

The odyssey of pediatric surgery research. Can an international perspective provide new solutions?

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The February 2021 issue of the *Seminars in Pediatric Surgery* journal is dedicated to the role of the *Academic Pediatric Surgeon* in different countries of the developed world. The analysis of the various authors shows that academic pediatric surgeons have been decreasing in number in recent years. Although the context differs from country to country, common obstacles can be found worldwide in developing a research career in pediatric surgery.

The vision of Shalkow-Klinovstein et al.⁽¹⁾ on the situation in Mexico highlights two of the main difficulties – the lack of protected time for research and labor precariousness. This is also the case in Spain, where the primary contracting model, at present, is the temporary one. Unfortunately, job stability is not synonymous with protected time for research. In the recent 2020 national survey by Díaz Diñeiro et al.⁽²⁾, most pediatric surgeons (89.4%) responded that they could devote less than 25% of their working day to research, and none of them could devote full time.

The solutions in countries such as the United Kingdom or Canada involve establishing training programs for young residents or associates (the *Walport Clinical Academic Training Pathway* and the *Surgeon Scientist Track*, respectively) that allow them to acquire training in clinical, basic, and translational research. They also provide protected time for such research, without this affecting their remuneration or subsequent working career.

However, as stressed by Patrick Ho Yu Chung et al.⁽³⁾ from Hong Kong, these efforts will be in vain if another significant gap is not filled – the lack of research leadership. Quality research requires leaders and mentors to guide, train, and suggest new ideas to avoid being pigeon-

holed in retrospective studies, case reports, and research for research, which, as Paul R.V. Johnson⁽⁴⁾ accurately analyzes, does not create new knowledge or does not result in a benefit to our patients.

As Sabine Sarnacki points out, there are intrinsic obstacles to rare disease research, which could be overcome by supporting the creation of multicenter networks. The low representation of women in the committee of experts consulted shows that inclusion and diversity are also pending tasks.

The financing of proprietary research lines is another top difficulty. Our low affiliation with Spanish universities (only 35% according to the survey by Díaz Diñeiro et al.⁽²⁾), the low impact factor of Spanish leading journals, the low incidence of the diseases to which we are dedicated, our broad field of study, the relevance of the results in the long term, and our inability to attract the interest of the healthcare industry make it very difficult to obtain funds in competitive calls for proposals compared to other disciplines.

In 2016, Dr. Tovar⁽⁵⁾ assessed all these problems in an editorial on pediatric surgery research in Spain. His pessimism towards the future is now contextualized with the vision of various countries in our region. However, there is still time to change this future if our Society is committed to its founding objectives of **promoting** scientific progress and **fostering** scientific, human, and social relations in Pediatric Surgery.

Creating multicenter networks and national working groups, without detriment to participation in European and Ibero-American networks, would allow us to escape from the single-center experience, improve the quality of research, and facilitate fundraising. It is an explicit duty of the Spanish Pediatric Surgery Society to **promote, encourage,** and support these networks.

These spaces would provide tools to the leaders – who we know exist in our country, scattered throughout the different Pediatric Surgery departments – to communicate, train,

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guide, debate, and combine their ideas in projects that allow us to move forward. We believe it is essential to integrate and promote social networks such as Twitter® within these tools, since they have already demonstrated to play an essential role in the creation and communication among scientific groups with relevant and current results such as Covi Surg® or the #SoMe4Surgery and #SoMe4PedSurg movements, which were also the subject of an editorial in our Journal.

The dissemination of surveys for national or international studies through the Society or the refresher course in Pediatric Surgery is another positive initiative for this purpose. This could also be the case with scholarships and awards for multicenter studies, as done by the Spanish Association of Surgeons.

In summary, the main obstacles to advancing research in pediatric surgery are the same in Canada, Italy, Germany, Mexico, France, the United Kingdom, Australia, Hong Kong, Japan, and Spain.

Lack of funding, protected time, leadership, and diversity make research in pediatric surgery an arduous,

complicated, and frustrating odyssey that leaves many by the wayside. However, part of the solution lies in our hands.

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