

## Patients, Families, Staff Improve Research Experience on New Council

Carla Howard, an adult research participant at Cincinnati Children's who was diagnosed with sickle cell anemia at CCHMC as a child, says that coming to Children's always puts a smile on her face.

"Children's is a gem of the city," Howard says. "If I'm having a bad day, this is one of the places I know I can come to. I enjoy helping sickle cell patients – even if it's just to sit with a patient and family and hold someone's hand."

When she's not volunteering with patients and families, Howard has another role at CCHMC: She's a member of the new Research Participant Advisory Council (RPAC). Howard is on RPAC with other former or current patients, healthy subjects, parents, and Cincinnati Children's and University of Cincinnati staff members.

"Some studies have allowed me to identify new treatments, and provided free care at a time when I really needed it," Howard says.

### Research Participant Advisory Council Brings Patients, Families and Staff Together

Cincinnati Children's researchers have been working with patients and families since the 1930s. Having an advisory group based at CCHMC that includes patients, families and staff is the next step in improving the research experience.

"There's a lot of fear and uncertainty about what actually happens in research," says **Keith Marsolo**, PhD, associate professor, Bioinformatics. "In some communities there's a mistrust around research. Our goal is to break down those barriers. We'd also like to increase the diversity of people participating in research studies, which will improve our



*Christina Hehn, and twins Jessie and Kendall, are members of the Research Participant Advisory Council*

studies and yield information that's more useful to patients and families."

The Research Participant Advisory Council, which is similar to the Patient Advisory Council, was created in 2014 by a team from the Clinical Translation Research Center (CTRC) led by **Rebecca Harper**, DNP, clinical operations director, CTCRC and Schubert Research Clinic.

"I wanted to make sure that patients and families have a voice and know how important they are to the organization and to research," Harper says. "We considered all types of research at Cincinnati Children's, and kept in mind that research goes on at all our campuses, satellite locations and in surrounding communities."

### First Step for Council: Fine-Tuning Consent Forms

One of the first projects RPAC took on was making research consent forms more understandable for patients and families.

Kendall Cappel, a 19-year-old college student, is on the council. For the consent project, she and other council members suggested adding illustrations of the blood draw process.

*[Continued next page](#)*

## IN THIS ISSUE:

[Professional Development](#)

[A Moment in History](#)

[Schubert Scheduling in ePAS](#)

[Rebranding Research](#)

[CCTST Grants Offered](#)

[New Partnership](#)

[Scientometrics](#)

[Trivia Corner](#)

[Dates & Deadlines](#)

[Progressive People](#)

[Now Enrolling](#)

[Research Week](#)

[Taming Big Genomics Data](#)

[Informatics Focus Group](#)

[CRP Appreciation Day](#)

[CORES Billing Implementation](#)



Winter 2015

## Research Participant Advisory Council



*Kendall Cappel, college student, is on the RPAC with her parents*

“We get different understandings from words, but we can look at an image and come up with the same idea,” Cappel says. “Adding images means that children don’t have to read a 17- or 20-page packet. They can look at the pictures and understand.”

### **Council Connects Patients, Families and Researchers Across CCHMC**

Different divisions at CCHMC have groups of patients they reach out to for help on research projects. But before RPAC was formed, there was no overarching structure in Research to bring those groups together.

The council’s work spans the institution. Harper says that the division of Human Genetics may use RPAC as a focus group for feedback on a proposed study. Plans are also in the works for council members to tour the new T1 research clinic and provide feedback.

“Before we started the council, it was hard to initiate improvement projects and form focus groups when we needed a group of people to help with feedback,” Harper says. “Now, we can tap into the experience and expertise of the Research Participant Advisory Council.”

At a recent meeting, Cappel and other council members were working on two other projects: reviewing and providing feedback on the research study section of Cincinnati Children’s web site, as well as on research participation brochures.

Eventually, RPAC will help provide organizing principles for divisions that want to start similar programs.

“We’re starting small, but it’s really about involving patients and members of the community who are interested in research,” Marsolo says.

### The Research Participant Advisory Council’s goals are:

- *To improve research across the academic health center, with a focus on participant experiences and building relationships of trust.*
  - *Establish best practices and improvement initiatives*
  - *Provide a formal referral system for other patient and family advisory councils looking to engage in research.*
- *Humanize research at the institution and the surrounding communities.*
- *Provide a foundation for researchers wishing to include patients and families in their study design.*

### **Parents, Healthy Subjects Also on Research Participant Advisory Council**

Janet and Tom Cappel, parents of Kendall, say it’s been helpful to be able to network with other parents and patients in RPAC, and learn from families working toward similar goals.

“No one that we knew had any children in studies,” Cappel says. “Being in studies and on RPAC has been a great experience for us. With the studies Kendall has been in, we were always in control and participation was always our choice.”

Christina Hehn, mother of twins Jessie and Kendall, says that being on the Research Participant Advisory Council has provided an opportunity for her daughters to give back while obtaining real-world work experience that will set them apart on college applications. Also, council members are compensated for their time.

“Since my daughters are interested in science, the council was a great fit and fulfills their volunteer service requirement for National Honor Society,” she says.

Jessie Hehn says she has enjoyed learning from council members with different backgrounds and viewpoints. “Research involves a broad, diverse group of people,” she says. “Having different viewpoints helps – you learn more about others and how different we are.”

*[Continued next page](#)*

# RPAC (continued)

## Working Toward Better Research Outcomes

**Jeremy Corsmo**, senior director, Office of Research Compliance and Regulatory Affairs, says that hearing from patients, families and staff on the Research Participant Advisory Council is helping Cincinnati Children’s grow research efforts, while making sure that participants understand the research and have a positive experience.

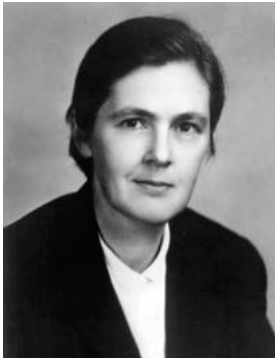
“Becca and the team in Clinical Translational Research are visionaries and a testament to the fact that we should continue to find new ways to work together with patients, families and all stakeholders to improve research for everyone,” Corsmo says.

RPAC’s work is helping to ensure that research participants stay in studies until they’re finished, which yields results that can change the outcome when they’re taken from bench to bedside.

As a former CCHMC patient, Carla Howard recognizes how the Research Participant Advisory Council is helping to improve the research process, and what that means for children’s health.

“I’m thankful that Cincinnati Children’s started the Research Participant Advisory Council,” she says. “We’re helping to streamline research so people aren’t afraid to participate. Research makes healthcare better for everyone.”

# Pioneer Passing - A Moment in History



Frances Oldham Kelsey  
1914 - 2015

At age 101, Frances Oldham Kelsey passed away. While you may not instantly recognize her name, you will likely recognize her most notable accomplishment...keeping Thalidomide from being FDA-approved in the United States.

After many years in pharmacology, Frances joined the FDA in 1960 and was soon assigned to review an application by Merrell for Thalidomide (which, incidentally, was produced in Cincinnati!). The drug had already been approved in Canada as well as over 20 European and African countries. Frances had concerns about the drug’s safety and as a result,

refused to authorize the product for market until sufficient safety data could be presented. Before such data could be produced, thalidomide began being linked to birth defects. Worldwide, over 10,000 cases of infants with limb malformation were reported, with only 50% surviving. The Kefauver Harris Amendment of 1962 (to the Federal Food, Drug, and Cosmetic Act) passed soon after, strengthening drug regulation.

For her work, she was awarded the President’s Award for Distinguished Federal Civilian Service by President John F. Kennedy.

# Professional Development

**ePAS IRB Training (pilot class)**  
Thursday, December 10<sup>th</sup>; 8:30am – 11:30am; ELM Registration

**EPIC Research Registration**  
Friday, December 11<sup>th</sup>; 8:00am – 2:00pm; ELM Registration

**Informed Consent Role Play**  
Friday, December 11<sup>th</sup>; 9:00am – 11:30; ELM Registration

**EPIC Research Registration**  
Wednesday, January 12<sup>th</sup>; 8:00am – 5:00pm; ELM Registration

**Clinical Research Orientation**  
Monday, February 1<sup>st</sup> – Tuesday February 2<sup>nd</sup>; 8:00am – Noon; ELM Registration

**EPIC Research Registration**  
Wednesday, February 3<sup>rd</sup>; 8:00am – 5:00pm; ELM Registration

**Clinical Research Skills Training**  
Thursday, February 4<sup>th</sup>; 8:00am – Noon; ELM Registration

**Clinical Research Phlebotomy Training**  
Thursday, February 4<sup>th</sup>; 12:30pm – 5:00pm; ELM Registration

**Core Clinical Research Training**  
Tuesday, February 23 – Thursday, February 25<sup>th</sup>; 8:00am – 12:30pm; ELM Registration

**Informed Consent Role Play**  
Thursday, March 4<sup>th</sup>; 9:00am – 11:30; ELM Registration

## Access to Schubert Research Clinic Services Available in ePAS

### *Did you know that you can request Schubert Research Clinic services, including CTRC, in ePAS?*

For those of you who fondly remember emailing your forms and protocol documents to CTRC representatives in the past, this might not be good news! However, we are certain that many of you will welcome this new ePAS/Schubert Research Clinic integrated submission process.

It is easy to request [Schubert Research Clinic](#) and CTRC services:

- When submitting your protocol to the IRB in ePAS, select “Schubert Research Clinic” (item #6) in the ‘Study Management - Research Location’ section.
- Then select from three Schubert Research Clinic (SRC) service options:
  - **Space only** or laboratory specimen processing/storage of specimens only
  - **Basic services only**, including: vital signs, prep for labs, blood draw, and urine collection
  - **[Clinical Translational Research Center \(CTRC\) services](#)**, including: basic triage services, nursing, bionutrition, DXA scanning, CTRC specialty labs, behavioral core, or vascular core
- **If you select “CTRC Services”**, the next page in ePAS will have items for you to easily fill out, which will provide additional information related to your study’s CTRC utilization, including a fillable PDF form where you can specify which of the CTRC services you will need. This form also includes a CTRC voucher funding request for investigator-initiated studies, if applicable. Save this form to your computer, fill it out, save the completed form to your computer and then upload the completed form to ePAS.

You do not need to contact SRC or CTRC staff to let us know about your protocol. ePAS will notify us that your protocol has been submitted and will keep us apprised of the IRB status. We will be able to access your protocol documents in ePAS, and you will not need to email them to us.

We are in the process of converting all studies with current IRB approval that were using CTRC services prior to the ePAS Schubert Research Clinic go-live on September 9 so that we can view them in ePAS. For studies that were approved by the IRB after 2012, the conversion will be smooth. We are still trying to work out how to convert the studies with IRB approval prior to 2012.

If you have any questions, please contact us at [schubertresearchclinic@cchmc.org](mailto:schubertresearchclinic@cchmc.org). If you wish to speak with one of our staff members, please call Christy Keller, our CTRC Coordinator, at 803-1842 on Tuesday through Friday.

## Rebranding Research Follow-Up

If you read the article in the [last edition of Research Forward](#) about efforts to rebrand the Clinical Research enterprise (and especially if you took the time to vote yourself!) and wanted to see which campaign won, the results were announced at the [MAGI](#) Clinical Research Conference last month.

ClinEdge won the Best Overall award as well as the People’s Choice award with the entry titled “Side Effects May Include.” It can be found [HERE](#) as entry F.

Entries are available under a Creative Commons license for royalty-free use, with credit to the creator for two years (until October 13, 2017).





## CCTST Community Leaders Institute, Translational Partnership Grants Offered

The Center for Clinical and Translational Science and Training (CCTST) **Community Engagement core** announces opportunities to apply for:

- Participation in the February- March 2016 **Community Leaders Institute**. The CLI is a leadership development training program designed to enhance community translational research skills and capacity building competencies. (application deadline: Dec. 18)
- An academic-community **Translational Research Partnership Grant (formerly the Community Health Grant)** to improve health outcomes in children, adults, and/or communities. Applicants may request up to \$20,000 for a one-year funding period. Each application must have at least one academic partner and one community partner. (optional letter of intent deadline: Dec. 11; proposal deadline: Jan. 8, 2016)

Program details are [available here](#). If you have questions or need more information, please email [ctsa@cchmc.org](mailto:ctsa@cchmc.org) or call (513) 803-0917.



*CCTST Community Leaders Institute 2015*



## Adare New Partner in Formulating Medicine for Kids

Adare Pharmaceuticals, Inc., and Cincinnati Children's have partnered up to focus on optimizing and reformulating medicines to better meet the needs of children and create new possibilities for improved patient care. For decades, Adare has solved complex formulation, manufacturing and commercialization challenges, resulting in transformational medicines.

The *Adare Drug Optimization and Repurposing Innovation Fund* is part of Cincinnati Children's broader initiative, which sponsors promising research projects across all therapeutic areas and types of technology. The goal of Adare's fund is to support projects that have the potential to bring new formulations of medicines to children, including making them easier to administer. Adare has successfully developed alternative dosage forms for the pediatric population that are on the market. These include ZENPEP® for the treatment of exocrine pancreatic insufficiency due to cystic fibrosis or other conditions, and VIREAD® for the treatment of HIV-1 infection, as part of a combination therapy.

"We have a strong track record of identifying opportunities to transform medicines that provide new options for patients, including those for the pediatric population," said John Fraher, president and CEO of Adare Pharmaceuticals. "Collaborations like these drive innovation, and we look forward to working with Cincinnati Children's to bring better options to infants and children, who have a special set of needs."

"We are pleased to partner with Adare Pharmaceuticals, a leader in drug development and optimization to identify and advance improved treatments for our patients," said **Margaret Hostetter**, MD, chair of pediatrics and director, Research Foundation.

Under the terms of the agreement, Adare will have the opportunity to sponsor select research programs submitted to Cincinnati Children's annual Innovation Fund, with members of Adare being part of the review committee. The selected research programs will receive funding commensurate with development needs, based on projects reaching specific milestones. Following the completion of the research programs, Adare will have an exclusive option to enter into a licensing agreement for these programs.

Upon entering into any subsequent licensing agreement, Cincinnati Children's will be eligible to receive certain milestone payments, as well as royalties on product sales from Adare. Adare will have the primary responsibility for further clinical development and commercialization of products arising from the collaboration. The partnership and Innovation Fund are managed by Cincinnati Children's Center for Technology Commercialization.

## SCIENTOMETRICS 101

Scientometrics is the study of measuring and analyzing science using quantitative approaches. Most people are familiar with citation analysis of their research; how many times has an individual article been cited over a specific span of time. Today there are more ways to measure impact including the *h*-index, Impact factor and Altmetrics. These new tools can help a researcher track their “broader impact” and “intellectual merit” not just for personal understanding but to use the data when updating their CV or applying for grants. Please note, these metrics are certainly not the final word on a researcher’s impact and merit as there are flaws relating to each measurement. That being said, let’s take a minute to go over what some of these tools are and where to find them.

***h*-index** (aka Hirsch Index)-In 2005 J.E. Hirsch proposed a numerical value found by measuring an author’s productivity and impact of published works. This value is based on the researcher’s most cited papers and the number of citations that the author has received in other publications. Using these numbers, a citation threshold (*h*) is determined.

[Web of Science](#) (logon as an affiliate if you are not UC faculty or student) watch [this video](#) to learn how to find your *h*-index. [Scopus](#) (logon as an affiliate if you are not UC faculty or student) Click on [this link](#) to learn how to find your *h*-index. If you use Internet Explorer, you may get a certificate error. Click on “Continue to this website (not recommended)”; then Login to UC. [Google Scholar](#) set up a free account to track your publications, click [here](#) for more information.

**Impact Factor**- In 1975, E. Garfield proposed this calculation of the average number of citations from a specific journal to recent articles. The impact factor measures the importance or the value of a journal compared to other journals within a field. Being aware of a journal’s impact factor is just one thing to consider when deciding where to publish. Keep in mind that there are journals that do not have an impact factor because e.g. the journal is too new.

[JCR](#)-(logon as an affiliate if you are not UC faculty or student) Watch [this video](#) to find a journal’s impact factor

[Edanz](#)- use the free Journal Section tool (copy and paste the abstract of your article) to decide the best journal to submit a publication to as well as review each journal’s impact factor, for a more informed decision.

**Altmetrics** (aka Alternative metrics)-This new set of methods is a way to analyze and study metrics by looking at article level data activity in media outlets e.g. New York Times, blogs, Facebook, Twitter, downloads or page views of an article on the publisher’s page and reference manager downloads.

[Almetrics bookmarklet](#)-Download the free bookmarklet to collect data about your publications

[Impactstory](#)-This open-source tool combines traditional data from journals as well as blog posts, datasets and software.

[Scopus](#)-(logon as an affiliate if you are not UC faculty or student) Find Altmetrics in Scopus for each article under Related Documents (if data is available).



**...and beyond**-Monitor collaboration activity including global information, compare your research against your peers, identify potential new areas of research and more!

[InCites](#)-Sign up for your free account through our hospital subscription (if you already have a user name and password for another Thomson e.g. Endnote Online, just login). Watch [this video](#) for a quick overview of what you can find in InCites.

For further information on see our [Scientometrics guide](#) or email [alison.kissling@cchmc.org](mailto:alison.kissling@cchmc.org). Utilizing and combining these different methods of evaluating scientific research will help the researcher better understand their “broader impact” and “intellectual merit”.

### Trivia Corner

Various (unverified) stats shared at the 2015 PRIM&R Conference:

There are 7 Billion mobile phones worldwide -- more people have access to phones than toilets.

35% of neuroimaging scans report findings, with 2-5% of these findings being medically significant.

95% of trial participants have positive experiences overall, but may feel let down at the end of the study.

90% of trial participants say they want to know the results of their clinical trial; 77% never hear back. If not informed, 68% say they wouldn't participate again.

# Dates and Deadlines

## NIH Grant Deadlines January 25, 2016 through April 13, 2016 ( CYCLE I )

**\*Note new due date for R41, R42, R43, R44, U43 U44 effective September 5, 2015\***

Activity Code	Program Description	SPO Due Date	CYCLE I Due Date
<b>P Series</b> <i>New, renewal, resubmission, revision</i>	Program Project Grants and Center Grants	January 18	January 25
<b>G07, G08, G11, G12, G13, G20, R10, R24, S06, S11, S21, S22, SC1, SC2, SC3, UG1, U10, S06, U19, U2C, U41, U42, U45, U54, U56</b> <i>New, renewal, resubmission, revision</i>	Other Activity Codes	January 18	January 25
<b>R18/U18 R25</b> <i>New, renewal, resubmission, revision</i>	Research Demonstration Education Projects	January 18	January 25
<b>C06/UC6</b> <i>New, renewal, resubmission, revision</i>	Construction Grants	January 18	January 25
<b>T Series</b> <b>D Series</b> <i>New, renewal, resubmission, revision</i>	<i>Institutional</i> National Research Service Awards Other Training Grants	January 18	January 25
<b>R01</b> <i>New</i>	Research Grants	January 29	February 5
<b>U01</b> <i>New</i>	Research Grants – Cooperative Agreements	January 29	February 5
<b>K Series</b> <i>New</i>	Research Career Development	February 5	February 12
<b>R03, R21, R33, R21/R33, R34, R36</b> <i>New</i>	Other Research Grants	February 9	February 16
<b>R15</b> <i>New, renewal, resubmission, revision</i>	Academic Research Enhancement Award (AREA)	February 18	February 25
<b>R01</b> <i>renewal, resubmission, revision</i>	Research Grants	February 29	March 5
<b>U01</b> <i>renewal, resubmission, revision</i>	Research Grants – Cooperative Agreements	February 29	March 5
<b>K Series</b> <i>renewal, resubmission, revision</i>	Research Career Development	March 7	March 12
<b>R03, R21, R33, R21/R33, R34, R36</b> <i>renewal, resubmission, revision</i>	Other Research Grants	March 9	March 16
<b>R41, R42</b> <b>R43, R44, U43, U44</b> <i>New, renewal, resubmission, revision</i>	Small Business Technology Transfer (STTR) Small Business Innovation Research (SBIR)	August 31, 2015	September 5, 2015
<b>F Series Fellowships</b> <i>New, renewal, resubmission</i>	<i>Individual</i> National Research Service Awards (Standard)	April 1	April 8
<b>R13, U13</b> <i>New, renewal, resubmission, revision</i>	Conference Grants and Conference Cooperative Agreements	April 5	April 12
<b>F31 Diversity Fellowships</b> <i>New, renewal, resubmission</i>	<i>Individual</i> Predoctoral (F31) Fellowships to Promote Diversity in Health-Related Research	April 6	April 13

**\*\* Deadlines Falling on weekends or holidays move to the next business day**





## Progressive People: Joseph Matu

The Office of Research Compliance and Regulatory Affairs is pleased to welcome Joe Matu, DVM to the IACUC Office. Joe comes to us with more than 21 years of experience in laboratory animal medicine.



Joe attended college at College of University of Nigeria, Nsukka and went on to work at Ahmadu Bello University as a faculty of Veterinary Medicine in the small animal unit, then worked in Laboratory Animal Resources at The Ohio State University for 10 years, and lastly in the division of Laboratory Animal Medical Services at the University of Cincinnati for over 10 years.

Joe will be completing all veterinary reviews of IACUC protocols. Please feel free to contact him if you have any questions or concerns regarding your animal use protocol.

## Now Enrolling

### Needed for Study: Newborn Babies Up to 13 Weeks Old

Rotavirus Vaccine and Bowel Function Study



00-HMO-170 # 2015-2754-12

#### What

The purpose of this research study is to look at what effects the routine rotavirus vaccines have on the bowel function of babies.

#### Who

Mothers and their newborn babies who are up to 13 weeks old

#### Pay

Families may receive up to \$400 for time and effort.

#### Contact

Study coordinator at [IDstudies@cchmc.org](mailto:IDstudies@cchmc.org) or 513-803-8800



[cincinnatichildrens.org/clinical-studies](http://cincinnatichildrens.org/clinical-studies)  
[facebook.com/cincinnatichildrensresearch](https://facebook.com/cincinnatichildrensresearch)  
[pinterest.com/cincykidstudies](https://pinterest.com/cincykidstudies)

MARK YOUR CALENDARS

## Research Week 2016 April 18-22

join in  
as we

celebrate research progress,  
increase resource networks and  
strengthen team science,  
improving health with  
cutting edge research.

#### Highlights:

- "Shark-tank" style competition with funding award
- Innovation, Entrepreneurialism and Technology Expo
- Keynotes, symposium and panel discussion
- Wellness Research and Practice Expo
- Hutton Ethics Lectureship

Research Week 2016 updates will be tweeted @UC\_CoMResearch and posted on Facebook CoM Office of Research

# Research WORKS!

University of Cincinnati ■ Cincinnati Children's Hospital Medical Center  
Center for Clinical & Translational Science & Training (CCTST)  
Cincinnati Veterans Affairs (VA) Medical Center ■ Cincinnati Education &  
Research for Veterans (CERV) Foundation ■ UC Health



# AltAnalyze, ToppGene Aim to Tame Big Genomics Data for Researchers

Thousands of researchers from around the world rely on two open-source software tools hosted at Cincinnati Children's to help them better understand genomics data: AltAnalyze and ToppGene. Both tools aid researchers in dealing with next generation sequencing, which has become an essential approach to discovering the cause of human disease.

Sequencing of patient DNA (the genetic blueprint of the cell) and RNA (the molecular activity of that blueprint) produces staggering amounts of data. Historically, teams of experts have been needed to apply software to determine which genes are active, how they are active and which pathways are impacted in disease. But now, tools such as AltAnalyze and the ToppGene Suite—along with the Children's researchers that run them—are helping researchers cope with this data deluge.

## AltAnalyze

AltAnalyze is an open-source software project principally run by Nathan Salomonis, PhD, and his colleagues in biomedical informatics at Cincinnati Children's and the University of Cincinnati. The tool provides easy-to-use applications that allow biologists with little to no computational training to analyze microarray and RNA sequencing datasets.

"AltAnalyze and associated tools are helping hundreds of researchers to obtain novel biological insights and uncover new mechanisms that regulate cellular biology," says Salomonis. "Our applications do so by providing comprehensive and easy-to-use methods to analyze transcriptome datasets from beginning to end."

Although biological and clinical researchers have a broad range of expertise in the life sciences and tools to understand disease, these researchers are often not trained in the use of sophisticated computational tools for sequence analysis. AltAnalyze was developed as a one-stop shop to allow non-computational and computational researchers alike to handle their large datasets on their own computers.

This cross-platform software can take the raw sequencing data provided by a genomics or DNA sequencing core facility and immediately process it to report modified gene activity (transcription, splicing, microRNA targeting), identify distinct populations of individual cells, predict which cell populations may be contributing to disease in complex samples, and present new possible molecular models (pathways) to describe disease processes. The software can be used for both conventional samples, such as RNA from blood, and with the single-cell RNA sequencing of thousands of cells.

AltAnalyze has been used by more than 20,000 unique users from over 120 countries since it was launched 2008, with an average of 600-1000 users every month. AltAnalyze can work on a laptop computer and has an easy-to-use application interface. For more information on AltAnalyze, visit [www.altanalyze.org](http://www.altanalyze.org).



## TOPPGene

The ToppGene Suite allows researchers with minimal computational experience to integrate diverse data types and synthesize hypotheses about gene and pathway function in human and mouse models. Anil Jegga, DVM, Bruce Aronow, PhD and their colleagues in the Division of Biomedical Informatics developed it.



"An important aspect of bioinformatics is the ease with which data can be brought together to support extended analysis and knowledge mining," says Jegga. "Significant conclusions can be drawn using published data for novel analysis by linking independent data sets. The ToppGene suite helps researchers do exactly that."

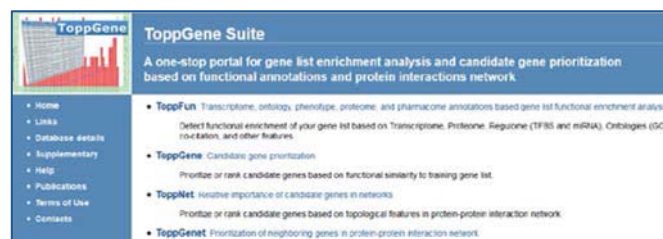
*(Continued next page)*

## AltAnalyze, ToppGene (continued)

ToppGene offers a web-based, one-stop online assembly of computational software tools that enables biomedical researchers to:

- Perform gene list enrichment analysis (ToppFun)
- Perform candidate gene prioritization based on functional annotations (ToppGene)
- Perform candidate gene prioritization based on protein interaction network analysis (ToppNet)
- Identify and rank candidate genes in the interactome based on both functional annotations and protein-protein interaction network analysis (ToppGeNet).

Although several other enrichment analysis tools are available, the strength of ToppGene is that it offers the most extensive collection of functional annotations covering all aspects of gene functions. Its backend database has an enormous collection of gene annotations, normalized using standard nomenclature, that have been compiled from an exhaustive list of resources.



The current backend knowledgebase for the ToppGene Suite houses more than 12 million annotations broadly categorized into 18 different features (Gene Ontology, Mammalian Phenotype Ontology, Disease-gene and Drug-gene associations, Pathways, Gene Expression Atlases, Protein Interactions, literature co-citations, and more).

ToppGene-related publications have been cited more than 700 times. Since its release in 2009, on average it receives more than 100 unique hits per day from researchers throughout the world. For more information on ToppGene, visit [toppgene.cchmc.org](http://toppgene.cchmc.org).

## New Clinical Informatics Focus Group Invites Researchers, Clinicians to Collaborate on EHR Data

How can we harness the data now available through electronic health records (EHRs) and other sources to research and improve patient care? This question and much more will be explored in the Clinical Informatics Focus Group, a new bimonthly, interdisciplinary networking opportunity.

Researchers, clinicians, and others from across both Cincinnati Children's and UC are invited to attend.

"For years, all of this information was locked up in paper records," says Peter S. White, PhD, director of biomedical informatics at Children's and UC. "But now with EHRs, we finally have the ability to mine that data, learn from it, and use it to improve patient care. We can also tie it to the rapidly emerging genomics research and begin to work toward truly individualized precision medicine."

The group meetings are open to all: researchers, clinicians, business staff, IT personnel, and anyone else who is interested.



"The goal of the group is to bring together people interested in clinical informatics as researchers, clinicians, or with just a casual interest to engage in community building and foster collaborations," says Judith Dexheimer, PhD, who is organizing the group. "The first meeting of the month will cover a basic informatics concept as well as a brief presentation about current research. The second monthly event is designed as a working meeting where researchers can get feedback on informatics implementations, study ideas, grants or manuscripts, or quality improvement projects."

The group will meet on the first and third Tuesdays every month at noon. The next meeting will be held December 15 at Cincinnati Children's, Location S, Room 8.100; all 2016 meetings will be held in Location S, Room 7.110.

For meeting notices, subscribe to the group's listserv by sending an email to [BMIClinInf-join@mailman.cchmc.org](mailto:BMIClinInf-join@mailman.cchmc.org). A Yammer discussion group called "Clinical Informatics Focus Group" has also been established; join at <http://yammer.com>.

## CRP Appreciation Day - Outstanding CRP Award Recap

Each year the Clinical Research Professionals gather to honor the efforts of its many members and give the community a chance to come together in acknowledgement of its hard work and dedication to the improvement of patient care. This year, CRP rolled out the red carpet to recognize Cincinnati Children's research personnel, including research coordinators, nurses and assistants, and Principal Investigators.

Those members who, in the past year, have advanced or received a promotion within the past year were recognized as well as all nominees for the Outstanding Clinical Research Professional Awards. The three Outstanding CRP winners for 2015 are highlighted below.

*Congratulations to all  
Outstanding CRP winners and nominees!!*

**Christy Cron, RN II, BSN; Clinical Translation Research Center**

The bulk of Christy's daily work consists of delivering safe and effective nursing care to research patients and their families. The strengths of her practice lie in her ability to create a trusting rapport with her patients and families; maintaining the delicate balance of the clinical and human aspects of patient care with the rigors of protocols and science; prioritizing the safety of the patient and their family; and making the research journey as enjoyable as possible. She enjoys acting as a preceptor to nursing students and new hires. Currently, she is conducting a nursing research study on the effects of patient participation in reducing pain, distress and increasing patient satisfaction during a blood draw or IV placement.

**Kelli Howard, RN I, BSN, MS, CCRC; Division of Critical Care Medicine**

Kelli works as a Research Nurse for the Division of Critical Care Medicine. Since joining in 2014, the division has increased its clinical research efforts, growing from six studies with three principal investigators (PI) to 17 studies that are overseen by eight PIs. Kelli is always available and eager to help when asked, volunteering for any and all tasks. Kelli is always available at all hours of the day or night to enroll a subject, perform study related procedures, or talk to a parent in regards to a study. Kelli is the cornerstone, powerhouse, driver, and engine behind a clinical research enterprise in the Division of Critical Care Medicine.

**David Huddleston, CRC III, BA; Department of Pediatric Neurology**

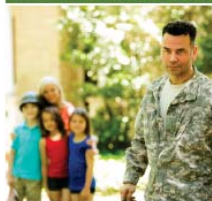
In David's current role, he serves as the head Clinical Research Coordinator (CRC) for the Gilbert/Wu Transcranial Magnetic Stimulation (TMS) Lab. He coordinates a number of research studies, including those that are NIH-funded. In addition to performing traditional CRC duties, David serves as a TMS technical consultant, computer programmer and lab manager. One of his major contributions involves the continuous design and implementation of new tools for data extraction, automation and process refinement. A favorite aspect of his position is his responsibility for building and maintaining rapport, as well as providing a positive experience for research participants and their families.



*Christy Cron, Kelli Howard & Don Gilbert (nominator for  
and accepting on behalf of David Huddleston)*

### Does Your Partner Suffer from Combat-Related PTSD?

Research Study Looking at Improving Treatment for Families of Veterans with Combat PTSD



COHMC IRB # 2015-0486; V2

#### What

We want to see if couple's-based therapy reduces Post-Traumatic Stress Disorder (PTSD) symptoms and improves relationships with partners and children.

#### Who

Adults, 18 and over, with a partner who:

- Has been diagnosed with or is suspected of having combat-related PTSD
- Reports a high level of relationship dissatisfaction
- Has at least one child, ages 4 to 12 years old, living with them

All parties must be willing to participate in the research study.

#### Pay

Families will receive up to \$200 for their time and travel.

#### Contact

Rich Gilman at 513-558-5872

 **Health.**

 **Cincinnati  
Children's**  
Research Foundation



## CORES Billing Implementation Nears the Finish Line

For the past 2 years, the Cincinnati Children's Research Foundation has been working to implement a centralized billing system that was developed at Vanderbilt University, called CORES Billing (Core Ordering & Reporting Enterprise System), for Shared Facilities. The creation and implementation of CORES Billing has allowed for streamlined ordering and increased efficiency in invoice management for both researchers and Shared Facility staff. Moving from paper order forms to electronic submission has allowed both parties to have a centralized record of order history, which has allowed for better reporting and visibility of how valuable research dollars are being spent. Further, Shared Facilities now have the ability to track how services and technologies are being utilized within their facility.

*Everything we need is in one place so we can look easily to evaluate what has been billed, what is pending, and have access to records at our fingertips without having to manage an Excel document to track our records. Billing is now automatic and has been both extremely helpful and time saving for our facility.*

*Chris Mayhew*

*Co-Director of the Pluripotent Stem Cell Facility*

"Our Shared Facilities are key assets that support the innovative science at CCHMC", noted Kristine Justus, PhD, Assistant Director of the CCRF and Vice President for Research Operations. "Early in 2012, we embarked on a search for an automated billing system that would give our Shared Facilities the tools they need to run their business." A multi-disciplinary task force was struck to select a system, and in 2013 we selected and began implementation of CORESBilling. The initial implementation of the system was a joint effort led by Shared Facility Resource Administrator, Nicole White, and Application Specialist Lauren Mays, who collaborated across the campus with many colleagues from BMI, Finance and Accounting and Peoplesoft. To develop a robust system that met everybody's needs, we worked as a team, along with critical input from users. "In order to implement the 'roles' correctly, it was really important we involve the users of the system. We worked with and incorporated input from Business Directors, Shared Facility Directors, lab technicians, and technical support staff," said Nicole White. The successful launch of this system was the result of every member of the team working toward one goal.

The CORES Billing implementation phase is nearing its completion. Over 20 Shared Facilities now utilize the system to help track, maintain, and fulfill orders from their customers. The order submission process for each facility varies slightly because it is tailored to the work done by the Facility, so be sure to check their website on Centerlink for specific instructions or contact the Shared Facility directly if you have any questions. Please visit the CORES Billing website on Centerlink (key word search: CORES) for more information on the system or for information on how to create a login account if you do not yet have one, or contact [help-cores@bmi.cchmc.org](mailto:help-cores@bmi.cchmc.org) for further assistance.



Send comments, story ideas or questions to:

**Mina Busch**

Office of Research Compliance and Regulatory Affairs

Cincinnati Children's  
Hospital Medical Center  
3333 Burnet Ave. MLC 7040  
Cincinnati, OH 45229-3039  
[Mina.Busch@cchmc.org](mailto:Mina.Busch@cchmc.org)  
513-636-3342

### Contributors

Editor – Mina Busch  
Writer – Beth Bloomberg  
Writer – Jared Connor  
Writer – Jim Flessa  
Writer – Becca Harper  
Writer – Sarah Hawkins  
Writer – Sara Helbig  
Writer – Jane Howie  
Writer – Allison Kissling  
Writer – Rachel Murray  
Writer – Michael Pistone  
Writer – Mark Schuller  
Writer – Andrea Smith  
Writer – Nicole White  
Writer – Jill Williams



**Happy Holidays and all the best to you and yours in 2016!!**

