The Collection Management and E-Resource Interest Group (CMERIG) held a one hour meeting at the 2016 ALA Annual Conference in Orlando, Florida on Sunday, June 26 from 3-4 pm. Chair Jennifer Bazeley (Coordinator, Collection Access and Acquisitions, Miami University Libraries) and Vice-Chair Sunshine Carter (Electronic Resources Librarian and E-Resource Management Unit Manager, University of Minnesota Libraries) co-facilitated the meeting. The 2016 annual meeting theme was e-resource troubleshooting and the session format included two twenty minute presentations followed by a brief period for questions from the audience.

The first presentation, “E-Team Workflow: A Case Study in Improving Electronic Access Troubleshooting”, was given by Debra Skinner (Interim Department Head, Collection and Resource Services, Georgia Southern University). In this presentation, Debra Skinner discussed a case study of revised workflows to improve electronic resource access (ERA) troubleshooting using a team approach in the Collection & Resources Department at Georgia Southern University. Debra opened the presentation with a discussion of the complexities of ERA troubleshooting at Georgia Southern University, which are the result of two factors. The first is the sheer number of stakeholders involved with e-resources, including patrons, campus information technology, the library’s own departments (Systems and Collection & Resource Services), Georgia’s state consortium (GALILEO), and vendors and publishers. The second factor is their implementation of a discovery layer, which increases the variety of ways in which e-resource access can break. Debra noted that ERA troubleshooting often requires a combination of both technical and reference services roles, and communication is a key part of the process. By examining the roles of these stakeholders, Debra’s department identified staffing and training needs. As a result, an “e-team” was created along with an entity email account used to channel all ERA troubleshooting emails. Initially, the email account was managed by two librarians in the Collection & Resources Services department and provided a convenient way to triage incoming problems. The library was also able to hire a Discovery Services & Data Curation Librarian, whose role emphasized proactive troubleshooting as well as training to reduce redundancies. The entity email account solution was an improvement over previous methods of troubleshooting but suffered due to a shortage of staff time. The e-team decided to adopt Springshare’s LibAnswers software to replicate an IT ticketing system that could be used for ERA troubleshooting. This allowed the e-team to be more efficient by moving the troubleshooting workflow out of email inboxes and into a centrally accessible site. It also allowed them to consolidate communication among stakeholders through the creation of an internal (for staff) and external (for patrons) FAQ. Within LibAnswers, a dedicated queue was created to manage tickets and the e-team leader was made responsible for evaluating, assigning, and closing all tickets. Tickets can be submitted through a form or through email and are then coded using a three-part tiering scheme. Staff are asked to check the internal FAQ before submitting a ticket to see if the issue has already been posted there or if a ticket has already been submitted. The internal FAQ provides links to status information, updates, and support materials for e-resources. Information that is especially significant can be “pinned” to the top of the FAQ list. Posts on the internal FAQ that are deemed suitable for patrons are also
posted to the external FAQ. Debra discussed the tiering and tagging systems used with the submitted tickets in depth. Each incoming ticket is tagged and tiered for three categories: origin and scope (5 tiers), stakeholder review (6 tiers), and communication plan (6 tiers). Tags labeled “ASAP” can also be added for problems that are urgent in nature. This system provides an easy visualization for e-team staff when evaluating tickets in their queue. Another benefit of using the LibAnswers software is that the e-team is now able to easily assess their ERA troubleshooting workflows. The e-team leader codes each ticket upon closure, allowing the library to analyze closed tickets by variables like source, trigger, cause, systems involved, third parties, and final resolution. This allows them to systematically assess how well they’re doing with their workflows and in communicating with their stakeholders. In closing, Debra discussed opportunities created by the implementation of this solution for ERA troubleshooting as well as future activities and best practices. The system improved their relationship with other departments, made clear the value of the FAQ posts for quick and easy access, improved triage at their reference desk, allowed for faster response times from the Collection & Resources Services department, increased staff confidence, reduced redundancies, and educated all staff on ERA issues. Going forward, Debra hopes to continue building FAQs for recurring questions and make them public, as well as assign additional staff to the LibAnswers queue in order to expand the system to handle more than just ERA troubleshooting. Best practices for this solution include limiting the ability to submit a ticket to library staff (patrons cannot submit tickets), aggressively promoting the submission process to staff, stressing the need for staff to be focused, specific, and detailed when submitting ERA problems, and encourage staff to check FAQ posts regularly.

The second presentation was given by Sunshine Carter (Electronic Resources Librarian and E-Resource Management Unit Manager, University of Minnesota Libraries) and Stacie Traill (Metadata Analyst, Data Management and Access, University of Minnesota Libraries) and was titled “Helping E-Resources Staff Build Reactive and Proactive Troubleshooting Skills”. Sunshine Carter began the presentation with contextual information about the University of Minnesota Libraries and addressed the history of e-resource troubleshooting there. The University of Minnesota Libraries consist of twenty-one libraries on five campuses (Crookston, Duluth, Morris, Twin Cities, Rochester). The twenty-one libraries share discovery systems (Alma, Primo, bX, EZProxy, Shibboleth) and have some overlap in e-resources but are all essentially autonomous. The presenters both work at the Twin Cities Campus, which has an undergraduate FTE of 30,000, 16,000 graduate and professional students, and 17,000 faculty and staff. The libraries on the Twin Cities Campus manage 91,000 e-journals, 632,000 e-books, and 500 subject-specific databases. The libraries’ migration to the Alma system in 2013 made it clear that there was a need to create e-resource troubleshooting workflows and expand Technical Services staff skills so that the work of the migration could be delegated across multiple staff. Fortunately, the Technical Services department on the Twin Cities campus did a reorganization in 2012 that facilitated the new workflows and education. What was formerly the Technical Services Department now consists of an E-Resource Management Unit with 6 FTE managed by the E-Resources Librarian and the Data Management & Access Department with 24 FTE (of which 2 FTE support e-resources). The E-Resource Management Unit oversees e-resource acquisition, licensing, and access, and the Data Management and Access Department manages systems and metadata.
To begin the process of expanding staff skills the presenters created flowcharts for common troubleshooting scenarios which helped to identify the key concepts that staff would need to learn about and identified tools that facilitate e-resource troubleshooting. Stacie and Sunshine incorporated the concepts from these workflows into a curriculum used in presenting a series of troubleshooting workshops to staff. Troubleshooting workshops included demonstrations of tools and also presented concepts and information that were reinforced by e-mails, handouts, and the creation of a Primo Central toolkit (available online at http://z.umn.edu/pcitoolkit). The presenters created system diagrams and troubleshooting process flowcharts for staff that both systematized the process and allowed for consistent application across many staff. System diagrams show relationships, communication paths, and failure points and provide a visual way for staff to understand large, complex e-resource ecosystems. Troubleshooting process flowcharts step through the most common failure situations for scenarios like broken links and cover only the most common e-resource problems. These flowcharts help staff with the concept of working through a series of decisions in order to identify a concrete problem. These diagrams and flowcharts have been useful both in training new staff and as a job aid for existing staff.

Stacie Traill continued the presentation by addressing the creation of the e-resource curriculum that she and Sunshine created as a result of the work that came out of their migration. Using their workflow charts, they created a curriculum that includes ten main topics: overview of discovery and access environment, common points of failure, authentication and authorization, openURL and link resolvers, differences/similarities between access for OA/free resources and licensed/paid resources, discovery index content, activations, and linking mechanisms, metadata sources, quality, and impact on access, detailed interaction between link resolver, discovery index, discovery layer, and LMS, distinguishing isolated issues from widespread problems, and effective communication with system vendors and content providers. They tried to organize the topics into a logical structure by also identifying subtopics for each--sample subtopics for authentication and authorization included concepts such as how off-campus access to library resources is offered, the impact of IP address and IP ranges on access, how to verify IP addresses of patrons, etc. (further in-depth information about the development of the curriculum will be found in the presenters’ forthcoming article in the Journal of Electronic Resources Librarianship, to be published in 2017). As noted early in the presentation, the curriculum detailed by the presenters was used to present a series of ten one-hour sessions to staff working with e-resources in their departments. The ten sessions took place between February 25 and May 25, 2016, and included assigned pre-readings, factual information, concepts, demonstrations, diagrams and workflows, and scenarios. Before the workshops began, a survey was sent to attendees to determine their pre-existing familiarity with the topics and to assess if the workshops would be worthwhile. The same survey was disseminated to attendees after the survey to measure the outcome of the workshop. Survey results revealed that staff familiarity with all topics was significantly higher after the conclusion of the workshops. The workshops also provided some less formal outcomes--staff seemed excited, receptive, and engaged with e-resource troubleshooting concepts. They were able to make connections between examples discussed in the workshop and “real world” issues they had come across in their own work. Stacie noted that the topics presented can be difficult and overwhelming for both new staff and more experienced staff. Next steps for workshop content include determining additional topics, sharing content with external Alma/Primo customers, adapting content into a
condensed workshop for public services staff, presenting workshops to other campuses within their system, and potentially creating online tutorials that cover workshop content. Now that staff have troubleshooting knowledge and skills, the presenters hope to enable a more proactive (rather than reactive) approach to troubleshooting. Proactive troubleshooting may include the automation of some troubleshooting processes but will also encompass planned projects where staff will identify, test, and fix e-resource problems in a systematic way.

Slides for both presentations are available on the Collection Management and E-Resources Interest Group’s ALA Connect site at: http://connect.ala.org/node/255322.