



# ANNUAL REPORT

**2016**



*Accurate Diagnosis Saves Lives*

## ASAP'S VISION

We, the members of ASAP, envision a future in which the importance of pathology in sub-Saharan Africa (SSA) is recognized at local, national, regional, continental and international levels; a SSA with a competent pathology workforce and a number of expert centers that are supported by a high quality sustainable delivery system to improve the quality of life of persons living in SSA.

## STRATEGIC AIMS and GOALS

### Advocating for Pathology

- Create and Implement an advocacy plan
- Generate an economic case for pathology
- Raise the pathology profile in the medical community

### Making Pathology Work

- Build networks for teaching and training
- Define and develop standards for acceptable practices
- Build, strengthen, and maintain operational laboratories
- Leverage private, research, and commercial sectors

## TABLE OF CONTENTS

HISTORY OF ASAP.....	2
ASAP'S ACCOMPLISHMENTS IN 2016.....	3
2016 FINANCIALS.....	6
GRANTS & AWARDS.....	7

**NOTE:** Board and member biographies are available on ASAP's website at <http://www.pathologyinafrica.org/about-us>



## HISTORY OF ASAP

Pathology plays a critical role in guiding clinical decisions about patient diagnosis and treatment. It also is an essential tool in screening and disease prevention programs that contributes to the overall health and wellbeing of communities. Inadequate pathology services result in ineffective treatment programs due to delayed or inaccurate diagnoses, which affect patient care directly and lead to erroneous estimates of disease rates. The latter results in a compromised ability for health care systems to plan for resource allocation, which in turn results in poorer clinical outcomes. There is also a significant negative economic impact due to unnecessary prolonged illness and absence from work.

In 2014, twenty-seven professionals with a common interest in increasing and improving access to diagnostic pathology and laboratory medicine in sub-Saharan Africa (SSA) formed African Strategies for Advancing Pathology (ASAP). ASAP is a non-profit organization, 501(c)(3), composed of individuals with expertise and interest in anatomical and clinical pathology, including histopathology, cytopathology, medical microbiology, hematology and hematopathology, and infectious disease pathology among others; information management, public health advocacy, public health policy, laboratory management, and process improvement. Many of the members are from sub-Saharan Africa (SSA), and of those based in the United States, United Kingdom, European Union, and Australia, all have extensive experience working in Africa. As of 2016, ASAP has 29 members.

When it formed in 2014, ASAP created a five-year strategic plan with the overarching goal to develop a robust framework for efforts to increase and improve pathology services within sub-Saharan Africa, through the following strategies:

1. Raise the pathology profile in the medical community
2. Develop an economic case for pathology
3. Build networks for teaching and training
4. Set standards for acceptable practice and operational laboratories
5. Engage strategic partners
6. Develop start-up and sustainable funding



## ASAP ACCOMPLISHMENTS IN 2016

### Publications Since Inception

ARTICLE TITLE	JOURNAL	DATE PUBLISHED	ASAP CONTRIBUTORS
<i>Cancer in Low- and Middle-Income Countries: Where to Start? Is it Pathology?</i>	American Journal of Clinical Pathology	October 1, 2014	Jeannette Guarner, Ken Fleming
<i>Building Capacity in Laboratory Medicine in Africa by Increasing Physician Involvement: A Laboratory Medicine Course for Clinicians</i>	American Journal of Clinical Pathology	March 1, 2015	Jeannette Guarner, Mike Wilson
<i>Quality Pathology and Laboratory Diagnostic Services are Key to Improving Global Health Outcomes: Improving Global Health Outcomes is Not Possible Without Accurate Disease Diagnosis</i>	American Journal of Clinical Pathology	March 1, 2015	ASAP Members
<i>Pathology and Cancer Policy</i>	Journal of Cancer Policy	March 1, 2015	Ken Fleming
<i>Providing Pathology Support in Low-Income Countries</i>	Journal of Global Oncology	September 23, 2015	Shahin Sayed, Robert Lukande and Kenneth Fleming
<i>Oncologic Care and Pathology Resources in Africa: Survey and Recommendations</i>	Journal of Clinical Oncology	November 17, 2015	Ann Nelson, Dan Milner, Timothy Rebbeck, Yawale Iliyasu
<i>Global Cancer Care: The Role of Pathology</i>	American Journal of Clinical Pathology	January 1, 2016	Mike Wilson and Ken Fleming
<i>An Essential Pathology Package for Low- and Middle-Income Countries</i>	American Journal of Clinical Pathology	October 18, 2016	Mike Wilson, Ken Fleming, John Flanigan, Modupe Kuti

- In addition, an ASAP-led manuscript, "Lab-in-a-Box: A Guide to Building Anatomic Pathology Networks in Resource-Limited Settings," was accepted for publication in the American Journal of Clinical Pathology.



## Additional Accomplishments in 2016

- ASAP established a long term infrastructure, including:
  - An elected Board of Directors and updated bylaws
  - A membership application process
  - Five additional members.
  - A Corporate PayPal account to receive online donations.
  - Office space at the Posner Center for International Development in Denver, Colorado.
  - A social media presence including Facebook, Twitter, and LinkedIn.
- Conducted oral and poster presentations and distributed ASAP marketing materials at numerous conferences throughout the year, including at the:
  - Association of Pathologists of East, Central and Southern Africa (APECSA) Conference in Kigali, Rwanda
  - UICC Global Cancer Control Conference in Paris, France
  - African Society for Laboratory Medicine (ASLM) Conference in Cape Town, South Africa.
  - In addition, ASAP submitted an abstract and was accepted to present at the CUGH Conference in Washington, D.C., in April 2017. The presentation will feature ASAP's NCI PAR 15-155 project findings.

**Improving Anatomic Pathology in Sub-Saharan Africa to Support Cancer Care**

Contributing Authors: Shakin Seyid, Zahir Makso, Daniel Berney, Jeannette Guernes, Susan Lester, Rizard Masia, Drucilla Roberts, Jennifer Stahl, Michael Wilson, Alexis Selas, Stephanie Ayers, Angela Mutuku

**BACKGROUND:**  
Accurate diagnosis is key to quality cancer care and to populating cancer registries. In most sub-Saharan African countries, varying methods of pathology training and a scarcity of pathologists limits access to quality cancer diagnosis and impedes the quality of cancer care and accuracy of cancer registry data. This research project focuses on determining the best approach to improve the ability of anatomic pathologists in East, Central, and Southern Africa (ECSA) to detect and diagnose cancer using standard approaches commonly used in the United States and United Kingdom. The project established a partnership between the University of Colorado Cancer Center, African Strategies for Advancing Pathology (ASAP), College of Pathologists of East, Central, and Southern Africa (COPECSA), and Aga Khan University (AKU) Hospital in Nairobi, four organizations integrally involved in improving cancer care in low and middle income countries.

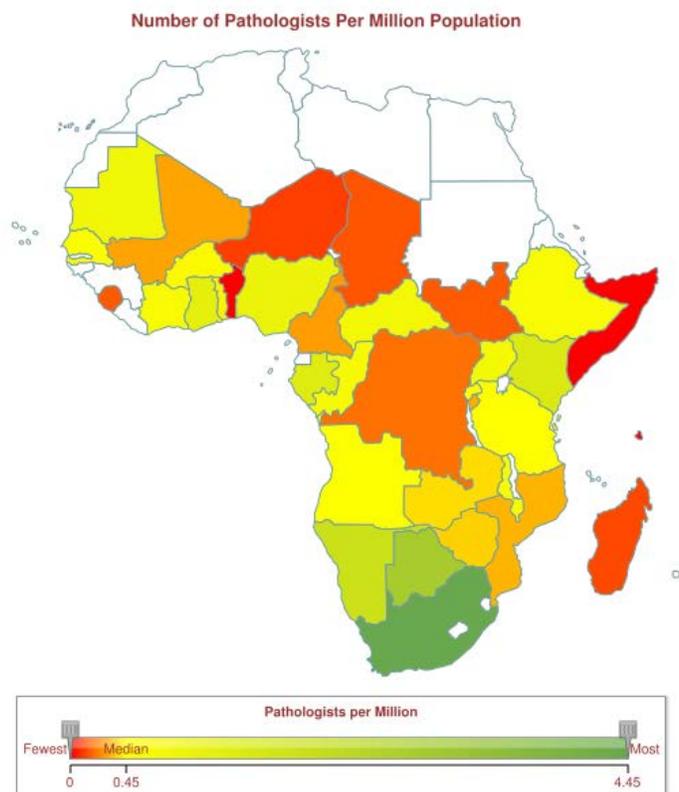
**METHODS:**  
The approach involved disseminating current best practices for processing, diagnosing, and reporting four common cancers through two 2.5 day workshops that included 31 anatomic pathologists and senior residents from eight institutions across ECSA. It featured two different approaches to teaching: case lecture-based and the other case-based. Educational assessments were developed to measure knowledge gained through each approach. The project also assessed which approach is most effective in changing practice patterns in ECSA institutions by comparing pre- and post-workshop training results of an online survey tool designed to assess diagnostic capacity at each institution. The accuracy and effectiveness of this tool was validated by conducting site visits to each of the participating institutions.

**RESULTS:**  
Results of individual and departmental assessments were analyzed to determine which teaching approach is most effective to educate and train pathologists and senior residents in the ECSA region. The case-based teaching approach resulted in:  
 - A 13% higher average post-assessment score  
 - Reports of increased engagement from the faculty  
 - Increased reports of changes in practice patterns, as indicated by both the online survey tools and institutional site visits  
 The skill-enhancing workshops in conjunction with the institutional site visits have contributed to a higher performing pathology workforce who will be able to assess and train other medical pathology laboratories within the region.  
 As a result of qualitative surveys, we hypothesize that a blended approach of both training styles may be more effective than one style in isolation, which we will test in a third workshop in January 2017.

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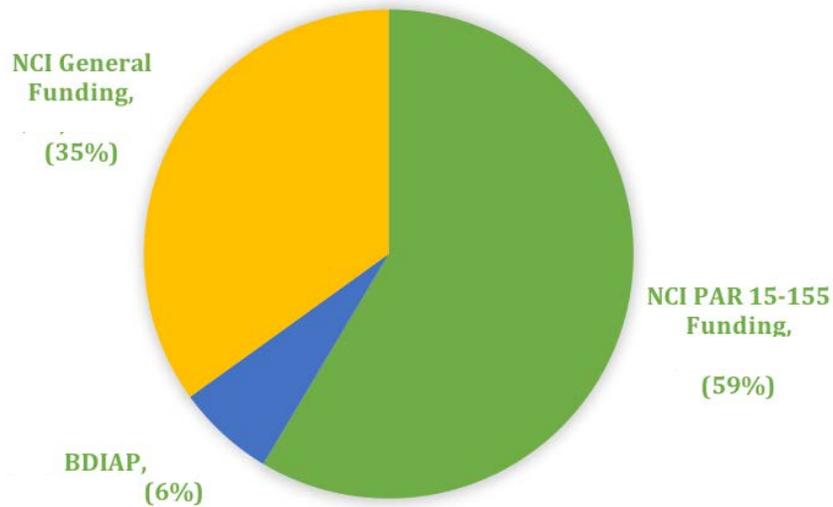
- ASAP's NCI PAR 15-155 project, titled *Improving Anatomic Pathology Services in Sub-Saharan Africa to Support Cancer Care*, held two educational workshops at Aga Khan University Hospital in Nairobi for pathologists and senior trainees from 11 institutions from ten different countries across SSA. The first workshop featured a didactic teaching style and the second workshop featured a case-based teaching approach. A pre-workshop survey and clinician surveys were conducted of each institution to assess their current pathology practices; these were repeated five months post-workshop to determine changes in practice. Site visits were conducted at all participating institutions. Planning sessions for a third workshop in January 2017, featuring a blend of the two teaching approaches, were underway at the close of 2016.

- ASAP submitted a grant application for NIH R13 to conduct an in-person meeting with key stakeholders in Africa to brainstorm on expanding lessons learned from the NCI PAR 15-155 project.
- ASAP established key partnerships with organizations doing work in pathology across SSA. These include, APECSA and the College of Pathology of ECSA (COPECSA), African Organisation for Research and Training in Cancer (AORTIC), International Academy of Pathology (IAP), Aga Khan University Hospital, American Society of Clinical Oncology (ASCO), University of Colorado Cancer Center, and the International Collaboration on Cancer Reporting (ICCR).
- ASAP held its 2016 annual meeting in Seattle, Washington, on Monday, March 14, 2016 in conjunction with the United States and Canadian Academy of Pathology (USCAP) Conference. Seventeen ASAP members were in attendance.
- An on-line survey of pathology capacity in Sub-Saharan Africa (SSA) was conducted between 2011 and 2013 by ASAP members. Surveys were available in English, French, Portuguese and Spanish. The link was sent to more than 200 pathologists – both in Africa and to those collaborating in Africa. The information requested included numbers of pathologists and technicians, training positions, work load and workflow, infrastructure and availability of cancer care (oncologists, chemo and radiation therapy). The data was updated and re-verified in 2015, and organized by region (East, West, Southern and Francophone Africa). In 2016, ASAP created interactive maps of the data that can be viewed in map or graph form on our website: [pathologyinafrica.org](http://pathologyinafrica.org).

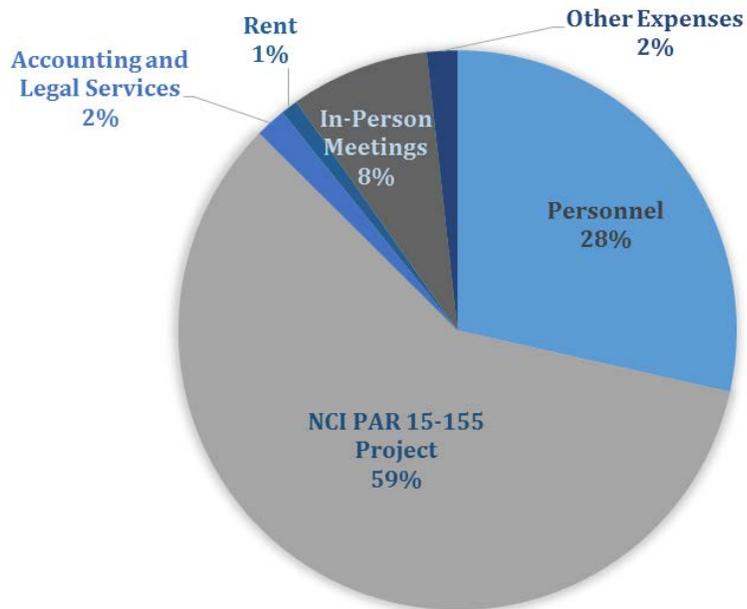


## FINANCIALS

### 2016 Funding Sources and Percentages



### 2016 Expense Categories and Percentages



## 2016 GRANTS & AWARDS

### **National Institute of Health (NIH) National Cancer Institute PAR 15-155: Administrative Supplements to Promote Cancer Prevention and Control Research in Low and Middle Income Countries**

ASAP is partnering with the University of Colorado Cancer Center, Aga Khan University Hospital in Nairobi (AKUHN) and the College of Pathologists of East, Central, and Southern Africa (COPECSA) on a project titled “Improving Anatomic Pathology in sub-Saharan Africa to Support Cancer Care”. This 17-month research project is focused on determining the best approach to improve the ability of the anatomic pathology workforce in Eastern, Central, and Southern Africa (ECSA) to detect and diagnose cancer using standard approaches that are commonly in use in the United States and the European Union.

### **NIH National Cancer Institute (NCI)**

ASAP secured two years of seed funding from NCI to move forward its strategies and bring together its members for ongoing strategizing and action planning. The commitment spanned from 2014-2016.

### **British Division of the International Academy of Pathology (BDIAP)**

ASAP secured five years of seed funding from BDIAP to assist in establishing ASAP and move forward its strategies. The commitment spans from 2014-2019.

### **The United States and Canadian Academy of Pathology Foundation**

The USCAP Foundation assisted in bringing African members of ASAP to the USCAP Conference in Seattle in March 2016.

### **In Kind Donations**

ASAP’s members, Board of Directors, and CEO have spent countless volunteer hours contributing to ASAP’s strategies and activities. The contributions of ASAP’s membership have been invaluable.





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