Our Mission and Goals

Our Mission
To advance health and wellness across the life span for the people of New York and the world through the education of tomorrow’s leaders in health care and biomedical sciences, innovative research and outstanding clinical care.

Our Goals
• Attract the most promising individuals and support their development
• Enhance our intellectual and technological environment to foster exceptionally creative science and education
• Develop and maintain excellent clinical programs to provide outstanding care
• Cultivate excellence, collegiality, and diversity
• Observe the highest standards of ethics, integrity, professionalism, and humanism
• Apply advances in science, medicine, and education to the betterment of humanity
Requirements

- Leadership
- Facilities and Space
- Funded Research Programs
- Clinical Service Lines
- Students/Trainees
- Faculty
  - PhD Scientists
  - MD Scientists
  - Translational and Clinical Investigators
  - Educators
  - Clinicians
- Resources
- Development/Communications/Marketing
## Leadership/Governance Initiatives 2009-11

### New Chair/Leadership Appointments

<table>
<thead>
<tr>
<th>Position</th>
<th>Name</th>
<th>Institution</th>
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<tbody>
<tr>
<td>Chair, Department of Pharmacology and Toxicology</td>
<td>Margarita Dubocovich, PhD</td>
<td>Northwestern University</td>
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<tr>
<td>Chair, Department of Pediatrics</td>
<td>Teresa Quattrin, MD</td>
<td>University at Buffalo</td>
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<tr>
<td>Chair, Department of Medicine</td>
<td>Anne B. Curtis, MD</td>
<td>University of South Florida</td>
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<tr>
<td>Senior Associate Dean for Medical Education</td>
<td>Avery Ellis, MD</td>
<td>University at Buffalo</td>
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<tr>
<td>Senior Associate Dean for Clinical and Translational Research</td>
<td>Timothy Murphy, MD</td>
<td>University at Buffalo</td>
</tr>
<tr>
<td>Senior Associate Dean for Research and Graduate Education</td>
<td>Kenneth Blumenthal, PhD</td>
<td>University at Buffalo</td>
</tr>
<tr>
<td>Senior Associate Dean for Faculty Affairs and Facilities</td>
<td>Suzanne Laychock, PhD</td>
<td>University at Buffalo</td>
</tr>
<tr>
<td>Senior Associate Dean for Student and Academic Affairs</td>
<td>David Milling, MD</td>
<td>University at Buffalo</td>
</tr>
<tr>
<td>Director, Hunter James Kelly Research Institute</td>
<td>Lawrence Wrabetz, MD</td>
<td>San Raffaele Scientific Institute, Milan, Italy</td>
</tr>
</tbody>
</table>

### Active Chair/Leadership Searches

- Structural (and Computational) Biology
- Dermatology
- OB/GYN
- Neurology
- Pathology and Anatomical Sciences
- Microbiology and Immunology

### Upcoming Chair/Leadership Searches

- Biomedical Engineering
- Radiology
Biomedical Engineering
Current Department Structure

University Leadership
Harvey Stenger
Dean, SEAS
Michael Cain
Dean, SMBS
Alexander Cartwright
Vice Pres. Research

Albert Titus and David Kofke
Department Co-Chairs

Staff
Cheryl Michalowski
Assistant to the Chair
Jon McMahon
Department Technician (½ time)

Faculty
Engineering: 7
Medicine: 6
BME: 2 – in fall 2010

UB2020: School of Medicine and Biomedical Sciences

<table>
<thead>
<tr>
<th></th>
<th>Integrated Nanostructured Systems</th>
<th>Molecular Recognition / Bioinformatics</th>
<th>Health and Wellness Across the Life Span</th>
<th>Extreme Events</th>
<th>Civic Engagement</th>
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</table>
Buffalo Translational Consortium

**Member Institutions**

- University at Buffalo Health Sciences Schools
- School of Medicine and Biomedical Sciences
- School of Public Health and Health Professions
- School of Nursing
- School of Dental Medicine
- School of Pharmacy and Pharmaceutical Sciences
- Roswell Park Cancer Institute
- Hauptman Woodward Research Institute
- UB Research Institute on Addictions
- New York State Center of Excellence in Bioinformatics and Life Sciences
- Great Lakes Health System of Western New York
- UBMD (UB School of Medicine and Biomedical Sciences practice plan)

**Community Partners**

- The P2 (Pursuing Perfection) Collaborative of Western New York
- Upstate New York Practice-based Research Network (UNYNET)
- New York State Area Health Education System (AHEC)
- HEALTHeLINK
Buffalo Clinical Translational Research Center (Buffalo CTRC)

Mission Statement
Serve as an integrated academic home for outstanding clinical and translational science and as the hub of the Buffalo Translational Consortium, providing innovative research tools, support, training, resources and coordination.

Vision
Perform innovative clinical and translational research to improve the health of our community and the nation.
### Molecular Recognition in Biological Systems and Bioinformatics

#### FACULTY HIRES (09-10)
- Olga Baker (Oral Biology)
- Ji Li (Pharmacology & Toxicology)
- Andrew Murkin (Chemistry)
- Raj Rajnarayan (Pharmacology & Toxicology)
- Fraser Sim (Pharmacology & Toxicology)
- Debanjan Sarkar (Biomedical Engineering)

#### FACULTY RECOGNITION
- John Canty (SUNY Chancellors Award)
- Paul Cullen (Milton Plesur Award)
- Derek Daniels (Epstein Research Award)
- Matt Disney (Dreyfus Scholar)
- Dan Kosman (Stockton Kimball Award)
- Norma Nowak (ACS Group Res. Award)
- Gabriela Popescu (UB Faculty Achievement)

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### New and Competitively Renewed Grants (2009-10)

<table>
<thead>
<tr>
<th>Name</th>
<th>Department</th>
<th>Agency</th>
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<tr>
<td>Autschbach</td>
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<tr>
<td>Campagnari</td>
<td>Microbiology</td>
<td>NIH</td>
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<td>Canty</td>
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<td>NIH</td>
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<tr>
<td>Connell</td>
<td>Microbiology</td>
<td>Oishei Fdn</td>
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<tr>
<td>Disney*</td>
<td>Chemistry</td>
<td>MDA</td>
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<td>Dubocovich*</td>
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<tr>
<td>Feng</td>
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<td>Garrett-Sinha</td>
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<td>NIH</td>
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<td>Gronostajski</td>
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<td>Kologa</td>
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<td>Koulidka</td>
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<td>NIH, AHA</td>
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<td>Li*</td>
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<td>Ochs-Balum*</td>
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<tr>
<td>Read</td>
<td>Microbiology &amp; Immunology</td>
<td>NIH</td>
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<td>Snell</td>
<td>Structural Biology</td>
<td>NIH</td>
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<td>Sutton</td>
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<td>NIH</td>
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<tr>
<td>Williams</td>
<td>Microbiology &amp; Immunology</td>
<td>NIH (ARRA)</td>
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<td>17 Investigators</td>
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*UB2020-authorized hire
Research Grants Funded

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<th></th>
<th>2007</th>
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<th>2009</th>
<th>2010</th>
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<td>SMBS</td>
<td>59</td>
<td>64</td>
<td>81</td>
<td>115</td>
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<tr>
<td></td>
<td>$18,683,789</td>
<td>$20,526,492</td>
<td>$25,504,584</td>
<td>$29,759,812</td>
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American Recovery and Reinvestment Act (ARRA)

NIH Proposals submitted with SMBS PIs 2009

- Total Proposals: 80
- Total Costs: $43,326,610
- Total Awards: 19
- Total Costs: $3,500,000

SMBS Clinical Studies, Training Grants: $9,330,000

Clinical Service Line Planning

- **2008-09 Great Lakes Health**
  - Cardiovascular
  - Transplant
  - Pulmonary and Critical Care
  - Orthopedics/Bone Health
  - Psychiatry
- **2009-11 Great Lakes Health**
  - Primary Care
  - Neurology
  - GI
  - Oncology
- **Roswell Park Cancer Institute**
- **VA Hospital**
- **UBMD**
  - Serves as the focal point for establishing strategic direction and coordinating clinical program activities across clinical departments and with our major teaching hospitals
  - Establishes school-wide clinical practice policies
  - Public policy advocacy
  - Provides key services and infrastructure for the clinical departments
  - Triple-threat departments
    - Basic scientist (PhD, MD/PhD, MD)
    - Physician-clinical scientist
    - Clinician-scholar/educator
Medical Admissions Profile

- Class of 2014; A Melding of Science, Art and Civic Duty
  - New class includes United States military members, community outreach activists, artists and athletes, entertainers and research enthusiasts
  - Total applications 4,329 of which 645 were interviewed
  - 1 Student earned a PhD and 12 Students have earned Masters Degrees

Class of 2014 Demographics

<table>
<thead>
<tr>
<th>Region</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Out-of-State</td>
<td>26%</td>
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<tr>
<td>Western NY</td>
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<tr>
<td>Downstate NY</td>
<td>20%</td>
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<td>Upstate NY</td>
<td>9%</td>
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<tr>
<td>Extended WNY</td>
<td>9%</td>
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<tr>
<td>Total</td>
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MCAT Scores

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<tr>
<td>2009</td>
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<tr>
<td>2010</td>
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</table>
Length of GME Programs Accreditation

IGPBS Admissions Profile

Admissions Committee 2009-2010
Terry Connell, Chair
Satrajit Sisha
Mark Hallon
Malcolm Slaughter
Chris Li
Sheri Yang
Wilma Hofmann
Dan Gewith
Anders Hakansson
Frank Mendel
Amy Jacobs
Tracey Ignatowski
Ji Li
Satpal Singh
Eddie Snelling

Students Enrolled
2004 22
2005 18
2006 21
2007 19
2008 15
2009 30
2010 19
SMBS Faculty Growth 2010 - 2012

- Recruit 58 New Faculty Members
  - 22 PhD- and MD-Scientists
  - 36 Clinician Educators

- Recruitment of Nationally Recognized Chairs in Core Departments
  - Anne B. Curtis, MD; Department of Medicine
  - Teresa Quattrin, MD; Department of Pediatrics
  - Dermatology-Offer letter to #1 finalist
  - OB/GYN-Two finalists
  - Neurology-Four finalists
  - Pathology and Anatomical Sciences-search started
  - Radiology-search to begin in 2011
  - Structural and Computational Biology-search started
  - Microbiology/Immunology-search started

- Investment in Existing Research and Clinical Base

- Investment in Research Growth and Productivity both in Basic Science and Clinical and Translational Research
Discussion
Cost SMBS Build out Plan for the Future

SMBS State Operating Allocations
UB/MD Practice Plans

SMBS UBF Endowments
Health and Wellness Across the Lifespan (2007-10)

• 19 Letters of Intent/10 Invited Full Proposals/2 Approved

Clinical and Translational Research in Brain and Behavior (Barry Smith, PhD)

- Goal: Develop and integrate theoretically grounded and innovative work in biomedical informatics an integral part of NIH-funded clinical research undertaken at UB in the field of brain and behavior.
- Hiring Plan (Phase 1)
  - 1 Neuroinformatician – Department of Neurology (SMBS)
  - Search Completed/d注letter extended
  - Alexander Diehl, PhD/The Jackson Laboratory
  - 1 Cognitive Neurologist – Department of Neurology (SMBS)
  - Kings Szegi, MD, PhD, Baylor College of Medicine
  - 1 Dental Information – School of Dental Medicine
  - Alan Rutterberg, MS (PhD-pending), Neurocommons Project, Science Commons, Cambridge, MA

- Hiring Plan (Phase 2)
  - 1 Biomedical Informatician – Department of Biostatistics (SPHHP)
  - 1 Ontologist – Department of Philosophy (CAS)
  - 1 Clinical Neurologist with MS focus OR Cognitive and Behavioral Neuroscientist OR Neuroimaging Scientist – Department of Neurology (SMBS)

Bioinformatics and Medication Management Research Network (Gene D. Morse, PharmD)

- Goals:
  - Develop an interdisciplinary core program that will facilitate clinical and translational research in biomedical informatics and medication management research
  - Build on the COE recent designation from the NYSDOH as a coordinating center for integrating ePrescribing with biomedical informatics platforms, ontology research and outcomes research with the Center for Computational Research.
  - Explore collaborative medication management research with UB/MD faculty
  - Collaborate with BNIAC partners with expertise in pharmacoconomics and pharmacovigilance during drug development and post-approval.

Graduation Survey Comparison 2009/2010

Where is the location of your primary activity after completing your current training position?
Total Revenues

Fiscal Year

Governing Board
Board Chair: Dean, School of Medicine and Biomedical Sciences, Michael Cain MD
Members: Leaders of BTC Institutions

Vice President Health Sciences
David Dunn MD PhD

Executive Committee
Chair, Buffalo CTRC Director
Chief Administrative Officer
Key Function Directors

Governor of Buffalo Clinical and Translational Research Center

Director
Timothy Murphy MD

Clinical Research Center (CRC)
Robert Genco DDS PhD

Key Functions
See Organizational Structure

Clinical and Translational Research Training Office

National CTSA Consortium
External Advisory Committee

Board Chair:
Dean, School of Medicine and Biomedical Sciences, Michael Cain MD

Members:
Leaders of BTC Institutions

Chair, Alex Adjei MD PhD

Clinical Research Center (CRC)
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Robert Genco DDS PhD

Key Functions
See Organizational Structure

Clinical and Translational Research Training Office

National CTSA Consortium
External Advisory Committee
SMBS: LCME Accreditation Review
Time-Line and Work Flow

- May 2009: Date set for LCME site visit.
- July 2009: Preparation of data base initiated.
- August 2009: Task Force organized and charged.
- October 2009: Assembly of data base completed.
- December 2009: Dean and staff complete review of data base.
- January 2010: Data base distributed to subcommittees.
- March 2010: Subcommittees submit reports to Task Force.
- June/July 2010: Self Study Coordinator critically reviews all self study documents.
- July 2010: Database and Summary Report submitted to LCME site visitors.
- September 2010: Data base updated and final plans for visit are completed.
- October 17-20, 2010: Survey team visits Medical School.

Medical School accreditation is extended for 8 years!!!

Biomedical Engineering
Initial Research Areas

1. Molecular-Cellular, Cell and Tissue Engineering
2. Computational Biomedical Engineering and Modeling
3. Biomedical Sensors, Instrumentation, and Diagnostics
4. Medical Imaging and Analysis