

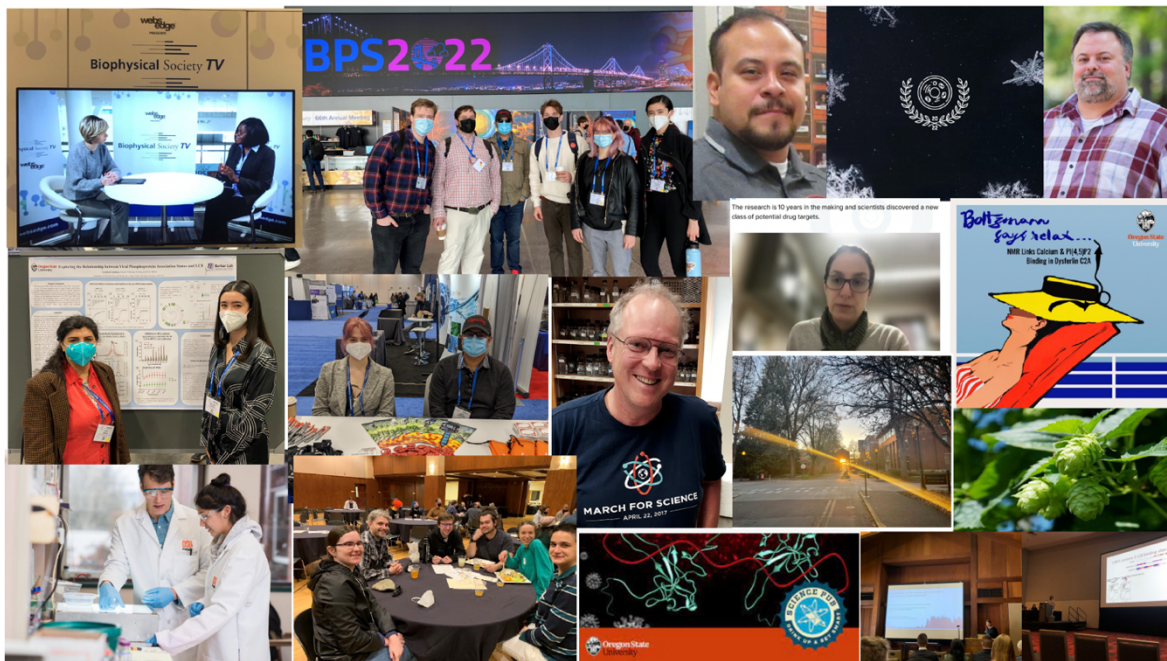
What's New with BB (January 1st, 2022 through March 31st, 2022)

Dear BB community,

Winter term started with the surge of Omicron and ended with the removal of the mask mandate and the promotion of back-to-normal life. Signs of back to pre-COVID times were especially evident with us attending in-person large conferences. A large group from BB attended the Biophysical Society meeting in February, and more recently the Freitag lab attended the Fungal Genetics Conference. On the horizon is the ASBMB with large participation from the Franco lab, and the Chemical Biology conference in Portland with large participation from the Mehl/Cooley labs. I know several of us are excited to be traveling again. I am invited to give a talk at a conference coming up in Paris, which I can't wait to go to, and hope that the new variants on the rise in Europe will remain under control.

I want to promote the Biophysics Day event on April 9th, sponsored by the Biophysical Society and held here at OSU and organized by our BPS student chapter. Please register to attend, this is a chance to connect with other biophysicists in Oregon.

The state of the department is strong: we are recipients of university and college awards. Michael Freitag's recent Distinguished Professor award is the highest honor bestowed to a professor at OSU. We are close to wrapping up a successful new faculty search and already getting excited about how the department will look next year. We had a busy grad recruiting season, with 4 acceptances well before the deadline, and several pending. We are in the process of recruiting an office replacement for Dina, we have several new postdocs hired as part of the GCE4All which kicked off Winter term. Our undergrads continue to win nationally competitive awards, our grads are giving talks at national meetings, and our alumni are successful and making us proud.



The world has changed since January with the horrific invasion and assault on Ukraine and the refugee crisis. Closer to home, the aggressive, hostile, and partisan questioning of a highly qualified supreme court nominee reminds us of how broken our political discourse has become and underscores the urgent need to work on our differences to be better stewards of this land of opportunities. Here is hoping for more cooperation among leaders towards a more peaceful world.

Highlights of Winter 22

Submitted Proposals:

Colin Johnson and Joe Baio submitted an application to the Muscular Dystrophy Association to fund their project titled *Molecular Mechanism of Dysferlin Membrane Repair*.

Victor Hsu's proposal to the W. M Keck Foundation (along with Sinisa Todorovic from Engineering) was invited for Phase II submission. This Phase II proposal is based on their Phase I proposal "*Promiscuity vs Specificity: Deep Learning Biomolecular Binding Selectivity*".

Yu Zhen submitted an RERF proposal titled: *High Capacity Centrifuge for Protein Production*. This is for a new Beckman Avanti J-HC floor centrifuge to replace our old 1 lit bottles centrifuge.

Fritz Gombart, along with Maret Traber submitted a RERF proposal for a *Biotech Synergy Plate Reader*

Elisar Barbar submitted a supplement for the NSF proposal *Structure and Assembly of SARS-CoV2 nucleocapsid phosphoprotein N*.

Funded Grants:

David Hendrix led a multi-college collaborative team to receive a grant from USDA-NIFA for a project entitled "The essence of Cannabaceae: Comparative genomics and metabolomics to unravel the complexities of aroma and flavor." This project was funded in the amount of \$638K. Read the full article [here](#).

Elisar Barbar, Afua Nyarko, Maca Franco, Patrick Reardon and Mike Blouin (IB) received a SciRIS Stage 1 award to for a project to bridge biophysics with biology. The award is for "seed funding for high impact collaborative proposals that build teams, pursue fundamental discoveries, and create societal impact."

Colin Johnson was awarded a SciRIS- Stage 2 to make a zebrafish model for studying Ferlin-6. The award is to fund "individual faculty who seek to establish or augment research relationships with external partners."

Fritz Gombart received the "Disease Mechanism and Prevention Fund" award from the College of Science to explore roles of the cathelicidin antimicrobial peptide in Alzheimer's. This award "supports research into the mechanism, diagnosis, treatment and prevention of (human) disease."

Phil McFadden received the 2022 Blended Learning Innovations in Pedagogy (BLIP) initiative for the redesign of BB450. Given full participation in the program, CTL will provide \$7,000 funding for each course redesign.

Professional Service:

Dave Hendrix served on two NIH study sections, Biological Data Management and Analysis (BDMA) and for MIRA Early Stage Investigator awards.

Fritz Gombart served as guest editor on Special Issue in Nutrients entitled “Vitamins C and D: Global and Population Health Perspectives”

Fritz Gombart served on the Training and Education Review Panel for March 10 and 11, 2022 for NIH/NCCIH.

Afua Nyarko served on an NSF MCB panel.

Afua Nyarko was a panelist at the *Change Makers in Science* talk by Laura Greene on International Women’s Day.

Publications:

From the **Barbar** group

Mostofian B, McFarland R, Estelle A, Howe J, **Barbar** E, Reichow SL, Zuckerman DM. [Continuum dynamics and statistical correction of compositional heterogeneity in multivalent IDP oligomers resolved by single-particle EM.](#) J Mol Biol. 2022 Mar 1:167520. doi: 10.1016/j.jmb.2022.167520. Epub ahead of print. PMID: 35245498.

From the **Beckman** group

Shaw JB, Cooper-Shepherd DA, Hewitt D, Wildgoose JL, **Beckman** JS, Langridge JJ, Voinov VG. [Enhanced Top-Down Protein Characterization with Electron Capture Dissociation and Cyclic Ion Mobility Spectrometry.](#) Anal Chem. 2022 Mar 8;94(9):3888-3896. doi: 10.1021/acs.analchem.1c04870. Epub 2022 Feb 21. PMID: 35188751.

From the **Franco/Estevez/Mehl** groups

Jandy M, Noor A, Nelson P, Dennys CN, Karabinas IM, Pestoni JC, Singh GD, Luc L, Devyldere R, Perdomo N, Mitchell CE, Adams L, Fuse MA, Mendoza FA, Marean-Reardon CL, **Mehl RA, Estevez AG, Franco MC.** [Peroxynitrite nitration of Tyr 56 in Hsp90 induces PC12 cell death through P2X7R-dependent PTEN activation.](#) Redox Biol. 2022 Jan 26;50:102247. doi: 10.1016/j.redox.2022.102247. Epub ahead of print. PMID: 35121403; PMCID: PMC8818572.

From the **Gombart** group

Su Y, Ganguli-Indra G, Bhattacharya N, Logan IE, Indra AK, **Gombart** AF, Wong SL, Xie J. [Codelivery of 1 \$\alpha\$,25-Dihydroxyvitamin D₃ and CYP24A1 Inhibitor VID400 by Nanofiber Dressings Promotes Endogenous Antimicrobial Peptide LL-37 Induction.](#) Mol Pharm. 2022 Mar 7;19(3):974-984. doi: 10.1021/acs.molpharmaceut.1c00944. Epub 2022 Feb 18. PMID: 35179903.

Carr AC, **Gombart** AF. [Multi-Level Immune Support by Vitamins C and D during the SARS-CoV-2 Pandemic.](#) Nutrients. 2022 Feb 6;14(3):689. doi: 10.3390/nu14030689. PMCID: PMC8840673.

From the **Hagen** group

Visioli F, Ingram A, Beckman JS, Magnusson KR, **Hagen** TM. [Strategies to protect against age-related mitochondrial decay: Do natural products and their derivatives help?](#) Free Radic Biol Med.

2022 Jan;178:330-346. doi: 10.1016/j.freeradbiomed.2021.12.008. Epub 2021 Dec 8. PMID: 34890770.

From the **Hendrix** group

Bell J, **Hendrix** DA. [Predicting Drosha and Dicer Cleavage Sites with DeepMirCut](#). Front Mol Biosci. 2022 Jan 24;8:799056. doi: 10.3389/fmolb.2021.799056. PMID: 35141278; PMCID: PMC8819831.

From the **Perez** group

Dorigatti AO, Riordan R, Yu Z, Ross G, Wang R, Reynolds-Lallement N, Magnusson K, Galvan V, **Perez** VI. [Brain cellular senescence in mouse models of Alzheimer's disease](#). Geroscience. 2022 Mar 6. doi: 10.1007/s11357-022-00531-5. Epub ahead of print. PMID: 35249206.

Faculty Talks:

Elisar Barbar gave a talk titled “Emerging Topics in Biomolecular Magnetic Resonance” in an international seminar organized by the Max Planck Institute, and another talk to the Structural and Computational Biophysics Discussion Group at Wake Forest University.

Afua Nyarko gave a talk at the Biophysical Society in the Future of Biophysics session, and two seminars one at Lewis & Clark College and one at the Institute of Life Long Learning.

Maca Franco gave a seminar at the Center for Translational Science, Florida International University, Port St. Lucie, FL. “Oxidized proteins as disease-drivers and therapeutic targets”, and was an invited speaker at the Winter Conference on Brain Research. “Nitrated proteins as tumor-directed targets in NF2”. Snowmass, CO. She also gave a seminar at the College of Medicine, Florida International University, Miami, FL. on “Nitrated Proteins as therapeutic targets: from bystanders to disease-drivers”

Department News:

Congratulations to our Winter 2022 graduates — all majoring in Biochemistry and Molecular Biology! We wish you all the best as you begin your next stage of your life and hope to see you at our June ceremonies. We have really enjoyed working with each of you over the years.

Tracy Dao, Chryzilla Emanuelle, Kei Horikawa, Alexander Houlette, Rylee Karrick, Paige Kump, Seth Larch, Elizabeth Lofurno, Christopher, Markgraf, Richard McFarlane, Emma Pearce, Nabiha Qureshi, Noah Ritschard, Kellie Roth, Kelsey Shimoda, Olive Vinson, Lynda Vo, Kaitlynn Wade

GCE4All Center launches and received press coverage from IMPACT. The Genetic Code Expansion (GCE) Center at Oregon State, the first ever of its kind. Named GCE4All, the Center launched February 1, revolutionizing protein-focused biomedical and materials research and solidifying Oregon State as the global leader in this powerful tool for protein engineering. **Ryan Mehl** will direct the center, funded by the NIH as a Biomedical Technology Development and Dissemination Center for a total of \$5.6M over five years."

- BB faculty, graduate students, and undergrads attended the 66th Annual BPS Meeting in San Francisco, featuring work by **Elisar Barbar, Afua Nyarko, Aidan Estelle, Jesse Howe, Amber Vogel, Sanjay Ramprasad, Gretchen Fujimura and Coban Brooks:**



Afua gave a talk in the Future of Biophysics, and was interviewed on the BPS TV, Jesse gave a platform talk, the rest gave posters. Gretchen and Coban represented the BPS Chapter and presented updates, and Amber, Sanjay and Afua staffed the grad recruiting and career event. Also in the Bay area, we visited with and had dinner gathering with BB Alumni Peter Hsu (BS 2007), senior scientist at Genentech, and with Andres Cardenas (BS 2010), a Professor at UC Berkeley.

- **Freitag Lab report on the International 31st Fungal Genetics Conference**

At [#FGC22](#), the Freitag Lab was represented by post-docs **Mareike Möller** and **John Ridenour**, undergraduate researcher **Lizzy Milford** and **Michael Freitag**. Lizzy was one of only three undergrads at this meeting of ~1,000 fungal biologists. She presented a poster on her studies on proteins that affect histone methylation (see image). Lizzy was sponsored by a JP Travel award (BB) and another stipend from the Honors College.

John was invited to give two talks, one on the chromatin remodeler ISWI, and one on an inducible and reversible system for protein degradation, which secured him numerous future collaborations. Mareike gave a talk on a novel repressive histone mark, H4K20 methylation, which garnered wide attention by all chromatin researchers at the meeting. Michael presented a poster on histone H3K27 methylation, and -as a late-stage surprise- will be the organizer for this foremost fungal biology conference in 2024, together with co-Chair Natalia Requena (Karlsruhe Institute of Technology, Germany). The meeting was a blast – after three long years it was exciting to talk to colleagues and friends about science all day, and all of the night!

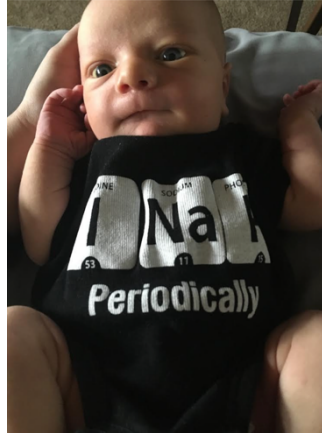
On the way home, we stopped to say hello to BB alumni Pallavi Phatale-Lal (PhD, Freitag Lab) and Sangeet Lal (PhD, Greenwood Lab) who have settled in Berkeley with their son Rohan, and in a very nice house. They convey all their best wishes to the BB community!

- **Maria Clara Franco** paper “Peroxynitrite nitration of Tyr 56 in Hsp90 induces PC12 cell death through P2X7R-dependent PTEN activation” was featured by OSU Today. <https://science.oregonstate.edu/impact/2022/02/oregon-state-researchers-identify-potential-new-means-of-slowing-neurodegenerative>
- **Tilo** and **Isabelle** from Maca’s lab received the ASBMB Graduate Research Award, and the ASBMB Postdoctoral Research Award, respectively, at the upcoming ASBMB annual meeting.
- **Jun Yang** from the Hendrix lab won the GSA Winter Travel Award!

- **Lauren Dalton** started the year off with good news in the form of **Evie Willow Dalton** born January 1st, at 5:02pm. Evie was born at Good Samaritan, weighing in 8lb 12 oz. So far she is enamored with the activities of her big sister Faye, who adores her.



- **Ander Rothmer Walker** was born 11:16 pm on March 15 at 7lbs 7oz and 20.25 inches to **Douglas and Erica**. Mom and Dad are enjoying every minute of getting to know him, even those in the middle of the night.



- **Dave Hendrix:** Dean's Early Career Achievement Award
 - “David Hendrix received the Dean's Early Career Award, which recognizes exceptional achievement in research and education of faculty no more than four years beyond the tenure date. With joint appointments in biochemistry and computer science, Hendrix' interdisciplinary skills have led to collaborations that have enhanced research in the College and university.”
- **Tony Reyna:** The Gladys Valley Award recognizes outstanding job performance and dedication by a College staff person to their department and to the College of Science.
 - “Joining the biochemistry department over five years ago, Reyna is particularly appreciated for his willingness to go above and beyond the scope of his job responsibilities to ensure the office ran smoothly despite numerous trying circumstances. Several nomination letters expressed appreciation for his 'can-do attitude' and ability to solve the most strenuous problems without complaint.”
- **Michael Freitag:** The title of University Distinguished Professor is given to current OSU faculty members who have achieved national and international distinction for their contributions in research and creative work, teaching and mentoring, public engagement, and service.
- **The Gombart Lab** was covered in IMPACT for their work in preventing surgical site infections via a new nanofiber-based wound dressing loaded with vitamin D. <https://science.oregonstate.edu/impact/2022/02/biochemistry-and-biophysics-researchers-make-key-advance-in-fight-against-dangerous>
- **Grace Petrina**, a third year undergraduate BB student in the Mehl lab, was featured in *Life at OSU* for her community volunteering. She donates time to both the Polk Community Free Clinic and South Corvallis Food Bank.

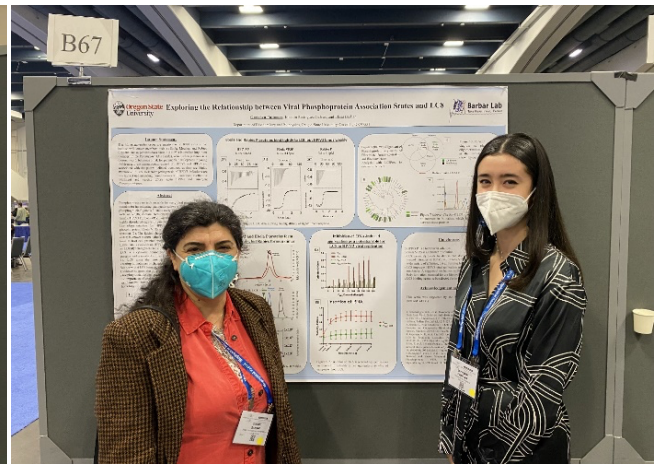
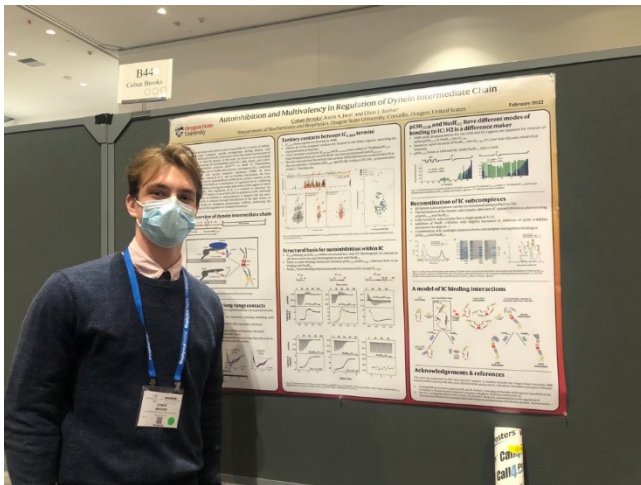
- **ALS2009A**, the BB Library, has been updated with a new 8k 72in TV for use in conferences. The new setup can allow for large conferences, presentations, and Zoom meetings. To reserve the room see [here](#). Instructions on operating the new technology are in the front of the room by the TV.
- A new tradition, the brainchild of **Dave Hendrix**, **BeaverHenge** to reflect on the changing seasons, and the changing positions of the setting sun. It's viewable twice a year around the Spring and Fall equinox.



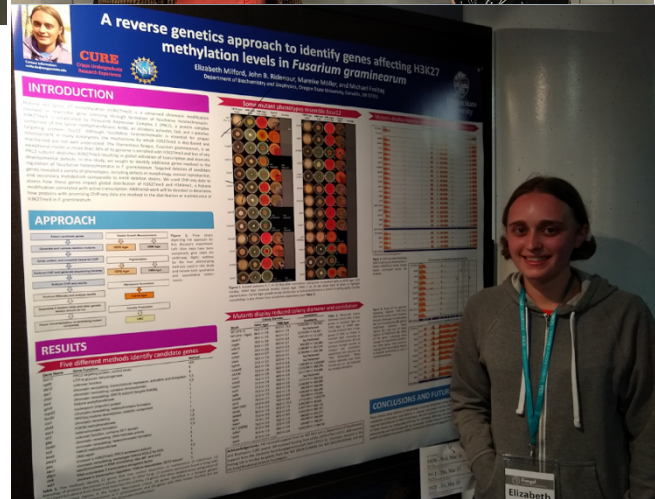
Undergraduate Research:

Thriving Undergraduate Programs

Students are the heart of our close-knit Biochemistry and Biophysics community at OSU. In the five years since the Department's 50th anniversary celebration, our undergraduate community has grown almost three-fold to 400 students, including a 2022 graduating class of 102 (16 BB and 86 BMB)! We are so proud of our outstanding undergraduate students and the many ways they use their molecular life science training to reveal how life works and solve real-life problems.



Several undergrads from BB have received JP Travel awards: **Elizabeth Milford** in the Freitag lab to present her work at the Fungal Genetics Conference in Pacific Grove, CA, **Alex Sathler** from the Franco lab, to present at the ASBMB meeting in Philadelphia, and **Gretchen Fujimura** and **Coban Brooks** from the Barbar lab to present at the Biophysical Society Meeting in San Francisco. Gretchen also received travel awards from the College of Science and the Honors College Experience Scholarship.



Nationally competitive awards received by undergrads

- **Gretchen Fujimura** received an AMGEN research internship in Tokyo for this summer!
- **Sahana Surya Shah** also from my lab received a summer internship from the UCLA AMGEN Scholars Program. The acceptance rate for this program is <3%.
- **Gretchen Fujimura** is named one of two OSU 2022 **Goldwater Scholars!** This is just hot of the press, results posted just this Friday. Gretchen's research will focus on The Role of Hub Protein LC8 in Viral Assembly. Getting such an award is a great honor to Gretchen and to BB. My thanks to Kari and the advising team for all the work they put in this.

Grad Specific News:

January

- Big thanks to all of our department union representatives for the work you do to represent and fight for graduate students. Special thanks to **Felisha and Tilo** who serve directly on the bargaining team!

February

- Thank you to the graduate students who gave flash talks for faculty recruitment and grad recruitment and thanks to **Kayla** and **Rachel** for organizing!

- **Kayla** was the keynote Speaker for OSU National Residence Hall Honorary (NRHH) induction by Gretchen's nomination. She shared information from her personal journey as well as broad leadership advice.



March

- Big thanks to **Roslyn** for hosting Gary Hardiman
- **Congratulations to Dr. Shauna Otto!** On March 8th, Shauna successfully defended her PhD thesis entitled "NMR Links Calcium & PI(4,5)P2 Binding in Dysferlin C2A". Shauna was a highly valuable member of the department taking leadership roles in the GSA and a strong voice for diversity and inclusion and rigorous science and an ambassador for BB in her tireless leadership of grad recruiting and in communicating science to the public. We wish her the best in her Postdoc in Sharona Gordon's lab at UW.



Alumni News:

Arden Perkins who received his PhD from Andy Karplus just accepted a position as an Assistant Professor at Washington State University in the Department of Veterinary Microbiology and Pathology, School of Veterinary Medicine. He'll be starting August 1st after wrapping up his postdoc at the UO.

Kelsey Kean, also from the Karplus lab, is starting this month as an Assistant Professor of Chemistry at High Point University, a private liberal arts university in High Point, North Carolina. She's doing that after finishing up her NIH-funded IRACDA postdoc fellowship in Marcey Waters research group at UNC Chapel Hill.

Heather Masson-Forsythe gave a Science Pub talk on "investigating how COVID-19 proteins stick to viral RNA and taking research from the lab to the dance floor".

Heather Masson-Forsythe is also a finalist for the AAAS Science & Technology Fellowship, Executive Branch.

Diego Rodriguez, who did undergrad research with Afua, was accepted in the MD/PhD programs at Stanford, and Weill Cornell, Sloan Kettering, and Rockefeller.

Upcoming Events:

Kevin Ahern will be the Featured Poet at the next Poetics Corvallis evening of poetry reading! The reading will be on April 1st at 7:30pm at the Interzone on Monroe. Kevin is an accomplished poet alongside a great scientist, evident by his published poems and numerous prose pieces.

BPS SYMPOSIUM 2022: APRIL 9TH, 12-5PM

Featured Speakers:



Dr. Elisar
Barbar
OSU



Dr. Liman Zhang
OHSU



Dr. Mike Harms
UO



Dr. Parisa Hosseinzadeh
UO

Featuring speakers: Dr. Elisar Barbar (OSU), Dr. Liman Zhang (OHSU), Dr. Mike Harms (UO), Dr. Parisa Hosseinzadeh (UO). [Register to attend HERE](#). Refreshments curtesy of Bruker will be served during the poster session. Also the symposium will end with a pizza reception for speakers and students to intermingle at the Barbar/Hare residence.

On April 27th, OSU will host Dam Proud Day, and the BB Undergraduate Committee is inviting alumni, family, friends, faculty and students to join us in raising funds for the BB Excellence Fund.

The fund helps break down barriers for our BB students, funding research fellowships, travel for conferences and helping those who struggle to pay for tuition. [Visit our page](#) to make your gift in honor of your favorite memory, or your favorite BB professor or advisor! And Visit the BB Excellence page on the [Dam Proud Day website](#) to make a donation and learn more about how your gifts support students. Connect with us on [Facebook](#) and [Twitter](#) to learn how to unlock additional challenge gifts throughout the day. Mark your calendars for other social events on Dam Proud Day and keep an eye out for any updates! We can't do it without you! #BeavsGive #DamProudDay.

Multiple BB students and faculty will attend the **Chemical Biology and Physiology 21|22** conference held in Portland, Oregon on **April 28-May 1**.

Kayla and Tilo are leading a BB Department workshop (3-1 hr sessions) for the Expanding Your Horizons (EYH) Conference to be hosted at OSU on **May 14th**.

The President's Commission on the Status of Black Faculty & Staff Affairs at Oregon State University is hosting its inaugural **State of Black Affairs Summit**. The purpose of this event is to build support for Black communities across Oregon. Please put **May 25th from 8am-6pm** on your calendars, [register](#),

Dave Hendrix will hold a "Computational Biology Summer Camp" on July 25th-29th.

COVID News:

HA Mask mandate update

Beginning March 12 in most OSU settings, masks will be welcomed, but not required. State and federal requirements for wearing masks in health care settings, within public transit, and in other specialized settings will remain in place at this time. Masks continue to be available in multiple [university locations](#).

Proof of vaccination no longer required for indoor events

Effective immediately, OSU will no longer require attendees at designated indoor and outdoor events to show proof of vaccination (or provide proof of a recent negative test). I conditions change, we may consider restoring this requirement in the future.

No changes to OSU's vaccination requirement planned


Up-to-date vaccinations remain an essential component to OSU's COVID-19 response. No further changes to [OSU's Vaccination Policy](#), and date by which OSU students and employees must be up-to-date on their booster vaccinations (May 1). Unvaccinated employees and students who work on the OSU Corvallis or Bend campuses continue to be required to test weekly. The Pathway Planning Team, in consultation with local public health authorities, will evaluate in early spring term when it may be appropriate to discontinue this testing requirement.


Oregon State University
 Department of Biochemistry & Biophysics
Revealing How Life Works, for the Benefit of All

Website: <https://biochem.oregonstate.edu/>

Our mission: to be a diverse, inclusive community that serves students, our professions and the public through innovative education, individualized advising, holistic mentoring and cutting-edge molecular life science research that creates knowledge and solves real-life problems.

Biochemistry & Biophysics is home to about 300 undergraduate majors and 30 graduate students. Our faculty oversees research funded by grants and contracts of ~\$4 million annually. The department is well-equipped with research facilities and our graduate and undergraduate students travel to present research at national conferences, are award winners, and are among the academically strongest students at OSU.





Core Facilities

- NMR
- Cell Culture
- Unnatural Protein
- Macromolecular Interactions
- Electrophysiology
- Electron Microscopy

Graduate Student Association

The mission of our GSA is to enhance the overall grad student experience of all BB graduate students.

- Provides opportunities for professional development, especially in terms of career development and potential career paths.
- Improves communication between faculty and grad students and increases involvement and input of graduate students in departmental decision making.
- Fosters positive interactions between graduate students, both socially and professionally.

Molecular Biophysics & Structural Biology

- Elisar Barbar: Structure, Assembly, & Regulation of Dynamic Protein Complexes
- Afua Nyarko: Multivalent protein assemblies in signaling networks
- Weihong Qiu: Mechanism and Regulation of Molecular Motors
- David Hendrix: RNA secondary structure and interactions
- Colin Johnson: Membrane Proteins and Neurotransmitter Release
- Rick Cooley: Molecular Mechanisms of Phospho-Protein Signaling
- Andy Karplus: Protein Crystallography
- Phil McFadden: The matrix structure of both mineral
- Maria Clara Franco: Structural changes induced by protein oxidation
- Patrick Reardon: Biological NMR

Protein Engineering

- Ryan Mehl & Rick Cooley: Development and Optimization of Genetic Code Expansion Technologies
- Andy Karplus: Genetic Code Expansion Technology
- Joe Beckman & Maria Clara Franco: Tyrosine nitration as a cause of pathology in the nervous system

Cellular & Molecular Biology

- Elisar Barbar: In cell protein biophysics and interactions
- Adrian F. Gombart: Micronutrients, Microbiota, Nuclear Receptors and Immune Function
- Colin Johnson: The Role of Vesicle Trafficking in Cell Signaling
- Michael Freitag: Chromatin structure and epigenetics
- Maria Clara Franco & Alvaro Estévez: Receptor signaling in tumors and neurodegeneration
- Phil McFadden: Mineral in-fil of cell volumes
- Siva Kolluri: Molecular Mechanisms of Cancer
- Kenton Hokanson: Electrical function and synaptic connectivity of living neurons
- Jessica Siegel: Neurobiological effects of psychoactive drug exposure

Computational Biology & Bioinformatics

- David Hendrix: Computational Genomics and Systems Biology and gene expression
- Michael Freitag: Computational approaches to chromatin biology and gene expression
- Elisar Barbar: Computational modeling of multivalent protein-protein interactions
- Andy Karplus: Data-Mining known Protein Structures
- Victor Heu: Biomolecular recognition and interactions

Life in Corvallis

Corvallis is in the heart of Oregon's Willamette Valley, within 90 minutes of Portland, skiing, and the Oregon coast. Corvallis has a thriving and active population of ~60,000 and is one of America's best college towns.


OSU is a public research university with people from all 50 states and 100+ countries. We embrace our responsibility to Oregon and the world, building a future that's smarter, healthier, more prosperous and more just. OSU is 1 of 3 land, sea, space and sun grant universities in the U.S.

Thanks to **Kayla Jara** for preparing the BB Recruiting Poster above. This is now hanging on the bulletin board across from the BB office and can be printed to take on recruiting talks.

Classes this Spring


New BB Courses Offered this Spring

Selected Topics: IDPs
Afua Nyarko
 BB652 section 002, CRN 60061
 Time: TR 8:30 – 9:50 a.m.



The functional importance of intrinsically disordered proteins (IDPs), and protein hybrids that contain intrinsically disordered regions (IDRs) is changing protein science. This Spring, I will teach a special topics course on IDPs and IDRs. We will discuss their unusual amino acid composition, tools for predicting and analyzing IDPs and their role in multi-protein assemblies, liquid-liquid phase separation and specific diseases.

Special Topics Course: Algorithms for Computational Biology
Dave Hendrix
 BB 499/599, CRN 60615
 Time: TR 2-3:20



We will discuss aspects of these different algorithms, their strengths and weaknesses, time complexity, and we will implement examples with pencil and paper. It's a fun course, and probably my favorite course to teach. If you are considering taking it, please do as it is only offered once every 3 years.

Mark your Calendar

The first Oregon Biophysics Symposium,
Saturday Apr 9th

Department Functions—

Spring Faculty Meeting: Friday Apr 15th, 3-5 pm

Coffee Hour: First and third Friday of every month

BB Science Talk: Friday May 6th, 3-5 pm

BB Curriculum Review: Friday June 3rd, 3-5 pm


BB Graduation Dessert: Friday June 10th

Whole Department End of the Year Celebration—
New this year, June 15th


Oregon State University Biophysical Society Chapter Presents:

The first
Oregon Biophysics Symposium

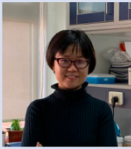
With featured speakers




Dr Parisa Hosseinzadeh
University of Oregon



Dr Elisar Barbar
Oregon State university



Dr Liman Zhang
Oregon Health and Science University




Dr Mike Harms
University of Oregon

Saturday April 9th
12 - 5 PM
OSU main campus
LPSC 125 and annex*

Register to attend!
Please register by March 31
In-person and Virtual
You may also submit an abstract
for our poster session & competition
(In-person only)

Light snacks and refreshments will be provided

 Oregon State University

*Campus parking is free on weekends. 30th st. and Campus way has a large lot, near LPSC

Finally, BB is well represented in the Winter 2022 Impact magazine, check it out.
<https://sites.science.oregonstate.edu/dean/impact/winter2022/>

Thank you for reading this far and wish you a great start of Spring 2022.

Elisar