

Watterson  
January 4, 1944

Dr. Ray Watterson  
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Dear Ray:

I have given considerable thought to the subject of your letter of December 16. My answer is delayed because we have started an army pre-medical program in December which caused me considerable headaches and still keeps me busy.

First of all I don't quite understand your conception of the project which you have in mind. You seem to plan a combination of a text and a laboratory manual. It will be difficult to unite both purposes. I admit that there is a need for a good textbook in invertebrate embryology but such a text written on a comparative basis could not possibly exclude the terrestrial relatives of marine invertebrates nor could it omit the arthropods as a whole. To handle the normal and experimental embryology of the latter is a gigantic job in itself. The enterprise of such a book would absorb a person's full energy for many years. I don't think you realize fully the amount of labor involved in such a task. The only way I could think of writing such a book would be to give courses in the subject for a period of years, at the same time get a working acquaintance with a variety of groups, and then after many years of mastering the field, find out if you still feel like writing the book. The laboratory manual for Woods Hole and similar courses would be a different proposition. It could be much more modest in scope and follow the outline given in your letter. I have talked with Costello about such a project. He has some good ideas along this line and would probably be available as a co-author or co-editor. I myself would not want to participate in the writing but I would give it every possible encouragement and would try to help in planning it and in finding financial help.

In principle, my advice would be strongly against your plan of writing a big text. I feel strongly that you can put your energies to better use and do a greater service to invertebrate and experimental embryology by opening up a new and fruitful line of research. Such work would not necessarily be limited in scope and specialized. There are plenty of fundamental problems open for investigation. I don't think a textbook stimulates other people to start research, but a enthusiastic worker at Woods Hole with an interesting field of investigation may have a great influence in vitalizing

Watterson, Ray

-2-

January 4, 1944

invertebrate embryology and in leading students of the younger generation. In the long run you will find that such a pursuit will also be more to your own benefit. If you have any taste for research you would find yourself tied down intolerably by the responsibilities for the book. The years to come should be your most productive years and unless you give up all intentions and ambitions for research--which I would deeply regret--you will be constantly in an inner conflict and in a dilemma. As I said there is no doubt in my mind where your energies and your enthusiasm would be most profitably applied. Also your career and your ranking in biology will depend on the amount of scientific imagination and accomplishments in research which you will show during the next 5 or 8 years, and never on the promise of a book, no matter how good, to be published 8 years hence. The basic question which you would have to solve for yourself is whether you believe in your future as a researcher. If you ask me, I see no reason why you should forego this noblest of all pursuits.

It occurred to me years ago that in order to fill the obvious gap of an English text in invertebrate embryology, one might think of translating the recent edition of Korschelt's book. One could omit the vertebrate part and bring the rest up to date. The problem would be how to find a publisher for such an undertaking.

I understand that suggestions have been made to the Woods Hole administration concerning the partial reimbursement of traveling expenses to and from Woods Hole. I hope that these plans will materialize and I shall do my very best to put you in a position next summer that you would not have to bear financial loss when you come to Woods Hole.

My best wishes for 1944.

Yours sincerely,

Viktor Hamburger

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