


In a nutshell 

The EMS for Children (EMSC) Innovation and Improvement Center (EIIC)

Submitted by

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The EMSC Program's New Direction focused efforts on quality improvement (QI) through the formation of an EMSC Innovation and Improvement Center (EIIC). In July of 2016, the EMSC program awarded this new Center to Baylor College of Medicine and Texas Children's Hospital in collaboration with co-investigators from the Emergency Nurses Association (ENA), the National Association of State EMS Officials (NASEMSO), the American Academy of Pediatrics (AAP), and the American College of Emergency Physicians (ACEP). The EIIC will utilize a clinical systems integration framework with input from subject matter experts (SMEs) and stakeholders to collaboratively provide EMSC grantees and the emergency care community with the training, support, and tools to use quality improvement (QI) methodology to minimize morbidity and mortality in children. The specific grantees supported include PECARN, State Partnerships (SPs), State Partnership Regionalization of Care (SPROC), and Targeted Issue (TI) grants.

Accelerating improvements in healthcare outcomes requires greater efficiency of all functions within the US health care system. Infrastructures that maintain the nation's assets for supporting emergency medical services for children must be transformed from mere coordination and dissemination centers to active cores for quality improvement (QI) across silos. An improvement science based model is necessary to link tools, efforts, and entities to effectively decrease child and youth mortality and morbidity sustained as a result of illness or injury. More than simple collaborative relationships, this structure requires integrated daily functioning of key stakeholder organizations and their quality improvement champions.

The EIIC is focused on improving outcomes for children in emergency situations by using improvement science as the basis for collaborative efforts to address known gaps in the US healthcare system. Collaboratives are networks designed for shared learning, driven by an evidence base and known gaps to facilitate rapid translation of research into clinical practice. The EIIC is prepared to support these collaboratives through varied learning systems, coaching, project management, information technology infrastructure, data management, and analytics. The EIIC will partner with stakeholders at every level of emergency medical services to ensure the needs of injured and critically ill children are adequately addressed.

For PECARN, the EIIC will organize in-person meetings and the semi-annual teleconferences. The EIIC will also continue to support the GAPS subcommittee to help distribute manuscripts for review and to compile a database of potential reviewers with subject matter expertise. Finally, the EIIC will assist investigators with platforms (e.g., webinars) to disseminate findings and facilitate the uptake of new knowledge into practice. ■

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What is an IT Project Manager, (and how can we enhance your study)?

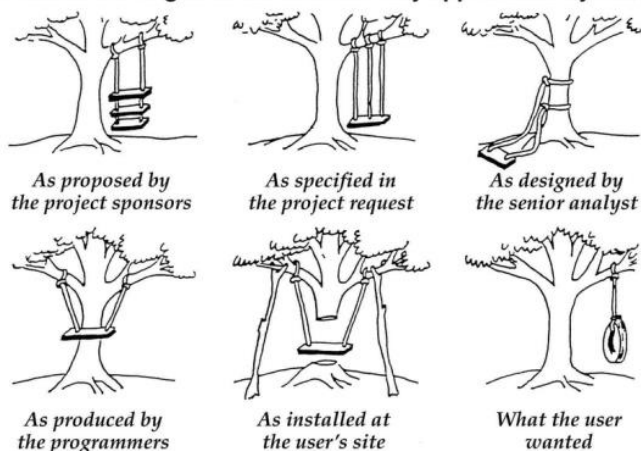
Submitted by
Cara Elsholz, BS
IT Project Manager, DCC

Do you remember the days when a hard drive was a long road trip and only spiders knew what the web was? Technology has now progressed to the point that we all use it daily. But as is the case with cars, most everyone can *drive* a car but not everyone knows what goes on *under the hood*. An information technology project manager (IT PM) can be thought of as someone who can bridge the gap between car and driver, and help to eliminate road rage.

Let's begin by defining, what is a project manager? Project managers are the glue that binds project elements together. We don't actually do the work, but rather help others do it. We are at the helm of a ship, steering it via a predefined route to a particular destination, making course corrections along the way.

Sure, this is a somewhat simplistic definition. A project manager is also meant to make the unpredictable predictable, ensure resources are used wisely, and solve problems which seem to appear out of nowhere. We are polite naggers and list-makers. We first help to plan the work, and then work the plan.

"Problem solving is an art form not fully appreciated by some"



The Swing graphic by S. Hagg 1993 - from Brainiacs.com/the-swing.htm 2013

Now, the purpose of an IT Project Manager is to solve an IT related business problem or exploit an opportunity. We help define: How can we most easily capture/transfer/store study data within the guidelines of our protocols? We may be brought in to help with creating a custom

solution for a study or we may be utilized as the main project manager for an "IT heavy" study. Based on the goal, an IT project manager is likely to assist in figuring out what features the application should have as well as to determine if the project is technically feasible and not prohibitively expensive. Project managers assist in the execution of manual workflows designed to execute a study, and IT project managers are tasked more specifically with attempting to programmatically automate workflows to make the flow of data more efficient.

A project manager should know about the people on their team and what their capabilities are. Who's good at *JavaScript*? Who knows about ETLs (Extract, Transform, and Load)? How long will this take, and do we have the resources we need? We need to be able to translate IT language into an easily digestible sentence for people who didn't graduate from MIT.

You may find yourself working with an IT project manager from the DCC in the near future, especially if you find that your study has been designed with complex data flows. Let's say for example, a PECARN PI wants to look at abdominal pain outcomes and treatments using data directly exported from the site electronic health records (EHR). The same proposed study involves linking survey data sent to certain patients triggered by a certain dataset. These are examples of a study that may be considered "IT heavy" and would likely be assigned to an IT PM. IT project managers are now being involved early in the PECARN protocol development phase, along with statisticians, data managers (DM), project managers (PM), and principle investigators (PI), so that technology issues can be identified and worked through earlier in the development process. Generating tech solutions requires input from the whole team (stats, DM, PM and PI).

Together with the DCC IT team, project managers are also beginning to investigate ways of incorporating innovative technology through repeatable processes that are scalable to studies both simple and complex. Our combined goal is to pave the road for a smoother, more efficient data collection for PECARN studies. ■



**PEDIATRIC EMERGENCY CARE
APPLIED RESEARCH NETWORK**



Targeted Issues Grants

In July of 2016, five Targeted Issues (TI) grants were awarded. This funding opportunity through Health Resources Services Administration (HRSA) / Emergency Medical Services for Children (EMSC) program has, in recent years, focused on closing gaps in prehospital pediatric care. For the 2016-2019 funding cycle, four of the five grants had a prehospital focus and one grant focused on community-based emergency departments (EDs).

MARYLAND – *John Hopkins University. (Principal Investigator: Jennifer Anders, MD)* PDTree: An EMS Triage Tool for Pediatric Destination Decision Making

MICHIGAN – *Western Michigan University School of Medicine. (Principal Investigator: John Hoyle, MD)* The Michigan Pediatric EMS Error Reduction Study (MI-PEERS)

NORTH CAROLINA – *University of North Carolina, Chapel Hill. (Principal Investigator: Jane Brice, MD, MPH)* Pediatric Performance Measures: Improving EMS Care for Time-Critical Illness and Injury

PENNSYLVANIA – *Children's Hospital of Philadelphia. (Principal Investigator: Sage Myers, MD, MSCE)* Advancing Family-Centered Care and Quality Self-Assessment for Pediatric Resuscitation Readiness

WISCONSIN – *Medical College of Wisconsin. (Principal Investigator: Brooke Lerner, PhD)* The Charlotte, Houston, and Milwaukee Prehospital (CHaMP) Research Node

More info is available at: <https://emscimprovement.center/projects/targeted-issues/>

State Partnership Regionalization of Care (SPROC) Grants

In May of 2016, three SPROC grants were awarded. These awardees were all recipients of 2012 grants to increase access for emergency medical services to children in U.S. rural, territorial, insular, and/or tribal communities. The ultimate goal is to reduce pediatric morbidity and mortality through increased access to pediatric subspecialists for children in these communities.

CALIFORNIA – *University of California, Davis. (Principal Investigator: James Marcin, MD, MPH)* Transport of Acutely Ill and Injured Children to Institutions of Higher Care from Allied Localities (TACTICAL)

MONTANA – *Montana Department of Health and Human Services. (Principal Investigator: James DeTienne, EMT)* Child Ready Montana Project

NEW MEXICO – *University of New Mexico. (Principal Investigator: Robert Sapien, MD, MMM)* Child Ready: Expanding a Novel Community Self-Assessment Approach to Regionalization



EMSC State Partnership Grants

This Fall, EMSC State Partnership grantees will be reporting on their progress toward achieving current EMSC performance measures. In the Spring of 2017, they will begin an assessment of EMS agencies to establish the Program and state's baseline on the three new performance measures.

What's Up with Our Federal Partners?

In July, the **National Highway Traffic Safety Administration (NHTSA)** hosted "Beyond Data Collection Summit: Envisioning an Information Driven Future" an EMS Data Summit with EMS and Healthcare Leaders. Dr. Edgerton attended for EMSC and joined stakeholders from more than 30 organizations. The Summit focused on data collection and use in emergency medical services. A final report is expected to be released in the fall of 2016 and will address topics such as ways to encourage data collection and use in EMS and how data can drive meaningful system improvements.



Indian Health Service (IHS): EMSC is supporting IHS efforts to re-assess the readiness of IHS facilities to take care of children between 2016 and 2017 using the National Pediatric Readiness Assessment. An article on the Pediatric Readiness of IHS facilities was published on the results from the first assessment. *Citation:* Sadovich J, Adirim T, Telford R, Olson LM, Gausche-Hill M, Edgerton EA. Pediatric Readiness in Indian Health Service and Tribal Emergency Departments: Results from the National Pediatric Readiness Project. *J Emerg Nurs.* 2015 Oct 31. pii: S0099-1767(15)00449-3.

National Partners

EMS Compass: The EMS Compass Initiative is a collaborative effort between the NHTSA and the National Association of State EMS Officials (NASEMSO) to develop EMS performance metrics for the prehospital setting to guide quality improvement initiatives. Performance measures are in the process of being beta tested using National EMS Information System (NEMSIS) data. More information on the performance measures being considered are available on the EMS Compass website: <http://emscompass.org/ems-compass-measures/>



The National Association of State EMS Officials (NASEMSO) Pediatric Emergency Care Council (PECC) will meet Sep. 19-20 in Albuquerque, NM. PECC provides leadership, promotes policies and research, and shares resources to improve the emergency medical care system for children. One focus area of continuing discussions is on the safe transport of children in ambulances. ■

What is an OOPS?

Submitted by
Heather Gramse
 PECARN Project Manager, DCC

An OOPS is an Outside of Protocol Specification a.k.a. protocol violation or deviation. Most PECARN studies collect and enter protocol violations/deviations in the study electronic data capture system (EDCS). The DCC then reviews these OOPS entries to determine errors that occurred, risk to human subjects and anything that would affect the analysis of the data. ICH GCP guidelines section 2.10 states: “All clinical trial information should be recorded, handled, and stored in a way that allows its accurate reporting, interpretation and verification.” This includes OOPS entries, protocol violations and protocol deviations. Here are some tips on writing a good OOPS entry:



1. Be succinct and to the point. State the facts of what occurred, how it was fixed (corrective action), and any follow-up to the event (preventative action).
2. List the actual protocol violation in the entry, not just the events that led up to it.
3. Refrain from including any identifying information. You should not list the physician’s name, coordinator’s name, hospital name, etc.

ICH E9 states “It is desirable to identify any important protocol violation with respect to the time when it occurred, its cause, and influence on the trial result.” Therefore, it is important to clearly state in the OOPS entry the actual protocol violation/deviation or OOPS, why it occurred and any follow-up action. Providing a well thought out description of the protocol violation/deviation in the OOPS entry provides the DCC and study team with enough details to determine the extent of the OOPS and the necessary action that needs to take place. ■

NEDARC Fall/Winter Workshops:

NEDARC will be hosting two conferences in the coming [months](#).

Techniques in Developing a Survey that’s Right for You: Seattle, WA; October 12-14, 2016

This 2.5 day workshop targets EMSC program managers, principal investigators, and state EMS office personnel interested in survey methodology or those planning to collect data outside of EMSC performance measures and the National Pediatric Readiness Project. Participants will have hands-on opportunities to draft and receive feedback on surveys they have or are planning to develop. Participants will learn to:

- Understand different survey tools and resources available, including free survey software
- Develop effective survey questions
- Pilot surveys before implementation
- Utilize strategies to improve survey response rates

Conference information: http://www.nedarc.org/workshops/workshopDetails.aspx?workshop_id=65

NEDARC

Using Data to Improve Care for Children



Tools and Skills for Engaging Stakeholders: Myrtle Beach, SC; February 7-9, 2017

This 2.5 day workshop targets EMSC program managers, EMSC advisory board members, and anyone who has to lead a committee. The workshop will review meeting management, project planning, and facilitation skills. Participants will learn to:

- Assess stakeholder interest
- Prepare a meeting agenda
- Use planning and organizational tools
- Demonstrate use of communication techniques to encourage meeting participation
- Facilitate meetings

Conference information: http://www.nedarc.org/workshops/workshopDetails.aspx?workshop_id=66



*Conducting High Priority
 High-Quality Research in
 Pediatric Emergency Care*

WINTER 2017 In-Person Meeting:
 Tuesday, February 14 - Thursday, February 16, 2017
 The Westin Tysons Corner Hotel, Washington, D.C.



PECARN CORE DATA PROJECT

The PECARN Core Data Project (PCDP) is an observational descriptive study to identify basic epidemiological information on all ED visits from each participating hospital in PECARN. This data has been instrumental in hypothesis generation and grant acquisition for PECARN. The PCDP database has complete data for 2002-2015. The Public Use Data Set request form can be found at <http://www.pecarn.org/studyDatasets/StudyDetails?studID=2>.

The upcoming 2016 data submission deadline will be April 2017. If you did not submit a XML file this year, we ask that you please plan to submit your file in XML format for your 2016 data. Data specs for submission can be found on the publically available wiki (<https://wiki.utahdcc.org/confluence/display/PCDP/PECARN+Core+Data+Project>). The Data Coordinating Center staff will offer one-on-one Training webinars to any site interested. This opportunity is meant to allow site IT staff or anyone else to directly ask questions about data submission instructions.

To set up a webinar or if you have any questions, please contact Cara Elsholz (Cara.Elsholz@hsc.utah.edu) or Libby Alpern (ealpern@luriechildrens.org).

FLUID

The DKA FLUID study is currently completing the final enrollments of 1,400 children with DKA, and 400 children with Type 1 diabetes with no history of DKA at 13 PECARN centers. We have had two manuscripts published in *Pediatric Diabetes* as well as several abstracts presented at national meetings. A list of 12 papers of interest has been circulated among investigators, for which we are actively working through the associated analysis and writing plans. We are very excited to see this study through completion and generate much great product and information that we hope will greatly help children with diabetes. Really appreciate the collaboration from so many people!



PECARN REGISTRY

The PECARN Registry project has developed an emergency care visit registry from electronic health record data for pediatric patients at participating sites. The electronic health record (HER) registry currently contains data from all ED visits from the sites for calendar years 2012 through July 2016. Each site transmits data to the DCC 4 weeks after completion of the calendar month to allow for maturation of the data. Comprehensive data quality assurance rules have been automated to assess data quality and validation of the transmitted data. Monthly data quality reports are constructed for each site by month and entire year data breakdown to facilitate effective and efficient data quality review.

The registry is currently being used to directly populate stakeholder-endorsed pediatric emergency medicine quality of care performance measures and has derived achievable benchmarks for each of the measures using 2013, 2014, and 2015 data. Some of the performance measures use text parsing and natural language processing in their derivation. Ongoing data validation with chart review containing spot and systematic checks are being done at each site for every performance measure. The site and individual-level quality performance measure are constructed directly from the data in the registry. The DCC produces site and individual provider report cards. Distributions of report cards to providers at each site have also been automated. Each month we successfully distribute over 475 provider-level and site level report cards. Data are currently being analyzed to determine the effect of the report cards on variation of care.

ARGININE

Data analysis for the retrospective chart review is underway and 2 abstracts were submitted to the American Society of Hematology meeting (San Diego, Dec. 2016). A total of 5/21 patients have been randomized into the Arginine PK Study at Emory University.

BIOSIGNATURES I

We are excited to share that JAMA has published the manuscript describing the primary RNA microarray analysis to define bacterial and non-bacterial biosignatures! In addition, an abstract, "*The Risk of SBI in Febrile Infants with Viral Infections*" was presented at the 2016 SAEM meeting. Various analyses and manuscript preparation are currently underway including the epidemiology of bacteremia in febrile infants, practice pattern variation in the evaluation of febrile infants, the SBI prediction rule, and the accuracy of the Yale Observation Scale versus clinician suspicion in identifying SBI. The Public use dataset will be released on the PECARN website in January 2017.

BIOSIGNATURES II

The Biosignatures II Study is moving forward and actively enrolling patients. With 12/18 sites approved to enroll, we are off to a great start with enrollment. The remaining sites anticipate approval to begin within the upcoming month. An update of the Manual of Operations is currently being completed, as various site questions have helped to clarify details of enrollment to be finalized. Additionally, an ongoing collection of FAQs is being maintained in eRoom for easy access to those frequently asked questions and answers.

QUALITY OF CARE

The Quality of Care study has submitted its first manuscript and it's now under peer review. This first manuscript describes and discusses this instrument as a valid way to measure quality of care delivered to children in the ED. A 2nd manuscript, examining patient level factors associated with quality, is being written for peer-reviewed journal (We need to wait until the 1st manuscript has been accepted prior to submitting the 2nd manuscript). A 3rd manuscript, which will examine physician- and hospital-level factors associated with quality of care, is in the data analysis phase.

PROBIOTICS

Probiotics is a randomized-controlled trial (RCT) of LGG vs. placebo in 900 children, aged 3 – 48 months with Acute Gastroenteritis (AGE). We have 10 sites participating with a few months left in year 3/4 of enrollment. There are a total of 552 patients to date with a follow-up rate of 92% across all time points. Additionally, Manuscript Analysis Plans (MAPs) continue to be developed from the 16 Manuscript Analysis Request Forms (MARFs) submitted by the study team.

THAPCA

All data related to the In-Hospital Trial has been collected and the database was locked in April 2016. The data analysis for the In-Hospital Trial has been completed and Dr. Frank Moler has completed his final draft of the paper. He submitted the paper in August 2016. We will keep you posted on the publication date.

ASSESS

In July, we submitted a continuation grant to NIAAA to extend our follow up period for 3 additional years. All sites have submitted this revision to the protocol to their IRBs. To date, 14 sites have received IRB approval for this revision. If awarded funding, we anticipate an additional protocol amendment will be required to clarify the study aims. Hasbro began 3 year follow up in May 2016 (for IRB approved sites only). As of August 1st, ASSESS follow up rates were 69% (n=1059) and 100% (n=7) for 2 and 3 year follow up, respectively. Four manuscripts have been submitted to GAPS, and 2 of those have been submitted for publication. A paper on the primary aims of the study was accepted by *Pediatrics*, while a methodology paper has been submitted to *Pediatric Emergency Care*. The study PIs are continuing to work on additional manuscripts, with the help of the DCC and co-authors/site PIs.

ED-STARS

Congratulations to the PECARN sites for their tremendous efforts in enrolling over 6,500 youth in the past 1 year! Although Study 1 enrollment is closed at PECARN sites, the Whiteriver site moves forward with its re-launch and the Survey Research Center continues with its 3 and 6-month follow-up. The NoA for the Study 2 supplement was also received! We currently await Study 2 start in summer 2017, work continues with site medical record reviews, data cleaning efforts, manuscript planning, development of the Computerized Adaptive Screen (CAS), and Study 2 preparations.

STUDY DATASETS

Study data sets can be downloaded directly from the PECARN website at <http://www.pecarn.org/studyDatasets/>. ■



GLEMSCRN Announcement

There's Something Happening Here— in the Great Lakes Node

Submitted by

Sherry Goldfarb, MPH and Jessica Saunders, BA

Nodal and Associate Nodal Administrators, GLEMSCRN Node



Major changes are afoot for the node. Dr. Prashant Mahajan and Elizabeth Duffy will soon join the faculty and staff at the University of Michigan and Dr. Robert Hickey and his crew at Children's Hospital of Pittsburgh will join as a new HEDA site replacing Children's Hospital of Michigan.

Dr. Mahajan will join the U of M Department of Emergency Medicine as Vice-Chair of Emergency Medicine and Division Chief of Pediatric Emergency Medicine and Elizabeth Duffy will join the staff as a program manager. The University of Michigan is very excited to have such talented individuals join the team and contribute to the mission of creating the future of emergency care.

At the same time, we are very pleased to announce the addition of Children's Hospital of Pittsburgh to the node. As many of you know, Dr. Hickey was the RNC PI of the PRIDENET node of PECARN from 2011 to 2015. They have a robust research infrastructure, are currently participating in ED Screening for Teens at Risk (ED-STARS) and ESETT (established status epilepticus treatment trial) and joined the Biosignatures II study on September 1st of this year. You may ask: *Can they really still be called the Great Lakes Node?* The answer is yes; Pennsylvania has 51 miles of coastline along Lake Erie. So, we will continue using our catchy, pithy, roll off the tongue acronym, GLEMSCRN!

GLEMSCRN Announcement (Continued)

Please welcome our new Pittsburgh HEDA members:



Dr. Robert Hickey is PI for the Children’s Hospital of Pittsburgh HEDA. He is a Professor of Pediatrics and Professor of Clinical and Translational Science. He serves as Director of Research within Ped Emergency Medicine at the Children’s Hospital of Pittsburgh. He has experience in both basic science and clinical research with over 90 peer-reviewed publications and

multiple grants.

Rose Azrak is a Clinical Research Nurse Coordinator at the Children’s Hospital of Pittsburgh of UPMC. She’s worked as a staff nurse in the CHP ED, and is now attending University of Pittsburgh’s Katz Graduate School of Business for her Master’s in Business Admin. She enjoys spending time with her fiancé and their puppy Vailyn.



Left to right Nicole Machi, Maria Nolan and Rose Azrak

Maria Nolan is a Clinical Research Nurse Coordinator at Children’s Hospital of Pittsburgh of UPMC. She’s worked as a nurse in their ED for 3 yrs. She also works as a clinical instructor for BSN nursing students at Duquesne University, and is enrolled in Duquesne’s MSN-Family Nurse Practitioner program. She enjoys traveling, running, and volleyball.

Nicole Machi is a Clinical Research Nurse Coordinator at Children’s Hospital of Pittsburgh of UPMC. She also works as a staff nurse in their ED. She is planning her wedding for next summer, loves traveling, camping and spending time with her puppy. ■

PECARN New Faces & Nodal News

SW-Node

As the Southwest Node is finishing its 1st year with PECARN we are all feeling very energized and excited. We were quite overwhelmed for much of this past year, but are feeling a bit more solid in our PECARN participation. We have mastered many acronyms and have even grasped a few PECARN SOPs.

All of the SW Nodal staff and PIs got together for a 2 day retreat in Albuquerque, NM at the end of August. As a result, we are hoping to be able to be a more focused and effective team. This is a good time for us to look back over the year and reflect on our performance.



Decorated Biosigs II data form box in the peds ED at University of Arizona. Artists are the daughters of the site PI.

PEM-NEW Node



CHONY is excited to welcome their new PECARN RC, Julie Ochs! Julie graduated from Skidmore College with a B.A. in Biology and a minor in Studio Art. Prior to becoming a research coordinator, she worked as an Emergency Medical Technician for two and a half years in Saratoga Springs, New York. She first joined the Emergency Medicine Research team at Columbia as a RA and is thrilled to make the transition to Research Coordinator. In the future she plans on applying to medical school and loves to paint, cook and learn new recipes.

PRIME Node

The PRIME node would like to congratulate Justine Cortez (CRC-UC Davis), who recently obtained her SOCR certification. We would also like to congratulate Nate Kuppermann on his receipt of the UC Davis SOM Research Award this year. This award is given in recognition of his contributions to medicine through clinical research. Finally, UC Davis would like to welcome Marianne So, our newest CRC. Marianne recently graduated from UC Davis with a degree in Environmental Toxicology. She has interesting experience serving as the PI of a study of our student-run clinics.



CHaMP Node

The Charlotte, Houston, and Milwaukee Prehospital (CHaMP) Node was renewed for funding. The CHaMP team is unchanged with Brooke Lerner, Nodal PI; Brittany Farrell, Nodal Admin.; Manish I. Shah, Jon Studnek, and Lorin Browne as Site PIs. CHaMP’s goal is to conduct high-quality pediatric EMS research. We will also continue to lead the PECARN EMSA Consortium.

DCC



Cara Elsholz has joined University of Utah as an IT Project Manager. She has a BS degree from Oregon State University, has studied public health and considers it one of her passions. Originally from the north-west she enjoys the weather and outdoor activities in Utah. She loves traveling with her husband and cooking.



Ryan Ross has joined the DCC stats team! Ryan recently completed his bachelor’s degree in statistics from BYU, with an emphasis in biostatistics. Ryan previously worked as a product specialist and data analyst at the online software company, Qualtrics. He will provide statistical support for PECARN.



John VanBuren grew up in Sycamore, IL and attended Augustana College in Rock Island, IL. He graduated with majors in Mathematics and Biology. He then attended University of Iowa for his Masters’ degree and Ph.D. in Biostats. He joined the DCC as a Faculty Statistician. John enjoys the outdoors.

GLEMSCRN



Kelsey Ryan is a new RA at NWCH. She grew up in Canton, OH and moved to Columbus to obtain her Bachelor's in Neuroscience at Ohio State University. She joined the research team in 2013 as a volunteer. She's excited to now be there full-time until she attends med school. She's currently training for a half marathon.



Asli Teweldeberhan, MPH, MA, is the new Team Lead RC at NWCH. She has a Masters of Public Health as well as a Masters in International Affairs. She previously held an Adjunct Instructor position in Epidemiology & Global Health at Ohio University.

Patricia Capone is a new RC at NWCH. She's originally from Long Island, NY and has spent the past four years in Columbus, Ohio attending Ohio State University. She graduated with a bachelor's of science in Chemistry this May and plans to go to medical school to become a pediatrician.



Catherine Flechsig, MPH, joined the PECARN RC team at the University of Michigan in May 2016, and will be the RC Champion for the Probiotics and ED-STARS projects. Catherine completed her undergraduate and graduate degrees at Michigan State University in Animal Science and Public Health.



Amber Kihm has joined the staff at Nationwide Children's Hospital as a research coordinator. She is a recent graduate from The Ohio State University with a BS in Human Nutrition with intentions to attend medical school. She joined our team after being an undergraduate Research Assistant with the ED.



Stephanie Johnson, MPH, is a new RC at the University of Mich. Stephanie is a Michigander, who has returned after spending time at Ohio State University for her undergrad and the University of Pittsburgh for her masters. She just graduated from the University of Pittsburgh with her master's in public health. She enjoys traveling, cycling, and swimming.

WBCARN Node



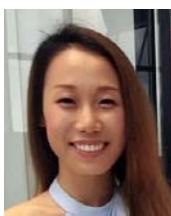
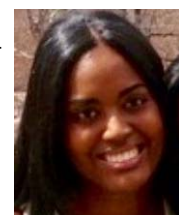
Rachel Chenard is a new RC at Boston Children's Hospital. She is originally from Maine and recently graduated from Simmons College with a BA in Public Health. Rachel will be working on the FLUID and Biosignatures II studies for PECARN. She enjoys swimming, trying out new recipes, and exploring Boston.

Philip Sang recently obtained his MS in Physiology in Biophysics from Georgetown University this past spring, and is now working as a Senior Research Intern at the Children's National Medical Center. He is pursuing a career in medicine and hopes to one day work in pediatric emergency medicine.

Alexandra Maulden is a new RC at Boston Children's Hospital. She graduated from Colgate University with a BA in Biology. Eventually, she hopes to combine her interest in public policy and clinical research. In her free time, she enjoys skiing, traveling, reading and being with her friends and family.



Jasmine Harris is a new RC at CNMC. She grew up in Oxon Hill, MD and went to the University of Maryland-College Park. She graduated from Case Western Reserve University with an MS in Physiology. She plans to attend med school and is interested in caring for the underserved and reducing health disparities. She enjoys reading, traveling, and running.



Angel Xuyan Jiao is a Senior at University of Maryland Baltimore County studying Health Admin and Public Policy with a minor in Psych. She began working in PECARN this past summer and will continue up until she graduates as a Clinical Research Project Administrator. In her spare time, she enjoys world travel and spending time with her puppies.



Karen Sheys is a Senior Research Intern at CNMC. She graduated with a B.A. in Psych and Spanish with high honors from Kenyon College in May 2016. She plans to pursue a Ph.D. in Clinical Psych specializing in OCD and anxiety disorders in children. She loves to bake (specializing in cookies and pies)!

WBCARN would also like to announce that **Monika Goyal, MD, MSCE** has been appointed PECARN's Research Director for the Division of Emergency Medicine at Children's National Medical Center. Congratulations, Monika!!!

