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Tulane grad translates evolutionary biology for Turkish readers

B. Duygu Özpolat [DOO-ē-goo] is a postdoc in <u>Alexandra Bely's</u> lab at the University of Maryland. Last fall she attended the short course, <u>Concepts and Model Organisms in Regenerative Biology</u>, in Santiago, Chile sponsored by the Society for Developmental Biology and the <u>Latin American Society for Developmental Biology</u>. She spoke with SDB about her research, the work she does translating evolutionary biology texts into Turkish, and her really <u>cool tattoo</u>.



What was your degree in? Where are you now?

I studied Biology in Turkey and recently got my Ph.D. [in Cell and Molecular Biology] from Tulane University, where I studied development and regeneration of the joint tissue in <u>Dr. Ken Muneoka's</u> laboratory. Besides developmental biology and regeneration, I have always been very interested in evolutionary biology. As a result, I found myself wondering how regenerative abilities in different organisms evolve or how certain organisms lose this ability while their ancestors clearly were able to regenerate. I have just started working in Dr. Alexa Bely's lab as a postdoctoral researcher on evolution of regeneration using annelid worms as a model.

How did you get involved translating <u>Understanding Evolution</u> [University of California, Berkeley] into <u>Turkish</u>?

As far as I can remember in my science education, there has always been anti-evolution propaganda in Turkey and it was very obvious that something had to be done about this. After I graduated from university and came to the USA for graduate school, a couple of my classmates in Turkey asked if I would like to help them with translating a website for educating the public about evolutionary theory. This was exactly my kind of thing because I love volunteer work and I think public outreach is a very important part of being a scientist. We call ourselves Hard-workers for Evolution. There are more than 100 university students, graduate students, post-docs and faculty in this volunteer organization who pitch in at different levels. I know how hard it is to accomplish such an immense amount of translations with such good quality, which is why I am very proud of everybody in our team for the work they have done and their dedication.

Why was *Understanding Evolution* such an important site to translate?

Firstly, because before we translated this website, there was not any website which purely focused on teaching evolution in Turkish. If you made a Google search at that time, you would find nothing but anti-evolution propaganda, or some blogs that tried to fight the anti-evolution propaganda, and even though there were very decent blogs among them, it was all a part of a disturbing fight. We agreed that, as

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scientists, it is not our job to challenge people's religious beliefs. We also believe that the anti-evolution propaganda is not worth wasting our time and breath on. *Understanding Evolution* website prepared by University of California, Berkeley was a great resource that covered many different aspects of evolution with fun, colorful essays and with a peaceful attitude. Their guide for teachers on how to handle certain situations in the classroom is also a great resource.

What is the process for translating a book like Richard Dawkins' <u>The Greatest Show on Earth: The Evidence for Evolution?</u>

As a part of the volunteer work we did for translating *Understanding Evolution*, we first had to put a glossary of biological terms together, because there were many terms that were not properly translated into Turkish. We made this glossary available to the public so everybody can use it. When one of our volunteers (Uygar Polat) was offered the job of translating Dawkins' latest book [*The Greatest Show on Earth: The Evidence for Evolution*], he decided to make this a team project and we formed a group of four, Uygar being the editor. Everybody had a number of chapters to translate. Once all the editing and translations were complete, we read the book one last time, made necessary corrections and finally got it printed. So far we have been getting great reactions from the readers concerning the quality of the translation. I think one of the greatest things about establishing a volunteer organization for making scientific translations is that, you create an educated bunch of young academics who are now equipped to make good translations.

What are your future plans with the Hard-workers for Evolution?

We have an ongoing project which is funded by the European Society for Evolutionary Biology (ESEB). We prepared information packages composed of a DVD, with an offline version of *Understanding Evolution* website in Turkish as well as printable pdf files of all the content, and brochures. We are currently sending these packages out to elementary and high school science teachers as well as libraries all around Turkey. By this, we are hoping that the Turkish *Understanding Evolution* website will become more widely known and even those teachers in small villages who do not have an internet connection all the time can use the DVD as teaching material for their classes.

What are your impressions from the Concepts and Model Organisms in Regenerative Biology course in Chile?

The course is Chile was one of the best experiences (if not the best) in my life. As somebody who is interested in evolution of regeneration, it is especially great to be exposed to different model organisms that can be used in the study of regeneration phenomenon. From the most classical limb regeneration model in axolotl, to sea cucumbers, this course was everything I could ask for at this point in my science career. It broadened my perspective so much. Interacting with scientists who have accomplished so much and who are basically celebrities for a graduate student like me was fantastic. The interactive way seminars took place, with lots of students comfortably asking questions and having discussions with the speaker was something you do not experience much in the more formal atmosphere of scientific meetings. The lab sessions were perfectly designed—we had so much hands-on experience. If I were to complain about this course, my only complaint would be that it was too short!

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Describe the process for choosing your cool science tattoo?

I wanted a tattoo for a long time and finally decided to get Darwin's finches but I wanted it to look like a butterfly. The idea itself evolved while I was talking to my friends and family about it. And the tattoo artist, Henry Rhodes, made it become real—even better than I imagined.

Check out the <u>full story</u> on Duygu's blog, Frizzled Thoughts of a Knotty Mind.

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