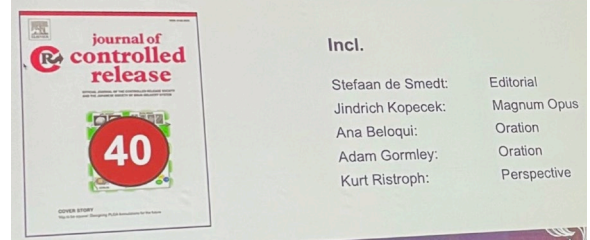


In July 8-12, 2024 Jindřich Kopeček and Jane Yang attended Controlled Release Society (CRS) 2024 Annual Meeting and Expo in Bologna, Italy. Henry gave an oral presentation 'Drug-free Macromolecular Therapeutics: Multi-Antigen T Cell Hybridizers', and Jane presented a poster titled 'Anticipating A New Wave of HPMA Copolymer-Drug Conjugates: Recent Progress and Perspectives in Cancer Therapy'.

This year, the theme of CRS annual meeting is **"Integrating Delivery Science across disciplines"**. It is also the 40th Anniversary of Journal of Controlled Release, the official journal of the CRS. In the Opening Ceremony, the CRS President Dr. Twan Lammers highlighted the major contributions in the special issue including Dr. Kopeček's Magnum Opus\*: **Hydrophilic Biomaterials: From Crosslinked and Self-Assembled Hydrogels to Polymer-Drug Conjugates and Drug-Free Macromolecular Therapeutics**. 'This is wonderful Magnum Opus from a great scientist and a pioneer in the field biomaterials of drug delivery, highlighting his inspiring ideas and remarkable achievements after more than 60 years in science.' 'Henry summarized the efforts of his lab over the years and presented his approach to



\* The Magnum Opus (Magna Opera) in the JCR is a series of exclusive papers from colleagues who have made exceptional contributions in the drug delivery field. In this series, eminent scientists share their scientific journeys, their lessons learned and the unique stories behind the science.

interdisciplinary research and shared some suggestions to early career scientists.'

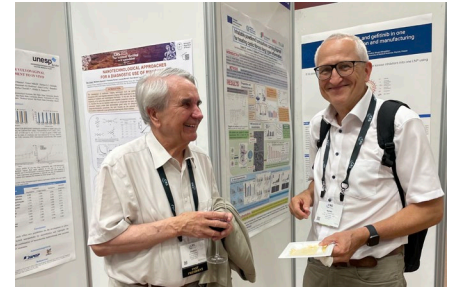
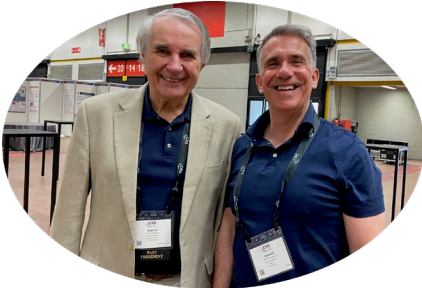
Dr. Kopeček's participation and his presentation greatly inspired young generation. 'First time attending a talk in person by one of the giants in the field of polymer drug conjugates and nanomedicine!' 'How can he keep coming up with new ideas?!'



After his presentation, Henry took a joyful group photo with the students from Sichuan University, whose mentor is Henry's former trainee Dr. Lian Li (Postdoc fellow 2016-2020). Dr. Kopeček encouraged them to join the 19th International Symposium on Recent Advances in Drug Delivery Systems that will be organized by the Department of Molecular Pharmaceutics, University of Utah in February 2025. He also happily found his former student Dr. Ayelet David, Professor at Ben Gurion University and her trainee Dr. Yosi Shamay, who is Assistant Professor of Biomedical Engineering, Technion-IIT. Yosi was very proud with this scientific family photo.




During the conference, Henry and Jane met friends from academy and industry. They had discussions with those potential collaborators. Jane also actively explored the possibilities of the translational initiative with Cristal Therapeutics on the second-generation HPMA polymer-drug conjugates and their new platform technology of antibody-polymer-drug conjugates for treatment of hematologic malignancies and solid tumors. It was a journey not only rewarding but also memorable and enriching.



**Multimodal neuro-nanotechnology drug to treat PCNSL tumor**

We designed a novel treatment for PCNSL lymphoma with multi-functional nano-biopolymeric drug based on poly(**N**-(2-hydroxypropyl)methacrylamide) (PHPMA)

- PHPMA-based nano-immunoconjugates developed by Kopeček's group are water-soluble, non-immunogenic, and biodegradable polymers.
- Importantly, multiple molecules for targeting can be easily attached covalently to PHPMA molecule. To date, Ab, Ab fragments, peptides, chemotherapeutic drugs, and antisense oligos (AONs) have been successfully conjugated onto PHPMA.



Collaboration with Kopeček group  
University of Utah

