My collaboration with Hu-Friedy began in the early 1990’s when I directed the University of Southern California’s Advanced Endodontic Program and saw a need for instruments which were better designed foratraumatic apical applications. Together we created a collection of explorers, condensers and burnishers. We also designed angled curettes, which are anatomically designed to elevate the marginal and interdental papillae, a task normally done by periosteals and elevators, and straight curettes, that enhance visual access to the lingual, palatal and distant root apicies of posterior teeth.

Currently, therapeutic, diagnostic and preventative indications embrace Endodontic surgery and the concept of “Treatment Finalization”. Extending care beyond performing a simple root canal to include other factors that impact success has led to a more holistic approach to endodontic and dental care with many biologic preventative and conservative merits. These include avoiding bone loss, critical size osseous defect formation, extraction and its impact on the alveolar ridge, and at a higher level, preventing tooth loss. The “wait and see” approach for the management of asymptomatic endodontic failures should be rarely advised; instead, “open and see” should reign, either thru the canal or the apex.

Today clinicians are better trained, surgery times are shorter, complications fewer, and successes greater. This progress is exciting to watch, and I am honored to have a part in enhancing the quality of life by advancing the endodontic profession.

THE MAR MICRO SURGICAL
ENDODONTIC LINE & PERSPECTIVE

Professor Marwan Abou-Rass is Professor Emeritus at the University of Southern California, School of Dentistry where he served as Department Chairman and Director of Advanced Endodontics from 1972-1998. He also served as Director of Prince Abdul Rahman Advanced Dental Institute (PAADI), Riyadh, Saudi Arabia from 1998-2013.

As an educator and clinician with formal specialty training in fixed Prosthodontics and Endodontics, Dr. Abou-Rass has witnessed and participated in the evolution of the current trends and concepts in microsurgical endodontics. Today’s Endodontists are better trained and biologically oriented with better surgical outcomes and fewer complications.

Dr. Abou-Rass continues to make significant contributions to endodontic research, education, and clinical practice.

For more information on Professor Abou-Rass, including a more in-depth discussion of historical endodontic trends visit AbouRass.com and Hu-Friedy.com.


CURRENTLY THERAPEUTIC, DIAGNOSTIC AND PREVENTIVE INDICATIONS EMBRACE ENDODONTIC SURGERY AND THE CONCEPT OF “TREATMENT FINALIZATION”*. EXTENDING CARE BEYOND PERFORMING A SIMPLE ROOT CANAL TO INCLUDE OTHER FACTORS THAT IMPACT SUCCESS HAS LED TO A MORE HOLISTIC APPROACH TO ENDODONTIC AND DENTAL CARE WITH MANY BIOLOGIC PREVENTATIVE AND CONSERVATIVE MERITS. THESE INCLUDE AVOIDING BONE LOSS, CRITICAL SIZE Osseous DEFECT FORMATION, EXTRACTION AND ITS IMPACT ON THE ALVEOLAR RIDGE, AND AT A HIGHER LEVEL, PREVENTING TOOTH LOSS. THE “WAIT AND SEE” APPROACH FOR THE MANAGEMENT OF ASYMPTOMATIC ENDODONTIC FAILURES SHOULD BE RARELY ADVISED; INSTEAD, “OPEN AND SEE” SHOULD REIGN, EITHER THRU THE CANAL OR THE APEX.

TODAY CLINICIANS ARE BETTER TRAINED, SURGERY TIMES ARE SHORTER, COMPlications FEWER, AND SUCCESSES GREATER. THIS PROGRESS IS EXCITING TO WATCH, AND I AM HONORED TO HAVE A PART IN ENHANCING THE QUALITY OF LIFE BY ADVANCEING THE ENDODONTIC PROFESSION.

FEATURES AND BENEFITS

The Marwan Abou-Rass “MAR” Microsurgical Endodontic instrument line is based on five criteria:

- **Assortment:** Explorers, condensers and burnishers with working tips matched to the shapes and sizes of apical foramina. Curettes designed for the marginal and interdental gingiva of anterior and posterior teeth.
- **Performance:** Complete access via angled and straight instrument shafts and working ends to operate on root apices with precise performance even with far distal or deep lingual and palatal positions.
- **Visualization:** Longer shafts aligned with instrument handles enable visualization of the movements of working tips at all times.
- **Preservation:** Angled and straight curettes, designed for atraumatic action and contact with the interdental papilla and precisely controlled manual bone removal for root apex exposure.
- **Straight and Angled Designs:** For passing through the thick buccal cortical plate of the maxilla and mandible to reach lingually or palatally located root apices, or the far distal of buccal bone covering the 2nd and 3rd molar roots.

The Abou-Rass Microsurgical Kit is now available, see the back cover for details, or visit us online to view our complete line of endodontic products: Hu-Friedy.com

NEW!

MAR Curettes are used for atraumatic elevation of endodontic and periodontic flaps. In straight single-ended and angled double-ended configurations they form the “heart” of the MAR line.

**PERFECT FOR DELICATE REMOVAL OR NECROTIC BONE AND INFECTED SOFT TISSUE; IN DISTANT AND CRITICAL LOCATION AREAS AND FOR SCRAPING CORTICAL BONE IN ORDER TO EXPOSE THE ROOT Apex**

MAR-SC2 DEBRIDING THE BUCAL CORTICAL PLATE DEFECT TO EXPOSE THE PRE-MOLAR ROOT AND AN APICAL THIRD INCOMPLETE VERTICAL ROOT FRACTURE WHICH WAS FOUND.

MAR-SC3 REMOVING THE FRACTURED ROOT FRAGMENT AND DEBRIDING THE PALATE EXTENDED DEFECT IN AN INTERNAL SURGICAL ENDODONTIC CASE.

**STRAIGHT**

For scraping thin cortical bone, exposing apices of fractured or thin eroded bone over pathologically involved roots. The MAR straight curettes are ideal for straight-line access and continuous tip visibility of far distal, deep lingual, palatal root tips and other anatomies.

MAR-SC1 DEBRIDING THE INCISED INTER-DENTAL PAPILLA AND MARGINAL GINGIVA.

MAR-SC2 ELEVATING THE INCISED INTER-DENTAL PAPILLA AND MARGINAL GINGIVA. MAR-SC3 USED AFTER THE MAR-SC2 FOR FURTHER BLUNT DISSECTION AND ELEVATION OF THE MARGINAL GINGIVAE PRIOR TO PERIOSTEAL ELEVATION.

**ANGLED**

Used sequentially for atraumatic flap elevation, controlled dentin curettage and degranulation of bone defects.

MAR-C1 The smallest curette – Long shank and sharp tip enable the clinician to reach and debride diseased hard or soft tissue trapped in the smallest bone and dentin spaces and hard tissue structures.

MAR-C2 Round, sharp working tip is excellent for full mucoperiosteal flap elevation of the mandibular lower anterior and maxillary lateral incisors.

MAR-C3 The line’s most universal mucoperiosteal flap elevation instrument. The long shank and sharp tip form atraumatic, controlled flaps on gingival crevices of all posterior teeth centrals, preparing gingival sulci spaces for the MAR-C4 or Allen P9A.

MAR-C4 Used for surgical curettage of large osseous (degranulation) alveolar defects and palatal flap elevation, or for initiating attached gingival elevation prior to using the Allen P9A periosteal.

EXPLORERS

MAR-EX1

With two different sharp working ends it is ideal for evaluating the cortical bone surface integrity to look for underlying periradicular or periapical defects that have eroded the inner (endosteal) side of the cortical plate. Also used to survey Alveolar bone damage by creating landmark holes that outline the border of diseased versus intact bone, and for emergency incision and drainage.

MAR-EX2

A single-ended bone-file styled explorer ideal for emergency incision and drainage to enlarge the pathway made with MAR-EX1 for better exudate drainage through the buccal cortical bone plate.

MAR-EX3

All-purpose double-ended measurement probe with one blunt flat end and one round end. Used to measure osseous defects or assess the integrity of the maxillary sinus floor before, during or after alveolar socket or defect curettage.

MAR-EX4

Single-ended, its straight, sharp working tip allows the clinician to apply direct and measurable pressure to differentiate between the solid root apex and the surrounding semisolid or porous trabecular bone.

MAR-EX5

Perfect for assessing the integrity and density of alveolar bone surfaces in confined areas. Its single-ended fine tip is excellent for checking root structure for fracture lines and microscopic defects.

MAR-EX6

With its right-angled single-ended working end it’s perfect for external evaluation of the apical third root segment when searching for the apical foramen iatrogenic perforations, crack lines, accessory foramina or root resorption.
Straight handle shank and right-angled working tips provide direct access and control, plus visibility of the condenser tip when operating at or in the root end. They are ideal for use in distal or lingually positioned root apices on posterior teeth.

The double-ended oval or round cross section of the tip allows controlled condensation of retro-filling materials: round working tips for “pot hole” preparations and oval tips for “isthmus” designs.

Angled condensers are used universally for retro-filling buccal roots as they correspond to the sizes of most ultrasonic “retro-prep” instruments. The MAR-AAC2 and MAR-AAC3 are ideal for apical condensing of large retro-fill preparations with wide open apices, and for apical root resorption.

EXCELLENT FOR DIRECT ACCESS TO THE ROOT END WHEN RETRO-FILLING LINGUAL AND PALATAL ROOTS USING A BUCCAL SURGICAL APPROACH

CONDENSERS / PLUGGERS

THE OVAL END OF MAR-SAC.5 CONDENSING AN ISTHMUS SHAPE APICAL FORAMIN RETRO-FILLING

MAR-SAC2 CONDENSING A "POTHOLE" APICAL RETRO-FILLING

MAR-SAC2

MAR-SAC.5 MAR-SAC1 MAR-SAC1.5 MAR-SAC2 MAR-SAC3

STRAIGHT

MAR-AAC.5 MAR-AAC1 MAR-AAC1.5 MAR-AAC2 MAR-AAC3

ANGLED

*.5 mm .8 mm 1.5 mm 1.5 mm 1.5 mm .6 mm .8 mm 1.5 mm 2 mm 3 mm .5 mm .8 mm 1.5 mm 1.5 mm 2 mm .6 mm .8 mm 1.5 mm 2 mm 3 mm

*The terms "Condensors" and "Pluggers" are interchangeable.
MAR burnishers are used for apical retro-fill packing, finishing and polishing, from the smallest sized retro-filling preparation to the largest apical retrograde obturation in wide-open apices. They are also useful for cold burnishing of well condensed apical gutta percha root fillings.

The angled instruments are designed for polishing anterior and buccal areas. Straight designs provide a direct, straight line to far distal, palatal or mesiolingual root apices in the maxilla or mesiolingual roots in the mandible.

To learn about our burnishers and our complete line of endodontic instruments, call 1-800-Hu-Friedy and request our Endo Essentials catalog.
Professor Abou-Rass is one of Hu-Friedy's Key Opinion Leaders.

Key Opinion Leaders' names are very recognizable and their work is renowned. They are, after all, the leaders of the dental community. Hu-Friedy is honored to be in close association with Key Opinion Leaders, and it is a pleasure to present them to you as individuals full of life, character and vision.

For more information on the program or to view other inspirational leaders' profiles, visit us online at: Hu-Friedy.com/community