Department of Molecular Medicine
School of Basic Biomedical Sciences
USF Health

First Annual Retreat
Basic Science Chairs
August 1, 2006
The World of Molecular Medicine

Exploring the Molecular Basis of Health and Disease
Our Faculty & Staff

• Primary Faculty 33.5
  – Regular 17.5
  – Courtesy (VA, etc.) 8
  – Research/Instructor 8

• Joint Faculty 25

• Voluntary/Affiliate Faculty 10

• Support Staff 3
Our Students/Trainees

- Ph.D. Students: 46
- Masters Students: 18
- Undergraduate Trainees: 15
- Certificate Students: 14
- Postdoctoral Trainees: 4
Educational Programs

• **Courses:**
  - Medical \(^{2+}\)
  - Graduate \(^{21}\)

• **Total Course Enrollments:**
  - Medical \(^{260^*}\)
  - Graduate \(^{270}\)

• **Other Teaching/Training Activities:**
  - Medical (Pre-matriculation; Profession of Medicine; Colloquia; Behavioral Medicine; Evidence-Based Medicine; Longitudinal Clinical Experience; Clinical problem Solving)
  - USF Honors College (5+ faculty)
  - Local Schools and Community Groups
  - Summer Programs (Minority HS Students and Teachers; Undergraduate Students; Medical Students)
  - Continuing Professional Education Courses

*Med I, Med II, DPT, and MS\(^3\) Students*
Graduate Programs

• Ph.D. Program

• Masters Programs
  – Bioinformatics & Computational Biology
  – Molecular Medicine
  – Biotechnology (pending approval)

• Certificate Programs
  – Bioinformatics & Computational Biology
  – Biochemistry & Molecular Biology
  – Biotechnology
  – Molecular Medicine
Highlights (since April 1, 2006)

- 3 New NIH grants; 2 New AHA Grants
- 6 NIH, 2 ADA, 1 NSF, 1 AHA new grant proposals submitted
- 2 PhD Dissertation Defenses
- New Masters Program in Biotechnology approved by USF Graduate Council
- Faculty Research Symposium
- Student Summer Symposium
- Establishment of Advisory Committees (Executive Advisory, APT, Graduate Education, Medical Education, Faculty Search)
- Faculty Awards (Lifetime Achievement – Dr. Friedman; Outstanding Service – Dr. Klein; Outstanding Achievement – Dr. Barber)
- Molecular Medicine Faculty and Staff Party
- Molecular Medicine Tennis Open
Current Productivity of Full-Time Faculty (16)

- **Research**
  - **17 Active Grants**: 9 NIH ($2.3 million); 1 NASA ($467,000); 1 ACS ($325,000); 2 Florida DOH ($350,000); 2 AHA ($120,000); 2 Alzheimer’s Center ($143,000)
  - **12 Pending Grants**: 8 NIH; 2 ADA; 1 NSF; 1 AHA
  - **65 Peer-Reviewed Publications** (05/06)
  - **28 Other Publications** (1 Book; 22 Chapters/Reviews; 5 Patents)
  - **28 Invited Talks** (05/06)
  - **20 Interdisciplinary collaborations**

*Note: Funding includes sub-contracts and collaborative projects*
Current Productivity

• **Education**
  
  – **Medical**: Administer and direct 2 major courses (~255 students) and 3rd year electives (~10 students) plus participation in several other courses administered through other departments or Office of Education.
  
  – **Graduate**: Administer and direct over 20 graduate courses with total enrollment of ~270 students. Train 46 doctoral students and numerous masters and undergraduate students.
  
  – **Other**: Participation in and contributions to other education programs, including: USF Honors College; continuing Professional Education; Community Groups; Summer Training Programs.
Current Productivity of Full-Time Faculty (16)

- **Education** (Course Directors)
  - **Dr. Adair** (Biotechnology and Ethics)
  - **Dr. Anderson** (Core Microbiology; Grant Writing)
  - **Dr. Barber** (Bioinformatics I; Bioinformatics II; Proteomics & Structural Biology; Introduction to Biotechnology)
  - **Dr. Burdash** (Core Microbiology)
  - **Dr. Blanck** (Graduate Seminar; Advances in Gene Regulation)
  - **Dr. Eichler** (Molecular Medicine)
Current Productivity of Full-Time Faculty (16)

- **Education (Course Directors)**
  - **Dr. Keller** (Current Topics in Biochemistry; Biomedical Genomics & Genetics)
  - **Dr. Medveczky** (Virology and Molecular Virology of Tumor Viruses)
  - **Dr. Ness** (Foundations in Biomedical Sciences; Scientific Writing and Ethics; Metabolic & Genetic Basis of Disease)
  - **Laura Pendleton** (Methods in Molecular Biology)
  - **Dr. Pross** (Principles of Microbiology, Immunology & Infectious Disease; Seminar)
  - **Dr. Solomonson** (Biochemistry, Cellular & Molecular Biology; Proteomics & Structural Biology)
Current Productivity

• Leadership Positions

– **Dr. Anderson:** Executive Council, American Society of Rickettsiology

– **Dr. Barber:** President, COM Faculty; President, USF Faculty Senate; Member, USF Board of Trustees; Interim Associate Dean for Graduate & Postdoctoral Affairs

– **Dr. Eichler:** Basic Science Director of Cardiovascular Signature Program

– **Dr. Ferreira:** USF Board of Trustees Workgroup on Research and Scholarship; International Advisory Board for Vitamin B₆ and Quinoproteins

– **Dr. Gower:** President, AHA Florida/Puerto Rico Affiliate

– **Dr. Hassell:** Research Director, Shriners Hospital
Current Productivity

- **Leadership Positions**
  - **Dr. Heller:** Co-Director, Center for Molecular Delivery; Treasurer, Society for In Vitro Biology
  - **Dr. Klein:** Secretary, Society for Neuroimmune Pharmacology
  - **Dr. Potter:** CEO and Scientific Director, Johnnie B. Byrd Sr. Alzheimer’s Center & Research Institute
  - **Dr. Pross:** Co-Chair LCME Accreditation Review
  - **Dr. Rao:** Senior Associate Dean – USF Health
  - **Dr. Solomonson:** President, Association of Medical and Graduate Departments of Biochemistry
  - **Dr. Williams:** USF Vice President for Diversity and Equal Opportunity Affairs
Blueprint for the 21st Century:
a strategic plan

Department of Molecular Medicine
School of Basic Biomedical Sciences
College of Medicine
USF Health

Goals and strategies that will focus our efforts and chart a course for the efficient and effective fulfillment of our mission in the areas of research, teaching and service and for the continuing development of our department and faculty as leaders of national distinction.

July 2006
General Principles and Premises

• Molecular Medicine is an essential foundation for modern medicine.

• The national and international reputation of the Department of Molecular Medicine and USF Health will depend on the strength of its research programs, which, in turn, are supported by strong graduate programs.

• Excellence in research and teaching/training programs is fostered in a highly collegial environment conducive to free enquiry, discourse and interactions.
General Principles and Premises II

• The potential and continuing success of the Department of Molecular Medicine and USF Health will depend on the commitment and quality of our faculty and students, adequate support staff, modern equipment/facilities for research and training, institutional support and infrastructure, and extramural grant support.

• Rapid developments and changes in areas of Molecular Medicine, and in supporting technology, make continuing education and development programs for faculty essential for the continued development of the Department of Molecular Medicine and USF Health.

• A system of rewards and incentives that is merit-based is important for fostering excellence in both research and teaching programs.
Mission and Vision

**Mission:** to advance knowledge and understanding of the molecular bases of health and disease.

**Overall Goal:** to develop preeminent research, teaching and training programs that will contribute to the enhancement of health and the prevention, treatment and cure of disease.
Areas for Focus

1. Administration and Operations

2. Faculty Recruitment, Retention and Development

3. Research

4. Education and Training

5. Service
Strategic Goal: Administration and operations should allow maximum productivity and efficiency and facilitate the development and sustenance of pre-eminent research and education programs.
Administration and Operations

**Keys**
- Focused faculty effort
- Staff support
- Efficient assignments and programs
- Work environment
- Shared governance
- Communication
- Diversity and respect
Administration and Operations

**Needs**

- Business manager, administrative assistant, education coordinator, facilities manager and 1-2 program assistants
- Space allocation and re-allocation to foster collaboration and optimize efficiency
- Core research facilities
- Classrooms and education facilities
Administration and Operations

Short-Term Goals

- Establish department-level committees.
- Organize meetings for optimal effectiveness.
- Establish fair and equitable performance standards.
- Develop high quality website and newsletter.
- Develop Core research facilities.
- Foster collegiality and unity through social and other events.
Recruitment, Retention and Development

**Strategic Goal:** Recruit and retain outstanding faculty and foster their continuing professional development.
Recruitment, Retention and Development

Keys

- Department Chair
- Faculty
- Working environment and programs
- Administrative support
- Salaries and promotion
- Sabbatical and development programs
- Post-tenure review program
Recruitment, Retention and Development

**Needs**
- Recruitment coordinator
- Recruitment policies and procedures
- Attractive salary and start-up packages
- Attractive, functional laboratories, offices and facilities
- Faculty Development program
Recruitment, Retention and Development

Short-Term Goals

• Recruit 2 new faculty and a new Department Chair.
• Implement merit-based performance appraisal and compensation system.
• Establish competitive salaries and incentives.
• Provide support for continuing education, training and development.
Research

Strategic Goal: Develop and maintain cutting-edge research programs of national prominence that will contribute to human health and the prevention, treatment, and cure of disease through advancement of knowledge and understanding of the molecular bases of disease states.
Research

Keys
• NIH and other funding sources
• Peer-reviewed, high impact publications
• Interdisciplinary and translational research programs
• Advocacy for research funding
• Promotion of research accomplishments
• Core research facilities
• Bridge-funding program
• Seed-funding program
• Administrative support and workshops
Research

Needs

• Adequate funding for effective administrative support system, high quality core research facilities, internal grants, bridge-funding, high quality laboratories & offices for research personnel and trainees.
Research

Short-Term Goals

- Increase NIH and overall research funding by 30%/year or more.
- Increase number of high impact peer-reviewed publications by 20%/year.
- Develop space utilization and allocation plan.
- Hold annual faculty research symposium.
- Provide seed-funding (cost-share?) to support 2 new interdisciplinary and/or translational research projects/year.
- Provide bridge-funding (cost-share?) to support continuance of meritorious research projects.
- Provide funding (cost-share?) to establish and maintain core research facilities.
- Provide support for faculty development.
- Establish merit-based reward & incentive program for salary bonuses.
Education and Training

**Strategic Goal:** Educate and train outstanding biomedical scientists to meet current and future local and national needs through the development of outstanding education and training programs of national prominence.
Education and Training

Keys

• Integrated courses for medical students
• Graduate and postdoctoral training programs
• Continual assessment and updating of programs
• Opportunities for development of teaching/training skills
• Student recruitment
• Stipends and benefits
• New programs in emerging areas
• Technical support
• Distance learning/on-line courses
Education and Training

**Needs**

- Attractive classroom/training facilities
- Funding for stipends and recruitment
- Technical support
- Education Coordinators/Program Assistants
Education and Training

Short-Term Goals

- Revamp graduate curricula and courses.
- Upgrade and update medical courses.
- Implement new Masters Program in Biotechnology.
- Develop on-line and distance-learning courses.
- Increase graduate stipends and benefits.
- Develop new, innovative graduate programs.
- Apply for training grants.
Service

**Strategic Goal:** Provide support and leadership for development and operation of programs and initiatives at the department, college, university, community, state, national, and professional levels.
Summary

• We are dedicated to helping **USF** be the best it can be through *embracing diversity, creating new knowledge* and *training outstanding biomedical scientists* for the 21st century.

• We strive to provide an environment that fosters exceptional educational opportunities and cutting-edge biomedical research.

• We look to a future of exciting *new discoveries* and *innovative educational programs*.
Molecular Medicine:
We **Do** Make Life Better!