Editorial Comment

N. Paul Ohori, MD

In this issue of the ASC Cytopathology Program Directors Communicator, we start with an overview of the Strategies in Cytopathology Education sessions at the upcoming Annual ASC Scientific Meeting. This is followed by a first in an occasional series entitled “Recommended Readings for Program Directors,” featuring briefs reviews of an item in the literature that may be of interest to Program Directors—here Dr. Morency recommends a helpful resource on crafting and interpreting high yield letters of recommendation. Next, Innovative Practices highlights the Memorial Sloan Kettering Cancer Center telecytology experience. Finally, this issue concludes with updates on the ASC PD website and resources for Cytopathology Board preparation.

Attend Strategies in Cytopathology Education at the Annual Scientific Meeting!

Paul N. Staats, MD, Elizabeth Morency, MD, Saeed Asiry, MBBS, and Roseann Wu, MD, MPH

The American Society of Cytopathology (ASC) Cytopathology Program Directors’ Committee is thrilled to offer another exciting and educational Strategies in Cytopathology Education session at the ASC Annual Scientific Meeting, and we hope to see you there. The program should be well suited to Cytopathology program directors and anyone involved in residency/fellowship training. Please note that this year the ASC Meeting schedule has changed, and the Strategies session has moved to Saturday morning, so book your flight accordingly. As it has been for the last few years, the Strategies session is free with meeting registration, but it is subject to space limitations, so please register early!

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Strategies in Cytopathology Education, continued

Last year Heather Barnes, MA, Director of the Aquatic Show and Live Programs at the Shedd Aquarium in Chicago, led us through a series of improv and theater exercises with applications for communication and teaching. This interactive, fun session was very well received by participants, but a common thread was a desire for some direct means of applying these lessons to fellowship training. So this year, we will show you how to apply these exercises to residency and fellowship training in practical ways. Kristen Atkins, MD, Director of Residency Training at the University of Virginia, has been incorporating improv into medical and graduate student, resident, and fellowship programs for the past two years. Kristen and Heather Barnes will show you real life examples where directing and improv blend to create a more meaningful platform for feedback, teach house staff to teach, and coach trainees for poster and platform presentations. We are very excited to have Kristen and Heather back to lead this can’t-miss session!

The second half of the program is devoted to the ACGME Self-study process. The ACGME Self-study process is the capstone of the 10-year ACGME accreditation cycle and an opportunity to evaluate and improve your fellowship program — to “take it to the next level.” Many programs have recently undergone or are about to undergo this process. Ingrid Philibert will lead this highly interactive session to get you started on the path to evaluating your own program. A panel of Cytopathology program directors will also be on hand to answer your questions about the process. Whether you have recently been through the process or are about to do so, we hope this session will help you in your quest to continuously improve your training program.

We hope to see you in November at the ASC Annual Scientific Meeting in Washington, DC. Whether you are a program director, a program faculty member, or just interested in a fun and educational experience, make sure to make this great Strategies in Cytopathology Education Session a part of your meeting plans!

Recommended Readings for Program Directors

Words matter! A helpful resource on how to craft and interpret high yield letters of recommendation

Elizabeth Morency, MD

A recent national cross-sectional survey of members of the Association of Pediatric Program Directors including fellowship, residency and associate program directors (PDs) performed by Saudek, et al titled “Dear Program Director: Deciphering Letters of Recommendation” published in the June issue of the Journal of Graduate Medical Education sought to identify the relative importance of 1) selected letter of recommendation (LOR) features, 2) applicant attributes and 3) perceptions invoked by certain key phrases common in LORs. Senior pediatric residency and fellowship PDs created individual lists of specific letter features, applicant abilities and commonly used phrases, and the ones that achieved consensus were selected and utilized to make a final survey composed of 13 letter features, 10 applicant abilities and 11 phrases. The survey was sent out to 1079 pediatrics PDs with a response rate of 43% (468). They were asked to rate the lists on a 5-point Likert scale (either; 1, not at all important to 5, very important OR 1, very negative to 5, very positive). Of the 13 letter features, the top 3 in order of importance included, “depth of interaction with applicant,” “specific traits of applicant,” and “applicant’s abilities.” Differences were noted between fellowship versus residency PDs, with fellowship PDs finding 1) highlighting applicant participation in research, 2) involvement in program/hospital activities, 3) academic rank of the letter writer and 4) length of the letter (4 paragraphs or more) being significantly more important than residency PDs. Of the 10 applicant abilities included in the survey, the top 3 included, “work ethic.” “trustworthy” and “team player.” (continued next page)
Finally, among the letter phrases that resonated most with PDs, some of the highest rated included, “would like the applicant to stay at institution,” “will be an asset to any program” and “I highly recommend.” Negative phrases included, “showed improvement” and “performed at expected level.” So words matter! In the interest of brevity, I will wrap up this review here and encourage you to read the article and review all 34 of the listed letter features, applicant abilities and commonly used phrases. There is a global lack of formal training for academic faculty in the art of composing a well-crafted LOR that most accurately conveys our assessment and perception of the applicant as well as interpreting potential code in the LORs that we review, and we could use a little help in that department. We all participate in the interview process and are asked to compose LORs for medical students and trainees at all levels, so I highly recommend (see what I did there!) this article (found at http://www.jgme.org/doi/pdf/10.4300/JGME-D-17-00712.1) to anyone looking to improve their LOR writing and interpretation skills, because it certainly gave me a new perspective on how to best compose and assess LORs moving forward.

Innovative Practices in Cytopathology

The Memorial Sloan Kettering Cancer Center Telecytology Experience

Jennifer L. Sauter, MD, Darren J. Buonocore, MD and Jean-Marc Cohen, MD

An innovative practice in cytopathology education implemented in the cytopathology fellowship training program at Memorial Sloan Kettering Cancer Center (MSKCC) is the utilization of telecytology for performance of rapid on-site evaluation (ROSE). This technology allows fellows to perform ROSE while an attending pathologist reviews the case off site in real time.

Telecytology was implemented at MSKCC in response to increased demand to have a cytopathologist perform real-time adequacy on touch preparations of core needle biopsies and fine needle aspirations (FNAs). Previously at MSKCC, ROSE was performed by cytotechnologists (CTs). However, interventionalists wanted involvement of attending cytopathologists who could provide advice with how to proceed at the time of adequacy assessment. As such, at the time of procedure, the cytopathologist not only comments on whether the specimen is adequate, but also indicates the best collection medium required to make a diagnosis and evaluates for suitability for molecular testing. Though performing adequacy is typically time intensive, telecytology allows one attending to simultaneously view cases in multiple procedure rooms. Currently, cytopathologists at MSKCC perform approximately 30 to 40 ROSE assessments at multiple procedure sites each day.

The telecytology technology used at MSKCC is a system from Remote Medical Technologies. A camera attaches to the microscope in the procedure room and, via a secure server, live streams high resolution images to the attending pathologist on a desktop or mobile device. The fellow prepares the slides in the procedure room and notifies the pathologist via the Vocera communication system, a secure wireless communication platform. The fellow independently screens the slide and then drives the slide on the microscope to display the cells of interest to the attending pathologist. Cytopathology fellows perform ROSE for approximately 6-10 patients each day on the adequacy service.

The use of telecytology for ROSE in cytopathology fellowship training is a good method for developing the skill and judgement required to identify key cytomorphologic features in a time limited situation. Throughout the fellowship year, telecytology is a useful tool for implementing graduated responsibility. (continued next page)
Innovative practices in cytopathology, continued

When cytopathology fellows first begin performing ROSE, a cytotechnologist (CT) accompanies them in the procedure room to provide support with screening the slide. As fellows gain experience with ROSE, they gradually gain independence. In the procedure room, they independently communicate with the clinical team throughout the procedure. As they progress, fellows screen slides independently, forming their own opinions before selecting areas to show the attending who can provide feedback as needed. This process allows the fellows to build confidence while maintaining a close security net. With telecytology, the fellow can act independently, but with an attending always present, albeit remotely, to observe and intervene when appropriate. Interactions between attending pathologists and fellows via telecytology form a mechanism for evaluating a fellow’s progress throughout the year.

Near the end of the fellowship year, the fellows flip roles and view ROSE remotely with an attending pathologist while a CT performs the adequacy assessment onsite. During this time, fellows learn the nuances of communicating effectively with another professional who is driving the slide to achieve an accurate assessment. This aspect of the fellowship training program provides fellows with experience interpreting slides remotely via telecytology.

We have received excellent feedback from our fellows regarding their ROSE training at MSKCC with telecytology. This experience provides in depth knowledge of this new technology including its advantages and limitations. With this training, fellows gain the autonomy they need for independent practice while also receiving real time support and feedback from attending pathologists as needed. Fellows have commented on the confidence they gain throughout the fellowship year because of the independent decision making skills they develop with the use of telecytology in their training. Proficiency in telecytology is an important skill that will become even more useful in the future as this technology is more widely implemented by cytopathology practices.

Visit the Updated ASC Program Directors’ Website

Chris Jensen, MD, Lisa Zhang, MD, Elizabeth Kurian, MD, Paul Staats, MD

The job of a program director (PD) can be very rewarding but also demanding and at times a little confusing with the competing demands of service and education on top of ACGME/RRC accreditation requirements. Having necessary resources and information in one easily-accessible location can help with efficiency and potentially alleviate confusion. The Cytopathology Program Directors Committee (CPDC) works to assist cytopathology fellowship PDs in improving the quality of fellowship education and complying with the ACGME/RRC program requirements. To that end, the CPDC has recently updated the Cytopathology Fellowship Program web page. The web page is available to both ASC members and nonmembers and can be accessed at the following URL (https://www.cytopathology.org/cytopathology-fellowship-programs/) or through the RESOURCES button on the right side of the ASC Home page, followed by the Cytopathology Fellowship Program link.

We have updated and reformatted the web page to make it more useful and organized. Links have been checked and updated, with the most important links at the top of the page. PDs and trainees (i.e. fellows and residents) can find links to a variety of education resources provided by the ASC including eJournals and Cell Talks. Fellows can access the required ACGME Case Log system. PDs can find links to a variety of pertinent ACGME resources, including the accreditation data system (ADS), current program requirements, and the pathology review committee page (RRC), which has links to pathology-specific information. Fellows and PDs will both be interested in new resources linked under Other Resources including an article about transitioning from fellowship to the first job and a recent summary of job prospects for graduates. The former comes highly recommended by our current (continued next page)
Visit the ASC Program Directors’ Website, continued

CPDC fellow member and may be a timely resource for PDs to share with new fellows starting in July. Finally, PDs can find links to handouts from past ASC Strategies in Cytopathology Education Sessions and past CPD Communicator articles. The committee hopes you will find these updates helpful and welcomes feedback on additional changes or other resources that would be helpful to you.

ASC Resources to Prepare Fellows for the Cytopathology Boards (and Life)

Aileen Grace P. Arriola, MD and Diane Kowalski, MD

Performance on the PEC exam has been shown to positively correlate with performance on the written and practical sections of the ABP sub-specialty cytopathology examination.\(^1\) Hence, these results are a good starting point in evaluating a fellow’s medical knowledge and readiness for the ABP certifying exam. Program directors can use the information on their fellows’ deficiencies as a guide on how to best prepare them for the boards and inspire the implementation of innovative teaching strategies to address these deficiencies throughout the training year.

One of the areas needing more focus during fellowship training is laboratory operations, as highlighted by the study of Davey et al. where authors noted both significantly lower mean scores and high coefficient of variation in the laboratory operations section of the PEC exam.\(^1\) According to the Cytopathology Exam Blueprint provided on the ABP website, laboratory administration, management, techniques and procedures accounts for a third of the written section of the exam. Although laboratory management carries significant weight on the boards and in real practice, fulfilling this competency gap is a known persistent problem in trainee education.\(^2\)

ASC membership provides access to valuable resources that complement board preparation strategies offered by individual programs and is especially useful in fulfilling gaps in laboratory management. Some of the ASC educational resources that can be utilized by cytopathology fellows as they prepare for the boards are detailed below.

1. Cell Talks. Cell Talks, initiated by the ASC Cytopathology Program Directors’ Committee, are online learning modules that educate trainees on various topics in cytopathology as based on ACGME Milestones. Each talk includes a 10-15 minute presentation accompanied by 3-5 assessment questions. Some of the available Cell Talk topics relevant to laboratory management and operations include Cytotechnologist Performance Evaluation, ThinPrep Imaging System for Cervical Screening, and Cytology Proficiency Testing, among others. Cell Talks can be accessed through the ASC CytoCE center.\(^3\) With the help of a mentor, fellows may even contribute their own Cell Talk to the ASC. Preparation of a Cell Talk reinforces material that is not readily available in a textbook and is certainly an educational endeavor on its own. To submit a Cell Talk, please visit here\(^4\) for instructions.

2. Case Studies. Case Studies provide an interactive distance-learning experience to interesting cytopathology cases. They include a clinical history, images, assessment of diagnosis in multiple-choice format, followed by a discussion with references. Fellows can transform everyday interesting cases into an online interactive experience by submitting their own Case Study with the help of a mentor. This activity helps reinforce knowledge of the cytomorphology and differential diagnosis on a case. Existing Case Studies can be accessed through the ASC CytoCE center,\(^3\) and to submit a case, please visit here\(^5\) for instructions. (continued on next page)
ASC Resources, continued

3. The ASC Cytopathology Program Directors’ Committee has compiled a list of resources for trainees on laboratory management. The document can be accessed here.³

4. The ASC Clinical Practice Committee created a guideline on Troubleshooting Issues in Cytopreparation. This guideline can be accessed here.⁴

5. Online Atlas for Bethesda System for Reporting Cervical Cytology. The ASC has created an online atlas with hundreds of instructive images of cervical cytology. This online atlas is a companion to the print atlas and each image includes explanatory text. There is even a self-test section which fellows can use to assess their own competence on GYN cytology. The website can be accessed here.⁵

6. E-Journal and the Journal of the American Society of Cytopathology (JASC). e-Journal is a continuing educational activity reviewing relevant cytopathology articles from JASC. A recent article published in JASC by Nayar and colleagues provides an in-depth summary of laboratory management topics that every graduating cytopathology fellow should be familiar with. This article is a must-read for program directors, and can be accessed here.⁶

These helpful resources are all available for free to any ASC member, including fellows, so encourage your fellows to join the ASC at the reduced fellow rate.

Dr. Arriola is a Cytopathology Fellow at MD Anderson Cancer Center. Dr. Kowalski is Associate Professor of Pathology and Director of the Pathology and Laboratory Medicine Residency and Cytopathology Fellowship programs at Yale School of Medicine. Both are members of the ASC Membership Committee.

References: