

# Reflections on Research Day 2023

Lois Rabinowitz Lamond

Today was Research Day at Penn Dental School. I attended the **Joseph L. Rabinowitz Memorial Lecture**, which was introduced by Robert Ricciardi. He spoke of the significance of the research done by José, and shared that he was a legend at the school. He said he was pleased to have known Dad, but that students and faculty who were new to the school shared the pride of association with Dad's discoveries.

The speaker was Claudia Kemper, PhD, Senior Investigator Section Chief at NIH, NHLBI (National Heart, Lung and Blood Institute). Her talk was above my comprehension level. It was about the intracellular and cell-autonomous complement ("*complosome*") and how it serves unexpected non-canonical roles in cell biology. Her discoveries and some unpublished data were exciting and showed promise for understanding disease in both animal and human models.

When she was introduced, she said that she was extremely flattered to be considered on the same level as Dr. Rabinowitz.

At the end of the lecture, Liz Kitterlinus, Vice Dean of Institutional Advancement, came in with a young man she wanted to introduce to me. He was one of the two recipients of the **Laib and Rachel Rabinowitz Scholarship Award**. He was very excited to meet me and thanked me multiple times for the scholarship. He spoke about how important it was to him. The other recipient was out of town, but Liz said that I would receive a thank you note from him. (I had previously asked about the winners of this award, and this was the first time I had met anyone.) They took photos which they promised to send me.

During the review of the posters explaining research by faculty and students, I chatted with one of the winners of the 2022 Rabinowitz Awards. She had used her prize money to help with research in two different projects. There was some discussion about how the flexibility of the funding meant that it worked well when combined with other grants.

While I was browsing through the posters, a woman approached me. Her name was Claire Mitchell. She shared that she was a Rabinowitz Award winner (2014-15). She said that she had come to our house with Kathy Battaglia for Mom's shiva. She had expected to see a mansion and was extremely touched to realize that our parents were not exceedingly wealthy. She said that this was a more meaningful award coming from people of limited means who so greatly valued research. She kept apologizing, saying that she didn't mean to offend me (I assured her that I was not offended).

I later spoke to Liz about citing the **Rabinowitz Award in Research**, and the importance of each year's winners providing a poster or some feedback about their investigation. Kathy Boesze-Battaglia, a colleague of José's, also told me that she would follow up with the winners and remind them of those things.

I met the 2023 winners of the **Joseph and Josephine Rabinowitz Award for Excellence in Research**. Both recipients spoke in heavily accented English and I had difficulty understanding them, but both shook my hand and thanked me repeatedly. Again, they took photos that they promised to share.

I am attaching scans from the booklet about the winners and the lecture. Dean Wolff and Liz Kitterlinus spent about a half an hour with me, showing me new artwork that had been donated to the school and assuring me that referencing the Rabinowitz Award citation was a very reasonable request.

I wanted to share with you that I felt that José was genuinely honored and respected. There was some discussion about how the award was considered very prestigious, and I noticed that in both write-ups from this year's recipients there are references to using the award to support future grants, which was one of the key goals of the prize.

KEYNOTE SPEAKERS

## THE JOSEPH L. RABINOWITZ MEMORIAL LECTURE

**CLAUDIA KEMPER, PhD**  
Senior Investigator Section Chief, NIH, NHLBI



Dr. Kemper is a Senior Investigator and Section Chief at the National Heart, Lung, and Blood Institute (NHLBI) at the National Institutes of Health (NIH) in Bethesda, Maryland.

Dr. Kemper received her Ph.D. in Immunology in 1998 from the University of Hamburg, the Bernhard-Nocht-Institute for Tropical Medicine, in Germany where she worked on the evolutionary aspect of complement regulatory proteins under the supervision of Prof. Irma Gigli. She joined in 1999 John Atkinson's laboratory as a postdoctoral fellow at Washington University in Saint Louis where she discovered that the complement regulator CD46 is a key checkpoint in human Th1 induction and contraction. Dr. Kemper left Washington University in 2008 as Assistant Professor to move her laboratory to King's College London, where she was promoted to Associate Professor in 2012 and Full Professor in 2015. During her time at King's College London, Dr. Kemper's group discovered that complement activation is not confined, as always thought, to the extracellular space but that it occurs within a broad range of cells. Importantly, this new location of activation allowed her group to discover that intracellular and cell-autonomous complement (coined the complosome) serves unexpected non-canonical roles in cell biology, including the regulation of key metabolic pathways such as glycolysis, oxidative phosphorylation, fatty acid synthesis and cholesterol flux as well as mitochondrial dynamics. Her group further showed that perturbations in complosome functions are associated with a range of human disease conditions, including primary immune deficiency, arthritic diseases (RA, SLE, and scleroderma) and cardiovascular disease. Dr. Kemper's research at the NHLBI now focusses on the non-canonical roles of complement in cell physiology in health and disease.

Dr. Kemper is the recipient of a Wellcome Trust Investigator Award, the Merit Award for Excellence in Science from the International Complement Society and two Orloff Awards in Science from the NHLBI/NIH, and elected member of the Henry Kunkel Society. Dr. Kemper also serves on the Scientific Board of Apellis, Inc., is the NHLBI representative of the Women Scientists Advisors (WSA), the Head of Admission of the NIH-OXCAM Scholars Program, and the sitting President of the International Complement Society.

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