

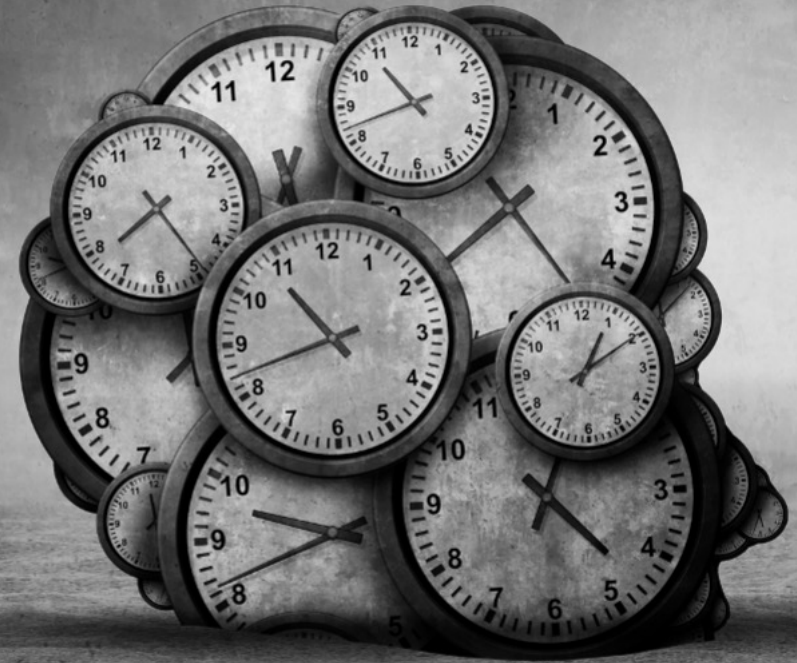
WELCOME

SAN DIEGO NATHAN SHOCK CENTER 2022 WORKSHOP

Tackling the Heterogeneity of Aging

HOSTS:

- GERALD SHADEL, PhD.
- ALESSANDRA SACCO, PhD.





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School of Gerontology

NOVATO, CALIFORNIA

DIRECTORS: Eric Verdin, MD, Gordon Lithgow, PhD, Pinchas Cohen, MD, Sean Curran, PhD

[About this Center](#)

- The Division of Aging Biology of the National Institute on Aging funds **8 Nathan Shock Centers of Excellence in the Basic Biology of Aging** across the U.S.
- The Centers provide leadership in the pursuit of **basic research into the biology of aging**
 - Each Center has a **overall theme, specialized research resource cores** that provide services for-fee to the community, and a **research development core**

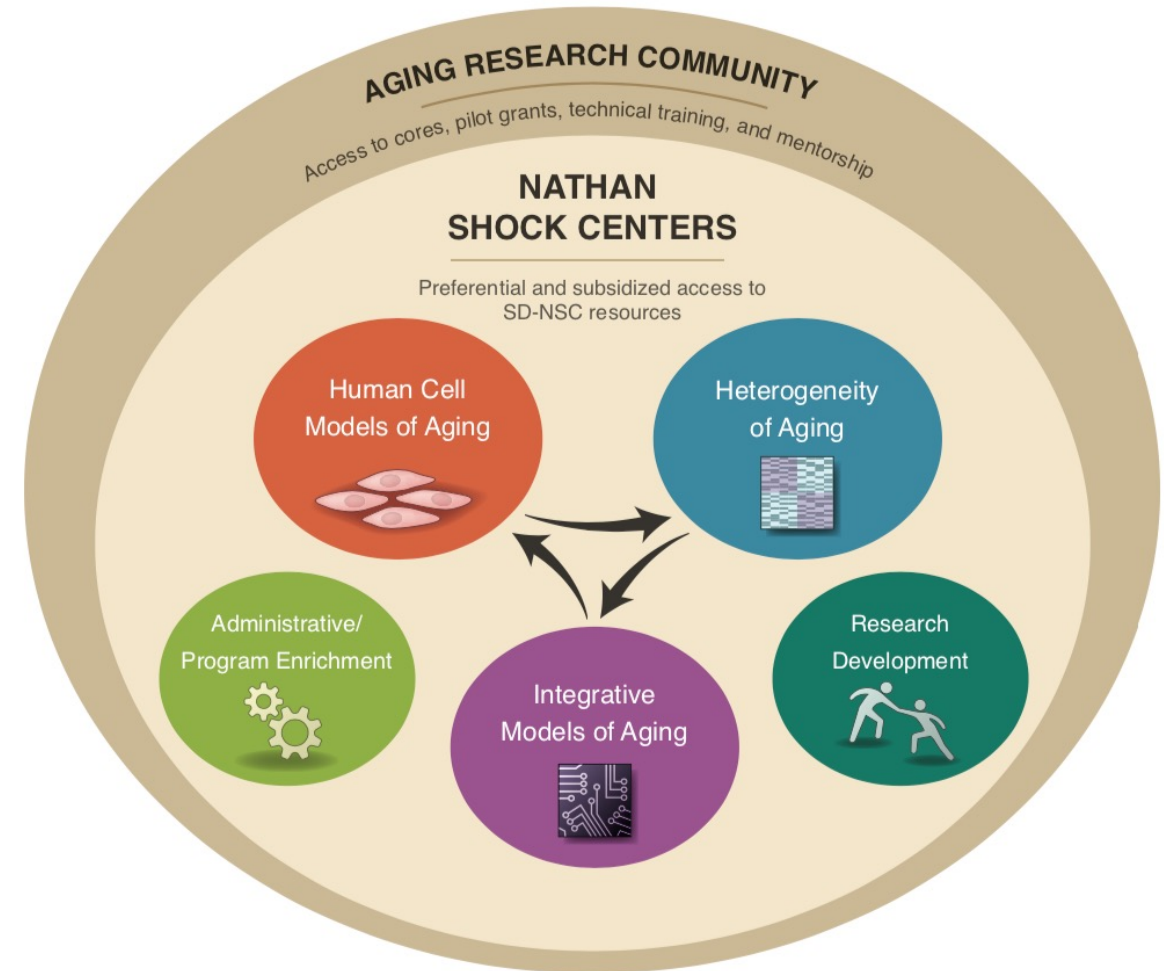
OVERALL PREMISE: UNDERSTAND THE HETEROGENEITY OF AGING

Development of personalized interventions to increase the number of years of healthy life (healthspan)

AIM 1. Create novel integrated scientific resources to develop human cell models of aging and enable basic studies of molecular, cellular, and tissue heterogeneity.

AIM 2. Increase basic biology of aging research through development, training, and mentoring activities of a Research Development Core.

AIM 3. Extend the reach of the SD-NSC by providing leadership and outreach activities to advocate for basic biology of aging research in general, and studies into the heterogeneity of aging specifically.



Geroscience 2021 43:2139

The San Diego Nathan Shock Center: tackling the heterogeneity of aging

Gerald S Shadel ¹, Peter D Adams ², W Travis Berggren ³, Jolene K Diedrich ³,
Kenneth E Diffenderfer ³, Fred H Gage ³, Nasun Hah ³, Malene Hansen ², Martin W Hetzer ³,
Anthony J A Molina ⁴, Uri Manor ³, Kurt Marek ³, David D O'Keefe ³, Antonio F M Pinto,
Alessandra Sacco ², Tatyana O Sharpee ³, Maxim N Shokriev ³, Stefania Zambetti ³

Affiliations + expand

PMID: 34370163 DOI: [10.1007/s11357-021-00426-x](https://doi.org/10.1007/s11357-021-00426-x)

Core Leads:
Rusty Gage, Salk
Anthony Molina, UCSD



Core Lead:
Tatyana Sharpee, Salk



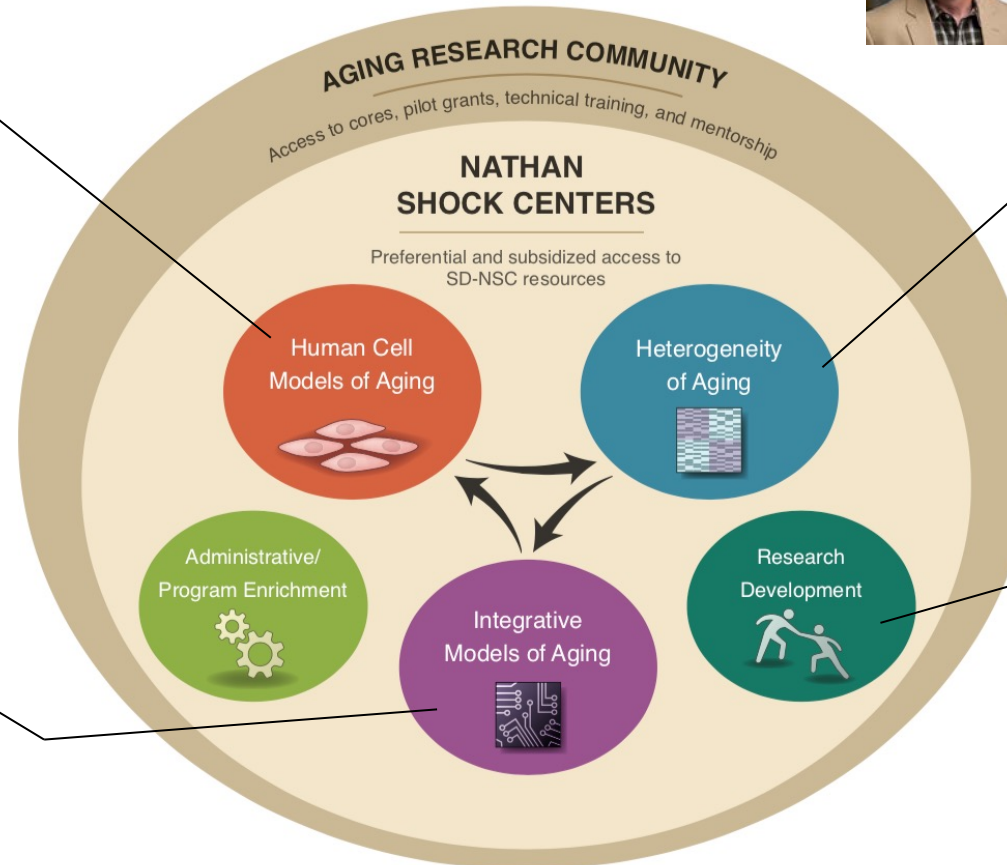
Center Director: Gerald Shadel, Salk



Core Leads:
Christian Metallo, Salk
Peter Adams, SBP



Core Lead:
Alessandra Sacco, SBP



Inaugural SD-NSC pilot grantees



Ana Chucair-Elliott
Oklahoma Medical
Research Institute



Vanessa Delcroix
Scripps Research
Institute



Maria Mihaylova
Ohio State University



Lara Labarta-Bajo
Salk Institute



Adam Konopka
University of
Wisconsin-Madison



Maria Clara Guida
SBP

PROGRAM

- Keynote by Professor Meng Wang
 - *Building multidisciplinary research in understanding aging biology*
- 2021 SD-NSC Pilot Grant projects
- Research resource core updates
 - *Human Cell Models of Aging Core*
 - *Heterogeneity of Aging Core*
 - *Integrative Models of Aging Core*
- Q&A sessions
- Career development panel

Timothy Huang-SBP
Daniel Oliver-RejuvenateBio
Yoav Altman-SBP
Monica May-UCSD

Objective: Bring new investigators into biology of the aging field

- PILOT GRANT PROGRAM: 6 x \$15K for junior investigators or established investigators new to the aging field (to be spent in SD-NSC research cores)
- MENTORING PROGRAM: Personalized mentor/mentee pairing for pilot grant awardees
- CAREER DEVELOPMENT TRAINING: Access to career development workshops for pilot grant awardees
- ANNUAL TRAINING WORKSHOP



UPCOMING CALL:

Open Date (earliest submission date): May 24th, 2022

Application due date: Aug 24th, 2022

<https://www.salk.edu/science/research-centers/san-diego-nathan-shock-center/pilot-grant-program/>

2021 PILOT GRANT PROJECTS






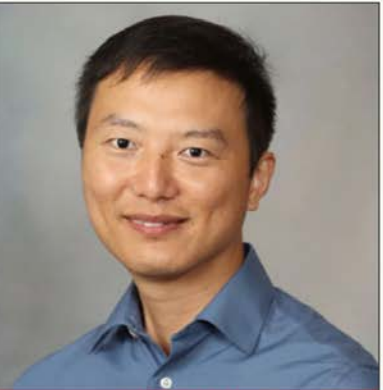


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UC San Diego
School of Medicine

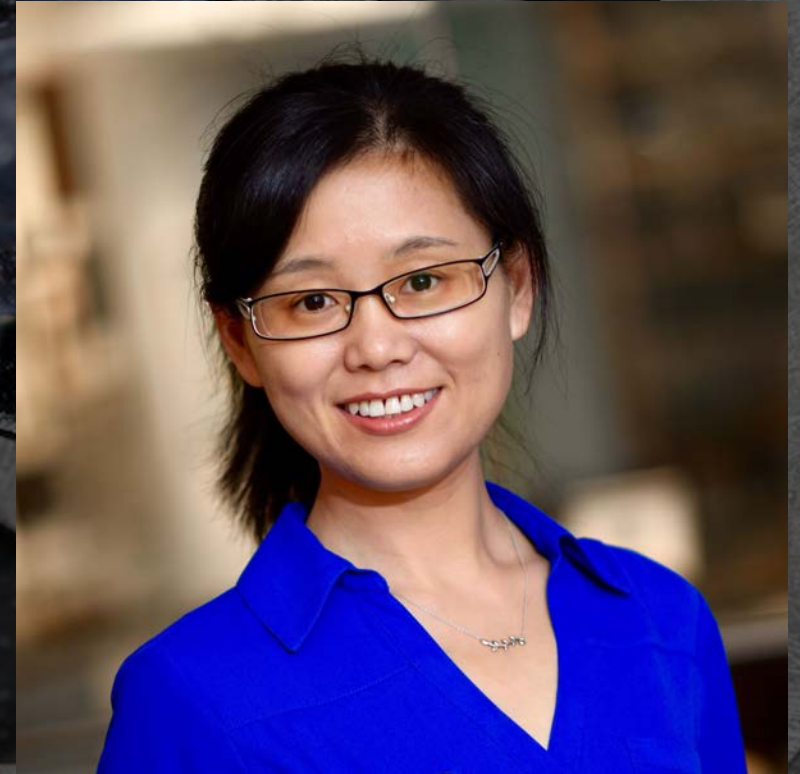
Congratulations to the Winter 2021 SD-NSC Pilot Grant Awardees!

					
LEENA BHARATH	SHEFALI KRISHNA	GARGI MAHAPATRA	CHIARA NICOLETTI	ANASTASIA SHINDYAPINA	XU ZHANG
PROJECT TITLE Human T Cell Inflammation in Aging	PROJECT TITLE Characterization and Function of Mitochondrial Age Mosaicism and Heterogeneity	PROJECT TITLE Identifying Mediators of Bioenergetic Decline in Peripheral Cells of Older Adults Across a Spectrum of Cognitive Abilities	PROJECT TITLE Extracellular Vesicles as Soluble Mediators of Accelerated Aging Within the Heterogeneous Population of Muscle-Resident Cells in Duchenne Muscular Dystrophy	PROJECT TITLE Unraveling Heterogeneous Biological Aging of Mouse Immune Cells at Single-Cell Resolution	PROJECT TITLE The Dynamics and Heterogeneity of Cell Fates During Cellular Senescence
Assistant Professor Merrimack College MitoCure Lab	Staff Scientist Salk Institute for Biological Studies Hetzer Lab	Postdoctoral Fellow Wake Forest School of Medicine Molina Lab	Postdoctoral Fellow Sanford Burnham Prebys Medical Discovery Institute Puri Lab	Instructor in Medicine Brigham and Women's Hospital, Harvard Medical School Gladyshev Lab	Research Associate Mayo Clinic Nathan K. LeBrasseur Lab

KEYNOTE SESSION

MENG WANG, PhD.
BAYLOR COLLEGE OF MEDICINE

*BUILDING MULTIDISCIPLINARY RESEARCH IN
UNDERSTANDING AGING BIOLOGY*



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2022 WORKSHOP

