

2015 AMERICAN ASSOCIATION OF ORTHODONTISTS ANNUAL SESSION

DOCTOR RICKETTS



The story of the master and legend

Robert Murray Ricketts



The AAO Annual Meeting is a great venue for us to share news with our customers, see and have fun with existing friends, and develop new relationships. It is also a great opportunity to say "thank you" to our customers, and also to all of the worldwide attendees which includes the RMO® extended family members and friends.

We have been partnering with the AAO since before the times when RMO® Founder, Dr. Archie Brusse, was president of this organization. We are the oldest exhibitor at the AAO Annual Meeting.

We decided to publish a tribute to a legend in our industry, Dr. Robert Murray Ricketts, also known as "Rick." This tribute was written primarily by Dr. Duane Grummons, who I first met in Anaheim, CA during the 1989 AAO Annual Meeting and during that back-to-back "Foundation for Orthodontics Research" meeting (F.O.R. founded by Dr. Ricketts). Dr. Grummons and I continued to work together at the annual F.O.R. meetings until the passing of Dr. Ricketts in 2003. I have always been so impressed with Dr. Grummons' enthusiasm, and his love of orthodontics with a passion for comprehensive patient care with continual improvement of the Bioprogressive® philosophy.

Dr. Grummons never stops contributing. He was an early member of the F.O.R. He served as president of this foundation, and served as a board member for about 20 years. Duane maintained private practices in California and Washington, and shared his love of Orthodontics and Facial Orthopedics by teaching all over the world with Ricketts. Dr. Grummons was among many great students and admirers of Dr. Ricketts. Most importantly, he puts other's needs and wishes ahead of his own. Any time we called on "Dr. G", he was there even as recently as the formation of The New Modern Bioprogressive® Foundation meeting. He participated and attended the inaugural meeting at the University of Illinois (UIC) in Chicago; he was as excited to be there and participate as the first day I met him 26 years ago.

Rick and Duane worked 20 years to validate and co-author their frontal analyses. Dr. G has particular interest in and subsequently developed the Grummons Frontal Asymmetry Analysis and the 3D Frontal using CBCT cone beam technology. Both the Ricketts® and Grummons frontal analyses are included in our Computerized Orthodontic Programs RMODS® and JoeCeph®. In addition, Duane has authored books, and book chapters, and published articles in the WJO/AJODO/JCO/Orthodontic Practice/Orthotown and other well-known orthodontic journals. He has innovated orthopedic appliances used worldwide.

We at RMO® would like to salute and thank all of the Bioprogressive® supporters around the world, you know who you are. Many thanks from RMO®, and as Rick would say when he finished his seminars, "I did it my way."



Tony Zakhem
CEO
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SMILE BECAUSE OF DR. ROBERT MURRAY RICKETTS

The orthodontic profession continues without Dr. Robert Ricketts - our mentor, master clinician and genuine friend. We are fortunate because of his friendship, influences and innovations. We smile because of his life and teachings; he resides in our hearts and clinical methodology. The messenger is finished with his missions; his message carries on as a beacon. His vast orthodontic experiences, extensive knowledge, talents and wisdom have become quiet.

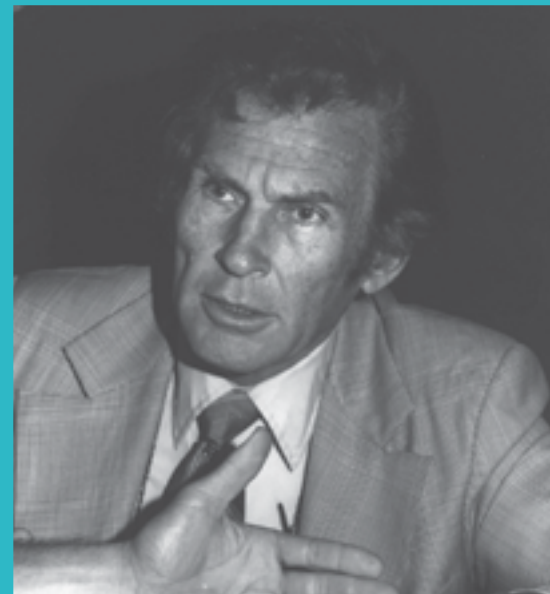
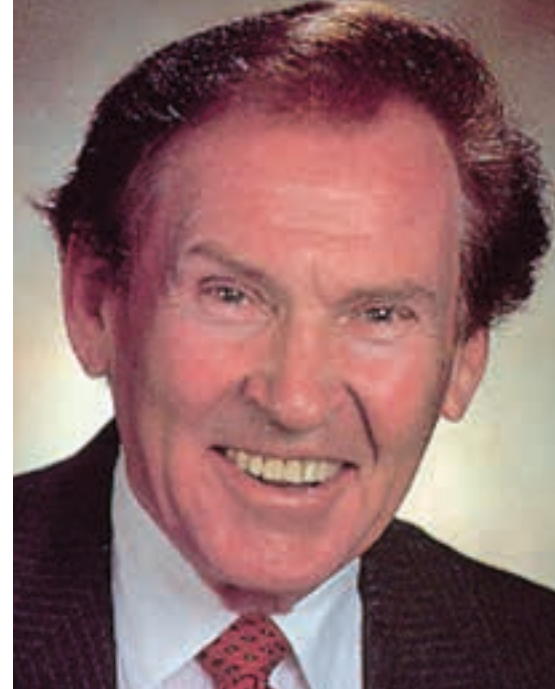
Our maestro and great teacher has crossed over to God's eternity. As he said in a lecture: "You won't forget me; I will live forever... in your minds and hearts".

In science, a scholar emerges from time to time to lay down certain principles and crystallize the information of his day as stepping stones for others to follow. Dr. Ricketts' influences continue to contribute to alleviation of biological and mechanical enigmas which challenge those with insatiable inquiring minds. His writings stimulate the student and promote advancements in a beloved orthodontic profession.

It is remarkable and genius that Dr. Ricketts commanded so much leading edge knowledge and pioneering in: early treatment/facial orthopedics; TMJ tomography and therapies; esthetics and golden proportions, orthodontic sectional biomechanics with biologic/physiologic emphasis; frontal facial analysis/asymmetry; nutritional influences; airway; world conditions, politics, music and the arts, anthropology and more.

We have had the privilege of walking alongside a giant. We each are grateful for the inspirations, learning, thinking, challenges, innovations, encouragements, and joyful moments together. His influence and spirit are very much with us.

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DR. RICKETTS: THE EARLY YEARS

Dr. Robert Murray Ricketts (RMR) began his life on a farm in Indiana with humble beginnings, unswerving persistence, and achievements. He credited "the farm" with his American work ethic, quick laughter and earthy sense of humor. In that community he was an accomplished athlete. Once he'd decided to pursue a career in dentistry, Ricketts forged himself into a determined scholar. He attended dental school at Indiana and graduated with honors from Indiana School of Dentistry (1945). Professionally, he devoted his life to lecturing, teaching and practicing orthodontics. He served in the United States Navy as Lt. J.G. in the Dental Corps.

Dr. Ricketts entered Dental School at Indiana (January 1943) during World War II. Then, young doctors served in the military as did Dr. Ricketts in the US Navy. While there, he became fascinated about orthodontics and attended University of Illinois under Dr. Allan G. Brodie (September, 1947), who was Dr. Angle's pupil. So the training focused on the Edgewise experience. Dr. Ricketts wrote: "Dr. Brodie had the most exceptional proclivity to instill in his students a sense of the importance of - orthodontics in their lives and to our whole culture. He expressed a love and respect for the profession." Ricketts earned his Masters Degree from University of Illinois Graduate School of Orthodontics (1950), the Merit Award from American Society of Dentistry for Children and research awards from the American Association of Orthodontics Essay Contest (1950 and 1952). He earned Diplomate of the American Board of Orthodontics.

As a student researcher in Chicago, Rick produced his first TMJ papers utilizing sectional laminography.



I practiced with Rick for 20 years, from 1959-1979. I observed his enthusiastic development of preformed bands, mixed dentition orthopedic treatment, adult TMJ diagnosis, open office design, computerized cephalometrics, and much more during these exciting orthodontic years. Rick was truly a renaissance man during his 56 years in orthodontics.

- Ruel W. Bench, DDS



JOINT FORM



Large Shallow Fossa



Small Fossa



Deep Fossa

Variations in TM joint morphology



DR. RICKETTS: THE PERSON

Dr. Cecil Steiner encouraged his move to Pacific Palisades, California to start his practice, with his first patient on July 1, 1952. Rick loved his work, avocations and people. He perceived and sought beauty in each moment, and was creative while pursuing goals. The longer he lived, the more he realized the impact of attitude on wellness and life. Dr. Ricketts indelibly touched and significantly influenced our hearts, shaped careers and honed lives. He was fascinating.

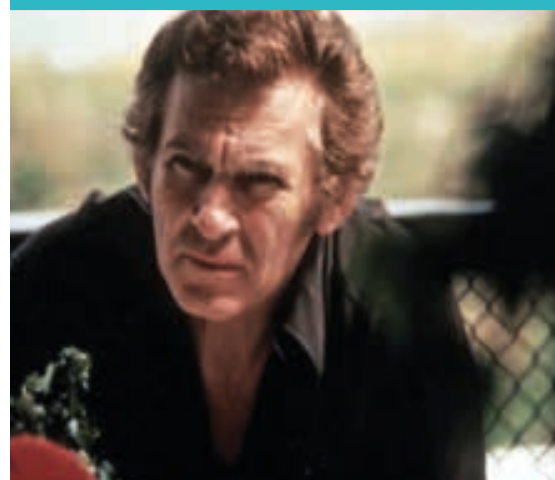
Rick inspired us to do small things in great ways, with newness in thinking, spirit and persistence. He emphasized that a good teacher is one whose students surpass him. He raised each of us to higher levels. Rick wrote that changes are inevitable; be prepared to change. Adversity offers challenges and growth, which stimulated his life.

He stood up and stood out for codes of decent behavior (ethics), morals, right conduct, integrity and uprightness. He wrote that our universities should rate student selection upon principles and ethical character.

To those who had the privilege to closely know him, Rick was a loyal friend and beloved as a brother. He was a true gentleman who would inspire and uplift another. He talked us through disappointments and joys. He made spontaneous phone calls urging us to close the ranks with those you love. What one puts into the lives of others comes back into your own.

Dr. Ricketts is survived by four children: Robin Machette, Gale, Craig, and Anastarr Ricketts and grandchildren.

Robert M. Ricketts inspired the thought processes of all contemporary orthodontists. Those interested in this unique, brilliant and colorful individual may read his autobiography, "The Reappearing American."



Rick will be remembered most for teaching us to love our patients, our work, and our profession. He challenged us to think out of the box, to challenge old dogmas, yet remain steadfast to truths that guide our thinking. He was an innovator whose thinking was often generations ahead of the profession... time will tell.

- Terry A. Sellke, DDS, MS



DR. RICKETTS: THE TEACHER AND MENTOR

Dr. Ricketts is vividly remembered world-wide by early adopter orthodontists. He provoked us to think, seek the truth in all things, and verify our beliefs based upon clinical studies. Rick emphasized education, broad experiences, awareness and self discipline. He taught us to be persistent and inquisitive; to seek causes and truths. RMR challenged us that it is acceptable to disagree, but never be disagreeable; criticize the topic, but not condemn the person. He was quick to replace old knowledge with new, and stood strong upon core principles which do not change. Rick made learning interesting and inspiring. He conveyed fresh new knowledge in a vitalizing style with meaningfulness. His genius and captivating delivery captured our focus and instilled a desire to pursue new knowledge. He implored us to keep our minds open. Man's mind, once stretched by a new idea, return to its original dimension.

Dr. Ricketts taught that the driving force to seek in orthodontics is esthetics. Biologics, facial orthopedics, differential diagnostics, systematic mechanics and motivated management are key components of practice. Rick taught us that the orthodontist of the future is the one who gains perfection and stability of results with the fewest appliances. Rick emphasized individualization and facial morphologies far beyond malocclusion. Begin with the end in mind, while providing individualized treatment design and specific clinical approaches to reach optimized facial and occlusal results.

"Rick" is affectionately remembered for teaching us to love our patients, our work, and our profession. He challenged us to critically think beyond the usual, to challenge old dogmas, and remain steadfast to truths that shape our thinking. He was an innovator, often generations ahead of the profession. He inspired us to reach for what was possible rather than settle for what was. He emphasized: Be fair and honest with all concerned; have impeccable ethics and the finest character.

He was co-founder of the orthodontic Bioprogressive® Therapy and Philosophy and a major force in the development of computer-aided diagnostics. Dr. Ricketts developed a variety of innovative orthodontic products used throughout the world. He published many articles, including the reference text "Provocations and Perceptions in Cranio-Facial Orthopedics." He was an active part of orthodontic education at University of Illinois, Loma Linda University, University of California Los Angeles, University of Texas Houston, University of Oklahoma, University of Southern California and universities throughout the world.

DR. RICKETTS: THE INNOVATOR AND ORTHODONTIC PIONEER

The entire orthodontic community benefits from that partnership of Rocky Mountain Orthodontics® (RMO®) with Dr. Ricketts. Archie and Martin Brusse and Tony Zakhem of RMO supported his lectures in Arizona: "The Bioprogressive® Philosophy Series of Courses." They described Dr. Ricketts as:

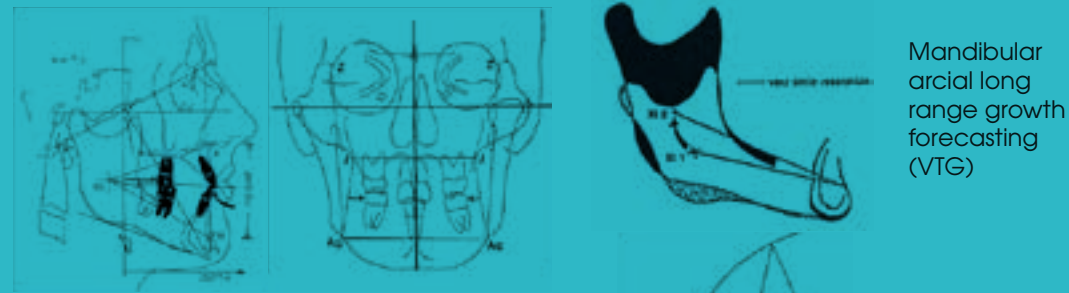
- 1) a great teacher, innovator, father, friend, and thinker;
- 2) always had the benefits for others in mind, especially patients;
- 3) taught to always think of the patient first for their overall health; and
- 4) to never stop learning "keep your mind stimulated."

His long partnership with Rocky Mountain Orthodontics® (RMO®) helped develop useful products and devices, including preformed bands and pre-adjusted brackets, first presented at the AAO meeting in Los Angeles, May of 1962. His other product related ideas: self-ligating brackets (1970's); snap-channel concept; ribbon arch wires; tooth-colored premolar bands for lingual retainers. RMO® closely worked with Dr. Ricketts to assure that his vision became a reality. RMO® continues to work with current Bioprogressive® teachers and clinicians around the world.

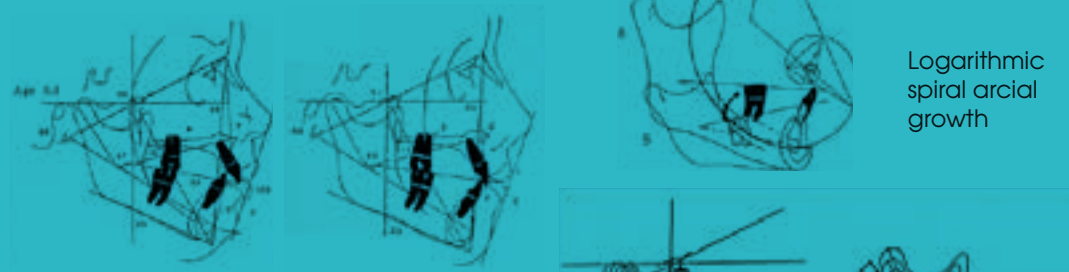
Rick's industrious accomplishments and pioneering in the field of orthodontics included:

- Development of .018 slot straightwire bracket with Rocky Mountain Orthodontics® (RMO®) (1970)
- Development of Ricketts' lateral and frontal cephalometric analyses; clinicians could compare patients to norms based upon age, sex and race with RMO®
- Development of first cephalometric diagnostic system to integrate growth into treatment prediction- visual treatment objective with growth (VTO), with RMO®, to date RMODS® is the exclusive provider.

Research revealed doubts of reliability for use of Sella for description or serial growth. Sella-Nasion was fair for nasal development, but unreliable when the mandible was analyzed.

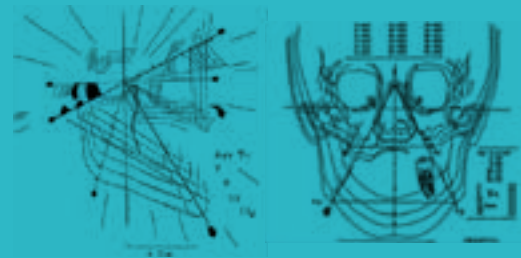


Mandibular arcial long range growth forecasting (VTG)

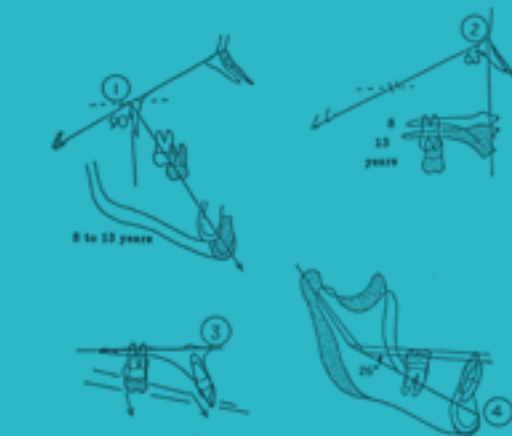


Logarithmic spiral arcial growth

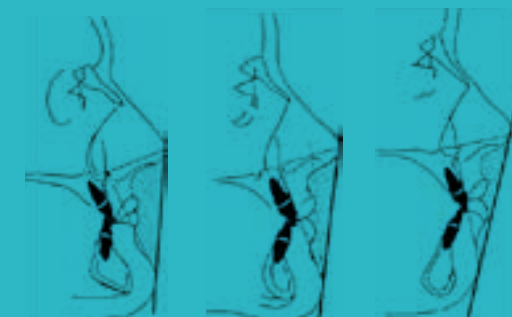
Ricketts Visual Treatment Objective VTO



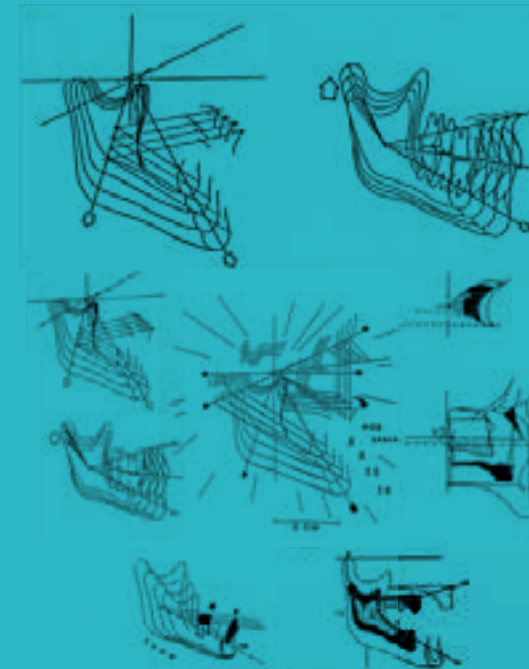
Polar phenomenon-anterior and posterior facial growth at the base of sphenoid; facialgnomic growth



Four Position Summary Analysis and



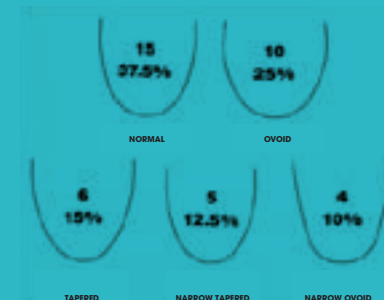
Ricketts Esthetic E plane



Allometric growth

Age	Sex	Race	Mean	SD	95% CI
15	M	Caucasian	10.5	1.5	7.5 - 13.5
15	F	Caucasian	10.0	1.5	7.0 - 13.0
15	M	Hispanic	10.0	1.5	7.0 - 13.0
15	F	Hispanic	9.5	1.5	6.5 - 12.5
15	M	African American	10.0	1.5	7.0 - 13.0
15	F	African American	9.5	1.5	6.5 - 12.5
15	M	Other	10.0	1.5	7.0 - 13.0
15	F	Other	9.5	1.5	6.5 - 12.5

Computerized lateral and frontal cephalometric diagnostic summary (Rocky Mountain Data Services)



Ricketts®' superimposition methods proved reliable for analysis.

- Pioneered "composite tracings" to understand growth patterns in facial types (superimposition upon Basion-Nasion plane at CC point and with Frankfort Horizontal plane.)

Following Dr. Downs' suggestions, Ricketts developed a technique of forecasting facial growth for a 2-year period from lateral radiographs.

- Researched facial growth and developed a computer generated growth projection to maturity using his and growth studies of Bjork, Moss, Scott, Petrovic and others.

Cephalometrics became an effective diagnostic and prognostic tool. The comprehensive analysis was divided into dental, skeletal, dentoskeletal, esthetic, jaw complex, deep structural and nasopharyngeal fields. Remember, a clinician can make a decision no better than the information available with which to work.

More ideas formulated with RMO®:

Computer Aided Orthodontic Diagnosis

- Development of computer driven cephalometric diagnostics (Rocky Mountain Orthodontics Data Services®) (RMODS®)
- Lateral and Frontal Analysis
- Long Term Visual Treatment Objective (VTO)
- Growth Prediction to Maturity (VTG)
- 4D - adding the dimension of time to appliances and treatment parameters; appliance differentiation based on facial type (mesofacial, brachyfacial, dolichofacial) and designed into brackets and tubes (1st version of what became straight wire appliances)
- Development of 5 Pentamorphic® individualized arch-forms

DR. RICKETTS: THE ORTHODONTIST

Dr. Ricketts was the recipient of numerous national and international awards and was a noted authority and expert in cranio-facial anatomy, physiology and human facial development. The world-renowned plastic surgeon Dr. Paul Tessier once stated: "If there was ever anyone, anywhere who understood cranio-facial anatomy, physiology and growth, it is Robert M. Ricketts."

Dr. Ricketts achieved many awards in Oral Surgery; Ketcham and Mershon Awards from the American Association of Orthodontists; Doctor of Nutrition (NMD); Merit Award from American Society of Dentistry for Children; and more.

Biologic principles, as described in Ricketts® manuals and textbooks, never change and are hallmarks for orthodontic treatment today.

More examples of Dr. Ricketts' influences are:

- Development of "root ratings" scale to quantify optimal forces to move teeth in any plane of space.
- Challenged the profession to learn and understand facial anatomy and its growth with orthopedic influences upon treatment decisions and biomechanics.
- Recognized orthopedic potential and challenged our profession to "treat faces, not teeth"; he emphasized jaw orthopedics and cervical headgear for orthopedic correction.
- Developed hierarchy of anchorage in recognition that facial growth, muscles, cortical anchorage, and tooth-based anchorage prevail in biomechanics.



Quad helix and utility arch



Robert M. Ricketts. I cannot think of anyone who has done more to advance our service to our patients than he has. His landmark TMJ studies serve as a basis for many advances in the field and his Bioprogressive Philosophy has many adherents. His emphasis on diagnosis countered the mechanotherapy overkill that afflicts so many today. Rick was a valuable member of our orthodontic department at Illinois. A great man for all seasons, for all reasons!

- Tom Graber



Ricketts taught us to think about individualized treatment; to begin with the end in mind, also emphasized by Bench and Gugino.

1. Systems approach to diagnosis and treatment by application of visual treatment objective (VTO) in planning treatment, evaluating anchorage demands and monitoring progress/results
2. Torque control throughout treatment
3. Muscular and cortical bone anchorage
4. Movements of teeth in any direction with proper applications of pressure
5. Orthopedic alteration of facial structures
6. Treat the overbite before the overjet
7. Sectional arch therapy
8. Concepts of over-treatment
9. Unlock the malocclusion in a progressive sequence to establish or restore normalized function
10. Efficiency in treatment with quality results utilizing a concept of pre-fabricated appliances

Bioprogressive® theory and practice based on these prospective possibilities:

1. Any tooth can be intruded with continuous pressures: 15 grams for lower incisor; 80 grams or less for molar
2. Molars can be moved bodily with specific mechanics
3. Permanent skeletal change is possible in mid-facial complex in three planes of space in the growing child
4. With pressures of 0.5 gm/mm squared, root surface ridge modification is possible by forward movement of the lower arch/lower incisors with attention to muscles of the lower lip
5. With correction of arch relations, a functional change may occur. Swallowing and breathing are highly important
6. Forecasting can be accomplished far beyond the element of chance

Belief in limitations started in the 1930's and led to rise in premolar extractions for orthodontics. Ricketts listed thirty "limitations" canons which were challenged and overcome by clinical and research findings. Seven most basic and limiting were:

1. No distal movement of molars
2. No forward movement of lower arch or lower incisors
3. No buccal expansion
4. No intrusion of teeth
5. No basal skeletal change
6. No change in the oral environment
7. No prediction of outcome

During his practice in California, he innovated new Bioprogressive® techniques and appliances. Rick developed key professional relationships and followers on all continents. After 10 years in practice and after collecting many patients' records; Rick convinced colleagues about his newfound approaches, innovations and reliable results.

He was the founder of the American Institute of Bioprogressive® Education, and instrumental in establishing the Foundation for Orthodontic Research (F.O.R.).

Today, the Modern Bioprogressive® Organization (www.bioprogressive.org) provides a portal for debates, place to share publications/scientific works and to keep the principles alive. New technologies and materials have been integrated to develop hyper-efficient orthodontic clinical therapies and biomechanical procedures to drive treatment to higher excellence. Bioprogressive® differs greatly from traditional Edgewise, Begg, and Straight Wire philosophy in terms of the possibility doctrine and the modalities attending to it.

- Drs. Ricketts, Bench, Gugino and Hilgers developed new appliance systems used worldwide, including facial orthopedic-approaches, quad-helix, utility arches, arch sectionalization, and overcorrection finishing techniques.
- They collaborated regarding Bioprogressive® Theory and philosophy, a biologic systems/therapies approach to diagnosis and treatment which emphasized the whole patient beyond straightening teeth.
- Ricketts stimulated new orthodontic treatment thoughts by his doctrine of possibilities (not limitations) publication "Doctrine of Limitations" in 1973. To this day, those fundamental concepts hold true.
- Professorships at The Loma Linda University, University of Illinois, UCLA, USC and dozens of orthodontic departments around the world.



Ricketts and Bench



Drs. Robert Ricketts, Ruel Bench, Jim Hilgers



Bob Ricketts was an absolute joy to work for. Every day was like a new day at school. Rick just had teaching in his blood. It was impossible for him to let a day go by without sharing his profound knowledge and wisdom. I wish every young orthodontist could have spent just a few moments with this incredible man.

- Dr. Jim Hilgers



Ricketts teaching manuals
13 volume series



Facial Divine Proportions
and caliper

The University of Illinois and Loma Linda University have designated areas in recognition of Dr. Ricketts.

- Authored over 300 refereed articles, chapters and textbooks on orthodontics, all derived and paid from his private orthodontic specialty practice in Pacific Palisades, California and personally thereafter.

His lengthy university research was personally financed; an exploration while he maintained a full-time orthodontic practice in Pacific Palisades, California. His discoveries and bold advances led to the creation of electronic computerized orthodontic diagnostics and staged clinical procedures. Dr. Ricketts published books and articles to transform and improve Bioprogressive® Philosophy and Therapy.

- Recognition and use of facial beauty proportionality (Divine Proportion) in treatment of dental and skeletal problems. Dr. Ricketts described esthetic smile factors and design long before it was so named.

After discovering facial gnomonic growth and facial growth of the mandible, geometrics and mathematics fascinated Dr. Ricketts. To better understand, in 1979, he visited Dr. Melvin Moss (New York) who inspired him to research and apply the Divine Proportion and Fibonacci numbers. In 1980, Ricketts began to lecture about this to orthodontists and plastic surgeons.

Orthodontic and dentofacial orthopedic treatment of jaws were individualized for each facial type. Treatment protocols could be easier taught; these customizations steepened the learning curve; orthodontics advanced beyond teeth alignment. Now biology and esthetics enter the consciousness; diagnosis and treatment planning become more complex and uniquely beneficial.



REMEMBERING DR. RICKETTS

Dr. Ricketts dedicated his life to the advancement of orthodontics, a topic he was always eager to discuss. Dr. Ricketts was an inspired and strong-principled person who accepted the lifelong challenge to favorably transform orthodontic thinking and therapies.

After orthodontic practice, Dr. Ricketts relocated to Scottsdale, Arizona where he continued his worldwide teaching. Dr. Ricketts continued to author books and teaching manuals, while continuing research in the biologic and physical sciences. He has inspired study groups in many nations.

Dr. Ricketts seemed to never rest, not even during flights nor moments between lectures. He taught within the principles and beyond the boundaries - part of his legacy. He was continually thinking, writing, and innovating new concepts.

In 1959, Rick accepted a preceptor, Dr. Ruel Bench, who became his most important partner in the development of Bioprogressive® therapy and philosophy. In 1963, Dr. Ricketts started teaching advanced classes for groups of 15 to 25 colleagues. In 1968, these students were invited to organize the FOR (Foundation for Orthodontic Research) in San Francisco, CA. In 1966, the lateral facial growth view started. In 1968, a radial point from which the face grows as "sun rays" was discovered and described; it was called the "polar growth phenomenon". Arcial growth of the mandible was described in 1971 and published in 1972.

In 1970, Dr. Ricketts included Dr. Bench in his practice and lectures. They invited Dr. James Hilgers to join their team so Ricketts could dedicate more time for research and teaching. During the 1970's, Ricketts was motivated to teach, write, lecture, and flourish his thoughts and ideas. Rick recognized that certain colleagues carried jealousies and that challenges would arise regarding acceptance of these new ideas. In 1975 alone, Rick published six scientific articles. With expansive and brilliant teaching influences by world-wide teachers and the help of Dr. Carl Gugino, Ricketts' ideas spread around the world. Their message emphasized thorough differential diagnosis and individualized treatment based upon degree of difficulty, and delivered in a systems approach. In 1977, Rick and Bench amicably ended their practice partnership and remained as good friends. Dr. Ken Fischer and Dr. Richard Jacobsen contributed clinically alongside Dr. Ricketts thereafter.



Specific and personal attention for each student.



The world and particularly the orthodontic world have seen the end of an era. There has never been a man who loved his profession more, and contributed so much to it. It is with great respect and admiration that we say goodbye to our mentor and friend.

- Carl F. Gugino, DDS



Carl Gugino and Robert Ricketts



Original Bioprogressive Instructors: Drs. Ricketts, Bench, Gugino, Hilgers



Continuous flow and surge or new ideas.

PERSPECTIVES: DR. RICKETTS

Ricketts was an incredibly perceptive man, a prolific writer and vigorous lecturer. In one year alone, he published 12 foundational articles in major orthodontic journals. His writings on cephalometrics, growth, and bio-mechanics have become standards for aspiring orthodontists. His two-week in-office course was almost a rite of passage for orthodontists in the '70's and '80's. Seasoned professionals were known to quake in their boots at the thought of being called upon to draw the precise anatomy of the temporal or sphenoid bone. In his marathon lectures, Rick taught by neutralizing people to core truths and rebuilding them with new knowledge and heightened curiosity. It became the stuff of true believers.

Plato explored; Aristotle taught; Ricketts did both as he awakened the orthodontic mind. We learned with him to seek scientific truths and continually stretch one's thinking. R.M. Ricketts was a scholarly orthodontist and facial orthopedic teacher seeking clarification of logical and factual orthodontic knowledge by exactness of reasoning. He was a pilgrim of curiosity and inspired newness of the orthodontic eye, mind, passion and soul.

In 1979, Dr. Ricketts produced six papers and a book: "Bioprogressive® Therapy with Drs. Bench, Gugino, Hilgers, and Schulhof. This textbook was translated into many languages, and included contributors with detailed biologic bio-mechanics with physiologic basis. Ricketts dedicated his efforts to publish an exhaustive Book One in 1989 with 2 volumes (co-sponsored with Rocky Mountain Orthodontics® - RMO®); Book Two never happened. In the 1990's, he dedicated his career to improve and prove his growth prediction system and traveled around the world repeatedly lecturing. He published Bioprogressive® manuals with descriptions and clinically relevant details regarding diagnostics.



RICKETTS AND THE TEMPOROMANDIBULAR JOINT: KNOWLEDGE AND TEACHINGS

Dr. Ricketts had a fervent interest and deeply knew the biology of occlusion, TMJ anatomy and jaw dysfunction therapies. He analyzed total patient issues, and recognized that function precedes form as it influences the biology of living. Dynamic tissues was a paramount concept for contemporary orthodontists as true physicians of the face.

In his one-week comprehensive TMJ course, Ricketts vigorously taught the important biologic functions of the human craniomandibular articulation and mechanical homeostasis for reflexes of the neuromuscular system. Scientific TMJ investigations by Ricketts continued over 43 years with three books devoted to the subject.

By 1990, Ricketts had treated 6000 stomatognathic disease TMJ cases. The Ricketts® Biotemplate was his most utilized "splint." He championed orthodontic corrections with the concept that occlusally supported results were more permanent. Ricketts helped develop the sectograph for corrected TMJ tomography which revealed TM joint space, structural surface changes and limits of adaptability in this TM joint. Ricketts taught about muscular input derived from normal occlusion and function to help preserve the joint and be in equilibrium.

He taught clinicians to be familiar with facial growth and development, the inter relationships of occlusion, and the influences of musculature. Temporomandibular dysfunction was his remarkably consistent area of interest, expertise and renown.

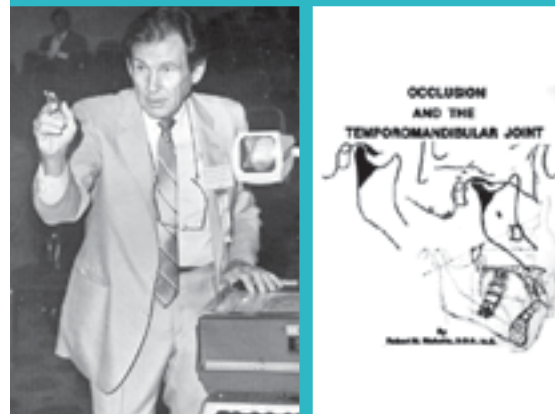
Rick concluded his Pacific Palisades, CA specialty orthodontic practice in 1995. From 1997 to 2002, Ricketts launched 13 manuals on Bioprogressive® Therapy within The Bioprogressive® Institute for Bioprogressive® Education, Scottsdale, Arizona. He published and vigorously lectured until he passed away in June, 2003.

He was quick to replace old knowledge with new, and yet he defended and stood strong upon principles which do not change. He indelibly influenced our lives and thinking; shaped our hearts, careers and lives to reach higher personal levels, with professional advancements and contributions. He taught us to love our patients and to treat with grace, style and class.



Dr. Robert M. Ricketts' personal impact upon lives remains a flame that burns brightly, and a beacon for learning. Rick inspired us to do small things in great ways, and with newness of thinking, spirit, enthusiasm and interest. He readily offered us shoulders to climb upward. He raised each of us to higher levels, as wind beneath our wings.

- Duane Grummons, DDS, MSD



Rick inspired me, by example, to give 100% and his spirit and message is with us forever. First, love your patient, he would say...

- Richard L. Jacobson, DMD, MS



RICKETTS TRIBUTE EVENTS

Anaheim, CA. Surprise Birthday Party for Rick 1989
A formal surprise birthday party to honor Rick was organized. He thought it was for Dr. Carl Gugino. 500 colleagues in tuxedos celebrated RMR and danced. That evening, the Loma Linda Ricketts Library was announced and funded. Rick was completely emotional with joyous gratitude.

Orlando, FL 2004
One of Dr. Ricketts requests was that after his death "graduation", a celebration should occur. He expressed to family that he desired a black tie affair to bring together his friends and family to joyfully celebrate his life. An incredible and significant Dr. Ricketts Tribute with 300 Bioprogressive® advocates gathered. It was honoring, monumental, historic, and simply outstanding; an event to remember in one's mind and heart forever. The whole Ricketts family attended, as did colleagues from every continent. What a festive reunion of friends. The Foundation for Orthodontic Research (FOR) final meeting was then held, with vital orthodontic subjects debated. FOR was finished. We treasure its exceptional memories.

RICKETTS: MENTOR AND FRIEND

Ricketts was a giver, driver, wise thinker, researcher, and master philosopher; quite a unique character indeed. "Rick" was continually in search of new knowledge his whole life. He loved people! We are fortunate to have shared his friendship and respectful love. Explorer, innovator, processor, inspirer, and musical crooner, he was multiple and unique.

This universal mentor and mind took us upon his shoulders and elevated colleagues to a higher level with his non-dogmatic thinking, teaching and innovations. Rick loved to regale his passionate followers with stories of Angle, Brodie, Downs, Tweed, Steiner and other orthodontic giants whom he knew, respected and often disagreed with.

He captured the imagination. He sang well, and was often heard crooning "I Did It My Way" or "Unforgettable" or "Smile" during a lecture. While Rick was lecturing in Brazil, he won a professional talent show singing "New York, New York". A bit of theatrics was within Ricketts. He sang and danced very well.

RICKETTS: "DASH" N LIFE

What matters is the "dash" between dates of birth and death, May 5, 1920 - (dash) June 17, 2003 for Dr. Ricketts. That dash represents all the time spent alive on earth. Worthiness and success are measured by what occurs between one's origin and one's final achievements. Dr. Ricketts contributed immeasurably through his talents, strengths and perseverance. Like him, the future belongs to those who believe in the beauty of their dreams.

We lost our mentor, Dr. Ricketts, the man who inspired and challenged professionals to follow biologic and progressive approaches to treat patients better. Doctors continue practicing the Bioprogressive® philosophy and therapy around the world. The principles, as emphasized by Dr. Ricketts, never change and are still practiced.

Hilgers wrote: "Ricketts' unselfish regard for economic matters put distress in his life. Rick's love for orthodontics was so innocent and genius that it never occurred to him that his efforts should have financial gain. His passion for orthodontics was unmatched.

He fully re-invested his earnings into teachings and publications. Dr. Robert Murray Ricketts piqued the interest of orthodontists in a most alluring way. His hearty laugh, his sharpened sense of humor, his authentic joy for life, his orthodontic passion and profound insights are missed by all who knew him. He was, quite simply, "one of a kind."

Consistently, Rick was and still is recognized as a transformational pioneer and history maker in our beloved profession. He was a strong clinician with imagination and innovation; an inquiring researcher who was brilliant to the end. He readily divulged his discoveries and learned from failures, igniting meaningful ideas and enthusiasm into possibilities and realities. He was a leader within and outside orthodontics, which he dearly loved and respected.

Remember that when we lose treasured friends, we do not really lose them. Memories live on, lessons persist and legacies endure. No more poignant story can be told than about the life of this extraordinary man. He was a quintessential and sometimes controversial figure; bold, sometimes arrogant, provocative, lofty and incisive at times; and also genuinely warm, loving, and nurturing toward others. He was called a Renaissance man. Such a person was Robert Murray Ricketts. For those who understand, no explanation is necessary; for those of you who do not, no explanation is possible. His passion for life transcended his knowledge about things. Ricketts understood that the world is a mysterious place and that his quest in life was to understand it more completely, and contribute to its betterment.



“
Dr. Robert M. Ricketts' contribution to the development of the orthodontic field all over the world was immeasurable. He was a great source of inspiration and motivation for me and will be greatly missed.
”
- Hiroshi Nezu, DDS, PhD



I can close my eyes and see him teaching us; hear his gusto and laughter, or his directives and bold convictions. I can remember his singing and cephalometric superimpositions; his style and personality; his moments of tender grace and intimate concerns; his love and considerations. It is hard to comprehend that his voice and knowledge have become silent. Whew, in your circle of influences and works, carry on with the teachings and updated aspects of Dr. Ricketts knowledge, and Bioprogressive® principles and approaches applied today. Knowledge and information are meant to be shared and passed on to others. Man's mind, once changed by a new idea, can never return to its original dimensions.

It is my honor to be part of this 100th year AJODO legacy publication. This is a classy, respectful chronicle of Dr. Ricketts' life, his significant contributions and deep relationships he shared. Yes, he left a hole in our hearts. We carry huge joy, respect and heartfelt memories through each relationship shared with Rick. When Rick smiled; people smiled back. Whew... it's hard to believe that Rick's active mind and breath have gone silent. He led us on a relentless pursuit of knowledge and truths. He was a giant colleague; our maestro; our primo gusto. He was profoundly great and significant. His innovations were many, and his influence will be felt by generations to come. He was a legend in his own time. I wish every orthodontist could have spent a few moments with this incredible man. What an indelible influence and privileged encounter for each of us who had this opportunity. Don't cry because his life is over; smile because he happened.

*To Duane
Drummond
No one can appreciate
a friend like you unless
its on a daily basis. I look
to you for strength and moral
support which is often needed
you have my love and respect
'Rick' 6-22-90*

REMEMBERING DR. RICKETTS



— HE WAS A — **GREAT**

teacher, innovator, father, friend, and thinker. He always had the benefits of others in mind especially the patients.

Dr. Ricketts dedicated his life to the advancement of orthodontics and it was a topic that he was always eager to discuss.

SOME OF THE IDEAS THAT RMO INCORPORATED INCLUDE:

- Computer Aided Orthodontic Diagnosis
- Lateral and Frontal Analysis
- Long Term Visual Treatment Objective (VTO)
- Growth prediction to maturity

Adding the dimension of time to treatment parameters (4D)

Appliance differentiation based on facial type – built into brackets and tubes

- Mesofacial
- Brachyfacial
- Dolicofacial

Dr. Ricketts was an innovator

whose thinking was often generations ahead of the profession.

He taught me to always think of the patients first and their overall health and to never stop learning.

THE ENTIRE ORTHODONTIC COMMUNITY CONTINUES TO BENEFIT

from the original partnership that was established with Dr. Ricketts

In 1973 he wrote the "Doctrine of Limitations." To this day, the fundamental concepts of this article hold true.

Dr. Ricketts collaborated with Dr. Ruel Bench and Dr. Carl Gugino, to develop the Bioprogressive philosophy.

RMO IS VERY PROUD to have worked with DR. RICKETTS

and to have helped assure that his vision became a reality.

