Many thanks to our Director Tammy Sumner for all of her communication to faculty, fellows, staff, and students to keep us up to date as the pandemic cri began and developed, and for setting the precedence of interacting without our teams with understanding and patience as we work in a crisis situation.

Thank you Associate Director Donna Caccamise for co-coordinating ICS closures access, reopening, organizing and managing staff for off-site work, directing the management of Muenzinger and CINC offices and facilities, and painstakingly conducting budget exercises required by CU senior T f 1 0 0

After a strong start to the new year and a busy winter, our community was taken by surprise by the speed with which campus research operations came to a screeching halt in mid-March. INC leadership had been discussing contingency plans for what to do in the case of a local coronavirus outbreak, and not a week later we were closing our doors without knowing when we would be able to resume scanning operations.

The first two weeks of the closure were focused on adjustment: adjusting to campus closures, stay-at-home orders, new routines, remote meetings, childcare, self-care, and the sudden loss of our day-to-day community. Once the dust settled, we moved on to pivoting our priorities and work for a prolonged period without data collection. Our team had spent January and February understanding our values, mission, and vision, which helped us quickly transition our work and use the first month of our shutdown to make progress on mission-critical projects such as:

- Creating databases of every prior scan session and study in INC's almost 9-year history to track trends in our use and monitor for potential problems
- Designing and testing a new architecture for MRI data and analysis storage on PetaLibrary, our Research Computing-based storage system

ICS: Why all the meetings?

NS: Talking with study teams ensures all staff and study teams have a common sense of purpose and understand how best to move forward in this new landscape. With so many constraints to balance in t reopening process, it is critical we have regular inpu from the PIs and researchers using our facility to make sure we are implementing appropriate and realistic safety measures. The core INC staff has da check-in meetings because the planning needed to reopen is intense. And talking frequently as a team i this constantly shifting environment helps us all stay focused, grounded, and connected, and helps us review what has happened in the previous 24 hours time so we can assess where we are and where we need to go.

ICS: How do you keep the meetings productive?

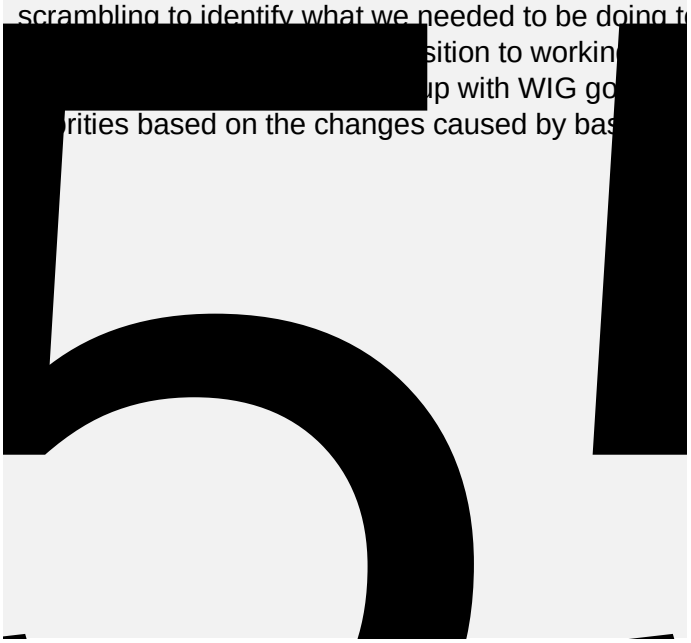
NS: We developed a structure to the meetings where one person shares at a time and addresses: 1) how you, generally; 2) what are you working on; 3) what are the one or two things you are focused on getting done; 4) what do you need to move forward and make progress, where are you blocked, where are your challenges in making progress?

Then as a group we dive into what came up for each person. At the end we go over information we gather from outside the team so everyone on the team know what is happening outside of the organization that may affect our work.

We find that talking in real-time provides a more holistic view of what is happening work wise within th team and how each member is doing, compared to individual emails and phone calls. The daily check-in force us to distill what is most important to our goal of making up for this lost data collection time, and how t quickly adapt and change what we work on when obstacles arise. This has been so helpful that the tea will likely continue this check-in even when business goes back to normal. We also developed a Wildly Important Goals (WIG) Dashboard to track our progress. See more on WIG below

ICS: What are 'Wildly Important Goals' (WIG)?

NS: Back in February, INC was working on identifyin our team WIGs for this year, which are one or two extremely important goals that we feel matter the most to our facility. In the midst of clarifying these goals, the pandemic hi After a few weeks of scrambling to identify what we needed to be doing t sition to workin up with WIG go rities based on the changes caused by bas



ICS: What structures have you built to achieve the WIG? (continuing reply from page 16)

As an example, Lena created an Optimization Algorithm that would create a schedule that optimize for nearly 100,000 constraints for example which days and times studies can run participants, how ma people they need to have by a certain time, how mu it will cost INC to staff extra hours and INC staff availability. The algorithm helps us balance our new safety measures, study needs and constraints, and staff schedules as cost effectively and efficiently as possible. With 12 different study teams working with our scanning facility, efficiency in scheduling is critica The calendar algorithm not only makes the scanner use more efficient, it provides interim data we can track progress toward our overarching goal.

RESEARCH & LIFE AMIDST A PANDEMI

CONNECTING WITH TEAMS & COLLEAGUES

Laura Michaelis-Cummings, ICS Fellow

RESEARCH & LIFE AMIDST A PANDEMI

PIVOTING RESEARCH TO MEET THE SITUATION

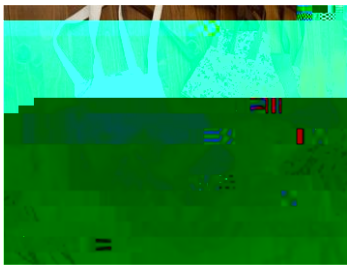
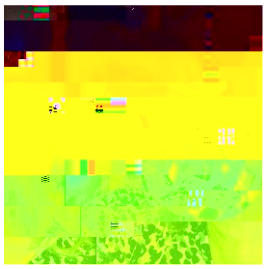
Marie Banich changed research protocols to look at stress and COVID-19

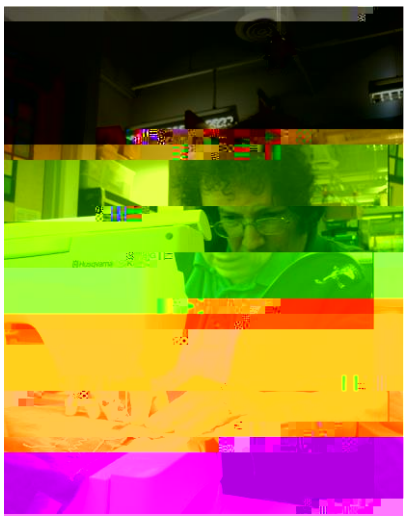
"We have just wrapped up data collection for a longitudinal study (NIH funded) in which we g very rich set of brain measures (spectroscopy, anatomy, function) and an equally rich set of behavioral measures related to executive function and emotional function specifically with regards to depression and anxiety at 2 time points (2 years apart) in 140 adolescents/adults (half male, half female) and 70 of their moms. Importantly, we also already have data on the stressors they have experienced up until this point in their lives and factors that influence the impact of stress (e.g., coping styles, their intolerance of uncertainty, etc.). Given that, we are gearing up to re-contact them at 8 time points over 4 months to get additional information on how COVID-19 is impacting them, their current levels of symptoms of depression and anxiety, other related and important measures for which we have prior information (coping styles) as w as the degree to which they are currently using mental health services. The goal is to see if we ca use the data on their brains and prior behavior to predict their response to this unprecedented situation. We have no money for this in the grant, so it's coming out of my research funds because I can't see passing this opportunity by……."

Donna Caccamise (PI) and Peter Foltz (Co-PI) have a grant with the Dept.

RESEARCH & LIFE AMIDST A PANDEMI

HOME & COMMUNITY LIFE



Nicole Speer, INC Operation Director spoke to ICS how working remotely during the global pandemic can be an opportunity to create a stronger foundation forinclusivity and diversity and ensure equitable participation in the community. This work involves growing our community's capacity for trust, understanding, commitment to collective success, and supporting one another.

Continuing to build community and developing a strong and effective team during this pandemic is important because "an effective team is made up of people who trust each other are willing to hold each other accountable." If a team member misses a goal, the individual and the team are able to honestly discuss what happened and how the team can work together to mitigate the delay. "You need to have trust along with vulnerability in a team that accepts that people make mistakes and that this is ok and that the team together will work to solve problems, change course, and make improvements."

Nicole says that teams benefit by agreeing that "being vulnerable and being ok with the fact that we don't know everything (is allowable within the team), and that you really have to lean on other people to help fill your blind spots."

Truly effective teams need a foundational structure, consciously creating an organization and team that is safe environment where it is allowable for people to b vulnerable, where mistakes are learning opportunities and part of being human, where there is no sha.464

S. Moeller, I. Wagner, M. Palmer, K. K

Our mission is to identify and address key questions in cognitive science. Through interdisciplinary research and education, we explore the nexus of humans and machines as we seek to understand and extend human cognition, machine intelligence, and fruitful collaborations between the two. Our research builds on artificial intelligence, cognitive neuroscience, human learning, and emotional processing to tackle some of society's most pressing challenges: understanding brain health and wellness, developing personalized therapies and interventions, enhancing and deepening human learning, and optimizing complex cognitive processes to improve human performance and collaboration

Our vision for ICS is:

- Be a campus leader in innovative, interdisciplinary research
- Be a campus leader in inclusiveness, diversity, and equity
- Reimagine our interdisciplinary educational programs
- Develop a robust resource engine to support future growth