

Cyto Paths

A Communication of the International Academy of Cytology
A Supplement to *Acta Cytologica*
September-October 1996 • Volume 40, Number 5

Cytology in South Africa

Organized cytopathology in South Africa, **The South African Society for Clinical Cytology (SASCC)**, survived the international academic boycott against South Africa during the apartheid era, partly by its liaison with the IAC and perhaps through the low-profile posture of its membership. The end of apartheid released cytology to international access and exchange of ideas, expert educational opportunities and cultural-scientific interplay. The thirty-year-old society stood ready to make its mark on the health care of its liberated nation. Under the leadership of its president, Dr. Bryan Kenyon Knight, the society focused during 1993-1995 on key reform issues influenced or mediated by cytology. The most important achievement was progress towards implementation of an External Quality Assurance Scheme in co-venture with *Thistle*, a commercial company, committed to the collation of archival cytology slides suitable for proficiency testing. A cherished derivative of the QA Scheme is the anticipated establishment of a centralized archive of cytology material retained as the property of the society for quality assurance, licensure, certification and training, along with a College of Cytology as a credentialing-competency assessment venue for the

diverse categories of cytology practitioners which include cytotechnologists, general medical doctors, gynecologists and pathologists. South Africa's excursion into international cytology and the warm reception of foreign practitioners to its evolving expertise is underscored by the extraordinary success of the **8th Triennial Conference** in Cape Town



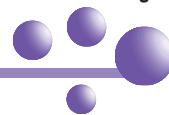
Highlights

- Bryan Kenyon Knight
- Gladwyn Leiman
- Art in Medicine



which focused on health care reform to reduce medical costs and provide mass population screening of women. Experts from nations beyond South Africa's borders attracted an enthusiastic and receptive audience. The most important issue

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the SASCC faces is a proposed National Screening Program rooted in a suggestion by the 1985 Minister of Health, Dr. Willie van Niekerk, that the government should fund three *free* Papanicolaou smears during the lifetime of every woman in South Africa. This concept is in line with the WHO recommendations for third world countries. Although it appears obviously restrictive and inadequate, it is better than the alternative of no screening at all. The Women's Health Forum based at the University of the Witwaterstrand in Johannesburg has reactivated this concept which is supported by numerous non-governmental organizations, by the current Minister of Health and two activists from the SASCC Council, incoming president

Shân McCallum and Judy Whittaker. The role that cytologists will play in this scheme is of paramount importance. In South Africa, there is the juxtaposition of developed and underprivileged worlds needing health care at prohibitive costs with a cultural dichotomy that will be difficult to transcend. Cytology will make its inroads. The International Congress of Cytology in 2004 will be hosted by South Africa with pride in its incomparable Cape Town which also hopes to attract the Olympic games. The conference will emphasize the theme *Where the First and Third Worlds Meet*, perhaps the place where cytology's torch will be transferred to an inspired new front runner.

Screening for Cervical Cancer in South Africa

Shân M. McCallum, M Med Sci, CFIAC, President SASCC

Cancer of the cervix is taking an unacceptable toll of South Africa's women who are the stabilizing influence in the home, active in their communities and essential to the country's successful progress. Particularly disturbing is the significant trend in incidence and rapid

development of the disease in younger women with deaths between the ages of 25 and 30 not uncommonly recorded. Teenagers present with significant CIN within short intervals of onset of sexual activity. This rapid development is unexplained but may be linked to epithelial and/or immune system

immaturity; the effect of the prevalence of the human immunodeficiency virus, currently exceeding 20% in local antenatal clinics, is unknown, but the virus could represent an accelerator in the

progression of premalignant to malignant disease. The necessity for mass screening of women for cervical cancer and related genital disease is undisputed, but there are seemingly monumental impediments to the implementation of an effective screening program. The number of non-medically trained and registered cytology personnel available to serve a total population of 37 million is 195 cytotechnologists and 88 cytotechnicians, not all of whom are currently practicing. This force is inequitably distributed primarily to medical and university centers, and workloads are uneven. No formal specialty qualification exists for pathologists; cytology is subsidiary to the histopathology curriculum. The inordinate teaching responsibilities of the major centers divert personnel from



Shân M. McCallum

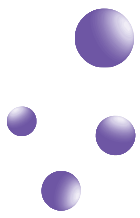
diagnostic to educational assignments, reducing screening productivity.

Comments referable to an effective screening program are based on my experience in running the KwaZulu-Natal regional cytology service, responsible for a population of 8.5 million within an area approximately the size of England. Within this region are several private cytology laboratories and a unit run by the National Cancer Association, for a combined Pap smear productivity of 220,000 annually. Our unit provides a cytology service for 33 hospitals and 39 clinics which play a major role in women's health and family planning. Roads and transport in the less developed areas are extremely unreliable, even when rivers are not in flood, and 4-wheel drive vehicles are required to reach women who cannot afford the busfare to attend established clinics or hospitals. This often results in women reaching medical facilities in a far advanced state of disease, and those who are treated face long periods of separation from their families. Support from social welfare services is very limited or non-existent. The effect of these conditions is to produce a reluctance among women to present for examination and to return for treatment and followup. Statistics are skewed by selection of Pap smears from symptomatic patients, or those attending clinics for family planning or antenatal care so that the prevalence of disease in this population may differ from a randomly selected sample. However, in 1995 the total incidence of premalignant and malignant smears was 25.6/1000. The incidence of CIN 2 and 3 lesions requiring colposcopy and biopsy was

14.6/1000 and has risen over the past three years. The necessity for mass screening is thus underscored by an emphatic prevalence and incidence of disease in a vast country whose cultural, geographic, educational, financial and social characteristics are synonymous with obstacles to progress.

The Pap smear must be considered as the center of a complex network of health services and related requirements. Patients receiving the service must be educated to the benefits, relieved of fears about treatment or how their therapeutic schedule might disturb family dynamics or challenge the cultural male predominance. Providers must be trained in latest collection, preparatory and screening techniques, quality control methodology, terminology, standardization and counseling. The state must appropriate funds to provide staffing – primary health care workers, nurses, social welfare personnel, laboratory technologists, technicians, clinicians, colposcopists and cytopathologists. Subsidized patient transport or mobile clinics should be funded. An absolutely non-negotiable requirement for a successful screening program is an adequate infrastructure for accurate patient followup and data processing. Currently, patients present with different names, no single, consistent identification number and labile addresses. Correlation of cytology results with histology and colposcopy is a nightmare of inaccurate information. The new system must provide for the precise identification of patients and a facility for the recording, analysis and transmission of data. A modified Bethesda system is proposed. A labora-

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tory accreditation program has been conceived in principle by the SASCC but awaits implementation.

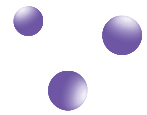
How often and when should screening be implemented? This is a vexing question depending on available resources. The most popular proposal at present is that three smears should be provided *free of charge* during a woman's lifetime, starting at the age of 30 and at 10 year intervals thereafter. With this inadequate effort by government, it is almost certain that the private sector will be approached to assist with the screening

itself, treatment of patients, or subsidy of the program by employers of female staff.

Although the obstacles are real and considerable, there is a core of skilled, motivated and committed personnel poised to launch a national screening program. Given reasonable resources and inter-sectoral co-operation there is every chance of success. Access to the international community with its current thinking and development may be pivotal to South Africa's successful accountability for women's health.

Fine Needle Aspiration Cytology in South Africa

Bryan Kenyon Knight, M Med Path, F.I.A.C., Past President SASCC



Fine Needle Aspiration (FNA) Cytology is widely practiced in South Africa but has not yet attained the recognition the procedure deserves. The technique is generally a service provided by large state hospitals or medical school affiliates but is also offered in the

(non-state subsidized) "private sector" in which aspirates made by surgeons, radiologists and other medical practitioners are submitted to private pathology laboratories. It would appear that the volume of such "private" work is small, and one wonders how skilled a person doing such

volumes can possibly become. Legislation in South Africa prevents cytotechnologists in private practice from reporting FNAs although they are authorized to report Papanicolaou smears. The most active center providing FNA cytology services is the South African Institute for Medical Research (SAIMR) at the medical school of the University

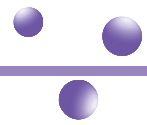


Bryan Kenyon Knight

of the Witwaterstrand in Johannesburg. Professor Gladwyn Leiman has contributed immensely to the popularization of the procedure by her pioneer work since the early seventies. The SAIMR does thousands of FNAs annually and expertise is considerable. The cytopathology service extends to a Rapid Diagnosis Service similar to Frozen Section where the cytopathologists travel to theatre with a portable staining kit and a microscope.

The first publication recording the use of FNA in the *South African Medical Journal* appeared in 1974 documenting the investigative efforts of Dr. Charlotte Brits who performed 1105 liver aspirations with histologic correlation in 390 cases. She described a variety of conditions, some of which would not be diagnosed by FNA today. The main finding was metastatic carcinoma, but considerable numbers of hepatocellular carcinoma

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mas, common in South African blacks, were recorded. Bantu Siderosis was the third most common finding, a disease of black people who are presumed to have a high dietary intake of iron from brewing traditional beer and cooking food in iron pots. Five hundred eighteen aspirates were performed on patients from the local Leprosarium with 88 demonstrating acid fast bacilli, 51 Bantu

Siderosis and 377 no significant abnormalities. The inception of FNA has been followed by progressive interest and academic support in teaching centers. As South Africa takes its place in the worldwide medical community, FNA is sure to assume the diagnostic significance and prestige it has gained elsewhere.

Lightsource: Gladwyn Leiman MBBCh, FRCPath FIAC

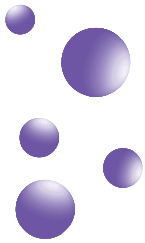
Born, bred, trained and tested in Johannesburg, Gladwyn Leiman has spent almost her entire professional career in the Cytopathology Unit of the Medical School Department of Anatomical Pathology of the University of the Witwaterstrand (Wits) and the South African Institute for Medical Research (SAIMR). Poached from the primary health care/family planning sector at an early age, she received her training in exfoliative cytology from the late Ann V. Berry MBBCh FIAC, who taught her how to look at, talk to and listen to cells! While in training, she established a cervical cancer screening laboratory at the largest family planning clinic in Johannesburg, which provided the first reliable screening statistics for urban Johannesburg women. In 1974 she was sent by Dr. Berry to run the SAIMR Branch Cytology laboratory at the 2000 bed Baragwanath Hospital, at that stage the largest in the southern hemisphere. The eight years she spent there proved vibrant, exciting and productive, providing her with the background, skills, backbone and thick skin required for every curved ball ever thrown at her since then. At Baragwanath Gladwyn conceived, instituted

and established Project Screen Soweto (PSS), an ambitious project that enabled the Baragwanath Laboratory to screen 100,000 adult women annually. However, bureaucratic barriers, gynecologist disinterest, and the basic disempowerment of the women in question, ensured the demise of PSS. The kernel of the plan, however, remains, and is ready to rise like a phoenix if revived. In the early 1980's, when PSS had lapsed into coma and Ann Berry had retired, Gladwyn Leiman took over the main Cytology Unit in Central Johannesburg. Encouraged, assisted, even propelled by the Professor of Surgery, J.A. (Bert) Myburgh, she was easily seduced into the amazing and intricate world of fine needle aspiration (FNA) cytology, which remains her passion to this day. Self taught, with access to journals and the few texts available then, she adopted the Scandinavian model, whereby the cytopathologist becomes the aspirator. An FNA clinic within the department has been hectic, active and productive ever since. Living in diagnostic isolation, she realized the impor-



Gladwyn Leiman

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tance of making forays to whatever international meetings were available.

Gladwyn acquired Fellowship of the IAC in 1983 and today serves on the International Board of Cytology, and various subcommittees of the IAC. She is honored to serve on the Editorial Boards of **Acta Cytologica**, **Diagnostic Cytopathology** and two other international pathology journals. She has taken various workshops countrywide through South Africa, has participated actively in recent IAC congresses, and has conducted lecture tours to India and Israel. *Cyto Paths* caught up with her for a quick interview:

What do you regard as your most important achievements in Cytology?

Locally, the scope and success of FNA in Johannesburg. Abroad, the international links which this department has forged with many other institutions, particularly in the USA.

And your failures?

Definitely the death of Project Screen Soweto, and also the dearth of histopathologists who have been attracted into the field of Cytopathology in South Africa.

Do you have any regrets?

That I did not choose stage career instead! Secondly, that I am a linguistic dwarf, and cannot speak any European or African language other than English. Finally, that so many of Ann Berry's medical cytology graduates left this country to practice abroad.

You have been called the pioneer of FNA in South Africa. How does that make you feel?

Like a frontierswoman or a Voortrekker in a long dress with a big-brimmed bonnet driving a covered wagon over the prairies or the veld! I am not a pioneer – I merely took what others had discovered, and introduced it locally, ignoring the hostility and the antagonism raised by any new technique.

What do you hate more than anything else?

Making a false positive diagnosis. Also, corruption in high places, diagnostic arrogance, traffic, decimation of the environment, and rodents.

How do you maintain your sanity in what has been described as a highly stressful post?

I retreat to the Game Parks of the Eastern Transvaal, now called Mpumalanga; or if I have enough time, I escape overseas to recharge my batteries and get a proper perspective on our little lives.

What is your overriding philosophy of life?

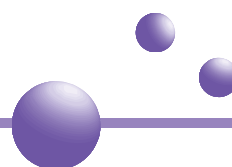
My non-negotiable philosophy of cytology – the patient must come first.

What are your passions outside Medicine?

Modern history, ancient ruins, antique jewelry, Italian design, ornamental frogs, the English language, foreign accents, cricket and CNN.

What hopes do you have for the future?

That South Africa will stabilize sufficiently to attract bright foreign medical graduates, and expatriates, to revel in this country, which is the greatest cytology laboratory the world has to offer.



Arts in Medicine: Depictions of Leprosy

The Old Testament introduced the clinical description of leprosy and defined the social context and public health policy of segregation to prevent contagious dissemination. Miriam was stricken with leprosy as punishment for her objection to Moses's intermarriage, but her brother Aaron's intercession with God commuted the sentence and her disease lasted only a week. Miriam's leprosy was rarely depicted by medieval or Renaissance artists, but one illumination in a fourteenth century English psalter shows her in white, hands clasped as if in prayer, with spots on her face and hands, Moses and Aaron at her side. Miriam's leprosy is also commemorated in stained glass at the Ste. Chapelle in Paris. The artists of Christianity embraced the interpretation of leprosy as a mark of moral corruption. In Henryson's *Testament of Cresseid*, a sequel to Chaucer's *Troilus and Criseyde*, the unruly heroine is spotted with leprosy because of her promiscuity. Lepers appear in the eighth circle of Dante's *Inferno* ("Onde l'altro lebbroso") where their disease is at some variance with clinical criteria implicating they are at least *moral* lepers to Dante. Whereas medieval artists depicted leprosy as a generic concept without intention to reproduce a clinical likeness, Renaissance artists portrayed lepers as individual human sufferers, but this was not a popular theme to display, and leprosy was considered a loathesome and terrifying disease. Not even Leonardo da Vinci's notebooks contain drawings of leprosy lesions among the details and documents of autopsy dissections. There are numerous depictions of Christ

healing the lepers in which artists were challenged to compose scenes in which the leper was recognized by "red spots", a convention uniformly observed in Western Europe from the ninth through the fifteenth centuries. "That the use of an immediately recognizable convention would make communication direct and simple is self-evident when we look at a mosaic high above eye level in the twelfth century Norman cathedral at Monreale near Palermo executed in a modified Byzantine style with one tessera equal to one leprous nodule." The history of leprosy in art is beautifully summarized and illustrated by the pathologist Dr. William Ober in his essays on medicine and the humanities from which this excerpt has been selected.

Reference:

Ober, William B., *Bottoms Up! A Pathologist's Essays on Medicine and the Humanities*, Southern Illinois University Press, 1987, pages 99-152.

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The leprosy of Miriam, before 1373. Oxford: Exeter College MS. 47, fol. 91v.



Christ healing a leper. Rhineland, latter half of the ninth century. Gospel from Essen Abbey, originally from Coblentz (Monastery of St. Florinus?). Dusseldorf: Landesbildstelle Rheinland MS. Cod. B, 113, fol. 5r.

Global Learning



Denmark. The 23rd European Congress of Cytology will happen in Aarhus, Denmark, September 22-25, 1996. The Congress will cover all essential and modern aspects of cytology with the impetus on population screening and the future devel-

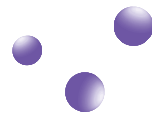
opment of cytology within the next few years. *Contact:* Dr. Ulrik Baandrup, Aarhus University Hospital, DK-8000, Aarhus C, Denmark. Tel 45 89 49 36 95 Fax 45 89 49 36 90. *Exhibition office:* Concert Hall, Aarhus, Thomas Jensens Alle DK-8000 Aarhus C, Denmark. Tel 45 89 31 82 00 Fax 45 86 19 43 86. **Chile.** The 19th Meeting of the Chilean Society of Cytology will be held from October 10-12, 1996 in the city of La Serena. *Contact:* Dr. Jorge Ramirez, Tel 56 51 212743 Fax 56 51 212936. **United States.** The 44th Annual Scientific Meeting of the American Society of Cytopathology will be held at the Radisson Hotel, Denver, Colorado, November 5-10, 1996. *Contact:* Petrina Smith, Fax 302 429 8807. **Austria.** The 20th International Tutorial on Clinical Cytology is scheduled from November 30-December 7, 1996 at the Vienna InterContinental Hotel. *Contact:* Dr. George Wied, Fax 312 947 0290. **Norway.** The annual meeting of the Norwegian Society of Clinical Cytology will take place at Vika Atrium, Oslo, January 31 and February 1, 1997. *Contact:* secretary Maj-Liv Elde, Department of Pathology, Cytology Division, The Regional University Hospital in Trondheim, N-7000 Trondheim. A weekend update course in

exfoliative cytology for cytotechnologists is planned for March/April 1997 which will include gene technologic methods and applications as well as workshops. *Contact:* Reidun Mecsei, CFIC, Sør-Trøndelag College, School of Engineering and Food Science, Department of Medical Laboratory Technology, Medical Technology Center, N-7000 Trondheim. **United States.** The 42nd Tutorial on Clinical Cytology is scheduled for March 15-22, 1997 at the Universal Sheraton Hotel, Universal City (Los Angeles) California. *Contact:* Dr. George Wied, Fax 312 947 0290. IAC-Mini-Tutorial on Clinical Cytology (Lectures only) will take place from June 6-10, 1997 at the Hilton Waikoloa Village on Hawaii's Big Island, Waikoloa (near Kona), Hawaii. *Contact:* Dr. George Wied Fax 312 947 0290. **Canada.** The 7th Course on Practical Diagnostic Cytology is scheduled for July 6-11, 1997 at the Radisson Hotel, Quebec City. *Contact:* Dr. Alex Meisels, Fax 418 656 2465. **Slovenia.** The 24th European Congress of Cytology will be held in Ljubljana, September 21-24, 1997. See page 9 for details. **Germany.** The 20th Meeting of the German Society of Cytology will be held jointly with the Austrian and Swiss Societies of Cytology from October 2 through 5, 1997 in Freiburg, Germany. A mixed educational format will address basic cytology, sampling techniques, gyn cytology, automation and FNA. Official languages: English and German. *Contact:* Dr. N. Freudenberg, Albertstrasse 19, 79104 Freiburg, Germany, Tel 0049 -(761) 203-6758 Fax 0049 -(761)

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203-6769. **United States.** The 45th Annual Scientific Meeting of the American Society of Cytopathology is scheduled for November 4-9, 1997 at the

Westin Hotel, Boston, Massachusetts.
Contact: Petrina Smith, Fax 302 429 8807.



24th European Congress of Cytology

September 21-24, 1997 • Ljubljana, Slovenia

SCIENTIFIC PROGRAM – international faculty

Invited Lectures: new developments in cell biology and future trends in cytopathology

- Nuclear structure
- Molecular biology
- Malignancy associated changes
- Confocal microscopy
- Telecytopathology
- Quality control
- Multidrug resistance

Panel Discussions: problematic issues and infrequent lesions in routine cytopathology

Invited Papers: new methods in cytopathology including electron microscopy, image cytometry

Cytotechnologists' Session: lectures, slide seminar, workshops on childhood tumors, lymphoproliferative lesions and rare findings in cervicovaginal smears

For information and registration, contact Prof. Marija Us-Krasovec, Chairman, Scientific Committee

Phone +386 61 132 20 99 • Fax +386 61 131 41 80


Binocular: The Editors' Views

The busy medical practitioner in need of an immediate reference to a disease process, diagnostic procedure or new therapeutic regimen is more likely to depend on a library search for a hard-copy article than to consult an on-line data service from a computer terminal in office or laboratory. The technology explosion that propels information through the world net and advances medical practice into the twenty-first century has unfortunately not metasta-

sized widely to MD's preoccupied with health care reform and quality outcomes. They remain traditional in their data access mode, unaccepting of modem or browser attitudes. The computer-reticent physician is missing the brainstorm on the net, the ability to find *The New England Journal of Medicine's* pertinent abstracts of seminal papers, or the University of Iowa's **Virtual**

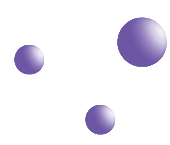
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Hospital training module for interventional radiology, digitalized images from surgical specimens, unusual fine needle aspirates or peculiar cellular findings from the female genital tract. Those who venture courageously to surf the Internet are bound to the library with safety lines and are often diverted from their medical search when they stumble onto BMW's home page and discover they can build the 540 of their dreams in animated color, *and place the order*. Physicians need to slow down and absorb the fascinations of access by Internet to the medical information that will soothe their practices with updates on technical, procedural, therapeutic, economic and political perspectives to modulate and transform their profes-

sional lives. Dr. Tom Linden, co-author of the *Guide to Online Medicine*, reports that only 50% of American physicians are computer literate, and fewer than 10% know how to access the Internet. Accredited CME courses must be organized for the practicing physician, and medical/cytotechnology school curricula revised to include computer competency. Perhaps the IAC should take a leadership role in educating its membership to the medical data on the web and how to enhance the dissemination of cytology issues worldwide. Only then will physicians (and technologists) familiar with advanced medical technology learn to apply their inquisitive hands to the keyboard and rediscover the world.



Focusing on IAC Committees Office of the Registrar

Catherine M. Keebler, Sc.D.(hon), CFIAC, Registrar

The Registrar's Office of the International Academy of Cytology performs several tasks on a regular basis:

Examination Activities

- Arranges the schedule and monitors for each examination
- Prepares the cytotechnology examinations
- Prepares the cytopathology examinations
- Maintains and updates the examinations, slides and Kodachromes for all examinations
- Obtains and maintains translations for all examination questions
- Maintains internal statistical data on examination materials and computerized databank of questions

Schedule

Two years prior to scheduling an examination, a form is sent out to those organizations or individuals who have monitored examinations in the past. We also receive new requests. For example, this year will be the first time we go to Korea and Maylasia, and next year we will add Taiwan.

Preparation

Once an examination site has been determined and a monitor assigned (usually an executive committee member or a committee member), examination materials and instructions on how to administer the examination are forwarded to the monitor. Because of the

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fragility of the slides, we send these materials by overnight express and request the monitor to fax confirmation of receipt. Without the volunteer assistance of some national and regional cytology societies, we would not be able to carry on the many examination activities.

Grading

Once the materials are returned to the Registrar's Office, the slides are examined and cleaned in preparation for the next examination. The materials are checked to verify receipt of the complete monitor instructions and examination papers for grading. Special scanning forms are utilized to automate evaluation of responses to the Comprehensive examination when there are more than 30 candidates; when there are fewer candidates, scoring is accomplished manually. Successful candidates are assigned a number and sent a letter of congratulations with a certificate.

Recertification

The Office annually recertifies those cytotechnologists due for renewal and coordinates the process with the Executive Secretary's office to insure that all dues-paying CMIACs are also recertified. Reminder letters and forms are sent to one of the four groups of both CMIACS and CT(IAC)s due for recertification in December of each year. The chart below illustrates the maximum number of registrants due for recertification in any one time period.

Group I	Due December 1997	2757
Group II	Due December 1998	1131
Group III	Due December 1999	2743
Group IV	Due December 2000	1074

The recertification process is challenged by changes of and obsolete addresses. In years when the Japanese cytotechnologists are recertified, the Japanese Society of Cytology staff reviews the forms, providing current addresses and name changes. We extend special thanks to Drs. Hasegawa and Yamauchi and their staff for their help and cooperation in this continuing education effort.

General Duties

General duties include maintenance and update of the address file, telephone response to requests for information about membership, examinations, recertification and other miscellaneous inquiries, and handling all correspondence related to these functions.

Committee Activities

The Registrar's Office works with the *Cytotechnology Registry and Certification Committee* on assignments which vary annually. This year committee members are evaluating glass slides to be used for future examinations. A consensus of three referees is required to select slides for pretesting which generally eliminates more than 60% candidate slides; the pretesting process eliminates an additional 40-50% so that from 100 slides, perhaps only 20 are qualified for exam use. The following lists committee members and medical consultants:

Members

- Loredana M. Alasio, CFIAC *Italy*
- Barbara Lynn Benstein,
CMIAC 2035 *USA*
- M. Luisa Esteban Casado,
CMIAC 2691 *Spain*

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Yong-Kil Chung, *Republic of South Korea*
 CMIAC 1887
 Katherine Cordatos, CFIAC 122 *Australia*
 Michael Facik, CMIAC 2083 *USA*
 Joyce Ford, CFIAC 545 *Australia*
 Carol Green, CFIAC 2066 *New Zealand*
 Barbara Keller, CMIAC 1659 *USA*
 Kyoko Komatsu, CMIAC 1931 *Japan*
 Jutta Lange, CMIAC 761 *Germany*
 Senta Lemberg, CFIAC 947 *Israel*
 Irene Le Roux, CFIAC 125 *Republic of South Africa*
 Shân McCallum, M.M.Sc., *Republic of South Africa*
 CFIAC 1616

Geok Eng Maria Ng, CMIAC 5671 *Singapore*
 Theresa M. Somrak, JD,
 CFIAC 1259 *USA*

Medical Consultants

Toshihiko Hasegawa, M.D.,
 Ph.D., MIAC *Japan*
 Gladwyn Leiman, MBBCh, *Republic of South Africa*
 MRCPATH, FIAC
 Gregory F. Sterrett, MBBS, FIAC *Australia*
 G. Peter Vooijs, M.D.,
 Ph.D, FIAC *Netherlands*
 Kazuhiro Yamauchi, M.D., FIAC *Japan*

IAC – 1996 Tentative Examination Schedule

Location	Day/Date	Cytotechnology Comprehensive	Cytotechnology Restricted to Gynecologic Samples	Cytotechnology Non-gynecologic Samples	Cytopathology Board	Application Deadline (receipt in our office)
Helsinki	Friday, Jan. 24	•	•			Dec. 13, 96
Paris	Saturday, Jan. 25	•				Dec. 13, 96
Gothenburg	Friday, March 14	•	•			Jan. 24, 97
Los Angeles	Sunday, March 23	•			•	Feb. 7
Cologne	Sunday, April 27	•	•	•		March 14
Amsterdam	June (TBA)	•	•		•	May (TBA)
Tokyo	Saturday, June 14	•			•	May 2
Taipei	Sunday, June 22	•				May 9
Quebec	Saturday, July 12	•			•	May 23
Brussels	October (TBA)	•			•	August
Munich	Saturday, Dec. 6	•			•	Oct. 24
London	December (TBA)	•	•			Oct. (TBA)
TBA (to be announced)						

Japan Hosts the 13th International Congress of Cytology

The 13th International Congress of Cytology will focus on cost-effective, clinical cytology and technological developments. May 10-14, 1998.

Congress Secretariat

International Medical, Communications Center, Tokyo Medical College, 6-7-1

Nishishinjuku, Shinjuku-ku, Tokyo 160, JAPAN, Tel: 81-3-3342-6111 (ext. 5998/5921), FAX: 81-3-3342-5392.



David B. Kaminsky, M.D., FIAC and Atsuhiko Sakamoto, M.D., FIAC – Co-Editors, *Cyto Paths*