

UCRF Optimizing NC Cancer Outcomes Initiative Health E-NC Pilot Research Project Proposal Opportunity

2011 REQUEST FOR APPLICATIONS

General Announcement/Description of Funding Opportunity

The Lineberger Comprehensive Cancer Center, with support from UCRF funds, is sponsoring a second round of pilot research to support the *Optimizing NC Cancer Outcomes Initiative*, one of three critical components of the overall University Cancer Research Fund (UCRF) Strategic Plan (http://ucrf.unc.edu/strategic_plan.asp). HEALTH-E-NC (H-E-NC) is a part of this initiative and aims to build a state-of-the-art system to deliver and test interventions to improve cancer outcomes for North Carolina residents. Our goals are to target cancer risk factors (tobacco use, dietary behavior, physical activity, obesity), cancer screening and referrals (e.g., breast, colorectal), decision support (colorectal and prostate screening), and uptake and maintenance of tested prevention and treatment interventions, such as adherence to maintenance therapy after initial cancer treatment. Through this pilot grant program, we aim to support novel research proposals that focus on these goals in North Carolina counties with the greatest cancer burden.

Priority for funding in this current round will be for proposed interventions that help optimize cancer outcomes using interactive technology-based interventions, especially those that include community academic partnerships.

Scientific Priority

Interactive Technology-based Interventions: A primary focus of H-E-NC is to harness the power of health information and other communication technologies to prevent cancer altogether; reduce risk of cancer; increase access to cancer screening, prevention and treatment services; and/or to improve quality of life for those living with cancer. To do so, an array of proven intervention delivery approaches including, but not limited to, message tailoring, social marketing, peer counseling/coaching, health provider interventions, and community participatory strategies can be employed via a technology-based medium. Interventions can be delivered through multiple channels including print, small media (e.g., direct mail and local radio), the World Wide Web, social networks, mobile devices (e.g., mobile phones, personal digital assistants), peer support, health professionals, and health systems. Since not all individuals and groups in North Carolina have access to all types of technology, researchers should discuss the limitations of their proposed intervention for this population and for impacting the cancer outcome(s) addressed by the intervention.

Research on intervention development, implementation, evaluation, or dissemination is responsive to this call for proposals. Funds for this initiative are directed to interventions that address any of the following:

- Cancer risk factors (tobacco use, dietary behavior, physical activity, obesity)
- Organizational systems/settings (e.g., communities, worksites, healthcare systems, schools, churches, libraries, etc.)
- Health care providers and practices

Community-Academic Partnerships: H-E-NC funded studies will support work in settings such as rural communities, physician office practices, local governments and homes, workplaces, and other settings. Community-academic partnerships are key to our mission of designing solutions that optimize cancer outcomes and increase opportunities for program sustainability. Community-academic partnerships may include community organizations (e.g., non-profit, health advocacy, or faith-based organizations, local and state health departments, practice-based research networks, health care organizations), clinicians, and investigators as equal partners in the research endeavor.

Priority Areas of Emphasis

Proposals should focus on priority cancers (lung, colorectal, and breast) and target counties with high cancer burden using an inter-disciplinary, team science approach.

Priority Cancers: With respect to cancer mortality, incidence, and stage at diagnosis, cancers contributing most to the cancer burden in NC are lung, colorectal, and breast. This RFA will give preference to applications that address these cancers. Investigators who intend to address other cancers will need to provide a strong rationale for why this cancer should be addressed. Tables 1 & 2 provide data on cancers that present the highest incidence and mortality for North Carolina residents (see Appendices). For additional guidance, applicants may refer to a recent publication by Carpenter and colleagues (2008)¹ that examined the cancer burden in North Carolina and identified priorities for intervention.

Counties of Emphasis: The proposed pilot projects are expected to take place on a statewide basis OR in key counties with pre-identified high rates of cancer incidence and/or mortality (exceptions may be made as long as there is a strong rationale). Counties of emphasis disproportionately contribute to cancer incidence, mortality, or screening deficits in North Carolina. By creating collaborative research partnerships with existing community and medical practice partnerships/networks in these counties, we will make deliberate, positive strides to close the gaps, improve outcomes and reduce cancer disparities. Tables 3-5 (see Appendices) provide a list of top 10 North Carolina counties with the highest burden for the priority cancers identified above.

Team Science Approach: Pilot projects should employ an inter-disciplinary, team science approach where UNC investigators from different disciplines collaborate on research proposals that focus on key priority areas, located in North Carolina counties that have the greatest cancer burden.

Eligibility

Faculty at all levels and appointments are eligible to apply as Principal Investigators. There is no salary support for UNC tenure track faculty on these proposals. Research track and adjunct faculty

¹ Carpenter et al., (2008). Towards a More Comprehensive Understanding of Cancer Burden in North Carolina: Priorities for Intervention. *N C Med J*, 69(4): 257-282.

may receive salary support at no more than 10% effort. For proposals that include community-academic partnerships, the Principal Investigator must have a primary appointment at UNC-CH.

Evaluation Criteria

Each proposal will be rated against NIH-established criteria (significance, innovation, approach), as well as potential for impact in NC and future funding, and the extent to which the project exemplifies inter-disciplinary, team science (see specific program guidelines).

Letters of Intent

We request that all applicants submit a Letter of Intent by **5 p.m., Friday March 18, 2011 that lists the Principal Investigator, Key Personnel, draft title, and focal counties.** The information in the Letters of Intent will enable H-E-NC staff to identify the expertise needed for the external review panels. H-E-NC encourages all interested applicants to submit a Letter of Intent, even if they think that they might later decide not to submit an application. The letter of intent is not binding and does not enter into the review of a subsequent application.

SPECIFIC PROGRAM GUIDELINES

Fast Facts:

Eligible Individuals/Teams: UNC-CH faculty at all levels and appointments.

Topics: Must focus on work in counties of emphasis or focus on statewide approaches (e.g., statewide tobacco control or obesity-related policies); address one or more identified priority cancer (lung, colorectal, breast); employ the use of a technology-based medium [such as print, small media (e.g., direct mail and local radio), the World Wide Web, social networks, mobile devices (e.g., mobile phones, personal digital assistants)]; and/or have a community-academic partnership focus.

Grant Award: \$20,000 - \$100,000

Grant Period: 12 months

Number of Awards: Depends on amount requested; total available is \$500,000

Allowable Expenses: See Budget and Appendices

Pre-Applicant Workshop: Monday, February 14, 2011

Register for this free event at: <http://ucrf.unc.edu/awards/healthenc/workshop.asp>

Letter of Intent Due: Friday, March 18, 2011

Proposal Due Date: Friday, April 8, 2011 (5 p.m., EST)

Anticipated Start Date: July 1, 2011

Proposal Guidelines:

Format: 0.6 margins on all sides, 11pt Arial only

Abstract: An abstract of no more than 250 words is required.

Length: No more than 5 pages (plus abstract, references, biosketches, and budget and justification) with general guidelines and *estimated* page limits according to the description below.

Proposal Outline, Expected Length and Criteria for Rating:

Aims: ½-1 page

What specific research questions will this study accomplish and how will each aim be evaluated?

Significance: ½-1 page

Do project aims address an important problem or critical barrier to progress in the field? If the aims of the project are achieved, what improvements in scientific knowledge, technical capability and/or clinical practice are expected? How will successful completion of the aims change the concepts, methods, technologies, treatments, services or interventions that drive the field addressed by the proposal? How broad a reach will be achieved by accomplishing these aims?

Description of Team: ½ page

Provide 1-2 sentences on each team member and the contribution he/she will make to the proposed work. Clarify how this team is multi-disciplinary and the extent to which this is a new team reflecting new collaborations. Include NIH biosketches of key personnel.

Innovation: ½ page

Does the application seek to challenge and/or shift current research or practice paradigms by utilizing novel theoretical concepts, approaches or methods, instruments or interventions? Are the concepts, approaches or methods, instruments or interventions novel to one field of research or novel in a broad sense? Is a refinement, improvement or new application of theoretical concepts, approaches or methods, instruments or interventions proposed?

Approach: 1-2 pages

Are the overall strategy, methods, and analyses well-reasoned and appropriate for accomplishing each of the specific aims proposed? Are potential problems, alternate strategies, and benchmarks for success presented? Is the team using state-of-the-science methods and approaches?

Potential for Impact in NC: ½ page

The UCRF is expected to fund “breakthrough innovation and excellence in cancer research”. To what extent will NC residents and/or communities benefit if these aims are achieved? Benefits may be expressed in terms of statewide, regional or local/county or city impact. If interventions are successful they should have an impact in reducing the cancer burden in North Carolina.

Potential for Future Funding: ½ page

UCRF funding is expected to be a catalyst to obtain funding from other external sources. How likely is it that if the aims are achieved for this proposal, it will be successfully positioned to obtain future funding?

Appendices:

The references, NIH budget sheet(s), NIH-format biosketches, and letters of external community support (if relevant) should be included in the Appendices. No other materials should be included in the appendices – they will not be reviewed.

Relevant Information for Appendices:

1. No funds will be allowed to support PIs and/or faculty member co-investigators with tenure track positions. Research track and adjunct faculty may receive salary support at no more than 10% effort. Post doc, student, and consultant costs are allowed.
2. Use the first-year budget form from the NIH 398 application to present the one-year budget. The accompanying justification should be sufficiently detailed for reviewers to assess whether the proper resources have been requested. Inadequate justification may result in a less favorable score and/or lower funding.
3. Applications must include NIH biosketches for all key collaborators.
4. If the proposed research makes use of a Cancer Center core resource, such as the Tissue Procurement Facility, the applicant should include a letter, note, or email from the core director. The indication/note need not be long or involved, but it must make clear that the core is willing to work with the investigator on the proposed project.
5. If the investigator has received other grant support for the proposed research or similar research in the past, please include relevant funding information.
6. If the proposed research involves a partnership with a community-based partner, the applicant is strongly encouraged to include a letter of support that describes the nature of the collaboration and the commitment of the partner to the proposed research.
7. Research involving animals or human subjects must be reviewed in accordance with the University's general assurances and HIPAA. Projects involving human subjects must be submitted to an Institutional Review Board (IRB). Intervention studies and clinical protocols must be reviewed and approved by the Protocol Review Committee (PRC). Prior to receiving any funds, projects must have appropriate approvals from the IRB and PRC. Appropriate animal forms must also be filed and approved. All investigators and all persons named on the budget page must have certification of training in the protection of human subjects.
7. A one-page mid-point project progress report will be due by January 15, 2012 and a final report due July 31, 2012.

Other Expected Outcomes:

We expect to achieve the following outcomes as a result of this process:

- Create larger numbers and new types of inter-disciplinary teams of UNC investigators working on priority UCRF topic areas, in priority locations and/or across the state of North Carolina using team science approaches.

- Increase the number and quality of external grants submitted and funded in cancer prevention and control.
- Increase future grant funding that significantly exceeds the 4:1 ratio as outlined in the UCRF Strategic Plan. In other words, the pilot funding of \$500,000 would be leveraged to more than \$2,000,000 in funding.

Proposal Submission:

If you have questions about the proposal application process, contact Ms. Barbara Alvarez Martin, H-E-NC Project Director at bamartin@unc.edu or 919-843-3555.

Send letters of intent and completed proposal application **IN PDF FORMAT** to:

Ms. Demetria Brooks
H-E-NC Administrative Assistant
demetria_brooks@med.unc.edu
University of North Carolina at Chapel Hill
1700 Airport Road, CB#7294
Chapel Hill, NC 27599
Phone 919-843-9612
Fax 919-966-7827

Receipt of all applications will be acknowledged via email.

Additional Information and Resources for Potential Investigators

Our previous RFA mechanism was done through a Work Group format focused on the four key priority areas. While this method was successful in the creation of innovative ideas and multidisciplinary work teams, it presented some challenges and time constraints for applicants. We have decided to discontinue this approach. Instead, we are directing potential applicants to make use of the UNC Lineberger and NC TraCS core facilities and services listed below, as needed, for their applications.

There are significant changes in this funding opportunity compared to the previous funding cycle. We encourage prospective applicants to attend the Health-E-N-C **pre-applicant workshop on Monday, February 14, 2011** to learn more about the shifts in focus and priority for this grant announcement. Register for this free event at:
<http://ucrf.unc.edu/awards/healthenc/workshop.asp>

Opportunities for additional technical assistance will be announced shortly.

Appendices

UNC Resources:

- **UNC Dissemination Core**
- **NC SPEED**
- **Integrated Cancer Information and Surveillance System (ICISS)**
- **CHAI Core**

Data Tables:

- **Table 1: NC Cancer Cases, 2002-2006**
- **Table 2: NC Cancer Deaths, 2002-2006**
- **Table 3: NC Lung & Bronchus Cancer Cases by Top Ten Counties, 2002-2006**
- **Table 4: NC Colon & Rectum Cancer Cases by Top Ten Counties, 2002-2006**
- **Table 5: NC Female Breast Cancer Cases by Top Ten Counties, 2002-2006**

UNC Dissemination Core

The **UNC Dissemination Core** aims to improve the quality of dissemination research and to identify and apply the most effective strategies to increase adoption and implementation of evidence-based innovations. By building the field of dissemination research and enhancing dissemination infrastructure, the Dissemination Core aims to eliminate roadblocks to research translation and increase our understanding and ability to propel effective interventions into practice. The Dissemination Core is supported by UNC Lineberger and the North Carolina Clinical and Translational Sciences Institute (NC TraCS), the academic home of the NIH Clinical and Translational Science Awards at the University of North Carolina-Chapel Hill.

Strategies and Services

Our primary strategy for closing the gap between research and practice is working to establish collaborative research relationships across North Carolina that span research, practice and policy settings. We work with **researchers and research teams** and **community partners** to develop a shared agenda for dissemination and implementation research.

Working with Researchers and Research Teams: The **Dissemination Core** helps **researchers and research teams** design, implement and evaluate dissemination strategies for their evidence-based interventions and understand how best to engage community partners in research. **University researchers with expertise in dissemination and implementation science are available to provide consultation and technical assistance** for *researchers and research teams* as they:

- **Plan and implement research proposals** on a range of topics and methods including approaches and methods for conducting [audience research](#), [assessing organizational readiness for change](#), [designing logic models](#), [identifying designs and instruments for dissemination research](#) and [measuring dissemination impact](#).
- **Adapt evidence-based approaches for use in various settings**

Working with Community Partners: The **Dissemination Core** provides services to **people in organizations, communities, and industries** that are dedicated to disease prevention and health promotion. In concert with UNC researchers and core faculty, we work with program planners, public health and medical practitioners, and evaluation teams to help them learn about **evidence-based approaches and to select, adapt, implement and evaluate the best evidence-based strategy for achieving target outcomes**. We also provide services to **healthcare and community-based organizations to help them analyze programs and plan and implement evidence-based solutions** using a variety of approaches including [quality improvement techniques](#), [training in evidence-based approaches and methods](#), and [data-driven program development, implementation and evaluation](#).

Building Collaborative Research Relationships Across North Carolina: The NC Statewide Push for Excellence Engagement and Delivery (NC SPEED), a Dissemination Core service, is designed to reach across North Carolina to facilitate research processes in local communities and to quickly move research findings into practice. **NC SPEED** services focus on facilitating research partnerships to help us, as a state, achieve **excellence in healthcare, engagement** of UNC researchers with community members and **delivery** of evidence-based approaches to improve individual and community health. Please see the attached NC SPEED Fact Sheet for a full description of services.

Using Dissemination Core Services

Pre-application and consultation services during the proposal development phase (e.g., dissemination methods, research design, evidence-based approaches, etc.) are provided free of charge. A budget, outlining the costs of services to be provided should the grant be funded, will be developed in this pre-application phase. Project complexity and staffing requirements will determine the extent of the budget required for services.

Questions about Dissemination Core Services, including faculty consultation:

Cathy L. Melvin, PhD, MPH. Director, Dissemination Core (cathy_melvin@unc.edu; 919-966-8072)

Questions about NC SPEED Services:

Catherine Rohweder, DrPH (rohwerder@email.unc.edu; 919-966-6879)

Please visit our websites for additional information: www.evidenceintoaction.org and www.ncspeed.org.

NC SPEED: Statewide Push for Excellence, Engagement and Delivery

WHAT IS NC SPEED?

NC SPEED is designed to work across North Carolina to quickly move research findings into practice. We build research partnerships to help our state achieve excellence in health care, engagement of University of North Carolina (UNC) researchers with community members, and delivery of evidence-based approaches to improve individual and community health. We strive to assure that every region of North Carolina participates in and benefits from designing and conducting research to improve local health and health care.

NC SPEED is part of the Dissemination Core serving UNC Lineberger Comprehensive Cancer Center and the North Carolina Clinical and Translational Sciences (NC TraCS) Institute at The University of North Carolina at Chapel Hill. NC TraCS is the academic home of the National Institutes of Health Clinical and Translational Science Awards (CTSA). NC SPEED is coordinated by faculty and staff in Chapel Hill who are based at UNC Lineberger. Regional research associates are located in Asheville and Wilmington. Funding comes from the University Cancer Research Fund (UCRF) and NC TraCS.

WHAT ARE NC SPEED SERVICES?

NC SPEED provides services to both researchers and communities. Our services help researchers link with communities, understand community issues, interact with local systems such as Institutional Review Boards, and manage and use local data. For specific research proposals or projects, we can assist with formulating study aims and designs, conducting data collection and analysis, and writing up findings from collaborative research and evaluation projects.

Our services help communities implement evidence-based approaches to address pressing local health and health care needs, locate funding sources, develop grant proposals, and link local providers and organizations to UNC investigators who want to conduct applied research on topics of mutual interest.

NC SPEED PROJECTS

- In Pitt County, we are evaluating the effectiveness of a patient navigator service on adherence to cancer treatment.
- In Cumberland, Harnett, Richmond, and Robeson counties, we are implementing and evaluating a social marketing campaign to increase uptake of the HPV vaccine.
- In Wake, Cumberland, and Wayne counties, we are providing technical assistance to organizations delivering wellness programs to their low-income residents.
- In Harnett County, we are working with a community health center to tailor an existing colorectal cancer screening toolkit for all community health center providers in North Carolina.

NC SPEED PARTNERS

NC SPEED staff work with the Carolina Well survivorship program, NC TraCS' Community Engagement Core, the North Carolina Comprehensive Cancer Program, and the American Cancer Society.

HOW DO YOU CONTACT NC SPEED?

We welcome requests from:

- Researchers from local colleges and universities
- Representatives from community-based health and human service organizations
- Local healthcare professionals including clinicians and staff in hospitals, clinics, or private practice
- UNC investigators who are seeking community partners to collaborate in their research

Prospective applicants are expected to consult with our staff to determine scope of the work to be completed. Pre-application and consultation services during the proposal development phase (e.g., input on research design, information for IRB submission or grant, etc.) are provided free of charge. A budget, outlining the costs of services to be provided should the grant be funded, will be developed in this pre-application phase. Project complexity and staff hours required will determine the extent of the budget required for services.

Go to www.ncspeed.org. You can also call or email us directly:

Western North Carolina: Asheville

Jane Laping, MS, MPH

Research Associate

laping@email.unc.edu

828-277-7342

Southeastern North Carolina: Wilmington

Sandy Diehl, MPH

Research Associate

diehl@email.unc.edu

910-763-3372

Central North Carolina: Chapel Hill

Catherine Rohweder, DrPH

NC SPEED Director

rohwerder@email.unc.edu

919-966-6879

Integrated Cancer Information and Surveillance System (ICISS)

Who we are

Integrated Cancer Information and Surveillance System (ICISS), provides the informatics foundation for optimizing cancer outcomes in North Carolina and beyond. The goal of ICISS is to provide a prospective data linkage between metrics of cancer incidence, mortality, and burden in North Carolina. ICISS will also acquire, integrate, and manage multilevel data sources that describe health care, social, behavioral, economic, and environmental patterns.

By linking and accessing multiple population, clinical, and other data sources over time, ICISS will prospectively create valid, and replicable measures of outcomes of cancer control activities, especially among vulnerable subgroups and communities that have been traditionally under-represented. Further, ICISS will inform research that seeks to identify factors that influence the occurrence of cancer in North Carolina.

For example, we have linked North Carolina Central Cancer Registry data to Medicare claims to assess patterns of care and outcomes. We have also linked additional data sources to characterize physicians and institutions providing care and the environment in which the individuals receive their care. The linked administrative claims data resources (Medicare, Medicaid, and others) are growing, and are anticipated to soon comprise approximately 80% of the North Carolina population with cancer, and approximately 55% of the overall North Carolina population (i.e., cancer and non-cancer).

Our services

The ICISS system includes not only a rich, evolving data system, but a growing staff of programmers, analysts, epidemiologists, and investigators who specialize in the use and interpretation of these data. Many elements of the ICISS system will be available through a web based platform intended for investigators, researchers, programmers and other project stakeholders. The system will facilitate the tracking of complex research networks represented by its' people, collaborators, their decisions, the data used and relevant timelines. Accumulation of knowledge will build a large resource that can be accessed through context specific search mechanisms. The ICISS integrated architecture will enable it to organize and structure multiple research resources, including for example data dictionaries, by characterizing individual fields through the use of clinical coding and standard nomenclatures such as CPT, ICD-9-CM, HCPCS, NDC, LOINC, and SnomedCT.

Currently, ICISS can help facilitate access to a number of publically available and limited-use datasets. These data currently include:

- NC BRFSS data (2000-2009)
- Area Resource File (ARF) (1985-2009)
- Hospital file (OSCAR) (2000-2010)
- NC Medical Licensure File (1979-2009)
- NCI Clinical trials accrual data (1995-2008)
- Robert Wood Johnson County Health Rankings (years vary depending on indicator)

In early 2012, we are anticipating being able to provide some information on types of procedures and treatments from the insurance claims files (CMS, BCBS, SEHP) – but only at aggregated levels (e.g., county, FIPS-code, etc.).

ICISS can also provide access to our professional programmers and study coordinators, including PhD, and Masters-trained analysts, epidemiologists, and research associates. We maintain a full complement of sophisticated software applications for statistical analysis, project management, mapping, web publishing, graphics production, and data management that are conducted in both centralized and microcomputing environments and have available the microcomputer versions of SAS, SPSS, and Stata. Multiple data linking programs and epidemiologic and econometric software programs are also used. Data are stored and accessed in a dedicated, secure computing environment controlled by the implemented ICISS-specific HIPAA compliant procedures.

Our process

If you are interested in using ICISS data for research purposes, please contact the ICISS staff to discuss whether the data are amenable to your research question, data use agreement issues, and cost for access or computing support. We will assist with proposal development as it pertains to the use of ICISS as well as IRB documents. If you agree to use ICISS, we will review your proposal with our governance committee and seek their approval before final data access, processing, or analysis is granted.

Pre-application and consultation services during the proposal development phase (e.g., input on research design, information for IRB submission or grant, etc.) are provided free of charge. A budget, outlining the costs of services to be provided should the grant be funded, will be developed in this pre-application phase. Project complexity and staff hours required will determine the extent of the budget required for services.

Our contact information

Questions about developing study questions or proposals using ICISS data:
Anne Marie Meyer, PhD (meyera@email.unc.edu; 919-972-7468)

Questions about the logistics of using ICISS data, specifically data use agreements and IRB:
Lisa DiMartino, MPH (dimartin@med.unc.edu; 919-972-7470)

Questions about ICISS staff or system support for data or analytic requests:
Tara Smith Strigo, MPH (tara_strigo@unc.edu; 919-966-0032)

CHAI Core (CHAI = Communication for Health Applications and Interventions)

The CHAI Core provides service to research projects that are developing interventions aimed at promoting health and disease prevention. We provide expertise in the areas of web development, survey design, database development, graphic design, gaming, and the facilitation of focus groups and usability testing. The CHAI Core has established teams within the Core that provide customized and responsive services aimed at strengthening the impact of our clients' research studies. As we work with clients, we follow an iterative process in which our staff repeatedly ensures that we are interpreting clients' goals and timeline correctly. We have learned over the years that obtaining client input and feedback is especially important early in the process, when the design or web structure we provide can offer the researcher insight into areas that still need to be addressed, as well as the opportunity to change direction, to expand concepts, and to refine interventions. Throughout the process, our staff works with the research staff to expand their knowledge, as needed, of formative research and interventions that may be new to them in terms of implementation (e.g., qualitative interviewing, tailoring).

A CHAI point person is established at the initiation of a study, thereby making communication easier for the client and helping both study staff and CHAI staff to move forward on the steps needed to meet deadlines. The point person plays an important role as a liaison between the client and the programmers. This allows the programmers to work with fewer interruptions and provides the client with feedback as to where the project stands. We encourage clients to build into their budgets usability testing at various points in the study design. For non-web-based studies, this is built in for review of print material, including surveys, for ease of use, organization, and comprehension. For web-based studies, we encourage usability testing at various logical points in the production, depending on its complexity.

The following are our current basic services:

- **Grant submissions:** Depending on the researcher, CHAI staff may provide minimal input around budget costs, or may provide more consultation around formative research, survey design, interventions, and web possibilities. CHAI creates a budget outlining the services that will be provided if the grant is funded, and the cost of the services.
- **Graphic Design:** CHAI provides graphic design services for print and web-based projects meeting with the client regularly to produce a range of designs from which the client chooses to best capture the interface between the design and the study topic/goals. For web projects, the graphic designer works closely with the programmer developing the site to be certain that the design chosen will be one that 'fits' the page well.
- **Formative/qualitative research:** Depending on the scope of the project, one to two staff members meet with clients to assist in formative steps, such as the development of the focus group protocol, the focus group moderator guide, and training of the moderator, and/or qualitative interview guides and protocols. CHAI also assists with focus group and qualitative analysis as needed.

- **Programming:** An initial meeting is held to determine programming needs and to develop a sense of the overall architecture of the site and its complexity. The study scope and tentative deadline are entered into the CHAI ticketing system. Follow-up meetings lead to a fully-detailed architectural design of the site and include discussions of graphics. When the design and architecture are finalized, the job moves to the assigned programmer. Assignment is based on whether the site will be in Windows or Linux, as well as on overall work load per programmer. The point person maintains regular contact with the programmer and the client. At logical steps in the programming, the client will review the site, usability testing may be done, and any revisions are completed. Quality assurance testing is carried out prior to delivery to the client for review. After client approval, the site goes live.
- **Usability testing:** For non-web-based studies, usability testing is built in for review of print material, including surveys, to test for ease of use, organization, and comprehension. For web-based studies, usability testing can be included at various logical points in the production, depending on the complexity of the site. The usability specialist conducts the testing and provides a report that recommends changes, if needed.
- **Survey Design:** CHAI Core assists clients with survey design as needed. This can range from help in choosing measures to an overall usability review by a similar population to the study group for literacy, organization, and comprehension.
- **Intervention Development:** CHAI Core works with clients at the point of grant submission to propose interventions that best fit their project in terms of current research. After funding, we help to implement the chosen interventions. In some cases the research staff may have limited knowledge about a chosen intervention, such as qualitative interviews, tailoring, or motivational interviewing. In these situations CHAI staff work more closely with the research staff on the actual development and implementation of the intervention. With research staff with more familiarity, CHAI might review the developed materials or conduct usability testing before implementation.
- **Dissemination:** CHAI Core assists researchers with development of materials appropriate for dissemination to increase community awareness about cancer and cancer screening. We work closely with the Dissemination Core.
- **Publication:** The CHAI Core's work has played an instrumental role in various studies. Increasingly, CHAI staff members are being included in the actual manuscript development and are acknowledged as co-authors.

Funding: The CHAI Core is a collaborative shared resource supported primarily by the UNC Lineberger Comprehensive Cancer Center (NCI funded) and the UNC Gillings School of Global Public Health's Nutrition Obesity Research Center (NIDDK funded). This funding support permits the Core to charge reduced rates to UNC Lineberger and Nutrition Obesity Research Center researchers.

How to Contact Us

Email: chaicore@unc.edu

Tel: (919) 966-7237 or 843-7830

Fax: (919) 843-3639 or 966-7827

Website: <http://www.chaicore.com>

CHAI has two offices:

On Campus:

Gillings School of Global Public Health

2217 McGavran-Greenberg Hall , CB# 7461

Chapel Hill, NC 27599-7461

Off Campus:

Lineberger Comprehensive Cancer Center – North

1700 Martin Luther King Jr. Blvd., CB# 7294

Chapel Hill, NC 27599-7294

Table 1: 2002-2006 NC Cancer Cases

WHITES, AFRICAN-AMERICANS AND AMERICAN INDIANS

Produced by the NC Central Cancer Registry, January 2011; numbers are subject to changes as files are updated

*Counts fewer than 5 are suppressed

Site	Males				Female				Total			
	White	African American	Am Indian	Total	White	African American	Am Indian	Total	White	African American	Am Indian	Total
ORAL CAVITY	2,623	758	18	3,419	1,237	243	11	1,500	3,860	1,001	29	4,919
ESOPHAGUS	1,252	364	7	1,627	346	128	7	483	1,599	492	14	2,111
STOMACH	1,072	447	11	1,554	662	323	8	1,010	1,734	770	19	2,564
COLON/RECTUM	8,629	2,099	69	10,838	7,822	2,260	58	10,204	16,451	4,359	127	21,042
LIVER	1,099	305	15	1,463	424	118	7	576	1,523	423	22	2,039
GALLBLADDER	94	44	*	140	180	62	*	248	274	106	*	388
PANCREAS	1,842	526	7	2,384	1,830	588	14	2,440	3,672	1,114	21	4,824
LARYNX	1,168	432	6	1,610	333	100	*	436	1,501	532	9	2,046
LUNG/BRONCHUS	15,481	3,360	156	19,055	11,637	1,911	85	13,696	27,118	5,271	241	32,751
BONE	176	31	*	212	127	37	*	168	303	68	*	380
SOFT TISSUE	519	125	5	654	432	144	8	588	951	269	13	1,242
MELANOMA	4,319	28	5	4,357	3,338	35	5	3,380	7,658	63	10	7,738
FEMALE BREAST	*	*	*	*	28,216	6,640	228	35,341	28,216	6,640	228	35,341
CERVIX UTERI	*	*	*	*	1,288	458	18	1,798	1,288	458	18	1,798
CORPUS UTERI	*	*	*	*	4,025	918	42	5,035	4,025	918	42	5,035
OVARY	*	*	*	*	2,508	437	17	2,990	2,508	437	17	2,990
PROSTATE	22,196	7,672	309	30,278	*	*	*	*	22,199	7,672	309	30,281
TESTES	923	76	8	1,013	*	*	*	*	923	76	8	1,013
BLADDER	5,720	503	24	6,266	1,892	286	10	2,196	7,612	789	34	8,462
KIDNEY	3,408	797	27	4,248	1,944	555	26	2,535	5,352	1,352	53	6,783
ENDOCRINE	1,111	209	7	1,340	2,598	611	17	3,288	3,709	820	24	4,628
MULTIPLE MYELOMA	993	399	7	1,405	793	425	11	1,233	1,786	824	18	2,638
LEUKEMIA	2,339	345	18	2,740	1,771	343	12	2,136	4,111	688	30	4,877
BRAIN/OTHER CNS (INCL. BENIGN BRAIN)	1,396	183	11	1,603	1,126	182	13	1,336	2,523	365	24	2,940
HODGKINS DISEASE	470	123	*	602	402	97	7	508	872	220	9	1,110
NON-HODGKINS LYMPHOMA	3,437	573	17	4,065	3,126	501	21	3,677	6,564	1,074	38	7,743
ALL CANCERS	85,414	20,417	786	107,120	83,221	18,592	682	103,246	168,643	39,009	1,468	210,374

Counts by race and ethnicity will not sum to totals because persons of "other" race are not shown separately, and Hispanics, an ethnic group are also included in one of the race groups. American Indian rate is known to be underreported. Previous analyses by the North Carolina Central Cancer Registry indicates approximately 17% of patients of American Indian race are reported as a different race. Incidence is assumed to be under-estimated.

Table 2: 2002-2006 NC Cancer Deaths

WHITES, AFRICAN-AMERICANS AND AMERICAN INDIANS

Produced by the NC Central Cancer Registry, January 2011; numbers are subject to changes as files are updated

Site	Males				Female				Total			
	White	African American	Am Indian	Total	White	African American	Am Indian	Total	White	African American	Am Indian	Total
ORAL CAVITY	544	242	8	797	343	62	2	409	887	304	10	1,206
ESOPHAGUS	1,116	288	8	1,414	299	122	4	426	1,415	410	12	1,840
STOMACH	588	302	5	909	416	198	7	631	1,004	500	12	1,540
COLON/RECTUM	2,921	832	23	3,786	2,792	885	28	3,731	5,714	1,717	51	7,518
LIVER	944	266	12	1,250	515	138	1	675	1,459	404	13	1,925
GALLBLADDER	50	17	0	67	119	32	1	155	169	49	1	222
PANCREAS	1,818	494	8	2,329	1,728	559	12	2,309	3,546	1,053	20	4,638
LARYNX	334	159	3	497	83	33	3	119	417	192	6	616
LUNG/BRONCHUS	12,222	2,752	128	15,140	8,574	1,501	71	10,176	20,796	4,253	199	25,316
BONE	56	18	0	76	57	14	0	71	113	32	0	147
SOFT TISSUE	197	44	2	246	209	50	3	264	406	94	5	510
MELANOMA	753	20	0	774	455	21	1	478	1,208	41	1	1,252
FEMALE BREAST	0	0	0	0	4,514	1,521	45	6,110	4,514	1,521	45	6,110
CERVIX UTERI	0	0	0	0	373	185	9	572	373	185	9	572
CORPUS UTERI	0	0	0	0	672	306	8	990	672	306	8	990
OVARY	0	0	0	0	1,772	326	15	2,116	1,772	326	15	2,116
PROSTATE	2,858	1,422	42	4,330	0	0	0	0	2,858	1,422	42	4,330
TESTES	49	7	0	56	0	0	0	0	49	7	0	56
BLADDER	987	126	8	1,124	452	118	6	576	1,439	244	14	1,700
KIDNEY	946	201	10	1,162	506	123	5	638	1,452	324	15	1,800
ENDOCRINE	107	21	3	132	100	37	0	138	207	58	3	270
MULTIPLE MYELOMA	620	237	6	866	604	271	6	882	1,224	508	12	1,748
LEUKEMIA	1,433	211	13	1,666	1,045	239	16	1,307	2,478	450	29	2,973
BRAIN/OTHER CNS (INCL. BENIGN BRAIN)	896	105	5	1,010	715	109	7	838	1,611	214	12	1,848
HODGKINS DISEASE	101	15	0	117	57	13	0	71	158	28	0	188
NON-HODGKINS LYMPHOMA	1,299	191	7	1,504	1,222	178	6	1,415	2,521	369	13	2,919
ALL CANCERS	34,288	8,814	321	43,596	30,758	7,808	281	39,051	65,047	16,622	602	82,648

Tables 3-5: 2002-2006 NC Cancer Cases by Top Ten Counties, for Top Cancer Types

Age-Adjusted to the US 2000 Census; Produced by the NC Central Cancer Registry, February 2010

Rank	Lung and Bronchus					
	White		Minority		Total	
1	Mecklenburg	1,345	Mecklenburg	492	Mecklenburg	1,841
2	Wake	1,278	Guilford	356	Guilford	1,613
3	Guilford	1,256	Wake	304	Wake	1,585
4	Forsyth	1,091	Forsyth	287	Forsyth	1,379
5	Buncombe	930	Cumberland	267	Buncombe	987
6	Gaston	856	Durham	251	Gaston	935
7	New Hanover	667	Robeson	226	Cumberland	909
8	Cumberland	639	Pitt	140	New Hanover	758
9	Davidson	588	Wayne	122	Durham	716
10	Randolph	535	Edgecombe	104	Davidson	636

Rank	Colon and Rectum					
	White		Minority		Total	
1	Mecklenburg	979	Mecklenburg	411	Mecklenburg	1,392
2	Wake	876	Wake	281	Wake	1,159
3	Guilford	820	Guilford	280	Guilford	1,102
4	Forsyth	617	Cumberland	251	Forsyth	793
5	Buncombe	544	Forsyth	171	Cumberland	608
6	Gaston	474	Durham	171	Buncombe	600
7	Catawba	364	Robeson	155	Gaston	555
8	Cumberland	357	Pitt	116	Durham	454
9	Davidson	343	Wayne	105	Catawba	401
10	Henderson	322	Edgecombe	92	New Hanover	388

Rank	Female Breast					
	White		Minority		Total	
1	Wake	2,169	Mecklenburg	761	Mecklenburg	2,832
2	Mecklenburg	2,059	Wake	561	Wake	2,735
3	Guilford	1,379	Guilford	445	Guilford	1,826
4	Forsyth	1,234	Cumberland	428	Forsyth	1,539
5	Buncombe	1,029	Durham	378	Buncombe	1,110
6	Gaston	708	Forsyth	301	Cumberland	1,013
7	New Hanover	681	Robeson	250	Durham	949
8	Cumberland	584	Pitt	195	New Hanover	806
9	Catawba	583	Wayne	184	Gaston	794
10	Durham	568	Edgecombe	138	Catawba	618