UNC

ODUM INSTITUTE
FOR RESEARCH IN
SOCIAL SCIENCE

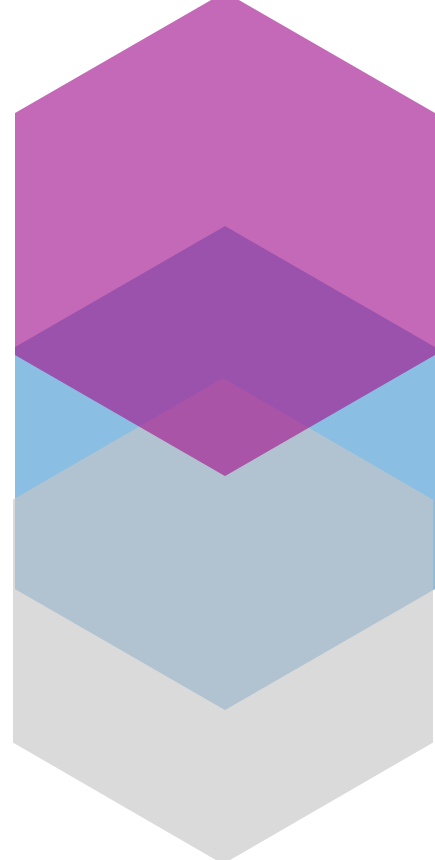# Odum Institute Annual Report

2021

Content

WORDS FROM OUR
Director

Throughout the COVID-19 pandemic, Odum staff have worked continuously to ensure that the Institute remains a leader in providing research and education services to the UNC community and the wide world of social science research beyond our doorstep.

At the beginning of the pandemic in March 2020, Odum's Research Data Information Systems (RDIS) and Education groups helped us to quickly pivot to safely provide all classes and consultations virtually. Last year, we offered consultations – both virtual and in person – to more than 2,750 members of the UNC community.

During this period, we also worked to make it much easier to draw on Odum staff expertise and services for longer-term or more time-consuming research assistance (e.g., grant-funded projects).

Today, researchers that find themselves in a bind or in need of research support beyond the free consultations we offer to the UNC community, can rapidly and inexpensively access Odum's resources through our new Recharge Center.

While UNC and other leading universities now offer many training efforts focused on improving aspects of Diversity, Equity, and Inclusion (DEI) on campuses, in teaching, and in clinical settings, few (if any) programs have focused on DEI in *research*. In 2020, Odum staff led the creation of a pilot Diversity, Equity, and Inclusion in Research (DEIR) Certificate program.

With generous funding from UNC's Office of the Vice Chancellor for Research (VCR), and input from by an advisory board representing a broad swath of expertise on DEI topics across UNC, Odum staff designed the program, partnered with numerous instructors to offer a full suite of short courses, and successfully graduated nearly 100 students during the 2020-2021 academic year. In 2022-2023, funding has increased to over

$307,000 and we will be expanding this program will serve over 400 faculty, staff, and administrators throughout VCR's office and its constituent centers and institutes. We are incredibly excited about this new and innovative program!

All of these efforts, and the many more described below, have been made possible by Odum's incredible staff (including our now new-ish Managing Director, Rocky Riviella), which we hope to expand in coming years as we expand our consulting and educational services.

Your support and feedback are crucial as we embark on a new era for the Institute and social science research. We thank you and look forward to a bright future for Odum and social science research!

Todd BenDor, Director

OUR VISIONARY
Leaders

Rocky Riviella
Managing Director

Rocky leads the day-to-day operations of the Institute, supporting all staff members and the business office

Jonathan Crabtree
Assistant Director

Jon is the Assistant Director for Research Data Information Systems, the team that keeps us up and running

Thu-Mai Christian
Assistant Director

Thu-Mai is the Assistant Director for Archives, spearheading the the Odum Data Archive and verification service

Jessica Grant
Assistant Director

Jessica is our new Assistant Director of Survey Research and Development, and Director of the Certificate in Survey Science

Paul Mihas
Assistant Director

Paul is the Assistant Director for Education and Qualitative Methods, providing crucial services and direction

Vision & Mission

Odum will be the leading social research support organization, providing world-class services, facilities, and resources.

Mission Statement

The mission of the Odum Institute for Research in Social Science is to foster groundbreaking social research that improves the lives of people in North Carolina and around the world. Odum expands Carolina's impact by providing education and support for planning, implementing, and disseminating research. We work to advance rigorous and reproducible research across the data, social and health sciences, while building collaborative, trans-disciplinary research networks.

Vision Statement

The Odum Institute will shape the future of social and data science in higher education through its innovations in research, education, dissemination, preservation, and discovery. Odum will equip the research communities at UNC and beyond to meet the demands of social science challenges and evidence-based practice in an increasingly data-rich future.

Services and Support

Short Courses & Workshop Series

Instrument Development and Guidance

One-on-one Consultations

Long-term Data Management, Data Curation and Verification

Research Project Design Support

IT Infrastructure Support and Advanced Compute Solutions

Data Collection and Analysis

Multimedia Production & Transcription

Why we do what we do

Our most important role is supporting the students, faculty and staff at UNC-Chapel Hill. By providing extensive support services, we save our users valuable time, allowing them to streamline their work and focus on what really matters—whether that be submitting a grant application, performing research, designing a data management plan, writing a report or simply finishing their homework.

To make our services even more accessible, we now:

- Provide convenient virtual options for short courses and consultations
- Hold virtual statistics and Qualtrics office hours each week for immediate assistance

Service Stats

2750 consultations

1763 course attendees

$2.5M revenue

61 short courses

Service Statistics

$807K new grants

860+ consultees

200+ campus groups supported

40 staff members

Top departments by number of consultations:	# of consults
Dept. of Psychology & Neuroscience	179
School of Nursing	112
Dept. of Sociology	110
Dept. of Health Behavior	93
School of Education	84
Dept. of Epidemiology	79
School of Medicine	66

Most used service: Statistical consulting

FULL-TIME CONSULTANTS

STATS HELP DESK CONSULTANTS

Departmental
Updates

UPDATES FROM OUR
Archives Team

Data
Archivists

Verification
Specialists

Undergraduate
Research Assistants

The Archive Department had a very productive and robust year.

Stewarding Research Assets

The Archive team collaborates with various groups across campus and beyond to provide specialized research data management and archiving services. These services include data policy development and implementation, data curation and repository ingest, and data management consultation and training. Below are highlights from of some of the Archive's recent collaborations.

1

ASYLUM IN THE ARCHIVE INITIATIVE

Extending our archival expertise to the humanities, archivists provided lifecycle curation services for the Asylum in the Archive Initiative, conducted by Dr. Robert (Bobby Allen) and the Community Histories Workshop staff. This unique collection of administrative records, medical case reports, and other data sources sheds light on the early years of the North Carolina's first asylum, Dorothea Dix Hospital, giving a voice to the patients treated from 1856 to 1919. The Archive team provided data ingest, metadata, secure dark archive, and data request services to enable the archiving and sharing of these valuable records in an ethical manner.

2

THE HARRIS POLL COLLECTION

In line with the Archive's mission to provide long-term preservation and stewardship of research data assets, the Archive team reconnected with the current producers of The Harris Poll, Harris Interactive, to revive a relationship that was first established in 1965 when the Odum Institute acquired its initial collection of polling data from Louis Harris and Associates, Inc. Harris Interactive delivered several batches of dataset materials to the Archive team for processing and ingest into the UNC Dataverse. After re-appraising and updating existing holdings, the Archive team processed and ingested an impressive 184 datasets containing over 2,000 files! New datasets are currently awaiting publication pending the launch of an external search tool being developed by Harris Interactive.

3

LIVING GOODS DATAVERSE (KENYA) AND INSTITUTE FOR ADULT LEARNING (IAL) DATAVERSE

Extending our service globally, the Archive team developed workflows for internal ingest, curation, and review of Living Goods and IAL data to facilitation dissemination and preservation of their vast collections of research outputs. Virtual training sessions were conducted live with project team members to review roles and responsibilities, and to orient attendees with using the Dataverse platform. Further guidance was provided via professional video walkthroughs as well as branded documentation.

4

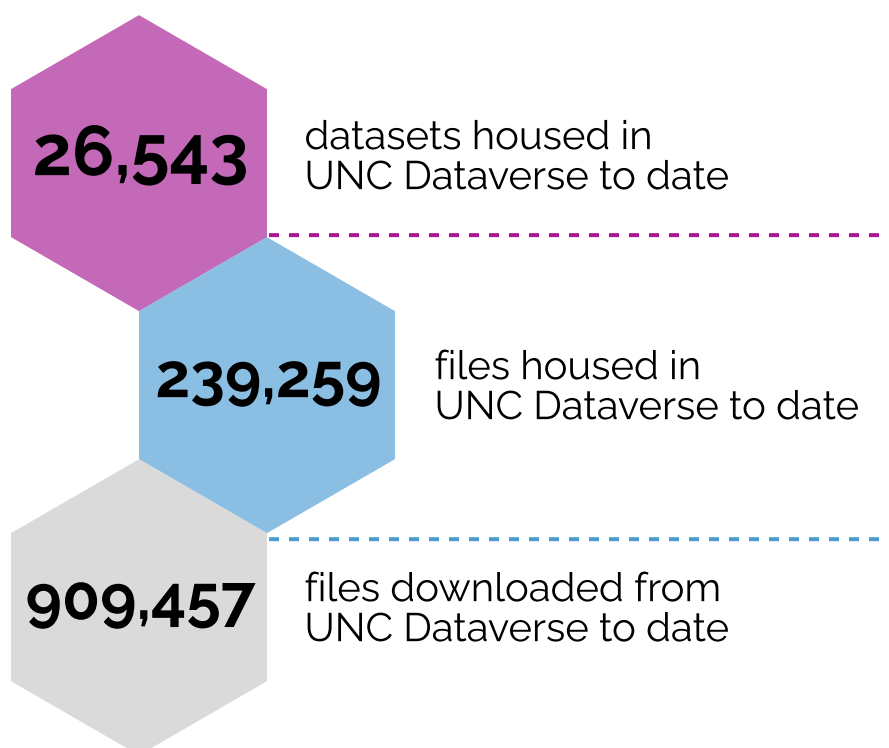### ASYLUM IN THE ARCHIVE INITIATIVE

With supplemental funding from the National Science Foundation (NSF: #1541450 PAG ID: CC*DNI 15-534), the Archive team is lending its years of experience in executing data curation and verification workflows to assess the feasibility of using the web-based, multi-user Whole Tale (WT) platform to support these workflows. WT was designed to support reproducibility by packaging data, code, documentation, and the computational environment into an "executable research object." To perform the assessment, the Archive team introduced the WT platform into verification workflows to perform activities that would otherwise take place on manually configured computational environments. Results of the assessment are being used to inform further WT enhancements and development to address the needs of authors, editors, curators, and reviewers.

Archives Team

Trustworthy Data Repository Service

Central to many of the Archive's data support services offered is the UNC Dataverse. Dataverse is an open-source application for preserving, sharing, and publishing research data and associated materials. Individual researchers, project teams, and organizations can create their own Dataverse within the UNC Dataverse platform to store, describe, and organize datasets while controlling access to files as necessary. Published datasets receive a DOI, which can be used in data citations.

26,543 datasets housed in UNC Dataverse to date

239,259 files housed in UNC Dataverse to date

909,457 files downloaded from UNC Dataverse to date

Supporting Scientific Reproducibility

The Archive group has entered its 7th year of providing data policy support to two journals, *American Journal of Political Science* and *State Politics and Policy Quarterly*. The Data Archive team has worked with these journals to integrate data curation and verification workflows into the manuscript review and publication process. Workflows include a comprehensive pre-publication quality assessment of author-submitted data, code, documentation, and other research artifacts that underpin results reported in the manuscript. These curation activities are followed by a thorough inspection and re-execution of analysis scripts to ensure that outputs match expected results.

508 verified manuscripts to date

Archives Team

Service to the Data Archives Community

The Archive team is actively engaged with the professional community of archivists, curators, technologists, and other data support professionals who are committed to the long-term preservation, discovery, access, and use of research data.

Each year, Archive staff participate in various international conferences to disseminate outputs of research and development projects, share expertise in data curation approaches, provide instruction on curation for reproducibility workflows, and contribute to the development of data archiving standards.
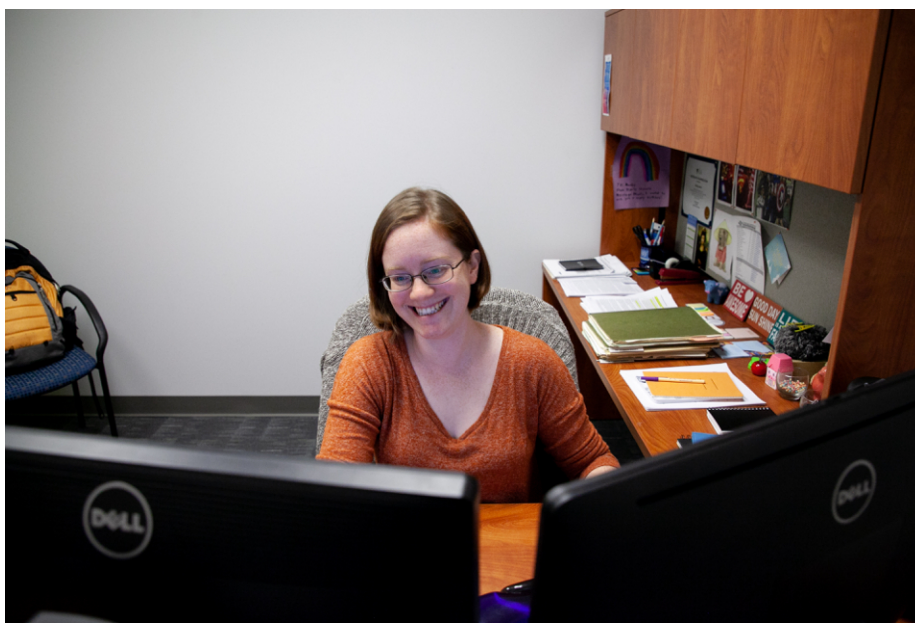
These conferences include the International Digital Curation Conference (IDCC), International Association for Social Science Information Service & Technology (IASSIST) Annual Conference, Dataverse Community Meeting, FORCE11 Annual Conference, and Research Data Alliance (RDA) Plenary.

Members of the Archive team also serve on various working groups and advisory committees including the RDA CURE-FAIR working group, Roper Center for Public Opinion archival advisory committee, Qualitative Data Repository technical advisory board, Curating for Reproducibility (CURE) Consortium co-founder, and GO-FAIR Train-the-Trainer (T3) Advisory Committee.

Supporting Scientific Reproducibility

The Archive group also manages various institutional memberships to other organizations that complement and extend Odum Archive service capabilities. These memberships give UNC affiliates access to a range of datasets, tools, and services from the Inter-university Consortium of Political and Social Research, Roper Center for Public Opinion Research, and Qualitative Data Repository.

Survey Research Team

New leadership

Odum's Survey Unit got a new leader in Fall 2021 as Jessica Williams was hired from RTI International. She holds a master's degree in sociology and brings almost two decades of survey research experience. Jessica has hit the ground running, implementing a 360 review of the unit in an effort to expand Odum's survey research capabilities and collaborations across the University.

The unit created a renewed focus on supporting multi-mode survey research including web, telephone, in-person, text messaging, and paper methodologies. During 2021, the Survey Unit completed almost 300 survey methodology and Qualtrics consultations to assist faculty, staff, and students achieve their research and data collection goals. Some of our top partnerships this year included contracting with UNC's Associate Dean for Diversity, Equity and Inclusion, the Carolina Population Center, the School of Medicine, and the School of Social Work.

Growing Qualtrics

To aid the University's growth with Qualtrics, the Survey Unit's Qualtrics Consultant, Tyler Steelman, assumed administrative responsibility for the Qualtrics license and now coordinates management efforts between the VCR's office, The Odum Institute, and ITS. This collaboration ensures that researchers across UNC have access to the features needed to conduct cutting edge research, like text message distributions, data analysis tools, and the continuation of premium services following the last contract negotiation.

In June 2021, the Survey Unit facilitated a new collaboration with ITS to streamline and increase efficiency with several administrative tasks in Qualtrics. Many Qualtrics software technical inquiries are now processed by front-line help desk staff. This has freed up valuable time to increase the number of individual consultations with staff, faculty, and students. As a part of this, the survey division continues working to create more formal documentation for data sharing, administrative access, and project collaboration to protect sensitive survey data and personal information about survey participants. Looking forward, Tyler is working with the University's Digital Accessibility Office to create a more accessible survey experience for users with vision impairments. This project aims to create a more inclusive experience for survey participants with the goal of increasing data quality for researchers across campus.

Survey Research Team

Certificate in Survey Science

Odum's Survey division also oversees Graduate Certificate in Survey Science. Shortly after joining Odum, Jessica completed CSS stakeholder interviews with members of the CSS executive board, local contract research organizations, faculty, and students. Entering into 2022, she continues meeting with University community members and is completing a competitive program analysis. This multi-pronged and in-depth evaluation is guiding Odum's effort to both strengthen the CSS program and identify how to best position it for success.
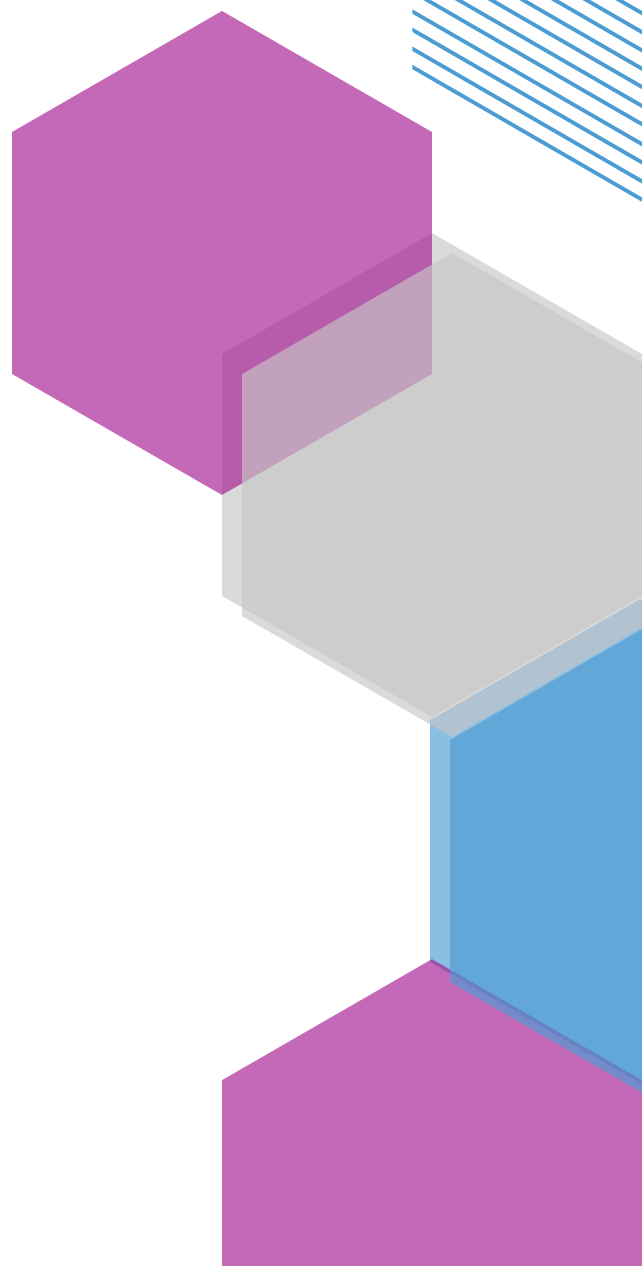
Odum's Survey and Marketing Groups met in late-2021 to collaboratively craft a CSS outreach plan. Within weeks of implementing the new marketing plan, the CSS program saw an increase in applicants and program inquiries. Jessica, along with the CSS Educational Coordinator, Jill Stevens, has been reviewing CSS procedures and protocols to identify gaps in documentation, outline potential process improvements, and prepare historical with forecasted budget projections.

"Survey design involves a number of compromises and decisions, the CSS program provides you with the knowledge to make educated decisions about survey design and implementation that can impact the quality and validity of your results."

———— Pauline Grist, current CSS student

Publications & partnerships

The Survey Unit also reestablished focus on professional contributions both in academic publications and presentations. In 2021, Tyler published three academic papers and represented Odum presenting research at the Southern Association for Public Opinion Research. He is on track to finish his PhD in Political Science spring semester of 2022. Jessica remains an active participant and presenter at the American Association of Public Opinion Research conference and joined the Association of Academic Survey Research Organizations.

Qualitative and Mixed Methods Research Team

Campus support

The Qualitative and Mixed Method Unit partners with various groups across campus to provide specialized qualitative and mixed methods consulting and analysis services. These services include consultations on research design, data collection strategies, analytic practices using specialized software, and research products, such as mixed methods diagrams and matrices.

Paul Mihas completed **489 consultations in 2021** with UNC graduate and undergraduate student, faculty, and staff.

Funded studies

In 2021, the Qualitative Unit concluded efforts on several funded studies, including a mixed methods research project exploring Latinx college completion (Lumina Foundation); Discovery through iterative learning (DisTIL) at the Carolina Performing Arts (Mellon Foundation).

The unit is integral to several ongoing studies, including PROMISE (Peer Group Research on Mentoring Scientists Underrepresented in Biomedical Research), a five-year NIH-funded study that includes interview and focus group data across over 100 participants at UNC-Chapel Hill and Duke University.

Other ongoing studies in 2021-22 involving leadership from the Qualitative Unit include the following:

- A multi-site national study, headed by Patient Discovery, to evaluate improvement in disease management using a patient appointment companion tool;
- Charting trajectories of sexual identity development and mental health disparities among sexual minority youth (NIH);
- Black patient experiences with cancer clinical trial participation (Jimmy V. Foundation for Cancer Research);
- Pharmacologic treatment of osteoporosis in patients with Alzheimer's (NIH);
- North Carolina Parkinson's Hospitalization improvement initiative;
- Geriatric conditions of adults with multiple myeloma (National Cancer Institute).
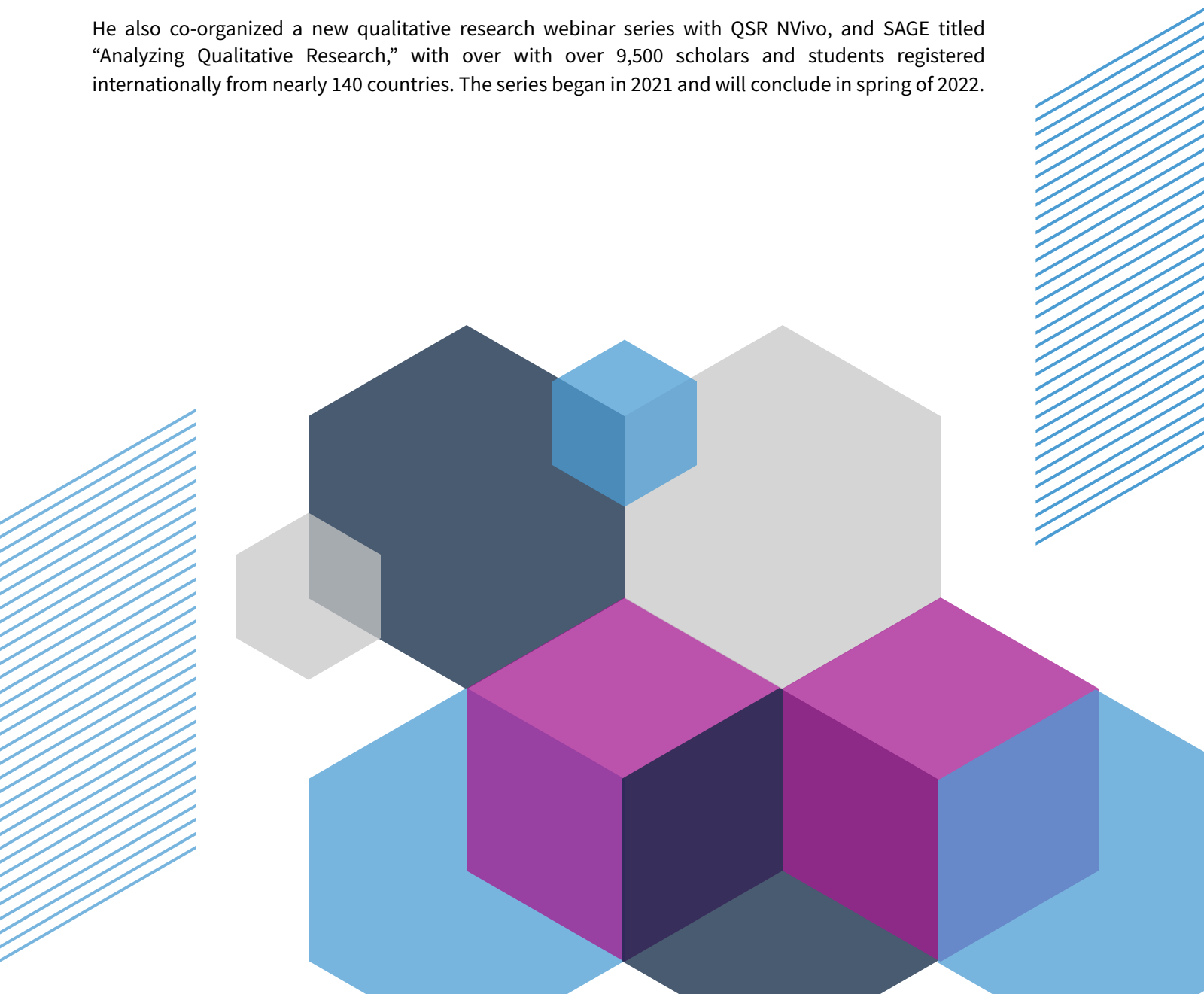
Qualitative and Mixed Methods Research Team

Publications and events

In 2021, Paul Mihas, with two co-editors, published *Analyzing and Interpreting Qualitative Research: After the Interview*, SAGE Publications, and four co-authored articles, two with UNC researchers at the School of Dentistry, one with UNC Surgical Oncology, and a qualitative methods article with co-authors at ResearchTalk, Inc. Mihas was also a co-facilitator of the SAGE MethodSpace for the month of August.

He also co-organized a new qualitative research webinar series with QSR NVivo, and SAGE titled "Analyzing Qualitative Research," with over with over 9,500 scholars and students registered internationally from nearly 140 countries. The series began in 2021 and will conclude in spring of 2022.

UPDATES FROM OUR
Education Unit

Short courses and course series

The Educational Unit offered a wide array of short courses and course series that support the social and behavioral sciences and the growing subfields of data science. Even during the pandemic, the unit was able to continue to offer numerous short course and classes through virtual instruction.

In 2021, Odum offered **61 short courses** with over 700 attendees, as well as ten Certificate in Survey Science (CSS) short courses that served 166 attendees. The Data Matters: Data Science Short Course Series offered 13 courses for 177 attendees. Odum, in partnership with ResearchTalk, Inc., held the Qualitative Research Summer Intensive (QRSI) program, with 20 courses and whose attendance has more than doubled to a record high of 720 people from around the world.

Together, Data Matters and QRSI programs generated net revenues of **nearly $195,000**.

DEIR Certificate Pilot Program

The Diversity, Equity & Inclusion in Research (DEIR) Certificate Program completed its pilot run in 2021, with 90 percent of its initial cohort completing their certification and showing great interest in continuing their involvement.

The pilot program was fortunate to have instructors with strong backgrounds in research and DEI work, who are well-known and gaining more attention and accolades nationwide. It is also gaining momentum and interest from outside departments, schools, and organizations both within and without the UNC-Chapel Hill community.

The Vice Chancellor for Research has expanded DEIR's funding to **$307,000**, enabling the program to train nearly 400 researchers and high level administrators in the VCR office and its centers and institutes. For this second cohort, Odum will offer new DEI courses, an online community, and an expanding DEIR caucus, which will work to promote awareness and change in the UNC and greater research communities.

Research Data Information Systems Team

Onward and upward

The [Research Data Information Systems (RDIS)](#) group has continued the shift in technology to support a hybrid environment for research, teaching, and learning. Odum's shift towards cloud-based services not only reduced operational cost, but also allowed for a more flexible environment for our staff and patrons. Shifting to Amazon cloud services while also leveraging university-based systems will enhance the available virtual desktops for Odum staff and research projects. Transitioning support for in-person labs and classrooms to remote support, and enhancing our agility in providing services and support to staff and patrons in remote environments has been a successful operation, often exceeding previous expectations and goals.

Ongoing projects

INFRASTRUCTURE FOR PRIVACY-ASSURED COMPUTATIONS (IMPACT)

The RDIS group has continued ongoing research projects and expanded services to better aid the research community that Odum serves.

Serving as co-investigator on the NSF funded [ImPACT grant](#), in collaboration with RENCI, the Odum team has helped develop tools to manage and share data with sensitive content across diverse users and institutions. Current plans target initial usage by not only UNC and the Odum Institute, but also by Duke and Harvard Universities. Continued funding has been pledged by Harvard University to help their institution adopt and manage components of ImPACT. Duke University Libraries and Information Technology services will be managing and running the entire ImPACT workflow stack for use at Duke University.

CONFIRMABLE REPRODUCIBLE RESEARCH ENVIRONMENT (CORE2)

Collaboration with the Odum Archive group continues in many areas, including providing support for [UNC Dataverse](#) and migration to Amazon cloud service to better support UNC researchers, especially those individuals with large data upload requirements, which are now possible with remote Amazon S3 direct uploads.

In addition, the RDIS group has continued work on the Sloan funded [CoRe2 project](#), which is aimed at building tools for computational reproducibility. In partnership with the Odum Archive Group, RDIS has secured a collaboration with the NSF-funded [Wholetail project](#). This project provides additional support to integrate a more scalable computational engine into CoRe2 as well as test workflows across the project.

Research Data Information Systems Team

Ongoing projects (cont.)

SUPPORTING RESEARCH GROUPS AND PROJECTS AT UNC

The RDIS group has also expanded data management services to include supporting research groups that are building longitudinal administrative data collections for research analysis. One such project assists the Criminal Justice Innovation Lab within the UNC School of Government to build a longitudinal database of court records.

This effort supports several ongoing and newly-funded efforts within the UNC School of Government. This work expands on our previous collaborations developing visualization tools and archiving strategies for COVID projects with the UNC Highway Safety Research Center.

> "Odum's work has been critical to our projects and we view [RDIS staff] as part of the Criminal Justice Innovation Lab team."
>
> —— Jessica Smith, J.D., CJIL Lab Director

DATAVERSE

The Dataverse Project, the open-sourced tool leveraged by the Odum Institute to operate the UNC Dataverse, is supported by Harvard University with assistance from groups all over the globe. Odum's RDIS group plays a critical role in supporting this community.

Dataverse is one of the world's foremost research data management tools. Its strength not only resides within the powerful data management and archival functions it supports, but also the dedicated community that has grown around it. Installations are spread widely across many continents and countries. Open and reproducible data efforts at UNC and around the world depend on communities like Dataverse to protect our research assets for future use.

The RDIS group leads the effort by supporting Dataverse community needs and providing primary support for the Global Dataverse Community Consortium (GDCC). The GDCC provides services such as required DOI minting abilities that save UNC thousands each year, supporting data publication across UNC research groups as well as supporting UNC Libraries data publication systems. As part of GDCC services, RDIS and Archive staff have participated in funded efforts to help provided support for new repositories in places like Singapore and Kenya. GDCC programmers have also supported development efforts in France and the Netherlands. All these funded efforts make Dataverse a better tool for UNC researchers and at the same time offset RDIS staff salaries for a benefit all around.

Marketing Team

Marketing Team

Transcription Team

New faces and approaches

Our marketing department has grown significantly in recent years. Manager of Marketing and Media Relations, Kasha Ely, kicked off 2020 on a high note by receiving her master's degree in Digital Communications from the Hussman School of Journalism and Media.

Shortly thereafter in March 2020, she hired the Institute's first full-time dedicated transcriptionist, Erin Dillenschneider. This addition allowed our transcription service to expand significantly, and the demand grew enough to require an additional part-time transcriptionist position. Katrina Marks joined the team in spring 2021 and in that first year, the team supported more than **30 projects**, transcribed more than **250 audio hours**, and brought in nearly **$40,000 in revenue** through the recharge center. Our service has supported projects from departments across campus, including:

- **UNC School of Nursing**
- **UNC Gillings School of Global Public Health**
- **UNC School of Medicine**
- **Hussman School of Journalism and Media**
- **Carolina Performing Arts**
- **NC Institute for Public Health**
- **UNC School of Education**
- **and many more!**

In fall 2021, the marketing team expanded to include four part-time student employees—Emma Amaglo, Stephanie Flores, Colby Teixeira and Eh Mwee—a significant jump from previous years. This has allowed for more intentionality and creativity with messaging, and a complete reimagining of our marketing approach, which went live in spring 2022.

In addition to providing transcription services, the team completed a 12-video promotional series for the UNC Center for Galapagos Studies and various other video production and graphic design projects for clients on campus.

News

Dr. Cathy Zimmer retires

In late August 2021, we saw the retirement of long-time Odum statistical research consultant, Cathy Zimmer, Ph.D. While we searched for her replacement, our other statistical research consultant, Chris Wiesen, Ph.D., did a superb job in covering all statistical consultations until November 15, when Cathy's successor, Eugenia Conde-Dudding, started at Odum.

Dr. Eugenia Conde-Dudding joins Odum

Conde-Dudding holds two master's degrees, one in education and the other in epidemiology, and a Ph.D. in sociology with a specialty in demography and a minor in medical sociology. Her statistical consulting experience includes two years advising doctoral students while she was a postdoctoral fellow at the Rutgers University Department of Sociology, and five years at Duke University Medical School and Duke's Cook Center on Social Equity.

In addition, she has multiple peer-review publications in statistical methods and research integrity that have been presented at international conferences, including England, China, and Sweden. Currently, she is co-authoring a textbook on applied social statistics for graduate students, which is under contract with Cambridge University Press.

Since starting at Odum at end of the 2021, she has provided numerous consultations to graduate students and faculty, while also preparing short courses she will be teaching in the Spring of 2022: Introduction to Stata, Logistic Regression, and Structural Equation Modeling (SEM).

During the short time she has been on board, she has also met with the graduate students who staff the virtual statical service "desk." She plans to take a pro-active approach to supervising these students while she continues to train and advance their statistical skills. She has also initiated relationships with professors in the sociology, geography, and psychology departments to generate more publicity for the Institute and to open channels for future collaboration.

News

Matthew Bhagat-Conway's joint appointment

In July, Odum welcomed Matt Bhagat-Conway, Ph.D., into a novel, joint appointment between Odum and the Department of City and Regional Planning. Bhagat-Conway is a tenure-track faculty member in City and Regional Planning (specializing in transportation planning) and a consultant at Odum. He provides Odum consulting services in data science and quantitative methods and teaches short courses for the Institute, including two new courses upcoming in early 2022.

By hiring a faculty member jointly with an academic department, Odum is better able to leverage cutting-edge academic research in its consulting and course offerings. Since joining Odum, Bhagat-Conway has consulted with students on a range of issues, including big data analysis and high-performance computing, structural equation modeling, data cleaning, and software development.

Jonathan Crabtree completes his doctoral program

RDIS leader Jonathan Crabtree has recently completed his Ph.D. in Information Science from the UNC School of Information and Library Science. His dissertation explored the international standard for trustworthy repositories the CoreTrustSeal and how perspective impacts the outcomes of trustworthy reviews. His work has led him to be elected the current chairperson leading the CoreTrustSeal.

In addition, he also helps lead the Research Data Alliance (RDA) Social Science Research Data Interest Group that over the past year has been exploring the disciplines needs around data quality and sharing of sensitive data.

Crabtree has also been a co-publisher on two relevant articles. The first in Natures Scientific Data "The Trust Principles for Digital Repositories" and the second in Elsevier's Future Generation Computing Systems entitled "ImPACT: A networked service architecture for safe sharing of restricted data."