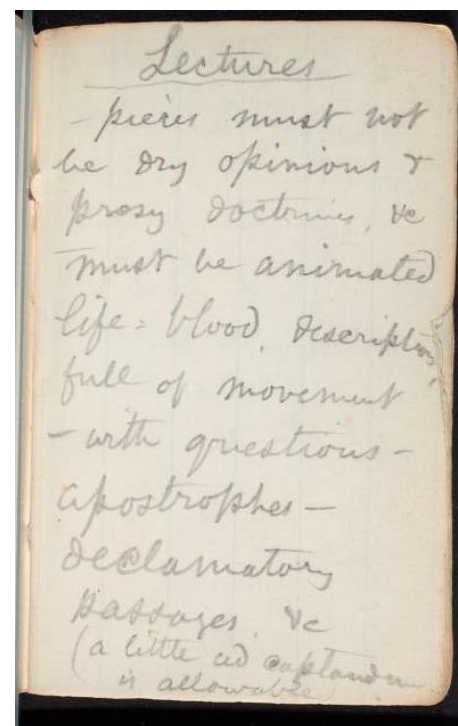


Student-faculty research

The results of **Raji Viswanathan's** (Chemistry) work with Moshe Carroll (YC), Alexandra Roffe (SCW), and colleagues from Einstein will soon be published in the journal *Bioinformatics*. "Computational Prediction of Multiple Antigen Epitopes" introduces the antigen epitope prediction program ISPIPab that they have developed. Identifying antigen epitopes is essential in medical applications, such as immunodiagnostic reagent discovery, vaccine design, and drug development, but current prediction methods have only moderate success predicting epitopes, which limits their applicability. ISPIPab outperforms existing models. By combining the prediction algorithm with hierarchical clustering, the authors show that we can effectively capture epitopes that align with available experimental data while also revealing additional novel targets for future experimental investigations. Earlier in the summer, Raji also published an article with Moshe Carroll and Ezra Rosenbaum (YC) reviewing existing models for predicting the B-cell epitopes ("Computational Methods to Predict Conformational B-Cell Epitopes", in *Biomolecules*) and demonstrating the superiority of ISPIPab to its rivals. Congratulations to Raji and her lab!

Matt Miller (English) has been working with two Stern students, Rivka Inger and Yita Khanin, on the second volume of a two-volume edition of Walt Whitman's notebooks and journals. Together with Miller's co-editor, Zachary Turpin, they have been transcribing Whitman's handwritten notebooks and journals from the Civil War period and onward, and they are nearly finished with a complete draft of this book manuscript. The manuscript is already under contract with the University of Iowa Press, with an expected publication date in 2025. The two students were supported by a grant from the Shevet Glaubach Center, designed to provide hands-on experience to students and to show them how their professors work in the academic world. Both Inger and Khanin plan to apply to graduate school this year. Few undergrads are paid to do serious archival work like this, and Miller hopes that his mentorship will give them a leg up on the competition in terms of experience and preparation.

Walt Whitman's notebook from his time as an army nurse in the Civil War, with some timeless advice, now in the Huntington Library in Pasadena



Rare books

Steven Fine (History) brought his Modern Jewish History class to see some of the library's treasures, including sixteenth-century printed books published by the Sephardi virtual community after the Jews' expulsion from the Iberian Peninsula, but also (at right) the hand-written Golden Haggada made in fourteenth-century Catalonia. Thank you to curator Shulamith Berger and her staff!



Summer conferences

This summer, colleagues have talked about their work at conferences all around the world.

Mark Edelman (Physics) presented a paper on “Periodic Points, Stability, Bifurcations, and Transition to Chaos in Generalized Fractional Maps” in Bordeaux during the 12th IFAC Conference on Fractional Differentiation and its Applications, now published as part of the conference proceedings. In the presentation and the paper, he introduced generalized fractional maps and developed the asymptotic theory of these maps. In August he went to talk at three separate venues in China, on “Generalized Multidimensional Fractional Maps” during the International Conference on Nonlinear Science and Complexity, in Yibin, Sichuan, on “Finite time and asymptotic behavior of discrete fractional systems (maps)”, as part of the “Fractional Calculus Days” in Jinan, and then he had the honor of delivering the plenary address to the Chinese Conference on Fractional Calculus and Applications in Xi'an, on “General properties (periodic points, stability, and bifurcations) of discrete fractional dynamics.”

Anderson Oliveira (Chemistry) presented ongoing research on the isolation and cloning of a novel photoprotein from bioluminescent marine organisms at the American Chemical Society's fall meeting, in Denver. This protein emits light in the presence of calcium ions (Ca^{2+}) and shows great potential as an alternative molecular tag for detecting and measuring calcium in both in vitro assays and within cells: understanding Ca^{2+} dynamics is crucial for advancing our knowledge of cellular physiology. Anderson's



work is a collaborative effort with researchers from the University of São Paulo (Brazil), Baruch College, Yale University, and the American Museum of Natural History.

In early July, **Shalom Holtz** (Bible) delivered lectures at two conferences in Israel: “What Are They Guarding?: *mišmeret* and *maṣṣartu* in Biblical and Babylonian Temples” at The Bible and Its World: An International Academic Conference in Israel held at the Hebrew University of Jerusalem’s Mt. Scopus campus, and “Indomitable Optimism: Isaiah 40-66 and the Return to Zion in their Ancient Near Eastern Context,” held at Bar-Ilan University’s campus in Ramat Gan. His article on “The Problems of Land Possession and the Meaning of Isa 60:21” was published in the summer issue of the *Journal of Biblical Literature*, the flagship publication of the Society of Biblical Literature, the oldest and largest learned society devoted to the critical investigation of the Bible from a variety of academic disciplines.

Elizabeth Goldman (Psychology) presented at a symposium on Children’s and Adults’ Abilities to Learn from Robots at the International Congress of Psychology in Prague. Two students have worked with her on her research: Harry Meister (YC) has collected data on children’s attribution of mental states to humans and robots, and Deena Erdfarb (SCW) is investigating whether children can learn from a robot when information is conveyed via pointing.

Elizabeth Goldman in Prague with her fellow panelist Aylin Küntay



William Stenhouse (History) gave two talks in Rome in June, one for a workshop at the British School in Rome to celebrate the completion of the Cassiano dal Pozzo Paper Museum, and one on “Antiquaries and Oral Traditions” at a conference on *Antiquaires voyageurs* at the Ecole française de Rome. He also talked to the Columbia Seminar on the Renaissance on the statue of St Hippolytus in the Vatican Library, long presented as an antique, but in fact created by a noted forger in the 1560s.

And, closer to home, **Michelle Levine** (Bible) was a scholar in residence along with GPATS students at the Riverdale Jewish Center, where she lectured on the topics of “Revealing the Light of Redemption through Our Prayers: The Blessings Before the Recitation of *Shema*” and “Redemption, Restoration, and Remembrance in the Book of Ruth.” She lectured on the holiday of Shavuot in her Queens community on the topic of “Shavuot—The Holiday of *Bikkurim*: A Time for Fresh, Fruitful Beginnings.” For the Yeshiva University Beit Midrash in Long Island, she delivered a series on the Book of Daniel, and for the GPATS Beit Midrash program, she presented a series on the Creation Account.



Where do our students go?!

Finally, some selected placement data from last year. Our pre-med students continue to do exceptionally well in winning places at medical school. Here are details from Stern:

Cycle Year	Applied to Einstein	Accepted to Einstein	Applied to All Med Schools	Admitted to a Medical * School
2019	22	9	22	21
2020	18	7	25	25
2021	13	6	17	17
2022	8	4	12	12
2023	9	5	16	12
2024	14	2	16	16

*Includes MD and DO programs

And here are the equivalent figures from YC:

Cycle Year	Applied to Einstein	Accepted to Einstein	Applied to All Med Schools	Admitted to a Medical * School
2019	17	9	32	29
2020	10	3	25	22
2021	20	6	21	18
2022	18	5	23	19
2023	9	3	16	12
2024	10	6	11	10

And our graduates in Computer Science continue to find jobs despite the tightening job market. Last year at YC, out of 36 majors, by graduation 32 had places at companies - including Amazon, Bank of America, Geico, and Prudential - or at grad school – including Georgia Tech and NYU. Majors at Stern found positions at companies including UBS, Mastercard, KPMG, and Microsoft.

These figures are a tribute to our devoted faculty and pre-health teams!

Stern College for Women
Yeshiva College

