

Proposal for Summer Course in Biological Physics in Greece

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Prompted by the recent initiative to enhance U.S.-Greece Academic Collaboration through International Academic Partnerships¹, we would like to express our interest to organize and teach a summer course in Biological Physics, in collaboration with Physics Departments in Greece.

We are faculty at US Universities who are actively involved in research and educational activities in biological physics, as well as related areas, such as soft matter and statistical physics. We studied Physics in Greece but were in fact initially not aware of the opportunities that exist in this area. We arrived to them only through graduate/postdoctoral studies and by exploring research opportunities abroad. It is our understanding that biological physics still remains poorly developed in Greece. We believe that Greek physics students would be very receptive to this developing field, which can essentially be traced back to Aristotle's famous unifying principles for physics and biology.

As mentioned in the recent US National Academies decadal report,² to which one of us (EK) contributed, biological physics now has emerged fully as a field of physics, alongside more traditional fields of astrophysics and cosmology, atomic, molecular and optical physics, condensed matter physics, nuclear physics, particle physics, and plasma physics. It is a field that can have its own identity within physics departments, even as its intellectual agenda connects profoundly to efforts in many other departments across schools of science, engineering, and medicine.

We thus seek to partner with Physics Departments in Greek Universities to deliver an exploratory summer course in which we introduce the main concepts of biological physics to physics students, communicate our enthusiasm, and establish contacts with other faculty in Greece. We envision that several of us will visit Greece to offer the course during the first year. Depending on its success, and on financial support, we would continue to invite international experts to come to Greece and give lectures over the following year. In this way we also intend to explore the development of MS program(s) and/or joint programs with US Universities in this area.

Sincerely,

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1 <https://www.iie.org/Programs/International-Academic-Partnership-Program/IAPP-Greece>

2 <https://www.nationalacademies.org/our-work/biological-physicsphysics-of-living-systems-a-decadal-survey>