TARC Newsletter

June 2024

A Message From Our Center Director:

Summer is upon us and we are winding down another successful academic year. It is important for all of us to find some time to relax, reflect, and recharge. We had a busy spring that included our first ever TARC Townhall Meeting in May, held in our newly refurbished Dickson Conference room (thanks to the Dickson Foundation for their generous support). In this newsletter you can read some highlights of the TARC activities presented at the meeting and if you would like to learn more there is a link to the presentation slide deck. We plan to hold these meetings each year during the spring to complement updates presented in the fall during TARC Research Day. If there are any specific topics that you would like covered during either of these meetings, please let me or Abby Mihalkovic know.

We are saying goodbye to our outstanding trainees, including the clinical fellows and several PhD students, and will soon be welcoming a new cohort of fellows and students eager to learn. As you will read in our TARC Investigator Spotlight, our third-year rheumatology fellow, Dr. Astia Allenzara, is joining the faculty in August and will be continuing to develop her exciting and important research in inflammatory myopathies. The new NIAMS funded T32 led by Leigh Callahan and Amanda Nelson "The Rheumatic and Musculoskeletal Disease Epidemiology and Outcomes Training Program at the University of North Carolina" will be a wonderful resource for expanding training opportunities in TARC.

We have several new staff members who have joined TARC this spring and are pictured below. Be sure to welcome them if you haven't already. We also want to remind everyone to mark their calendars for the 2024 TARC Research Day which will be held on Friday October 25th at the Friday Center. Be on the look out for the call for abstract submissions that will be sent out late summer. We want to especially encourage trainees to submit an abstract. It is a great way for them to gain experience presenting their research in a friendly, low-pressure environment.

I hope that everyone can enjoy some well-deserved time off this summer.

- Richard F. Loeser, MD

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Welcome New TARC Members!

TARC Staff:



Nadalie Harris Administrative Coordinator (Div. of Rheumatology, Allergy & Immunology



Ariana Lospinoso Soc/Clin Research Assistant Callahan Team, TOPS



Olivia Ontjes Soc/Clin Research Assistant Callahan Team, TOPS



Elena Filippova Research Specialist/Lab Manager Diekman Lab



Bailey Smith Soc/Clin Research Specialist Sheikh Team



Ananth Murthy Soc/Clin Research Specialist Sheikh Team

Recent TARC Touchpoints:

- May 24th, 2024: 2024 ACR/Rheumatology Research Foundation Investigators Meeting and Rheumatology Research Workshop: Highlights from TARC Attendees (View full story online)
- May 23rd, 2023: Kraus Lab Research Reveals Biomarkers Capable of Predicting Knee OA (<u>View full story online</u>)
- May 15th, 2024: TARC Rheumatologists Attend ACR Advocacy Leadership Conference in D.C. (View full story online)
- May 3rd, 2024: Drs. Leigh Callahan and Amanda Nelson Receive T32 Award for Training Program at UNC (View full story online)
- April 16th, 2024: Dr. Brian Diekman Receives \$205k NIH Grant to Investigate the Genetic Risk Factors for Osteoarthritis (View full story online)
- April 5th, 2024: Osteoarthritis and Cartilage 30 Year Anniversary Issue Highlights Publications from TARC Faculty and Staff (View full story online)
- March 21st, 2024: Dr. Amanda Nelson is Promoted to Professor of Medicine (View full story online)
- March 20th, 2024: Dr. Leigh Callahan Provides Insights for New Article, "How Exercise Can Help Ease Osteoarthritis Joint Pain" (View full story online)





In Case You Missed It: TARC Townhall Meeting from May 6th, 2024

Topics & Takeaways

• TARC Budget Updates

 Dr. Richard Loeser gave an update on the current TARC budget and showed a breakdown of how the TARC budget is used across center operations. He also highlighted that TARC's cumulative F&A was \$35.8k greater in April 2024 than it was in April 2023 due to additional grant funding this past year.

TARC 5-Yr Strategic Plan Updates

Dr. Loeser also presented the latest updates to the TARC Strategic Plan based on the progress made in working group meetings over the past several months. Some of these updates included recruiting Astia Allenzara as a faculty member at TARC, interdepartmental collaboration with Orthopedics and the new School of Data Science, inviting a guest to evaluate TARC's infrastructure and scientific collaboration, and creating new quarterly meetings for research study coordinators and lab managers in TARC. To review the full details of the TARC Strategic Plan, please visit the link here.

TARC/CCCR Pilot Grants

• Pilot grants awarded to TARC faculty, including Drs. Jason Franz, Yvonne Golightly, and Brian Pietrosimone, were highlighted.

New TARC Faculty

• New TARC Faculty member, Dr. Ming-Feng Hsueh, was introduced as an assistant professor in Orthopaedic Surgery with research interested in osteoarthritis and cartilage regeneration, among others.

TARC Stakeholder Advisory Board (SAB)

Dr. Leigh Callahan highlighted some of the ways that our SAB contributes to investigators' project development by providing feedback on study design, participant recruitment, and intervention delivery. Abby Mihalkovic can be contacted to request an online Zoom session with the TARC SAB.

Drs. Callahan & Nelson's T32 Training Program

 Drs. Leigh Callahan and Amanda Nelson announced their recently funded training program at UNC. Their training grant will support a pre-doc trainee (Ashley Buck, Dept. of Exercise and Sport Science) and a post-doc trainee (Dr. Helal El-Zaatari, Dept. of Biostatistics).

• The UNC Core Center for Clinical Research (CCCR)

• Dr. Amanda Nelson discussed the future directions and goals of the CCCR Resource Core, including the newest iteration of the CCCR Phenotyping & Precision Medicine Resource Core. Drs. Allen and Schwartz also reminded the group of the utility of the CCCR's ABC sessions and reminded people to request sessions with CCCR leadership whenever needed.

• The Osteoarthritis Action Alliance (OAAA)

Kirsten Ambrose provided a brief overview of the current OAAA resources and tools offered to the public.
Some of these resources include OACareTools, Arthritis-Appropriate Evidence-Based Intervention (AAEBI), the Walk With Ease Registration & Tracking Portal (Camine Con Gusto), and others.

• Clinical Trials Updates

• Shruti Saxena Beem updated the group on the current clinical trials team vision and studies actively recruiting, including lupus studies (cell therapy and non-cell therapy) and osteoarthritis studies.

• DEI Workgroup

• Dr. Onyi Iweala spoke about the current use of TARC and the Div. of Rheum., Allergy & Immunology's DEI workgroup and encouraged anyone who is interested in contributing but has not yet joined the workgroup to reach out to herself, Patrica Owens, and/or Abby Mihalkovic to be added to the group.

• Upcoming TARC Events

- TARC Research Seminar Series (resuming in September, 2024)
- TARC Research Day on Friday, October 25th (More details provided on pg. 8 of this newsletter)
- TARC Chalk Talks (resuming in September, 2024)

To view the full presentation from the TARC Townhall, click here to access a PDF of the presentation slide deck.





RAI Fellows End of Year Celebration

On Wednesday, May 29th, members of the UNC Div. of Rheumatology, Allergy & Immunology and TARC gathered to celebrate the end of the academic year and the fellows who are graduating from the Rheumatology and the Allergy & Immunology Fellowship Programs.

From the Rheumatology Fellowship Program, Drs. Katie Yates, Ashley Abbot, and Prarthana Jain celebrated their completion of the 2-year program (pictured on top second from left, middle, and second from right).

From the Allergy & Immunology Fellowship Program, Drs. Rayan Kaakati (pictured on bottom left) and Jeremy Owens (pictured on bottom right) celebrated their completion of the 2-year program.







TARC/RAI All Faculty & Staff Meeting from May 24th, 2024

DEI Topic: Neurodiversity

For the Division of Rheumatology, Allergy & Immunology and TARC's quarterly All Faculty & Staff meeting, Dr. Onyi Iweala led the DEI-themed event by introducing the topic of neurodiversity and providing information to enhance our understanding of what this term encompasses. Attendees were given the opportunity to participate in small group discussions exploring the various facets of neurodiversity including social and environmental interactions, information processing, and self-identity.

Two of our own TARC members, Mary Hale and Brian

What does NEURODIVERSITY mean to you? learning functions dynamic expression Creative acceptance 🗀 ulversity ad brains ad sensorv perceived perspective

Anonymous responses from attendees at the start of the meeting when asked, "What does neurodiversity mean to you?

Diekman, provided personal testimonies regarding the importance of discussing neurodiversity and creating spaces for neurodiverse individuals to feel comfortable and thrive in inside and outside of the work setting.

To measure impact and usefulness of this activity, a Qualtrics survey was made available to attendees after the event. This survey collected feedback on attendees' level of familiarity/comprehension of neurodiversity before and after the training activity. The survey also allowed attendees to provide open-ended responses on their takeaways from the activity.

Survey results showed that most attendees reported having low knowledge of neurodiversity prior to participating in the activity, with a common assumption that neurodiversity was mainly about autism. However, results showed that the majority of attendees reported an increase in knowledge after participating in the activity, with the majority of attendees also finding the topic of neurodiversity to be highly relevant.

The open-ended responses yielded several positive remarks about the thoughtfulness of discussions during the activity and the informative introduction given by Dr. Iweala. Helpful ideas for how to continue the conversation around neurodiversity and how to integrate these efforts into our daily work practices and environments were also offered.

The DEI admin team is incredibly grateful for all of the feedback received and for the engaged participation shown by the event's attendees!

TARC Heels Team Up for the Walk to Cure Arthritis

Members of our TARC Heels team met up in Cary, NC this past Saturday for the Arthritis Foundation's Walk to Cure Arthritis event. There, our center Director, Dr. Richard Loeser, was acknowledged as the Medical Honoree and spoke to the crowd about the importance of the event and of the impactful research supported by the Arthritis Foundation.

Our TARC Heels team took home numerous awards! Our team won 1st place as the top earning team for fundraising, with Dr. Loeser receiving a 1st place trophy for being the fund raiser of the event and Christina McMillan taking home a trophy as the second top fund raiser.

Thank you to everyone who signed up for our team, helped fundraise and/or donated, and showed up on Saturday to walk with our team and represent TARC. A special thank you to Dr. Amanda Nelson's daughter for her creative design that we used for our team's t-shirts! We look forward to participating in this event again next year!



Walk to CURE Arthritis®













Visit Us On The TARC Website, or Join Us on Social Media:





TARC Investigator Spotlight



Dr. Astia Allenzara

Dr. Astia Allenzara is a board-certified rheumatologist who is joining the faculty on August 1st. Prior to joining UNC, Dr. Allenzara received a BA in Biochemistry at Smith College in Northampton, Massachusetts, and her MD from the College of Medicine at the University of Vermont. She completed her Internal Medicine residency training at the University of Pennsylvania, and in 2021 started her rheumatology fellowship at UNC. Dr. Allenzara has tremendously benefited from the support of the Thurston Arthritis Research Center (TARC), the Core Center for Clinical Research (CCCR) and her primary mentor: Dr. Amanda Nelson. She has been able to learn more about study design and survival analysis through enrollment in the Masters of Science in Clinical Research (MSCR) program.

Dr. Allenzara's research focus is investigating a group of rare autoimmune diseases: idiopathic inflammatory myopathies (IIM). Her goal is to improve patient outcomes through assessing and treating comorbidities such as cancer and atherosclerotic cardiovascular disease.

Studying infrequent outcomes in a rare disease is challenging, and administrative datasets may be a solution to track infrequent outcomes, such as cancer. She has collaborated with Dr. Galen Foulke, a dermatologist at Penn State, to use TriNetX, an electronic medical record dataset linked across multiple institutions. Her research in TriNetX demonstrated that patients with obesity and dermatomyositis (DM), a subgroup of IIM, have an increased risk of cancer compared to DM patients without obesity. Drs. Allenzara and Foulke are investigating ways of improving the accuracy of International Classification of Disease codes to identify patients with IIM in electronic health records. To further investigate cancer risk, Dr. Allenzara has been selected to participate in the Cancer Information & Population Health Resource (CIPHR) New Investigator Program through the UNC Lineberger Comprehensive Cancer Center. Through this program, she has access to mentoring from UNC cancer epidemiologists. She will evaluate cancer incidence, stage at diagnosis and death for patients with IIM and how this differs from the general population to inform future grant proposals that will target interventions to reduce cancer morbidity for patients with IIM.

Dr. Allenzara's goals are to set up a myositis cohort at UNC to investigate how comorbidities develop and strategies for harm reduction. She is grateful for the outstanding mentorship and support from TARC!





TARC Clinical Trials Actively Recruiting Participants

The Osteoarthritis Prevention Study (TOPS)

This study is a Phase III, assessor-blinded, 48-month, parallel 2 arm, multicenter randomized clinical trials designed to reduce the incidence of structural knee OA. The study objective is to assess the effects of a dietary weight loss, exercise, and weight-loss maintenance program in preventing the development of structural knee OA in females at risk for the disease.



The study is led at UNC by **Dr. Leigh Callahan**, Site PI. The TOPS team also includes Dr. Cortney Armitano-Lago, Research Project Manager, Nia Jackson and Mary Hale, Research Specialists, and Ariana Lospinoso and Olivia Ontjes, Research Assistants.

Co-investigators for this study include Ali Guermazi, MD, PhD, Jeffery Katz, MD, MSc, Emily Leary, PhD, Richard Loeser Jr., MD, Gary Miller, R.D. PhD, Brian Pietrosimone, PhD, ATC, Sandra Soto, PhD, Kurt Spindler, MD, Ezequiel Zamora, MD

For more information about this study, please contact the TOPS team at tops@email.unc.edu.



Site PI: Leigh Callahan, PhD



Site PI: Elena Losina, PhD, MSc



Site PI: Shannon Mihalko, PhD



Data Coordinating Center: Edward Ip. PhD



Site PI: David Hunter, MD



Data Coordinating Center: Jimi Cook, DVM, PhD, OTSC

Vitamin K OA Study

Previous research suggests that vitamin K is an important factor in joint health. Proteins that require vitamin K to function are present in cartilage and bone and individuals with low vitamin K levels have a greater risk of OA progression. This information leads us to believe that vitamin K supplementation can be beneficial to those with knee osteoarthritis (OA).

The vitamin K OA study is a two site (Tufts University and UNC Chapel Hill), 6-month pilot study designed to determine if supplementing with Phylloquinone (vitamin K1) can help knee osteoarthritis vs placebo. The study is actively recruiting patients who are 50 years of age or older and who report chronic knee discomfort.

This study is led at UNC by **Dr. Richard Loeser**, Site PI. Please have interested participants reach out to Anthony Trujillo via email at trujilla@email.unc.edu.







Upcoming TARC Events

We Look Forward to Seeing You at TARC Research Day 2024!

October 25th, 2022; 8:00 a.m. to 2:30 p.m.; UNC Friday Center, Chapel Hill, N.C.

We're excited to be announce our Keynote Speaker and John B. Winfield, MD Visiting Scholar for this year's TARC Research Day meeting. See details below.

More information and updates regarding this event will be announced in the coming months.



TARC Research Seminar Series

| Date | Speaker | Affiliation |
|----------|---------------------------------------|---|
| 9/6/24 | Duncan Lascelles, PhD, DECVS/DAVCS | Professor Small Animal Surgery and Pain Management, NC State College of Veterinary Medicine |
| 11/08/24 | Erin Steinbach, MD, PhD | Assistant Professor of Medicine, Div. of Rheumatology, Allergy & Immunology, UNC School of Medicine |
| 12/13/24 | Matthew Fisher, PhD | Associate Professor, Director of Graduate Studies, Dept. of Biomedical Engineering, NC State University and UNC Chapel Hill |





VIRTUAL 5K

June 1 - August 31, 2024

LOCATION: WHEREVER YOU ARE TIME: WHENEVER YOU CHOOSE



bit.ly/oaaavirtual5k2024

Description

Osteoarthritis (OA) is the most common type of arthritis, affecting over 32.5 million US adults. There is a common myth that being active could make your joint pain symptoms worse, but the opposite is true! The OA Action Alliance Virtual 5K was created to help you take one step forward and stay active with OA!

Race Contact Info

Visit the <u>link here</u> or email Nick Beresic (nicholas_beresic@med.unc.edu) for more information about this event and how to join!



