

## Audrey Heimler Special Projects Award

### Project Directors:

Carrie Atzinger  
3333 Burnet Ave., ML 4006  
Cincinnati, OH 45229  
513-803-5249  
[Carrie.atzinger@cchmc.org](mailto:Carrie.atzinger@cchmc.org)

Katie Wusik  
3333 Burnet Ave. ML 4006  
Cincinnati, OH 45229  
513-636-2436  
[Katie.wusik@cchmc.org](mailto:Katie.wusik@cchmc.org)

### Title: Supervision Models in Current Genetic Counseling Supervision Practice

#### Project purpose:

The purpose of this project is to examine whether the content of genetic counseling supervision debriefing sessions between genetic counselor supervisors and genetic counseling trainees matches proposed models of supervision, including the Discrimination Model (DM) and the Reciprocal Engagement Model of Supervision (REM-S). Currently, no research exists that explores whether elements of these models are demonstrated in the supervision of genetic counseling students during training. Recognizing where these models fit current supervision practices and where they do not will help us refine existing theoretical models of supervision and provide guidance to genetic counseling supervisors. Ultimately, the successful training of future genetic counselors is critical to the field and to the patients and other clients we serve.

#### Statement of need and relevance of project to the Society and/or genetic counseling profession

Supervision is a key component of genetic counseling student training with the ultimate goal of moving students towards competence in the practice of genetic counseling (McCarthy Veach & LeRoy, 2009). Ultimately, the successful training of genetic counseling students impacts how these future professionals interact with patients and other clients and thus, is key to the future of the field. Theoretical models of supervision provide a framework that supervisors can use to develop and structure their approach to supervision to allow them to best serve the students they are supervising (Bernard & Goodyear, 2014). Supervision models also have the potential to provide consistency in training when applied by supervisors (Wherly et al., 2015). However, genetic counselors report that they most often learn to supervise through informal methods such as trial and error, so it is unclear whether or not genetic counseling supervisors knowingly or unknowingly apply models of supervision to their supervision practice (Atzinger et al., 2014; Lindh et al., 2003).

#### Models of Supervision

There are many models of supervision within the field of counseling psychology which focus on different aspects of supervision (Bernard & Goodyear, 2014). The Discrimination Model (DM) is one of the more flexible supervision models that may apply to genetic counseling (Bernard & Goodyear, 2014; McCarthy Veach & LeRoy, 2009). The DM was developed in 1979 by Bernard as a tool for teaching supervision (Bernard, 1979). It is a social role model that identifies different roles that a supervisor can assume in response to the needs of the supervisee and the supervision situation (Beinart, 2004). The roles

outlined in the DM are teacher, consultant, and counselor (Bernard, 1979). Others have suggested the addition of a fourth role of evaluator to this model (McCarthy Veach and LeRoy, 2009). Each of these roles can be used by the supervisor with three different foci – process, conceptualization, and personalization (Beinart, 2004). These foci can help supervisors categorize their observations of students in clinic, and can also provide a framework for structuring the feedback they provide after a session. Process (also called intervention) refers to basic techniques and strategies the student is using with a client (McCarthy Veach and LeRoy, 2009; Bernard and Goodyear, 2014). Conceptualization refers to the situation analysis and plan formation that the student is doing. Personalization refers to how the student is feeling or reacting to the situation including their overall comfort in clinic as well as attending to countertransference (Beinart, 2004; Bernard and Goodyear, 2014). Critiques of this model focus on the lack of inclusion of the supervisory relationship (Beinart, 2004).

Only one model of supervision has been proposed specific to the field of genetic counseling. The Reciprocal Engagement Model of Supervision (REM-S) was developed as a parallel to the Reciprocal Engagement Model of Genetic Counseling (REM) (Wherley et al., 2015). The authors suggest that structuring the supervision model around the unique process of genetic counseling represented in the REM provides a strong basis for training new professionals (Wherley et al., 2015). The REM-S has 3 main components: Education, Relationship, and Individual Attributes. These areas are described in 5 tenets: Tenet 1 “Learning and Applying Genetic Information are Key” (Education), Tenet 2 “Relationship is Integral to Genetic Counseling Student Supervision” (Relationship), Tenet 3 “Student Autonomy Must Be Supported” (Individual Attributes), Tenet 4 “Students are Capable” (Individual Attributes), and Tenet 5 “Student Emotions Make a Difference” (Individual Attributes). These tenets are further broken down into goals that support these tenets. The authors suggest that the REM-S can be used to standardize supervision practices and maximize desired supervision outcomes (Wherley et al., 2015).

#### GC Supervision Research

Up to this point, research on supervision in genetic counseling has focused primarily on self-report of supervisors. Live supervision has been found to be the most common supervision method used with genetic counseling trainees (Hendrickson et al., 2002; Lindh et al., 2003). Supervisors have been found to have higher perceptions of their own competence in supervision with formal training (Atzinger et al., 2014). In addition, supervision competencies in genetic counseling have been developed (Eubanks Higgins et al., 2013). Recently, a national study of 131 genetic counseling supervisors found that generally supervisors rated their self-efficacy as high for the supervision competencies related to goal setting and feedback (Finley et al., 2016). Several of these competencies could be seen as relating to aspects of the DM and REM-S though particularly those aspects related to student emotions, however, none of the competencies related directly to applying supervision models. At this time, no study has examined the content of supervision by recording actual supervision debriefing sessions between supervisors and trainees. In addition, no study has empirically explored how models of supervision are applied in genetic counseling. Thus, the purpose of the current study, as stated above, is to determine whether the content of genetic counseling supervision debriefing sessions matches elements of two supervision models, the DM and REM-S.

#### References:

Atzinger, C.L., Lewis, K., Martin, L.J., Yager, G., Ramstetter, C., Wusik, K. (2014). The impact of supervision training on genetic counselor supervisory identity development. *Journal of Genetic Counseling*, 23: 1056-1065.

Beinart, H. (2004). Chapter 3: Models of Supervision and the supervisory relationship and their

evidence base. In Fleming, I. & Steen, L. (Eds.), *Supervision and Clinical Psychology: Theory, Practice, and Perspectives*. Hove: Brunner-Routledge.

Bernard, J.M. (1979). Supervisor training: A discrimination model. *Counselor Education and Supervision*, 19(1): 60-68.

Bernard, J.M., Goodyear, R.K. (2014). *Fundamentals of Clinical Supervision*. Boston: Pearson.

Eubanks-Higgins, S., McCarthy Veach, P., MacFarlane, I.M., Borders, D., LeRoy, B., Callanan, N. (2013). Genetic counseling supervisor competencies: Results of a delphi study. *Journal of Genetic Counseling*, 22: 39-57.

Finley, S.L., McCarthy Veach, P., MacFarlane, I., LeRoy, B.S., Callanan, N. (2016). Genetic counseling supervisors self-efficacy for select clinical supervision competencies. *Journal of Genetic Counseling*, 25: 344-358.

Hendrickson, S.M., McCarthy Veach, P., LeRoy, B.S. (2002). A qualitative investigation of student and supervisor perceptions of live supervision in genetic counseling. *Journal of Genetic Counseling*, 11: 25-49.

Lindh, H.L., McCarthy Veach, P., Cikanek, K., LeRoy, B.S. (2003). A survey of clinical supervision in genetic counseling. *Journal of Genetic Counseling*, 12: 23-41.

McCarthy-Veach, P., LeRoy, B.S. (2009). Chapter 13: Student supervision: Strategies for providing direction, guidance, and support. In Uhlmann, W.R., Schuette, J.L., & Yashar, B.M. (Eds.), *A Guide to Genetic Counseling*. Hoboken: Wiley-Blackwell.

Wherley, C., McCarthy Veach, P., Martyr, M.A., LeRoy, B.S. (2015). Form follows function: A model for clinical supervision of genetic counseling students. *Journal of Genetic Counseling*, 24: 702-716.

#### **Program Plan, which should include the following:**

- **Goals/Specific Aims:**

1. Do genetic counseling supervisors demonstrate aspects of the REM-S or the DM in supervision debriefing sessions with genetic counseling students?
2. Which elements of the REM-S or DM are most frequently represented by supervisors in the supervision debriefing sessions genetic counselors have with genetic counseling students?
3. What elements of debriefing sessions that genetic counseling supervisors have with genetic counseling students do not fit the REM-S or DM?

- **Methods:**

All genetic counseling supervisors with clinical roles (N=38) and all students (N=25) for the University of Cincinnati/Cincinnati Children's Hospital Medical Center Genetic Counseling Program will be invited to participate in the study. Informed consent will be obtained from the supervisor and the student(s) they are supervising for clinical rotations. For the purposes of this study, debriefing sessions will be defined as interactions between a supervisor and student that take place after a clinical encounter for the purpose of discussing the patient encounter and/or providing feedback to the student. Only those

debriefing sessions in which both supervisor and student provide consent will be recorded. We conducted a preliminary feasibility survey of supervisors for the UC/CCHMC Genetic Counseling Program and found that 93% of supervisors who responded indicated that they would consider participating in the study, particularly if an outside transcription service was used. Similarly, we surveyed second year students and 100% of students who responded indicated they would be willing to participate in the study if an outside transcription service was used, though it is important to note that these are not the same students who will ultimately be enrolled in the study due to normal program turnover.

For each supervision pair that provides consent, supervisors will be asked to record the debriefing session that they have with the student after each clinical encounter. These sessions will be recorded with a handheld recording device that the supervisor can keep with them so that debriefing may be recorded as it would usually happen. The debriefing sessions may be formal meetings that are scheduled after a clinical encounter or may be more informal sessions that are held spontaneously with the student. The sessions may vary in length from just a few minutes to more extended feedback discussion of a half hour or more. For each debriefing session, the supervisor will be asked to complete a one page information sheet to collect the following information: specialty in which the patient was seen (adult, cancer, pediatrics, prenatal, other), student experience level (first vs. second year), years of experience of the supervisor, supervisor familiarity with supervision models, how long after the patient encounter the debriefing took place (in days and hours), about how long the debriefing session lasted (in minutes), and whether the debriefing session was scheduled or spontaneous.

All recordings will be transcribed by an outside service to protect the identities of the students and supervisors involved in the study. A non-disclosure agreement will be obtained with the transcription service so that any Protected Health Information (PHI) that is disclosed in these sessions is protected as required under HIPAA. In addition, PHI will be redacted from the transcripts before analyses.

- **Evaluation of Results:**

Analysis of the transcripts will use a mixed methods approach combining both qualitative and quantitative analyses as appropriate to each specific aim as outlined below:

Specific Aim 1: A multi-theory based qualitative analysis will be performed in which each transcript is coded independently according to the two supervision theories – REM-S and DM. Sensitizing concepts will be used for coding based on the REM-S and DM. Sensitizing concepts are those ideas that are brought by the researcher to the data rather than arising organically from the data itself. In this case, the sensitizing concepts are based on the two supervision theories. The transcripts will first be coded using the 5 tenets of the REM-S as sensitizing concepts. A codebook will be developed for these 5 tenets using the 16 goals underlying the tenets. In this approach, each supervisor statement of the transcript will be assessed to determine if it fits one of these sensitizing concepts. The transcripts will then be coded a second time using the 4 roles (including evaluator role) and 3 foci outlined in the DM as sensitizing concepts. A separate codebook will be developed for this analysis. In the end, each supervisor phrase will have been coded as part of the REM-S, DM, both models, or neither model. Each supervisor phrase will be matched to tenets (REM-S) and/or roles/foci (DM). A second coder will repeat the coding for a randomly selected sub-set of the transcripts so that a reliability rating for the coding can be calculated.

Specific Aim 2: A quantitative assessment of the coded transcripts will be done to determine how well the debriefing sessions match each model. Frequencies will be calculated to describe how often a debriefing session demonstrated each tenet (REM-S) and/or each combination of role/foci (DM). In

addition, across all transcripts, the percentage of words which represent neither model, represent each specific tenet of the REM-S and/or each combination of roles/foci of the DM will be calculated. Stratifying will be done if possible by level of experience of the student, level of experience of the supervisor, supervisor's familiarity with supervision models, area of practice, and whether the supervision was scheduled or spontaneous to assess whether patterns emerge. In addition, student phrases will be assessed if possible to determine if aspects of the models are more or less likely to follow specific student questions or statements.

Specific Aim 3: A qualitative analysis of the portion of the debriefing session transcripts that do not fit the REM-S and DM models will be completed. In this analysis, those portions of the transcripts that do not map to the REM-S or DM will be coded using inductive analysis where the themes arise from the data. This will allow for identification of aspects of supervision that are occurring outside of the present models of supervision.

- **Final Product:**

The finding from our project will contribute to the revision or reaffirmation of two existing supervision models and will be submitted for publication. In addition, it is hoped that this information will lead to strengthening of training for supervisors.

#### Projected timeline for completion of project

- July-August 2017 – IRB submission and approval
- August – September 2017 – recruitment of supervisors, consenting of supervisors, purchase and distribution of hand held recording devices
- September – December 2017 – recruitment of students, consenting of students, data collection
- October 2017 – January 2018 – transcription of recordings, data analysis for Aim 1
- January – February 2018 – data analysis for Aims 2 and 3
- March – May 2018 – manuscript preparation

	2017						2018					
	July	August	September	October	November	December	January	February	March	April	May	June
IRB submission and approval	■	■										
Supervisor Recruitment		■	■									
Purchase/Distribution Recording Devices		■	■									
Student Recruitment			■	■	■	■						
Data Collection			■	■	■	■						
Recording Transcription				■	■	■	■					
Data Analysis Aim 1					■	■	■					
Data Analysis Aim 2							■	■				
Data Analysis Aim 3								■	■	■		
Manuscript Preparation									■	■	■	
Manuscript Submission												■

#### Itemized budget and total amount requested, including in-kind contributions, when applicable.

A feasibility survey conducted with supervisors who might be a part of this study indicated that it is critical for the participants to be able to record debriefing sessions that happen on the spot. It is also important to the integrity of the data that debriefing sessions are recorded as they happen rather than supervision being modified to fit the study. Therefore, handheld voice recorders that supervisors in the study can keep with them are critical to the success of this study. In addition, supervisors and students indicated that they would be most likely to participate if transcription was completed by a third party to protect identities of those involved. Therefore, the main expenses for the study are voice recorders and

transcription services. The remaining budget is for software QDA Miner that allows for qualitative and quantitative analysis of text-based data.

<b>Budget Item</b>	<b>Itemized Cost</b>	<b>#/amount</b>	<b>Total Cost</b>
Handheld Recording Devices	\$40 each	20 (estimate based on number of supervisors that may potentially participate)	\$800
Transcription	\$2.00/min	~1500 minutes (this estimate is based on approximately 20 supervisors participating and each supervisor recording approximately 5 debriefing sessions that last about 15 minutes each)	\$3,000
QDA Miner	\$1,165	1 license	\$1,165
Coding and Data Analysis	in kind		0
Manuscript Writing	in kind		0
<b>Total</b>			<b>\$4,965</b>

**CV, Project Director(s):**

See attached