



































ANNUAL REPORT



















The Sleep Research Society Foundation is committed to the growth and development of the field of sleep and circadian research through education and research funding opportunities.

\$3.2 MILLION SINCE 2005

THE SRS FOUNDATION CONTINUES TO DEMONSTRATE ITS SUPPORT FOR SLEEP AND CIRCADIAN RESEARCH.

The Sleep Research Society Foundation (SRSF) provides support for growth and development in the field of sleep and circadian research. The SRSF was established in 2005 by the Sleep Research Society board of directors to provide support for investigators to conduct research that would form the basis of more comprehensive research applications to federal agencies, private foundations, and industry partners.

Since its inception, the SRSF has awarded more than \$3.2 million in support for research conducted by early-career sleep and circadian

scientific investigators through various programs. The SRSF has helped investigators obtain NIH and other government funding through research supported by SRSF awards.

While there is no shortage of innovative thinking and ideas in the field of sleep research, there is a shortage of investigators to spearhead sleep-related research projects, specifically early-career investigators to ensure the pipeline of future funding for sleep research.

The Sleep Research
Society Foundation is uniquely
positioned to address the current
critical shortage of early-career sleep
and circadian researchers through our
programs: SRSF Career Development
Award, SRSF Small Research Grant,
SRSF Mentored Collaboration Grant
and various SRSF conference
scholarships.

A MESSAGE FROM THE PRESIDENT, Philip R. Gehrman, PhD

The Sleep Research Society Foundation (SRSF) is pleased to share great news regarding the Foundation's activities in 2023.

The Foundation announced the 11th solicitation for the 2023 SRSF Career Development Award, receiving 24 high quality applications. This SRSF award is an important stepping-stone to the future success of those recipients. We are extremely grateful to the SRS Scientific Review Committee, chaired by Mark R. Zielinski, PhD, for undertaking the review of these proposals, which aligned with the NIH grant review model. The SRS Foundation Board of Directors selected 4 proposals representing a broad range of topics and approaches which are outlined in the 2023 annual report. These projects help to advance sleep and circadian science and change the way we think about the impact of sleep within public health. Funding for these awards would not be possible without the generous support from our SRSF Corporate Partners and individual donors!

We are happy to share that SRS members, sleep patients and the public have donated nearly \$34,000 through the <u>SRSF Funding</u>
Our Future Scientists Annual Appeal! Funds raised for programs

beyond the SRSF Career Development Award include the SRSF Small Research Grant, SRSF Mentored Collaboration Grant, and travel awards and scholarships to specialized meetings, including the 2023 SLEEP Meeting Undergraduate Award, and the SRS Foundation's scholarship to attend the 2023 Young Investigator's Research Forum. Thank you for supporting these early-career investigators that are highlighted in the annual report!

The SRS Foundation is uniquely positioned to address the critical shortage of early-career sleep and circadian researchers, impacting the pipeline for future funding. Thus, the importance of the SRSF career development awards and programs for the advancement of scientific careers cannot be overstated and cannot be achieved without your support. If you have not donated to the SRS Foundation, I personally urge you to support the important work of the SRS and its Foundation by donating today.

We are very grateful to our <u>SRSF Corporate Partners</u> for their strong support of the SRS Foundation's mission. Their generosity is demonstrated by the \$900,000 given to support sleep and circadian research in 2023!



In recent years, the SRS Foundation has been very intentional about engaging with other stakeholders within our field. I am pleased to share with you the positive outcomes that have been achieved through these efforts including:

- ◆ The SRS Foundation has collaborated with the American Academy of Sleep Medicine Foundation (AASMF) to provide additional funding in support of early-career researchers to attend the 2023 AASMF's Young Investigator's Research Forum by means of SRS Foundation scholarships. Likewise, the AASMF has provided funding in support of the 2023 SRSF Small Research Grant. This partnership provided additional funding for 11 early-career researchers in 2023!
- ◆ The SRS Foundation has created opportunities for the SRS membership to collaborate with our SRSF Corporate Partners. This has been achieved by promoting industry research grants made available to SRS members through the SRSF Call for Research Proposals; disseminating the science behind sleep and circadian treatments through the SRSF Scientific Update; hosting educational webinars lead by key opinion leaders through the SRSF Expert Summit; and providing a forum for key opinion leaders and committed industry stakeholders to discuss research ideas and techniques, and brainstorm potential solutions to the challenges impacting the sleep and circadian field that was made possible through the SRSF Industry Advisory Council roundtable discussions.

A special thank you to all the SRS members who donated their expertise and time to participate in these endeavors! All these efforts were conducted with the goal of furthering sleep and circadian research to, ultimately, impact public health.

↑ The SRS Foundation was able to fund the first SRSF Focused Research Award! We are extremely grateful to the SRS Scientific Review Committee, chaired by Mark R. Zielinski, PhD, for undertaking the review that aligned with the NIH grant review model. The SRS Foundation Board of Directors selected 1 proposal by Christopher Kaufmann, PhD, MHS at the University of Florida on the topic, "Cardiovascular Outcomes in Patients with Narcolepsy." The award is intended to further our understanding by performing rapid analyses of readily available large datasets. We await the research outcomes in 2024, and thank Jazz Pharmaceuticals for its generous support for making the 2023 award possible!

The SRS
Foundation is
committed to being
innovative and relevant to
meet the needs of the SRS
membership. With your help, we
will impact the future of our
field. Now, enjoy the success
stories told in the 2023
annual report.



Career Development AWARD

Now in its 11th solicitation for the SRSF Career Development Award, the Foundation received 24 high quality applications. We are extremely grateful to the SRS Scientific Review Committee, chaired by Mark R. Zielinski, PhD, for undertaking the review of these proposals, which aligned with the NIH grant review model.

The SRS Foundation recognizes the challenges of transitioning from post-doctoral training to independent research funding. The goal of these mentored awards is to invest in promising early career researchers and assist with their transition into independence as junior investigators. This award is an important stepping-stone to the future success of those recipients. Annual Award: up to \$50,000 per award



2023 RECIPIENTS

Joshua M Bock, PhD Mayo Clinic

"Effects of Inorganic Nitrate Supplementation on Sleep Quality."



Niki B Gumport, PhD

Stanford University

"A Clinician Training Program to Integrate Digital Cognitive Behavior Therapy for Insomnia into Routine Psychotherapy."



Weston Powell, MD, PhD

Seattle Children's Hospital

"Airway Epithelial Circadian Rhythms in Pediatric OSA."



Danielle A Wallace, MPH, PhD

Brigham and Women's Hospital

"Developing epigenetic markers for irregular sleep timing."

We are confident that these early career stage investigators will increase our knowledge of sleep and circadian science and change the way we think about the impact of sleep for public health.

2022 AWARDEE UPDATES



Lauren Hablitz, PhD

Assistant Professor, Center for Translational Neuromedicine
University of Rochester Medical Center
Project Title: "Beyond the SCN: a role for VIP and AVP regulation of glymphatic function."

"The SRSF Career Development Award was an amazing opportunity to jump-start my career as an independent investigator. This award enabled me to start an entirely new research path, with enough data to have manuscripts and grant applications in preparation. I was also able to recruit my first PhD student to truly establish "Hablitz lab." Presenting this work at SLEEP 2022 gave me the opportunity to meet new people in the sleep community, and the exposure from this award led to an invited commentary on glymphatic function in disease. While this award was ongoing, I was also able to finish several collaborative projects from my postdoc. Overall, this award was a critical steppingstone in my science career, and I am very grateful to have had this support as I began my career as tenure-track faculty."

Published Papers:

https://elifesciences.org/articles/82232

https://academic.oup.com/brain/article/145/9/2943/6675106

https://www.sciencedirect.com/science/article/pii/S2211124722011445



James Dooley, PhD

Assistant Professor in the Department of Biological Sciences Purdue University

Project Title: "Theta rhythms during REM sleep promote the developmental integration of primary motor cortex in the sensorimotor network."

"The Sleep Research Society Foundation's Career Development Award has been pivotal in my research career, enabling my transition to a tenure-track faculty position at Purdue University while significantly advancing my research program. With this award, I successfully established my laboratory, recruited a dedicated team, and conducted transformative research investigating the state-dependent connection between primary motor cortex and the red nucleus during sleep. The award's financial support allowed me to collect crucial preliminary data for my RO1 grant submission and respond effectively to reviewer feedback by pivoting to optogenetic inhibition. The grant's significance goes beyond funding; it instilled ownership and confidence in my research direction, further emphasized by the positive reception of my findings at both 2023's SLEEP meeting and the annual Society for Neuroscience meeting. In summary, the SRSF Career Development Award has not only provided essential financial backing but has also been a catalyst for my academic growth, positioning me for ongoing success in the field of sleep research. I am deeply grateful for the Foundation's support, which has undoubtedly helped propel my career to new heights."

Published Papers:

https://www.sciencedirect.com/science/article/pii/S0896627322007516



Small Research GRANT



SYED IMRAN AHMED, MBBS, MPH VIRGINIA COMMONWEALTH UNIVERSITY*



JEREMY A. BIGALKE, PHD
BAYLOR UNIVERSITY



CAROLINE Y. DOYLE, PHD UNIVERSITY OF PITTSBURGH*

2023 RECIPIENTS

Now in its 4th grant cycle, this grant is designed to support the research of trainees and early career investigators who otherwise do not have the institutional resources to support new studies and/or do not have a sustained record of external funding. This grant provides seed funding to support research to ultimately allow individuals to successfully apply for or complete career development grants (e.g. K-awards). Annual Award: Up to \$5,000 per award



CHRISTINA GILES, MD
UNIVERSITY OF COLORADO
ANSCHUTZ MEDICAL*



EMILY GOLDBERG, M.S. CCC-SLP UNIVERSITY OF PITTSBURGH



ASHLEY INGIOSI, PHD
OHIO STATE UNIVERSITY



MONICA R. KELLY, PHD VA GREATER LOS ANGELES



KATHRYN KENNEDY
THE UNIVERSITY OF ARIZONA



JENNIFER MUNDT, PHD NORTHWESTERN UNIVERSITY



CASSI SPRINGFIELD, MS, MA
UNIVERSITY OF SOUTHERN
MISSISSIPPI*



VALERIE SWISHER
PENNSYLVANIA STATE
UNIVERSITY*

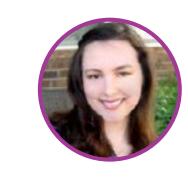
^{*}Funding for this grant was provided in partnership with the American Academy of Sleep Medicine Foundation (AASMF).



BRANDON TOTH
UNIVERSITY OF MICHIGAN



BRUNA VISNIAUSKAS, PHD
TULANE UNIVERSITY



JAMIE WALKER, M.A., LPC UNIVERSITY OF ARKANSAS*



Mentored Collaboration GRANT

The goal of this grant is to link trainees who have limited sleep/circadian mentoring options in their chosen field of interest to mentors that can provide rich, face-to-face opportunities in state-of-the-art research techniques and methods. The mentor-mentee relationship should extend beyond the face-to-face portion and, as appropriate, include mentorship via ongoing phone or web-based meetings over the course of the funded year. The expectation is that all mentor-mentee pairs to develop a research product such as an abstract for the SLEEP Meeting, manuscript, and/or grant proposal. This collaboration may be in the United States or abroad as long as both participants are active SRS Members. Annual Award: ≤\$3,500 each will be given annually for travel-related expenses.

2023 RECIPIENTS



Mattina Davenport, PhD
Center for Child Health Equity and Outcomes Research



Rupsha Singh, PhD National Institute on Minority Health and Health Disparities



Undergraduate Trainee Travel SCHOLARSHIP

This scholarship is offered to undergraduate trainees with an interest in pursuing a career in sleep or circadian rhythms. Trainees will be offered up to \$1,000 reimbursement for registration fees, travel, and lodging costs associated with attending SLEEP. To be eligible, trainees must complete and submit the application, attend the Trainee Symposia Series, and submit an evaluation form.

2023 RECIPIENTS

- ♦ Freya Fanson Washington State University
- ♦ Sydney Holtman Children's Hospital Colorado
- ♦ Pooja Kalyan Brown University
- ♦ Lindsey Lee Brigham Young University
- ♦ Connor Malby Northumbria University



SCHOLARSHIP

Since 2019, the SRS Foundation has been partnering with the AASM Foundation (AASMF) to provide scholarships to attend the annual AAMSF Young Investigator's Research Forum. The forum is aimed at providing guidance, tactics, and strategies to better position young investigators for a successful career in sleep and circadian research.

2023 RECIPIENTS



Sydney Aten, PhD

Beth Israel Deaconess Medical Center/
Harvard Medical School



Ian Greenlund, PhDMayo Clinic



Leandro Brito, PhDOregon Health and Science University



Amy Hartman, PhD, OTR/L
University of Pittsburgh



Luciana Giorgio Cosenzo, PhD, MSW
University of Alabama School of Social
Work



Focused Research AWARD

NEW AWARD

We are extremely grateful to the SRS Scientific Review Committee, chaired by Mark R. Zielinski, PhD, for undertaking the review which aligned with the NIH grant review model. The SRS Foundation Board of Directors selected 1 proposal on the topic of, "Cardiovascular Outcomes in Patients with Narcolepsy." The award is intended to further our understanding by performing rapid analyses of readily available large datasets. *We await the research outcomes in 2024!*

2023 RECIPIENT



Christopher Kaufmann, PhD, MHS
University of Florida



PRIVATE INVESTIGATOR'S TEAM

Rakesh Bhattacharjee, MD, FRCPC, DABP(SM), CBSM, DBSM

University of California, San Diego



Wei-Hsuan "Jenny" Lo-Ciganic, PhD University of Florida



Atul Malhotra, MD University of California, San Diego



Emerson M. Wickwire, PhD
University of Maryland



Thank you for generously supporting the 2023 SRSF Focused Research Award!





THANK YOU TO OUR 2023 DONORS!

\$5,000+

Daniel J. Buysse, MD Namni Goel, PhD

\$2,500+

Christopher J. Earley, PhD, MBBCh, FAASM

\$1,000+

Edward Bernreuter Chiara Cirelli, MD PhD

\$500+

Mary A. Carskadon, PhD
Christopher M. Depner, PhD
Christopher L. Drake, PhD
Philip R. Gehrman, PhD, CBSM,
FAASM
Ronald R. Grunstein, MD PhD

Susan T. Harbison, PhD

Craig Heller, PhD

Thomas S. Kilduff, PhD Elizabeth B. Klerman, MD PhD Kathryn A. Lee, PhD, RN

Teofilo Lee-Chiong, MD

Miranda M. Lim, MD, PhD

BBMC LLC

Bryce A. Mander, PhD

Jennifer L. Martin, PhD

Michael Nield

Megan E. Petrov, PhD

Michael Scullin, PhD

Ronald S. Szymusiak, PhD, FAASM

Kenneth P. Wright, PhD

\$200+

Cathy A. Alessi, MD, FAASM Suzanne Bertisch, MD, MPH Sean P.A. Drummond, PhD Jeanne F. Duffy, MBA, PhD William Fishbein, PhD Ying-guide Fu

Monika Haack, PhD

Brant P. Hasler, PhD, DBSM

Octavian C. Ioachimescu, MD, PhD,

FAASM

Kristen L. Knutson, PhD

Ken M. Kunisaki, MD, MS

Daniel S. Lewin, PhD, Diplomate

Emeritus, ABDSM

Kiwamu Misaki, MD

Andrew A. Monjan, PhD, MPH

John Noel

Kathryn Reid, PhD

Frank A. Scheer, PhD, MSc

Thomas W. Uhde, MD

Phyllis C. Zee, MD, PhD

\$100+

Christine Acebo, PhD Ravi Allada, MD Todd Arnedt, PhD

Jeffrey Borenstein, MD

Shawn Candler, MD

Stephanie J. Crowley, PhD

Clayton Funk

Erin Hanlon, PhD

Sarah M. Honaker, PhD

Leon Lack, PhD

James T. McKenna, PhD

Lisa J. Meltzer, PhD

Chooza Moon, PhD

Anne Marie Morse, DO

Douglas E. Moul, MD, MPH

David N. Neubauer, MD

Barbara L. Parry, MD

John D. Roehrs, MD

Clifford B. Saper, MD

Carlos H. Schenck, MD

Srinivas Tetali, MD

Hans P.A. Van Dongen, PhD

Ed Wagner, DVM

Danielle Wallace, MPH, PhD

Amy R. Wolfson, PhD

James K. Wyatt, PhD

Yasushi Yoshida, MD, PhD

\$99 AND UNDER

Daniel Aeschbach, PhD

Alexander Allum Hvaal

Eric Bernreuter

Jonathan Cedernaes, MD, PhD

Suzanne Crincoli, PhD

Tony J. Cunningham, PhD

Luis De Lecea, PhD

Helen Driver, PhD, RPSGT, CCSH

Dylan Lee Ellis

Carol A. Everson, PhD

Peter L. Franzen, PhD

Paula C. Genik, PhD

Kevin S. Gipson, MD, MS

Diana Grigsby-Toussaint, PhD, MPH

Els Van Der Helm, PhD

Stephanie Jones, PhD

Christy Mather, MA

Diana E. McMillan, PhD, RN

Thomas A. Mellman, MD

Janet M. Mullington, PhD

Benjamin H. Natelson, MD

Wil R. Pigeon, PhD

Jack Plageman

Ana Pocivavsek, PhD

Jeremy R. Powers, BS

Darlynn M. Rojo-Wissar, PhD, MPH

Kenneth C. Sassower, MD

Christi S. Ulmer, PhD, DBSM

Teresa M. Ward, PhD, RN, FAAN

Carleara Weiss, PhD, MS, RN

Katherine Yasick

It is our goal to ensure accuracy in donor reporting. Names are listed as they were provided during the donation process. Please contact foundation@srsnet.org with any updates.

CORPORATE PAR	RINERS PROGRAM ——
SRS®	SRSF®

THANK YOU TO OUR 2023 CORPORATE PARTNERS

for their generous support of the SRS Foundation's mission!

PRESIDENT'S CIRCLE \$100,000+



DIAMOND CIRCLE \$50,000+













EMERALD CIRCLE \$20,000+









RUBY CIRCLE \$10,000+







SAPPHIRE CIRCLE \$5,000+





JADE CIRCLE - \$2,500+





SRS Members and Corporate Partners Collaborate to Forward Sleep and Circadian Research

SRSF CALL FOR RESEARCH PROPOSALS



Sleep Image announced a call for research proposals using the SleepImage
System patented method of Cardiopulmonary Coupling (CPC).

Dr. Robert Joseph Thomas,
Associate Professor of
Medicine at Harvard Medical
School and co-founder of the

CPC-technique, and Dr. Solveig Magnusdottir, Medical Director of Sleeplmage, reviewed all applications.

2023 Recipients

- Jacklyn Ewald, M.S.
 George Fox University
 (PhD Student)
- Michael S. Irwig, MDBeth Israel Medical Center,Boston
- Diego R. Mazzotti, PhD
 University of Kansas Medical
 Center
 (SRS Member)
- ♦ Stephanie Moriartey, PhD, RD Careica Health

- ◆ Jonna L. Morris, PhD, RN University of Pittsburgh (SRS Member)
- ◆ Anna E. Mullins, PhD
 Ichan School of Medicine at Mount Sinai
 (SRS Member)
- Nirvikalpa Natarajan, MDS, FFDRCS, MOMSRCPS, MFDSRCPS
 Academy of Dental Excellence
- Nadine Rampf, PhD
 Stellenbosch University,
 South Africa
- Harish Rao, MDIndiana School of Medicine



SleepScore Labs announced its first edition of the SleepScore Sleep Research Grant designed to reward novel research projects leveraging consumer sleep technology to objectively measure and characterize longitudinal sleep in the at-home, naturalistic environment.

Members of SleepScore Labs'
Scientific Advisory Board and
Sleep Science Team reviewed
applications for novelty/
innovation, feasibility, and
impact. Reviewers included
Drs., Roy Raymann, Nate
Watson, Rafael Pelayo, Shona
Halson, and Elie Gottlieb.

2023 Recipients

- Kimberly A. Honn, PhDWashington State University(SRS Member)
- Kelly N. Kim, B.S.The University of Arizona(SRS Member, PhD Student)

SRS Members and Corporate Partners Collaborate to Forward Sleep and Circadian Research



SRSF SCIENTIFIC UPDATE

This opportunity allows corporate partners to disseminate the science of their product published in a peer reviewed journal to the SRS Membership.

Read the Update - https://sleepresearchsociety.org/
https://sleepresearchsociety.org/
https://sleepresearchsociety.org/
https://sleepresearchsociety.org/
osa-related-to-children-and-connection-with-overweight-obesity/



SRSF EXPERT SUMMIT

This opportunity provides a public forum to corporate partners to address a specific sleep and circadian rhythm topic lead by key opinion leaders in the field.

The panel discussed symptoms of narcolepsy and idiopathic hypersomnia beyond sleepiness. The discussion focused on the full spectrum of symptoms which are the most bothersome for patients and the impact of those symptoms on patient function. The experts discussed the lexicon used by their patients and the mitigation strategies of bringing more focus to the full spectrum of symptoms to everyday clinical practice.

Chair: Alon Y. Avidan MD, MPH

Panelists:

- ♦ Christian Baumann, PhD
- ♦ Bruce Corser, MD
- ♦ Yves Dauvilliers, MD, PhD
- ♦ Nancy Foldvary-Schaefer, DO, MS
- ♦ Patricia Franco, MD, PhD
- ♦ Suresh Kotagal, MBBS, FAASM
- ♦ Markku Partinen, MD, PhD, FAAN
- ♦ David T. Plante, MD, PhD
- ♦ Luis E. Ortiz, MD
- ♦ Chad M. Ruoff, MD
- ♦ David B. Rye, MD, PhD

This opportunity was made possible by the SRS Foundation. Supported by:



Learn More - Watch Recording - https://sleepresearchsociety.
org/symptoms-beyond-sleepiness-in-narcolepsy/





The SRS Foundation was pleased to host the 4th annual Industry Advisory Council roundtable discussions held virtually and in-person at the SLEEP 2023 meeting. Key opinion leaders and SRSF Corporate Partners leaders in the sleep and circadian sciences and clinical settings are invited to discuss issues, share research ideas and techniques, and brainstorm

potential solutions to the challenges impacting the sleep and circadian field.

Thank you to the many key opinion leaders who volunteered their expertise and time to participate in these important roundtable discussions!



SRS FOUNDATION VIP RECEPTION

Participants of the 2023 Industry Advisory Council (IAC) roundtable discussions were invited to the SRS Foundation VIP Reception immediately following these discussions which provided opportunities for networking with corporate partners, SRS/SRSF leadership, and distinguished SRS Foundation donors.

2023-2024 SRSF Board of Directors



PRESIDENT
PHILIP GEHRMAN, PHD

University of Pennsylvania, *Perelman*School of Medicine



SECRETARY/
TREASURER

STEPHANIE J. CROWLEY, PHD

Rush University Medical Center





CATHY ALESSI, MD

UCLA, VA Greater Los Angeles Healthcare System



SUZANNE M. BERTISCH, MD

Brigham and Women's Hospital



DANIEL BUYSSE, MD

University of Pittsburgh School of Medicine



NAMNI GOEL, PHD

Rush University Medical Center



OCTAVIAN IOACHIMESCU, MD, PHD

CTSI, Medical College of Wisconsin



CHANDRA JACKSON, PHD

National Institutes of Health

National Institute of Environmental Health Sciences



GIRARDIN JEAN-LOUIS, PHD

NYU Langone Medical Center

Center for Healthful Behavior Change



ANDREW D. KRYSTAL, MD

University of California San Francisco School of Medicine



MIRANDA M. LIM, MD, PHD

Oregon Health and Science University



ANNE MARIE MORSE, DO

Geisinger Medical Center, Pediatric Neurology



MEGAN E. PETROV, PHD

Arizona State University, College of Nursing & Health Innovation



AMY WOLFSON, PHD

Loyola University Maryland

TRAINEE MEMBER-AT-LARGE



MIRANDA CHAPPEL-FARLEY, MS

University of California, Irvine

TEAC Liaison

STAFF

John A. Noel-Executive Director
Christine A. Davis-Foundation Director



Support the Next Generation of Sleep and Circadian Researchers!

LOOKING BACK...

- ♦ Would it have been beneficial to attend more scientific conferences as a trainee?
- ◆ Did you have a mentor that helped you navigate your path early in your career?
- Was applying for your first grant an overwhelming experience?
- ◆ Do you think an additional \$5,000
 to \$50,000 in research funding would
 have helped to jump-start your career?

YOUR DONATION WILL FUND THESE PROGRAMS AND SRSF CONFERENCE SCHOLARSHIPS:



Career
Development
AWARD



Mentored
Collaboration
GRANT



Small Research
GRANT



Make your donation today at...

sleepresearchsociety.org/foundation

...or by scanning the QR code.

All contributions are tax-deductible.