

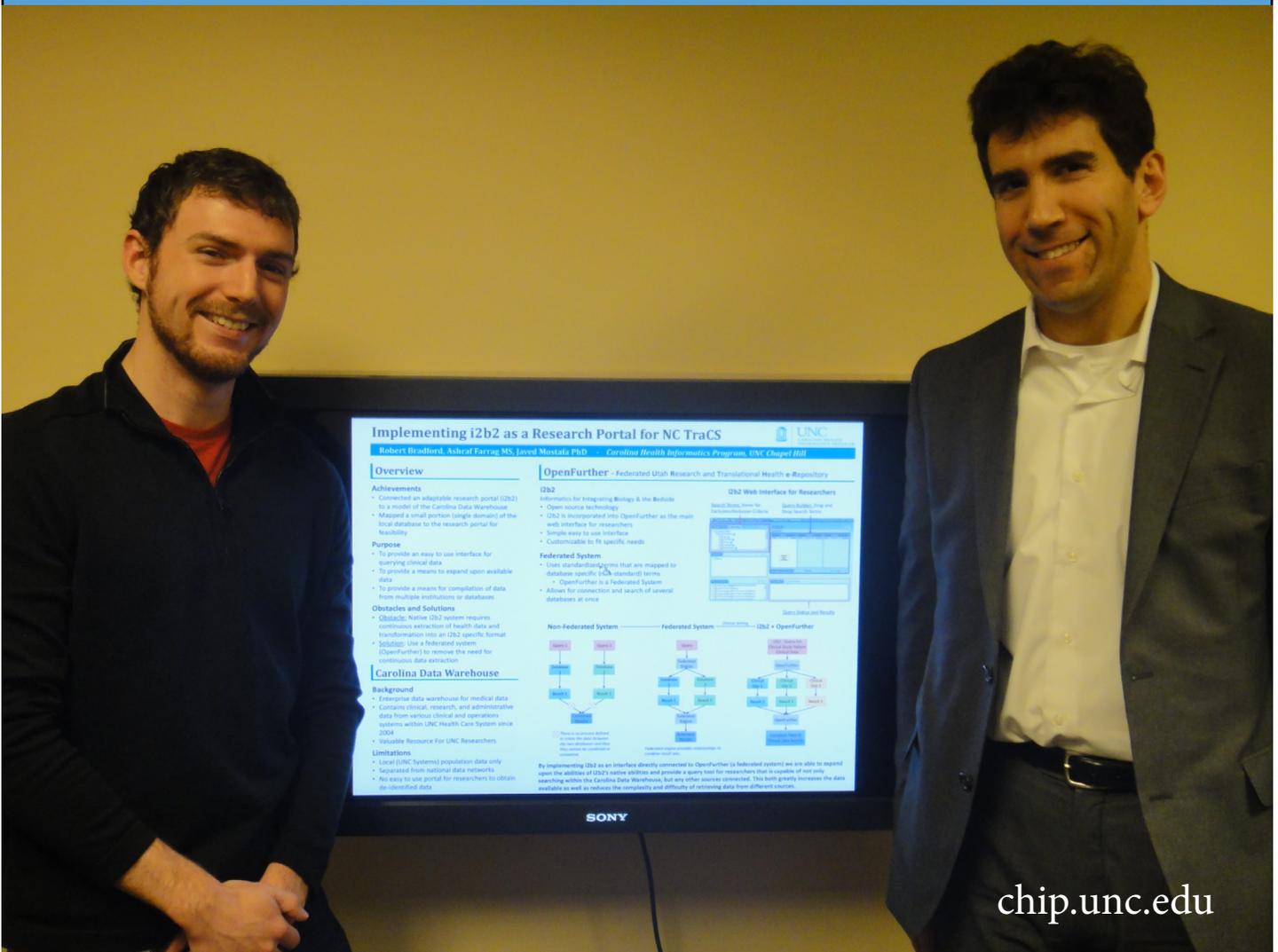
Student e-Newsletter

# Chipping In

Issue 4

Summer 2014

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 -CHIP alumni earning awards  
 -Student Org: Health Informatics Hub  
 - Health Informatics seminar for Fall  
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## **CHIP would like to offer an exuberant congratulations to CHIP alumni Ashraf Farrag and Robert Bradford in winning 1st place at UNC's Research Day in the Computer Science category**

*(picture on cover)*

Ashraf completed his MSIS at UNC in 2010 and CHIP certificate in 2011 and went on to mentor Robert through his practicum, which he completed along with his certificate in December 2013. Ashraf and Robert currently work for the NC TraCS Institute as Research Analysts in the Carolina Data Warehouse Health group.

Ashraf and Robert's poster not only won at UNC's Research Day but was also accepted as a talk at the AMIA Joint Summit in 2014 and was very warmly received by peer CTSA institutions in attendance. Additionally, Robert was invited to present it again at the Annual Graduate Student Recognition Celebration in April.

Ashraf and Robert's poster is on their i2b2 project highlighted in the Spring 2014 issue of Chipping In. This project focused on Informatics for Integrating Biology and the Bedside (i2b2), which is an ontology-based object-oriented database system with a flexible database schema and a user-friendly web client interface. The ease of use of the i2b2 web client made it a prime target to be incorporated into a query translation system called OpenFurther, an open source system that connects i2b2 to a federated query engine that allows us to combine and relate data from multiple data sources. By attaching i2b2 to OpenFurther, the need to extract and transform data and insert it into i2b2 is removed. Instead, the OpenFurther engine handles the transformation of data in real time through a series of associations defined for each data source that information is dynamically retrieved from.

Enter CDW-H (Carolina Data Warehouse for Health): a valuable resource for storing clinical data, developed by The University of North Carolina Health Care System (UNCHCS). Since 2004, the CDW-H serves as a central repository for clinical, research and administrative data collected from within the UNCHCS.

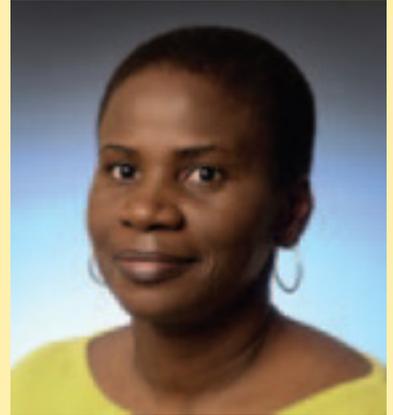
Ashraf and Robert formulated a plan for a proof of concept practicum for connecting OpenFurther to the CDW-H. For an initial proof of concept, a single domain representing the patient demographic information in the CDW-H was successfully connected to OpenFurther. This process required a test environment that included a shadow schema of the CDW-H loaded with a set of non-specific sample patient data, and ran the OpenFurther server. At the conclusion of the practicum, a user is able to login to the i2b2 web client, submit a query on the various demographic attributes of patients and retrieve a count of patients that satisfy the query. Achieving this connection demonstrates the ability to configure the engine to communicate with our local data source, the CDW-H. Additionally, it provides confidence in our ability to expand upon the information, such as clinical or administrative data, connected to the engine in the future.

Again, congratulations to Ashraf and Robert for their research and awards.

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## Meet Emelia Amoako, Nurse Practitioner for United Healthcare, and a CHIP alumna.

Emelia earned her Ph.D. in the School of Nursing in 2004 and entered the working world to find herself confronted with complicated and ever-changing systems of electronic data collection and management. Intensely frustrated, she searched the School of Nursing website for programs that could help. It was here that she found the Post-Master's Certificate in Health Informatics: the CHIP certificate program designed for Nurses. She enrolled in the program and completed it in December 2012.



Emelia says she has many fond memories of the certificate program. She highly praises her advisor, Dr. Debbie Travers of the School of Nursing, saying that Dr. Travers provided practical guidance and always made herself available for questions and advising. She says that the interdisciplinary nature of the program proved to be a strength; not only in the diversity of the curriculum, but the diversity of the classes themselves. She remembers attending an INLS course in the School of Information and Library Science where her classmates were from programs across campus, including SILS, Nursing, Pharmacy, and Public Health. The diversity of the students allowed them to assist each other in learning and eventually succeeding. She particularly remembers one professor (Mr. Jeff Campbell) who stayed after class to help her make some decisions about a new laptop. She says it's that kind of non-traditional support that helped her succeed in the program.

After finishing her certificate she returned to work with a new understanding and mastery of programs and data management systems. She currently works as a Nurse Practitioner for United Healthcare providing preventative services. When asked if she uses the skills she learned in the certificate program in her current employment she says "Absolutely!" Emelia reports, "my goal for going back [for the certificate] was to improve my knowledge of computers and EHR's. I wouldn't be as comfortable in my job without those skills. I am completely independent." Emelia also spends time volunteering in the field. She tests new updates for health applications and provides valuable feedback which helps developers roll out the best changes possible.

## Health Informatics Hub: Promoting Knowledge Sharing and Collaboration at UNC

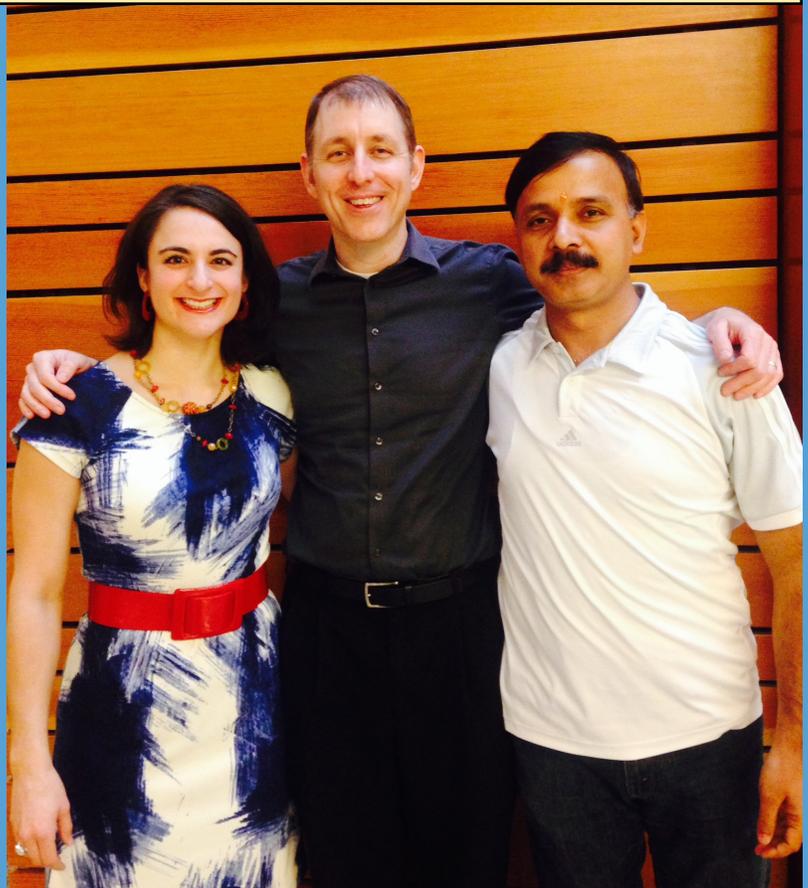
Knowledge sharing and collaboration among students, faculty and professional organizations is critical to harness the potential benefits of health informatics for improved health care and public health.

As they say, it is easier said than done. But with commitment, perseverance and team work nothing is impossible and the story of Health Informatics Hub (HIH), an informal knowledge sharing and collaboration platform, is one such example.

In the fall of 2013 in their quest to explore and identify health informatics courses, faculty and key organizations, two of the Gillings first-year graduate students--Sarah Hiller from the Health Behavior department and Manish Kumar from the Public Health Leadership Program--met Brian Moynihan, who works at the School of Medicine, at a Health Informatics event called Health 2.0 at the Research Triangle Institute in Raleigh. From that meeting the monthly informal knowledge sharing and collaborative platform, Health Informatics Hub (HIH), came into existence in November 2013.

Since its first monthly meeting in November 2013, students from Public Health, Nursing, Information and Library Sciences, Medicine, Pharmacy, the Carolina Health Informatics Program and the Business School have participated to exchange knowledge and expertise. Faculty and staff from these schools have also extended their support and shared their experiences with the students.

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A unique feature of HIH is that its membership is driven by the interest of participating individuals in health informatics. People attend these meetings based on their needs, but remain connected and aware about the proceedings of each meeting through the HIH listserv (healthinformaticshub@listserv.unc.edu – contact Sarah Hiller if you'd like to join). The HIH has facilitated collaboration among students and faculty, and with industry professionals. Over the last six months HIH has made efforts to fill a niche at the University in gathering students and faculty from varied disciplines to share information about their health informatics projects and interests.

HIH is now collaborating with the Carolina Health Informatics Program at the University to mainstream its efforts while continuing to pursue its goals. If you are looking for health informatics courses, faculty members, organizations or students interested in working with faculty on health informatics topics, HIH can facilitate this process.

As the spring semester comes to an end, HIH is preparing for an exciting phase for fall 2014. You all are welcome to join hands and lead HIH efforts.

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## UNC/Duke Joint Health Informatics Seminar Series Celebrating 5 years of Collaboration in HI

The UNC/Duke Joint Health Informatics Seminar Series explores key areas in Health Informatics and includes research results, overview of programs of research, basic, applied, and evaluative projects, as well as research from varied epistemological stances.

The Seminar Series, which began in 2009, will be held August 27th-November 12th in the Fall 2014 semester. Students interested in earning credit for attending seminars can register for the one credit course: INLS 690 section 154. Nursing students can earn CEU's for attending individual seminars.

Seminars are held each Wednesday at the Health Sciences Library in room 328. They begin promptly at 4pm and last for one hour, including a Q&A session following the presentation.

UNC's first presenter this fall will be Dr. Rich Medlin, MD, clinical instructor of emergency medicine at UNC School of Medicine, who will be presenting **"HOWTO: Board Certification in Clinical Informatics" on Wednesday, Sept 3rd, 4-5pm.**

Spring 2014 presenters included Professor Timothy J. Carney and CHIP alumni Dr. Vincent Carrasco. To view archived seminars, including these presentors, please visit: <https://www.dchi.duke.edu/education/informatics-seminars>.



*Dr. Timothy J. Carney  
Gillings School of  
Global Public Health*

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# News & Events

6/10/14 - Tuesday  
*Applications for  
MPS in BMHI Due*

Link to application:  
[gradschool.unc.edu/  
admissions/  
instructions.html](http://gradschool.unc.edu/admissions/instructions.html)

6/11/14 - Wednesday  
*NCHICA Thought  
Leader Forum on An-  
alytics and Informatics*  
[www.nchica.org/Activi-  
ties/TLF/intro.htm](http://www.nchica.org/Activities/TLF/intro.htm)

8/8/14-8/10/14  
*Triangle Health  
Startup Weekend*  
[http://trianglehealth.  
startupweekend.org](http://trianglehealth.startupweekend.org)

9/3/14 - Wednesday  
*Health Informatics  
Seminar Series:  
HOW TO: Board  
Certification in  
Clinical Informatics*  
Health Sciences  
Library, room 328  
4-5pm.

**Save the Date:**  
10/24/14 - Friday -  
*Health Informatics  
Career and Internship  
Fair/Symposium*  
Held at the East  
Carolina Heart Institute

## **Application now open for the Master of Professional Science in Biomedical and Health Informatics!**

CHIP is pleased to announce that the application for the Master of Professional Science in Biomedical and Health Informatics ([gradschool.unc.edu/admissions/instructions.html](http://gradschool.unc.edu/admissions/instructions.html)) will remain open until June 10th, 2014. Applicants will be accepted for the Fall 2014 semester through rolling admissions. Applications for the Spring 2015 semester are also being considered between now and October.

Students currently enrolled in other programs (such as CHIP certificate programs) should note they can transfer up to 7 credits (two classes) into the MPS program. For detailed information on required courses and electives please visit [chip.unc.edu/mps-bmhi-curriculum](http://chip.unc.edu/mps-bmhi-curriculum). This program is flexible and is accepting both full-time and part-time students.

## **UNC is Hiring CHIP Faculty in Four Schools**

Several academic units at UNC - Chapel Hill are actively seeking candidates in the broadly defined area of health informatics. The selected colleagues will become core faculty members in the Carolina Health Informatics Program. Hiring units include the School of Nursing, the Gillings School of Global Public Health, the School of Dentistry and the Eshelman School of Pharmacy. New faculty will have joint appointments in the individual schools and in CHIP and will be integral in the new MPS in BMHI program.

## **Cohort from BCBS-NC set to finish in Summer**

This summer students from Blue Cross Blue Shield -North Carolina are set to complete their practicums and finish their certificate requirements. This represents the first of this kind of venture between CHIP and an industry partner. Feedback has been positive and CHIP hopes to not only continue the program with BCBS-NC but to expand it to other industry partners as well.

For comments and suggestions regarding news items, please contact:

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