INNOVATIONS IN EDUCATION AND CLINICAL PRACTICE

Teambuilding and Leadership Training in an Internal Medicine Residency Training Program

Experience with a One-day Retreat

James K. Stoller, MD, MS, Mark Rose, MD, Rita Lee, MD, Colleen Dolgan, RN, MA,
Byron J. Hoogwerf, MD

OBJECTIVE: The purpose of this report is to describe and evaluate the impact of a 1-day retreat focused on developing leadership skills and teambuilding among postgraduate year 1 residents in an internal medicine residency.

METHOD: A group of organizers, including members of the staff, the chief medical residents, administrative individuals in the residency office, and an internal organizational development consultant convened to organize an off-site retreat with activities that would provide experiential learning regarding teamwork and leadership, including a "reef survival exercise" and table discussions regarding the characteristics of ideal leaders. In addition, several energizing activities and recreational free time was provided to enhance the interaction and teamwork dimensions of the retreat. To evaluate the impact of the retreat, attendees completed baseline and follow-up questionnaires regarding their experience of the retreat.

RESULTS: Attendees universally regarded the retreat as having value for them. Comparison of baseline to postretreat responses indicated that attendees felt that the retreat enhanced their abilities to be better physicians, resident supervisors, and leaders. Follow-up responses indicated significant increases in attendees' agreement that good leaders challenge the process, make decisions based on shared visions, allow others to act, recognize individual contributions, and serve as good role models. Results on the survival exercise indicated a high frequency with which team-based decisions surpassed individual members' decisions, highlighting the importance and value of teamwork to attendees.

CONCLUSIONS: Our main findings were that: participants universally found this 1-day retreat beneficial in helping to develop teamwork and leadership skills and the experiential

learning aspects of the retreat were more especially highly rated and highlighted the advantages of teamwork.

In the context that this 1-day retreat was deemed useful by faculty and residents alike, further study is needed to assess the impact of this learning on actual clinical practice and the durability of these lessons.

KEY WORDS: leadership; residency training; teambuilding.
J GEN INTERN MED 2004;19:692-697.

Teamwork and leadership are important components of effective medical practice. Indeed, the value of collaboration has been recently demonstrated in intensive care practice. Specifically, Clemmer et al.¹ have shown that creating a collaborative intensive care unit (ICU) environment was associated with preserving ICU mortality rates and with cost savings in the face of worsening patient acuity. Also, Baggs et al.² observed fewer medical ICU (MICU) admissions and a lower risk of death in units where nurses reported a positive collaborative environment with physicians.

Though the issue of teaching leadership and teamwork skills has received little formal attention, acquiring these skills is critically important to trainees as they advance and assume supervisory responsibilities for medical teams. To enhance residents' awareness of effective teamwork and leadership and to confer relevant skills to interns (postgraduate year 1 [PGY1]) who were about to assume junior resident (PGY2) responsibilities in our internal medicine residency, we conducted a full-day retreat with the explicit goals of: 1) Presenting the principles of effective leadership and teamwork; 2) Providing experiential activities that would develop these concepts and enhance participants' appreciation of effective teamwork and leadership skills; and 3) Evaluating participants' experience of the retreat in order to assess its impact and optimize future offerings.

The current report presents the structure and outcomes of this retreat. Specifically, to optimize this activity for future offerings and allow its use by others, we present the activities of the retreat and the residents' ratings before and then at the end of the day's activities, the outcomes

Received from the Division of Medicine, Departments of Pulmonary, Allergy, and Critical Care Medicine (JKS) and Endocrinology, Diabetes, and Metabolism (BJH); Internal Medicine Residency Program (MR, RL); and Cleveland Clinic Health System (CCHS) Center for Quality Leadership (CD), the Cleveland Clinic Foundation, Cleveland, Ohio 44195.

Address correspondence to Dr. Hoogwerf: Desk NA 21, Internal Medicine Residency Program, Cleveland Clinic Foundation, 9500 Euclid Avenue, Cleveland, OH 44195 (e-mail: hoogweb@ccf.org).

of teamwork metrics, and the insights developed by the residents regarding the principles of effective teamwork and leadership.

METHODS

Literature Review

To review the available literature regarding teamwork and leadership in medicine, we searched MEDLINE from 1966 to March 2003 using the following search terms: *leadership*, *teamwork*, *collaboration*, *medical education*, *interns*, and *residents*. Papers were reviewed by two of the authors (RL, MR) and selected when they addressed the issues of leadership and teamwork in medical trainees.

Development of the Retreat Day and Questionnaire

The intervention consisted of a full-day, off-campus retreat in which all current PGY1 residents convened in a shelter in a suburban park.

To assess participants' experience of the retreat, a questionnaire (Appendix, available at www.jgim.org) was designed using an ordinal scale to record responses. The questionnaire was distributed at the beginning and then at the end of the retreat day. The questions addressed the residents' perceptions about themselves as leaders, their ratings of each component of the retreat, and their understanding of leadership skills. The characteristics of effective leadership were those described by Kouzes and Posner in "The Leadership Challenge."³

The study was approved by the Investigational Review Board of the Cleveland Clinic Foundation. Statistical analysis was conducted using SAS (SAS Institute Inc., Cary, NC). Differences between the post- and prequestionnaire responses were compared using paired *t* tests, with values of $P < .05$ deemed statistically significant.

The Retreat Day

The retreat was organized as a series of activities, both structured and unstructured. First, to enhance group solidarity, a bus transported the residents to the retreat site from the Cleveland Clinic at 8:30 AM. Breakfast was provided at the retreat, during which the baseline component of the questionnaire was completed. After breakfast, a senior physician member of the internal medicine staff gave a brief introduction to the day by providing relevant examples of leadership. Next, a teambuilding simulated survival exercise was conducted, followed by a debriefing and a 90-minute recreational and lunch period during which various games (i.e., frisbee, basketball, and soccer) were available. After lunch, the group reassembled for a game of Pictionary (Pictionary, Inc., Seattle, Wash), followed by a team-based discussion of leadership principles, a summary discussion of the retreat outcomes, completion

of the postretreat questionnaire, a brief closing recreational period, and return by bus to the hospital at 3:30 PM.

Teamwork and Teambuilding Activity

To allow participants to evaluate their teamwork skills and to highlight the impact of effective teamwork, we organized an experiential activity in which team members were asked to respond to a commercially available, simulated survival exercise (Human Synergistics International, Plymouth, Mich). The survival situation presented a hypothetical survival challenge in which team members were shipwrecked on a reef and needed to elect a strategy (i.e., either stay on the reef and await help or leave on a raft to seek help) and to prioritize a list of equipment needed for the chosen strategy. Seven teams of four or five members each were assembled by the attendees' "counting off" from their self-selected breakfast groups. Because interns tended to have breakfast as groups of friends, this "count off" scrambled the group and allowed for unselected assignment of participants to each team. Individual team members were first asked to decide by themselves on a strategy and equipment priority list. After each member committed to an individual solution, each team developed a group strategy and equipment priority list. During the activity, the interpersonal and reasoning skills of each group was observed by the facilitators.

When the teams had completed their decision making, both individual and team strategies and choices about equipment were compared to those of a survival expert, whose "right" answers were provided with the exercise instructions. Individual and team scores were then calculated based on the degree of concordance with the survival expert; lower scores indicated greater concordance and higher scores greater discordance with the expert's choices. These analyses also determined whether the team choices were better than those of the individual team members and whether any individuals within the team performed better than the team as a whole. Team scores that were lower than the average individual score indicated that the team performed better on average than the individuals. Team scores that were lower than any individual member's score indicated that the team performed better than individual team members. If individuals on the team performed better than the team as a whole, this outcome suggested that the individuals' voices were not optimally heard or implemented.

By design, comparison of individual and team scores invited analysis of how the team performed. The facilitators analyzed each team's performance in a group debriefing and solicited comments regarding the characteristics of effective teamwork based on the teams' analyses of their performance. Specifically, members of each team were asked to highlight insights garnered from the activity regarding interpersonal or reasoning skills, effective teambuilding skills, and barriers to team synergy. The observers were also asked to share their observations of the teams' interactions and decision-making process and to evaluate the team scores within this context.

Pictionary

After lunch, an energizing group activity was conducted to refocus attention on teambuilding and leadership. For this activity, participants were regrouped by counting off by sevens. The facilitators (CD, JKS) then explained the rules of the parlor game Pictionary, and instructed teams that they would be competing to see which one could guess the word clue first. The same word was given to each of the teams, which selected one person to draw clues on a flipchart. When any team guessed the correct answer, they raised a flag so that the scorekeeper could see it. At the end of each round, a new team member was selected to draw a clue until each team member had a chance to draw a clue. After eight rounds, the winning team was announced. Next, the facilitators debriefed the activity by drawing a parallel between the engagement of team members in this activity and those of highly effective teams in a work setting.⁴ At the close of the activity, participants were invited to comment on their learning.

Group Review of Characteristics of Effective Leadership

The last formal activity of the retreat was a table discussion among participants about the attributes of effective leaders and a reporting out of personal experiences that demonstrated some of the leadership traits articulated by Kouzes and Posner in "The Leadership Challenge"³ (Table 1). Newly counted-off groups of seven were assembled and each group was assigned to discuss one of the five main

attributes of effective leaders described by Kouzes and Posner³ and then report out to the entire group personal experiences from the team members that exemplified the attributes.

RESULTS

Characteristics of Attendees

The mean age of attendees was 27.7 years old and 25% of the attendees were women. Thirty-two of the 40 current PGY1 residents (80%) attended and 96% of attendees responded to the questionnaire. Of note, results from two current PGY2 residents, who also attended and completed both a pre- and postretreat survey, were included.

The attendees were typical of our residency program, which has wide diversity among its residents. The Cleveland Clinic Foundation internal medicine residency program is comprised of 118 categorical residents and 20 preliminary residents. Within the categorical program, 54% are graduates of U.S. medical schools (from 41 different schools) and 46% of international medical schools (from 31 different schools). Among the last three graduating classes, the mean board pass rate has been 97% and more than two thirds of the graduates go on to subspecialty fellowship training; more than half of those not electing fellowship training accept academic appointments in teaching institutions.

Leadership Questionnaire

Of the 32 PGY1 residents who attended the retreat, 30 completed the baseline and follow-up questionnaires. One person partially completed the baseline questionnaire and fully completed the postretreat questionnaire. Another fully completed the baseline questionnaire but did not complete the follow-up questionnaire.

Survey responses were divided into two categories:

1. Residents' responses to questions regarding the retreat (after-before; Table 2).
2. Residents' perceptions of leadership traits (Table 3).

Overall, all attendees responded affirmatively to the postretreat question "Was the day valuable to you?"

Based on significant changes in residents' responses on the postretreat questionnaire (Table 2), attendees believed that the retreat enhanced their abilities to be better physicians, resident supervisors, and leaders.

Regarding the impact of the retreat on residents' perceptions of leadership traits, postretreat responses (Table 3) indicated significant increases in agreement that good leaders challenge the process, make decisions based on shared vision, allow others to act, recognize individual contributions, and serve as good role models.

Teamwork Survival Exercise

Table 4 presents the results of the seven teams' performance on the survival exercise. Notably, six of seven

Table 1. The Commitments of Leadership

1. Challenging the process
a. Search out challenging opportunities to change, grow, innovate, and improve.
b. Experiment, take risks, and learn from the accompanying mistakes.
2. Inspiring a shared vision
a. Envision an uplifting and ennobling future.
b. Enlist others in a common vision by appealing to their values, interests, hopes, and dreams.
3. Enabling others to act
a. Foster collaboration by promoting cooperative goals and building trust.
b. Strengthen people by giving power away, providing choice, developing competence, assigning critical tasks, and offering visible support.
4. Modeling the way
a. Set the example by behaving in ways that are consistent with shared values.
b. Achieve small wins that promote consistent progress and build commitment.
5. Encouraging the heart
a. Recognize individual contributions to the success of every project.
b. Celebrate team accomplishments regularly.

From reference 3, with permission.

Table 2. Residents' Responses Regarding the Value of the Retreat Activity (Mean (Standard Deviation))

Question	Pre	Delta (Post minus Pre) Response	P Value*
1. I believe that today's activities will help me to become a better resident supervisor.	4.74 (0.90)	1.15 (0.91)	<.001
2. I believe that today's activities will help me to become a better physician in general.	4.44 (0.70)	1.12 (0.74)	<.001
3. I believe that today's activities will help me to become a better leader in general.	4.74 (0.83)	1.09 (0.91)	<.001
4. I believe that today's activities are important for the CCF IM residency program.	5.53 (0.96)	0.61 (0.90)	<.001
5. I believe that today's activities are important for the CCF.	5.21 (1.04)	0.64 (0.78)	<.001
6. I believe that the CCF IM residency program is a model for good leadership skills.	4.97 (0.72)	0.79 (0.82)	<.001
7. I believe that CCF staff model good leadership skills.	5.06 (0.69)	0.45 (1.15)	.30

1 = absolutely disagree, 2 = strongly disagree, 3 = disagree, 4 = neutral, 5 = agree, 6 = strongly agree, 7 = absolutely agree.

* Paired t test.

CCF IM, Cleveland Clinic Foundation Internal Medicine.

teams chose the correct strategy of leaving the reef on a raft rather than staying on the reef to await help (Team 4). Mean scores for the individual members of the team were similar across all seven teams, with a mean ($\pm$ standard deviation [range]) of 38.6 ± 3.4 (35.5–45.8). Team scores were consistently lower than mean individual scores, where a lower score indicates greater concordance with the survival expert "gold standard." In four teams, the team score was lower than each of the team's members; in two teams, ≤ 2 individual members scored lower than the team and in one team (Team 4, which elected the wrong strategy to stay on the reef), each of the members' individual scores

was lower than the team's score. Notably, in debriefing Team 4, two of these team members originally opted to leave the reef but deferred to the opinion of the two who opted to stay.

In the debriefing session, several features of successful teams emerged. First, successful teams clearly defined their overall objective (e.g., survival) before starting to rank the items. Second, in successful teams, leadership changed during the course of the activity according to which member's ideas seemed most compelling at the time. Third, effective teams often identified leaders who facilitated discussion to assure that every member of the team had input.

Table 3. Residents' Perceptions of Leadership Traits (Mean (Standard Deviation))

Question	Pre	Delta (Post minus Pre) Response	P Value*
8. I believe that good leaders implement programs that do not involve significant change from the status quo.	3.36 (1.19)	-0.44 (1.58)	.13
9. I believe that the best leaders challenge the "current process."	5.00 (1.22)	0.69 (1.31)	.006
10. I believe that the best leaders are benevolent autocrats (make the decisions that others should follow).	3.12 (1.05)	-0.34 (1.36)	.16
11. I believe that the best leaders make decisions based on shared vision.	5.58 (1.03)	0.63 (1.07)	.002
12. I believe that the best leaders make excellent decisions that others should then follow.	3.97 (1.13)	-0.22 (1.31)	.35
13. I believe that the best leaders enable others to act (foster collaboration, give others power to act).	5.67 (0.82)	0.59 (0.91)	<.001
14. I believe that the best leaders can be effective without being good role models.	3.30 (0.49)	-0.72 (1.28)	.003
15. I believe that the best leaders are good role models for the people they lead.	5.76 (0.97)	0.53 (0.84)	.001
16. I believe that the best leaders are effective irrespective of whether they acknowledge the contributions of others.	2.73 (1.28)	-0.50 (0.80)	.001
17. I believe that the best leaders recognize individual contributions and any successes of the group.	5.97 (0.95)	0.38 (0.98)	.037

1 = absolutely disagree; 2 = strongly disagree; 3 = disagree; 4 = neutral; 5 = agree; 6 = strongly agree; 7 = absolutely agree.

* Paired t test.

Table 4. Summary of Results for Barrier Reef Game

Team number	1	2	3	4	5	6	7
Average individual score	38.6	37.2	36.6	35.5	39	37.5	45.8
Team score	28	34	36	44	30	16	26
Gain/loss score	10.6	3.2	0.6	-8.5	9	21.5	19.8
% change (divide gain or loss by average individual score)	27.5	8.6	1.6	-23.9	23.1	57.3	43.2
Lowest individual score	29	32	27	20	30	28	34
Number of individual scores lower than team score	0	1	2	4	0	0	0
Group decision to "go" or "stay"	"Go"	"Go"	"Go"	"Stay"	"Go"	"Go"	"Go"

In contrast to these success factors, Team 4, which wrongly opted to stay on the reef, based its decision on the opinion of one team member who reported having had survival experience, rather than weighing the views of other members with ideas but with less actual experience.

Characteristics of Effective Leaders Exercise

Each team reported real world examples from members' own experiences, both in medical and nonmedical contexts. These experiences were used to illustrate specific leadership traits as outlined by Kouzes and Posner³ (Table 1). We offer in greater detail one specific example that captures the ability of the exercise to elicit the residents' stories about leadership traits: one resident related a story that while in medical school, he proposed implementation of a United States Medical Licensing Examination (USMLE) board review course, which was declined by the administration. In then designing a course himself, he challenged existing policy and inspired a shared vision, as other students participated in offering the course. The course persists 5 years after his graduation.

DISCUSSION

Cultivating teamwork and leadership skills is an important adjunct to medical training that has received only sparse attention.⁵⁻⁹ In this context, we designed a retreat for incoming junior internal medicine residents (PGY1 about to become PGY2) at the Cleveland Clinic Foundation to help develop these skills. The main findings from the participants' assessment of the retreat were that participants:

1. Universally enjoyed the retreat and found it beneficial in identifying their needs and helping to develop their skills,
2. Rated most highly the experiential activities that examined teamwork and that reviewed the attributes of effective leaders,
3. Noted that in the survival exercise, teams almost uniformly performed better than individuals; this provided powerful support for the benefits of teamwork to attendees, and
4. Were able to cite many examples from their experience of excellent leadership that, in being recalled and

reported, were deemed helpful to set their own leadership standards.

In keeping with the importance of developing leadership and teamwork skills for physicians in practice and in training, several official groups have recently endorsed the value of such training for physicians. For example, the American Council on Graduate Medical Education (ACGME)⁹ has recently implemented a series of core competencies that include "interpersonal and communication skills," "practice-based learning and improvement," "systems-based practice," and "professionalism." These core competencies focus on the ability of physicians in training to work collaboratively with colleagues as well as with patients and hospital staff. Similarly, the American Academy of Pediatrics reported that collaboration and teamwork should be addressed in residency curricula.¹⁰ Finally, the Agency for Health Care Research and Quality and the American Board of Internal Medicine have emphasized collaboration as an important component of quality and improved patient safety.⁹

Our review of available literature regarding teamwork and leadership training identified several earlier reported experiences. For example, Wipf et al.⁵ provided an annual intern training course that was associated with improved teaching scores as measured by a standardized clinical teaching assessment form. While they addressed team leadership during the sessions, no assessment regarding the value of collaboration and teamwork was described. In a second study, Kasuya and Nip⁶ described an intern retreat where team management and other leadership skills were emphasized. Scores on a self-assessment survey showed that participants gained more confidence in their ability to lead a ward team and better appreciated their roles as team leader and manager. In a third study, McNair et al.⁷ described a 3-year program regarding primary care resident teamwork that is currently underway and from which results are forthcoming. In the business journal *Fast Company*, an example of the benefits of teamwork in medical practice has been recently reported in a description of the obstetrics service at Parkland Memorial Hospital.¹⁰ In keeping with the lessons conferred in our retreat by reviewing Kouzes and Posner's "The Leadership Challenge," the author cites the importance of modeling participative, nonhierarchical behavior, especially in the context of a highly structured team. Specifically, in mopping the floor to pitch in for the collective need, the soon-to-be fourth-year

resident states "I'm not too good to clean rooms, to mop floors, to take vital signs. And when a new intern watches me clean rooms, she'll say: 'If a fourth-year doc can do it, I can do it.'"⁸

In the context of the few available reports regarding teamwork and leadership training for house officers,⁵⁻⁷ our findings that the retreat was well-received and effective in enhancing trainees' knowledge of leadership and teamwork principles extends available experience. Our hope in describing this retreat and the outcomes we observed is to optimize the program and to offer an effective model for other training programs wishing to confer these skills to medical trainees.

At the same time, several shortcomings of this study warrant comment. First, while participants clearly indicated enhanced knowledge of principles and a heightened appreciation of the value of effective leadership and teamwork, our study neither assesses the impact of this learning on physicians' actual clinical practice nor the durability of these insights. We imagine several strategies to address the extent and durability of the impact of the retreat, namely: 1) by conducting a follow-up (but different) survival exercise with the same cohort of house officers to assess any incremental performance as teams, and 2) polling the group later in their PGY2 regarding their impressions about the sources and nature of their learning about teamwork and collaboration. Second, because this experience is based on only a single cohort of residents in a single training program, its generalizability to other residents or to other settings is uncertain. Our hope is that our continued experience and others' adopting similar programs will help clarify the value of this intervention.

In summary, we report the design and results of a 1-day retreat for PGY1 internal medicine residents designed to improve leadership and teambuilding skills. Feedback from participants suggested that the retreat was successful in developing the principles of effective leadership and teamwork and in helping to confer these skills. Still, further study is needed to assess the impact of this training on house officers' supervisory and clinical performance and to assess the durability and generalizability of this training experience.

REFERENCES

1. Clemmer TP, Spuhler VJ, Oniki TA, Horn SD. Results of a collaborative quality improvement program on outcomes and costs in a tertiary critical care unit. *Crit Care Med*. 1999;27:1768-74.
2. Baggs JG, Ryan SA, Phelps CE, Richeson JF, Johnson JE. The association between interdisciplinary collaboration and patient outcomes in a medical intensive care unit. *Heart Lung*. 1992;21:18-24.
3. Kouzes J, Posner B. *The Leadership Challenge*. San Francisco, Calif: Jossey-Bass; 1995.
4. Parker G. *Team Players and Teamwork: The New Competitive Business Strategy*. San Francisco, Calif: Jossey-Bass; 1990.
5. Wipf JE, Pinsky LE, Burke W. Turning interns into senior residents: preparing residents for their teaching and leadership roles. *Acad Med*. 1995;70:591-6.
6. Kasuya RT, Nip IL. A retreat on leadership skills for residents. *Acad Med*. 2001;76:54.
7. McNair R, Brown R, Stones N, Simms J. Rural interprofessional education: promoting teamwork in primary health care education and practice. *Aust J Rural Health*. 2001;(suppl 1):S19S-26.
8. Fishman C. Miracle of birth. *Fast Company*. 2002;63(October):106-14.
9. Halpern R, Lee MY, Boulter PR, Phillips RR. A synthesis of nine major reports on physicians' competencies for the emerging practice environment. *Acad Med*. 2001;76:606-15.
10. Eileen JK, Jackson JC, Kratz L, et al. Teaching professionalism to residents. *Acad Med*. 2003;78:26-34.

Appendix

A (before retreat activities)

Number

1. I believe that today's activities will help me to become a better resident supervisor.

Absolutely Disagree	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Absolutely Agree
☐	☐	☐	☐	☐	☐	☐

2. I believe that today's activities will help me to become a better physician in general.

Absolutely Disagree	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Absolutely Agree
☐	☐	☐	☐	☐	☐	☐

3. I believe that today's activities will help me to become a better leader in general.

Absolutely Disagree	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Absolutely Agree
☐	☐	☐	☐	☐	☐	☐

4. I believe that today's activities are important for the CCF IM residency program.

Absolutely Disagree	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Absolutely Agree
☐	☐	☐	☐	☐	☐	☐

5. I believe that today's activities are important for the Cleveland Clinic Foundation.

Absolutely Disagree	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Absolutely Agree
☐	☐	☐	☐	☐	☐	☐

6. I believe that the CCF IM residency program is a model for good leadership skills.

Absolutely Disagree	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Absolutely Agree
☐	☐	☐	☐	☐	☐	☐

7. I believe that CCF staff model good leadership skills.

Absolutely Disagree	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Absolutely Agree
☐	☐	☐	☐	☐	☐	☐

8. I believe that good leaders implement programs that do not involve significant change from the status quo.

Absolutely Disagree	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Absolutely Agree
☐	☐	☐	☐	☐	☐	☐

9. I believe that the best leaders challenge the “current process.”

Absolutely Disagree	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Absolutely Agree
☐	☐	☐	☐	☐	☐	☐

10. I believe that the best leaders are benevolent autocrats (make the decisions that others should follow).

Absolutely Disagree	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Absolutely Agree
☐	☐	☐	☐	☐	☐	☐

11. I believe that the best leaders make decisions based on shared vision.

Absolutely Disagree	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Absolutely Agree
☐	☐	☐	☐	☐	☐	☐

12. I believe that the best leaders make excellent decisions that others should then follow.

Absolutely Disagree	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Absolutely Agree
☐	☐	☐	☐	☐	☐	☐

13. I believe that the best leaders enable others to act (foster collaboration, give others power to act).

Absolutely Disagree	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Absolutely Agree
☐	☐	☐	☐	☐	☐	☐

14. I believe that the best leaders can be effective without being good role models.

Absolutely Disagree	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Absolutely Agree
☐	☐	☐	☐	☐	☐	☐

15. I believe that the best leaders are good role models for the people whom they lead.

Absolutely Disagree	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Absolutely Agree
☐	☐	☐	☐	☐	☐	☐

16. I believe that the best leaders are effective irrespective of whether they acknowledge the contributions of others.

Absolutely Disagree	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Absolutely Agree
☐	☐	☐	☐	☐	☐	☐

17. I believe that the best leaders recognize individual contributions and any successes of the group.

Absolutely Disagree	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Absolutely Agree
☐	☐	☐	☐	☐	☐	☐

B (after retreat activities)

Number

1. I believe that today's activities will help me to become a better resident supervisor.

Absolutely Disagree	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Absolutely Agree
☐	☐	☐	☐	☐	☐	☐

2. I believe that today's activities will help to become me a better physician in general.

Absolutely Disagree	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Absolutely Agree
☐	☐	☐	☐	☐	☐	☐

3. I believe that today's activities will help me to become a better leader in general.

Absolutely Disagree	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Absolutely Agree
☐	☐	☐	☐	☐	☐	☐

4. I believe that today's activities are important for the CCF IM residency program.

Absolutely Disagree	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Absolutely Agree
☐	☐	☐	☐	☐	☐	☐

5. I believe that today's activities are important for the Cleveland Clinic Foundation.

Absolutely Disagree	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Absolutely Agree
☐	☐	☐	☐	☐	☐	☐

6. I believe that the CCF IM residency program is model's good leadership skills.

Absolutely Disagree	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Absolutely Agree
☐	☐	☐	☐	☐	☐	☐

7. I believe that CCF staff model good leadership skills.

Absolutely Disagree	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Absolutely Agree
☐	☐	☐	☐	☐	☐	☐

8. I believe that good leaders implement programs that do not involve significant change from the status quo

Absolutely Disagree	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Absolutely Agree
☐	☐	☐	☐	☐	☐	☐

9. I believe that the best leaders challenge the “current process.”

Absolutely Disagree	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Absolutely Agree
☐	☐	☐	☐	☐	☐	☐

10. I believe that the best leaders are benevolent autocrats (make the decisions that others should follow).

Absolutely Disagree	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Absolutely Agree
☐	☐	☐	☐	☐	☐	☐

11. I believe that the best leaders make decisions based on shared vision.

Absolutely Disagree	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Absolutely Agree
☐	☐	☐	☐	☐	☐	☐

12. I believe that the best leaders make excellent decisions that others should then follow.

Absolutely Disagree	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Absolutely Agree
☐	☐	☐	☐	☐	☐	☐

13. I believe that the best leaders enable others to act (foster collaboration, give others power to act).

Absolutely Disagree	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Absolutely Agree
☐	☐	☐	☐	☐	☐	☐

14. I believe that the best leaders can be effective without being good role models.

Absolutely Disagree	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Absolutely Agree
☐	☐	☐	☐	☐	☐	☐

15. I believe that the best leaders are good role models for the people whom they lead.

Absolutely Disagree	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Absolutely Agree
☐	☐	☐	☐	☐	☐	☐

16. I believe that the best leaders are effective irrespective of whether they acknowledge the contributions of others.

Absolutely Disagree	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Absolutely Agree
☐	☐	☐	☐	☐	☐	☐

17. I believe that the best leaders recognize individual contributions and any successes of the group.

Absolutely Disagree	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Absolutely Agree
☐	☐	☐	☐	☐	☐	☐

18. I believe that today was valuable to me as a resident

Absolutely Disagree	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Absolutely Agree
☐	☐	☐	☐	☐	☐	☐

19. I believe that today was valuable to me for my life in general

Absolutely Disagree	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Absolutely Agree
☐	☐	☐	☐	☐	☐	☐

20. Please rate the learning quality of today's retreat for you.

Excellent	Very good	Good	Fair	Poor
☐	☐	☐	☐	☐

21. Please list in order (from highest to lowest) the parts of the day for you (i.e., the specific activities that most contributed to your experience of this retreat.

Contributed most to my experience: _____

Contributed least to my experience: _____

The 3 most valuable things I learned today were:

1.

2.

3.

General Comments on today's activities

(Please place this questionnaire in box separate from pre-/post-questionnaires).

Was the day valuable to you?

What was the most valuable item/activity?

What as the least valuable item/activity?

What could the IM residency do to make activities like this more valuable?

If you were "leading" the next IM residency retreat, what would you do?

Other comments: