

*University of the Virgin Islands
Medical School Update*

*Medical School Classrooms
Medical School Simulation Center*

APPOINTMENT OF INTERIM DEAN OF
MEDICAL SCHOOL (May 2014)

Dr. Benjamin Sachs

Harvard Medical School (1978-2007)

Rosenfield Professor & Chair Ob/Gyn HMS and HSPH

President Beth Israel Deaconess Physician Organization

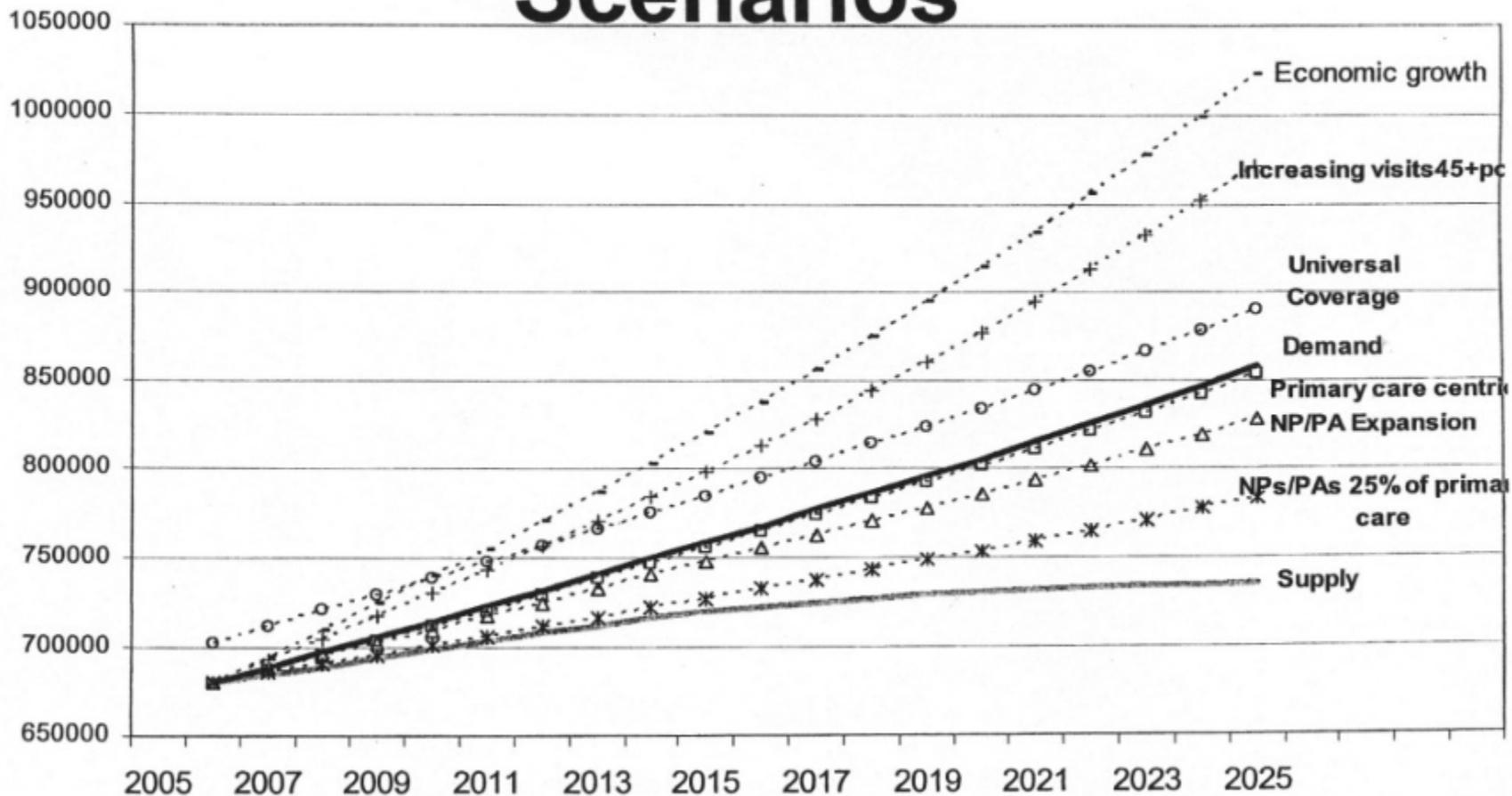
SVP & Dean, Tulane medical School (2007-13)

Senior lecturer Harvard Medical School (current)

UVI School of Medicine: Why?

- Train next generation of physicians for the USVI
 - USA: growing shortage of physicians
- To Improve the healthcare of the people of the USVI
 - USVI hospitals to become teaching hospitals
 - Teaching hospitals:
 - Offer wider range of clinical services
 - Easier to recruit MDs and allied health professionals
 - Higher quality care
 - Higher reimbursement – financial improvement
- Research: public health & Infectious disease
 - Better understand healthcare needs of the Territory
- Economic impact on USVI: Classroom and simulation center facilities
- UVI: Grow biomedical sciences, raise stature of university

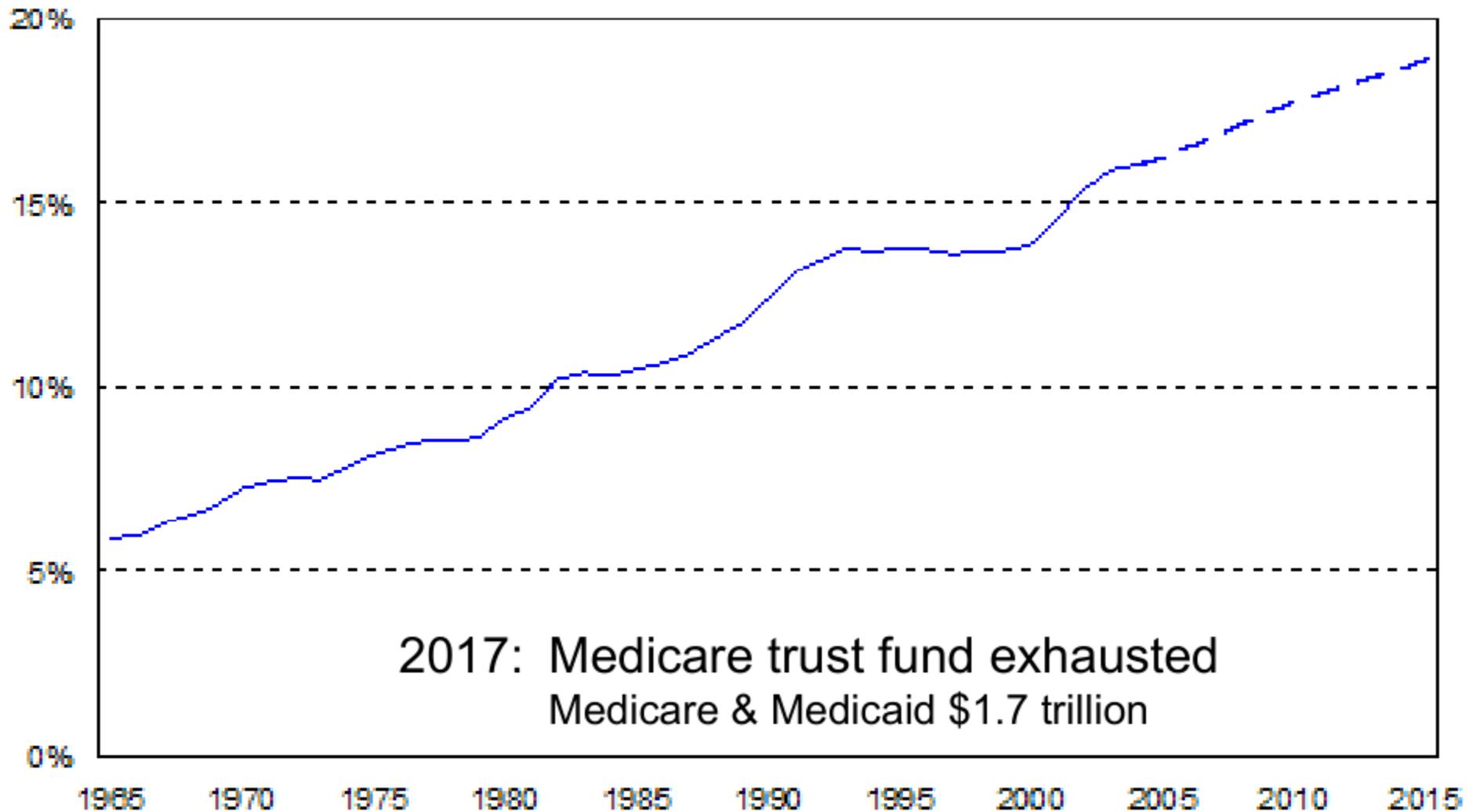
Summary of Demand Scenarios



Physicians USA



Growth in National Health Expenditures as a Percentage of GDP



Source: Department of Health and Human Services (Centers for Medicare and Medicaid Services).





Vision

The **vision** of the University of the Virgin Islands School of Medicine (UVISM) is to improve the health care of the people of the Territory and wider Caribbean community and to address pressing national and international health issues in support of the global community.

Mission

The **mission** of UVISM is to educate students from the diverse communities of the U.S. Virgin Islands, the wider Caribbean and the Continental US as physicians dedicated to the health and well-being of their communities. These physicians will be prepared through innovative pedagogy that results in physicians who are life-long learners, solution finders, team players and leaders of the 21st Century.

Liaison Committee Medical Education (LCME) Timetable

- December 2014 - Preliminary submission
 - Including names of faculty
- Spring 2015 – Site visit
- Summer – Preliminary approval
- August 2016 – 1st class 25 students
- August 2017 – 2nd class 50 students
- Full Accreditation -2020

Key issues: Facilities, Faculty and Finances

Medical School Education

- Year 1: basic science e.g. physiology, anatomy, nutrition, biochemistry etc.
 - Other: medical ethics, public health, preventive medicine, culture & health
 - Taught by PhDs and MDs
- Year 2: Understanding organ function health and disease e.g. Heart, kidney, brain etc. and disease e.g. diabetes
 - Other: Preventive medicine, communication skills, patient safety & healthcare quality
 - Taught by PhD scientists and MDs
- Year 3: clinical experiences- hospitals, clinics etc.
- Year 4: clinical experiences-sub internships, preparation for residency

| | | | |
|--|--|-----------------------------------|--|
| M1 | Cellular Function and Medical Genetics (8 weeks) | Structure and Function (17 weeks) | Psychosocial Issues in Healthcare (11 weeks) |
| | | | Health and Disease (8 weeks) Hematology/Oncology (4 weeks) |
| Practice of Medicine including Community of Practice I | | | |
| ACLS Training | Emergency Medical Services, Autopsies - Medical Examiner, MPH-course work (elective), Institute for Healthcare Improvement Certification | | |

| | | | | | | | |
|----|--|--|--|--|------------------------------|----|---|
| M2 | Emergency Medical Services, MPH - course work (elective), Institute for Healthcare Improvement Certification | | | | USMLE STEP 1 | M3 | Internal Medicine Neurology-Psychiatry Ob/Gyn Pediatrics Family medicine Surgery |
| | Practice of Medicine including Community of Practice II | | | | | | |
| | Cardiovascular and Pulmonary Systems (6 weeks) | Endocrine and Reproductive Systems (6 weeks) | Gastrointestinal and Renal Systems (6 weeks) | Skin and Musculoskeletal Systems (4 weeks) | Brain and Behavior (7 weeks) | | |

| | | | | | | | |
|-----------------------------------|--|--|--|--|--|----------------|-----------------------------------|
| Internal Medicine (12 weeks) | | | | | | Capstone M4 | USMLE STEP 2 CK/CS by December |
| Family Medicine (4 weeks) | | | | | | | |
| Ob/Gyn (6 weeks) | | | | | | | |
| Pediatrics (6 weeks) | | | | | | | |
| Psychiatry & Neurology (10 weeks) | | | | | | | |
| Surgery (10 weeks) | | | | | | | |

| | | | | | | | |
|---|--|--|--|--|--|------------------------|--|
| Emergency Medicine (4 weeks) | | | | | | Capstone Graduation | Graduates begin Residency Training as M.D. |
| Tampa General Hospital (16 weeks including 2 sub-internships and critical care) | | | | | | | |
| Electives (22 weeks) ¹ | | | | | | | |

| | | | | | | |
|---------------------------------|---------------------------|-----------------------------|-----------------------|--|---------------------|-------------------|
| Longitudinal Curricular Themes: | Culture, Health & Society | Ethics & Medical Humanities | Gender Based Medicine | Geriatrics & Principles of Palliative Care | Medical Informatics | Medical Nutrition |
|---------------------------------|---------------------------|-----------------------------|-----------------------|--|---------------------|-------------------|

1. MPH students required course work

Models: Classical vs. New School

| | Boston University / Tufts | UVI |
|---|------------------------------|--|
| # students/year | 200 | 50 ¹ |
| Departments: Preclinical clinical | 7+/- 12 +/- | 1 3 (each STT & STX): Chairs 1ary and specialty care, chief ambulatory medicine |
| Pedagogy: | Lectures | "flipped" classroom – Just in Time Teaching (JITT) |
| Anatomy | Cadaveric labs | 3D simulation + autopsies with Medical examiner |
| Intro. Clinical med. | Student clinic | EMS, homeless clinic, geriatrics |
| # FT faculty needed for UVI: | 25 Develop curriculum | 33 UVI existing faculty, clinicians and new hires Purchase curriculum |

1. Limited by clinical sites: USVI can accommodate ~ 50 students
2. St. Thomas (STT) St. Croix (STX)

Partnership Objectives

- To provide high quality cost effective medical education
- To take advantage of an extremely high quality curriculum developed by another school.
- To take advantage of UVISOM's PhD faculty:
 - opportunity to teach in the medical school.
 - UVISOM faculty will be paid extra
 - Improve UVI's undergraduate education.
- In the unlikely event of forced closure of the UVISOM (e.g. major hurricane) another school to take the responsibility of arranging the placement of the students so they will be able to complete their studies.

Medical School Simulation Center

CAMLS - model

- <https://www.youtube.com/watch?v=OfdXCbk8pUs>

How We Teach

“Physicians will be prepared for the challenges of the 21st century: doctors who are life-long learners, solution finders, team players and educators.”

NO LECTURES

The “flipped” classroom
Just in Time Teaching (JiTT)

<https://www.youtube.com/watch?v=r2b7GeuqkPc>

| | St Thomas | St Croix | St John | Mainland |
|--|--|---|----------------------|--------------------------------|
| Medical School: Years 1 & 2 –basic science | Classroom building | | | |
| Medical School Years 3 & 4 -clinical medicine | Schneider Hospital East End family Clinic | Juan Luis Hospital Frederiksted Clinic | Myrah Keating Clinic | 4 th year rotations |
| Medical School: Years 1,2,3 & 4 simulation | | Medical school simulation center | | |
| Residency training (future plan) | Schneider Hospital | Juan Luis Hospital | | |
| Continuing professional development: local, regional, national and international physicians and nurses | | Medical school simulation center ² | | |
| Allied health professionals, 1 st responders | | Medical school simulation center ² | | |
| Additional biomedical research facilities for medical school & other UVI schools | Combined with Classroom Building | | | |



Estimated Annual Economic Impact

| | St Thomas | St Croix | Total | Comments |
|--|----------------|--------------|----------------|--|
| Medical school classrooms ¹ FTEs | \$24-30m 64 | \$1m 5-10 | \$31m 69-74 | 4 years -50 students/year Includes approximately 24 existing faculty, support staff & 6 new faculty |
| Medical school simulation center FTEs | 0 | 50 | 50 | New Hires: technical jobs |
| Fully operational Classrooms + simulation center | \$24-30m | \$30m | \$54-60m | |



University Central Florida

- New medical school – 17 miles south Orlando Florida
- Brainchild Governor Jed Bush
 - Investment: \$30m / year 3 years

Size of investment proportional to economic benefit

Economic Impact

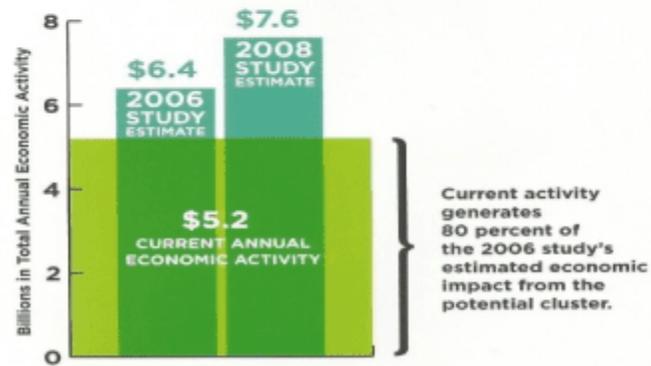
The College of Medicine, combined with a life sciences cluster, by 2017, could create:

30,000 jobs

\$459.9 million in annual tax revenue

\$2.8 billion in annual wages

\$7.6 billion in annual economic activity



Source: Arduin, Laffer & Moore Econometrics

The UCF College of Medicine's Burnett School of Biomedical Sciences is where the best and brightest graduate students can create tomorrow's cures.