

Contributors

CONSULTING EDITOR

MILENKO JOVAN TANASIJEVIC, MD, MBA

Vice Chair for Clinical Pathology and Quality, Department of Pathology, Director of Clinical Laboratories, Brigham and Women's Hospital, Dana-Farber Cancer Institute, Associate Professor of Pathology, Harvard Medical School, Boston, Massachusetts, USA

EDITOR

DANNY A. MILNER Jr, MD, MSc(Epi), FASCP, FASTMH

Chief Medical Officer, Center for Global Health, American Society for Clinical Pathology, Chicago, Illinois USA; Adjunct Lecturer, Harvard T. H. Chan School of Public Health, Affiliate, Global Health and Social Medicine, Harvard Medical School, Boston, Massachusetts, USA

AUTHORS

TIMOTHY K. AMUKELE, MD, PhD

Department of Pathology, The Johns Hopkins University School of Medicine, Baltimore, Maryland, USA; Clinical Core Laboratory at Infectious Diseases Institute, MU-JHU Research Collaboration, Makerere University-Johns Hopkins University, Kampala, Uganda

LINDA R. ANDIRIC, MT(ASCP), MSc, EdD

Center for Global Health, American Society for Clinical Pathology, Chicago, Illinois, USA

FABIENNE ANGLADE, MD

Partners In Health, Boston, Massachusetts, USA; United States and Canadian Academy of Pathology, Evans, Georgia, USA; University Hospital of Mirebalais, Centre Department, Haiti

FAY BETSOU, PhD, HDR

Chief Scientific Officer, Integrated BioBank of Luxembourg, Luxembourg, Luxembourg

JANE E. BROCK, MBBS, PhD

Assistant Professor of Pathology, Brigham and Women's Hospital, Boston, Massachusetts, USA

LAWRENCE A. CHAVEZ, PhD

Center for Global Health, American Society for Clinical Pathology, Chicago, Illinois, USA

FRED CHIMZIMU, BS

UNC Project Malawi, Tidziwe Centre, Lilongwe, Malawi

OLIVER D. COHEN, MD, PhD

AGEIS EA 7407 Laboratory, Professor, Medical School of Grenoble, Joseph Fourier University, La Tronche, France

ISHAAN K. DESAI, BA

Partners In Health, Department of Global Health and Social Medicine, Harvard Medical School, Boston, Massachusetts, USA

BAL MUKUNDA DHUNGEL, MBBS, MD

Kamuzu Central Hospital, Tidziwe Centre, Lilongwe, Malawi

MOHENOU ISIDORE JEAN-MARIE DIOMANDE, MD, FWACP (Lab Med)

Professor of Pathology, Président de la Société Ivoirienne de Pathologie, Laboratoire d'Anatomie Pathologique, UFR Sciences Médicales, Abidjan, Côte d'Ivoire

QUENTIN EICHBAUM, MD, PhD, MPH, NNHC, JD

Associate Director of Transfusion Medicine, Director, Transfusion Medicine Fellowship Program, Professor, Department of Pathology, Microbiology, and Immunology, Vanderbilt University Medical Center, The Vanderbilt Clinic, Nashville, Tennessee, USA

PAUL E. FARMER, MD, PhD

Partners In Health, Department of Global Health and Social Medicine, Harvard Medical School, Boston, Massachusetts, USA

YURI FEDORIW, MD

Associate Professor, Director of Hematopathology, Department of Pathology and Laboratory Medicine, University of North Carolina at Chapel Hill School of Medicine, Lineberger Comprehensive Cancer Center, Chapel Hill, North Carolina, USA

ANDREW S. FIELD, MBBS (Hons), FRCPA, FIAC, DipCytopath (RCPA)

Associate Professor, The University of Notre Dame, School of Medicine, Deputy Director and Senior Consultant, Department of Anatomical Pathology, St Vincent's Hospital Melbourne, Sydney, New South Wales, Australia

JOHN S. FLANIGAN, MD

Senior Adviser for Non-Communicable Diseases, Center for Global Health, National Cancer Institute, National Institutes of Health, Rockville, Maryland, USA

WILLIE GITHUI, PhD

Chief Research Officer and Head, Mycobacteriology Research Laboratory, Centre for Respiratory Diseases Research, Kenya Medical Research Institute, Nairobi, Kenya

SATISH GOPAL, MD, MPH

UNC Project Malawi, Tidziwe Centre, Lilongwe, Malawi; UNC Lineberger Comprehensive Cancer Center, Chapel Hill, North Carolina, USA

LAUREN A. GREENBERG, BA

Partners In Health, Boston, Massachusetts, USA

MARTIN HALE MB ChB, FCPATH, (ANAT) SA

Professor and Chair, Department of Anatomic Pathology, National Health Laboratory Service, University of the Witwatersrand, Johannesburg, Johannesburg, South Africa

MARIANNE K. HENDERSON, MS

Senior Advisor on Biobanking and Division Resources, National Cancer Institute, National Institutes of Health, Department of Health and Human Services, Bethesda, Maryland, USA

E. BLAIR HOLLADAY, PhD, MASCP, SCT (ASCP)^{CM}

Chief Executive Officer, American Society for Clinical Pathology, Chicago, Illinois, USA

ANDRÉ M. ILBAWI, MD

Technical Officer, Management of Noncommunicable Disease Unit, Department for Management of Noncommunicable Diseases, Disability, Violence and Injury Prevention, World Health Organization, Geneva, Switzerland

YAWALE ILIYASU, MBBS, MD, FMCPath(Nig), FICS, MIAC, IFCAP, FCPath(ECSA)

Associate Professor, Department of Pathology, Faculty of Medicine, Ahmadu Bello University, Smaru, Zaria, Kaduna State, Nigeria

MICONGWE MOSES ISYAGI, BDS, MMed, FCPath(ECSA)

Dental Surgeon and Oral Pathologist, Legacy Specialty Clinics, Kigali, Rwanda

LOUISE C. IVERS, MD, MPH

Partners In Health, Department of Global Health and Social Medicine, Harvard Medical School, Center for Global Health, Massachusetts General Hospital, Boston, Massachusetts, USA

MIRA JOHNSON, BA

Center for Global Health, American Society for Clinical Pathology, Chicago, Illinois, USA

RAPHAEL M. KALENGAYI, MD, MMedSc, SpPath, PhD

Professor of Pathology, Department of Pathological Anatomy, Faculty of Medicine, University of Kinshasa, Kinshasa, Democratic Republic of Congo

SIMEON KALYESUBULA-KIBUUKA, MD, MPH

M&E Technical Advisor, Uganda National Health Laboratory Services, Kampala, Uganda

COXCILLY KAMPANI, BS

UNC Project Malawi, Tidziwe Centre, Lilongwe, Malawi

ROBERT KRYSIAK, MS

UNC Project Malawi, Tidziwe Centre, Lilongwe, Malawi

STEVE KUSSICK, MD, PhD

Chief Medical Officer, PhenoPath Laboratories Clinical Assistant Professor, University of Washington, Department of Laboratory Medicine, Seattle, Washington, USA

KENNETH LANDGRAF, MSc

Center for Global Health, American Society for Clinical Pathology, Chicago, Illinois, USA

RITA T. LAWLOR, PhD

Research Centre Coordinator, ARC-Net Applied Research on Cancer Centre, Verona University, Verona, Italy

MARIA P. LEMOS, PhD, MPH

Staff Scientist, Fred Hutchinson Cancer Research Center, Seattle, Washington, USA

ROBERT LUKANDE, MBChB, MMed, FCPath(ECSA)

Lecturer, Department of Pathology, College of Health Science, Makerere University, Kampala, Uganda

YEHODA M. MARTEI, MD

Instructor, Department of Medicine, Division of Hematology-Oncology, University of Pennsylvania, Abramson Cancer Center, Philadelphia, Pennsylvania, USA

NEIL A. MARTINSON, MBBCh, MPH

Perinatal HIV Research Unit (PHRU), MRC Soweto Matlosana Collaborating Centre for HIV/AIDS and TB, University of the Witwatersrand, Johannesburg, Johannesburg, South Africa; Johns Hopkins University, Center for Tuberculosis Research, Baltimore, Maryland, USA

MARTIN MATU, PhD, MSc, MBA

Senior Laboratory Specialist, Regional Project Director, ECSA Health Community, Arusha, Tanzania

SUZANNE M. McGOLDRICK, MD, MPH

Seattle Genetics, Seattle Children's Hospital, Fred Hutchinson Cancer Research Center, Seattle, Washington, USA

MAIMUNA MENDY, PhD

Group Head, Laboratory Services and Biobank Group, International Agency for Research on Cancer, Lyon, France

MANOJ MENON, MD, MPH

Assistant Member, Global Oncology, Vaccine and Infectious Disease and Clinical Research Division, Fred Hutchinson Cancer Research Center, Assistant Professor, Department of Medicine, University of Washington, Seattle, Washington, USA

DANNY A. MILNER Jr, MD, MSc(Epi), FASCP, FASTMH

Chief Medical Officer, Center for Global Health, American Society for Clinical Pathology, Chicago, Illinois USA; Adjunct Lecturer, Harvard T. H. Chan School of Public Health, Affiliate, Global Health and Social Medicine, Harvard Medical School, Boston, Massachusetts, USA

NONHLANHLA N. MKHIZE, PhD

Centre for HIV and STIs, National Institute for Communicable Diseases (NICD), National Health Laboratory Service (NHLS), Faculty of Health Sciences, University of the Witwatersrand, Johannesburg, Johannesburg, South Africa

MALCOLM E. MOLYNEUX, MD, FRCP

Liverpool School of Tropical Medicine, Liverpool, United Kingdom

NATHAN D. MONTGOMERY, MD, PhD

Department of Pathology and Laboratory Medicine, University of North Carolina at Chapel Hill School of Medicine, Chapel Hill, North Carolina, USA

ELIZABETH A. MORGAN, MD

Brigham and Women's Hospital, Boston, Massachusetts, USA

MAURICE MULENGA, MBBS, MD

Kamuzu Central Hospital, Tidziwe Centre, Lilongwe, Malawi

ANN MARIE NELSON, MD, FASCP

Professor of Pathology (Visiting), Duke University School of Medicine, Durham, North Carolina, USA; President, InPaLa Consulting, Washington, DC, USA

JOHN NKENGASONG, PhD, MSc

Director, Africa Centers for Disease Control and Prevention, African Union Headquarters, Addis Ababa, Ethiopia

JUAN DANIEL OROZCO, DPH

Partners In Health, Boston, Massachusetts, USA

MICHAEL K. OWINO, MPH

UNC Project Malawi, Tidziwe Centre, Lilongwe, Malawi

LYDIA E. PACE, MD, MPH

Instructor, Department of Medicine, Division of Women's Health, Brigham and Women's Hospital, Boston, Massachusetts, USA

ERIC POWERS, BA

Department of Pathology and Laboratory Medicine, University of North Carolina at Chapel Hill School of Medicine, Chapel Hill, North Carolina, USA

JULIE RANDOLPH-HABECKER, PhD

Pacific Northwest University of Health Sciences, Yakima, Washington, USA

PETER H.J. RIEGMAN, PhD

Department of Pathology, Director, The Erasmus MC Tissue Bank, Rotterdam, The Netherlands

SARAH RILEY, PhD

Department of Pathology, Saint Louis University, St Louis, Missouri, USA

JULIA ROYALL, BA, MA

(Ret.) Chief, Office of International Programs, US National Library of Medicine, National Institutes of Health, Dubois, Global Health Information Specialist, Washington, DC and Dubois, Wyoming, USA

BELSON RUGWIZANGOGA, MD, MMed (Path)

Department of Clinical Biology, School of Medicine and Pharmacy, University of Rwanda College of Medicine and Health Sciences, Kigali, Rwanda

DEOGRATIUS RUHANGAZA, MD

Ministry of Health, Butaro Hospital, Rwanda

SHAHIN SAYED, MMed(Path)

Department of Pathology, The Aga Khan University Hospitals, Nairobi, Nairobi, Kenya

MIRIAM SCHNEIDMAN, MA, MPH

World Bank, Health, World Bank, Washington, DC, USA

LAWRENCE N. SHULMAN, MD

Professor, Department of Medicine, Division of Hematology-Oncology, University of Pennsylvania, Abramson Cancer Center, Philadelphia, Pennsylvania, USA

SHANNON L. SILKENSEN, PhD

Program Director, Center for Global Health, National Cancer Institute, National Institutes of Health, Rockville, Maryland, USA

KELLY ARAUJO SILVA, MBA, MPH

Lacliv – Laboratório de Análises Clínicas de Valença, Valença, Bahia, Brazil

ANDREA STRITMATTER, BA, HTL(ASCP)

Focus Histopathology LLC, Seattle, Washington, USA

TERRIE E. TAYLOR, DO

College of Osteopathic Medicine, Michigan State University, East Lansing, Michigan, USA; Blantyre Malaria Project, University of Malawi, College of Medicine, Blantyre, Malawi

MERIH T. TESFAZGHI, PhD

Department of Pathology, Washington University School of Medicine in St. Louis,
St Louis, Missouri, USA

TAMIWE TOMOKA, MD

UNC Project Malawi, Tidziwe Centre, Lilongwe, Malawi

ANNE LINDA VAN KAPPEL, MSc, PhD

Managing Director, IMV Technologies, l'Aigle, France

ADRIANA VELAZQUEZ-BERUMEN, MSc

Senior Advisor on Medical Devices, Innovation, Access and Use Unit, Essential Medicines
and Health Products Department, World Health Organization, Geneva, Switzerland

EDDA VUHAHULA, DDS, PhD, FCPATH

Department of Pathology, Muhimbili University of Health and Allied Sciences (MUHAS),
Dar es Salaam, Tanzania

NICHOLAS G. WOLF, BA

CRTA Fellow, Center for Global Health, National Cancer Institute, National Institutes of
Health, Rockville, Maryland, USA