Logic Model for the Hawaii RCMI Infrastructure for Clinical and Translational Research (Rev. 11/15/11)

Overarching Evaluation Questions	Methods and Metrics	Outcomes
1.How is RMATRIX stimulating or generating translational research?	•Publications, presentations, patents, & grant proposals emerging investigators (pilot & junior) & RMATRIX researchers (KF members, mentors, HEALTH leaders in translational research)	Increase in translational research (from T0 to T4) over time
2. To what extent are potential and current investigators' needs being met by RMATRIX? How are new investigators navigating their way through the RMATRIX network?	•Satisfaction with services via interviews and surveys with emerging investigators & RMATRIX researchers	Improvement over time in the awareness, knowledge, usage, & satisfaction of RMATRIX services
3.What new products, resources, knowledge, etc., has RMATRIX generated?	•Publications, presentations, grant proposals, & patents submitted & awarded by emerging investigators & key RMATRIX researchers	Increase in the number of publications, presentations, grant proposals & patents each year.
4.How and to what extent has RMATRIX contributed to collaborations among researchers, institutions, and communities?	•Changes in collaborations with pre-/post- interviews with emerging investigators; review the number of co-authorships on grant proposals, publications, & presentations •Assess frequency of collaborations among Key Functions using Social Network Analysis •Assess collaborations among agencies, hospitals, community centers, & other institutions with pre- & post-test interview data from the Collaborations & Partnerships Key Function director	Increases in collaborations among researchers, Key Function areas, & institutions
5. To what extent have health disparities in the community decreased because of RMATRIX?	•Pre- & post- interviews with emerging investigators to ascertain how their research has improved the health of targeted minorities in the community •Track the number of studies by emerging & RMATRIX investigators focusing on targeted minorities over time	Increase in the number of studies focusing on targeted minority populations (Native Hawaiians & Pacific Islanders

Specific Aims (related overarching questions in parenthesis)

Approach and Governance (1,2,4) •Establish RMATRIX as lead C&T research infrastructure entity •Engage C&T research development for researchers •through MRET & CDP •Establish key functions supporting & promoting multidisciplinary C&T research	•Establishment of RMATRIX; establishment of key function areas •Project records on all advisory groups & consortia; number & types of collaborative arrangements •Establishment of an investigator database	Infrastructure to support clinical and translational research in Hawaii
Collaborations and Partnerships (1,2,4,5) •Develop collaborations & partnerships with university & community-based investigators and organizations with focus on reducing health disparities	•Increase in number of collaborative HEALTH projects •Description of community members involved; assistance provided •List of new researchers identified & developed with ORCHiD assistance •Establishment & promulgation of community criteria for RMATRIX	Increase in local & university, community & regional partnerships
Community-Engaged Research (1,3,4,5) •Establish ORCHiD and administrative structure •Develop the infrastructure for implementing & disseminating a teaching program for academic researchers to learn about community-engaged research in Hawai'i	•Documentation that ORCHid activities, resources & products have been established • Strategies to facilitate participation developed •Community engagement criteria established, distributed & applied •Documentation that linked investigator database has been created •Criteria for CER established, distributed, applied	Greater involvement of community researchers in translational studies; increased involvement of academic researchers in CER
Multidisciplinary Research Education, Training and Career Development (2,3,4) •Expand on existing masters and degree curricula •Establish Community Based Research Training Advisory Program •Provide career development activities •Enhance collaboration with RTRN	•Documentation of ethics and biomed. Informatics integrated into the curricula •Number & types of courses and workshops provided; enrollment figures •Number and types of mentors ; development of mentorship program, including mentor training •Number and types of career development activities •Electronic surveys to measure program access & satisfaction •Number and types of learning opportunities for community-based researchers •Records of RTRN participation	Increase in graduates, investigators, and community researchers with translational expertise
Biomedical Informatics (1,2,3,4) •Provide bioinformatics resources, tools and services •Create a collaborative informatics environment that promotes translational & health disparities research and enables the networking of biomedical scientists •Promote opportunities for investigators to enhance their knowledge and use of biomedical informatics; explore the roles of biomedical informatics on research	•Number of Hawaii and non-Hawaii-based collaborations facilitated by BMI •Website with bioinformatics tools, services, data mgmt, transfer & storage capabilities; hit rate •Number of partners mentored/ consulted on database, methods, & design •Number of workshops/trainings supported; development of biomedical informatics course •Number of grant proposals submitted; number of papers, posters, and abstracts submitted	Sustainable biomedical informatics infrastructure providing tools and services for translational research to reduce health disparities
Research Design and Biostatistics (1,2,3,4) •Form a consortium of local programs, community partners, and national partners (e.g. RTRN, DTCC) •Provide a centralized point of access to research design & biostatistics tools and services •Ensure long-term sustainability of research capabilities by offering degree programs for investigators & introductory-level training for staff & community members	•Documentation of extent that core unit is developed, enhanced and utilized •Baseline comparison & change in # of users, new queries, and/or users, tools/resource availability •Documentation of tools and services offered •Analysis of tools/service utilization and collaboration among partners •Number of workshops & educational activities offered per year •Number of students enrolled in courses and training	Coordinated and integrated biostatistics resources & capabilities to enhance collaborative, translational research
Participant&Clinical Resources(PCRs) (1,2,4,5) •Restructure & transform existing CRC and CCRE to provide PCRs to support innovative research focused on HEALTH initiatives •Facilitate participation in outpatient C&T research, especially by Hawaii's underrepresented minorities	•PCR structure & operating processes governing the function of the 3 sites is communicated to RMATRIX leadership, KF leaders, UH, & the community; structure & operating processes posted on RMATRIX website •SOPS in place for initial study review, PCR/study, PI function & responsibilities, & periodic monitoring •Kakaako clinic renovations completed/Mobile van equipped & functional •Increases in number of: PCR studies; pilot studies; studies in designated HEALTH initiatives; junior investigators supported;1st time PIs; grants submitted & awarded with intent to use PCR support; abstracts & publications crediting PCR; participants in PCR studies, especially Native Hawaiian & Pacific Islanders; •User Satisfaction survey completed	Centralized infrastructure providing participant and clinical resources for translational research; Greater participation of minority populations in research, in particular, Native Hawaiians and Other Pacific Islanders
Regulatory Knowledge and Support (2) •Centralize existing regulatory support services to serve RMATRIX investigators & interdisciplinary teams	•Documentation of progress has been made towards developing a website & centralizing services •Documentation of user satisfaction with centralized services •Reduced time to obtain compliance approvals •Number of trained research personnel working with RMATRIX investigators	Reduction of regulatory barriers to translational studies; expedited research processes in translational studies
Ethics (2,4) •Establish a research ethics panel to assist in addressing ethical issues •Provide expert consultation & offer training	•Formation of ethics panel with relevant expertise •Documentation of services; user satisfaction with services •Number and type of training and consultation provided; number of participants •Written procedures for identifying and addressing ethical issues in research	Integrated and expanded training and consultation in clinical research ethics
Evaluation •Build a multidisciplinary evaluation team •Conduct formative evaluation & communicate findings to leadership for program improvement •Develop web-based data collection & tracking systems •Conduct summative evaluations	•Document review; observations •Review & document reports to leadership •Examine electronic data collection & tracking mechanisms •Examine survey & interview results; periodic & annual reports	Systematic, timely, and comprehensive assessment of RMATRIX; evaluation findings useful for program improvement

Impact

Effective, sustainable clinical and translational center in Hawai'i with significant community participation addressing health disparities among minority populations