FY 2011-12



# Robert C. Byrd Health Sciences Center Transforming Lives and Eliminating Health Disparities

### **ANNUAL REPORT**

Office of the Chancellor August 2012







### Contents

Introduction 2

Administration Update 3-9

HSC 2020 Strategic Plan 3-6

Key Leadership Recruitments 7-8

By the Numbers 9-10

Mission Updates 11-19

Education 11-14

Service **15-17** 

Research 18-20

Patient Care 21-23

Preview of 2012-13 24



Page 11



Page 11



Page 11



Page 23

West Virginia University is governed by the West Virginia University Board of Governors and the West Virginia Higher Education Policy Commission. WVU is an Equal Opportunity/Affirmative Action Institution.





### Introduction

#### **Health Sciences Senior Leadership**

Christopher C. Colenda, MD, MPH Chancellor for Health Sciences

Fred R. Butcher, PhD Vice President, Planning & Operations

Glenn H. Dillon, PhD Vice President, Research & Graduate Education

Wendy L. King Chief Financial Officer

Patricia A. Chase, PhD Dean, School of Pharmacy

Alan M. Ducatman, MD, MSC Interim Dean, School of Public Health

David A. Felton, DDS, MS Dean, School of Dentistry

Georgia L. Narsavage, PhD Dean, School of Nursing

Arthur J. Ross III, MD, MBA Dean, School of Medicine

L. Clark Hansbarger, MD Assoc. VP HSC, Dean, Charleston Division

Konrad C. Nau, MD Assoc. VP HSC, Dean, Eastern Division

It is a pleasure to present the 2011-12 Annual Report of the Robert C. Byrd Health Sciences Center of West Virginia University. There is a tangible atmosphere of change and forward motion at all three of our campuses and among the faculty, students and staff of our five schools.

This has been a watershed year. For the first time since the creation of our academic health sciences center, we have added a new school: The School of Public Health. The creation of this school – long a dream of our faculty – gives solid evidence that we are taking real action to accomplish our strategic goals of transforming the lives of our students and the people of West Virginia and eliminating the health disparities that impact so many lives in our state.

The recent announcement by the National Institutes of Health that they have selected WVU for an Institutional Development Award Program for Clinical and Translational Research, worth more than \$19 million over the next five years, is a testament not only to our ability to work across disciplines and organizations on our own campuses, but of our strong linkages to health providers, state health agencies, and other educators across West Virginia.

Like every University across the nation, we will face challenges in the upcoming years, and must make difficult decisions about how we allocate our limited resources. We are confident that we are on the right path and that our focus on the needs of our state is correct.

Christopher C. Colenda, MD, MPH Chancellor for Health Sciences





## Administration Update

#### HSC 2020 Strategic Plan

In FY 2010-11, the WVU Health Sciences Center (HSC) went through a rigorous strategic planning process. This past year, all five HSC schools finalized their respective strategic plans that directly support the overall HSC plan. These plans are available on-line at

http://www.hsc.wvu.edu/hsc2020/hscplans.

Clearly, the plans themselves cannot move an institution forward; therefore, we developed an annual project identification process which allows us to target specific projects that we believe will move us towards our vision and goals. As a result of the process, we have completed 15 major projects this past year. A project list



that contains quarterly updates for each HSC project is available at http://www.hsc.wvu.edu/hsc2020/the-journey/.

Below are highlights from five key projects that were completed this past year.

#### 1. Submission of an IDEA-CTR Grant Application

In the fall of 2011, the WVU Health Sciences Center submitted an application to the National Institutes of Health for a clinical and translational infrastructure grant called an IDeA-CTR. Well over 50 people participated in the preparation of this 472 page application – under the direction of the principal investigator Dr. Uma Sundaram. In March 2012 we were notified that we received a very favorable score on this application and in August, we received notification that we were awarded this transformative grant.

The intent of this grant is to continue to develop the necessary infrastructure for clinical and translation research within West Virginia, train and recruit clinician scientists, and ultimately address health disparities that plague our state and beyond. For additional details about this grant, please see the research section on page 18.

#### HSC 2020 Strategic Plan goals supported by this initiative:

- Contribute to the health of West Virginians through leading edge research programs that distinguish WVU HSC
  - o Goal 1: Attract and retain the "best & brightest" faculty, staff, and students.

- o Goal 2: Establish scientific infrastructure/partnerships that transform the research culture at HSC.
- Raise the health status of West Virginians
  - o Goal 1: Create a dynamic partnership between healthcare systems and public health that improves the health status of West Virginians.
  - o Goal 3: Build a high quality workforce that meets the healthcare and public health needs of West Virginians.



#### 2. Interprofessional Education Task Force

A task force was charged with developing recommendations to move Interprofessional Education (IPE) activities forward at the WVU Health Sciences Center (HSC). This group, led by Drs. Christina DeBiase (Dentistry) and Rashida Khakoo (Medicine) constructed a report that provided an analysis of our current IPE activities as well future recommendations that will ensure better coordination across all HSC Schools. Recommendations included:

- Development of a Center for IPE to serve as a clearinghouse for the coordination of all IPE curricular content, activities and resources
- Creation of faculty development initiatives devoted to IPE
- Design and implementation of an IPE curriculum
- Development of an HSC IPE Seminar Series
- Reinforce and expand upon IPE-related community outreach activities
- Assessment and documentation of outcomes associated with IPE activities, i.e., patient satisfaction, treatment outcomes
- Promote scholarly activity relative to IPE teaching, research and service outcomes

The report was presented at the WVU Health Sciences Center Executive Leadership Committee and the process of implementing key recommendations is in motion. Two major IPE initiatives currently inprogress include the \$1.2 million renovation of small group study space and the recruitment of a Director of IPE.

#### HSC 2020 Strategic Plan goals supported by this initiative:

- Contribute to the health of West Virginians through leading edge research programs that distinguish WVU HSC
  - o Goal 1: Attract and retain the "best & brightest" faculty, staff, and students.
- Promote a vibrant environment devoted to diversity, learning & scholarship
  - o Goal 1: Become a national leader in developing inter-professional education & patient care model(s).
  - o Goal 2: Establish national and global collaborations to enhance our faculty, staff, & student
  - o Goal 4: Dramatically enhance diversity and cultural competency among our faculty, staff, & students.



- Raise the health status of West Virginians
  - o Goal 3: Build a high quality workforce that meets the healthcare and public health needs of West Virginians.
- Deliver high quality, effective patient-centered care
  - o <u>Goal 2</u>: Consistent, integrated patient care recognized for delivering the right care in the right place at the right time at all sites.

#### 3. Diversity and Cultural Competency Task Force

A task force was charged with developing recommendations to move diversity and cultural competencies activities forward at the WVU Health Sciences Center (HSC). This group, led by Dr. Jennifer Knight (Medicine), developed a thoughtful report highlighting recommendations for diversity and cultural competencies activities at the HSC. Recommendations included:

- Create an integrated administrative infrastructure to promote diversity, inclusion, equality, and intercultural and intercommunity outreach
- Dramatically enhance diversity and cultural competency among our faculty, staff, & students
- Become a model institution for the attraction and inclusion of diverse groups
- Integrate diversity broadly into the curriculum

The report was presented at the WVU Health Sciences Center Executive Leadership Committee and the process of implementing key recommendations is in motion.

#### HSC 2020 Strategic Plan goals supported by this initiative:

- Promote a vibrant environment devoted to diversity, learning & scholarship
  - o Goal 2: Establish national and global collaborations to enhance our faculty, staff, & student experiences.
  - Goal 4: Dramatically enhance diversity and cultural competency among our faculty, staff, & students.

#### 4. Leadership Development Program

Managing in an academic healthcare environment takes a special skillset. In an effort to prepare new and existing leaders, the WVU Health Sciences Center (HSC) has partnered with the Center for Executive Education and the College of Business and Economics to develop a certificate program in Academic Healthcare Leadership. Under the leadership of Dr. Barbara Ducatman (Medicine), a series of three certificate programs have been developed to help healthcare professionals apply effective business management strategies in the delivery of quality patient care. The three certificates offered are in: leadership, financial management, and management. Participants who successfully complete all three certificate programs will be awarded the Executive Certificate in Academic Healthcare Administration.

For the first semester this fall, 54 applications were received and 31 faculty from three HSC Schools have been admitted. In order to promote the value of this program – five scholarships were provided by the Chancellor's Office.

#### HSC 2020 Strategic Plan goals supported by this initiative:

- Foster a culture of high purpose, accountability & accomplishment
  - o Goal 2: Reward nationally recognized leaders amongst faculty, staff, & students.



#### 5. Submission of Application to form a New School of Public Health

After a year of preparation, an application was submitted in the spring of 2012 to the Council on Education for Public Health (CEPH) from the WVU Health Sciences that requested consideration to create the only School of Public Health in the state of West Virginia. In July, a response from CEPH was received indicating that the HSC had approval to move forward with the formal accreditation process. The School of Public Health will be the first new school to be created at WVU in more than 50 years.

Dr. Alan Ducatman, interim Dean for the School of Public Health, as well as his leadership team have been instrumental in all aspects of starting a new Health Sciences Center school. The accreditation process for a new school takes approximately 2-3



years. We anticipate an accreditation decision in the spring or fall of 2014.

Some public health programs previously existed in the WVU School of Medicine. The M.P.H. degree had been offered since 1997 and since 2008 had doubled enrollment. Currently, students are enrolled in three graduate degree programs: Master of Public Health (122), M.S. in School Health Education (35), and Ph.D. in Public Health Sciences (22). The School includes five disciplines of study: biostatistics; epidemiology; health policy, management and leadership; occupational and environmental health sciences; and social and behavioral sciences.

#### HSC 2020 Strategic Plan goals supported by this initiative:

- Raise the health status of West Virginians
  - o <u>Goal 1</u>: Create a dynamic partnership between healthcare systems and public health that improves the health status of West Virginians.
  - o Goal 2: Establish a School of Public Health in order to transform the lives of West Virginians and eliminate health disparities.
  - o Goal 3: Build a high quality workforce that meets the healthcare and public health needs of West Virginians.

#### ✓ WVU Health Sciences Center 2020 Strategic Plan Priorities

- Contribute to the health of West Virginians through leading edge research programs that distinguish WVU HSC
- Promote a vibrant environment devoted to diversity, learning & scholarship
- Raise the health status of West Virginians
- Deliver high quality, effective patient-centered care
- Foster a culture of high purpose, accountability & accomplishment



#### **Key Leadership Recruitments**

Over the past year several key leaderships have been filled at HSC – and a few searches are in progress.

#### **Newly Appointed HSC Leadership**



Chief Medical Officer, WVU Healthcare - Judie F. Charlton, M.D., has been appointed chief medical officer (CMO) of WVU Healthcare and vice dean for clinical affairs of the WVU School of Medicine, effective September 2011. Dr. Charlton served as interim CMO shortly after the creation of WVU Healthcare in 2010. Prior to this appointment, Dr. Charlton served as the chair of the WVU Department of Ophthalmology since 2008 and a faculty member in the department since 1989. Dr. Charlton graduated from the WVU School of Pharmacy in 1981, the WVU School of Medicine in 1985 and completed postgraduate training at Mercy Hospital in Pittsburgh and at WVU.



Dean, School of Dentistry – David A. Felton, D.D.S., M.S., has been appointed dean of the West Virginia University School of Dentistry, effective September 2011. Prior to this appointment, Dr. Felton served as a professor at the University of North Carolina since 1990, has been named dean of the West Virginia University School of Dentistry. At UNC, Felton served as director of graduate prosthodontics from 1989-1992 and as chair of prosthodontics from 1992-2002. Dr. Felton is a graduate of the UNC dental school.



Vice President, Health Sciences Research and Graduate Education - Glenn H. Dillon, Ph.D., has been appointed Vice President for Health Sciences Research and Graduate Education, effective November 2011. Prior to this appointment Dr. Dillon was the vice president for research and a professor in pharmacology and neuroscience at the University of North Texas Health Science Center. Dr. Dillon earned his undergraduate degree from Missouri State University and his PhD in physiology from the University of Illinois at Urbana – Campaign.



Associate Vice President for Health Sciences & Dean for the School of Medicine, Eastern Division - Konrad C. Nau, MD, has been appointed, as associate vice president for health sciences and campus dean for the School of Medicine, Eastern Division, and effective July 2012. Prior to this appointment Dr. Nau served as the associate dean and chair of the Department of Family Medicine in the Eastern Division. A graduate of Bethany College and the WVU School of Medicine, Nau completed his family medicine residency at WVU before going into practice in the Eastern Panhandle. He has served as chair of the Department of Family Medicine-Eastern Division since 2004.



#### **HSC Leadership Recruitments – In-Progress**

**Dean, School of Public Health** – A search committee has been formed and is chaired by Dr. Arthur J. Ross, Dean for the School of Medicine. A large number of applications have been received and they have all been carefully screened by the Search Committee. The nine most highly competitive candidates were invited to participate in a phone interview. Three of these candidates have been invited for an onsite interview in the months of October and November. We anticipate that the search will conclude in early 2013.

**Dean, School of Nursing** – A request for proposal has been sent to three recruitment firms and we are awaiting their response. A search committee will be formed in the month of October. Dr. Georgia Narsavage will continue to serve as Dean until January 1, 2013. At that time, an interim Dean will be named and expected to serve until a permanent Dean is appointed – which we anticipate will be in the fall of 2013.



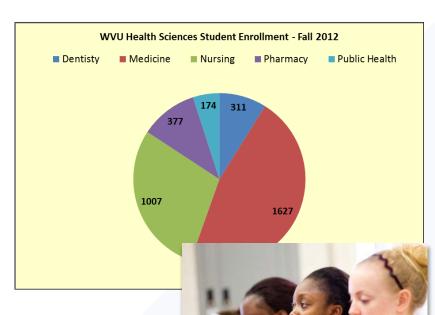


#### By the Numbers

#### Students

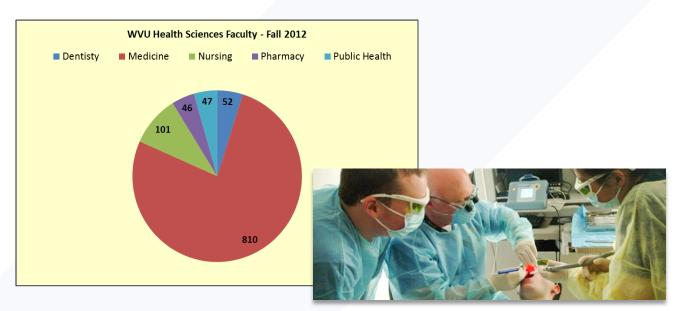
The WVU Health Sciences Center has five Schools (Dentistry, Medicine, Nursing, Pharmacy, Public Health) and two regional campuses (Charleston, Martinsburg) in which 3500 students are educated. Educational offerings include both undergraduate and graduate programs.

- <u>Dentistry</u>: 204 DDS; 71 dental hygiene; 31 graduate& residents
- Medicine: 430 MD; 97 graduate programs; 1100 professional programs
- Nursing: 802 undergrad; 205 graduate
- <u>Pharmacy:</u> 336 PharmD; 31 graduate studies
- <u>Public Health</u>: 174 graduate studies



#### **Faculty**

The WVU Health Sciences Center is the home to over 1056 faculty members whom directly support the education, research, service, and patient care missions of our institution.



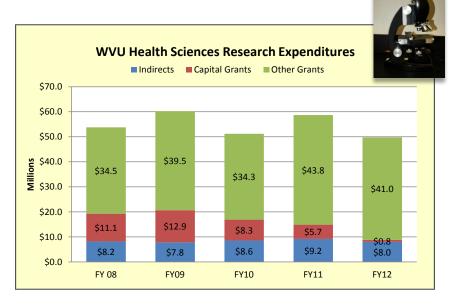


#### 2011-212 HSC Finances

As of June 30<sup>th</sup>, the WVU Health Sciences Center's FY 2011 cash financial results show that operating revenues exceed expenses by \$ 1.5 million. Leadership at the HSC has strategically created a cash reserve to fund critical capital projects - such as the upgrade of the 20-40 year old HSC facilities infrastructure (HVAC, etc.) which costs will exceed \$39 million. Accrual financial results that include integration with our healthcare partners will be available in November 2012.

#### Research

Research funding continues to provide a significant portion of the overall health science center budget. Despite continued downward pressure on federal funds for biomedical research, HSC funding for research project grants was only modestly impacted. With awarding of the \$19.6 million Clinical and Translational research grant from the National Institutes of Health (see pg. 18), we anticipate significant growth in research expenditures for FY 2013.







## Mission Updates

The mission of the Health Sciences Center is to improve the health of West Virginians through the education of health professionals, through basic/clinical scientific research and research in rural health care delivery, through the provision of continuing professional education, and through participation in the provision of direct and supportive health care.

#### Education

WVU's five health schools share a common goal: to educate the next generation of health care providers, biomedical researchers, and health policy leaders for West Virginia. Our educational programs are offered on three WVU campuses, at other locations across the state, and online.

#### 2011-12 Select Accomplishments

Over the past year there have been a host of accomplishments within the HSC with regard to the education mission. The list below contains a few highlights:

★ New WVU School of Public Health officially opens -In August 2012 the new School of Public Health welcomed 179 students for their first week of classes in the first new school to be created at WVU in more than 50 years. Along with the new students, the School welcomed 13 new faculty members. The WVU School of Public Health is now in the process of earning accreditation from the Council on Education for Public Health through a rigorous, two-year selfstudy process.



- ★ The WVU School of Pharmacy was ranked No. 26 in the Best Health Schools-Pharmacy category of the U.S. News and World Report's 2013 edition of "America's Best Graduate Schools." At the time the survey for the 2013 report was conducted, there were 125 schools of pharmacy. The WVU School of Pharmacy is the state of West Virginia's flagship pharmacy school and will be celebrating its centennial in 2014.
- ★ The WVU School of Medicine has once again ranked in the top 10 programs nationwide for rural medicine, tying at number nine. The rankings are published in the latest issue of U.S. News and World Report's 2013 edition of "America's Best Graduate Schools" and available online at USNews.com. Other School of Medicine programs had notable rankings: primary care at 52, physical therapy at 63, research at 86 and occupational therapy at 116. The medical school rankings are based on ratings by medical school deans and senior faculty in the nation's 126 accredited medical schools and 23 accredited schools of osteopathic medicine.





- New MS program preps health professionals to take research from bench to bedside Along with educating future professionals, producing meaningful research is at the heart of higher learning. Translational research moves science from the lab to the bedside, to the clinic, and ultimately to the public with the goal of improving the health of people in our communities and the nation. The West Virginia Clinical and Translational Science Institute's (WVCTSI) new Master of Science program aims to develop the next generation of clinical and translational scientists through educational and mentored research training. Initial enrollment is limited to faculty, clinicians and health professions students at West Virginia University and the West Virginia School of Osteopathic Medicine. The first CTS students will begin classes in the fall 2012 semester.
- ★ Oman Medical College (OMC) renews WVU affiliation A 5-year agreement extends OMC's relationship with WVU Health Sciences. OMC is located in the Sultanate of Oman where they educate physicians, pharmacists, and other health professionals. This partnership has resulted in enhanced learning for both WVU and Omani students. The renewed five-year agreement commits both schools to cooperation on academic matters, quality appraisal, curriculum review, faculty and student exchanges, research and student education. This initiative was led by Chris Martin, MD, Director of International Health for Health Sciences.



★ Deborah Shelton, PhD, RN, WVU School of Nursing was awarded \$1.3 million in funding for Advancing Correctional Nurse Competencies for Quality Care. This project seeks to assure that nurses possess the knowledge and skills required to practice safely in the correctional healthcare environment by strengthening the nursing workforce. This sub-contract is funded by the Health Resources and Services Administration.



- ★ WVU Department of Family Medicine receives \$948,000 HRSA grant- a five-year \$948,000 grant from the Health Resources and Services Administration (HRSA) will be used by the Department of Family Medicine to address three key areas in health sciences education: communication, care of the rural and underserved and inter-professional education. The advanced communications skills curriculum will help in program accreditation and provide students skills to better communicate with other health professionals and patients. The goal of the primary care rural and underserved education track will encourage medical students to practice in areas of the state where there is a shortage of primary care providers. This initiative is led by Dorian Williams, MD, professor, WVU School of Medicine.
- ★ WVU School of Pharmacy and College of Business and Economics have signed an agreement create a Doctor of Pharmacy and Master of Business Administration (PharmD/MBA) dual-degree program for current and future students of the WVU School of Pharmacy. The new PharmD/MBA degree was created to provide student pharmacists with knowledge of business principles to broaden their expertise for those seeking to become leaders, administrators or managers in healthcare systems, community pharmacy practice or in the pharmaceutical industry.





- ★ Dentists and dental hygienists from all across West Virginia celebrated in May when the Pew Children's Dental Campaign announced that the state had improved its grade on dental care for children from an 'F' to a 'C.' The WVU School of Dentistry took steps to improve that grade even further by conducting the West Virginia Medical Infant and Child Oral Health Train the Trainer Program. The School of Dentistry encouraged all medical care providers that treat children to complete the training course.
- ★ Integrating Knowledge of Genomics Across the Nursing Profession Laurie Badzek, RN, JD, received a \$298,203 grant from The National Council of State Boards of Nursing Center for Regulatory Excellence for a two-year period, "Expanding Registered Nurse Scope of Practice: A Method for Introducing a New Competency into Nursing Practice." Because studies have suggested that more than two-thirds of today's practicing nurses have little to no knowledge of genomics, there is a need to implement and evaluate a program to improve genetics and genomics knowledge among nurses.



- ★ A WVU School of Nursing faculty member was selected to receive one of the highest honors bestowed on any nursing professional. Laurie Badzek, RN, JD, has been selected as a fellow in the American Academy of Nursing (AAN).
- ★ Doug Slain, PharmD, BCPS, WVU School of Pharmacy, was selected as a Fellow in the American Society of Health-system Pharmacists (ASHP). Dr. Slain received the honor at the ASHP Summer Meeting and Exhibition in Baltimore, Md.
- ★ For nearly two decades, all WVU students from the Schools of Medicine, Nursing, Dentistry and Pharmacy have spent several months working and learning in small clinics and hospitals in the state as they lived in the communities they served. While a rural rotation is no longer a state mandate, WVU believes it is essential to the educational experience of our students. Each HSC school has been retooling its rural health rotation program to best suit the educational goals of its students and the needs in the communities. Students will work side by side with physicians and other healthcare providers, coordinated by Area Health Education Centers (AHEC). Extra incentives will be available to five students each year to stay and practice in West Virginia. That represents a value of \$30,000-40,000 per year for each student. This initiative is led by Larry A. Rhodes, MD, Director of Rural Programs.
- ★ WVU School of Medicine and the College of Business and Economics have entered an agreement to create a program that provides medical students with important business credentials. This is the first cross-disciplinary collaboration for the School of Medicine. The two schools have collaborated to create the MD/MBA for medical school students during an optional "step out" year in the medical school curriculum, which occurs at the conclusion of their second year of study.







John C. Linton, PhD, WVU School of Medicine Charleston Division, has received the Ivan Mensh Award for Distinguished Achievement in Teaching, awarded by the Association of Psychologists in Academic Health Centers. Dr. Linton, is well known for his work in the field of Health psychology and is a gifted mentor and education.



★ NIH pledges five years of HSTA funding: Award totals \$1.3M - The Health Sciences and Technology Academy (HSTA) housed at WVU Health Sciences Center has helped West Virginia high school students transition into college and explore careers in science and health for nearly two decades. HSTA's success will continue, thanks to a renewed pledge of funding made possible by a Science Education Partnership Award (SEPA) from the National Institutes of Health (NIH). This year HSTA received just over \$269,000 of the \$1.3 million NIH plans to disburse to the program over the next five years.

Through similar grants, NIH has awarded HSTA funding since 1996, helping HSTA encourage rural 9th through 12th graders to pursue higher education. The program not only helps educate underserved populations, but also serves to recruit more scientists and health care providers in West Virginia's medically underserved communities. HSTA students who complete the program earn tuition waivers for West Virginia state-run colleges. These waivers may be used from undergraduate work through professional school in certain majors. This initiative is led by Ann Chester, PhD, HSTA program director.







#### Service

Service is both an indispensable part of the education process for our students and a key responsibility of the faculty of a Land Grant university. The culture of each of the health professions represented at WVU includes an expectation that the health providers place the interests of patients above all else. Participation in service activities gives our students the opportunity to learn how to make that commitment a part of their lives.

#### 2011-12 Select Accomplishments

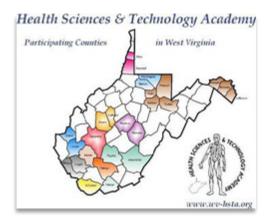
Over the past year there have been a host of accomplishments within the HSC with regard to the service mission. The list below contains a few highlights:

- ★ During the last academic year, students in the School of Dentistry performed 6,981 hours of service. In the School of Pharmacy, students logged 5,133 hours of community service. Nursing students, at all campuses, recorded 11,133 hours. The Class of 2010 in the M.D. program listed 9,679 hours of service; other students in the School of Medicine added 26,316 hours to the 2011-12 totals. That is a total of 59,222 community service hours by HSC students in on year!
- ★ WVU and its statewide affiliates spent over \$100 million to provide health services for people who could not pay for their care. This figure includes care provided by faculty members through University Health Associates, WVU Physicians of Charleston, and at our hospital partners in the West Virginia United Health System.
- ★ WVU School of Pharmacy educates children on bullying – Second-year students in the School of Pharmacy educated students, grades K-8 about the dangers and effects of bullying. Verbal and physical bullying can have a large impact on students and it is estimated that 160,000 children miss school every day due to fear of bullying. Parents were also provided with information to recognize the signs of bullying. The educational puppet show and interactive exercise took place at The Shack Neighborhood House through the WVU Center for Civic Engagement.



★ WVU Center for Excellence in Disabilities (CED) provides training for parents of children with autism -The CED received funding to help families receive Parent Implemented Training for Autism through Telemedicine (PITA-T). Families learn applied behavior analysis therapy through video or written instruction. Trained practitioners in West Virginia are very limited and parents are in need of resources to help their children. Families are recruited to participate in the study, are given a video camera to record themselves working with their children, and then receive individualized feedback. All training is free, and the research is anticipated to provide an immediate benefit to families in West Virginia. The CED is led by Ashok S. Dey.

Health Sciences and Technology Academy (HSTA) received \$125,000 grant from the Benedum Foundation to evaluate the student influence on health living in their families and community. The faculty and staff, as well as HSTA students and teachers will work on various community-based participatory research projects that focus on metabolic syndrome and related diseases. The students will then take the knowledge that they gained back to their families and communities via lifestyle interventions that are designed to improve health literacy and biomedical science education. This initiative is led by Ann Chester, PhD, HSTA program director.



- Oral health education program to be provided to kids at Camp Horseshoe Students and faculty of the WVU School of Dentistry conduct Project Lucky Smile for children at Camp Horseshoe's Youth Opportunity Camp in Parsons, WV during the month of July. The camp is for low-income boys and girls, ages 7-12, and focuses on promoting healthy lifestyles, making good choices, teaching good personal hygiene, and encourages physical and mental activity. Second-year dental student Sawan Prabhu of Morgantown received a \$500 WVU Student Government Association Grant through the WVU American Student Dental Association to fund Project Lucky Smile.
- **★ WVU Pharmacy students educate youth about prescription drug abuse Developed by the Ohio** State University College of Pharmacy and conducted in partnership with the American Pharmacists
  - Association (APhA), GenerationRx is a nationwide program that aims to educate communities about the dangers of prescription drug abuse. WVU pharmacy students Kayla Hetrick, Kimberly Kimble and Joe Michael Fusco learned about the program while attending the American Pharmacists Association-Academy of Student Pharmacists and felt it was important to implement the project in schools and community groups across the Mountain State. As a growing problem in West Virginia, the students are hoping to take the program into schools, parent meetings, church meetings, and nursing homes.



- The WVU School of Dentistry collaborates with the Central Appalachian Health Careers Opportunity Network (CAHCON) to offer a summer pre-admission enrichment program for undergraduate students in Central Appalachia. The six-week experience is designed to enhance knowledge and skills to enter health profession school and to encourage participants to return to rural Appalachian communities upon graduation.
- WVU School of Dentistry to "Give Kids a Smile" The WVU School of Dentistry launched National Children's Dental Health Month by offering free examinations, appropriate X-rays and fluoride treatments to children ages one through 17 on Feb. 3 in the WVU Pediatric Dental Clinic. The appointments were part of the annual "Give Kids a Smile!" national dental access program of the American Dental Association and the West Virginia Dental Association. This program is now in its 10th year at WVU.

★ The WVU Eye Institute celebrated the Department of Ophthalmology's 50 years of service and growth by honoring its founder and first chair. As course offerings at the new West Virginia University Health Sciences Center continued to take shape in 1961, there were no immediate plans for an ophthalmology program. This prompted Boston eye specialist Robert R. Trotter, M.D., to return to Morgantown – his hometown – with a vision for the future. In 1964, Trotter established



WVU's three-year ophthalmology residency program. Since then, West Virginia's only ophthalmology training program has trained more than 120 eye residents and fellows.

- ★ The West Virginia University Health Sciences Campus has received re-designation as a Platinum Well Workplace by the Wellness Council of West Virginia The designation recognizes the efforts of WVU Healthcare and WVU Health Sciences as organizations that show dedication and commitment to its employees' health and wellbeing.
- ★ Since the startup of the mobile mammography program in 2009, Bonnie's Bus has travelled more than 40,000 miles and provided more than 3,000 mammograms. More than half of those were screened in 2011. The mammograms are billed to private insurance, Medicaid or Medicare if available. Mammograms for women who do not have insurance will be covered by the West Virginia Breast and Cervical Cancer Screening Program (WVBCCSP) or through special grant funds.
  - No woman over 40 is turned away due to lack of funding. Made possible by a generous gift from West Virginia natives Jo and Ben Statler to the Cancer Center, Bonnie's Bus is operated in partnership with WVU Hospitals. The bus is named after Jo Statler's late mother, Bonnie Wells Wilson.



★ WVU student to become a Schweitzer Fellow - WVU School of Medicine student Jeffrey Kiser was selected as the first WVU student to become a Schweitzer Fellow. Kiser joins 240 other Schweitzer Fellows across the country in conceptualizing and carrying out service projects that address the social determinants of health. Kiser will establish a depression and anxiety prevention program for international students who attend WVU. His program will focus on building a sense of community among the school's diverse international student population through cultural expression and communication skills development.



★ WVU Eye Institute receives grant for Children's Vision Rehabilitation Project – the WVU Eye Institute outreach program that assists children suffering from visual impairments in rural West Virginia is getting a \$79,790 grant from the Greater Kanawha Valley Foundation. Established in 1996, the Children's Vision Rehabilitation Program (CVRP) provides West Virginia school-aged children with incurable vision loss access to a visual environment.



#### Research

The State of West Virginia demonstrated its commitment to research by establishing a Research Trust Fund that WVU could access by developing private matching donations. This "Bucks for Brains" fund has helped the HSC recruit a corps of experienced biomedical researchers who are at the heart of our efforts to compete for federal and private research dollars and develop programs aimed at eliminating West Virginia's health disparities.

#### 2011-12 Select Accomplishments

Over the past year there have been a host of accomplishments within the HSC with regard to the research mission. The list below contains a few highlights:

★ WVU Health Sciences gets \$19.6 million research grant from NIH: Additional investment from statewide partners makes total \$53 million – WVU Health Sciences Center was awarded a \$19.6 million grant from the National Institutes of Health (NIH) that will be used to address the health issues that most commonly affect West Virginians. The grant to the West Virginia Clinical and Translational Science Institute (WVCTSI) is part of the NIH Institutional Development Award Program for Clinical and Translational Research (IDeA-CTR). The federal program provides funding for the development of infrastructure and to enable scientists to become more competitive for NIH and other biomedical research funding opportunities over the next five years.



In addition to the NIH grant, other leading educational, health sciences and healthcare entities from across the state have committed to providing another \$33.5 million to the WVCTSI, to make the total initiative worth an unprecedented \$53.1 million over the next five years. The principal investigator of this grant is Uma Sundaram, MD, School of Medicine.

- ★ WVU Injury Control Research Center receives \$4.1-million grant from the CDC. The WVU Injury Control Research Center (ICRC) has been awarded a five-year grant totaling \$4.1 million to continue as one of 11 such federally funded centers of excellence for injury prevention research, education and outreach in the nation, according to the funding agency, the Centers for Disease Control and Prevention (CDC). The WVU ICRC was cited by CDC reviewers and officials both for its outstanding contribution to the advancement of injury prevention during the past five-year funding period and for its innovative proposal for 2012 and beyond. The principal investigator of this grant is Jeffery Coben, MD, School of Medicine & School of Public Health.
- ★ WVU researchers receive \$444,000 NIH grant Two researchers in the WVU School of Public Health, George Kelley and Kristi Kelley have received a \$444,000 grant from the National Institutes of Health (NIH) to study the effects of exercise on depression in adults with arthritis. Depression is a major public health problem in adults with arthritis.

- NIH awards \$5.5 million to WVU for cancer research the National Center for Research Resources, part of NIH, awarded a five-year \$5.5 million research grant to MBRCC. The grant supports the Center of Biomedical Research Excellence for Signal Transducation and Cancer, led by Laura F. Gibson, PhD. This is the third phase of a research program originally funded a decade ago. The award of the Phase 3 funding recognizes the contributions of WVU scientists to the scientific community's overall understanding of basic cancer mechanisms.



- WVU Eye Institute receives gift to advance glaucoma research a \$70,000 gift from Glenmark Holding LLC will be used to establish an endowment called Nesselroad Family Glaucoma Research fund. It will be matched by the state Research Trust Fund, totaling the investment at \$140,000. The funds are hoping to target challenges that include an aging population in a rural state. Biological, biotechnological, and biomedical sciences will also be advanced using these funds.
- American Cancer Society awards research grant to WVU Mary Babb Randolph Cancer Center -MBRCC received a three-year \$180,000 grant from the American Cancer Society that will support
  - six junior faculty members working in cancer research. The ACS review committee rated the cancer program as "outstanding." The award granted is one of 16 given nationwide by the ACS, and the only one of its kind in the state.



- WVU researchers identify several new genetic markers for repeat lung cancer - Researchers at MBRCC identified 21 gene signatures that more accurately predict lung cancer recurrence in tumor samples, as evidenced by 442 lung cancer patient samples. This research will help physicians identify patients whose lung cancer is likely to come back and decide which ones may benefit from chemotherapy.
- WVU Eye Institute researchers restore vision with gene replacement therapy Visvanathan Ramamurthy, PhD, and WVU MD/PhD student Cristy Ku demonstrated that gene replacement therapy restores sight in animal models. Long-term studies, if successful, may create vision restoration options for childhood blindness patients. Mice used in the study showed restoration of vision up to two months after a single treatment. The researchers hope to use the pre-clinical model to help treat childhood blindness known as leber congenital amaurosis (LCA). This project was done in collaboration with University of Florida and the National Eye Institute.
- WVU researchers receive \$100,000 grant from Bill and Melinda Gates Foundation Two researchers in the WVU Department of Biochemistry, Bryan O'Hara, PhD and Vazhaikkurichi M. Rajendran, PhD, received a global health grant for \$100,000 to study scientific-based therapy to improve nutrition. The Grand Challenges Exploration grant will fund the project titled "Resistant Starch Derivatives to Treat Chronic Diarrhea." The research intends to develop basic biological information that can be used in developing clinical-grade compounds that will be used as treatment of chronic colitis and persistent diarrhea.

- WVU study finds strong link between arsenic and lung cancer incidence A study at Mary Babb Randolph Cancer Center raises concerns about arsenic exposure and lung cancer occurrence in U.S. Research was led by Lan Guo, PhD, WVU School of Public Health. Previous studies linked arsenic to cancer in countries where levels of arsenic in drinking water were high, but this study sheds new light on effect of chronic low-level arsenic exposure. The research model suggests that arsenic may contribute to more than 5,000 lung cancer cases per year, and may also account for the higher lung cancer incident rates in West Virginia and Kentucky.
- ★ WVU study examines effects of adding exercise to teen smoking cessation programs a study by researchers in the WVU School of Medicine shows that adding physical activity to tobacco cessation programs for teens may enhance success. Although West Virginia has one of the nation's worst smoking problems, the study proves that youth in our state can quit when given the right tools. It is known that teen smokers are often highly sedentary. The study shows that it may be possible to improve two health behaviors simultaneously with the tobacco cessation, and physical activity having an ever greater increase in health. This study was led by Kimberly Horn, EdD and Geri Dino, PhD, School of Public Health.
- **★** CARDIAC Project research influences new national cholesterol screening guidelines for youth an expert panel of government officials released new cardiovascular screening guidelines for youth based in part on a research study project, CARDIAC (Coronary Artery Risk Detection in Appalachian Communities) Project. William Neal, MD, School of Medicine, is the director of CARDIAC. Previous guidelines recommended checking cholesterol in children with a family history of high cholesterol or early heart disease. New guidelines now recommend that all children have cholesterol screening. Emphasis is placed on lifestyle modification, such as healthy diet and physical activity, to hopefully prevent early heart disease during adulthood.
- WVU Ph.D. students receive national research fellowships Andrea Armstead and Ryan Williams, PhD graduate students in the School of Pharmacy's Pharmaceutical and Pharmacological Sciences program, received national fellowship from the American Foundation for Pharmaceutical Education (AFPE). Pre-Doctoral Fellowships are awarded to outstanding pre-doctoral students nationwide, who have completed at least three years of graduate study, to encourage them to continue their pursuit of pharmaceutical sciences.





- ★ Dr. Christian Stork, a postdoctoral fellow, received the Ruth L. Kirschstein National Research Service Award from the NIH, Heart, Lung, and Blood Institute. This Fellowship provides three years of support with total amount of \$155,346 for Dr. Stork to investigate the roles and mechanisms of circulating micro-particles in mediating diabetes-associated vascular complications.
- Sulei Xu, PhD candidate, received the Great Rivers Affiliate Pre-doctoral Fellowship from the American Heart Association. This award provides an annual amount of \$25,000 for two years. Sulei Xu's application is one of the 25 funded out of 143 pre-doctoral fellowship applications reviewed in the 2012 winter cycle. Her project is to investigate the roles of shear stress in the regulation of microvessel functions.



#### **Patient Care**

No West Virginian should ever have to leave our state to benefit from the most advanced healthcare. WVU's affiliated hospitals and faculty practice plans remain at the forefront of care. They operate without direct subsidy from the University or the state, and deliver care to tens of thousands of people at dozens of locations. In 2011, WVU-related healthcare organizations provided more than \$100 million in uncompensated care to people who were uninsured or otherwise unable to pay.

#### 2011-12 Select Accomplishments

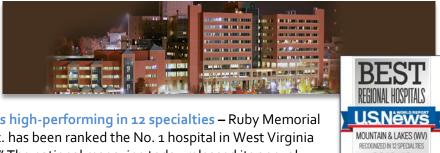
Over the past year there have been a host of accomplishments within the HSC with regard to the patient care mission. The list below contains a few highlights:

- Creation of WVU Healthcare Much of the past year was spent in the integration of leadership, management and other functions of WVUH and UHA. Significant integration efforts were undertaken and accomplished in human resources, facilities, finance, revenue cycle, administrative operations and other aspects of WVU Healthcare operations.
- **★** Development of a Strategic Plan for WVU Healthcare A strategic plan for WVU Healthcare was completed in 2011. The key goals of the plan include the following:
  - To develop an effective ambulatory care network, particularly in the primary service area. Included within this component of the plan will be an effort to significantly improve access to primary care services within WVU Healthcare.
  - o To strengthen access functions and clinical programs and to expand capacity. One of the components of this goal is the recruitment of approximately 70 additional faculty physicians within the next five years. Also included within this component of the plan will be the identification and development of key service lines within WVU Healthcare. There will also be an expanded effort to improve ambulatory access and care coordination. Finally, facility capacity also needs to be addressed.
- WVUHealthcare STRATEGIC PLAN
- o To create a regional delivery network in collaboration with other hospitals within the West Virginia United Health System and other community hospitals.
- o To demonstrate and deliver consistent, effective care across the network. In conjunction with this goal, a pilot for accountable care is being developed with the Geisinger Healthcare System. There will also be an effort to develop a continuum of care model for chronic disease in collaboration with community physicians.
- o To build a high performance organizational culture in which our clinical care, research and educational missions are fully recognized, supported and valued. As a component of that effort, we have engaged the Studer Group to work with WVU Healthcare leadership in an effort to effect a significant change in the organizational culture.
- Performance improvement The operating results of WVU Healthcare have continued to improve in the last year. The four pylons of the Performance Improvement Plan are people, quality and patient safety, service, and growth and efficiency. The goals that were established for 2011 were

aggressive. In the end, not all of the goals were achieved; however, significant improvement occurred across the organization.

★ Facility Expansion – WVU Healthcare has announced plans for a significant expansion of WVU Hospitals, including the construction of a 10-story patient bed tower contiguous to Ruby Memorial Hospital. Patient demand for services at WVU Healthcare, both the Hospital and physician services, has continued to increase. We believe that we have been increasingly successful in developing and

delivering specialty services that are enabling West Virginians to stay in the state for their healthcare needs. We expect this trend to continue in the future.



- Magazine recognizes WVUH as high-performing in 12 specialties Ruby Memorial Hospitals of WVU Hospitals, Inc. has been ranked the No. 1 hospital in West Virginia by "U.S. News & World Report." The national magazine today released its annual Best Hospitals rankings, listing WVUH as high-performing in 12 medical specialties. In addition to the state ranking, WVU Hospitals was recognized as a Best Regional Hospital and high-performing in cancer; cardiology and heart surgery; diabetes and endocrinology; ear, nose and throat; gastroenterology; geriatrics; gynecology; nephrology; neurology and neurosurgery; orthopaedics; pulmonology; and urology. This year's "Best Hospitals 2012-13" showcases more than 720 of the nation's roughly 5,000 hospitals. This is the first year that the publication has ranked hospitals within most states and recognized high-performing hospitals outside metro areas as Best Regional Hospitals in their respective regions.
- ★ WVU Healthcare named state's first MDA/ALS center-The Muscular Dystrophy Association named WVU Healthcare as a designated MDA/ALS center in recognition of the high standard of care provided to West Virginians living with ALS. Every MDA/ALS center is required to have a neurologist, pulmonologist, speech/swallow therapist, and nutritionist on its staff as well as physical and occupational therapists. Additional services to families include support groups, educational seminars, and home visits.
- ★ WVU Urgent Care receives national certification WVU Urgent Care becomes only facility of its kind in West Virginia to be certified by the Urgent Care Association of America. Since opening in September 2007, it has seem more than 85,000 patents and provides a convenient option for medical conditions that cannot wait for scheduled appointments with a primary care physician. This honor was recognized in the January edition of the "Journal of Urgent Care Medicine."
- ★ WVU offers Tele-stroke treatment at Davis Memorial Hospital WVU Stroke Center neurologists will communicate with Davis Memorial Emergency Department staff using video conferencing. This will hopefully decrease patient's risk for disability and mortality by providing decision for treatment during the crucial three-hour time-window following the stroke. The Stroke Center Team will be able to securely view and interact with the patient while viewing diagnostic data over an encrypted connection.

- ★ Ruby Memorial Hospital of WVU Hospitals, Inc. named to Most Connected list Ruby Memorial Hospital has been included on "U.S. News and World Report" list of the Most Connected Hospitals, which it describes as institutions that are "digitally forward and clinically excellent." Two sources were used to achieve the final 118 hospitals on the list. It looked at hospitals ranked best in the nation or "high performing." Hospitals are ranked from Stage o to Stage 7. Ruby Memorial Hospital is at Stage 6. A factor of this ranking and recognition by U.S. News and World Report may come in part by the introductions of Merlin, the electronic medical records project, and MyWVUChart. MyWVUChart is an online portal that allows patients to view their own medical records. 12,000 patients now have access to it.
- ★ WVU's Jon Michael Moore Trauma Center receives verification extension the trauma center received full three-year verification as a Level 1 Trauma Center and a Level II Pediatric Trauma Center by the American College of Surgeons. The achievement recognizes optimal care give to injured patients. There are less than 200 Level 1 Trauma Centers in the nation, making the hospital among an elite group. There are 5 categories of verification, Level 1 being the highest.



- ★ WVU's breast care program recognized for excellence -Two programs have been recognized by national organizations for excellence in breast care. The Comprehensive Breast Cancer Program at the MBRCC was granted a three-year, full accreditation designation by the National Accreditation for Breast Centers. Accreditation is give only to those centers that provide the highest level of quality breast care and that undergo a rigorous evaluation process and review of their performance. The Program was 100% compliant with standards, and in some cases exceeded the standards set by the NAPBC. Also, WVU's Betty Puskar Breast Care Center was awarded the Breast Imaging Centers of Excellence Award and breast ultrasound imaging accreditation by the American College of Radiology.
- ★ Ruby Memorial Hospital of WVU Hospitals, Inc. ranks among nation's Most Wired hospitals in a survey representing 1,388 hospitals for the 2011 Most Wired Survey, Ruby Memorial Hospital made the list for the first time. The lists are based on level of achievement in four focus areas: clinical quality and safety, care continuum, infrastructure and business and administrative management. The results of the annual survey were released this week in the July issue of "Hospitals and Health Networks," the journal of the American Hospital Association. www.hhnmostwired.com



★ Ruby Memorial Hospital of WVU Hospitals, Inc. only hospital in state to hold national stroke honor – Ruby Memorial Hospital has become the only hospital in West Virginia to be recognized as a Target: Stroke Honor Roll hospital by the American Stroke Association for the WVU Stroke Center's commitment and success in continued excellent care for stroke patients.



## Preview of 2012-13

There are several initiatives that are currently underway at the WVU Health Sciences Center that will carry into the new academic year. From an education and service perspective, we will continue to move forward with interprofessional education (IPE) initiatives. Two of the major activities will be a \$1.2 million renovation of small group education/study space and the appointment of a director of IPE. Not only is the renovation necessary to facilitate IPE activities, it is also critical for accreditation of many of our educational programs.

In 2012-13, we will also continue with the accreditation for our new School of Public Health. Creation of a new School is a very time intensive process and will require significant resources to meet the rigorous criteria of the accreditation body. During this same period, we will also be naming the permanent founding Dean to lead the only School of Public Health in the state.

From a research perspective we will continue to implement the clinical and translational research infrastructure that was outlined in our application for the \$19.6 million IDeA-CTR grant that was awarded to the West Virginia Clinical and Translational Institute in August 2012. A few of the activities planned for this year include: the creation of a new clinical trials unit, hiring of five clinician scientists, creation of an administration core, administering of pilot projects, and the creation of a host of education/training programs.

In 2012-13, WVU Healthcare will move forward with the construction of the 10 story patient care tower and other facilities projects as well as continuing to hire new clinical faculty as outlined in the strategic plan.

Like most years at the WVU Health Sciences Center, it will be an exciting 12 months!

