



## PERSPECTIVES AND NOTES

# Perceptions of a curriculum vitae clinic for conservation science students

Stephanie R. Januchowski-Hartley<sup>1</sup>  | Sukhmani K. Mantel<sup>2</sup> |  
Helen M. Barber-James<sup>3,4</sup> | Jorge Celi<sup>5</sup> | Julian D. Olden<sup>6</sup> | John J. Piccolo<sup>7</sup>  |  
Virgilio Hermoso<sup>8</sup>

<sup>1</sup>Department of Biosciences, Swansea University, Swansea, UK

<sup>2</sup>Institute for Water Research, Rhodes University, Makhanda (Grahamstown), South Africa

<sup>3</sup>Department of Freshwater Invertebrates, Albany Museum, Makhanda (Grahamstown), South Africa

<sup>4</sup>Department of Zoology and Entomology, Rhodes University, Makhanda (Grahamstown), South Africa

<sup>5</sup>Grupo de Investigación de Recursos Hídricos y Acuáticos, Universidad Regional Amazónica Ikiam, Tena, Ecuador

<sup>6</sup>School of Aquatic and Fishery Sciences, University of Washington, Seattle, Washington

<sup>7</sup>Institute for Environmental and Life Sciences, Karlstad University, Karlstad, Sweden

<sup>8</sup>Centre Tecnologic Forestal de Catalunya, Lleida, Spain

## Correspondence

Stephanie R. Januchowski-Hartley,  
Department of Biosciences, Swansea University, Swansea, UK.  
Email: s.r.januchowski@swansea.ac.uk

## Funding information

South African National Research Foundation's Knowledge Interchange and Collaboration, Grant/Award Number: 110234; European Regional Development Fund, Grant/Award Number: 80761-SU-140; Welsh European Funding Office

## Abstract

We led a curriculum vitae (CV) clinic aimed at student participants attending the 28th International Congress for Conservation Biology (ICCB 2017) in Cartagena, Colombia. The CV Clinic was a pilot program consisting of resources to assist with developing an effective CV and involving preconference and at-conference reviews of student attendees' CVs. Here, we explore our experiences in organizing the CV Clinic as well as nonparticipant and participant perceptions of the clinic. We used an online standardized interview form to gather qualitative data on nonparticipant and participant perceptions of the CV Clinic, and to explore how such a CV Clinic program could best align with student needs. Most respondents who submitted their CV for review ahead of ICCB 2017 ( $n = 9$ ) found the template and guidance useful. Half of the respondents who did not participate in the CV Clinic perceived the clinic as duplicating services provided by their academic institutions. Both participant and nonparticipant respondents perceived value in such a CV Clinic, but also believed that adjustments could be made to make the CV review part of a broader professional development program lead by Society for Conservation Biology (SCB). Key lessons learned from the CV Clinic include the need to: (a) document and evaluate professional development initiatives within SCB; (b) better understand and account for the diversity of student needs before program creation; and (c) pilot and evaluate appropriateness of different locations, frequency, and duration of professional development programs.

## KEYWORDS

conferences, conservation, curriculum vitae, education, evaluation, professional development

This is an open access article under the terms of the Creative Commons Attribution License, which permits use, distribution and reproduction in any medium, provided the original work is properly cited.

© 2019 The Authors. Conservation Science and Practice published by Wiley Periodicals, Inc. on behalf of Society for Conservation Biology

## 1 | BACKGROUND

In our roles as leaders on the Freshwater Working Group (FWWG) board within the Society for Conservation Biology (SCB) we work to deliver professional development opportunities for our membership that are beneficial to young conservationists (Blickley et al., 2013; Kuehne et al., 2014). In late 2016, through several discussions between FWWG board members and SCB staff members it was determined that CV and résumé guidance could be a useful professional development resource for student and early career society members. A CV or résumé is often the first impression an employer has of an individual and is an important medium for conveying an individual's skills and achievements. Considerable research has linked the content and design of an applicant's CV with influence on employment decisions (e.g., Chen, Huang, & Lee, 2011; Cole, Rubin, Field, & Giles, 2011; Waung, McAuslan, DiMambro, & Mięgoć, 2017), and a recent Career Column in *Nature* highlighted the importance of CV structure when applying for graduate school (Román-Palacios, 2019). It has also been noted in other fields, such as pharmacy, that students gain more knowledge and confidence in acquiring skills needed for postgraduate programs and the workplace through structured or course-like professional development materials and programs (Murphy et al., 2006). Professional development opportunities and programs of variable duration and structure do exist for many students and early career researchers, often through their institutions or work places. We are not aware of any reviews or syntheses of existing professional development programs for environmental conservation students or professionals, but Hidayat, Huggins, Vanugopalan, and Berrios-Colon (2017) reviewed postgraduate training programs for U.S.-based pharmacy schools and colleges and found that programs were highly variable across institutions, as were the methods used to evaluate or capture student satisfaction. With these considerations in mind, the FWWG board determined it would be valuable to create and make available CV guidelines that are easily accessed by others around the world to support CV or résumé development as needed, and to pilot a structured review and feedback program for students and early career conservation professionals.

In turn, we (FWWG board members) led the development of a CV template and guidance document targeting students and early career professionals working in environmental conservation. This approach was informed by our own collective experiences in environmental science and practice in 11 countries (Australia, Canada, Ecuador, France, Hong Kong, Peru, South Africa, Spain, Sweden, United Kingdom, United States), as well as experiences and feedback shared by other professionals in our networks. We

initially made the CV template and guidance available to students participating in a "CV Clinic" (considering both CV and résumé formats) as part of a Career Fair held at the 28th International Congress for Conservation Biology (ICCB 2017) in Cartagena, Colombia. The CV Clinic was a pilot program consisting of the CV template and guidelines, and preconference and at-conference reviews of student attendees' CVs in association with ICCB 2017. After ICCB 2017, we asked both nonparticipants (students who attended the conference but did not participate in the CV Clinic) and participants (students who submitted their CV preconference or at-conference) to share their perceptions of the CV Clinic via an online standardized interview form. We sought to explore both nonparticipant and participant perceptions of the CV Clinic, and to explore how such a CV Clinic program aimed at supporting students and their professional development could best align with their needs. Here, we present the CV Clinic as a case study through which we explore professional development programs in environmental conservation, and students' needs for such programs. We share our own experiences of organizing the content and CV Clinic event, nonparticipant and participant perceptions of the clinic, lessons learned, and some future directions for professional development programs within SCB.

## 2 | CV CLINIC: TEMPLATE, GUIDANCE, AND CONFERENCE EVENT

Our initial focus was on developing the CV template and guidance because we wanted students attending ICCB 2017 to have access to it ahead of the conference. The FWWG board developed the CV template and guidance, led by board members Sukhmani Mantel and Helen Barber-James, and with input and review by all board members as well as contributions from others outside the board but within the environmental conservation field. Three SCB staff members who were responsible for leading the ICCB 2017 Career Fair also reviewed the CV template and guidance ahead of the documents being shared online. The final version of the CV template and guidance shared with students ahead of ICCB 2017 is published online (<https://goo.gl/1ZfWWB>).

Once the template and guidance were online, we notified all ICCB 2017 student attendees about the CV Clinic opportunity. The preconference CV review opportunity was promoted through communications shared by SCB and ICCB 2017 via email, website, and social media (Twitter and Facebook). We limited the number of CVs that could be given detailed review ahead of the conference to 50—primarily to ensure adequate review and feedback of all CVs by the eight FWWG board members (article co-authors). Student attendees were also made aware of the opportunity

to bring their CV with them to the conference for in-person review (with less detailed feedback).

Twenty-three students, from 12 countries (Australia, Bangladesh, Canada, Germany, India, Malawi, Mexico, Netherlands, Nigeria, Pakistan, United States, and Venezuela), submitted their CVs ahead of the conference for detailed review and feedback by FWWG board members. Students who submitted their CVs for review did not necessarily focus on freshwater ecosystems, but were all studying or working in the broader field of environmental conservation. Feedback, and any tracked-changes on the CV document, from FWWG board members was returned to students at least 1 week ahead of the conference. All students who submitted their CV for review ahead of the conference were also extended the opportunity to meet with any of the FWWG board members present at ICCB 2017 (four members—S.R.J.-H., S.K.M., H.M.B.-J., and J.C.) to further discuss their CV or any feedback that they received.

The CV Clinic and Career Fair occurred over 2 hr on a single evening during the conference. The event was highly advertised. We are unsure of total student attendance numbers to the Career Fair (this data was not collected by SCB), but approximately 400 students attended the conference, and we estimate that 100–150 students visited the CV Clinic. Several students shared their CVs with us in person at the Career Fair; many students were interested in copies of the CV template and guidance, and to informally discuss both their CVs and broader professional development.

### 3 | INITIAL FEEDBACK AND REFLECTIONS ON THE CV CLINIC

We accepted and considered informal feedback from students throughout the CV Clinic process. We considered this part of our participatory process to better understand student needs related to professional development. Several students who submitted their CV for review ahead of the conference also visited us during the CV Clinic event at ICCB to thank us for our time and feedback. During the event at ICCB 2017, discussions with students moved beyond CVs to questions about, and interest in, internship and work placement opportunities to enhance their employment potential. Given the feedback and narratives shared by students before and during the conference, we were interested in exploring students' perceptions of the CV Clinic. We realized that it would also be valuable to capture perspectives from students who did not participate in the CV Clinic, who submitted their CV for review ahead of the conference but did not attend the Career Fair, or who attended the CV Clinic in-person at the Career Fair.

### 4 | EXPLORING NONPARTICIPANT AND PARTICIPANT PERCEPTIONS OF THE CV CLINIC

We did not prepare an exit survey or interview schedule ahead of the CV Clinic or conference. However, student feedback and questions shared with us throughout the CV Clinic process inspired us to craft a standardized interview schedule after the conference had completed. This schedule was prepared and shared with all student conference attendees, including nonparticipants of the CV Clinic. The interview form was circulated 6 months after the conference via email-list announcements, and SCB and ICCB 2017 Twitter and Facebook social media accounts. The standardized interview was formed primarily of open-ended questions, with a few complementary closed questions, and it was administered through a Google Form. We chose online standardized interviews because of the time since conference completion (6 months). Had we prepared questions ahead of the conference we would have preferred a general interview guide and in-person interviews with both nonparticipants and participants while we were still present at the conference. The standardized interview questions that we used were developed to gather qualitative data, and our evaluation of responses is descriptive in nature. We sought to explore both nonparticipant and participant perceptions of the CV Clinic and examine how a CV Clinic program could best the professional development needs of students. Our standardized interview schedule (Supporting Information, Data S1) was reviewed by Rhodes University's Science Faculty Ethics Committee, and the right to conduct research involving human subjects was granted on November 28, 2017 (IRB #SCI2017/074).

There were 20 respondents to our survey, three-quarters of whom attended the conference. The five respondents who did not attend the conference were excluded from further evaluation. Twelve of the 15 respondents indicated that they knew about the opportunity to submit their CV for review (9 of the respondents submitted their CV for review ahead of the conference (participants) and 3 did not submit their CV for review at all (nonparticipants), and 3 were not aware of the opportunity (also nonparticipants). None of the respondents indicated that they submitted their CV for review during the ICCB Career Fair. We coded responses to identify and organize nonparticipant and participant perceptions of the CV Clinic and to begin to develop explanation for these perceptions (Lincoln & Guba, 1985; Saldaña, 2016). We report all responses anonymously, using a random number assigned to each interviewee, and these numbers (in parentheses) are used at beginning of excerpted quotes, indicating particular respondents.

We asked the three nonparticipant respondents who knew about the opportunity but did not submit a CV: (a) if there were specific reasons that they did not submit their CV for review; (b) if they would consider submitting a CV for review in future; and (c) how we as organizers could make the review and feedback process most useful for their needs (Data S1). Two of these nonparticipants had existing professional development programs or mentors to review their CV, would not consider submitting their CV for review and feedback in the future, and did not necessarily believe that such feedback from conservation professionals would be helpful for their CV. The other nonparticipant stated that they had insufficient time to submit their CV for review but believed the CV review would be useful to them in the future because of the reviewers' diverse experiences. These nonparticipant respondents also noted that such a review process would be most useful if they could know more about the potential reviewers in advance, be paired with a reviewer bespoke to their needs, and have more opportunities for virtual discussions about their career and CV with the reviewer. In addition, two of the three nonparticipant respondents who were not aware of the opportunity to submit their CV for review believed that such review and feedback would be useful for developing and refining their CV. None (three of the three respondents) of these respondents shared ideas about how the process might be improved to make it most useful for their needs.

We asked the nine respondents who submitted their CV for review (participants) ahead of the conference questions about the CV template and guidance as well as the review process (Data S1). The majority (seven of the nine respondents) of these respondents indicated that they submitted their CV for review ahead of the conference to update or refine their current version. These respondents cited upcoming job searches, interest in updating their English language CV, and receiving feedback from outside of their immediate area of study as reasons for submitting their CV for review ahead of the conference. For example:

*(12) I identify as a conservation social scientist and was looking to get feedback on my CV from other conservation disciplines outside of the social sciences.*

More than half (six of the nine respondents) of the respondents also read the CV template and guidance before submitting their CV for review. These respondents perceived the template and guidance to be straightforward and to provide a clear overview of the purpose of a CV. Two respondents who did not use the CV template or guidance before submitting their CVs did not know it was available, and one

did know it was available but indicated that they were "... in a rush, didn't have time to include."

Finally, we asked all respondents (nonparticipants and participants) if they had any further feedback to share with us about the CV template and guidance, CV Clinic or Career Fair. None of the nonparticipant respondents shared any additional feedback or perceptions. Six of the nine participant respondents did provide additional feedback, which focused on future clinics or career fairs and making such opportunities most useful to students. These six respondents perceived the CV Clinic as being a particularly useful component of the Career Fair, for example:

*(4) Overall, the CV clinic at the Career Fair was probably the only career-related table, unfortunately. Most of the other tables were simply exhibition tables from inside and few (if any) had anything to do with careers at all; it was quite disappointing!*

These respondents also indicated a need for the CV Clinic to be organized at future ICCB conferences as well as regional conferences or workshops, and for the CV Clinic to be one part of broader professional development programs supported by SCB, for example:

*(4) The CV is one barrier to entry for careers in conservation, but there are obviously many more (lack of opportunities, the need to complete many low or unpaid internships to get a foot in the door, few graduate programs with professional skills training, etc.). Perhaps the CV clinic could develop into a more ... holistic program to provide training on other aspects of conservation career development in the future.*

## 5 | DISCUSSION

Most respondents who submitted their CV for review ahead of ICCB 2017 found the template and guidance useful for their needs and submitted their CV for review because of upcoming job searches or to receive feedback from outside their immediate network or area of study. Half (three of six respondents) of nonparticipants perceived the clinic as duplicating services already provided by their academic institutions, while the other half of these respondents perceived the idea of a CV Clinic to be valuable to their professional development, and that feedback through a similar program would be useful because of the reviewers' diverse experiences. Respondents also believed future professional development opportunities could grow from the CV Clinic

example, and that CV reviews and other activities could be offered in-line with ICCB as well as other regional conferences or workshops. Based on these perspectives and our experiences during the CV Clinic program, below we set out several lessons learned that we hope will be useful for current and future leadership of professional development opportunities for students (or people at different career stages) who are SCB members or who attend SCB conferences.

## 5.1 | Lessons learned and future directions

Although we found great reward in supporting students' professional development through the CV Clinic, and believe it was successful to an extent, we also believe there is value in reflecting on how things could be improved. Based on our experiences during the CV Clinic event held at ICCB 2017 and perceptions shared by study respondents, we see value in refining the use of a CV Clinic or review process in the context of an international conference. In addition, our experiences and exploration of others' perceptions suggests a broader program is needed to expand mentorship and professional development opportunities for students in SCB or attending SCB conferences, whereby CV review is just one component of such a program. This could be varied depending on student needs (see further discussion below). One way to keep the CV Clinic theme integrated in a broad professional development program could be to have a "rapid" pop-up CV Clinic at different SCB conferences for students (and others) who are looking for feedback in a short time frame and are interested in having feedback and ideas shared by a conservation professional from outside their immediate network. Such pop-up clinics could be advertised as soon as conferences are being planned so that attendees know about the opportunity and who will be there to review documents on different days. This would provide support for those, like some of the respondents in our study, who value such opportunities for feedback in addition to broader professional development and mentorship opportunities. We do also believe that SCB should offer, and continue to refine their approaches to, professional development for members; one of the society's strategic goals is to deliver professional development support for its membership.

With this in mind, we suggest steps that could be taken to better inform, guide, and evaluate professional development programs, within the society and its associated conferences.

1. Evaluation of existing programs, and collaboration between program leaders, associated with society conferences and the SCB more broadly. This would help to identify what is or is not working or supporting member

needs, and to determine potential changes or actions needed to consolidate efforts and refine programs to better support diverse needs. Details about how this is executed within the society are beyond the scope of this manuscript, but we see these steps as necessary to refine and improve programs for society members and conference attendees. For example, our experience with the CV Clinic demonstrates that there may be value in developing an exit interview schedule to connect with students prior to them leaving the conference to provide depth to our understanding of student perceptions and needs as related to professional development. Along these lines, there would also be value in collaboration across SCB leaders (there are multiple sections, working groups, and chapters each with different leadership roles) for activities like the CV Clinic to enhance assessment with a broader panel of reviewers from different backgrounds, fields, and career experiences. The CV Clinic is just one example within SCB, and others should be documented and evaluated so that the society can better support our members and conference attendees and grow from our successes and failures.

2. Interviews or focus group discussions with students from diverse backgrounds and experiences (e.g., ensuring representation across gender, race, sexual orientation, region, career stage) could be used to identify specific professional development needs and interest. Students from different backgrounds, and with different experiences, are likely to have varied interests in professional development programs. Much could also be learned from asking program participants to identify their professional development needs ahead of an event; this could help enhance individual or group experiences. For example, in the case of a CV Clinic, ask participants ahead of the event what career experience they would prefer the reviewer to have (e.g., academic, nonprofit, government), and use this input to recruit the reviewer team. To provide the greatest benefit, programs, and opportunities supported by SCB must consider people's diverse needs, and this could include diversifying approaches to programs to include one-on-one or small group mentoring schemes (programs like this have been established by societies such as the Peer Group Mentoring scheme run by British Ecological Society) in association with conferences or more frequently through virtual meetings.
3. There is a need for those leading programs with SCB to evaluate the scale, frequency, and duration of professional development programs. For example, many CV Clinic participants were from Latin America, Africa, and South Asia, suggesting that professional development initiatives, like the CV Clinic, could be most useful if offered at regional scales and the approach refined based

on specific student needs in those regions. In the United States, where professional development and employability skills programs are often offered through universities, students believe they are better prepared for graduate school or employment applications and interviews after taking part in programs that provide skills development, experiences, and feedback on CVs, personal statements, interviews, and related communications (Hidayat et al., 2017). Developing and making such professional development programs available for students in regions where these do not yet exist, or are not easily accessed through universities is an important resource that societies like SCB can make available to its members. Discussions and organization around professional development opportunities or programs are needed beyond individual conferences or workshops, otherwise such opportunities will continue to be rather piecemeal, and not necessarily foster professional development for students with varied needs.

Finally, our approach to leading the CV Clinic and exploration of nonparticipant and participant perceptions of the program offers a starting point for others leading or interested in leading professional development opportunities within SCB, and possibly within other similar societies. Our goal was to share this case study so that others can learn from our approaches to the program, perceptions shared by participants, and our own perceived failures and successes.

## ACKNOWLEDGMENTS

The authors thank all supporters of the *Connecting Conservation Colleagues* Pozible Campaign for their generosity to the CV Clinic at the 28th International Congress for Conservation Biology and costs associated with publishing this work. We also thank Laure Cugniere, Matthew Herbert, and Nathan Spillman for their support, feedback on earlier version of the CV template and guidance, and for help communicating and organizing the CV Clinic at ICCB 2017. Thanks also to Steven Lang for comments on earlier drafts of the CV template and guidance, and to an anonymous associate editor and two reviewers whose feedback improved the quality of our manuscript. S.R.J.-H. acknowledges funding from the Welsh European Funding Office and European Regional Development Fund under project number 80761-SU-140 (West), and S.R.J.-H. and S.K.M. acknowledge funding from the South African National Research Foundation's Knowledge Interchange and Collaboration (KIC 2017) for Visiting Foreign Researcher (Grant no. 110234).

## CONFLICT OF INTEREST

The authors have no conflicts of interest to report.

## AUTHOR CONTRIBUTIONS

S.K.M. and H.M.B.-J. conceived the idea of the CV clinic. All authors contributed to the design of the CV guidance and reviewed and provided feedback on CVs. S.K.M., S.R.J.-H., H.M.B.-J., and J.C. lead the CV Clinic at ICCB 2017. S.R.J.-H. and S.K.M. designed and carried-out the interview schedule and analyzed and interpreted associated data. S.R.J.-H. led the writing of the manuscript. All authors contributed to the drafts and approved publication.

## DATA ACCESSIBILITY

The CV guidance is available online through the Society for Conservation Biology <https://goo.gl/1ZfWWB>.

## ORCID

Stephanie R. Januchowski-Hartley  <https://orcid.org/0000-0002-1661-917X>

John J. Piccolo  <https://orcid.org/0000-0002-2633-4178>

## REFERENCES

- Blickley, J. L., Deiner, K., Garbach, K., Lacher, I., Meek, M. H., Porensky, L. M., ... Schwartz, M. W. (2013). Graduate student's guide to necessary skills for non-academic conservation careers. *Conservation Biology*, 27, 24–34.
- Chen, C. C., Huang, Y. M., & Lee, M. I. (2011). Test of a model linking applicant résumé information and hiring recommendations. *International Journal of Selection and Assessment*, 19, 374–387.
- Cole, M. S., Rubin, R. S., Field, H. S., & Giles, W. F. (2011). Recruiters' perceptions and use of applicant résumé information: Screening the recent graduate. *Applied Psychology*, 56, 319–343.
- Hidayat, L., Huggins, C. E., Vanugopalan, V., & Berrios-Colon, E. (2017). Preparing students to enter the race for postgraduate training. *Journal of Pharmacy Practice*, 30, 476–482.
- Kuehne, L. M., Twardochleb, L. A., Fritschie, K. J., Mims, M. C., Lawrence, D. J., Gibson, P. P., ... Olden, J. D. (2014). Practical science communication strategies for graduate students. *Conservation Biology*, 28, 1225–1235.
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Newbury Park, CA: Sage.
- Murphy, J. E., Nappi, J. M., Bosso, J. A., Saseen, J. J., Hemstreet, B. A., Halloran, M. A., ... American College of Clinical Pharmacy. (2006). American college of clinical pharmacy's vision of the future: Postgraduate pharmacy residency training as a prerequisite for direct patient care practice. *Pharmacotherapy*, 26, 722–733.
- Román-Palacios, C. (2019). Five tips for nailing your US-based graduate-school applications. *Nature*. <https://doi.org/10.1038/d41586-019-00845-z>

- Saldaña, J. (2016). *The coding manual for qualitative researchers* (3rd ed.). London, England: Sage.
- Waung, M., McAuslan, P., DiMambro, J. M., & Mięgoć, N. (2017). Impression management use in résumés and cover letters. *Journal of Business and Psychology*, 32, 727–746.

## SUPPORTING INFORMATION

Additional supporting information may be found online in the Supporting Information section at the end of this article.

**How to cite this article:** Januchowski-Hartley SR, Mantel SK, Barber-James HM, et al. Perceptions of a curriculum vitae clinic for conservation science students. *Conservation Science and Practice*. 2019; e37. <https://doi.org/10.1111/csp2.37>