"The Onassis Foundation
Science Lecture Series 2025
in Biology and Chemistry"

"Re-engineering Biology:
Directed Evolution of Enzymes and Cellular Pathways"

Heraklion, Crete, July 07 - 11, 2025

Monday 07 July	09:00 - 09:45	Registration
	09:45 - 10:00	Welcome
	10:00 -11:15	"Directed enzyme evolution: theory, practice, and future", by Frances Arnold
	11:15 -11:45	Break
	11:45 -13:00	"Fixing CO2 fixation: Re-inventing the operating system of photosynthesis by Tobias Erb
	13:00 -14:30	Lunch Break
	14:30 – 15:45	"Designing enzymes de novo", by Donald Hilvert
Tuesday 08 July	09:30 -10:45	"Fixing CO2 fixation: Building the hardware", by Tobias Erb
	10:45 -11:15	Break
	11:15 -12:30	"Evolving virus-like assemblies in the lab" , by Donald Hilvert
	12:30 -14:00	Lunch Break
	14:00 – 15:15	"Putting Enzymes to Work: Biocatalysis in Pharma", by Jeffrey Moore
Wednesday 09 July	09:30 -10:45	"The Future of Biocatalysis (is now!)", by Jeffrey Moore
	10:45 -11:15	Break
	11:15 -12:30	"AI for Generative Protein Biology", by Alexander Rives
	12:30 – 14:00	Lunch Break

	14:00 – 15:15	"Accelerating Discovery with Emergent World Models" by Alexander Rives
	20:00	"Innovation by Evolution", by Frances Arnold - PUBLIC LECTURE (in English)
Thursday 10 July	09:30 -10:45	"The energetic basis of protein fold evolution", by Vincent Hilser
	10:45 -11:15	B r e a k
	11:15 -12:30	"The ensemble basis of Allostery and epistasis", by Vincent Hilser
	12:30 – 14:00	Lunch Break
	14:00 – 15:15	"Real-time control of pharmacokinetics", By Kevin Plaxco
	15:15 – 16:30	"Synthetic, out-of-equilibrium cell-like systems for directing reaction networks" By Bert Poolman
Friday 11 July	09:30 -10:45	"Introducing biomolecular regulation in biotechnologies" by Kevin Plaxco
	10:45 -11:15	Br e a k
	11:15 -12:30	"Decoding Folding Landscapes with Biophysical Tools", by Giorgos Gouridis
	12:30 – 14:00	Lunch break
	14:00 -15:15	"Allosteric Evolution and Folding Landscapes" by Giorgos Gouridis
	15:15 – 16:30	"Spatiotemporal organization of the bacterial cytoplasm" By Bert Poolman
	16:30 – 16:45	Closing remarks