VCU Kuwaiti Alumni Meeting

Recognizing the successful partnership between the State of Kuwait and Virginia Commonwealth University –

Charting a course for the future.

Kuwait City
May 7, 2008
VCU 2020: Vision for Excellence

• Board of Visitors approved VCU 2020 in February 2006.

• Doctoral Enrollment
• Undergraduate Enrollment
• Faculty Mix
• New Faculty
• Community Engagement
• Health Sciences
• Research
• International Opportunities
Five Themes / 40 Initiatives

1. Ensure and maintain the highest levels of University efficiency, accountability and infrastructure support required to achieve our strategic vision.

2. Achieve national recognition as a learning-centered research university that embraces a world-class student experience.

3. Assure continued international recognition for our research, scholarship and creative expression.

4. Achieve preeminence for our academic medical center.

5. Maintain VCU as a model for university-community partnerships.
Growth in Enrollment
Changes in Applications and Enrollment: First-time Freshmen

Applications

Enrollments

1995 1997 1999 2001 2003 2005 2007
Overall Enrollment

<table>
<thead>
<tr>
<th>Year</th>
<th>Actual</th>
<th>Projected</th>
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<tbody>
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<tr>
<td>2013</td>
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</tbody>
</table>
Undergraduate Enrollment

![Graph showing undergraduate enrollment trends from 2001 to 2013. The graph displays actual and projected on-campus degree-seeking undergraduate students over the years. The enrollment shows a general upward trend.]
Growth in Full-time Instructional Faculty


Full-time Faculty Headcount
Addressing the Mix of Faculty

*Theme III: Assuring Continued International Recognition for Our Research, Scholarship, and Creative Expression.*

First two initiatives of Theme III address faculty diversity and mix.
VCU Students: The Freshman Class

GPA in Fall 2007: 3.27          SAT in Fall 2007: 1065

- 58% Female

- 89% Virginia Residents

- 99% Attend Full-time

- 45% Minority
  - 24% African American
  - 13% Asian
  - 5% Hispanic
  - 3% “Other”
The University College (UC)

- Provides a central home for academic programs and support services to enhance student engagement and success.
  - Promotes successful transition for all freshmen and first year students.
  - Accommodates the unique characteristics of this generation.
  - Creates opportunities to help students feel better connected to students, professors, classes.

The VCU Compact

VCU students will develop skills needed for college, professional, and life-long success in:

- Writing
- Critical Thinking
- Quantitative Literacy
- Information Fluency
- Oral Communication
- Ethical and civic responsibility
Engaging Students through Summer Reading Program

Introduces students to their first common intellectual experience and to the university’s academic life. It is intended to enhance connections.
Expanding Undergraduate Research Opportunities

• Current opportunities
  – NSF-funded Bioinformatics and Bioengineering Summer Institute, Center for the Study of Biological Complexity
    • Students come from all over the U.S. and this year, one student from the UK (N = 15)
  – NSF funded Research Experiences for Undergraduates, Department of Chemistry
    • Students include our undergraduates as well as HS students and their science teachers from around the country (N ~ 20)
  – Honors Summer Undergraduate Research Program, Honors College
    • Students placed with faculty in English, engineering, humanities & science, medicine and pharmacy (N = 18)
  – Howard Hughes Medical Institute Summer Scholars Program, Center for the Study of Biological Complexity
    • Math, science and engineering students with interest in biological or biomedical research (N = 24)

• Future initiatives
  – Web-based central clearinghouse to connect students with research opportunities
  – Development of collaborations across schools/departments
  – Development and deployment of mechanisms for showcasing undergraduate research
  – Creation of introductory workshop/course to prepare students for the research experience
Graduate Enrollment Projections

- Projecting nearly 1,500 more master’s and doctoral students.
  - An average of 84 more doctoral students in each of the next five years.
  - VCU expects to initiate several interdisciplinary doctoral programs over the next few years.

-- Graduate student enrollments need to be increased in high demand and critical shortage areas and in areas where VCU intends to grow its sponsored research activities.
International Admissions:

- International Student Enrollment (2006/2007): 1,128
- Application Numbers:
  - applications up by 25% compared to 2006
  - freshmen applications up 21%
  - undergraduate transfers up 12%
  - Master’s applicants up 46%
  - Ph.D. applicants up 6%
- Applications received from 95 countries
VCU International Partnership University Initiative

- University of the West of England (Bristol, England)
- St. Petersburg State University (St. Petersburg, Russia)
- University of Messina (Messina, Italy)
- University of Córdoba (Córdoba, Spain)

- Fudan University (Shanghai, China)
  - Beijing Foreign Studies University (Beijing, China)
  - University of Guadalajara (Guadalajara, Mexico)
  - University of Oxford – Harris Manchester College (Oxford, England)
  - University College Dublin (Dublin, Ireland)

- University of São Paulo (São Paulo, Brazil)
- Indian Institute of Technology – Kharagpur (Kharagpur, India)
- Post-Graduate Medical Institute of Medical Education and Research – (Chandigarh, India)
- University of KwaZulu-Natal (Durban, South Africa)
- Curtin University of Technology (Perth, Australia)
Enhancements to Student Life:
James Branch Cabell Library
Enhancements to Student Life: Shafer Court Dining Center

- April 7, 2006: received the Excellence in Design, Interiors Award from the Hampton Roads Chapter of the American Institute of Architects.
Business and Engineering
– Snead & East Halls
Enhancements to Student Life: Recreation Facilities

- Hunton Hall (Hunton Student Center)
- Cary Street Recreation Project
- Larrick Center
- Lobs & Lessons Tennis Facility
Project Description

- Renovate existing 32,600 SF Cary Street Gymnasium.
- Build a 3-Story, 95,000 SF addition.
- Relocated a 1-story, 2,400 SF Building at 911 Green Alley.

- Fitness Center.
- Climbing Wall.
- Natatorium (Leisure Pool & 5 Lane Lap Pool).
- 4-Court Gymnasium & Multi Activity Center.
- Indoor Running Track.
- 2 Racquetball Courts.
- Recreation Sports Administrative Offices.
- Group Exercise Rooms.
- Resource Center.
- Outdoor Adventure Program.
Floor Plans

Main Level
- Lobby
- Fitness
- Climbing Wall
- Group Exercise
- Leisure Pool
- Pool Below
- Four Court Gym

Second Level
- Multi-Activity Center
- Administration
- Fitness Mezzanine
- Running Track (4 Court Gym Below)
- Open to Below

Cary Street Recreation Center
Monroe Park Campus
Preserve Historic Character of Cary Street Gym

Cary Street Recreation Center
Monroe Park Campus
Relocated 911 Green Alley Building

Cary Street Recreation Center
Monroe Park Campus
Cary Street Recreation Center

Monroe Park Campus

Virginia Commonwealth University

MCV Campus Student Recreation Center
Project Description

- Demolish existing Larrick Student Center.
- 1-Story, 30,500 sf addition.
- Renovate 10,700 sf of existing fitness center and locker rooms.
- Renovated and expanded Fitness Center.
- Dining Services / Marketplace
- Interior common dining area.
- Interior lounge.
- Exterior Plaza.
- 2-Multi-purpose meeting rooms.
- 3- Large conference rooms.
- Student Services administrative space.
Floor Plan
Hunton Student Center

- Built in 1841, second home of First Baptist Church.
- Acquired by VCU in 1938
Hunton Student Center

Before

After
Hunton Student Center

Before

After
Hunton Student Center

- Telling the Story of VCU
VCUMC is embracing simulation as a key educational tool
School of Allied Health

Degrees Offered/Centers
- Clinical Laboratory Sciences (B.S., M.S.)
- Gerontology (Certificate, M.S.)
- Health Administration (M.H.A., Ph.D., M.H.A./J.D., M.H.A./M.D. & hybrid distance-learning executive program leading to a M.S. in Health Administration)
- Nurse Anesthesia (M.S.N.A. & D.N.A.P.)
- Occupational Therapy (M.S. & O.T.D.)
- Physical Therapy (M.S. D.P.T.)
- Patient Counseling (M.S., certificate)
- Rehabilitation Counseling (M.S.)
- Radiation Sciences (B.S.)
- Health Related Sciences (hybrid distance-learning Ph.D.)
- Virginia Center on Aging

U.S. News & World Report rankings
- Nurse Anesthesia as No. 1
- Health Administration as No. 4
- Rehabilitation Counseling as No. 13
- Occupational Therapy as No. 15
- Physical Therapy as No. 25
SCHOOL OF ALLIED HEALTH PROFESSIONS

Fall 2007 Enrollment Profile

- Clinical Lab Sciences - 84
- Gerontology - 13
- Health Administration - 134
- Health Related Sciences - 48
- Nurse Anesthesia - 96
- Occupational Therapy - 103
- Patient Therapy - 257
- Patient Counseling - 32
- Radiation Sciences - 117
- Rehab Counseling - 112

TOTAL ENROLLMENT 990
Cutting the Ribbon
Students working with Human Patient Simulator

Photo: Alain Jaramillo
CLC Classroom

Photo: Alain Jaramillo
Research
Enrollment Data – School of Nursing
VCU School of Medicine: Advancing the Research Mission 2005-2011

Financing a Strategic Plan to Expand the Research Mission of the VCU School of Medicine and Enhance NIH Research Ranking

VCU Board of Visitors
February 2005
STRATEGIC GOAL – Improve the NIH Ranking for the VCU School of Medicine Over a 6 Year Period

- With the recruitment of a new Dean, the goal is to move the VCU School of Medicine’s NIH ranking among medical schools from 60th to 45th by FY 2011.
New Dean of the School of Medicine

- Jerome F. Strauss III, MD, PhD
- Member of Institute of Medicine
- 25 of continuous NIH funding
- Comes to VCU from U. Penn where he was:

- Profession of Obstetrics and Gynecology and Associate Chair
- Director of the Center for Research on Reproduction and Women’s Health
- Internationally authority on reproductive biology
Where We Are and Where We Want to Be

NIH Rank 2003

NIH $ Required to Reach Goal Rank (in millions)
Medical Sciences Bldg II (MSB II)
Medical Science Building II

Features:

- 125,000 square foot (11,600 sq m), eight story building which will replace the current Nursing Education Building on Broad Street
- It will contain a combination of academic, administrative, and research space

Cost: $71.5 million
Fund Raising: The Campaign for the School of Medicine

- Campaign Goal by 2010: $87 million
- Campaign Priority: Move into the top tier of NIH funded medical schools.
  - $35 million is targeted to support medical research.
- New endowed research professorships will be created.
  - Will qualify for State Eminent Scholar Support
Capital Investments: New Construction and Renovations

**New School of Medicine Building:**

- The VCU master site plan includes a new facility located on the present site of West Hospital/A.D. Williams.
- The new facility will be constructed in two phases.
- Estimated cost $160M for Phase I.
- 200,000 sq feet or 18,600 sq m.
New School of Medicine Building

Dedicated space for simulation
Making the Investment

Total projected investment in operating support: $112.2 million between FY 2006 and FY 2011

- $87.0 million for 86 new full-time research/teaching faculty positions.
- $13.2 million in tuition, fees and stipend support for 80 additional Ph.D. students in the basic health sciences.
- $12.0 million in additional infrastructure and core service equipment for the growing research enterprise.
A Blueprint for Research

Transforming research based on traditional disciplines into mission-based research that is disease-oriented based on interdisciplinary teams.

- Maternal & Child Health
- Cancer
- Pathogens & the Environment
- Behavioral Medicine
- Aging & Metabolism
- Cardiopulmonary disease
- Regenerative Medicine

<table>
<thead>
<tr>
<th>Genetics/Omics</th>
<th>Neurosciences</th>
<th>Bioinformatics &amp; Computational Biology</th>
<th>Microbiology &amp; Immunology</th>
<th>Cellular &amp; Molecular Biology</th>
<th>Structural Biology</th>
<th>Bioengineering</th>
</tr>
</thead>
</table>

VCU Medical Center

VCU School of Medicine
New Faculty

- New chairs to grow and remake science
- Successful recruitment of research faculty in other key areas:
  - Cancer and cancer treatment
  - Chemical biology
  - Autism and genetics
  - Biostatistics/genomics
  - Reproductive medicine
  - Lung and vascular biology
  - Neurobiology
History

Oct. 2000
Site Visit to Univ. of Arizona

May 2001
Both institutions reaffirm Commitment to establish VCU School of Medicine - Inova Division Campus

Oct. 2001
SCHEV authorizes the affiliation agreement between VCU and Inova

Jan. 2002
The VA General Assembly and Governor approved the creation of the Northern Virginia Campus of the VCU School of Medicine

Dec. 1999
First affiliation agreement between VCU & Inova was signed

Dec. 2000
Joint Planning Committee completed work to develop working relationships btw. the two organizations

August 2001
VCU Board of Visitors approves affiliation agreement With Inova

Fall semester 2005
First 24 3rd year medical students begin studies at Inova

Spring Semester 2007
First Graduating Class From VCU School of Medicine Inova Campus

INOV A Division Campus
INOVA Division Campus

INOVA Fairfax Hospital
- 833-beds
- Over 12,000 deliveries / year
- Over 50,000 admissions / year
- Over 70,000 ED visits / year

Falls Church

- One of only six community hospitals in the nation offering the full spectrum of organ transplantation
- 5th largest Obstetrics program in the U.S.
- Only Level I trauma center in Northern Va.

Enrollment

**Medicine:**
- 24 M3 and 24 M4 students
  - Spring, 2007 - first graduating class

**Pharmacy:**
- 20 P3 and 20 P4 students
  - Fall, 2007 - first students enrolled
Center for Translational Research - a catalyst for change

Building on a heritage of established strengths in clinical and translational research, Virginia Commonwealth University has established the Center for Clinical and Translational Research to enhance research infrastructure and promote collaboration.

Within the university, the center will provide the necessary longitudinal and cross-disciplinary networking, culture and infrastructure for identifying promising discoveries made in the laboratory, testing them in animals and developing trials and studies for humans.
Massey Cancer Center Goodwin Research Building

Open: May 2006

Features:
- Three-floor, 80,000 sq.ft. research facility (7,400 sq m)
- 109 space underground parking
- Cost: $42 million
- Named in honor of Mr. and Mrs. William H. Goodwin
Making Strides in Cancer Research…

• Massey has strengthened its program in cancer prevention and control with the recruitment of Dr. Laura Siminoff.
• The Clinical Trials Eligibility Determination system was developed to identify all patients registered at VCU Health System for their potential for participation in clinical trials.
• Growth in NCI funding has increased to $15.5M this year which represents a doubling of NCI source funding since the last review five years ago.
• Collaborating with other key NCI centers on clinical trials.

Image Guided Adaptive Radiation Therapy
The National Cancer Institute has awarded a five-year, $10.7 million grant to VCU Massey Cancer Center researchers to develop a new form of radiation therapy that will enable the safe administration of more aggressive cancer treatments.
About Us

Every day, a new discovery

- **Five Health Science Schools**
  - Allied Health Professions
  - Dentistry
  - Medicine
  - Nursing
  - Pharmacy

- **VCU Health System**
  - MCV Hospitals
  - MCV Physicians
  - Virginia Premier Health Plan

- More than 15 affiliated centers and institutes, including the VCU Massey Cancer Center, Virginia’s first NCI-designated cancer center
The VCU Health System

- **VCU Health System**, the clinical delivery component of the VCU Medical Center,
  - Only academic medical center in Central Virginia
  - Referral center for the state and Mid-Atlantic
  - 32,000 admissions and 500,000 outpatient visits each year

- **MCV Hospitals**
  - Teaching hospital of the VCU Health System
  - 779 licensed beds
  - 20% share of the Richmond inpatient market
  - 80,000 patients are treated annually in the hospital’s emergency department, which is the region's only Level I Trauma Center

- **MCV Physicians**
  - 650-physician, faculty group practice

- **Virginia Premier Health Plan**
  - 125,000 member Medicaid HMO
Critical Care Hospital – Opens Fall 2008

367,000 sq. feet (34,600 sq meter)
Critical Care Hospital - Interior

Operating Room

Medical gas booms and lights in burn ICU

NICU Room

Waiting Area
VCU School of Public Health:
Strategic Plan for Full Implementation &
Accreditation

Serving the Commonwealth of Virginia for Healthy Citizens

Virginia Commonwealth University
2008
A major driving force for a VCU School of Public Health

- Virginia is the only state with a population over 7M without a school of public health
  - Only one of five states with a population over 4M without a school of public health
Key Requirements for Accredited School of Public Health

- Independent structure with its own dean
- Expertise in five core areas with at least five faculty members per core
  - Biostatistics, Epidemiology, Social Behavioral Health, Occupational and Environmental Health, Health Policy/Administration
- MPH degree in each core area
- At least three PhD degree programs
# Current Academic Degree Programs

## Degree Programs in Current School of Public Health Departments

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<thead>
<tr>
<th>Department</th>
<th>Current Location</th>
<th>Degree Programs</th>
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<td>Health Administration</td>
<td>School of Allied Health Professions</td>
<td>Masters of Health Administration (MHA)</td>
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<tr>
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<td></td>
<td>MHA/JD w/ University of Richmond</td>
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<tr>
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<td>MS in Health Administration (MSHA)</td>
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<td>PhD Health Services Organization and Research</td>
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<tr>
<td>Biostatistics</td>
<td>School of Medicine</td>
<td>MS in Biostatistics</td>
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<td>PhD in Biostatistics</td>
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<td></td>
<td>MS in Clinical Research and Biostatistics</td>
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<tr>
<td>Epidemiology &amp; Community Health</td>
<td>School of Medicine</td>
<td>MPH</td>
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<tr>
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<td>PhD in Epidemiology</td>
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<tr>
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<td>MPH/MD</td>
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<td>MPH/MS in Nursing</td>
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<td>MPH/Master of Social Work (MSW)</td>
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<td>School of Medicine</td>
<td>MPH</td>
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<tr>
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<td>PhD in Social and Behavioral Health</td>
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</table>

Will need to develop MPH tracks in Biostatistics, Health Administration, and Environmental & Occupational Health

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*Slide 70*
School of Public Health

Jan 1, 2005 - as approved by SCHEV and VCU Board of Visitors

Only School of Public Health in Va.

**Core Areas**
- Biostatistics
- Epidemiology & Community Health
- Environmental & Occupational Health
- Behavioral Sciences & Health Promotion
- Public Health Management and Policy

**Collaborative Working Relationships**

<table>
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<th>VCU Programs</th>
<th>State Agencies</th>
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<tr>
<td>• Center for Public Policy</td>
<td>• Va. Department of Health</td>
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<tr>
<td>• Environmental Studies</td>
<td>• Office of Chief Medical Examiner</td>
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<tr>
<td>• Community Health Education</td>
<td>• Division of Consolidated Laboratory Sciences</td>
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<tr>
<td>• Nursing, Dentistry, Pharmacy, Psychiatry, Psychology, Social Work</td>
<td>• Other state agencies</td>
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</table>
Public Health Departments

• Established Departments
  – Biostatistics
  – Epidemiology and Community Health
  – Social and Behavioral Health
  – Health Administration

• Authority granted to establish
  – Environment and Occupational Health
VCU Center on Health Disparities

Research

• Four grant proposals recently submitted. One awarded, others pending (including a P60 to the NIH/National Centers of Minority Health and Health Disparities)
• COHD has developed a research focus on improving birth outcomes for minorities
• Working with a Perinatal coalition of community health care providers and social services agencies to develop ideas to reduce infant mortality rates and improve birth outcomes in the Central Virginia region

Education

• Developed a business plan to partner with the School of World Studies Office of Language and Cultural Competency to develop cultural competency training programs for health care professionals
• Working with the School of Medicine to integrate a cultural competency training module into its curriculum
Improving Access

- Developing a survey to catalogue outreach activities across the VCU medical campus
- Coordinating data gathering activities with the VCU Council on Community Engagement (CCE)
- Participating in the REACH Community Health Services Planning process focused on developing a safety net health care delivery model for the Greater Richmond area.

Workforce Diversity

- Established a Health Careers Pipeline model that includes programs across the University focused on introducing K-16 students to careers in health care.
- Collaboration with Va. AHEC
- Developed a database to track students involved in VCU health careers introductory programs
- Established a partnership with Cosby High School’s Health Careers Specialty Center
- Dr. Seth Leibowitz and Ms. Donna Jackson will be teaching the Intro to Health Careers course in the Spring 2008 to Cosby High School and VCU students
School of Pharmacy - Programs

- Doctor of Pharmacy
- Non-Traditional Doctor of Pharmacy
- Combined Degree
- Graduate
  - Ph.D.
  - M.S.
  - M.B.A.
  - M.P.H.
  - Certificate in Gerontology
- Northern Virginia – INOVA
  - 3rd & 4th year
Every day,
a new discovery
Strategic Plan

Discovering new ways of serving, teaching, and generating new knowledge
Discovering New Ways of Serving

Improving Patient Care
Discovering New Ways of Teaching

Enhancing Curricula

State-of-the-Science Labs
Lead to earlier patient care experiences
Active Learning

Encourages participation, small group discussion and critical thinking
After Graduation
Life long learning

Keeps alumni up to date with the latest developments in dentistry
Discovering New Ways of Generating Knowledge

Bolstering Research
Philips Institute

Molecular Biology of Oral Cancer and Pathogens

VCU
Donor Recognition in Philips Lobby
Philanthropy

$12M Endowment
Payout yielded $660,000 in FY 2007
Gifts and pledges for FY 2007 totaled more than $2M
Campaign for Dentistry(‘99-07) raised $11M of that $11M
$4M went to the Campaign for Clinical Simulation

leads to discovery
Tissue Engineering of Bone

Russell D. Jamison, Ph.D.

Professor, Bioengineering and Chemical and Life Sciences Engineering
Dean, School of Engineering
Virginia Commonwealth University
Bone is a ceramic particle-reinforced collagen composite.
.... and this case of bone loss due to periodontal disease

Photo courtesy Michael Goldwasser
Custom Hydroxyapatite Implants
An Alternative Approach
Designs were tested *in vitro* to assess cell-scaffold interactions . . . .

*Images courtesy Jennifer Dellinger*
After 8 weeks significant bone ingrowth occurred in all scaffolds . . . .
Tissue Bioengineering in Dentistry

- Recruitment underway for founding director
- Unique program to train dental life science engineers of the future
- Clinical Ph.D. program in Engineering
- Regenerative Medicine
We end at the beginning.

VCU’s First Kuwaiti Dental Graduate

Class of 1995

Dr. Mansour Al-Ajmi
We end at the beginning.

VCU’s First Kuwaiti Advanced Dental Education Graduate

Dental Class of 1998 & Prosthodontics

Dr. Saleh Al-Rowaieh
Leigh Street looking West on Sunday May 4, 2008