and alumni enjoyed a light supper in the cafeteria, giving students an additional opportunity to discuss career alternatives.

with alumni. Thirty-two alumni volunteered their time as presenters.

The Parents' Day Program allows second-year students to share a bit of their medical school experience with parents and spouses. On March 11, Thomas J. Nasca, MD '75 Dean, Jefferson Medical College, opened the program with a brief history of the Medical College. Four faculty members gave presentations, followed by lunch in the cafeteria and tours of the campus. President Robert Barchi, MD, PhD was present to welcome the students and their guests.

The Alumni Association continues to look for ways to interact with the residents and fellows who will one day be postgraduate alumni. All new residents and fellows are welcomed to Jefferson in the name of the Alumni Association and given a Jefferson mug. All house staff members receive the quarterly **Alumni Bulletin**.

Alumni can stay in touch with Jefferson and each other through the articles and class notes section of the Alumni Bulletin. The Bulletin, which is published and mailed to all constituents four times a year, is also available in electronic format on the Internet. The Alumni Association's home page on the Internet is another way for alumni to stay in touch with Jefferson. In addition to learning about ongoing programs and upcoming events, alumni can register for our

password-protected online email directory, change their address, send in class notes and make online contributions to Annual Giving.

At the Annual Business Meeting on April 20, Walter F. Wrenn III, MD '74 passed the gavel to incoming president James W. Fox IV, MD '70. The slate of nominees elected to office was: president-elect Lorraine C. King, MD REN '77; vice presidents Barbara G. Frieman, MD '80, Joseph A. Riggs, MD OBG '64; John H. Moore, Jr., MD GS '85 and Karen D. Novielli, MD '87; and secretary James J. Purtill, MD '93. New members of the Executive Committee and new honorary members of the Alumni Association were welcomed.

The 57th Annual Giving campaign concluded on June 30 of this year. We thank the 3,439 alumni, postgraduate alumni, non-graduate faculty, widows, and friends who contributed \$1,546,396 to advance the mission of the Medical College. Phillip J. Marone, MD '57 generously agreed to make a donation in the name of every member of the Class of 2004 for the next five years so that these young physicians could achieve a 100% participation rate in Annual Giving as they begin their careers. We hope that, given this good start, our young alumni will continue to be supporters of Annual Giving and Jefferson throughout their lives.

**Phillip J. Marone, MD '57**

Associate Dean for Alumni Relations

Executive Director of the Alumni Association

# Jefferson University Physicians

Fiscal year 2005 heralded another year of enviable operating results for Jefferson University Physicians (JUP) with record levels of charges punctuated by unparalleled revenue growths and faculty productivity across all JUP departments. Further supporting these indicators of advancement was the foundation laid by the Jefferson Clinical Strategic Initiative kicked off in March with a retreat, which included participation of TJU and TJUH senior leadership along with faculty representation. This initiative lead by the President's Office is focused on changes to JUP's structure, planning for an ambulatory care building, service and operational excellences, and clinical care delivery models. The recommendations of the work groups are to be presented to University and Hospital leadership in September 2005.

Of note, Dr. William Keane was named as the new Medical Director of Jefferson University Physicians. In his role, Dr. Keane will provide physician oversight of the practice plan.

## Strategic Highlights

On the strategic front, there were a number of key organizational initiatives that laid the foundation for the year's results and, more importantly, set the baseline for JUP's future. These initiatives included:

- In anticipation of yet another year of increased malpractice premiums, a task force led by Dr. Barchi, was formed to explore coverage options for the group. The outcome of this effort was that Jefferson University Physicians has joined the Jefferson Health System Risk Retention Group, which resulted, in aggregate, in favorable FY06 premiums for the practice plan as compared to alternatives available in the market.
- Work efforts associated with JUP's clinical computing strategy for an Electronic Health Record (EHR) continued. The primary focus was on selection of a vendor, but efforts were expanded specifically in the analysis of current operational workflows and identifying IT infrastructure requirements, as well as extensive contract negotiations.
- Jefferson University Physicians participated as the first healthcare organization with the Bridges

Mentoring Program. This program is a 12-month internship and training program that prepares non-college bound Philadelphia public high school students for post-graduation employment. JUP had five students from the program in the first year with three students obtaining full time employment upon completion of their internships. We have continued our participation in FY06.

- The Fifth Annual JUP Golf Outing was held in October at the Philadelphia Cricket Club. With more than 140 golfers, it was another overwhelming success. The outing resulted in another \$70,000 in capital contributions to the Jefferson Medical College's Clinical Skills Center.

## Financial Highlights

JUP enjoyed a strong year financially in FY05. The year's financial performance was punctuated by the following:

- Charges were \$14.4 million or 3.24% ahead of budget and \$21 million or 4.8% ahead of FY04.
- Receipts were \$12.3 million or 7.434% ahead of budget and \$12.2 million or 7.34% ahead of FY04.
- Further, departments continued to retain earnings for future strategic initiatives.
- Once again, there was a reduction in the actual costs of billing and overhead assessment, compared to budget, resulting from better than budgeted revenue and continued cost containment.

## Health Plan Services Highlights

Health Plan Services continued to enhance payor contracting, provider relations and physician enrollment/credentialing. Highlights of the year include:

- Continued work effort associated with JUP's goal of obtaining a delegated credentialing program, which encompassed development of policies and procedures as well as an onsite audit of physician files.
- Enhanced reporting to monitor and track the status of physician's credentialing applications to third party payors.

### **Practice Operations Highlights**

Practice Operations continued to evaluate methods to enhance the practice environment. Accordingly, emphasis was placed this year on initiatives that facilitated workflow processes through the use of information and technology:

- Patient Online – implementation of a new product for secure messaging which enables a physician and/or the clinical provider team to communicate with patients via email.
- IDX Flowcast Upgrade – successful conversion to the latest version of the IDX practice management program. This version offers enhanced features, associated with physician schedules as well as facilitating the conversion of the JUP practices to the Web-based version of IDX, as necessitated by the EHR implementation.
- JUP Referral Directory – a JUP directory was developed for use by physicians and staff, which details all JUP physicians by clinical specialty and identifies practice locations with primary contact numbers.

### **Business Services Highlights**

Physician Business Services continued to expand upon the electronic capabilities of the IDX system. These technological advances along with continued process improvement in both front-end and back-end operations were the primary drivers of FY05 success. Specific accomplishments included:

- Electronic conversions for claim submission for all medical managed care plans was completed.
- A registration interface from Last Word to IDX was completed which has enhanced operational efficiencies within the central registration area.

- FY05 gross collectibility targets were exceeded.
- Days in Accounts Receivable decreased from 67 days in June 2004 to 62 days in June 2005.

### **Outlook for FY06**

While FY05 was a remarkably successful year it is clear that JUP will continue to be challenged by market pressures.

Competition in the marketplace will require a more flexible organizational structure that enables JUP to better respond to the market. To this end, there are a number of exciting initiatives planned for the next fiscal year. These include:

- Revising the JUP Bylaws.
- Developing and communicating standards in support of an “ideal” patient experience.
- Confirming the conceptual plan and design for a new ambulatory care building.
- Completing the planning phase of JUP’s electronic health record (EHR) strategy.
- Continuing to evaluate JUP’s cost profile to assure a competitive structure.

Success in all of the above initiatives will position JUP as a valued partner with payers, consumers and referring physicians. We look forward to another productive year.

### **John Ogunkeye**

Executive Director  
Jefferson University Physicians

## Statistical Abstract

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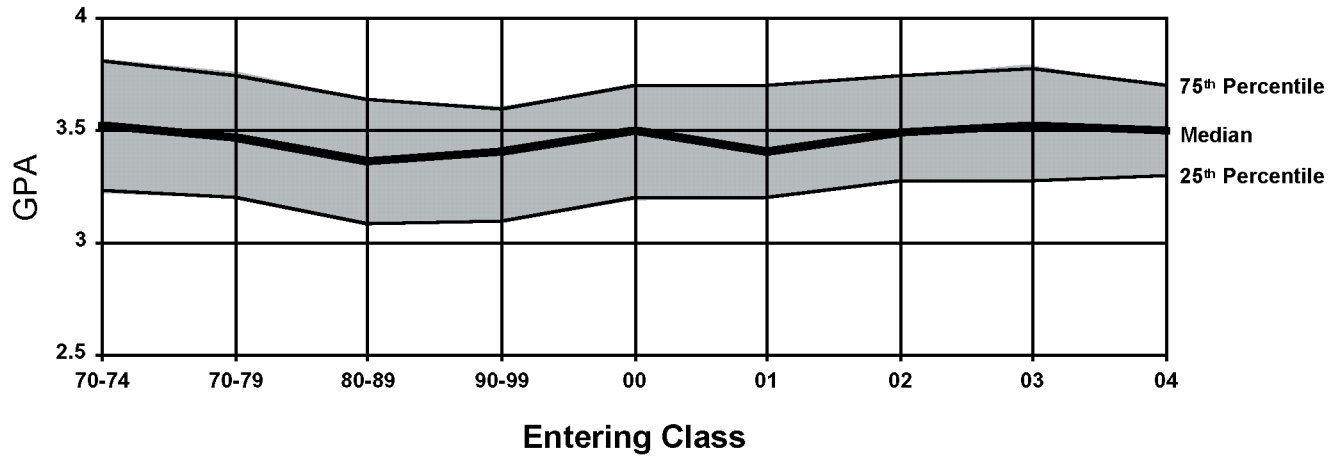
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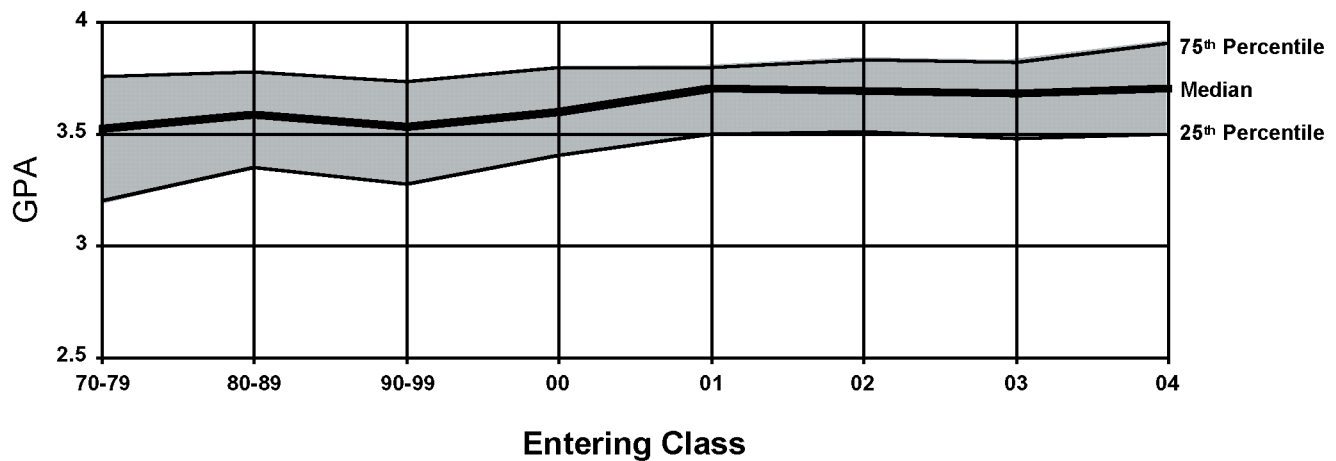
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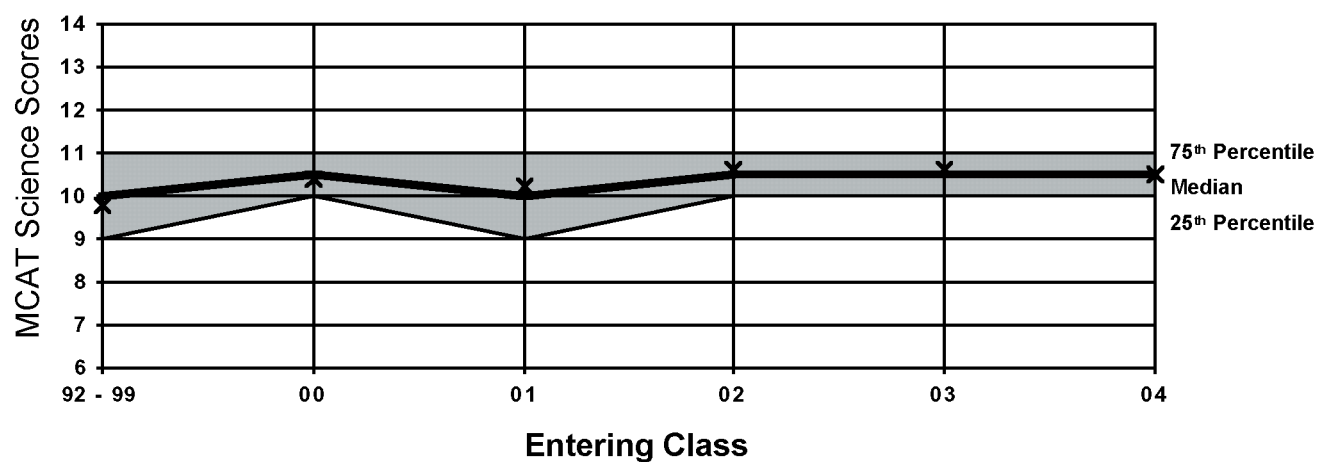
**Figure 1**  
**Undergraduate Science GPA**



**Figure 2**  
**Undergraduate Non-Science GPA**



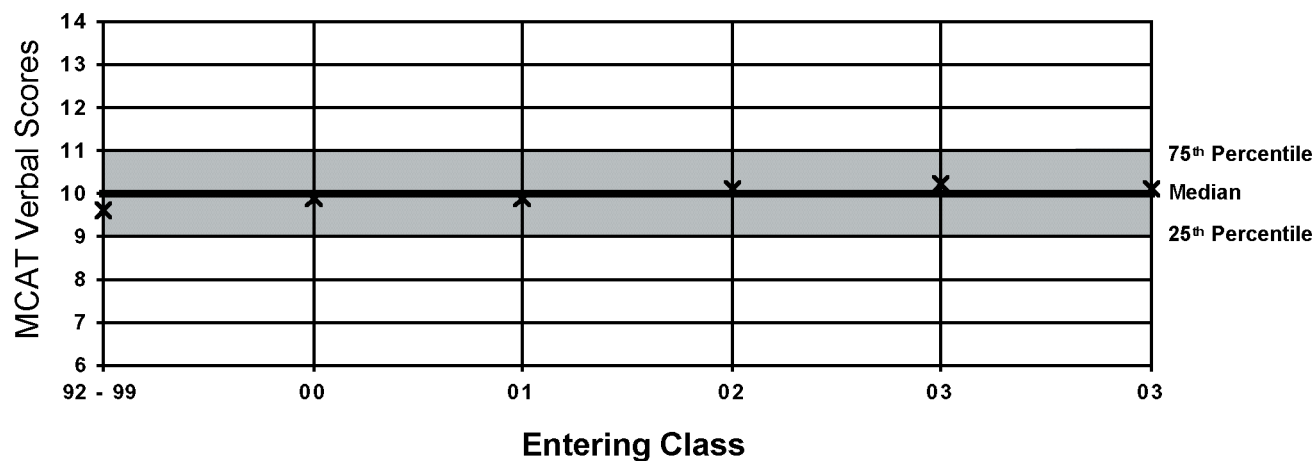
**Figure 3  
MCAT Science<sup>1</sup>**



X = Mean

<sup>1</sup> The Biological Sciences score, highest score is used for repeaters.

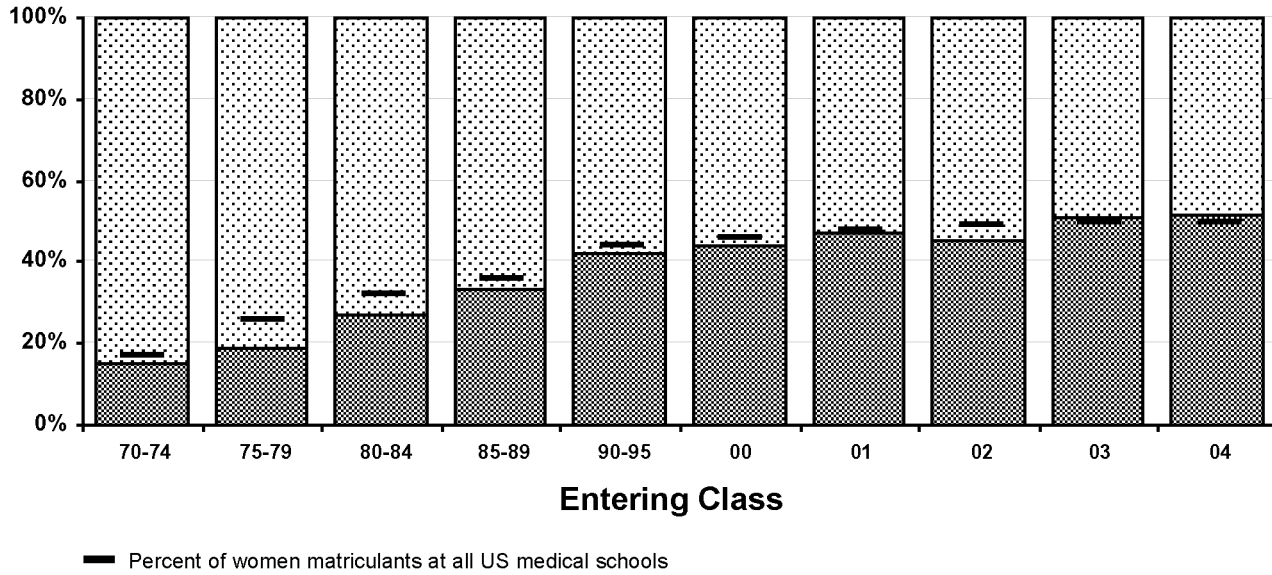
**Figure 4  
MCAT Verbal<sup>1</sup>**



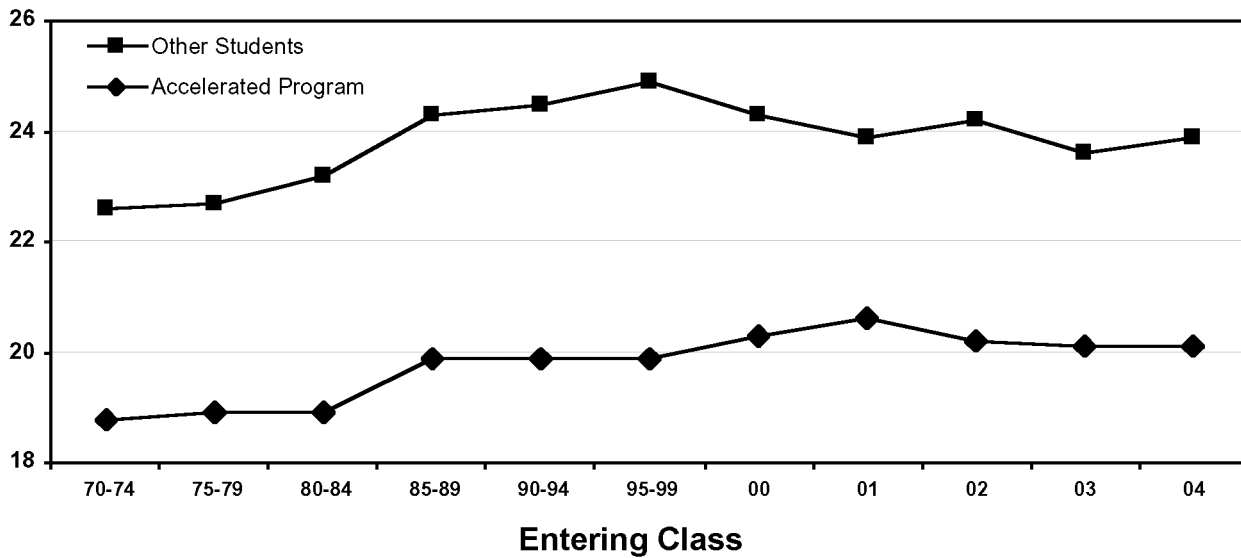
X = Mean

<sup>1</sup> The Verbal Reasoning scores, highest score is used for repeaters.

**Figure 5**  
**Percent of Women Matriculants**

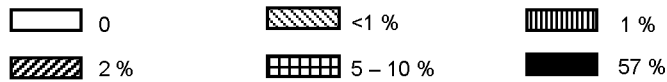
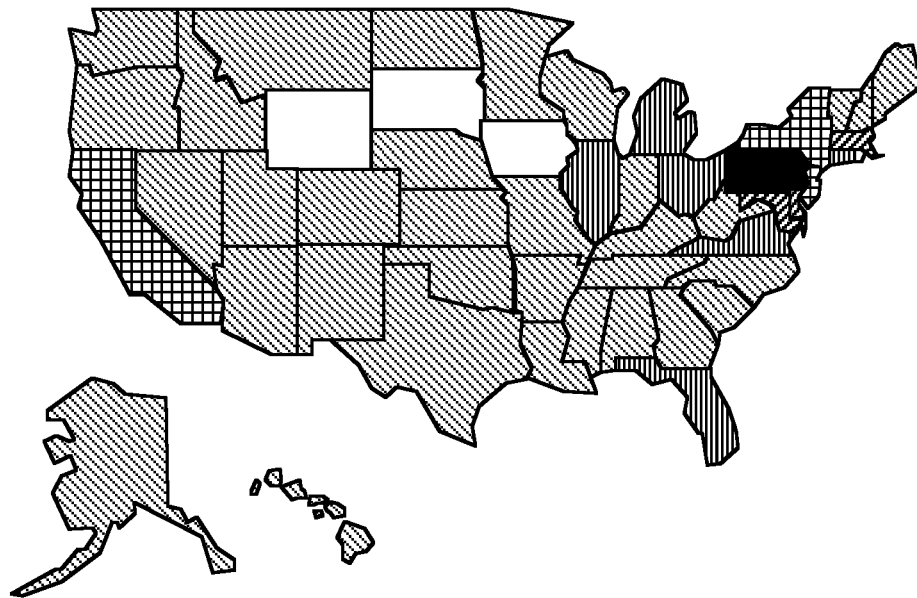


**Figure 6**  
**Mean Age at Matriculation**



<sup>1</sup> The accelerated program had been a 5-year combined BS-MD program before 1984. During the transition year 1984, no students were admitted to the program. Thereafter, it became a 6-year program.

**Figure 7**  
**Home State for Matriculants**  
**Entering Classes of 1970 - 2004**



Frequency Distribution <sup>1</sup>	
State	n
Pennsylvania	4,368
New Jersey	804
Delaware	662
California	413
New York	389
Maryland	146
Massachusetts	126
Connecticut	81
Florida	79
Virginia	70
Michigan	54
Ohio	51
Illinois	47
Washington	36
Hawaii	32
Colorado	31
Texas	31
North Carolina	28
Arizona	23
New Hampshire	21
Georgia	20
Rhode Island	17
Minnesota	15
Alabama	14
Wisconsin	14
District of Columbia	13
Oregon	13
Indiana	12
Utah	12
West Virginia	11
Maine	10
Tennessee	10
Louisiana	9
Missouri	9
Kentucky	8
Nevada	8
Vermont	6
Idaho	5
Kansas	4
Mississippi	4
South Carolina	4
Arkansas	3
Nebraska	3
New Mexico	3
Oklahoma	3
Montana	2
North Dakota	2
Alaska	2
<b>Total</b>	<b>7,728</b>

<sup>1</sup> A total of 45 students from foreign countries, 7 students from Puerto Rico, 3 students from Canada and 5 student from the US Territory Virgin Islands are excluded.

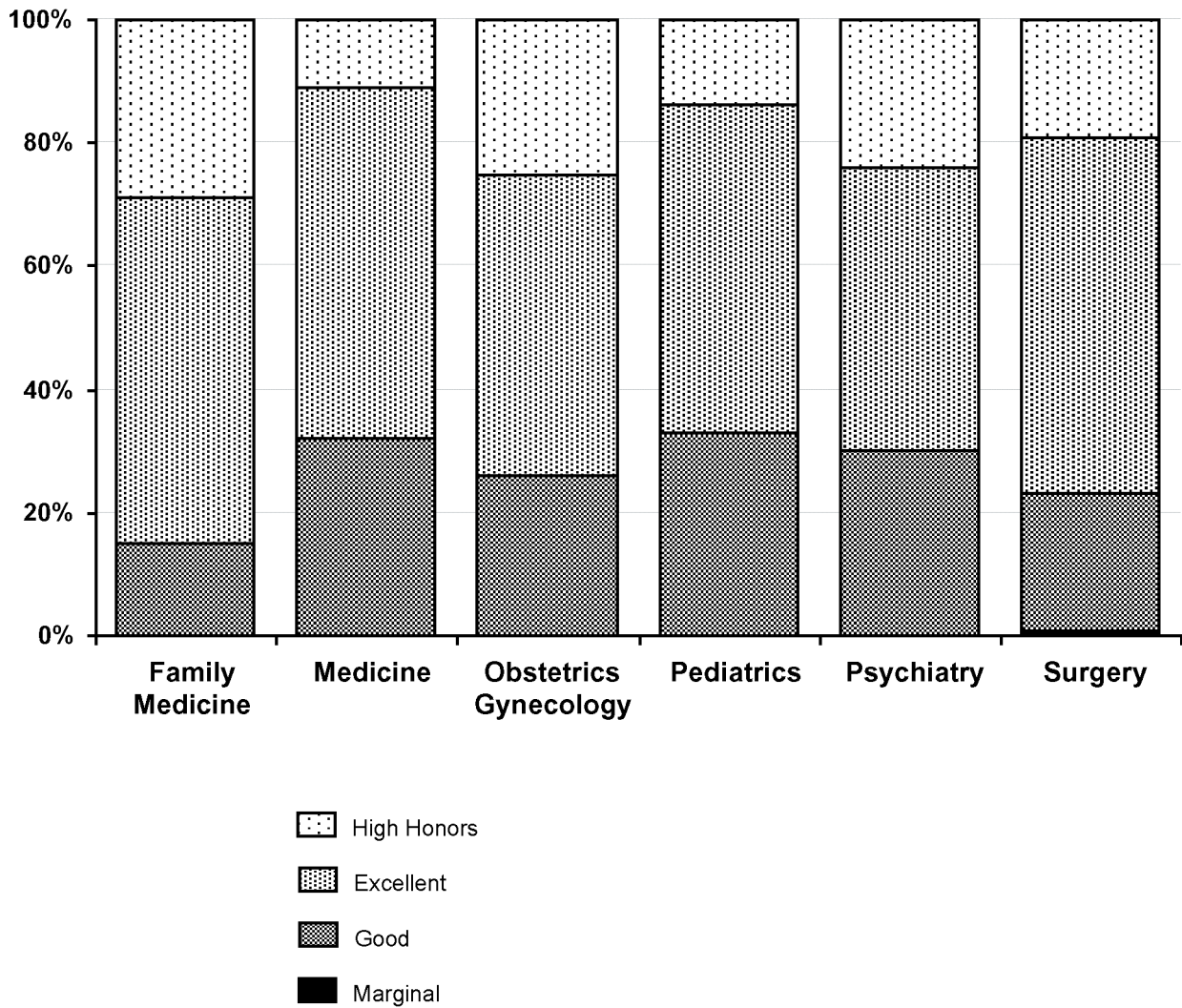
**Table 1**  
**Graduation, Transfers, and Attrition**  
**Entering Classes of 1970 - 2001**

Entering Class		Graduated			Transfer	Did Not Graduate		
		On-time	Late			Withdrew		Dismissed
		Year	Size	Academic		Combined*	Not Failing	Failing
70	210	181	11	10	1	6	1	0
71	212	199	2	2	2	3	2	2
72	223	207	3	7	0	2	1	3
73	223	202	7	4	1	4	2	3
74	223	209	4	3	3	1	1	2
75	223	209	6	3	2	2	0	1
76	223	202	8	8	2	3	2	1
77	223	204	9	3	2	1	1	3
78	223	208	4	1	4	2	0	4
79	223	201	8	4	3	2	0	5
80	223	200	11	4	1	1	0	6
81	223	195	13	3	4	0	0	8
82	223	204	6	5	2	0	0	6
83	223	195	12	7	3	4	0	2
84	223	200	9	4	5	3	0	2
85	223	205	4	4	2	4	2	2
86	223	191	13	5	4	2	2	6
87	222	190	10	9	6	2	1	4
88	225	199	11	9	3	1	1	1
89	225	191	10	15	3	4	0	2
90	223	187	10	11	2	2	0	11
91	223	192	10	8	3	4	1	5
92	245	217	9	13	2	2	0	2
93	226	198	9	11	1	0	2	5
94	224	207	3	10	2	1	1	0
95	224	199	7	12	4	0	0	2
96	223	195	6	16	5	0	0	1
97	223	194	7	19	0	2	0	1
98	223	199	7	14	1	0	1	1
99	223	181	21	20	0	1	0	0
00	223	198	12	13	0	0	0	0
01	223	200	5	11	0	3	0	4

\* Includes special programs (MD-PhD, MD-MBA) and delayed graduates for non-academic reasons.

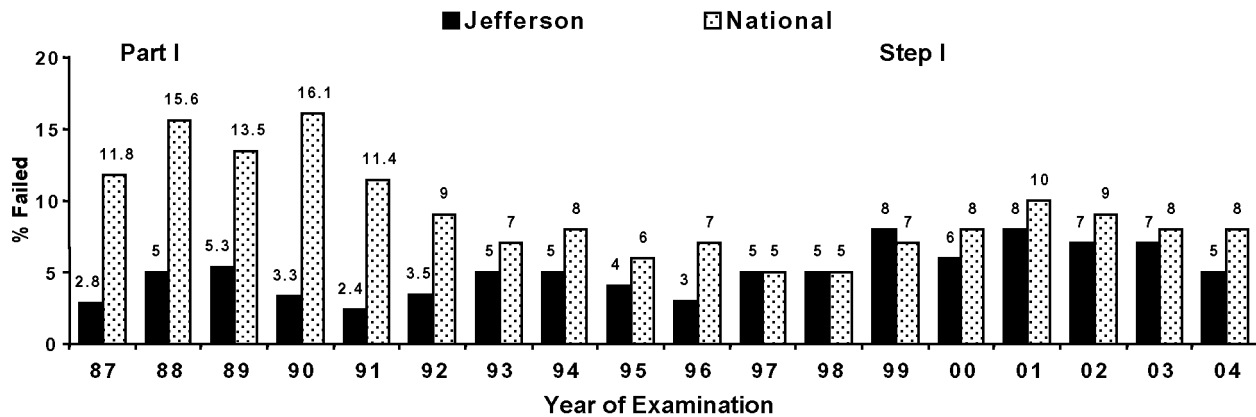
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**Figure 8**  
**Clinical Ratings of Students in Six Core Clerkships\***  
 Graduating Class of 2005

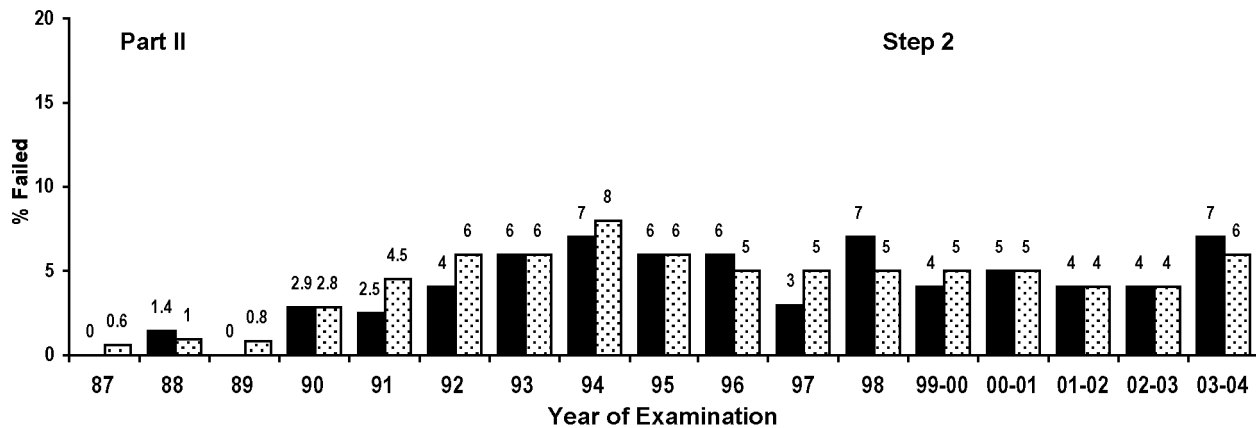


\* Faculty's global rating of students' clinical competence.

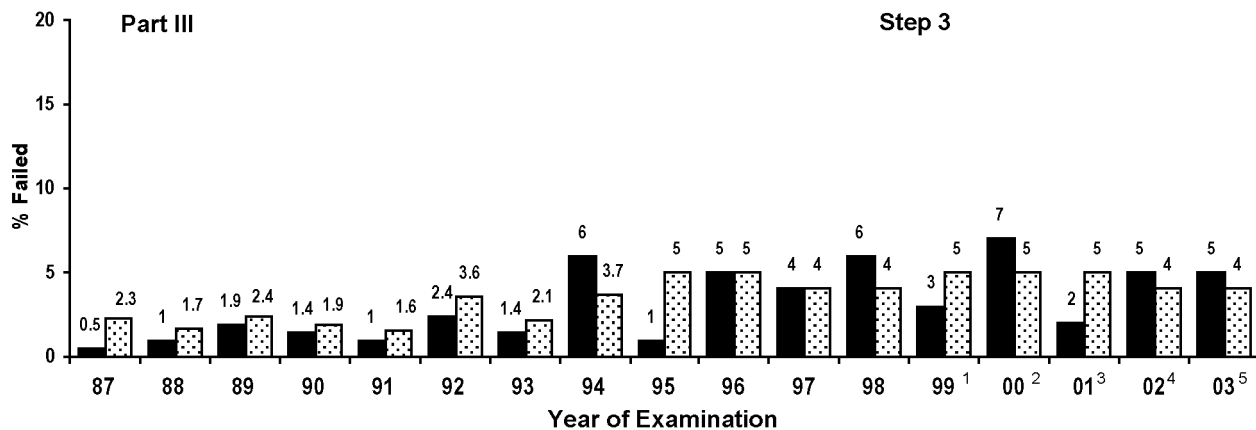
**Figure 9**  
**United States Medical Licensing Examinations (USMLE)**  
**National Board Examinations\***



\* Data on Part I are presented for the candidate reference group who took the examination for the first time each year and who were two years from expected graduation. The USMLE Step 1 replaced Part I in June 1991.



\* Data on Part II are presented for the candidate reference group who took the examination for the first time each year and who were one year from expected graduation. The USMLE Step 2 replaced Part II in September 1992.



\* Data on Part III are presented for graduates who took the examination for the first time in each year. The USMLE Step 3 replaced Part III in June 1994.

<sup>1</sup> Graduates of 1998 who took the examination between May 1998 to December 2000.

<sup>2</sup> Graduates of 1999 who took the examination between May 1999 to December 2001.

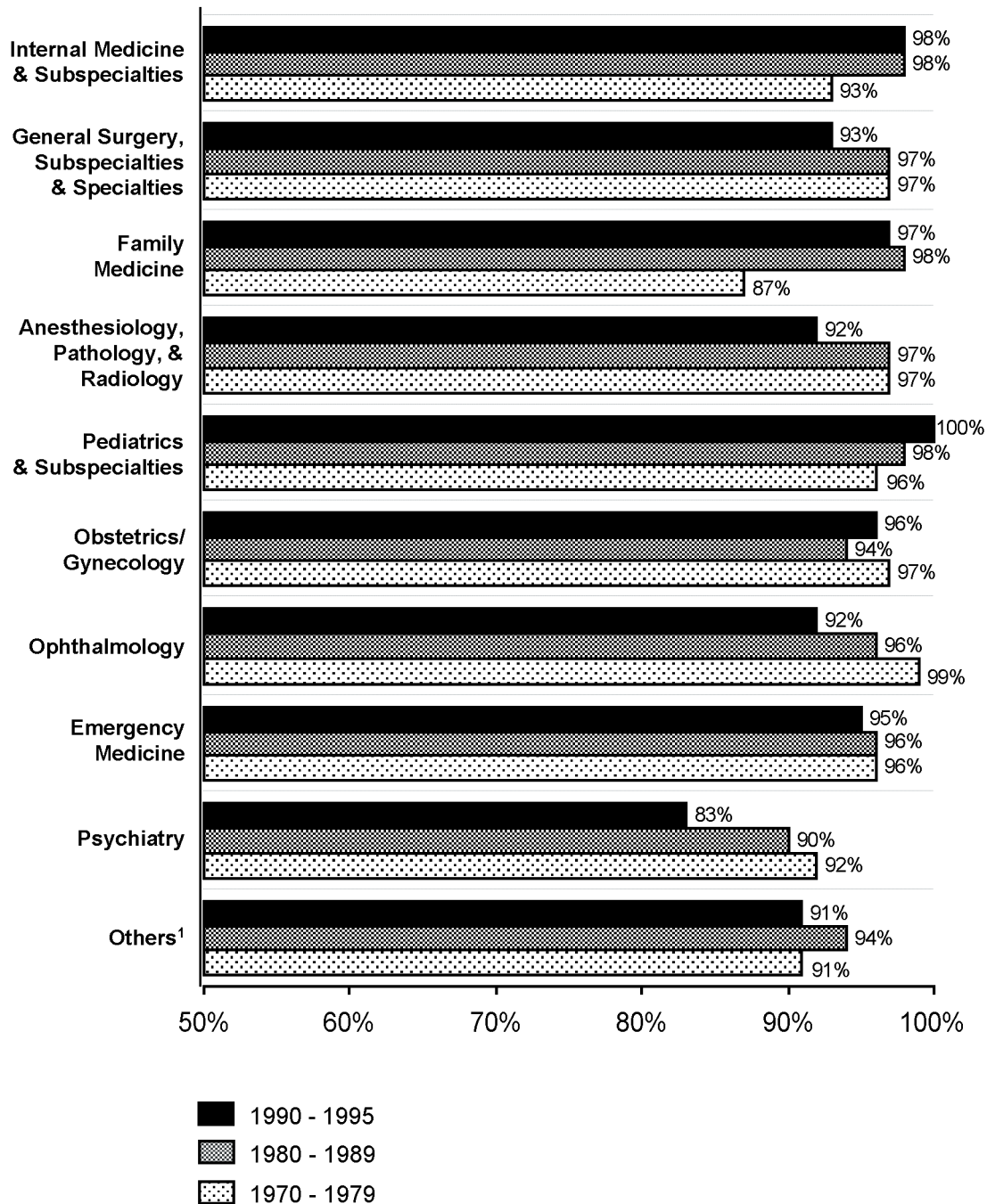
<sup>3</sup> Graduates of 2000 who took the examination between May 2000 to December 2002.

<sup>4</sup> Graduates of 2001 who took the examination between May 2001 to December 2003.

<sup>5</sup> Graduates of 2002 who took the examination between May 2002 to December 2004.

Center for Research in  
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 July 2005

**Figure 10**  
**Board Certification Rates of Alumni\***  
**Graduating Classes of 1970 - 1995**



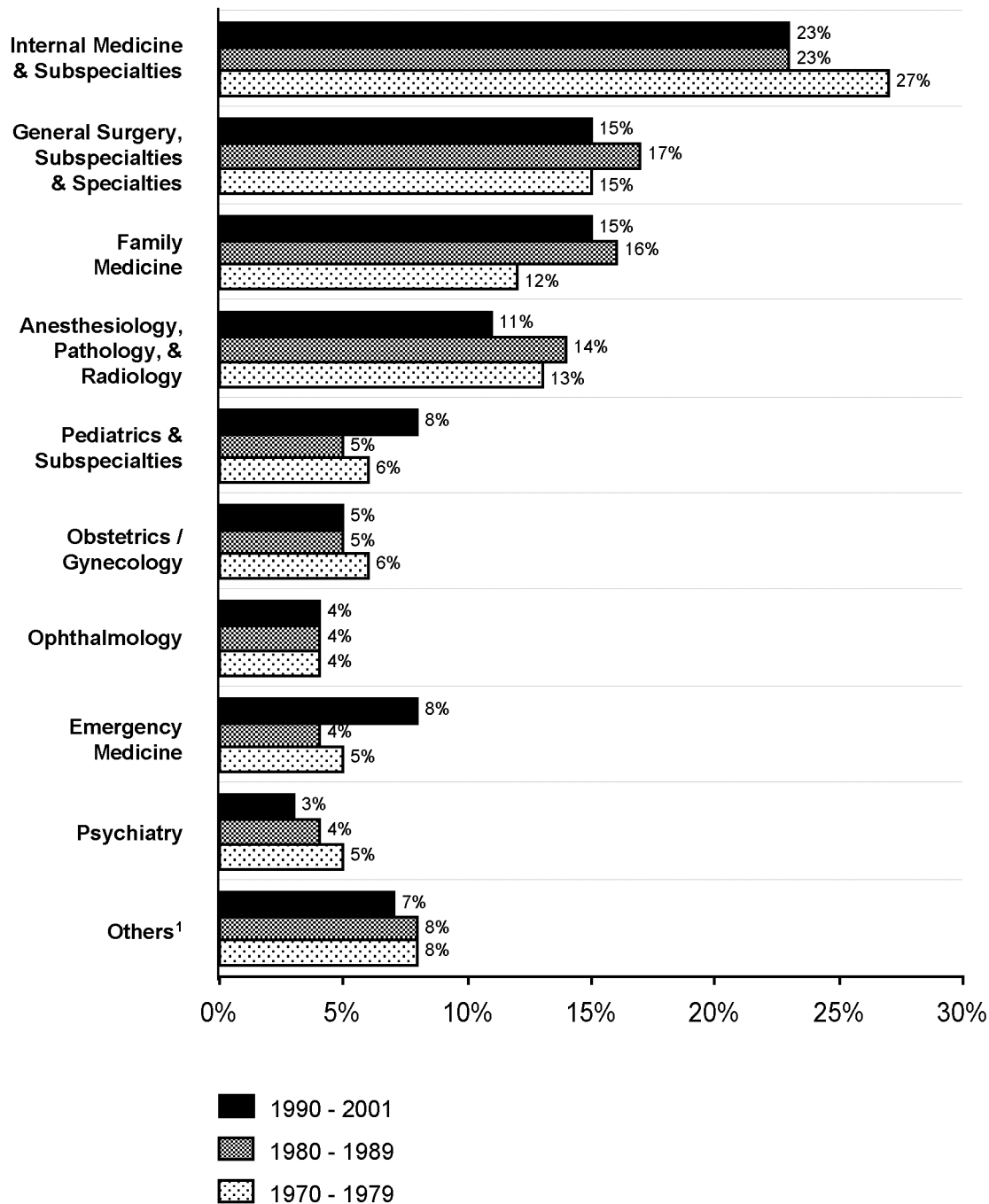
\* Percentages are based on the total graduates in each specialty.

<sup>1</sup> "Other" includes 24 specialties and subspecialties, each representing less than 1.7 percent of total alumni.

Sources: American Medical Association.

Center for Research in  
 Medical Education and Health Care  
 July 2005

**Figure 11**  
**Specialties of Alumni\***  
**Graduating Classes of 1970 - 2001**



\* Sources: American Medical Association, American Board of Medical Specialties,

<sup>1</sup> "Other" includes 24 specialties and subspecialties, each representing less than 1% of the total alumni.

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**Table 2**  
**Location of First Year Post-graduate Training**

State	Year of Graduation			
	1970 - 1979 (n = 2,011)	1980 - 1989 (n = 2,167)	1990 - 1999 (n = 2,153)	2000 - 2005 (n = 1,315)
Pennsylvania	47%	51%	44%	42%
New York	11%	6%	5%	8%
California	5%	6%	8%	5%
Delaware	5%	6%	5%	5%
New Jersey	2%	4%	4%	3%
Massachusetts	3%	3%	3%	4%
District of Columbia	3%	2%	3%	3%
Maryland	2%	2%	3%	3%
Virginia	2%	3%	3%	2%
Ohio	3%	2%	3%	2%
Illinois	2%	1%	2%	2%
Connecticut	3%	2%	2%	1%
North Carolina	1%	1%	2%	1%
Florida	2%	1%	1%	1%
Michigan	1%	1%	1%	1%
Texas	1%	1%	1%	1%
Georgia	1%	1%	1%	1%
Others <sup>‡</sup>	7%	8%	10%	14%
<b>Total %</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

† Percentages are calculated based in total graduates in each time period.

‡ States with less than 1% of graduates in all time periods.

**Table 3**  
**Percentage<sup>†</sup> of Living Graduates by Current State of Residence**

State of Residence	Year of Graduation		
	1970 - 1979 (n = 1,942)	1980 - 1989 (n = 2,149)	1990 - 2000 (n = 2,349)
Pennsylvania	37%	38%	30%
New Jersey	6%	8%	9%
California	7%	6%	9%
New York	5%	5%	5%
Florida	6%	5%	2%
Delaware	4%	4%	4%
Massachusetts	3%	3%	5%
Maryland	2%	3%	5%
Virginia	2%	3%	4%
North Carolina	2%	2%	2%
Ohio	2%	2%	2%
Texas	2%	1%	2%
Illinois	1%	1%	2%
Georgia	1%	2%	2%
Connecticut	2%	1%	1%
Washington	1%	1%	1%
Colorado	1%	1%	1%
Others <sup>‡</sup>	13%	13%	9%
<b>Total %</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

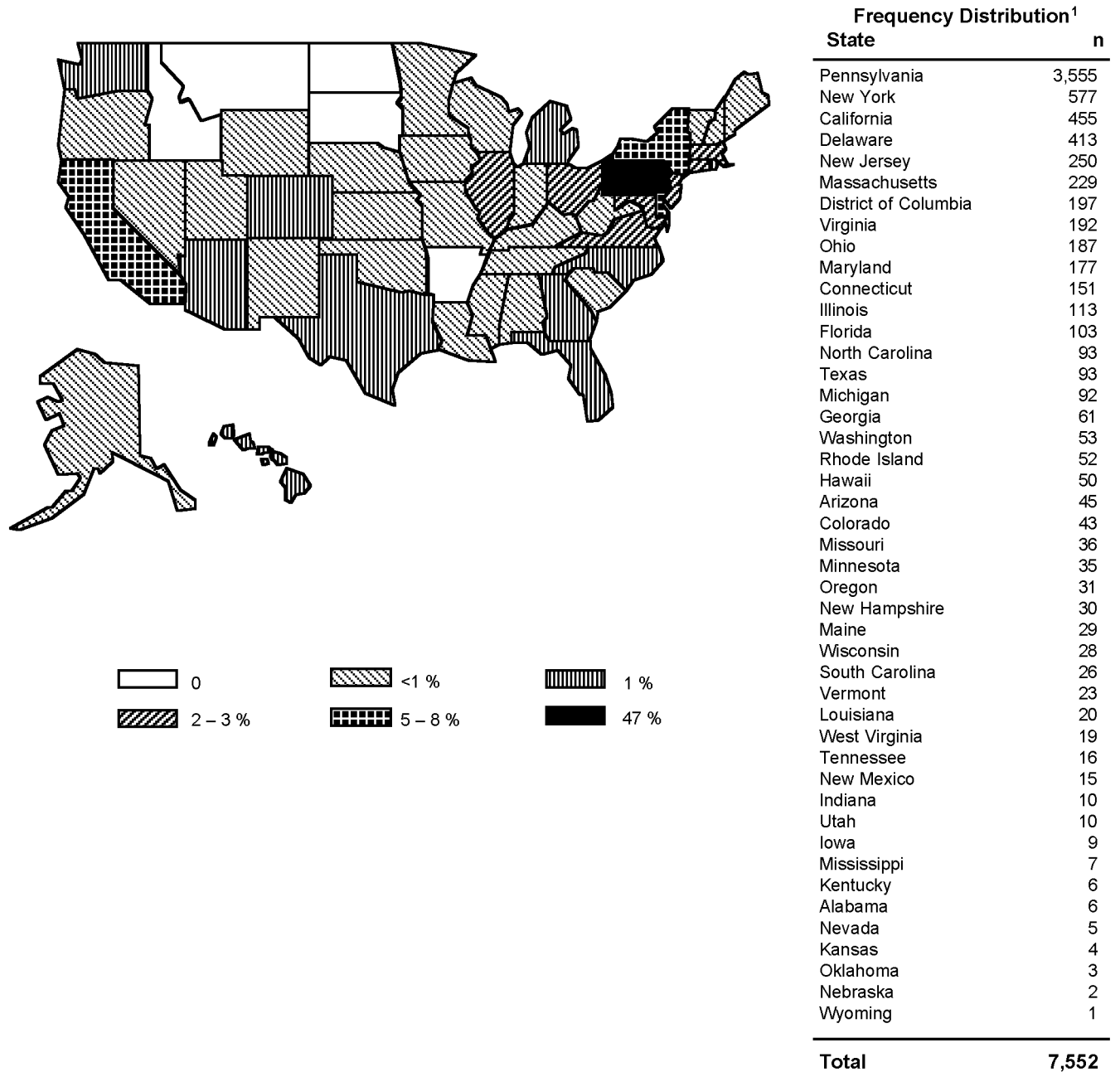
Source: American Medical Association.

† Percentages are calculated based in total graduates in each time period.

‡ States with 1% or less of graduates in all time periods.

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**Figure 12**  
**Location of First Year Post Graduate Education**  
**Classes of 1970 - 2005\***

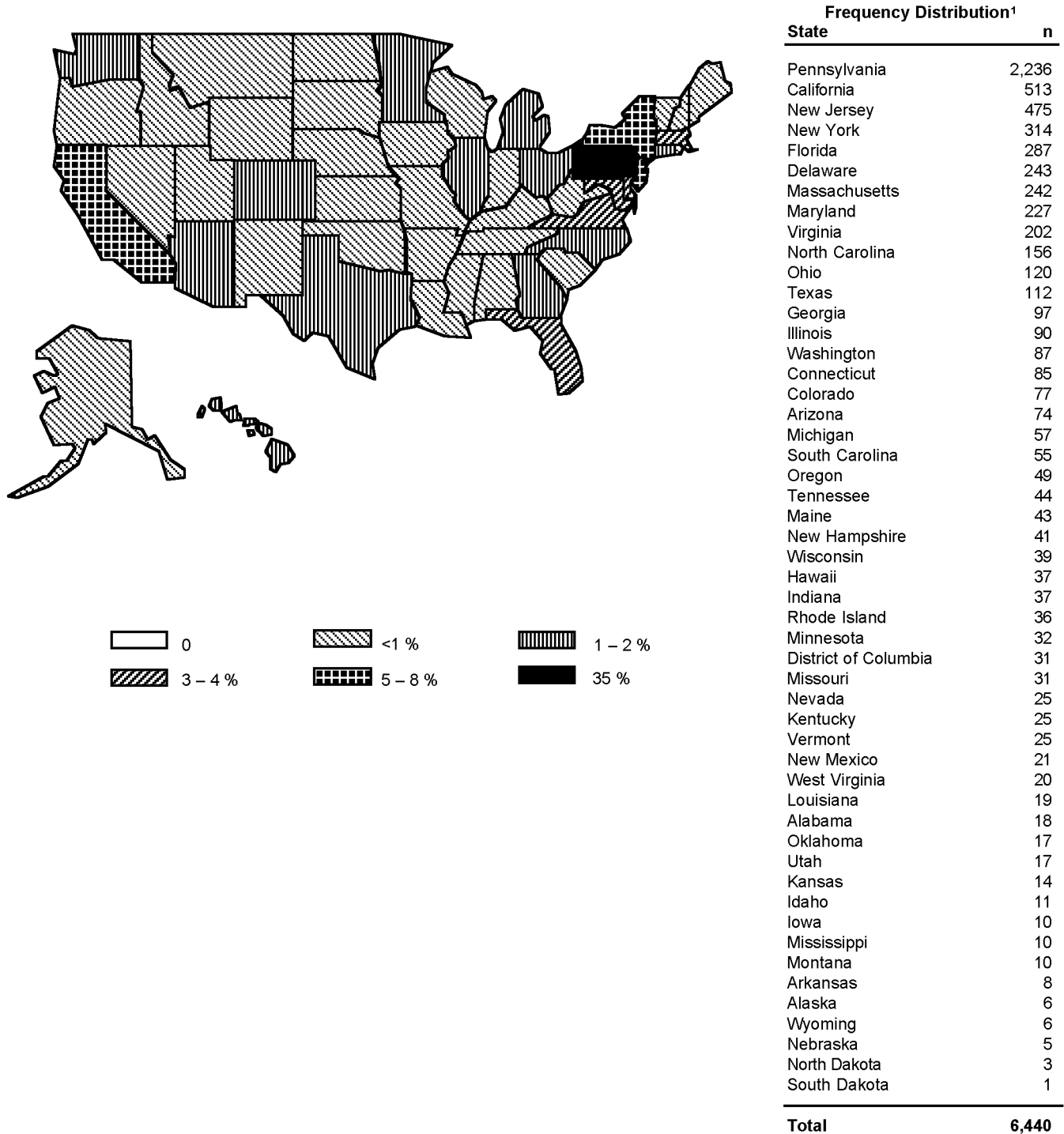


\* Sources: National Residency Match and Jefferson Alumni Office.

<sup>1</sup> There were 94 graduates who pursued their residency in Canada or other countries, or pursued research or deferred their residency in this time period.

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**Figure 13**  
**Current State of Residence of Living Alumni\***  
**Graduating Classes of 1970 - 2000**

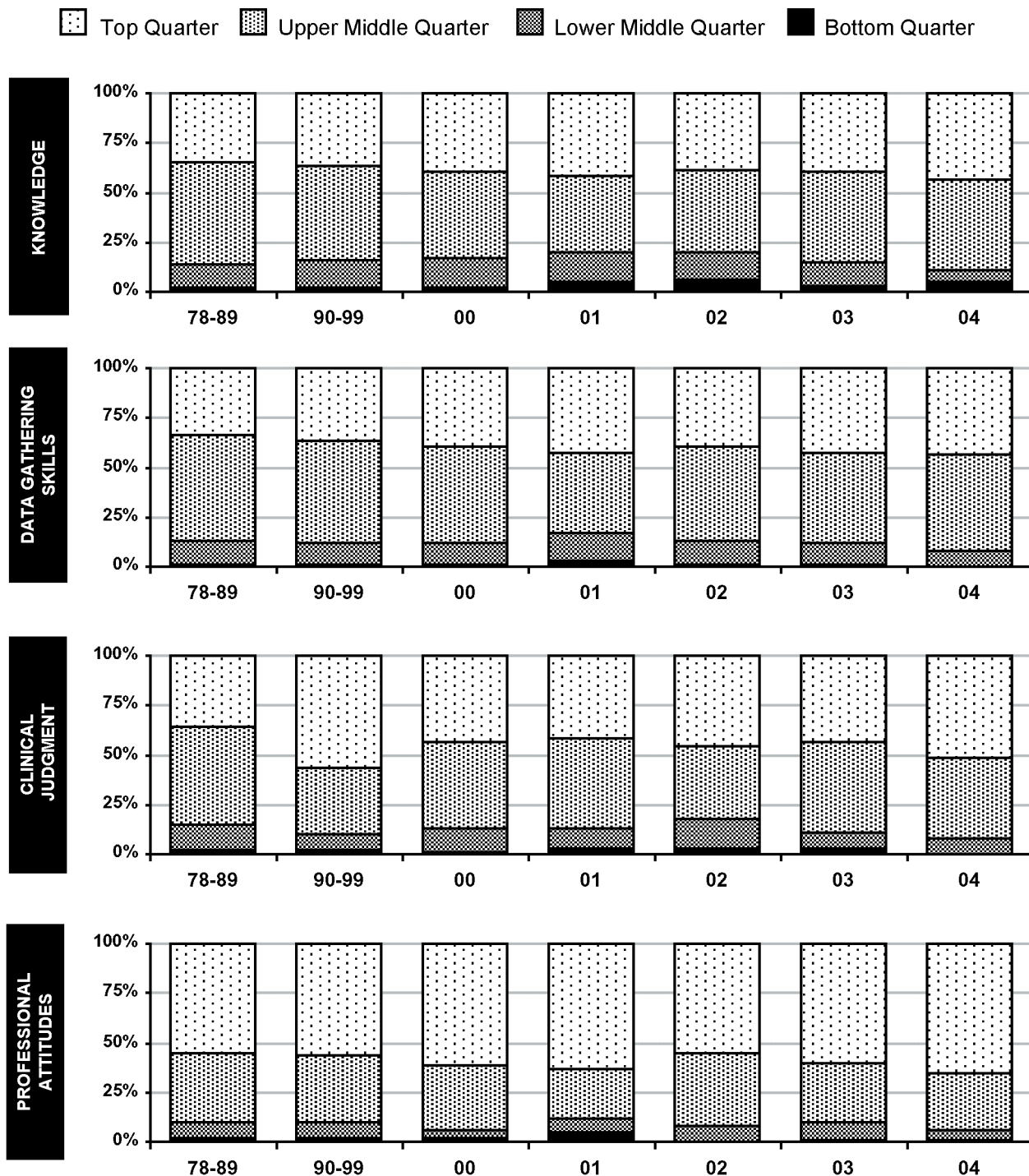


\* Sources: American Medical Association.

<sup>1</sup> A total of 6 alumni residing in foreign countries, 4 in Puerto Rico, and 4 in U.S. territories are not included.

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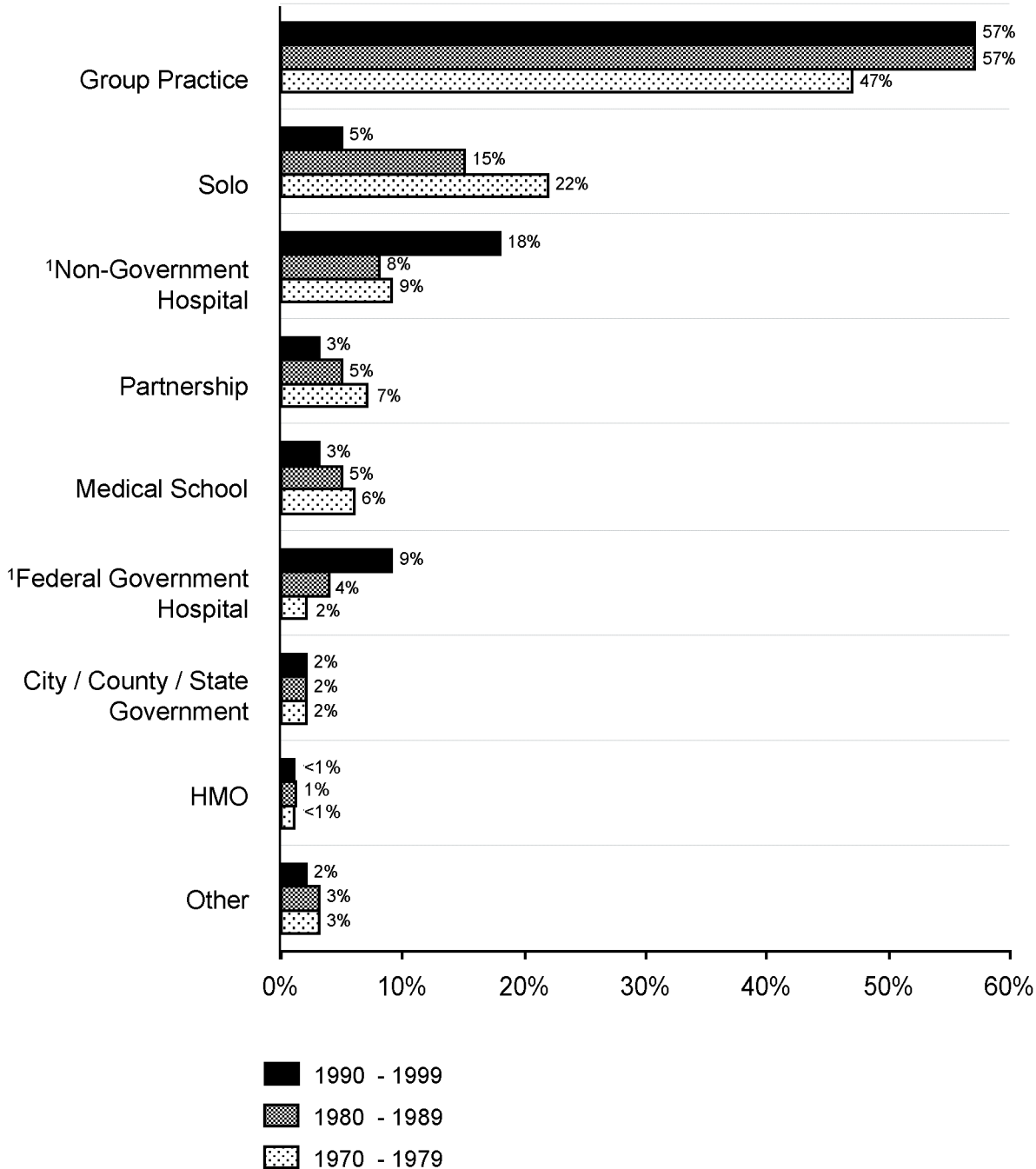
**Figure 14**  
**Program Directors' Ratings in the First Postgraduate Year\***  
**Graduating Classes of 1978 - 2004**



\* Approximately 75% of the graduates are represented in the figures.  
 Program directors rated the graduates on a 4-point Likert scale comparing them with all graduates they ever supervised.

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**Figure 15**  
**Current Practice Setting of Alumni\***  
**Graduating Classes of 1970 - 1999**



\* Source: American Medical Association. Data on current practice setting were available for 74% (n=4,608) of the alumni in this time period.

<sup>1</sup> Graduates in residency programs are excluded.

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**Table 4**  
**Full-Time Salaried Medical School Faculty Appointments of Alumni**  
**Graduating Classes of 1970 - 2001 (n=6,760)\***

Medical School	N <sup>1</sup>	Medical School	N <sup>1</sup>
Jefferson Medical College	255	Virginia Commonwealth University	6
University of Pennsylvania	78	University of Southern California	6
Drexel University	43	University of Utah	6
Pennsylvania State University	33	Albany Medical College	5
Harvard Medical School	32	East Carolina University	5
UMDNJ-Piscataway	32	Medical College of Wisconsin	5
University of Pittsburgh	25	New York University	5
Mayo Medical School	22	Oregon Health Services University	5
Temple University	21	University of Georgia	5
Albert Einstein University	20	University of Oklahoma	5
Uniformed Services	19	University of Tennessee	5
Johns Hopkins	18	Vanderbilt University	5
Cornell University	18	Eastern Virginia	4
University of Maryland	16	SUNY - Stony Brook	4
Emory University	13	Loma Linda University	4
Tufts University	13	Tulane University	4
University of Colorado	13	University of Arizona	4
University of Massachusetts	13	University of California - Irvine	4
Georgetown University	12	University of California - San Diego	4
University of Washington	12	University of Cincinnati	4
UCLA	12	University of Indiana	4
Columbia University	11	University of Iowa	4
Dartmouth Medical School	11	University of South Florida	4
University of California - San Francisco	11	University of Vermont	4
Yale University	11	University of Miami	4
Brown University	10	University of Minnesota / Minneapolis	4
Case Western Reserve University	10	Southern Illinois University	3
Ohio State University	10	Texas at Galveston	3
University of Florida	10	University of Arkansas	3
University of Virginia	10	University of Alabama	3
University of Wisconsin	10	University of Hawaii - Manoa	3
Baylor College of Medicine	9	University North Carolina - Chapel Hill	3
Boston University	9	University of South Carolina - Columbia	3
University of California - Davis	9	West Virginia University	3
New York Medical College	8	Wayne State	3
Northwestern University	8	Washington University - St. Louis	3
SUNY/Buffalo	8	Wright State University	3
University of Rochester	8	Medical University of South Carolina	2
University of Connecticut	7	Merces University	2
University of Michigan	7	Rush Medical College	2
UMDNJ - Newark	7	Saint Louis University	2
University of New Mexico	7	Stanford University	2
Bowman Gray School of Medicine	6	SUNY - Upstate - Syracuse	2
Duke University	6	University of Louisville School of Medicine	2
East Tennessee	6	University of Missouri - Kansas City	2
George Washington	6	University of Missouri - Columbia	2
Kentucky University College of Medicine	6	University of Nevada	2
Mt. Sinai Medical School	6	University of Puerto Rico	2
Northeastern Ohio Universities	6	Schools with one Jefferson graduate	12
University of Texas - Dallas	6		
Virginia Commonwealth University	6		
		<b>Total</b>	<b>1,151</b>

\* Source: Association of American Medical Colleges (AAMC) and internal sources.

<sup>1</sup> Approximately 17% of the graduates had a full-time salaried faculty appointment at some point during the past five years.

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**Table 5**  
**Percentage of Seniors Who Were Satisfied or Very Satisfied**  
**With the Jefferson Medical College Educational Programs\***

<b>Graduating Classes</b>	<b>Academic Year</b>			
	<b>First</b>	<b>Second</b>	<b>Third</b>	<b>Fourth</b>
<b>1992</b>	81	85	97	97
<b>1993</b>	78	79	94	95
<b>1994</b>	80	84	95	95
<b>1995</b>	85	72	87	94
<b>1996</b>	85	49	90	94
<b>1997</b>	72	43	82	89
<b>1998</b>	77	71	87	88
<b>1999</b>	79	69	90	90
<b>2000</b>	78	62	94	94
<b>2001</b>	76	59	94	89
<b>2002</b>	75	70	92	92
<b>2003</b>	64	68	92	92
<b>2004</b>	70	72	86	90
<b>2005</b>	83	87	95	95

\* From the graduation questionnaire of the Jefferson Longitudinal Study asking the extent of graduates' satisfaction with each medical school year on a 4-point scale (4=very satisfied, 3=satisfied, 2=dissatisfied, 1= very dissatisfied). Response rates ranged from 83% to 94%.