

**SPECIAL ISSUE**

# 6 feet apart but working together

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**Abstract**

Prior to COVID-19, the field of genetic counseling was responding to a workforce shortage in patient-facing roles through efforts to increase the training capacity within existing programs, as well as development of new programs. These efforts were hindered by the number and capacity of fieldwork training sites. COVID-19 heightened this barrier with a sudden restriction on student training for an indefinite period of time. The onset of these restrictions highlighted the need to think creatively and, more importantly, collaboratively for ways to not only expand but also maintain fieldwork training capacity.

Described here are two different collaborative efforts in response to pandemic-related cancellations of important curriculum components: 1) the development of clinical simulation experiences and coursework shared between two ACGC accredited training programs; and 2) the creation of a virtual laboratory curriculum between an ACGC accredited training program and a non-academic laboratory partner.

This Professional Issues paper illustrates how collaboration with our academic and non-academic colleagues benefits students, training programs and non-academic partners beyond the needs of the initial crisis of a global pandemic.

**KEYWORDS**

collaboration, COVID-19, education, genetic counseling, professional development, workforce

**What is known about this topic**

Prior to the COVID-19 pandemic, the field of genetic counseling was facing a workforce shortage and fieldwork capacity concerns. The onset of the pandemic highlighted the need to think creatively and more importantly collaboratively for ways to not only expand but also maintain fieldwork training capacity.

**What this paper adds to the topic**

This commentary illustrates how collaboration benefits students, training programs, and non-academic partners beyond the needs of initial crisis of a global pandemic.

## 1 | INTRODUCTION

“There is an institution wide suspension of in-person activities effective immediately” and “Student clinical rotations are suspended until further notice”. These and similar phrases were heard at the onset of

COVID-19 restrictions by anyone involved with student training including instructors, fieldwork supervisors, program leadership, and last but certainly not least, our students. Immediate thoughts from leadership included, ‘How can we adapt our training and still meet Accreditation Council of Genetic Counseling (ACGC) standards?’,

and 'Are we equipped to deliver quality genetic counseling (GC) experiences so our students attain the level of competence required?' and from students 'will I be able to accrue the necessary cases, graduate, and find a job?'. Genetic counselors are trained to deal with crises and adapt to new situations but responding to a global pandemic is not a practice-based competency, nor was this outlined in any GC programs policy and procedure manual.

As is typical, every event is accompanied by context. Within the GC profession that context included efforts to explore strategies to grow our workforce in response to identification of a GC shortage in patient facing roles (Dobson et al. 2016). The workforce report, commissioned by the National Society Genetic Counseling (NSGC), recognized that external factors affect the number of new entrants into the profession including "the limited number and capacity of clinical sites to provide clinical internships for trainees" (Dobson et al. 2016, p. 6). It is this external factor that brought anxiety to program leadership at the onset of the COVID-19 training restrictions; we have an obligation to increase student capacity by adding and/or maximizing fieldwork training sites, while those same sites are suspending or severely limiting student training. At the very least, we had to maintain current capacity (for students already enrolled and accepted). Additionally, planning meant structuring clinical and didactic training without any knowledge about what re-opening might look like or how frequently things will change (which they did often and usually without notice).

Historical perspective of our profession shows us that GCs excel at collectively building and, if necessary, re-grouping and moving forward. Consider that the first training program - Sarah Lawrence College - that opened was intended for continuing education for women with degrees but no profession (Stern 2012). Now, not only have the number of programs increased, but we are also a recognized profession with over 5,000 certified genetic counselors (Accreditation Council for Genetic Counseling 2020). We have a national society, a national certification exam, an accreditation body, and over 50 accredited training programs in North America (Accreditation Council for Genetic Counseling 2020). And, although we have had our share of controversies (e.g. split from the ABMG or the need to move to an entry level clinical doctorate degree), our desire for the success of the profession drives us to work together and remain cohesive. We can, and will, weather this global pandemic but it will take our collective effort, collaboration, and cooperation. What follows are two examples of collaboration between nontraditional partners. These collaborations both grew out of the same vortex of extremes - simultaneously trying to build fieldwork experiences when all traditional norms were removed and replaced by uncertainty.

## 2 | WORKING TOGETHER: THE COLLABORATIVE PROJECTS

### 2.1 | Fieldwork project

Like most accredited GC programs, fieldwork training that focuses on depth and breadth at the University of Minnesota (U of MN) and

the University of Wisconsin School of Medicine and Public Health (UW SMPH) begins late spring, after the first year of training. Unlike previous years, in 2020, this transition occurred during the middle of a nationwide shelter-in-place. We needed to provide students with fieldwork training outside of the traditional clinical space which included maximizing still available opportunities and incorporating innovative methods. Standardized patients (SP) are one such example. Although SP are not novel to GC education, our programs had yet to take full advantage of our respective Simulation Centers in part due to: (a) the time required to create robust scenarios and, (b) Previous ACGC standards did not accommodate the use of SP for case acquisition. COVID changed the urgency with which we incorporated the flexibility provided by the revised ACGC standards that now allowed for inclusion of SP within the 50 required participatory cases. Early in the pandemic, the programs at the Universities of MN, WI, and MI connected and pooled cases developed for prior coursework and clinical supplementation. Connections between UW SMPH and U of MN went even further to develop the core elements into a set of more robust standardized patient experiences in prenatal, pediatric, and cancer. Focus was on consideration of diverse demographic variables and common, yet nuanced, psychosocial presentations.

Through this collaboration and sharing of materials, the UW SMPH and U of MN programs tailored these cases based on their respective summer clinical needs. Given that students at the U of MN program were not in clinic for the majority of the summer, they refined the cases into a set of six full, standardized genetic counseling sessions, and six shorter, focused role-plays. All twelve activities were used throughout an 8-week clinical preparatory summer course. Although students at UW SMPH had prior introductory clinical experiences pre-pandemic, in-depth fieldwork was to be delayed until July. Not wanting to lose the momentum of their clinical skills acquisition, collected materials were tailored into five full, telehealth standardized genetic counseling sessions with live supervision by certified genetic counselors, thus making them logbook eligible and emulating real clinic experiences. The remaining materials were refined into focused role plays that supplemented current materials used for incoming first year's students at both programs. Collaboration allowed quick development of these materials through a shared effort that was far less burdensome than each program working independently and resulted in a richer, more nuanced set of cases for all our students.

In addition to creating additional and more robust SP GC sessions, the U of MN program took advantage of this (rare) gift of time to move forward with needed coursework in professional development and developed a Professional Development Series to build student's self-awareness and self-efficacy. This course, developed by Dr. Ian MacFarlane, stresses communication, specifically, metacommunication and its relevancy towards student engagement in the relationship building process with fieldwork supervisors. While intended for the students at the U of MN students, there was immediate recognition of the lack of geographical barriers that typically prevents joint attendance but more importantly, the value of bringing students together with varied clinical experiences and backgrounds. Students from both UW

SMPH and UofMN virtually attended Dr. MacFarlane's workshop on *Supervision Dynamics and Reflective Practice* where they discussed how to make the most out of fieldwork supervision and their supervisory relationship through preparation, engagement and feedback with supervisors. Given their varied fieldwork experiences thus far in training, students from both programs were able to find common ground in how they were approaching their rotations through naming and normalizing anticipated successes and challenges in their clinical rotations.

## 2.2 | Academic-industry project

Collaboration went beyond training programs and included bringing together the needs of academia and industry. With the pandemic limiting resources for students to gain laboratory exposure, the UW SMPH program needed to replace a planned in-person laboratory experience with something "pandemic-friendly", which forced us, or perhaps in a more positive frame, allowed us to take time to reassess. The previously weeklong, in-person experience was cancelled and now positioned us to create an equally high caliber, yet virtual educational experience. What resulted was the "Build-A-Lab GC" module that came from a collaboration between the UW SMPH program and PreventionGenetics, an internationally known Wisconsin-based genetic testing laboratory.

A team comprised of UW SMPH instructional staff and students, and PreventionGenetics laboratory staff leveraged previous experiences and respective expertise. The instructional staff were deeply familiar with program laboratory experiences, and course content. Students provided input on what they hoped to gain from the experience which led to creation of specific learning objectives. The learning objectives and activities not only addressed stakeholders' educational needs and perceived content gaps, but also formally integrated and built upon concepts from the larger course curriculum, all while exposing students to new facets of laboratory genetic counseling and the genetic testing process. Intention was placed on ensuring background readings and outlined discussion topics and group work objectives complemented course curricula and enhanced learning. PreventionGenetics created materials for this intended audience and interested PhD staff recorded sessions, dedicated time for interactive sessions and created new content to meet objectives. Synchronous and asynchronous discussions were facilitated by experts in the field and complemented by remote content. Group work presentations and real-time topic discussions were facilitated by both PreventionGenetics PhD geneticists as well as clinical and laboratory GCs from both the MGCS program and PreventionGenetics. Ease of use for contributors outside of UW SMPH was maximized to minimize technology issues.

Like all quality newly or re-designed educational courses, we expect this to be an iterative process. Upon completion of the module, feedback was collected from students, staff, and faculty to evaluate its success and discuss how the module can evolve for the next cycle. Lastly, while this experience was created for the training of genetic counselors, PreventionGenetics was able to modify some parts of the created content to be used in an undergraduate course and workshop

that also needed to move to an online experience, thus meeting the needs of not only the UW SMPH learners, but learners beyond.

## 3 | GETTING CLOSER: WHY THIS MATTERS

Genetic counseling training programs found themselves in a state of crisis during the COVID-19 pandemic. Or did they? While there are many definitions of crisis, one used in the GC literature is as good as any i.e. "... a crisis is a period of disequilibrium and decreased functioning as a result of an event or situation that creates a significant problem which cannot be resolved by using familiar coping mechanisms." (Scheyett 2003, p. 378). While we would likely all agree we were unbalanced by an event that created a significant challenge, the notion that we were not capable of coping is debatable.

Our profession has a history of drawing upon our collective wisdom and resources through collegial and collaborative relationships with our colleagues. In our infancy, we relied heavily on each other (as programs and as individuals) to build a strong foundation for a profession that was on its own professional development journey. Also, collaboration as a practice is emphasized in many official documents of relevant national organizations including the AGCPD Mission Statement (AGCPD, 2020), the ACGC Practice-Based Competencies (ACGC, 2020) and the NSGC Code of Ethics (NSGC, 2017; Table 1). These statements are not just words on paper. AGCPD members share curriculums and teaching strategies. Students are trained to work as part of an interprofessional team. GCs give back to the profession through mentoring the next generation of counselors.

Collaborative relationships were also identified as a consistent theme in a recent literature review of strategies used by health professions training programs to confront workforce shortages by increasing fieldwork capacity (Berninger et al. 2020). It is noteworthy that genetic counseling literature relevant to this theme was non-existent. Not anymore. This commentary documents the power of collaboration to maintain (and even build) capacity during a global pandemic. The resilience of our community was fostered by a familiar strength-based approach which may, in some ways, seem reminiscent of the Reciprocal Engagement Model of Genetic Counseling Practice, in that the relationship is central and allows partnership between our individual programs to access our strengths and adapt to a disruptive/unprecedented situation (McCarthy Veach et al. 2007).

So, back to the question posed above - were we in a crisis? We think not, because while clearly unbalanced for a time, together we built from our respective strengths and emerged not only intact but perhaps even better.

### 3.1 | How are we better?

Beyond the maintenance of educational programming, didactic and clinical, the collaborative effort required for these experiences

**TABLE 1** Official genetic counseling documents emphasizing collaboration

Organization	Official document and relevant statements
Accreditation Council of Genetic Counseling (2020)	<i>Practice Based Competencies</i> Domain IV: Professional Development and Practice No. 22 <i>Establish and maintain professional interdisciplinary relationships</i> in both team and one-on-one settings, and recognize one's role in the larger healthcare system.
National Society of Genetic Counselors (2017)	<i>Code of Ethics</i> Section III: Genetic Counselors and their Colleagues <i>Share their knowledge</i> and provide mentorship and guidance for the professional development of other genetic counselors, employees, trainees and colleagues. <i>Respect and value the knowledge, perspectives, contributions, and areas of competence of colleagues, trainees and other professionals.</i>
Association of Genetic Counseling Program Directors (2020)	<i>Mission statement</i> The mission of the AGCPD is to promote collaboration between genetic counseling program directors to facilitate recruitment, admissions, education, and guidance of genetic counseling students and to nurture new program development.
Canadian Association of Genetic Counsellors (2012)	<i>Practice Based Competencies</i> <i>Domain 3. PROFESSIONALISM AND ETHICAL PRACTICE</i> <i>Core Competency 3.1 Collaboration and Interdisciplinary Teamwork</i> 3.1.2 <i>Establish and maintain professional relationships with key individuals, organizations and groups</i> to facilitate the provision of service. 3.1.3 <i>Seek, respect, consider and be receptive to the information and opinions of...collaborators.</i> 3.1.5 <i>Demonstrate effective interpersonal communication skills in collaborative and interdisciplinary practice.</i>

offered less-tangible benefits to programs, students, and our industry partner. Intangible, but no less valuable. A few that come to mind:

### 3.1.1 | Benefits to our students

- Students saw firsthand how programs (some might even say competitors) role-modeled successful collaborations.
- Students connected with others experiencing the same disruption in their professional training, therefore normalizing their anxiety and offering a space for wellness.

- This intentional networking, sharing of experiences, and just simple connectedness offered the students invaluable time to begin building collaborative relationships with future colleagues.

### 3.1.2 | Benefits to our programs

- Innovative training materials were created and incorporated into existing coursework and fieldwork. Innovation was more easily achieved given the power of group think.
- New relationships were formed for future collaboration and even more importantly and sorely needed during this time, friendships and connections were formed.
- Working together on a project brought some normalcy to a situation that was anything but normal thereby reducing anxiety among participants.

### 3.1.3 | Benefit to our non-academic partners

- Non-academic partners were able to utilize the materials developed for their own educational endeavors.
- Built relationships with clinical partners that opened more opportunities for non-academic partners to be involved in student training.
- Provided non-academic partner staff with professional development opportunities to build educational skills.

Overall, from these productive collaborations where didactic and fieldwork materials were developed, shared, refined, and tailored all while “six-feet apart” - came the question, “*Shouldn't we return to a time when collaboration and collective efforts were the norm?*”

## AUTHOR CONTRIBUTIONS

Krista Redlinger-Grosse was a major contributor to the development, writing of the fieldwork section, and revision of the commentary. Kimberly Anderson was a major contributor to the development, writing of the laboratory section, and revision of the commentary. Laura Birkeland was a major contributor to the development, writing of the fieldwork section, and revision of the commentary. Christina Zaleski was a major contributor to the development, writing of the laboratory section, and revision of the commentary. Catherine Reiser was a major contributor to the development, writing of the introduction and conclusion section, and revision of the commentary. All authors reviewed and approved the submitted manuscript.

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## COMPLIANCE WITH ETHICAL STANDARDS

### CONFLICT OF INTEREST

Krista Redlinger-Grosse, Kimberly Anderson, Laura Birkeland, and Catherine.

Reiser declare they have no conflict of interests. Christina Zaleski is an employee of PreventionGenetics, LLC.

### HUMAN STUDIES AND INFORMED CONSENT

This commentary is not original research and does not involve human participants.

### ANIMAL STUDIES

No animal studies were carried out by the authors for this article.

### DATA AVAILABILITY STATEMENT

This commentary is not original research with data availability.

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