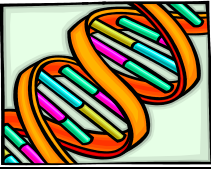


**Commonwealth Health Research
Board (CHRB)**

2013/2014 Annual Report



Commonwealth Health Research CHRB [CHRB] FY 2013/2014 Annual Report

Goals and Purposes of the Commonwealth Health Research Board [CHRB]

The Commonwealth Health Research Board [CHRB or Board] was created by Virginia Code § 23-278 to provide financial support, in the form of grants, donations, or other assistance, for research efforts that have the potential of maximizing human health benefits for the citizens of the Commonwealth. Research efforts eligible for support by the Board shall include traditional medical and biomedical research relating to the causes and cures of diseases as well as research related to health services and the delivery of health care.

More specifically, in accordance with Virginia Code § 23-279, the Board encourages collaborative research efforts among two or more institutions or organizations, gives priority to those research efforts where Board support can be leveraged to foster contributions from federal agencies or other entities, and supports both new research efforts and the expansion or continuation of existing research efforts. CHRB grant recipients, for grant awards made in 1999 through 2004, have leveraged almost \$20.5 million in additional private and federal grant funds to further their research studies. In addition, numerous publications in peer-reviewed scientific journals and periodicals as well as presentations of the data at regional and national scientific meetings have resulted from CHRB grant funded research projects.

The authority to invest and manage the assets of the Commonwealth Health Research Fund [CHRF] and maintain a separate accounting for the CHRF assets are provided to the Virginia Retirement System [VRS] in Virginia Code § 51.1-124.36. Assets of the [CHRF] are pooled with the VRS investment fund which had a total fund value of \$66.0 billion at June 30, 2014. The estimated value of the CHRF as of June 30, 2014 was \$35.4 million. The current asset allocation for the VRS investment fund reflects 44% public equity, 19% fixed income, 18% credit, 11% real assets, 8% private equity, 1% strategic opportunities, and 1% cash.

Grant funding is calculated by an amount not to exceed six percent of the moving average of the market value of the CHRF calculated over the previous five years or since inception, whichever is shorter, on a one-year delayed basis, net of any administrative fee assessed pursuant to subsection E of § 51.1-124.36. That amount may be expended in a calendar year for any purpose permitted by the CHRB/CHRF's governing statutes.

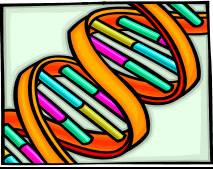
Since its inception, the CHRB has made 157 grant awards totaling \$12.2 million in grant funding to institutions of higher education and other not-for-profit or nonprofit organizations that conduct health, or health related research in Virginia. When the required 33% matching funds are added to the CHRB funded amount, the cumulative funding totals approximately \$17.5 million for health research in Virginia. More detailed information is provided by year in the chart below. For a description of past CHRB grant awards and abstracts, please visit our website at www.chrb.org.



Commonwealth Health Research CHRB [CHRB]
FY 2013/2014 Annual Report

Executive Summary of FY 2013/2014 Grant Process:

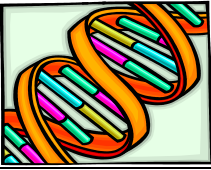
Login Identification	Institution/Organization	Concept Papers Received	Full Proposals Reviewed	Presentations to the Board	Grant Awards
207	University of Virginia	15	5	2	0
208	Virginia Polytechnic Institute and State University	15	6	2	0
216	James Madison University	4	0	0	0
221	Old Dominion University	3	1	0	0
236	Virginia Commonwealth University	15	6	3	2
242	Christopher Newport University	1	0	0	0
247	George Mason University	3	1	0	0
274	Eastern Virginia Medical School	15	7	3	2
307	University of Richmond	1	1	1	1
311	Mary Baldwin College	1	1	1	0
319	Ferrum College	1	0	0	0
323	Randolph-Macon College	1	0	0	0
804	Carilion Medical Center	1	0	0	0
Total		76	28	12	5



Commonwealth Health Research CHRB [CHRB]
FY 2013/2014 Annual Report

CHRF Historical Funding

Grant Year	Total Grant Awards	Number of New Grant Awards	Number of Ongoing Grant Awards [Year 2]	CHRB Grant Awards	Grantee Matching Funds	Total Project Funds
1999	9	9	0	\$597,377	\$278,808	\$876,185
2000	11	11	0	\$718,542	\$430,738	\$1,149,280
2001	13	13	0	\$825,590	\$341,680	\$1,167,270
2002	12	12	0	\$718,382	\$344,603	\$1,062,985
2003	8	8	0	\$509,806	\$199,999	\$709,805
2004	14	10	4	\$887,914	\$376,735	\$1,264,649
2005	10	6	4	\$755,436	\$304,409	\$1,059,845
2006	12	9	3	\$954,058	\$451,983	\$1,406,041
2007	12	7	5	\$1,105,585	\$512,493	\$1,618,078
2008	12	8	4	\$1,102,030	\$446,400	\$1,548,430
2009	8	2	6	\$734,390	\$310,338	\$1,044,728
2010	9	7	2	\$775,105	\$312,808	\$1,087,913
2011	11	5	6	\$1,061,644	\$397,212	\$1,458,856
2012	8	6	2	\$799,746	\$327,186	\$1,126,932
2013	8	5	3	\$746,688	\$372,766	\$1,119,454
Cumulative Total	157	117	40	\$12,265,018	\$5,271,203	\$17,536,221



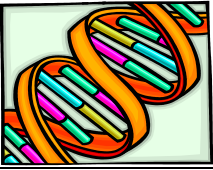
Commonwealth Health Research CHRB [CHRB]
FY 2013/2014 Annual Report

Comparison of Success Rates

Based upon a six-year average, success rates from **Step 1: Submission of a Concept Paper** to being awarded CHRB grant funding is 9%. Success rates from the Step 1 Concept Paper to **Step 2: Submission of a Full Proposal** to **Step 3: Presentation of the Full Proposal to the Board** to receiving a CHRB grant award, varies from year to year. The chart below provides success statistics for the last seven years.

Grants Cycle	Step 1: Concept Papers submitted	Step 2: Full Proposals requested	% success Full Proposals	Step 3: Full Proposals Presented	% success Presentations	New Grant Awards	% success Awards	From Step 1 to Awards
2013/2014	76	29	38%	12	41%	5	42%	7%
2012/2013	84	28	33%	14	50%	6	43%	7%
2011/2012	76	24	32%	13	54%	5	38%	7%
2010/2011	73	22	30%	11	50%	7	64%	10%
2009/2010	54	23	43%	6	26%	2	33%	4%
2008/2009	67	29	43%	15	52%	8	53%	12%
2007/2008	61	23	38%	15	65%	7	47%	11%
Cumulative from 2007/2008 to 2013/2014 [Seven Year total]	491	178	36%	86	48%	40	47%	8%
Cumulative from 2007/2008 to 2013/2014 [Seven Year average]	70	25	36%	12	48%	6	47%	9%

*Note: This chart excludes two-year grant awards approved for Year 2 funding.



Commonwealth Health Research CHRB [CHRB]
FY 2013/2014 Annual Report

FY 2013/2014 CHRB Grant Awards

Year 2 of a two-year grant award

Principal Investigator	Submitting Institution/ Organization	Grant Award \$	Recipient Matching \$	Total Project Funds	Grant Title
Stuart Berr, PhD	University of Virginia	\$ 100,000	\$ 33,000	\$ 133,000	Development of Biomarkers that Target Tumor Associated Macrophages
Michael Boyd, MD	Carilion Medical Center	\$ 98,638	\$ 42,735	\$ 141,373	Genetic Reassessment after Induction in Advanced Non-small Cell Lung Cancer
Raymond Colello, D.Phil.	Virginia Commonwealth University	\$ 100,000	\$ 33,000	\$ 133,000	Enhancing Axon Regeneration and Quality of Life Following Spinal Cord Injury
Stephen Deutsch, M.D., Ph.D.	Eastern Virginia Medical School	\$ 100,000	\$ 133,713	\$ 233,713	Identifying NMDA Receptor Interventions for the Treatment of Impaired Sociability in Autism Spectrum Disorders using an Automated High-Throughput Screening Technology
Rebecca Heise, Ph.D.	Virginia Commonwealth University	\$ 100,000	\$ 33,000	\$ 133,000	Development of Extracellular Matrix Hydrogels for Lung Regeneration
Michael Leopold, Ph.D.	University of Richmond	\$ 48,500	\$ 17,966	\$ 66,466	Amperometric Biosensors Incorporating nanoparticle Networks: Monitoring Sepsis using Lactate Measurement
Michael Neale, Ph.D.	Virginia Commonwealth University	\$ 99,550	\$ 32,852	\$ 132,402	Whole Exome Sequencing to Improve Stem Cell Transplant Outcomes
Laurie Wellman, Ph.D.	Eastern Virginia Medical School	\$ 100,000	\$ 46,500	\$ 146,500	Oxytocin and Exposure Therapy: A Novel Approach for Treating PTSD
		\$ 746,688	\$ 372,766	\$ 1,119,454	



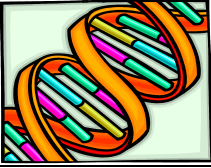
Commonwealth Health Research CHRB [CHRB]
FY 2013/2014 Annual Report

CHRB Grant Awards and Funded Types or Categories of Research

The chart below provides statistics on the number of CHRB Grant Awards funded by type or category of Research, from 1999 to 2013.

Key Codes	Type or Category of Research	1999 to 2013 Grant Awards	1999 to 2013 Grant Awards in Dollars [CHRB]
AG	Aging and Diseases of the Aging	5	\$510,675
BD	Behavioral Disorders	6	\$691,089
BV	Bacterial and Viral Diseases and Treatments	19	\$2,622,381
CA	Cancer and Cancer Treatment	24	\$2,489,548
CB	Cartilage and Bone	5	\$576,078
CV	Cardiovascular Disease	10	\$927,399
DI	Diabetes	8	\$880,685
DM	Drug Metabolism and Drug Addiction	3	\$209,250
EE	Eye and Ear Diseases	4	\$478,925
GI	Gastrointestinal Diseases	2	\$179,494
HS	Health Services Research	3	\$181,126
HE	Hematology	4	\$120,983
KD	Kidney Disease	3	\$340,927
LD	Lung Disease	4	\$384,083
ME	Metabolism	5	\$320,683
ND	Neurological Disorders	4	\$470,238
WH	Women's Health	5	\$505,531
PD	Psychiatric Diseases	1	\$200,000
WO	Wound Healing	1	\$76,373
ZZ	Other	1	\$99,550
	Total	117	\$12,265,018

Excludes second year funding to avoid duplication.



Commonwealth Health Research CHRB [CHRB]
FY 2013/2014 Annual Report

Virginia Retirement System [VRS] Reports:

The authority to invest and manage the assets of the Commonwealth Health Research Fund [CHRF] and maintain a separate accounting for the CHRF assets are provided to the VRS in Virginia Code § 51.1-124.36. Assets of the [CHRF] are pooled with the VRS investment fund which had a total fund value of \$66.0 billion at June 30, 2014. The estimated value of the CHRF as of June 30, 2014 was \$35.4 million. The current asset allocation for the VRS investment fund reflects 44% public equity, 19% fixed income, 18% credit, 11% real assets, 8% private equity, 1% strategic opportunities, and 1% cash.

Grant Funding Available for FY 2013/2014 CHRB Grant Awards

Calendar Year		Market Value as of 12/31/xx
January 31 - December 31, 2007	Year 1	\$32,807,479
January 31 - December 31, 2008	Year 2	\$22,749,283
January 31 - December 31, 2009	Year 3	\$25,803,429
January 31 - December 31, 2010	Year 4	\$28,320,007
January 31 - December 31, 2011	Year 5	\$27,511,097
	Total	\$137,191,295
	Average Market Value	\$27,438,259
Funds available for 2013 grants based on 3.5% of the average market value	3.5%	\$960,339
Less Administrative Expenses:		
Less Operating Expenses		\$100,000
Less VRS Administrative Fees		\$2,600
Total Administrative Expenses		\$102,600
Funds Available for 2013 grants less estimated expenses:		\$857,739

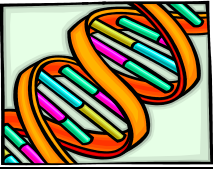
Source: VRS Finance Division
Analysis of CHRF Activity for
CY 2011 through December
2011

Investment of Funds

Assets of the Commonwealth Health Research Fund [CHRF] are pooled with the **\$58.5 billion** Virginia Retirement System [VRS] investment fund. The estimated value of the CHRF as of June 30, 2013 was **\$31.4 million**. The current asset allocation for the VRS investment fund **44.1% equity, 18.7% fixed income, and 37.2% alternative assets.**

Source: VRS Analysis of Offsetting Relationships and Transfers Accounts - Accrual Basis for the Year ended June 30, 2013

Source: VRS Finance Division CHRF Activity Report through June 30, 2013 shows CHRF balance at \$31,409,908.01



Commonwealth Health Research CHRB [CHRB]
FY 2013/2014 Annual Report

Commonwealth Health Research Board Fiscal Reports:

FINAL FY 2013/2014 Final CHRB Expenses [through June 30, 2014]

Administrator Pace provided a summary of the FY 2013/2014 Final CHRB Administrative and Grant expenses:

FY 2013/2014	APPROVED FY 2013/2014 Administrative Budget	YTD 2013/2014 Expenses [as of June 30, 2014]	Expenses YTD as a % of Budget	Special Notes:
Total Administrative	\$ 185,483.75	\$ 181,661.67	98%	Greatest expenditures are for salaries and management services
Total Grant Disbursements	\$ 746,688.00	\$ 692,409.22	93%	Majority of funds disbursed in July 2013 for initial grant payments

FY 2013/2014 Accomplishments and Activities

Virginia Biosciences Health Research Corporation [VBHRC]: Administrator Pace provided information to the members regarding the creation of the Virginia Biosciences Health Research Corporation [VBHRC], a tax-exempt corporation designed to foster collaborative scientific research innovation by providing a new program for public/private partnerships with Virginia universities and the VBHRC. CHRB Member Dr. Matthew Frank had initially brought this to Administrator Pace’s attention by providing information about the VBHRC mission, goals, project funding guidelines, project scoring elements and outcome metrics.

On-line Review of CHRB Grant Applications “CHRB CLOUD Project”: The “CHRB Cloud Project” will be developed by and in coordination with the Department of Accounts Information Technology staff. The Board approved \$16,000 to develop and implement this project to provide CHRB members with the capability to review grant applications [Concept Papers and Full Proposals] via password protected link.



Commonwealth Health Research CHRB [CHRB]
FY 2013/2014 Annual Report

Commonwealth Health Research Board Members

Robert S. Call, M.D., Chairman

George E. Broman, Jr., M.D., Vice Chairman [until May 15, 2014] This was his last meeting.

Cynda A. Johnson, M.D., M.B.A., Vice Chair [elected Vice Chair at May 15, 2015 meeting]

Kenji M. Cunnion, M.D., M.P.H.

L. Matthew Frank, M.D.

Cynthia Keppel, Ph.D.

Commonwealth Health Research Board Administrator

Anne C. Pace, M.P.A.

Commonwealth Health Research Board

101 N. 14th Street, 2nd Floor

Richmond, Virginia 23218-1971

804.371.7799