

Building Successful Infrastructures: Lessons Learned in Achieving and Measuring Success

BRIC Program Case Study Creighton Health Services Research Program

Kimberly A. Galt, Pharm.D., Ph.D.(c)

Professor of Pharmacy Practice

Associate Dean for Research

Director, Creighton Health Services Research Program (CHRP)

School of Pharmacy and Health Professions

Creighton
UNIVERSITY



BUILDING ON TRADITION. CHANGING LIVES.

Location: Omaha, Nebraska on a 120-acre campus adjacent to the downtown business district.

Affiliation: Jesuit Catholic University

Founded: 1878

Enrollment: 6,700 from the U.S. and other countries.

Distinctions: Ranked 1st U.S. News and World Report as a Masters level private university 11 years

Objectives of Our BRIC Grant

- Develop both faculty and infrastructure to achieve and maintain a long-term, sustainable health services research effort.
- Implement our **Institutional Research Infrastructure Development Plan** and a **nationally competitive and timely research project.**

Institutional Research Infrastructure Development Plan

- **Develop** the skills and abilities of faculty
- **Develop** the infrastructure and provide resources for CHRP research faculty
- **Develop** the processes that support forming and maintaining an interdisciplinary health services research team
- **Develop** the processes that support timely dissemination of products
- **Prepare** a nationally competitive application

Research Project Aims

- **Develop** a model to explain technology acceptance in primary care in the clinical decision support context
- **Describe** the use and acceptance of technology by Nebraska and South Dakota primary care physicians
- **Predict** the likelihood of voluntary implementation of technology and clinical decision support
- **Explore** how the findings may be used with MEPS data to predict the potential impact on prescribing safety
- **Translate the findings** back to practitioners for consideration in practice improvement decisions
- **Develop** an external research grant proposal (R01)

Faculty Research Scientist Development

- Skills
- Performance
- Focus
- Direction



CU In Kind Sources of Infrastructure and Development Support

- Health Futures Foundation – launch monies
- School of Pharmacy and Health Professions
 - CHRP Administrator – 10%
 - CHRP Administrative Assistant – 10%
 - Data Management/Analyst Position – 75%
 - In kind salary/time for 2 faculty (Galt, Paschal)
- School of Nursing
 - In kind salary/time for 1 faculty (Abbott)
 - Development expenses shared with CHRP

Strategic Development Plan

Phase I

- Creighton Health Services Research Program (CHRP)
- Health Futures Foundation Funding

Phase II

- Build Research Infrastructure Capacity (BRIC) Funding
- Development efforts:
 - CHRP Research Fellow Mentees
 - CHRP Leadership
 - Community Partnerships
 - University Relationships to build sustainable health services research

Phase III

- University contribution to sustain CHRP infrastructure
- BRIC 2 to expand and advance development

Phase IV

- To infinity and beyond!

Strategic Development Plan

	Phase I		Phase II			Phase III (now)	
	HFF	CU	HFF	CU	BRIC	CU BRIDGE	BRIC 2 ?
Shared Infrastructure Support	✓	✓	✓	✓	✓	✓	✓
Expanded Infrastructure						✓	✓
Shared Mentorship	✓	✓	✓	✓	✓	✓	✓
Expand Mentorship in University						✓	✓
Individual Expertise Skills	✓	✓	✓	✓	✓	✓	✓
Interprofessional Team Skills					✓	✓	✓
Project Development Skills	✓		✓	✓	✓	✓	✓
Project Implementation Skills	✓		✓	✓	✓	✓	✓
Project Dissemination Skills	✓		✓	✓	✓	✓	✓
Community/Partner Relationships	✓		✓	✓	✓	✓	✓
Submit a competitive research project for external funding					✓		
Submit several competitive research projects for external funding						✓	✓

Challenges

Within our university:

- Educate academic community to “know health services research” when they see it
- Create an institutional vision of health services research
- Establish “relationships without walls”
- Secure funding to support sustainability

Challenges

Among BRIC scientists:

- Develop clear concept for career trajectory
- Early need for team formation realized
- Additional time needed to form team work
- Engage in simultaneous training and ambitious research product
- Rapidly disseminate research as findings are generated in the research process
- Integration of emerging opportunities onto the project roadmap...revised deadlines
- Success breeds opportunities

Successes

Engagement and Dissemination

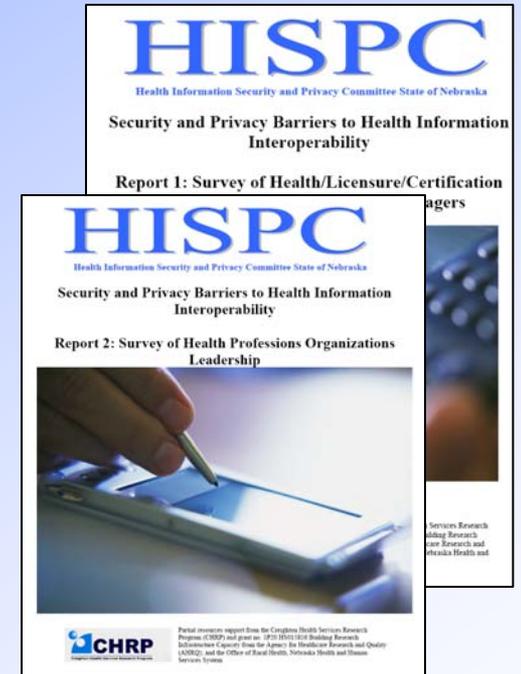
Scientific Leadership

Relationship Leadership

Translating Research to Service



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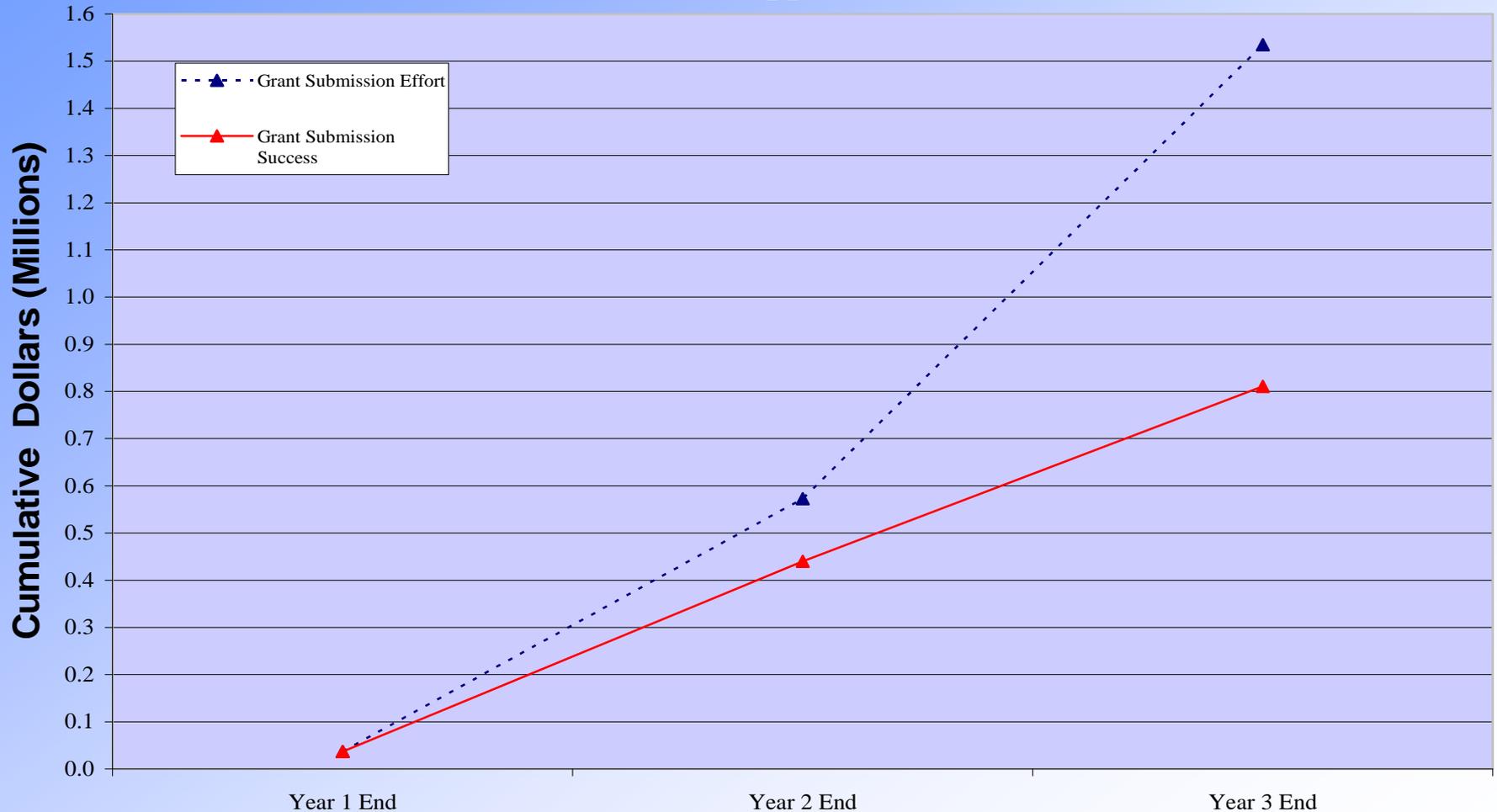
Status of HIT in Nebraska: Focus on Electronic Health Records in Physician Offices



Andjela Drincic, M.D.; Mark V. Siracuse, Pharm.D., Ph.D.;
Kimberly A. Galt, Pharm.D., Ph.D. (c); James D. Bramble, Ph.D.;
Karen A. Paschal, DPT, MS; Amy A. Abbott, Ph.D., RN;
Kevin T. Fuji, Pharm.D.; Ted A. Kasha, BS
June 5, 2008

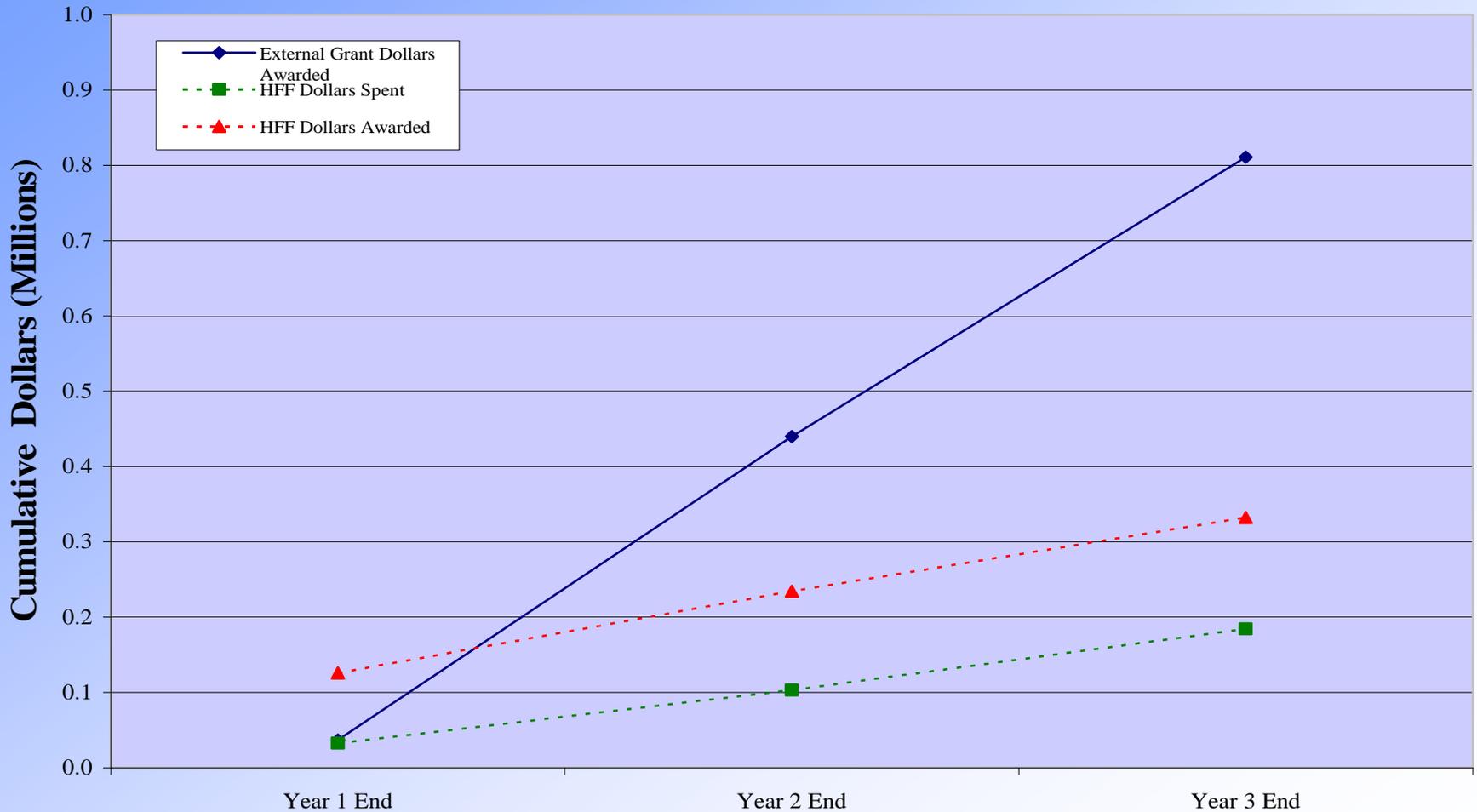
Successes

FINANCIAL PERFORMANCE Effort to Success: Cumulative Grant Application



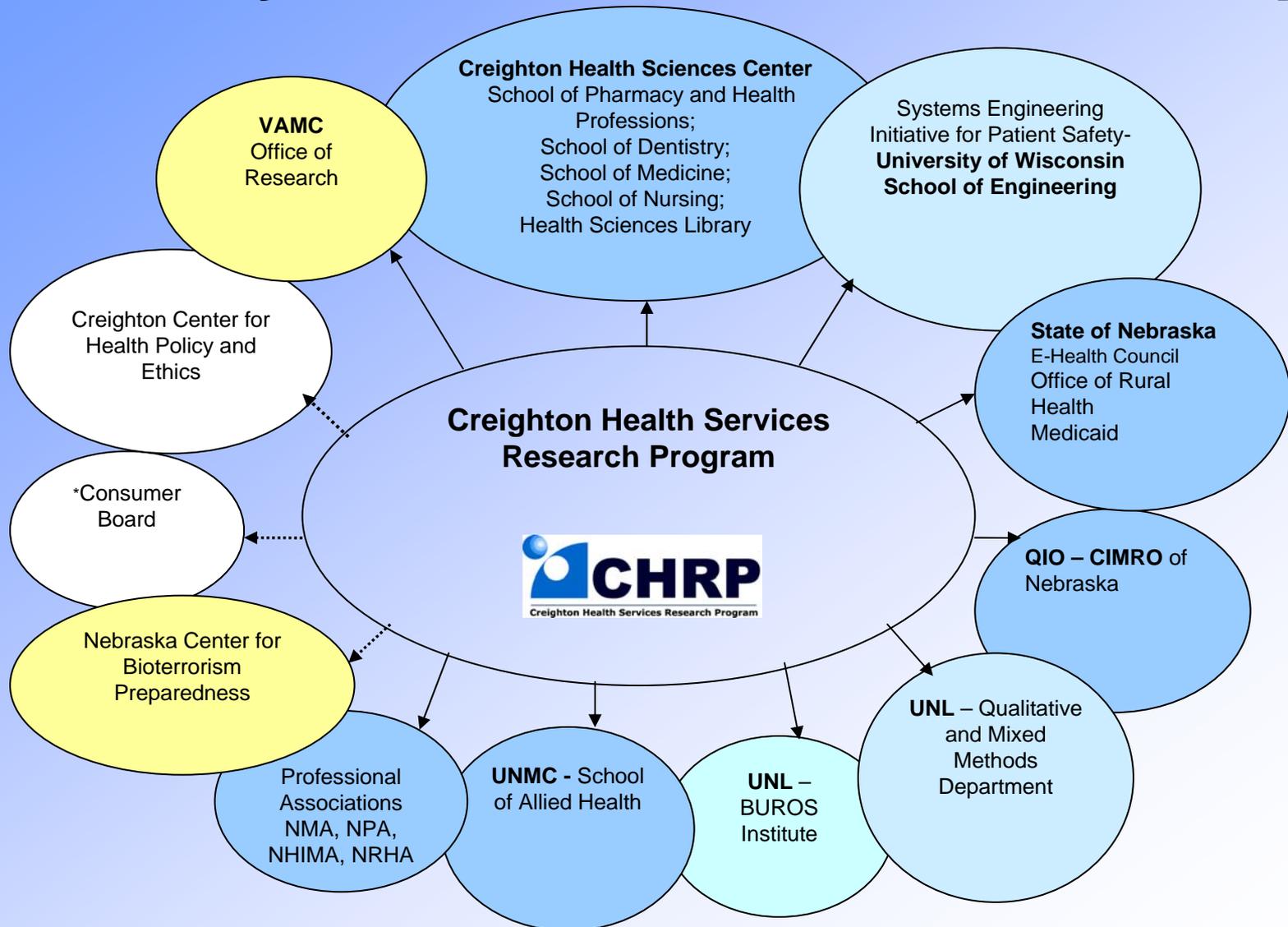
Successes

FINANCIAL PERFORMANCE Creighton Health Services Research Program (CHRP) 2004 through 2007: Cumulative



“Name Brand” Recognition

Community and Government Relationships



Growth and Accomplishments of Individuals

Health Services Researcher Team	Published abstracts/ manuscript	Federal Grant Reviews	Grants/ Contract Submits	Grants/ Contract Awards	Presentations	Appointments	Others
J.D. Bramble, Ph.D. Associate Professor	10 (2 not peer – reviewed)	AHRQ Special Emphasis Panel	5	3	18	NA	NA
Karen A. Paschal, PT, DPT, MS Associate Professor	9	NA	4	3	10	Co-Chair State e-Health HISPC committee	NA
Mark Siracuse, Pharm.D., Ph.D. Assistant Professor	19	AHRQ Special Emphasis Panel	6	3	26	State E-Rx Workgroup; Creighton University IRB	NA
Amy A. Abbott, Ph.D., RN Assistant Professor	3	NA	2	1	9	NA	Ph.D. May 2008
Kevin Fuji, Pharm.D. Instructor	2	NA	4	3	6	State PHR Workgroup	Post-grad Fellowship
Andjela Drincic, M.D. Assistant Professor	12	NA	4	2	9	NA	NA
Kimberly A. Galt, Pharm.D, Ph.D. (c) Professor	18	AHRQ Study section member	5	5	27	National: AHRQ Study section; several SEPs; NIH SEPs Co-Chair State E-health council; state e-Rx workgroup; state PHR workgroup; state HISPC committee	Ph.D. (c) in Research Methods – expected May 2009

Lessons Learned

- Relationships are key to sustainability and success
- Development and growth requires an organizational champion
- Scientist faculty must share the vision
- Funding for infrastructure support is key to success
- Two years of external funding is an underinvestment to secure sustainability - “too lean and mean”
- Our two years prior to receiving BRIC was an essential “head start”
- Our early successes were important to garner bridge funding (HFF) while we are hopeful for BRIC 2

How the grant has impacted research activities - In the short term

- Obtained external funding to augment the BRIC research project (Nebraska and South Dakota)
- Obtained external funding to extend the research beyond the original BRIC project; related research questions are being asked by state government and BRIC faculty are actively engaged in formulation and conduct of this research
- Driven faculty to rapidly engage with translation and dissemination opportunities directly related to the research
- Facilitated interdisciplinary team formation and productivity in health services research
- BRIC faculty have been sought to mentor other faculty who know of their advancing skills and abilities
- Employed additional infrastructure staff to support these additional efforts

How the grant has impacted research activities - In the long term

- A higher level of excellence in research is sustainable through the talents of the faculty
- Expectations within the university now include applying for federal funding in the health services research area
- A snowball effect is observed as the BRIC faculty are sought as research experts to teach and participate in other projects that faculty need expert mentoring in
- The university had little experience with AHRQ; the management of this grant resulted in the university research support staff becoming informed and experienced with the agency
- Health services translational research is now identified with Creighton University by various stakeholders in the state

Future Plans

Continue Research Scientist Advancement

- Identifying Research Streams for Individuals
- Identifying Research Platform for Research Team
- Support grant application development

Respond to Expanded Interest

- New faculty have requested support
- Expand our external partner engagement
- Engage scientists outside our university

Further Develop Sustainability Plan

- Extend vision across campus
- Include others not yet involved

Future Plans

Post Award Efforts to Establish Funded Support

Participant	External Funding Application Type	Agency or Source	1 st Target Date to Apply	2 nd Target Date to Apply
Bramble, J.D.	R03 or R01	AHRQ	October 16/5, 2008	February 16/5, 2009
Paschal, K.A.	K02	AHRQ	October 12, 2008	February 12, 2009
Siracuse, M.V.	K02	AHRQ	October 12, 2008	February 12, 2009
Drincic, A.	K08 (Galt Mentor)	AHRQ	October 12, 2008	February 12, 2009
Galt, K.A.	State Grants/BRIC 2	AHRQ	Fall 2008/Spring 2009	Various dates BRIC 2?
Fuji, K.T.	K08 (Galt Mentor)	AHRQ	June 12, 2008	October 12, 2008

How do we sustain what
we have developed?

Our rapid success ...facilitated by federal funding...and now interrupted... forces us to ask... where will we land?



Contact Information

- Kimberly A. Galt, Pharm.D., Ph.D.(c)
 - Professor of Pharmacy Practice
 - Associate Dean for Research
 - Director, Creighton Health Services Research Program (CHRP)
 - School of Pharmacy and Health Professions
 - Creighton University
 - 2500 California Plaza - Boyne 143C
 - Omaha, NE 68178
 - kgalt@creighton.edu
 - 402-280-4259
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- Go to <http://chrp.creighton.edu> to view CHRP activities and opportunities.