



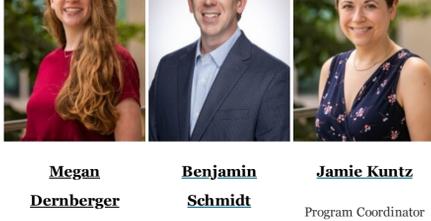
A NOTE FROM THE DIRECTOR

Reflecting back on the accomplishments of our VINSE community over the past several months, I continue to be amazed not only by our successes that receive broad recognition, but also by the day-to-day creativity and innovation that happen during conversations and brainstorming meetings between students, faculty, and other researchers. For example, a conversation between Mingze He, a graduate student in Josh Caldwell's group, and a graduate student in Bennett Landman's group led to an innovative approach to designing infrared thermal emitters, a Nature Materials publication, and a Chancellor's Award for Research. Please take advantage of the opportunities to chat with your colleagues at the many VINSE-sponsored events, and maybe come up with the next ground-breaking research discovery! Upcoming dates of note include NanoDay! on Nov. 4 and VINSE short courses in microfluidics and electron microscopy on Dec. 19-20 (see right sidebar for more details and a full calendar of events). Finally, I hope everyone has had an opportunity to meet and welcome the three new VINSE team members who joined our community in the past six months – Megan Dernberger (cleanroom staff), Dr. Ben Schmidt (cleanroom manager), and Jamie Kuntz (program coordinator) – as well as Prof. De-en Jiang, a new faculty member in ChBE. De-en joined the VINSE community last month and has already taken the initiative to organize a VINSE-ORNL workshop on nanomaterials for energy and environmental applications to be held at Vanderbilt on November 21 (please contact [De-en](#) for more details).

Have a great semester!

Sharon Weiss
Director, VINSE

WELCOME NEW VINSE STAFF



Megan Dernberger
Cleanroom Staff

Benjamin Schmidt
Cleanroom Manager

Jamie Kuntz
Program Coordinator

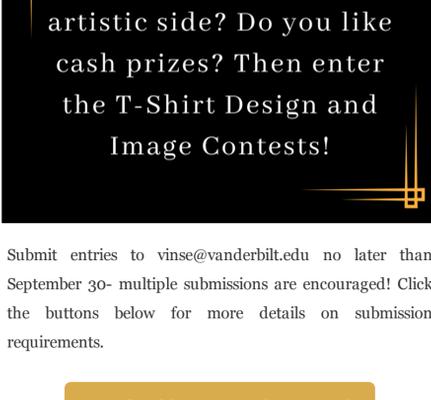
NANODAY!

The 22nd Annual Nanoscience & Nanotechnology Forum - also called NanoDay! - will be held on November 4. This yearly forum is an opportunity for faculty, postdocs, and students engaged in nanoscience and nanotechnology research to share their work during the poster session and a series of talks.

This year's keynote speaker is Dmitri Basov, a Higgins Professor and Chair of the Department of Physics at Columbia University. His talk will be on the illuminating topic of "Shedding Nano-light on Quantum Materials."

Please register using the link below to attend NanoDay! and to present at the poster session!

[REGISTER HERE](#)



Submit entries to vinse@vanderbilt.edu no later than September 30- multiple submissions are encouraged! Click the buttons below for more details on submission requirements.

[IMAGE COMPETITION RULES](#)

[T-SHIRT COMPETITION RULES](#)

FALL FACULTY CELEBRATION

There is a lot to celebrate in the VINSE community, which makes it the perfect time for the 16th Annual Fall Faculty Celebration! At the event we will recognize the accomplishments of our community, celebrate faculty promotions, and welcome new VINSE members.

The event, by invite only, will be held on September 26.

[READ MORE ABOUT FALL FACULTY](#)

RESEARCH HIGHLIGHTS



— ” —
The Lippmann lab combines principles from engineering, neuroscience, and regenerative medicine to model, understand, and ultimately treat neurodegeneration more effectively.
— ” —

ETHAN LIPPMANN
ASSOCIATE PROFESSOR OF CHEMICAL AND BIOMOLECULAR ENGINEERING

— ” —
In the Macdonald group, our interdisciplinary group of chemists and materials scientists discover the chemical principles that go into how atoms arrange to form different types of crystals in the flask.
— ” —

JANET MACDONALD
ASSOCIATE PROFESSOR OF CHEMISTRY



[READ FULL FACULTY HIGHLIGHTS](#)



— ” —
My research copies how our noses work, using arrays of porous silicon sensors, formed by electrochemically etching nanoscale pores in silicon.
— ” —

SIMON WARD
WEISS LAB

— ” —
In our research, we develop novel microfluidic devices with probing and sensing capabilities to study the electrophysiological response of retina ganglion cells (RGCs) in explanted retinal tissue to different stimulations.
— ” —

ALBERTO ESTEBAN LINARES
LI LAB



[READ FULL GRAD STUDENT HIGHLIGHTS](#)

FALL 2022 SHORT COURSES



VINSE offered the Microfluidics and Electron Microscopy short courses in June, with very favorable feedback from the attendees. Due to high demand, both courses will be offered again in December.

[REGISTER FOR ELECTRON MICROSCOPY](#)

[REGISTER FOR MICROFLUIDICS](#)

WELCOME NEW TECH CREW



Please give a warm welcome to our newest tech crew members! These students have spent the summer working in the cleanroom, developing familiarity operating complex tools and performing nanofabrication and characterization processes to assist with the development of new processes and techniques of research interest. They will be familiar faces in VINSE facilities over 2022-2023 academic year.

The new tech crew members are:

- **Esther Ayoade**, Biology & Medicine, Health & Society
- **Laura Bertolami**, Chemical Engineering
- **Sarah Driskoll**, Chemical Engineering
- **David Mankarios**, Biomechanical and German
- **Lavonte Saunders**, Biochemistry & Mathematics

FALL EVENTS

- **SEP 14** Colloquium with Michael Tsapatsis
- **SEP 26** Fall Faculty Celebration
- **SEP 30** NanoDay! T-Shirt and Image Contest Deadlines
- **OCT 12** Colloquium with Kyle Bishop
- **NOV 4** NanoDay!
- **NOV 21** VU-ORNL Workshop
- **DEC 7** Colloquium with Yuri Vlasov
- **DEC 19-20** VINSE Short Courses

FOLLOW US ON SOCIAL MEDIA



VINSE FACULTY IN THE NEWS

[Piran Kidambi wins Department of Energy Early Career Research Award](#)

[Justus Ndukaife receives NSF Early CAREER Award](#)

[Cynthia Reinhart-King named Senior Associate Dean of Research in School of Engineering](#)

[John Wilson named 2022 Chancellor Faculty Fellow](#)

[Josh Caldwell awarded Chancellor's Award for Research](#)

[Sharon Weiss and Michael King named 2021 AAAS Fellows](#)

[Todd Giorgio Awarded Seeding Success Grant](#)

VINSE STUDENTS IN THE NEWS

[Undergraduate Research Symposium Winners](#)

[Sen Yang receives IMS Best Publication Award](#)

[Simon Ward awarded SPIE Optics and Photonics Education Scholarship](#)

[Congratulations to the 2022 VINSE graduates!](#)

[Hong named to Paul and Daisy Soros Fellowship Program for New Americans](#)

[KP Arnold wins 1st place at inaugural ECE Day poster session](#)

[Rabeh Layouni wins best talk at PSST conference](#)

[Ryan Kowalski awarded NASA Space Technology Graduate Student Research Opportunity](#)

HAVE A NEWS HIGHLIGHT? SUBMIT IT TO BE FEATURED!

[SUBMISSIONS](#)

CONTACT THE VINSE TEAM

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[HELIOS FIB](#)

[OSIRIS TEM](#)

[MERLIN SEM](#)

[BRUKER AFM](#)

[ANALYTICAL](#)

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[NOMINATIONS](#)