

TARConnections...

Summer, 2022

Please send newsletter content suggestions to [Bradd Pavur](#), APR; Editor

UNC Thurston Arthritis Center and Division of Rheumatology, Allergy & Immunology Hold Strategic Planning Retreat

More than 30 faculty and staff from TARC and the Division of R/A/I met recently to review the 5 year strategic goals of the organizations.

For several months prior to the meeting, six work groups developed specific goals for their areas of focus and presented them for discussion during the planning retreat, which was held at the UNC Friday Center.

The work groups and respective group leaders were:

- Basic & Translational Research: Dr. Onyi Iweala and Dr. Doug Phanstiel
- Clinical Research: Dr. Kelli Allen
- Clinical Trials: Dr. Saira Sheikh
- Education: Dr. Rumei Ishizawar and Dr. Sofija Volertas
- Clinical Care: Dr. Nicole Orzechowski and Dr. Millie Kwan
- Marketing & Communications: Bradd Pavur, APR; and Dr. Nick Beresic

A few examples of goals identified by the work groups include:

- Recruit a clinical investigator with expertise in genetic epidemiology and or phenotyping/precision medicine to complement ongoing work in these areas, and a rheumatology physician scientist working in the area of autoimmunity.
- Develop and maintain a centralized data base of human samples and clinical data held by TARC investigators and promote its use in collaborative studies.
- Find new ways to build community & efficiency among TARC research investigators.
- Make diversity a priority for recruitment including trainees who may be future faculty.

“Strategic planning is essential for our Research Center and Division, in order to have a clear and collaborative vision of where we want to be headed over the next five years, as well as how to get there,” said Richard F. Loeser, M.D., TARC Director.

Dr. Beth Jonas, Division Chief, added, “The meeting was a perfect opportunity to gather after a long period of remote work and virtual meetings. It gave us a chance to take stock of all we have achieved in the areas of clinical care, education and research, and to ‘think big’ about goals for the upcoming five years.”



An Update From Our TARC Director...

Richard F. Loeser, MD

Dear TARC Faculty, Staff, Research Collaborators and Friends,

Welcome to a new section of our “TARConnections” newsletter, in which I look forward to keeping you informed and up to date on important TARC activities. As you can see elsewhere in the newsletter, we have a lot going on, from our TARC/RAI Strategic Planning that is in full swing, to our upcoming TARC Research Day in October. I encourage everyone to participate in these mission-critical activities. In addition, the newsletter has been revamped to provide you with additional updates and recognition for the wonderful accomplishments of our TARC faculty and staff. These are just a few of the many people who “keep the wheels turning.”



There are several TARC highlights that I would like to draw your attention to. We have just completed a very successful 5-year review of the center and center director, which is performed by the dean’s office in the SOM.

From 2017 to 2022 we have:

- Added 24 faculty members, bringing us to 51 multi-disciplinary TARC faculty from 18 different departments in the UNC Schools of Medicine, Nursing, Arts and Sciences, and Public Health as well as at NC State and Duke.
- Published over 1,000 manuscripts, including 4 in Nature, 3 in JAMA, 14 in Arthritis and Rheumatology, and 5 in Nature Reviews in Rheumatology.
- Received 46 awards and 56 honors.
- Obtained revenue from grants and contracts (administered through TARC) of well over \$7 million a year for a 5-year total of over \$36 million.
- Received \$8.5 million dollars in additional trust funds (gifts/endowments), two new professorships (Linda Coley Sewell Distinguished Professor of Medicine and the William J. Yount MD Distinguished Professorship) and initiated the John B. Winfield, MD Visiting Scholar award.
- Been awarded a NIAMS P30 Core Center for Clinical Research and renewed the CDC funded Osteoarthritis Action Alliance.
- In collaboration with the Division, established a Diversity, Equity and Inclusion work group led by Dr. Onyi Iweala.



I want to thank everyone for all of their efforts in these activities and many, many more that are too numerous to list, but which are just as important.

Please keep in touch with your thoughts, suggestions, comments and any questions. I’d love to hear from you! Feel free to send me an email at Richard.Loeser@med.unc.edu. I’m also happy to meet for coffee or lunch.

Sincerely,
Richard F. Loeser, Jr., M.D.



Save The Dates...

We Look Forward to Seeing You at TARC Research Day!

October 14th, 2022; 8:00 a.m. to 4:00 p.m.; UNC Friday Center, Chapel Hill, N.C.

We're excited to be assembling *in person* for this year's meeting (pending COVID-19 policies at that time). Some events will offer a virtual option for attendees who can't join us on site.

For more detailed information and updates, check our [Website](#).



Keynote Speaker

Ali Ellebedy, PhD

Associate Professor of Pathology and Immunology,
Medicine, and Molecular Microbiology
Washington University School of Medicine
Department of Pathology & Immunology
Division of Immunobiology

presenting on:

B cell responses to viral infection and vaccination

Click Here to [Register to Attend](#)

Registration Deadline: Sept. 15

Click Here to [Submit an Abstract](#)

Abstract Submission Deadline: Sept. 1

Upcoming "TARC Research Seminar" Presentations

Date/ Link	Speaker	Affiliation
9/16	Laurie Goodrich, DVM, PhD	Dir., Orthopedic Research Center, Colorado State University; C. Wayne McIlwraith Translational Medicine Institute
11/18	Janet Rubin, MD	Professor of Medicine, Division of Endocrinology/ Metabolism, UNC
12/16	Brian Diekman, PhD	Assistant Professor of Biomedical Engineering, UNC/NC State
1/27	Anne Marie Malfait, MD, PhD	Professor, Department of Internal Medicine, Division of Rheumatology, Rush Medical College
6/16	Saira Sheikh, MD	Associate Professor, Division of Rheumatology, Allergy & Im- munology, UNC

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TARC News & Highlights...

Key offerings of the TARC Core Center for Clinical Research (CCCR)...

Enhancing the design and conduct of clinical studies in Rheumatic and Musculoskeletal Diseases (RMDs), with a focus on Osteoarthritis.

There are three main “Core” sections: Contact: [Dr. Leigh Callahan](#), CCCR Director

Administrative Core: Provides leadership, oversight, coordination, and evaluation and general administrative support for all CCCR activities. Contact: [Dr. Leigh Callahan](#)

Methodology Core: Provides a set of comprehensive RMD-focused services to enhance the quality, efficiency and innovation of the CCCR research community. Contact: [Dr. Todd Schwarz](#) or [Dr. Kelli Allen](#)

Phenotyping and Precision Medicine Resource Core: Provides services that will add value to and optimize the design and implementation of clinical studies, as well as develop strategies to maximize the use and success of phenotyping and precision medicine in RMD, with a particular focus on OA. Contact: [Dr. Amanda Nelson](#)

Additional offerings include:

- Proposal Development Support, Support of Study Conduct, Data Sharing and Secondary Analyses, Dissemination and Implementation of Study.
- “TARC ABC” — Advisory, Brainstorming and Consultation sessions to support research projects at any stage.
- Diversity Resources: A variety of documents and links designed to help increase minority participation in clinical research, and much more.
- Several discussion series; viewable remotely during or after the presentations.

The CCCR also facilitates monthly meetings with TARC’s **Stakeholder Advisory Board (SAB)**. This board is comprised of individuals from various backgrounds who have experience with different arthritis, musculoskeletal, autoimmune, and/or allergy conditions. Board members provide advice and input to researchers seeking patient perspectives on their studies. If you’d like to request feedback from the SAB, please contact: [Kate Lindrum](#).



PREVIOUS PRESENTATIONS...	
March 11, 2022 “COVID Impacts on Persons with Rheumatic Diseases” Dr. Jean Liew Assistant Professor of Medicine Boston University School of Medicine Link to Recorded Presentation	
December 8, 2021 “Evidence-Based Analysis of Longitudinal Data” Dr. Patrick Heagerty Professor of Biostatistics University of Washington Link to Recorded Presentation	
April 23, 2021 “Rigor, Reproducibility, and the NIH” Dr. Bethany Wolf Associate Professor, Medical University of South Carolina Link to Recorded Presentation	



TARC Faculty Spotlight—Dr. Doug Phanstiel

Dr. Doug Phanstiel is an Assistant Professor of Cell Biology & Physiology, and a member of the Thurston Arthritis Research Center (TARC).

His innovative research is largely focused on the three-dimensional (3D) structure of human chromatin and how it can inform our understanding of human disease.

His lab team uses both experimental and computational approaches to map 3D chromatin structures in human cells responding to disease-associated stimuli.

By intersecting these results with publicly available data sets, they can identify new disease-risk genes for further study and therapeutic development.

Dr. Phanstiel's work is particularly important to the scientific and medical community because it can help identify novel drug targets for currently intractable human diseases, including Alzheimer's disease and osteoarthritis.

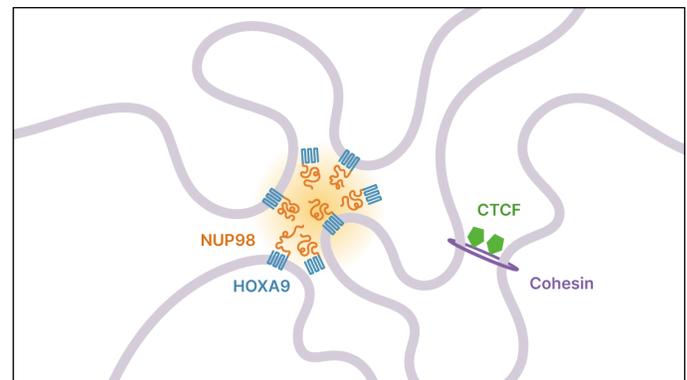
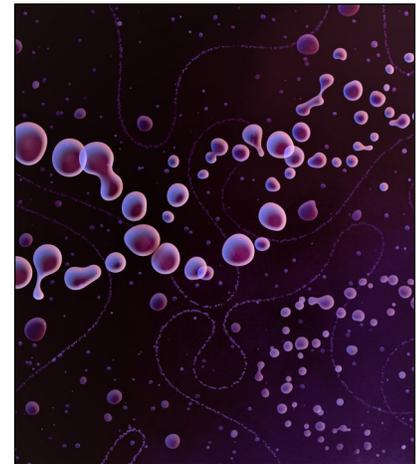
A recent collaboration with TARC members, Dr. Brian Diekman and Dr. Richard Loeser, utilized genomics, bioinformatics, and CRISPR-based genome editing to identify SOCS2 as a putative new risk gene for osteoarthritis, and a potential new drug target.

Last year, they teamed up with Dr. Greg Wang from UNC's Lineberger Comprehensive Cancer Center to identify an entirely new mechanism of oncogenesis that involves the formation of previously unidentified 3D chromatin structures, work that was published in the journal Nature.

Dr. Phanstiel's lab also develops software to analyze and visualize complex genomic data sets that accelerate scientific progress by improving rigor, reproducibility, and communication.

Dr. Phanstiel is highly collaborative, working frequently with members of the department of Biostatistics, the department of Genetics, the Neuroscience Center and numerous other institutions both nationally and internationally in order to maximize the scientific impact of his research.

We invite you to learn more about [Dr. Phanstiel's research](#).



Dr. Onyinye Iweala, UNC Diversity, Equity & Inclusion (DEI) “Champion,” Leads TARC Initiatives

Within the Department of Medicine and School of Medicine, TARC continues to lead when it comes to engaging faculty, staff, and learners in reflective exercises on important DEI topics.

On May 13, 2022, we participated in a modified “Privilege Walk” (example: <https://bzfd.it/2OicEMY>) to help us address some of the circumstances, identities, and experiences that shape us, as well as our views of ourselves and others, our societal and organizational roles, and our interactions with others. TARC members described the exercise and discussion that followed as “thought provoking.” In breakout sessions, they also identified certain areas within TARC where privilege disparities affect TARC members, so that our community can begin to address them.



For additional information, be sure to check out the websites for the [School of Medicine’s Office of Inclusive Excellence](#), and the UNC [Department of Medicine’s Diversity and Inclusion](#).

To volunteer or learn more, contact: Dr. Onyinye.Iweala@med.unc.edu. If you would like to access the TARC DEI Microsoft Teams Page and DEI resource library, contact: Samantha.Kemper@med.unc.edu.

Our next DEI Workgroup meeting will be Wednesday, 10/19 at 3:30 p.m., via Zoom:

<https://zoom.us/j/91234456211?pwd=UzJSbjR4cVlvMSsvcVk0VkdRQ0M2Zz09>

Meeting ID: 912 3445 6211 Meeting Passcode: 971267

A Very Warm “TARC Welcome” To...

- [Joe Hart III, PhD](#); (pictured at right), Vice Chair of Research and Professor of Orthopedic Surgery, UNC
- [Virginia Kraus, MD, PhD](#); (pictured at right) Professor of Medicine, Pathology, & Orthopedic Surgery; Duke University
- [Tamara Baker, PhD](#); Professor of Medicine, Psychiatry, UNC
- [Dr. Ashley Abbott](#), [Dr. Prarthana Jain](#), [Dr. Katie Yates](#); First Year Rheumatology Fellows, UNC
- [Dr. Ryan Kaakati](#), [Dr. Jeremy Owens](#); First Year Allergy Fellows, UNC
- [Kate Lindrum](#); TARC Administrative Support Specialist, UNC



TARC News & Highlights

Recent Grants...

- **Dr. Amanda Nelson and Dr. Duncan Lascelles:** 1) NIH Grant; “Is the gut important in multiple joint osteoarthritis?” — \$3.4M (5 year period) [Link](#).
- **Dr. Amanda Nelson:** NIH/NIAMS Grant; “Midcareer Investigator Award for Patient Oriented Research.” — \$950K (5 year period) [Link](#).
- **Dr. Greg Wang and Dr. Doug Phanstiel:** NIH/NCI Grant; “The role for phase separation in oncogenesis and aberrant chromatin looping formation.” — \$2.9M (5 year period)
- **Dr. Saira Sheikh:**
 - 1) NIH U01 Innovation Award; Minority Health & Health Equity — \$500K (1 year period)
 - 2) ACR Grant; funded by Office of Minority Health to address racial disparities in lupus clinical trials — \$500K (2 year period) [Link](#).
 - 3) Lupus Clinical Investigators Network Infrastructure Grant funded; by the Lupus Research Alliance/Lupus Therapeutics \$350K (2-year period)
 - 4) Grateful Patient Gift to support Dr. Sheikh’s TARC research — \$500K [Link](#).
- **Dr. Kelli Allen:** NIAMS Grant; “Optimizing osteoarthritis (OA) care through clinical & community partnerships” — \$350K (2 year period) [Link](#).
- **Dr. Erin Steinbach:** PSTP Faculty Award; “Revealing the mechanisms of increased intestinal epithelial cell barrier permeability in peanut allergy.” — \$160K (2 year period)
- **Dr. Brian Diekman and Dr. Doug Phanstiel:** NC TraCS grant; “Genomics and genome editing to establish new drug targets for osteoarthritis.” — \$50K (1 year period)
- **Dr. Lauren Schnabel; Dr. Richard Loeser as collaborator:** NCSU CVM Intramural Grant; “Development of a novel equine fibromectin model of osteoarthritis for translational use.” — \$24K (1 year period)



More Great News to Share...

- **Dr. Beth Jonas:** (1) Was interviewed by Spectrum News TV regarding MTX availability for rheumatology patients. [Link](#); (2) Discussed system-wide stress/exhaustion among providers on “Rheumatology Advisor” podcast. [Link](#)
- **Dr. Saira Sheikh** co-authored a study published in NEJM for a novel therapeutic that shows promise in cutaneous lupus. [Link](#)
- **Drs. Saira Sheikh and Tessa Englund** penned a key editorial: “EMBRACE: One small story in lupus, one giant challenge in clinical trials.” [Link](#)
- **Dr. Millie Kwan** was recognized by Carolina Antimicrobial Stewardship Program as a “Super Steward.” [Link](#)
- **Dr. Amanda Nelson:** (1) Was honored by having her Research selected for a 2021 ACR Debrief; “Baseline cam or pincher morphology is associated with loss of joint space width at the hip.” [Link](#); (2) Was featured in iHeart Media podcast, “The importance of movement for osteoarthritis.” [Link](#)
- **Ralph Alberto**, received “Highest Honors” award for senior honors thesis. [Link](#)
- **TARC researchers** shared their findings at OARSI-22 conference. [Link](#)
- **JoCoOA** participated in the largest study to date, identifying genomic variants with blood lipid levels. [Link](#)

