







## About Collegium Aesculapium

In a troubled world, physicians and healthcare professionals who are members of The Church of Jesus Christ of Latter-day Saints have the benefit of spiritual insights as well as the art and science of medicine.

Collegium Aesculapium addresses the ethical and spiritual as well as the physical aspects of medicine. Thus, we invite qualified professionals to embrace the Collegium and take advantage of insightful meetings and seminars, newsletters, service opportunities, and the *Journal of Collegium Aesculapium*, all of which include this important expanded dimension, as well as the constantly changing body of scientific information available to us.

For more information, see <http://www.collegiumaesculapium.org>.

## How to Join Collegium Aesculapium

Collegium Aesculapium encourages physicians, podiatrists, dentists, physician assistants, Ph.Ds, and doctors of pharmacy to become active members of the organization (\$200 per year). Special rates are available for retired health professionals (\$100) and professionals in their first two years of practice (\$50). Others interested in Collegium are invited to join as Associate Members (\$100 per year). Residents (\$35) as well as medical students and upper-class premedical students are also invited join the Collegium.

To join, send name, address, and membership fees to:

*Collegium Aesculapium Foundation, Inc.*  
493 S. Orem Blvd.  
Orem, UT 84058

## Collegium Aesculapium Board and Past Presidents

### PAST PRESIDENTS

1982 Robert H. Hales  
1983 Richard A. Call II  
1984 John C. Nelson  
1985 N. Lee Smith  
1986 Robert D. Jones  
1987 Roger L. Hiatt Sr.  
1988 Joseph G. Cramer  
1989 Lattimer H. Ford  
1990 Homer S. Ellsworth  
1991 Larry Noble  
1992 G. Michael Vincent  
1993 Sydney A. Horrocks  
1994 Blayne Hirsche  
1995 Richard B. Sampson  
1996 Marian M. Brubaker  
1997/8 James M. Clayton  
1999 Joseph P. Hardy  
2000 Thomas N. Spackman  
2001 Lloyd Call  
2002 George Van Komen  
2003 Swen Swensen  
2004 Marv Orrock  
2005 James L. Parkin  
2006 James H. Pingree  
2007 Jeffrey R. Smith  
2008 D. Glen Morrell  
2009/10 Johnnie Cook  
2011 Anthony Middleton

### PAST PRESIDENTS (CONT.)

2012/3 David Anderson  
2014 Scott Swift  
2015 Kimball Taylor

### BOARD OF TRUSTEES

David Anderson, M.D.  
Terry Clayton, M.D.  
Johnnie Cook, M.D., *Chair Consc. Comm.*  
Steven Davis, M.D.  
Donald Doty, M.D., *President*  
Adam Dustin, DPM  
Ben Eggleston, M.D.  
Brian Gill, M.D.  
Steven Grover, M.D.  
Robert Lamb, M.D.  
Anthony Middleton, M.D., *Chap. Coordinator*  
Larry Noble, M.D., *Treasurer*  
Marv Orrock, PHARM. D., *CME Coordinator*  
Fortunato Perez, M.D.  
James H. Pingree, M.D., *Chap. Coordinator*  
Susan Puls, M.D.  
Richard Rees, M.D., *Secretary*  
George Snell, M.D.  
Scott Swift, M.D.  
Kimball Taylor, M.D., *Past President*  
Matthew Weeks, M.D.  
Bruce H. Woolley, PHARM. D., *Exec. Vice Pres.*  
Spencer Woolley, *Managing Director*

THE JOURNAL OF

COLLEGIUM AESCULAPIUM

FALL 2015

### EDITORIAL STAFF

Bruce H. Woolley, PHARM. D., Editor  
Matthew Wright, Production Editor

### EDITORIAL BOARD

David Anderson, M.D., *Emergency Medicine*  
Johnnie Cook, M.D., *Family Practice*  
Devon Hale, M.D., *Tropical Medicine/Infectious Diseases*  
Ed Heyes, M.D., *Orthopedics*  
Bruce Jafek, M.D., *Ophthalmology*  
Anthony Middleton, M.D., *Urology*  
D. Glen Morrell, M.D., *Surgery*  
Larry Noble, M.D., *Ophthalmology*  
Marv Orrock, PHARM.D., *Pharmacology/Therapeutics*  
Craig Jenson, M.D., *Dermatology*  
Susan Puls, M.D., *Humanitarian Service*  
Richard Rees, M.D., *Pediatrics*  
Brent Scharman, PH.D., *Behavioral Medicine*  
Thomas N. Spackman, M.D., *Anesthesiology*  
G. Michael Vincent, M.D., *Cardiology*

Manuscripts considered for publication in the *Journal of Collegium Aesculapium* must be clinically appropriate and spiritually consistent with the principles and doctrines of The Church of Jesus Christ of Latter-day Saints. All manuscripts must be clearly written and submitted in a double-spaced 12-point font in a Microsoft Word e-mail attachment. A manuscript that meets these standards is peer reviewed by several members of the editorial board and is evaluated with the reviews by the editorial staff. After suggested content adjustments are made, an article may be accepted, edited to our standards of style and readable writing, and published in the *Journal*.

Manuscript submissions should be emailed to:  
[bruce@collegiumaesculapium.org](mailto:bruce@collegiumaesculapium.org)

*The Journal of Collegium Aesculapium* is a peer-reviewed journal published by the Collegium Aesculapium Foundation, Inc. Articles published in the *Journal* are the sole responsibility of their respective authors and do not necessarily reflect the opinion of the organization or any sponsoring or affiliated institutions.

© 2015 Collegium Aesculapium Foundation



THE JOURNAL  
OF COLLEGIUM  
AESCULAPIUM

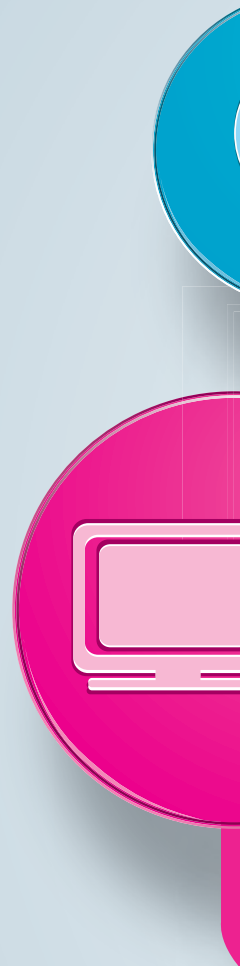
FALL 2015

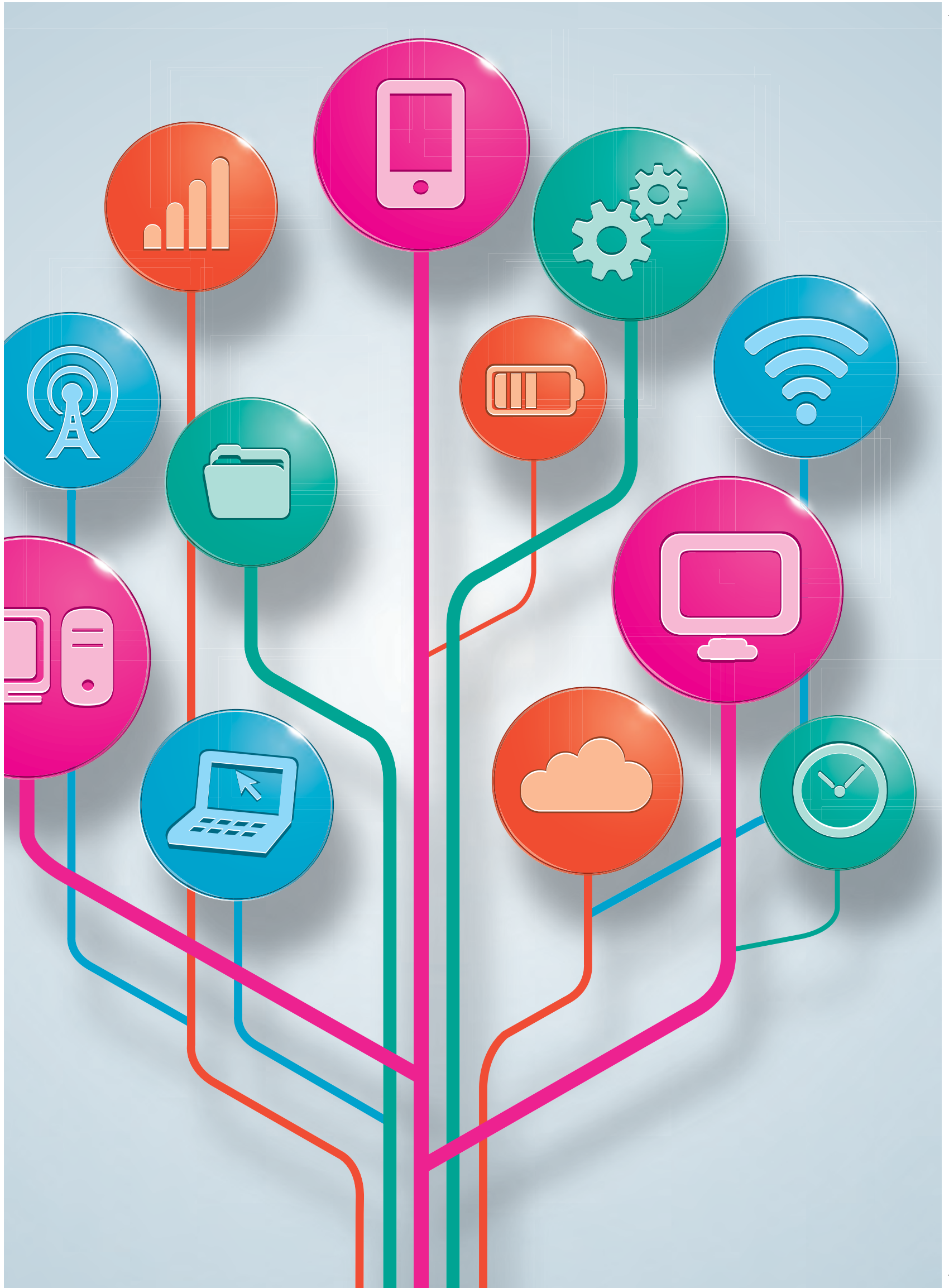
<i>Using Technology In the Service of the Lord</i>	6
<hr/>	
ELDER L. TOM PERRY	
<i>He That Hath Ears to Hear, Let Him Hear</i>	12
<hr/>	
RICHARD K. GURGEL, M.D.	
<i>To Graduating Physicians</i>	18
<hr/>	
GREGORY A. SCHWITZER, M.D., FACP	
<i>The Bomb and Me</i>	22
<hr/>	
GEORGE F. SNELL, M.D.	
<i>The Egyptian Obsession with Eternal Life</i>	28
<hr/>	
ANDREW C. SKINNER, PH.D.	

# Using Technology *in the Service* *of the* Lord

The expanding role of the Church's  
Public Affairs Department

*by* Elder L. Tom Perry





Good evening! I am honored by the invitation to speak to such a distinguished and capable group of physicians. Your organization has quite a name! Knowing about the mission of healing you are all involved in, I am eager to discuss our common goals of serving the Lord.

Fifty years ago we could not imagine the astonishing advances in technology that shape the medical field today. Surgeries that once required opening the chest cavity, can now be performed through a catheter with the patient often able to return home the same day! Earlier this month one of my hips was replaced. I am grateful for capable doctors and the medical advances that allow me to return so quickly to my regular schedule.

With all of the miraculous increases in medical technology that allows you as physicians to better people's lives, there has been an equally miraculous change in the way technology helps me to communicate and carry out my duties. Tonight I would like to discuss how my responsibilities with the Public Affairs Department of The Church of Jesus Christ of Latter-day Saints has been enhanced by these changes.

The Founders of this Republic recognized that the capacity of this nation to endure rested on the ability of its citizenry to govern itself according to righteous principles; that when any nation departs from those principles, it commences in a downward course toward self-destruction.

We have a concern that some of these basic principles are being eroded. We have an obligation to safeguard these sacred principles and teach that which the Lord has revealed for our own good and for the salvation of future generations.

I am in awe of what the Lord has given us in the founding of this great nation. The early settlers came here to establish the God-given right to enjoy religious freedom. They wanted freedom from states in which their civil rights and their religious rights were under the rule of the king thus denying them of their rights to find their own relationship with their eternal God.

Remember how religious rights were insisted upon before the states would ratify the Constitution. New York, Virginia, North Carolina, and Rhode Island insisted on a bill of rights with the first amendment guaranteeing religious freedom. We see it being threatened today and we must unite with other faiths for its preservation.

In August I observed my 92<sup>nd</sup> birthday. I don't feel that old—unless I start thinking about the many changes I've witnessed in our society. Much has changed during my lifetime. I have seen the development of medical marvels. The discovery of penicillin, blood typing, and insulin to treat diabetes. More recently we have mapped the human genome, created targeted cancer therapies and engineered

sophisticated prosthetics. At my age I marvel at the rapidly changing world in which we all live. So many of today's medical breakthroughs excite the imagination with their potential to better our lives.

Communication has also evolved tremendously over time. People used to need paper and pen, stamps, an envelope, and a lot of patience in order to communicate with each other. Sometimes it would be weeks or even months before a response came back. And sometimes letters were lost in the mail, with neither the sender nor the intended receiver ever knowing. These days we can communicate instantly with people almost anywhere in the world, increasing the potential for connecting with others as never before. The field of medicine is no exception. Because of technology's reach, you as physicians can better connect with your patients and provide greater feedback and support in the healing process.

I personally have greatly benefitted from the rapid advances in communication technology. I use my iPad frequently to manage almost all my work. I even have a special app that helps me organize my work as chairman of the Public Affairs Committee, which oversees the Public Affairs Department of the Church. Other tools like email, texting, and social media platforms facilitate relationships and efforts between organizations and people who otherwise might never have known each other. It has opened up a new world to bring the church out of obscurity.

Tonight I want to share a few illustrations with you of some of the projects we are working on in Public Affairs to further our efforts to serve the Lord. These projects may be of interest to you as physicians because we, like you, are using technology to better serve and reach out to those who need spiritual healing.

Now, I imagine most of you know that the Church's Public Affairs Department interacts frequently with the media—and certainly we have many wonderful relationships with people who work throughout the news industry. In recent years great strides have been made in expanding the reach of our Newsroom website, which is a site that provides information tailored specifically for the media and various opinion leaders, most of them outside the Church. In the last three years we have added 75 international Newsroom sites that tell the story of the Church and its membership in specific geographic areas all across the world.

As we post stories and resources and materials on Newsroom, we know that many journalists have subscribed to the site and receive prompt notifications whenever anything is added. In today's fast-paced age, we also know that they don't have time to read a lot of material, so we tailor material to their needs through



such things as infographics. Just last month we posted an infographic on Newsroom to help people keep track of the various temple construction projects around the world. Other infographics explain such things as the welfare and humanitarian aid programs of the Church.

Another example of how we are reaching out is through a weekly series entitled, “In Your Own Words,” which features samples of social media content posted by members of the Church. This series is intended to help news outlets and opinion leaders better understand Church members by giving them an unfiltered look at the kinds of things members post. I might add here that content viewed on the Newsroom Facebook page far exceeds the number of views on the website itself, demonstrating how many people now obtain information on social media. This is another reflection of the remarkable period of technological advancement of which we are a part.

Though our interaction with the media is vital, the efforts of the Public Affairs Department are much broader than just our interactions with the media. There are two other important ways Public Affairs is reaching out to help individuals provide service *to* and connect *with* individuals not of our faith. One project helping us accomplish this is called “JustServe,” which is the first effort I would like to discuss.

### The JustServe Initiative

JustServe came about as an initiative from the collaboration of four different Church departments, including Public Affairs. The purpose of the JustServe website is to help people—both members of the Church and non-members alike—identify opportunities for volunteer service. The website provides a platform, or marketplace, where many community service organizations can post projects and where volunteers can connect with projects in which they want to participate. JustServe was tested in California, Texas, and Colorado and is being rolled out over the coming months to the western United States and Canada. We hope it will come to Utah soon. The reception has been remarkably enthusiastic, and I believe the statistics reflect the reception: Currently there are more than 2,100 service projects in progress, with over 1,000 projects completed since the beginning of the year. During that time, more than 2,500 volunteers have given an estimated 737,500 hours. Currently around 1,000 users per week are registering with the website, with approximately 20,000 users already signed up. Again, these are members and nonmembers, which provides opportunities for us to interact with people not of our faith but on common ground. This is a project that anyone can participate in, even you! Organizations and individuals can add projects



to the site and find volunteers to accomplish the task.

Elder Bill Price, one of our service missionaries who is helping with the rollout of JustServe has shared the following account. I believe it highlights the exciting potential of religious cooperation that joint service projects foster:

“Rev. G. B. Washington, Pastor of the Ocean View

Baptist Church in Seaside California, agreed to invite members of one of our local units, the Monterey First Ward, to help him do some restoration and refurbishing to his aging church building. Latter-day Saint volunteers repaired water damage in the basement kitchen, repainted the kitchen, and improved the landscaping and parking areas. Windows and window operating mechanisms were repaired along with several other projects. All those who participated in this restoration project were treated by the Baptist congregation to a lunch of chicken and catfish with all the trimmings. Afterward, Rev. Washington asked for permission to express his gratitude at the Monterey First Ward at Fast and Testimony Meeting on Sunday, May 6<sup>th</sup>. Permission was granted and he expressed heartfelt and enthusiastic thanks to the ward members for their selfless service to him and to his congregation.”

Projects like these bring out the best in us, generate feelings of brotherhood, and create meaningful relationships between individuals and faith communities. Here’s another example from Elder Price that also illustrates the ways religious communities are coming together through service:

“Every year since 2008, several wards in the Monterey Stake have joined with other congregations to provide free Thanksgiving meals to the poor and needy in Seaside and Salinas, California. Planning and staging is held at Bethel Missionary Baptist Church in Seaside. Donations have come from local area businesses and members of the local churches. Occasionally local Latter-day Saint bishops direct their \$1,000 contribution from the Bishop’s Storehouse to this annual event. In November 2011, the churches provided 921 food boxes for thanksgiving, and forged ties with several new pastors. It has been very effective in building bridges between Mormons and several other churches.

“A few months ago a meeting was held at Bethel Missionary Baptist Church to plan for food distribution to the poor prior to Easter. It was attended by eight protestant ministers, three Mormon bishops, a high councilor, and a member of a local stake presidency. Clearly the walls of misunderstanding and suspicion on both sides have been greatly diminished. Feelings of mutual love for God and for one another were expressed. Lutheran and Seventh-day Adventist ministers who have been very reluctant to participate with Mormons because of “doctrinal differences” have called Reverend Lusk, the senior Baptist pastor, and asked to be included among the partnering churches.”

These relationships are tremendously important for peaceful and cooperative communities. We have seen warm relationships blossom between people of faith who have joined together in opportunities to serve and

help each other. More opportunities for service will lead to additional ways for people to come together and find common ground. As physicians who are already joined together through this organization you could have tremendous impact through your service and the projects that you could create together. We hope the JustServe platform will help in your efforts to provide healing and service in your communities here in Utah.

### **The Faith Counts Initiative**

I’d like to talk now about a second project that has to do with our interfaith outreach efforts. I’m sure you as physicians have been following news of the Ebola outbreak. The World Health Organization has forecasted that if a collaborated effort doesn’t occur now, the world is looking at over a million individuals becoming infected. This lesson of collaboration is the same for those of the faith community. We in the church have spent considerable time and effort in reaching out to create religious ties in our effort to fight for religious freedom. We have recently developed relationships with many wonderful people who belong to many different faiths. Some of the beliefs and doctrines of these faiths of course differ from our own, but we believe that there is much more that we hold in common. In recent years I have frequently met with leaders of other faiths as part of my travels. On these visits I have often been accompanied by Elder D. Todd Christofferson, my colleague in the Quorum of the Twelve Apostles, and by John Taylor, our Director of Interfaith Relations, who is here with me today along with one of his staff. I’d like to share with you a little about some of our recent meetings.

A few months ago we travelled to Louisville, Kentucky, to meet with Dr. Al Mohler, who serves as president of The Southern Baptist Theological Seminary. He spoke in February at a BYU Forum. Dr. Mohler is a delightful man, and he is an influential and well-respected voice in the Evangelical community. He and his lovely wife Mary were gracious in hosting us at their home. During our visit we discussed the challenges we all face in reaching out to the rising generation, as well as other challenges faith communities are facing in a changing world. I believe our meeting significantly strengthened the bond between our respective faiths while we agree to live with our theological differences. I cherish my warm relationship with Dr. Mohler.

Another recent visit was to Archbishop Joseph Kurtz, president of the United States Conference of Catholic Bishops. We have many dear friendships with leaders of the Catholic Church, and we have united on many issues over the years. Our recent visit focused on the significant challenge of strengthening faith and religious freedom.

We are both of course deeply interested in these issues, and we explored many areas of commonality and ways we can work together to help individuals and organizations see the critical role these values play in our homes, in our churches, and in our communities. Here in Salt Lake City I have lunch regularly with Bishop John Wester, and we discuss many of these same issues. He is a wonderful fellow with a big heart.

In addition to our meetings with Catholic and Southern Baptist leaders, we have also met with the Seventh-day Adventist Church in Silver Spring, Maryland; with Jewish, Sikh, Evangelical, and Muslim organizations; and with numerous other faith groups. Many of the leaders of these groups have in turn visited us in Salt Lake City and some have spoken in forums at BYU or as part of the Faith, Family, and Society lecture series. We are grateful for these magnificent people and for the goodness they radiate.

Now, I want to say unequivocally here that our visits and collaboration with other faiths are not motivated by a desire to proselytize. There is enough of that to go around. I have met with Cardinal Timothy Dolan in New York, and have said to him, “Now Brother Dolan, you have got millions of Catholics in the United States. How many of them go to church? And what are you going to do to bring the ones back who aren’t going?” I’ve said the same thing to Evangelical leaders too. “What was your attendance percentage like last week? I want to see you raise that by 10 percent next month!” And I even had the impertinence to ask them to report back to me on how they’re doing. If we are to strengthen faith and religious freedom in our society, then every faith has got to do better. Catholics must be better Catholics, Mormons must be better Mormons, and Protestants must be better Protestants, and so on for every faith. Can you tell that I feel strongly about this?

Now I’d like to discuss one of the fruits of the relationships we have built with these religious leaders, which is an interfaith undertaking called FaithCounts. It is a joint social media effort to promote the value of faith in society, especially among those of the so-called “Millennial” generation. We are concerned about the young people in our society and we do not want them to miss out on the wonderful fruits of faith. Some of our partners in this interfaith alliance include the U.S. Conference of Catholic Bishops, the Seventh-day Adventist Church, several Evangelical Christian denominations, Jewish and Sikh groups, and many others. It has been exciting to see the enthusiasm of individuals and organizations as they have learned about FaithCounts. Many have readily volunteered time and resources to assist in this uniquely collaborative effort.

As you can imagine, there are a number of different ways such a diverse group defines faith. But we don’t want to define it; instead, we want to show how the idea of faith—the core values of whatever it means to each person—is important to individuals and to our society as a whole. And we want to accomplish this by telling compelling and powerful stories about how and why faith has shaped people and made them who they are. These stories are told in videos, articles, and images that are found at FaithCounts.net, as well as on several social media channels like Facebook, Twitter, Pinterest, and Instagram. We have all watched together as we have seen promising growth in followers and sharers and we think FaithCounts will continue to grow as more and more faith communities join and contribute to the effort.

I’ve asked our Public Affairs staff to show you three short examples of the types of videos that have been produced by our interfaith group for FaithCounts. The first video features one of our own, Professor Clayton Christensen of Harvard University, as he explains the important role that faith plays in democracy: The second features Missy Franklin, a young woman of faith who is a four-time Olympic gold medalist. The third video calls attention to the ultimate source of the freedoms we enjoy. You will note that each of these video spots carries the same non-denominational tag at the end. No matter which church produces them, they all carry the same tag, because it’s the value of faith we are promoting in the face of rising secularism and atheism, and not a particular denomination.

I think those are pretty good! Now, in the same way that faith must be strengthened within each faith community and by these communities working together, FaithCounts is a truly interfaith effort. It is not a Catholic project, a Mormon project, or a Jewish project. Rather, each partner is working hand-in-hand with the others to give a voice to faith by utilizing the remarkable means of communication available to us. Ultimately, the goal of the interfaith alliance is to generate a movement that shows why faith is so important to individuals, families, communities, and societies. And we can do it as we continue to set aside our differences and work together to find common ground. I acknowledge your efforts to reach across the religious aisle to include and collaborate with other physicians of various faiths.

As I said before, I’m grateful for the opportunity to speak to such an accomplished group that has been charged to lift, heal, and bless lives. Our Savior, Jesus Christ, was the Master Healer. We are grateful for your examples of Christ-like service and faith in your profession and I wish you continued success as you move forward with faith.

He That Hath

**Ears**  
*to hear*

Let Him Hear

by Richard K. Gurgel, M.D.



**M**y training is in Neurotology, a sub-specialty of Otolaryngology – Head and Neck Surgery, which focuses on everything involving the ear and its connection to the brain. I am continually confronted with the question of how to improve or maintain the hearing of my patients. Hearing is a fundamental part of the human experience, particularly as it relates to our ability to communicate and connect with others. When one loses the ability to hear, there are many subsequent consequences. Hearing loss in children can negatively impact speech and language development and performance in school. Hearing loss in older adults often leads to social isolation, depression, and even changes in cognition.

From this clinical perspective, and as I have tried to liken the scriptures unto myself,<sup>1</sup> I have become particularly aware of how the Lord uses the ear and hearing to describe the obedience of His children. Additionally, there are multiple examples of how the ear and hearing are central to the miracles performed by the Savior during his mortal ministry and among the Nephites. This article will examine these instructive examples.

### Ears to Hear

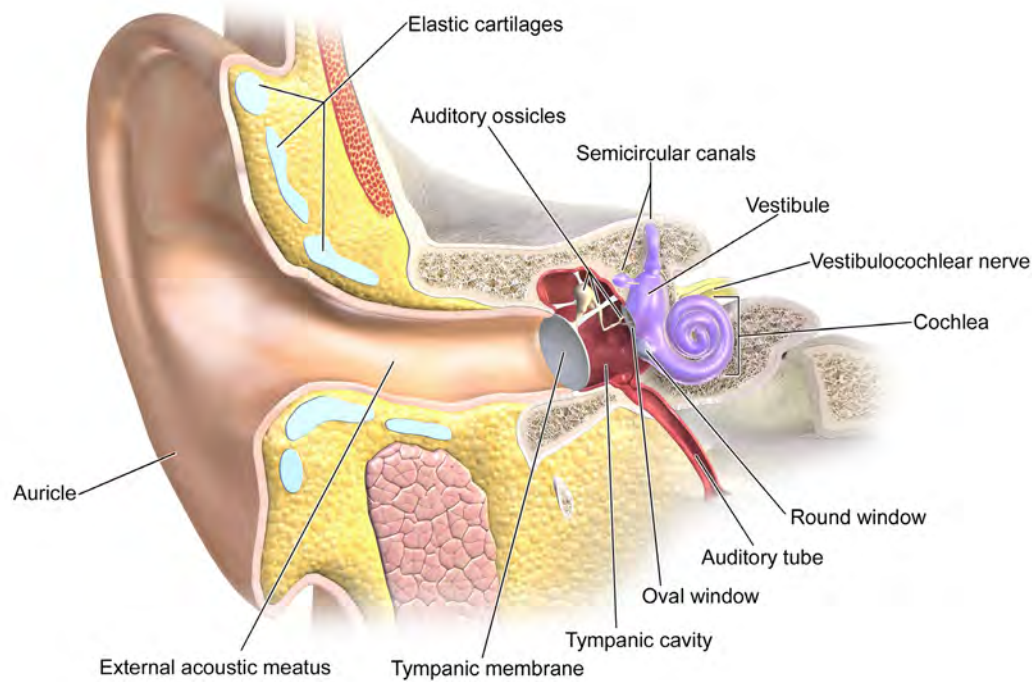
Many of the great prophets of the Old Testament and Book of Mormon used the ear and hearing to describe the obedience of the children of Israel. If they would hear and listen, they would live. If their ears were “heavy” and they refused to hear, the Lord would send punishments. Isaiah, the great prophet of the Old Testament, implored us to “*Incline your ear, and come unto me: hear, and your soul shall live; and I will make an everlasting covenant with you, even the sure mercies of David.*”<sup>2</sup> The prophet Ezekiel taught, “Moreover he said unto me, Son of man, all my words that I shall speak unto thee receive in thine heart, and hear with thine ears.”<sup>3</sup> The prophet Jeremiah taught, “To whom shall I speak, and give warning, that they may hear? Behold, their ear is uncircumcised, and they cannot hearken: behold, the word of the Lord is unto them a reproach; they have no delight in it.”<sup>4</sup> King Benjamin, the wise Nephite king-priest, gathered his people for his final address to them, which he gave from a tower built adjacent to the temple. He said, “My brethren, all ye that have assembled yourselves together, you that can hear my words which I shall speak unto you this day; for I have

not commanded you to come up hither to trifle with the words which I shall speak, but that you should hearken unto me, *and open your ears that ye may hear*, and your hearts that ye may understand, and your minds that the mysteries of God may be unfolded to your view.”<sup>5</sup>

When the Savior taught in parables, He ended his teachings with the phrase, “Who hath ears to hear, let him hear.”<sup>6</sup> When the disciples inquired why He taught in parables, the Savior hearkened back to the prophecies of Isaiah and answered, “Therefore speak I to them in parables: because they seeing see not; and hearing they hear not, neither do they understand. And in them is fulfilled the prophecy of Esaias, which saith, By hearing ye shall hear, and shall not understand; and seeing ye shall see, and shall not perceive: For this people’s heart is waxed gross, and their ears are dull of hearing, and their eyes they have closed; lest at any time they should see with their eyes, and hear with their ears, and should understand with their heart, and should be converted, and I should heal them. But blessed are your eyes, for they see: and your ears, for they hear.”<sup>7</sup>

Ears and hearing are used in the scriptures synonymously with obedience, faith, and spiritual sensitivity. When we hear, sound enters the ear as an air pressure wave. The pressure wave is directed from the pinna into the external auditory canal. The pressure wave causes subtle vibrations in the tympanic membrane which then transmit to the inner ear and are amplified by the ossicles. The sound pressure wave is converted to a fluid pressure wave at the round window and into the cochlea. The different frequencies of those fluid pressure waves travel along the tonotopically organized cochlea to stimulate different regions of spiral ganglion neurons. Those neurons then send electrical signals to the brain via the eighth cranial nerve, cochlear nucleus, superior olivary nucleus, lateral lemniscus, inferior colliculus, and ultimately to the auditory cortex in the temporal lobe. From the auditory cortex, the signal radiates through the auditory association cortex to form vital connections with the cortex of the brain so that we become consciously aware of sound and begin to interpret what we hear. The auditory signals are also delicately interconnected to the hippocampus, so we can remember what we hear, the limbic system, so we can make emotional connections to what we hear, as well as the motor cortex, so that we can act on what we hear.

Many of the great  
prophets of the  
Old Testament and  
Book of Mormon  
used the ear and  
hearing to describe  
the obedience of the  
children of Israel.



## The Anatomy of the Ear

Our “spiritual ears” have a similar intricate interconnectedness. When we hear the word of the Lord either through the scriptures, the prophets, apostles, and leaders of the church, and from the Holy Ghost, that spiritual signal can stimulate our hearts and minds. As we listen spiritually, we can use our agency to decide on how we will act on the promptings we receive. Developing this ability to hear and listen is critical to our spiritual progress.

### Touched his ear, and healed him

When the Savior was leaving Gethsemane, He was met by Judas and a mob. They were ready to arrest Him and take Him to a contrived and illegal trial. From the account recorded in John, we learn that, “Judas then, having received a band of men and officers from the chief priests and Pharisees, cometh thither with lanterns and torches and weapons. Jesus therefore, knowing all things that should come upon him, went forth, and said unto them, Whom seek ye? They answered him, Jesus of Nazareth. Jesus saith unto them, I am he. And Judas also, which betrayed him, stood with them. As soon then as he had said unto them, I am he, they went backward, and fell to the ground. Then asked he them again, Whom seek ye? And they said, Jesus of Nazareth. Jesus answered, I have

told you that I am *he*: if therefore ye seek me, let these go their way: That the saying might be fulfilled, which he spake, Of them which thou gavest me have I lost none. Then Simon Peter having a sword drew it, and smote the high priest’s servant, and cut off his right ear. The servant’s name was Malchus.”<sup>8</sup>

The account of Peter cutting off Malchus’ ear is included in each of the four gospels. Interestingly, only from Luke (who was a physician), do we learn that Christ “touched his [Malchus’] ear, and healed him.”<sup>9</sup> What lessons can we learn from the Savior’s compassionate act during a moment of His personal extremity in tribulation? Jesus had just spilt His precious blood from every pore to atone for our sins in the Garden of Gethsemane. He was then confronted by those who hated Him and led to His crucifixion. In this moment of high drama, He paused to heal the ear of the high priest’s servant. Malchus’ injury, likely a complete auricular avulsion, is typically not life-threatening. In fact, there is minimal impact on hearing from an auriculectomy alone, assuming the ear canal is still patent. Malchus would likely have had only a cosmetic defect from Peter’s brash assault. Despite this, the Savior took the time to heal him.

As physicians, we can learn from this example, albeit

on a much smaller, personal scale. We can incorporate Christ-like discipleship into our professional lives. Due to the rigors of practicing medicine and balancing the demands on our time, we may at times find proverbial mobs at the gate in our personal lives. Yet because of our unique training, we may need to sacrifice our personal difficulties in order to care for others. When we set aside our own interests and concerns, we will be better enabled to look “outside” ourselves and rescue the one in need – a patient, a neighbor, a child, parent, sibling, or spouse. As the Savior advised us, “whosoever will lose his life for my sake shall find it.”<sup>10</sup>

Perhaps a deeper lesson we can learn from Malchus, Peter, and the Savior is how we respond to adversity, particularly when the adversity is brought to us by the will of the Father to give us experience. After Peter cut off Malchus’ ear, there are two accounts of how the Savior used this particular moment to teach. Both accounts of what the Savior said to Peter immediately after the event are as follows:

Matthew 26	John 18
<p>52 Put up again thy sword into his place: for all they that take the sword shall perish with the sword.</p> <p>53 Thinkest thou that I cannot now pray to my Father, and he shall presently give me more than twelve legions of angels?</p> <p>54 But how then shall the scriptures be fulfilled, that thus it must be?</p>	<p>11 Then said Jesus unto Peter, Put up thy sword into the sheath: the cup which my Father hath given me, shall I not drink it?</p>

In both accounts, the Savior taught Peter to put away his sword in order for the will of the Father to be accomplished. When we are faced with adversity, particularly the type of adversity that comes from the Father in a divinely-designed trial, do we draw our sword and fight back in resistance against His will? Alternatively, do we, like the Savior and many of his humble disciples, bury our veritable “weapons of war”<sup>11</sup> – our pride, anger, and lack of faith – and meekly submit to the will of the Father?

### Incline thine ear unto me

In addition to healing the deaf, Christ also makes it possible for God the Father to hear us. God also has ears to hear, and He listens for our prayer. The Psalmist wrote, “Hear the right, O Lord, attend unto my cry, give ear unto my prayer, that goeth not out of feigned lips. I have called upon thee, for thou wilt hear me, O God: incline thine ear unto me, and hear my speech.”<sup>12</sup> David also exclaimed, “In my distress I called upon the Lord, and cried to my God: and *he did hear my voice out of his temple, and my cry did enter into his ears.*”<sup>13</sup> In order for our Heavenly Father to hear us, though, we need the Savior as an intermediary.

This is why we pray in the name of Jesus Christ.

We have been admonished to have ears to hear the word of the Lord. This happens in accordance through our faith and obedience. Just as the Savior healed the deaf during His mortal ministry, He continues to unstop our ears through the power of the Atonement. As we listen to the voice of the Lord through the scriptures, modern prophets, and the Holy Ghost, the acuity of our spiritual hearing is strengthened. Equally important, however, is the Savior’s role as our advocate to enable the Father to hear us. President Joseph Fielding Smith taught, “The Father has never dealt with man directly and personally since the fall, and he has never appeared except to introduce and bear record of the Son.”<sup>14</sup> Without Christ’s intermediary role, our Heavenly Father would be deaf to us, unable to hear our prayers since we would be eternally unworthy to approach Him.

As we consider the fundamental role of hearing in communication, let us never forget how important hearing is in our spiritual communication – as we listen to the voice of the Lord and as we seek for Him to listen to us!

### Ephphatha

Cochlear implants are devices that are intended to restore hearing to patients with severe to profound sensorineural (inner ear) hearing loss. Cochlear implants are placed surgically with an electrode that is inserted into the inner ear. Cochlear implants are utilized to restore hearing for individuals of any age, from young children to older adults. We have learned from our experience with cochlear implants that there is a critical window of time to implant a child who is born deaf. If a child is born deaf and has no auditory stimulation during the early years of cortical brain development, the auditory cortex – the hearing part of the brain – will be re-mapped for other purposes. Once the brain is re-mapped, even if auditory stimulation is introduced with either hearing aids or a cochlear implant, there will be minimal central neurological processing of those signals, and meaningful hearing cannot be achieved. For this reason, the sooner a child who is born with severe to profound deafness receives a cochlear implant, the better that child’s hearing outcome will be. In the United States, the FDA has set 12 months as the earliest a child may be implanted, with some exceptions such as in cases of meningitis.

One of the hallmarks of the Savior’s mortal ministry was His willingness to heal the deaf. In fact, the Savior specifically noted healing the deaf as proof of His divine identity and fulfillment of prophecy. When John the Baptists’ disciples were sent to inquire if Jesus was the promised Messiah, He said, “Go your way, and tell John what things ye have seen and heard; how that the blind



see, the lame walk, the lepers are cleansed, *the deaf hear*, the dead are raised, to the poor the gospel is preached.”<sup>15</sup> Healing the deaf was clearly a central part of the Savior’s mission among the children of men.

One specific and detailed example of the Savior curing deafness is recorded in Mark. We read, “And again, departing from the coasts of Tyre and Sidon, he came unto the sea of Galilee, through the midst of the coasts of Decapolis. And they bring unto him one that was deaf, and had an impediment in his speech; and they beseech him to put his hand upon him. And he took him aside from the multitude, and put his fingers into his ears, and he spit, and touched his tongue; And looking up to heaven, he sighed, and saith unto him, Ephphatha, that is, Be opened. And straightway his ears were opened, and the string of his tongue was loosed, and he spake plain. And he charged them that they should tell no man: but the more he charged them, so much the more a great deal they published it; And were beyond measure astonished, saying, He hath done all things well: he maketh both the deaf to hear, and the dumb to speak.”<sup>16</sup> While we do not know the duration of this man’s deafness, because he had a speech impediment, we can infer that he was deaf from birth or from before he developed language.

Curing the deaf man was a miracle. When we consider what needed to take place biologically, we realize how great a miracle it was. In order for a man who was born deaf to hear again, the Savior not only restored the microscopic hair cells and spiral ganglion neurons in the cochlea, but He also fundamentally altered the central nervous system. Restored were all of the networks of the auditory cortex in the brain which take years to develop. The Savior knew exactly how to restore function to an exceedingly complex system.

The miracle of Christ healing the deaf, and all miracles performed during His mortal ministry, were types and shadows of the ultimate miracle Christ would perform, the Atonement. On the surface, the Atonement can be summarized in a singular statement – “Christ suffered and died for our sins.” This fundamental doctrine can be understood by a child. When we consider, however, how deeply this doctrine reaches into our own lives and the lives of billions of others who have lived,<sup>17</sup> we soon realize the infinite complexity of the Atonement.

On my surgical scrub cap, I have the word “Ephphatha”

embroidered on the back. This word, meaning “be opened,” spoken by the Savior when He cured the deaf, is a reminder to me of who I am trying to emulate when I operate and work to restore hearing. While this word has particular meaning to an ear surgeon, the principle of following the Savior while practicing medicine is applicable to us all. Our duty, like His, is to “heal the brokenhearted, to preach deliverance to the captives, and

recovering of sight to the blind, to set at liberty them that are bruised.”<sup>18</sup> Through our profession, we can be instruments in His hand to bring about His will. I have learned, through difficult experiences, to pray while I operate. By continually pleading for the Lord’s guidance, we can receive the help we need to hear what we need to hear, see what we need to see, and do what we need to do for our patients. It is humbling to know that many patients who seek our care, are also exercising their faith by receiving priesthood blessings, fasting, and praying to be restored to full health. It is my hope that we recognize our sacred duty that comes when we take upon ourselves the name of the Savior, and do our best to emulate the Master Healer!

Curing the deaf  
man was a miracle.  
When we consider  
what needed to take  
place biologically,  
we realize how great  
a miracle it was.

#### Notes

- 1 1 Ne. 19:23-24
- 2 Isa. 55:3, italics added
- 3 Ezek. 3:10
- 4 Jer. 6:10
- 5 Mosiah 2:9, italics added
- 6 Matt. 13:9
- 7 Matt. 13:13-16
- 8 John 18:3-10
- 9 Luke 22:51
- 10 Matt. 16:25
- 11 Alma 24:19
- 12 Ps. 17:1,6
- 13 2 Sam. 22:7
- 14 Smith, Joseph Fielding. *Doctrines of Salvation*. Volume I: pg. 27, 1973, Bookcraft Publishers.
- 15 Luke 7:22, italics added
- 16 Mark 7:31-37
- 17 D&C 76:24
- 18 Luke 4:18



# To Graduating Physicians...

*by* Gregory A. Schwitzer, MD, FACP

**I** congratulate you young physicians, on your achievement of graduation, and join with many of my senior colleagues in welcoming you into a lifetime association of one of the greatest professions one could ever pursue. It is with great hope that I anticipate what you will be doing as you seek to serve and care for humanity. It is also with some sadness as I consider the challenges you may face with a world bent on a course that seems to move us away from our humanity and happiness. You can make a huge difference in life if you place your skills and abilities in the hands of Him who is the Savior of this world.

Sir William Osler said: “To each one of you the practice of medicine will be very much as you make it—to one a worry, a care, a perpetual annoyance; to another, a daily joy and a life of as much happiness and usefulness as can well fall to the lot of man (or woman).” It is my hope that you will fall into the latter category.

What you do each day will depend on how you view yourself and what you have to offer. Sometimes that view can be quite restricting and sometimes it will open to you a panorama of what can happen with the little you may feel you have to offer.

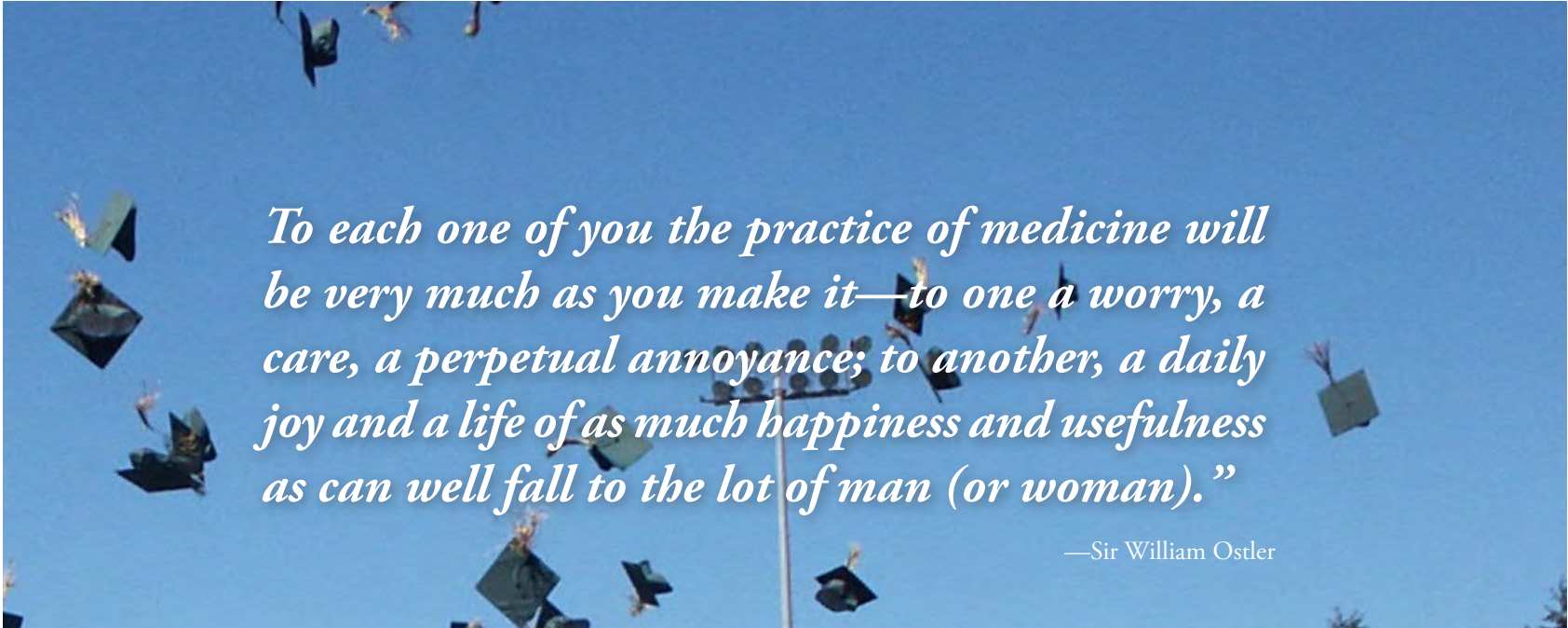
I am reminded of the story in the New Testament of Jesus feeding of the five thousand. You recall how many

had come to listen to him and were hungered. He asked that food be brought to feed them and Phillip responded that it would take “two hundred penny’s worth” of bread to do so, such that each man could have a morsel. “Two hundred penny’s worth” was equivalent in those days to a year’s wages of a common laborer.

A young lad stepped forward with five loaves and two small fishes. It was all he had, but he gave it. We don’t know who he was or what became of him, but this was a lad who somehow had confidence that what he had to offer, the Savior could amplify and accomplish a greater work. He gave all he had when asked, and we are indeed impressed with the results. It not only became the source of food for many, but a witness that the Son of God was among us.

Perhaps you look at your future in medicine as having five loaves and a few fishes. If you only have that vision, you shall not feed many. Yet if you see the potential of what you have and put it toward doing a greater work through Him who has all power, you will see, with great peace and satisfaction, what really can be done with the talent that you have been given.

The fact that this young man is never written about again, nor given the accolades of the world does not lessen in any degree what was accomplished with his contri-



*To each one of you the practice of medicine will be very much as you make it—to one a worry, a care, a perpetual annoyance; to another, a daily joy and a life of as much happiness and usefulness as can well fall to the lot of man (or woman).”*

—Sir William Ostler

bution. In fact, it amplifies his humility and greatness. This young man probably went home realizing what had been done and that was reward enough—he was truly great for his age and station in life.

What the Savior did with that offering of an unknown lad is truly amazing. We as physicians may not always appreciate, or see, that what we do has far reaching effects, but in giving on occasion our five loaves and fishes, we may just feed five thousand in the way our profession advances and helps others. Whatever you have, give your best and God will do the rest. Your pay may be an expression of gratitude from a child you help when a mother cannot afford the medication and you help pay for it. Your pay may come in taking time to help a parent deal with a wayward child who has made a huge mistake in life. Do not always focus on the “measurables” of money and fame in your work; there is much more to our lives than the “measurables” of the world.

To me it is always a wonder how much I learned about life and my profession in studying the works and life of Jesus Christ. One story has deeply impressed upon my mind certain basic principles of being a physician. In a couple of simple statements, Christ taught these principles that can guide us for a lifetime. This story is that of a great healing institution that existed at the time of Christ. It was known as the Pool of Bethesda. One of our great healing institutions in the military today is named after that historic place and it is where many presidents of the United States have gone for their health care.

The Savior, as he visited this Bethesda, observed how many were seeking to be healed and had placed all their hope in the movement of the waters of the pool. He or she who was first to enter the healing pool when the water moved would be healed. They competed to be the first

to enter and thus achieve their goal. While there, Christ observed a man who was described as having an infirmity. He could have been a cripple, a stroke victim or a person so afflicted systemically that he could not move quickly or with ease. In his address to the man, Christ teaches us valuable lessons as physicians.

First, he observed the man lying down and “knew that he had been now a long time in that case.” Obviously this was a chronic condition. He said to him these words, “Wilt thou be made whole?” Every word in this brief statement takes us to the heart of what we seek to do as physicians. “Wilt thou be” – it is essential that a person seeking to be better, have a desire to do so. The Savior understood this well as he put forth this question. So often we as physicians forget this and enforce our will, desire, or impression on the patient and do not involve them enough in the decision process or the path to healing. The words “be made whole?” testify that the Savior was interested in more than just the fact that the man would walk again. He was looking at the whole man, including his mind, spirit, and body. There are many in this world who are healthy physically and yet are not whole. There are also many who are ill, yet are quite whole in their attitude. This man by his desire, faith, and the power of the Great Physician Christ, was healed.

Christ saw that same man later in the day in the temple, observing that the man had come to worship and give thanks. He said, “Behold, thou art made whole.” He then said that this man should take care that he did not slip back into old way “lest a worse thing come unto thee.” This was an expression of future changes that were needed to maintain the condition of wholeness. Physicians should always be concerned about the long term

needs of continued treatment to maintain the gain in the person's progress. Don't just walk away.

If a physician fails to look at all that entails healing or a return to wholeness and what it takes to retain that wholeness, he or she will never help a person become really whole and will see only results of temporary fixes.

By way of example, when I was a young physician in my residency I cared for a patient who was a heroin addict and had suffered the ravages of endocarditis with a terrible infection of her mitral valve. In those days these patients were hospitalized for long periods of time for this infection. We treated her for weeks with the very best of antibiotics and suffered with her trying to keep IVs in her sclerotic veins, so abused by drug abuse. She made great progress and we discharged her to go home. We thought she was "healthy" again.

I saw her back months later with the infection having returned, only worse than initially. She eventually ended up with surgery and death as the final outcome. We failed to look at or address the whole patient and her needs. To what kind of environment was she returning? We should have recognized that the disease was more than the infection; it was also her environment. It included her associates in the drug network. We should have thought deeper and considered the real human factors that truly caused this problem. Medicine is often narrow in its focus and unless you as professionals consider these broader issues and address them carefully like the Savior did, you will face many of these cases.

I was trained during the Vietnam War and did my residency in the military at Fitzsimons Army Medical Center. This old hospital is now decommissioned and given to the University of Colorado. It had a porch with an overhanging porch at the main entrance. On this overhang were inscribed in marble the words of Hippocrates regarding our role as physicians: "To comfort, To heal, and To relieve." As I would enter that hospital each day I remembered those words, and realized that there is much of medicine that may not actually heal. Much is actually dedicated to lifting the burdens of chronic disease, and if I forget that part, I have missed the essence of much of the profession and blessings of medicine. This is often not taught in medical schools today and you are left to learn it on your own through your experience. Learn from the Savior and you will become a great physician.

You are blessed  
with a profession  
in which you have  
the opportunity  
to learn, to  
understand, and  
to experience  
humanity unlike  
any other.

The realization that a person may die from a chronic or terminal disease often causes practitioners to visit the sufferer less or perhaps "lose interest" in the case. How very tragic this is. These are those who need more time, and benefit more from the kindness of a caring physician. I have often heard physicians say, "There is nothing else we can do." These are words that I would recommend you strike from your thoughts and vocabulary. There is always something we can do, even if it is but to give the time of human kindness to the suffering patient! This is also our profession's lot and our cause. Be not afraid of death, it is a transition, and often needs to be accompanied by a kind doctor who is willing to hold a hand and listen to a person tell of the regrets and desires at the end of their life.

I recall a woman whom I served as her physician in the military. She was a German national and had married a soldier during his tour in her home country. She had several children and was now diagnosed with cancer of undetermined origin. I helped her with her chemotherapy and yet the cancer was progressive and unrelenting. She visited my office regularly and knew that this disease would take her life. One day she was sitting in my office and I watched her eyes well up in tears. I had the impression that she was worried that she would have to die in pain. I asked her what she was thinking. She was silent. I then told her that I felt she feared I would let her die in pain. She nodded her head with tears running down her cheeks.

I told her I would do my best to make sure she had her pain well controlled. Weeks later she was in the hospital in a very terminal state. I had her on a morphine drip. Being in the military, I lived but a short way from the hospital. A nurse called me around 1 AM and said it looked like she was going to die that night and that her husband was there. I left home and went to her bedside and was there when she passed. The family was there and I watched her husband hold her as she left this life. I did not have any miracle cure, I did not have anything to offer but my comfort and friendship. That was what was needed. I left the hospital that night and it was snowing the whitest flakes I had ever seen. I was alone, yet I knew at that point I had done what a physician should do. I was at peace. I hope you have such experiences and do not miss the great feelings of humanity that come from doing so.

Often in today's medical practice, we are so overwhelmed with all the pressure placed upon us for efficiency, moving the patients to the proper level of care and the constant monitoring by others with regard to the measurable aspects of our practices, that we forget this huge blessing of caring for people. We may also be caught up in the need to increase our margins or to see more patients and forget the need of others to talk to us. Never forget who really employs you. It is always the patient. I can promise you that what you will carry as memories into your old age will have nothing to do with margin, efficiency or measures of output or quality. It will be the memories of gratitude by your patients when you connect with them as a physician and not just as a technician.

You are blessed with a profession in which you have the opportunity to learn, to understand, and to experience humanity unlike any other. You must not miss this in your life.

Sir William Osler said: "You must always be a student. You must treat the man as well as the disease. The poor you have always with you and you must consider them beyond all others." He then quoted Sir Thomas Browne: "no one should approach the temple of science with the soul of a money-changer." You will suffer great temptations in this regard. My prayer for you is to resist this and consider the higher issues of the profession.

I took care of a young motorcyclist in the ER one night. He was regaled with all the leather trappings and signs of a devoted motorcycle gang. He had crashed and once the life threatening injuries were ruled out, I focused my attention on a stellate laceration on his forehead. I felt he should see a plastic surgeon and called in our consultant. He entered the room and in ten minutes was back at my desk stating the young man did not want the laceration closed. He promptly left the ER and I went back to the room of the young man and found that the surgeon had initiated the conversation with a discussion of how much this would cost the young man. He had no means and certainly no insurance.

I had closed these types of lacerations before, but thought this might not have as good an outcome. The young man asked that I try. I did the closure and it turned out well. I felt the help of the spirit guide me to do a good job. He left without bill from me and I left with a good feeling that someone had been helped who was otherwise rejected for lack of money. He will not remember my name, but he will remember the kindness and help he received.

I often worry about these surveys that are talked about in the media. They point out how many physicians are dissatisfied with the practice of medicine. Many feel that if they were asked to advise a young person

about medicine as a career they would discourage them. How very sad that we see this. This is a most rewarding profession – perhaps one of the best in our society. If, however, we look for a narrow measurement of the world in terms of gain and prestige, we miss the inner measurement of increasing love for others and a better understanding of this great creation called the human body.

In D&C 88 Christ revealed to Joseph Smith that the body and the spirit of man are the soul. It is not just the body that is our consideration in this great profession, it is the rewards of the soul that often carry us to more happiness and peace. Your happiness will reflect well on the future of those who will follow you. Do not degrade the profession with your personal dissatisfactions, rather be grateful for the chance to serve and serve well.

You are in partnership with God in your profession. Some of our profession have lost faith in God or never developed it. How tragic this is! He created these souls and you have the privilege to care for them and help them. Never miss that point. I love this little poem that expresses feelings on compensation well.

Who does God's work will get God's pay  
 However long may seem the day,  
 However weary be the way.  
 No mortal hand, God's hand can stay  
 He may not pay as other pay,  
 In gold, or lands, or raiments gay,  
 In goods that perish and decay  
 But God's high wisdom knows the way,  
 And this is sure, let come what may-  
 Who does God's work will get God's pay.


It is my hope and blessing to you that you will be richly rewarded with the gratitude deserved by great physicians who know how to help people become whole; who know what it means to care with no thought of measurable reward; who know that the real blessing of this is service.

I pass on to you my blessing and hope as you embark on your journey to become great physicians. May the Lord keep your eyes on the right rewards. May He give you better understanding and knowledge on your path. The great physician Christ overcame death and gave us all the hope of eternal life. He also knew that we needed comforting and care on your way. I know he is the Redeemer of the world and all mankind. He is the true standard by which we should measure our success. Take time to be like Him and become an honor to yourselves, your family, your community, and your profession.



# THE BOMB AND ME

by George F. Snell, MD



**W**hat is “the bomb?” It is an affectionate yet somewhat misleading appellation for anti-worm and anti-protozoa medication given to missionaries to reduce the number of roundworms and protozoans (chiefly giardia) inhabiting their bodies. It has other names in different languages: la bomba in Spanish, a bomba in Portuguese, porga in Tagalog, or sometimes just called “the pill.” The history of the bomb is an interesting, even fascinating, story. In the 1980s the burden of intestinal disease in missionaries in Latin America was impressively excessive. Members of BYU and U of U faculties (including Dr. John Matson and Dr. DeVon Hale) surveyed missions in Bolivia, Chile, and Peru, and found that in any given week 38% of missionaries missed work because of gastrointestinal (GI) illness.<sup>1</sup> In brief, these are the results of their studies:

- 25% of missionaries with diarrhea had giardia. 15% of their companions with no symptoms also had giardia.
- 1% was found to have amoeba.
- 91% of native Bolivians were found to have ascaris (similar prevalence rates have been found in Samoa).
- Chile had a low incidence of ascaris.<sup>2</sup>

With these figures in mind, and recognizing that many developing countries had periodic treatment programs in children attempting to reduce the burden of infestation, a group of four physicians and scientists (Quinton Harris, Cecil Samuelson, Homer Ellsworth, and Bruce Woolley) was formed at the request of Elder M. Russell Ballard and became the first Missionary Medical Advisory Committee (MMAC). After visiting Peru, they advised the missionary department to begin an anti-worm/

protozoa program, which became “the bomb.” In developing countries, albendazole/tinidazole was given every 6 months to all missionaries. It was to be given also to all departing missionaries. In addition, missionaries arriving from developing countries were to be dosed with these medicines shortly after arriving at their respective MTCs. This policy was the initial recommendation and was in effect for over 15 years. It cost approximately \$2.00 per dose when initiated.

I first became acquainted with “the bomb” in July 1994 when I arrived with my wife, Clara, to preside over the Philippines Bacolod Mission. The Missionary Medical Division recommended giving medication every 6 months to all missionaries serving in developing countries of the world. This dosing in our mission consisted of mebendazole 500mg and metronidazole 1.0gm, which was designed to reduce the burden of roundworms and giardia, (it was thought to have some reducing effect on the number of amoeba as well) carried by missionaries. These medications were given every 6 months and then also when the missionaries departed for their homes. In other countries, albendazole 400mg was available and thought to be more effective than mebendazole as a single dose. Tinidazole and secnidazole were also acceptable alternatives for the parasite treatment. The combination used was left up to the area medical advisor (AMA), and depended on cost and availability.

Clara and I both administered these drugs at zone conferences, and directly observed them taking the three pills. We watched them swallow the pills so as to be certain they were taken. Some missionaries, especially diminutive Filipinas, told us they could not take them all at once, so we obtained a promise from them to take the remaining dose later that same day. I wrote down on each missionary’s interview page the date and dose given. The most common complaint was a metallic taste, nausea was

the next most common, and a few vomited. Those that vomited did not get repeat dosing. I do not recall that any had serious side effects.

Reflecting on this practice after several years, I have wondered that there were so few reactions. We had approximately 400 missionaries (275 elders, 125 sisters) from 1994-1997. Averaging three doses per sister and four per elder, we would have given about 1400 doses over the three year period, allowing for a small percentage of doses avoided or missed. That’s an amazing safety record! We hope we followed the hallowed aphorism, *primum non nocere*, or first, do no harm. A valid question also might be posed, “Did we do any good?”<sup>3</sup> Knowing what I do now about missionary eating and drinking habits in general, I think that question can be answered affirmatively. Undoubtedly we treated some persons unnecessarily, but that is a discussion that will be continued in later paragraphs.

Our next adventure with the bomb came as we went to Central America as AMAs in January of 1999. The Area had 12 missions with an average of nearly 2,300 missionaries serving at any given time. The universal policy was still in effect for all 12 missions. We used albendazole 400 mg on the first day and tinidazole 2.0 gm on the second day. I do admit to giving all 5 pills at once to some missionaries whom I thought were high risk for poor compliance.<sup>4</sup>

It soon became apparent from the monthly reports from mission nurses (11 of 12 missions had nurses) that some missions had many more problems with GI illness than others. Over a 16 month period from January 1999 to April 2000, we noted some startling statistics. See the table below.

Not all these infections were proven in the laboratory. I recorded the ones who were empirically treated as well as those who had positive stool examinations, which was less than 50%. Note that the range of prevalence was

Mission	#Parasite/Worm Infections	Proposed Treatment Group
Costa Rica	6	1
El Salvador East	24	2
El Salvador West	29	2
Guatemala City Central	78	3
Guatemala City North	84	3
Guatemala City South	16	2
Guatemala Quetzaltenango	150	3
Honduras Comayagua	31	2
Honduras San Pedro Sula	62	3
Honduras Tegucigalpa	16	2
Nicaragua	117	3
Panama	5	1



from 5 in Panama to 150 in Guatemala Quetzaltenango. During the months of January through April of 2000, I attempted to document the occurrence of parasites or worms in departing missionaries in the four missions with the highest incidence of treated infection (proposed treatment group 3 in the table above). Mission nurses were asked to obtain stool specimens on missionaries within two weeks of departure. Margaret Shumway, the nurse in the Managua Nicaragua Mission, was able to obtain the highest percentage of testing among the missionaries. The total number of fecal analyses accomplished was less than 60 (unfortunately I do not have the exact number). These results were as follows:

1. 62% had positive stool exams for worms or protozoans..
2. All missionaries tested had received “the bomb” within 3 months of being tested.
3. 80% of those tested had no symptoms.
4. The 3 most common “critters” found were giardia, amoeba, and *B.hominis*.
5. Among symptomatic missionaries, amebic infection dominated.

It did not seem logical to give the same treatment to all missions, nor did it seem that what we were doing was very effective. With those conclusions in mind, I proposed a different schedule and some dose adjustments, which received approval, as a trial, from the Area Presidency and from the Public Health Committee (PHC) in June of 2000. See above table for Proposed Treatment Groups.

**Group 1:** No treatment during the mission unless there were symptoms present, and then after stool testing. Each missionary should be tested within two weeks of departure, and treated for any specific pathogen found.

**Group 2:** Treat all asymptomatic missionaries after 12 months with albendazole 400 mg on day 1, then tinidazole 2.0 gm on day 1 and day 2. Then test and treat as needed all departing missionaries. Alternative drugs were used depending on cost and availability; they included mebendazole, secnidazole, and nitazoxanide.

**Group 3:** Treat all asymptomatic missionaries at 9 and 18 months as above, then test and treat as indicated 2 weeks before departure. Sisters were treated once, and then as needed at departure; elders were treated twice and then as needed at departure.

Clara and I returned home in July of 2000. This program was attempted for one year, but was never well established. The logistics of departure testing were difficult if not impossible, as well as being objectionable

to many missionaries. My successor, Dr. Robert Payne, reported in October of 2001 that all missions were going to resume automatic treatment every 6-9 months. It was far simpler and easier to accomplish.

My next involvement with the bomb began in 2001 as a member of the PHC and the Executive Committee (EC) of the Medical Service Division of the Missionary Department (MD), the new name for the MMAC. Other AMAs in developing countries began noticing that parasite and worm infections seemed to be lessening, and consequently questioned the need for the 6 month treatment program. The PHC and Pharmacy Committee suggested getting more accurate and current data. An attempt to obtain this information included three projects. 1. Search Medlog records (the original electronic medical record developed by Homer Warner) for the number of documented infections during 2001 in high risk missions. 2. Request AMAs in these missions to complete a questionnaire which included documenting the number of diagnosed and treated protozoan and worm infections during the first 6 months of 2002. 3. Select several high risk missions to do stool exams on departing missionaries to more accurately determine the actual infestation incidence.

Area presidencies, mission presidents, and AMAs would each receive an explanatory letter in advance encouraging their input and support for the project. Draft copies of the letters, report forms, and questionnaires were prepared.<sup>5</sup> Final approval was not received from the MD, chiefly because of the proposed departure testing. These deliberations did result in a change to the long established bomb protocol. The new policy in 2002 included the following procedures:

1. Native missionaries from developing countries would be given the albendazole/tinidazole 2-day treatment in their respective MTCs.
2. All missionaries from high risk missions would be given this treatment as they leave their missions.
3. The routine treatment given every 6 months would not be continued. If an AMA and mission president felt that a particular mission needed to continue the bomb policy, they should get approval from the EC or PHC.
4. Mission Medical Coordinators (MMCs) and AMAs should attempt to obtain a specific diagnosis if symptoms are present with laboratory confirmation, if possible, and then treat as indicated, either directly or indirectly through local physicians.

AMAS were also asked to complete the questionnaire and attempt accurate data collection regarding infection rates in their missions.

Interestingly, this relatively minor change in policy took several years to accomplish. People were really attached to the bomb. To some it was a safety net. There was no need to be careful about food preparation, or using pure water. Eat everything—we've got the bomb to protect us! Others mistakenly used it as the most complete treatment for all GI troubles or the blahs. The reasons for this false reliance on the bomb are undoubtedly multifactorial.

1. With that name it's got to cure everything!
2. Many missionaries felt better after taking it, so it must be effective.
3. Misconceptions by missionaries, parents, mission presidents and wives, nurses and even physicians as to the purpose for giving the medications.
4. Statements used to encourage reluctant missionaries, such as "you really need this", "it will fix everything", and the bribe "no medicine, no cookie".

Remember it was never intended to cure anything. It would reduce the number of foreign invaders, thus hopefully allowing the host to effect healing, and decrease the chance of spreading the pathogens to other individuals living in close association.

In 2012 the PHC began to receive more vocal and written pushback from AMAs, particularly those in Latin America serving in cities where an MTC was located. Many arriving missionaries were refusing to take the pills. Drug cost and availability also became problematic. Members of the PHC were cognizant that the data from which the bomb policy was derived was 20 years old. New current data was needed. The best method, stool sampling of incoming and outgoing missionaries, was not feasible both for cost and esthetic reasons. DeVon Hale volunteered to search international literature, and I was directed to request the MTCs in Argentina and Brazil to give incoming missionaries a brief three question survey developed by the PHC. The Sao Paulo MTC was especially selected because of the number of missionaries being trained there and the improvements made in Brazil's public health infrastructure and policies.<sup>6</sup>

**The three questions agreed upon were as follows:**

1. Have you ever been treated for intestinal worms or

parasites? If yes, when?

2. In the past month have you had three or more loose stools in a 24 hour period?
3. Did you have an indoor flush toilet in the home where you lived before your mission?

A yes answer to #1 or #2, or a no to #3, were considered indicative of an increased risk for intestinal infestation. The missionary would then be interviewed and considered for treatment.

The results of these little investigations were surprising. In Argentina over a period when three incoming groups were surveyed, only one missionary was found to need treatment. In Brazil, one out of 95 missionaries was found to need treatment. Those AMAs were elated and anxious to terminate the policy.

DeVon Hale provided the clincher for the PHC in Feb 2013.<sup>7</sup> He reviewed the international literature from Argentina, Brazil, and Chile. Probably the best marker for the prevalence of intestinal infection is the measurement the level of Hep

A antibodies from naturally occurring infections during the first 10 years of life. In each country this level had fallen sufficiently to stimulate public health authorities to consider initiating Hep A vaccination programs. Increasing percentages of adults were susceptible to the disease. Other markers included improvement in water purification, sewage disposal, and general socioeconomic status in these countries. Additionally, AMAs reported that local public health authorities and medical consultants were generally not supportive of our bomb policy. Thus was instituted the new, and current, selective policy as found on the Missionary Website, in the Infield Guidelines section under parasite treatment. Incoming missionaries from developing countries were to be asked the three questions, interviewed if their answers put them at a higher risk for infection, and then treated as indicated. Departing missionaries were to be asked these questions:

1. Were you treated for worms or parasites during your mission?
2. In the past month have you had 3 or more liquid stools in a 24 hour period, especially on a recurring basis?
3. Were you careful to drink purified water and eat sanitary food during your mission?

People were really  
attached to the  
bomb. To some it  
was a safety net.  
There was no need  
to be careful about  
food preparation, or  
using pure water.

Yes answers to questions #1 and #2 and a no answer to #3 (some missionaries really do answer yes to #3!) would suggest to the MHC (nurse or mission president wife) to give the bomb to that missionary.

Does this policy get followed? Yes and no; the PHC does not have survey data that verifies its widespread use. Indeed, one policy does not cover all situations. AMAs and mission presidents in Africa and the Pacific Islands have felt that protozoan and worm infections have remained common enough that they continue to treat all departing missionaries. MD doctors continue to receive calls from returned missionaries and/or their parents asking about getting worm medicine or parasite treatment, because it was never given or was lost. Our advice has been, “If you don’t have symptoms, you probably don’t need it,” or “If you have symptoms get tested, and then treated for a specific problem.”

The latest development regarding the bomb occurred at the Provo MTC. For some reason the questionnaire had not been used with incoming missionaries from developing countries until this year. In April and May of 2015 the questions were asked of 162 missionaries. 47 of them had answers indicating a need for treatment. The cost for one albendazole/tinidazole dosing was nearly \$250. After checking efficacy and cost of mebendazole and nitazoxanide, the PHC decided to change the bomb in Provo to those drugs, which will cost about \$130 per dosing (exact figure not yet established), an obvious significant savings.<sup>8</sup> The PHC hopes that AMAs are instituting this selective policy in the other MTCs throughout the world.

So what can we learn from this 30-year saga of “The Bomb?” As I have reviewed this interesting history, these are the important facts and principles demonstrated:

Reducing the burden—decreasing the number of disease carrying organisms to which a person is exposed—is a valid concept in reducing illness. The bomb approach accomplished this reduction for several years, but with time and progress did not need universal application.

Fixed policies need to be reviewed and evaluated periodically to see if they address accurately ever-changing circumstances. The PHC needs to be receptive to ideas and suggestions from AMAs who are “in the trenches.”

Variable conditions exist among regions of the world that make one solution less effective or appropriate. Alternatives need to be developed and allowed which cover such variability.

There is really only one constant that is universally effective, but very difficult to achieve: prevention. Washing hands, using pure water, and eating sanitary food are sound practices that work, but human nature seems to resist using simple but inconvenient approaches.

There are ways to reduce risk when the above practices are nearly impossible to achieve. What does one do when

the sacrament water is obviously impure, or a host offers refreshments of uncertain purity? We have been in those situations when outright refusal is not an option. Thus, only a drop or a swallow may reduce the number of organisms ingested, and when accompanied by a silent prayer of faith and hope, some protection can be expected. During five years of some exposure in the Philippines and Latin America, Clara and I have been protected. We believe the Lord protects those who labor in his service, but they must do what they can to protect themselves, and not ignore sound principles of disease prevention.<sup>9</sup> There is a special relationship between the Lord and those who commit and serve as His emissaries throughout the world. Those who advise them on health matters, as well as those who give them spiritual counsel, need to indoctrinate them with an understanding of this aspect of the law of obedience both by precept and example.

## Notes

1. Quinton Harris, “Called to Serve”; *Journal of Collegium Aesculapeum*, Fall 2006, p. 20. Personal communication with Bruce Woolley, June 2015.
2. Personal communication with DeVon Hale, May 2015.
3. The origin of *primum non nocere* has been attributed to Hippocrates, but this is not exactly accurate. In *Epidemics*, Hippocrates states: “The physician... must have the special objects in view with regard to disease, namely, to do good or to do no harm.” Wikipedia.
4. Bruce Woolley will no doubt shake his head at this confession. He always taught AMAs to give the worm medicine on day 1, and the parasite medicine on day 2. This was to prevent worms from migrating out of the gut, having been stimulated by the parasite drug, therefore making the anti-worm drug less effective if given second. Although this practice is logical, there is not much evidence in the literature to support it. From their experience, however, AMAs clearly are in favor of worm first, parasite second.
5. Copies of these documents were on file in the Missionary Department and are now in my possession
6. Minutes of the PHC Sep., Oct., and Nov. 2012
7. Minutes of the PHC, Feb. 2013
8. Minutes of the PHC May and June 2015
9. D&C 84:80; D&C 82:10

# The Egyptian Obsession *with* Eternal Life

BY ANDREW C. SKINNER, PH.D.

The ancient Egyptians were a people obsessed with the concept of eternity and eternal life. Virtually everybody after 2000 BC, who wasn't a slave, thought about it. And gradually, during the Middle Kingdom (approximately 2050 BC through 1750 BC), we find what historians refer to as the democratization of eternity<sup>1</sup> where the *possibility* of eternal life becomes available to more and more people, not just royalty (the Pharaohs and their families).

From the tomb of 14<sup>th</sup>-dynasty Pharaoh, Nefer-hotep (about 1745 BC), we read the following poem:

I have heard the songs inscribed in the ancient tombs,  
how they exalt the temporal life and deprecate the  
kingdom of the dead.

Why say this of the land of eternity,  
that righteous place, devoid of terror?  
It abhors strife; none there attacks the life of another.  
It is a land without enemies.

All our forbears since primal antiquity rest there.  
Millions, millions yet unborn shall sail there,  
for none fail to reach it,  
none may stay behind in the land of Egypt.

These years we change on earth are mere illusion.  
When you disembark in the West, they say:  
“Welcome! Safe and Sound!”<sup>2</sup>



*Sunset behind the Great Pyramids*

The term “west” used here, was a metaphor in ancient Egypt for the next life—not an after-life, but the “other” life, as Egyptians viewed things. To “go west” meant to transition from *this* life to another life, through that event called death. This other life was the longed-for place where all were “safe and sound.” The sun was the most prominent natural phenomenon that the Egyptians encountered, day after day. It seems only natural that it would become the symbol of the Egyptians’ most important cultural value. The sun set in the west, symbolic of death, only to be followed by its rising in the east—symbolic of resurrection.

The ancient Egyptians seem to have envisioned two parallel and contiguous time zones, both originating at creation by the gods. One of these zones was the time-line of the living—“that continuum in which human beings were born and on which they underwent the stages of the life cycle. [They] had their careers, and



achieved things great and small. This is the time-line marked . . . by the chronological backbone delineated by the continuous succession of royal reigns.”<sup>3</sup> This is the time-zone of what we would call “historical events.”

Thus, “Death is the translational event, the portal through [which] each human passes, hoping to gain permanent admission to the other time zone.” This other time zone or time-line, “is the one without historical markers. It is the time in which the gods—including past kings—and the blessed dead, abide. They move about without temporal limitations.” The souls of the dead, as we would call them, “can, like the gods, move back and forth between the two time-lines and have influence on the affairs of mortals. . . . [T]he time-line of the living [is] in essence a recruiting ground for the time-line of the divine. The latter is eternity, the former is merely eternal. No one in the former is eternal, even if his temporal milieu is; one must cross over to the latter to gain [the divine, eternal zone]. This divine time zone is without history, without change, illness, injury, . . . or aging. It is a good place to be.”<sup>4</sup>

All of this is to say that when one went “west” he hoped to go to a land (or place) of righteousness without change, without illness, without injury, without aging. In the west one was outside of time as humans know it. Thus, eternal life was the most desirable of conditions. Eternal life was this other “zone.” Eternal life was life with the gods and life like the gods, to enjoy all good things. The common sentiment among ancient Egyptians from at least 2000 BC onward obsessed over eternity and eternal

life. Ancient Egyptian religion was centered on eternal life. Ancient Egyptian literature was permeated with thoughts of eternal life. Discourse about the nature of the universe was grounded in the fundamental principle of obtaining eternal life. The optimistic outlook of the ancient Egyptians, so much talked about by modern historians, was a reflection of their belief in eternal life.

Thus, the ancient Egyptian preoccupation with death and the afterlife (or the *other* life as they would have spoken of it) was not morbid and depressing. Rather, it was a bold assertion that the goodness of the present world could indeed last forever. This outlook was not an unhealthy obsession with death, but a confident affirmation of life. In what follows we will attempt to do three things:

1. Present enough evidence to demonstrate that the ancient Egyptians were, unequivocally, obsessed with eternal life;
2. Discuss how, in the ancient Egyptian view, mortals obtained eternal life; and
3. Discuss the source of ancient Egyptian understanding of eternity.

### **I. EVIDENCE OF THE OBSESSION**

That the ancient Egyptians were obsessed with eternal life may be seen virtually anywhere where ancient Egyptian culture is displayed: tombs, temples, papyrus documents, and mummies. The first, most obvious indicator of this obsession are the predominance of certain hieroglyphic signs that were part of the writing system of the ancient

Egyptians. These predominant hieroglyphs are seen almost everywhere one looks. They all center on “life,” and the benefits or blessings that are a natural consequence of eternal life.

The most recognizable hieroglyph in all of Egypt is the *ankh*, meaning literally “life,” “on-going life,” or “living forever,” and thus “eternal life.” This symbol is found literally everywhere: temples, tombs, and papyrus documents.



Sometimes the *ankh* hieroglyph was written (or carved) with the *was* scepter, especially on ancient Egyptian temple walls, which was the house or home of the gods or a specific god. The *was* scepter combined two ancient Egyptian concepts: the wooden scepter whose hieroglyphic character stands for power; and the *sekhem*, a type of ritual scepter held by gods and pharaohs that represented authority. By combining the two hieroglyphic signs, *ankh* and *was*, a phrase was created that is found in various temples all up and down the Nile and translates as something like: “Power and authority for eternity.” Note the following image carved on the temple wall of Philae on the Nile.



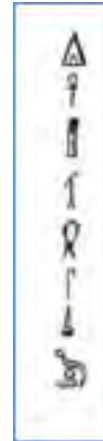
*The god horus holding the was scepter*



*The hieroglyphic phrase: “power and authority for eternity.”*

Often the hieroglyphic sign *di* is joined with *ankh* or other hieroglyphs to create powerful formulas. The trian-

gle-shaped sign *di* translates as “may he—or she—have or be given . . . [some blessing associated with eternity].” Thus, the phrase *di ankh* translates as “may he have on-going life” or “may he have life for eternity.” Sometimes we see a whole string of hieroglyphs put together that request several qualities, characteristics, or blessings be granted on behalf of the deceased whose tomb it is. The illustration directly to the right reads: “May he have on-going life, stability, power/dominion, protection, health, prosperity, for eternity.”



Closely related to the *ankh* sign is a hieroglyph which represented the Egyptian word for “eternity,” *djet*, and also conveyed the notion of eternal life or immortality. It is commonly found near representations of the various pharaohs expressing their hope for eternal life, or desire to possess other blessings eternally.



*djet (dt)  
“eternity”*

The symbol for “backbone,” seen in the following carving from two temple walls, wasn’t any generic backbone. It was the backbone of Osiris—god of resurrection, god of judgment, god of the afterworld, husband of Isis the mother goddess.



Osiris is also god of the Nile, and the god of vegetation. He is always depicted by the color green since the renewal of the earth in its seasons occurs because of the annual inundation brought on by the yearly flooding of the Nile. Below he is seen sitting on his judgment seat (left), and standing (right) with the crook and flail, symbolic of his responsibility to shepherd the flock or people of Egypt as well as to smite all the enemies of the gods. When Osiris is



seen wrapped in pure, white linen it indicates that he has undergone death and participated in the rituals associated with mummification that bring eternal life. His green face and hands indicate he has been resurrected. And thus green is also the symbolic color of resurrection. His red sash is also emblematic of authority.

Osiris gives humankind the fruit of the earth. He orders society and is the teacher of laws. He was the son of the primordial deities: the earth, “Geb,” and the sky, “Nut.” He is also the son of the god Ra—the sun. He is among the most powerful of the entire pantheon of deities.

When a man dies and merits eternal life, he becomes Osiris or an Osiris—a distinction not clear in Egyptian religion. Without question, the person becomes a god, to enjoy eternity.

### Mummification

A second major piece of evidence pointing to the Egyptian obsession with eternal life, life with the gods, comes from the practice of mummification and the construction of numerous tombs and temples, found all up and down the Nile River Valley. The practice of mummification is virtually synonymous with ancient Egyptian culture. It is found throughout Egypt’s long pre-Christian history, precisely because mummification was necessary to receive eternal life.



Death was a transfer—not an end—of life. Life after physical death is a replica of life on earth to a large extent, and in order to enjoy eternal life *a physical form is needed*. A person’s eternal survival required the preservation of his or her physical form, either as a mummified body or a statue—which is why we see so many statues in ancient Egypt. These preserve a person’s identifying characteristics.

Ancient Egypt was, ultimately, a very literal-minded culture. The modern scientific distinction between what

was “real” and what was only illusion, illustration, or metaphor was not drawn by the ancient Egyptians. Just because one could not see something, or something appeared to be an inanimate model or representation of a person, place, or thing, did not mean the representation did not have a literal existence.

All the different components that made up an individual—the soul, the spirit, the name, shadow, and above all the untranslatable *Ka*, the vital principle or essence of the person—needed to return to the body, or form of the body, on a regular basis to renew, reconfirm, and strengthen the identity, look, shape and individuality of the person. The best place to do that was the mummified form of an individual’s body, located in its tomb, where all the entities that made up the individual could re-unite without being disturbed.

Because life after physical death was a replica of life on earth, life’s necessities were, at all times, available to the *mortally* deceased (not eternally deceased) man or woman in their tomb. Food, clothing, jewelry, chariots, and even little toilets were required for the tomb’s inhabitant to be comfortable. These items helped individuals be sustained on their journey, in their ascent, to the realm of everlasting life with the gods and goddesses. The following photographs of material found in the unmolested tomb of Pharaoh Tutankhamun, discovered in 1922, illustrate the point.



According to one scholar, offerings of all kinds were placed in the tomb of the deceased, beside the sarcophagus in the hope of, and desire to, please the departed. With the accoutrements and offerings in place, “the dead man will be able to go on living in tranquility, and will not be tempted to come back to earth and haunt the living: for even in this civilization, more serene and cheerful than any

other of the ancient orient, a certain fear of the mysterious power of the dead is not lacking. The living have recourse to [the dead] to obtain favours, to renew remembrance, to ask for justice.”<sup>5</sup>

Texts written on the inside of the individual’s sarcophagus were intended to further instruct the deceased regarding eternal life. The most famous and important of these texts is the Egyptian *Book of the Dead*, or as it is literally entitled, *The Coming Forth by Day, Receding by Night in Thy Tomb Book*.



One other aspect of mummification and entombment is worth noting, because it too speaks to the Egyptian obsession with eternity. This is the practice of writing letters to the departed person. One of the more striking examples of this kind of letter is one sent by a high official to his wife, whose departed spirit continues to bother him and give him no peace. The official writes: “What wrong have I done thee? What have I done that I should conceal? I married thee when thou wast young. I was with thee in my employments. I did not neglect thee, I did not cause thee pain. I always acted in accordance with thy wishes. I made thee presents of every kind. I took care of thee when thou wast sick. I wept over thy tomb. No, thou canst not tell good from evil.”<sup>6</sup>

It was in the tomb that the deceased person made initial contact with the gods as the person awaited final ascent to the sun—to the eternal realms of the gods.



The gods helped to teach and guide the deceased on their journey to the “time-zone” of eternal life. We find many representations of the gods blessing the deceased person in preparation for eternal life.

The tomb painting to the right shows Ramses III embracing the goddess Isis and the Pharaoh’s young son who died during an epidemic in the Palace of Thebes.<sup>7</sup>

From the tomb of Pharaoh Thutmose III (1479-1425 B.C.) comes the scene of the Pharaoh suckling from the tree of life of Isis, the great Queen, goddess of renewal, marriage and love, and wife of Osiris.<sup>8</sup>



Another example of contact with the gods in the tomb comes from the tomb of Nefertari in the Valley of the Queens. She was the wife of Ramses II the Great, and her name means “beautiful companion.” Painted on the foreground pillar (below), Nefertari is receiving the symbol of eternal life (the *ankh*) from the goddess Hathor, goddess of love, beauty, motherhood, fertility, and music. She is almost always depicted with the horns of a cow supporting the solar disk. Note Hathor touching the *ankh* to the nose of Nefertari. Nefertari then breathes in life as the goddess knows it. The background pillar shows Osiris (green face, white garment and red sash) wishing the person of Nefertari ongoing life, stability, protection, health, and prosperity. As we discussed previously, Osiris’s body is wrapped in white linen cloth up to his neck, indicating that he died, but his face and hands are painted green, indicating his resurrected state. His hands bear the scepters of power, authority, dominion (the flail) and the emblem of his role as shepherd of the people, represented by the shepherd’s crook.<sup>9</sup>





## II. HOW DOES ONE OBTAIN ETERNAL LIFE?

All of the foregoing leads us to talk about how eternal life was finally realized—the rituals an individual had to participate in as part of the ascent to the realm of the gods. The Egyptians believed that every person had to be properly taught, prepared, gifted, helped, and guided through the rituals required upon the death of the candidate for eternal life.

Such rituals began in the temple, both the mortuary and the valley temples. From one modern source we read: “Once the body had arrived with the procession of sacred barks [symbolic boats used to transport the soul of the deceased], the ‘purification’ ceremonies began at the Valley Temple and the preparation of mummy was also completed. [Either 40 days for commoners; 70 days for royalty.] The principle ceremony [in the Valley temple] was the purifying washing. . . . [Once] purified, covered with propitiatory amulets, the mummy passed by the ‘Guardian of the threshold,’ then began his journey of ascent. . . . As the body proceeded from one columned hall to the next [still in the Valley temple], the number of initiates and purified, who accompanied him (consisting of priests and relatives), dwindled. When it [the body] reached the great central court, only the great initiated . . . continued into the ‘sancta sanctorum’ [holy of holies] of the mortuary temple, where the fundamental ceremony of the ‘opening of the mouth and eyes’ took place.”<sup>10</sup>



### Opening of the Mouth Ceremony

By way of explanation, the Opening of the Mouth was a ritual wherein the priest would use various holy instruments

to touch the mouth, nose, ears, and eyes of the deceased to give life to those organs so they would function properly in the next life, the “other” life or parallel time-zone. The eyes to see, the ears to listen, the mouth to speak. According to Hugh Nibley: “[T]he famous Opening of the Mouth ceremony, [is] a very ancient sequence of rites which, in the longer texts, contains in reduced form the entire Egyptian initiation or endowment. The Opening of the Mouth rite can represent at one and the same time both baptism and coronation, libation and ritual meal. In the Joseph Smith and de Horrack versions, it comes as the final step to preparing the initiate for a journey: ‘Thou seest with thine eye, thou hearest with thy two ears, thou speakest with thy mouth, thou walkest with thy two legs.’”

After the completion of the Opening of the Mouth ceremony the deceased person’s mummified body was “taken through secret ways to the subterranean chapel. Once sealed, the precious sarcophagus was set in the midst of his [the mummy’s] clearest possessions and treasures, after which the worker-priests retraced their steps, closed the marble portcullises and obstructed every passage so that no one might disturb the [mummy] as he waited for his final ascent to the sun.”<sup>12</sup>

By the way, the sloping sides of the pyramids—which were tombs of royalty and nobility—reminded everyone of the slanting rays of the sun, by which the souls or spirit of the individual, the king or noble in this case, could climb to the heavens and join the gods for eternity.

What we have been describing by way of ritual performance applied to the mummified body of the deceased candidate for eternal life. At the same time the mummification rituals were being performed, the spirit, soul, or essence of the deceased person was also expected to engage in ritual certification or proof of his or her worthiness to live among the righteous in the land of Osiris.

### Weighing of the Heart Ceremony

First, the candidate, the soul or true essence of the individual, and *not* the shell called the physical body, was escorted into the judgment hall and taken before the god Osiris by the jackal-head god Anubis (god of mummification). He or she then recited the so-called *negative confession*, a formula that is contained in the celebrated



Book of the Dead, and which was written on the inside of the coffin of the deceased person:

The Negative Confession reads:

Hail to thee, O great god, lord of the Two Justices!  
I have come to thee, my lord, I have been brought  
that I might see thy beauty. I know thee; I know  
thy name and the names of the forty-two gods who  
are with thee in the Hall of the Two Justices . . . I  
have come to thee, I have brought thee justice, I  
have banished deceit for thee.

*I have not done evil to men.*  
*I have not illtreated animals.*  
*I have not sinned in the temple.*  
*I have not known what is not . . .*  
*I have not blasphemed the gods.*  
*I have not done violence to the poor.*  
*I have not done what the gods abhor.*  
*I have not defamed a slave to his master.*  
*I have not made anyone sick.*  
*I have not made anyone weep.*  
*I have not slain.*  
*I have not given orders to slay.*  
*I have not made anyone suffer.*  
*I have not stolen temple property.*  
*I have not harmed the food of the gods . . .*  
*I have not falsified the measure of grain . . .*  
*I have not added weight to the scales . . .*  
*I have not taken the mild from the mouth of children.*  
*I have not driven cattle from their pasture.*  
*I have not hunted the birds of the gods.*  
*I have not caught fish in their marshes.*  
*I have not held up the water in its season.*  
*I have not dammed running water.*  
*I have not put out a fire that should have stayed alight.*  
*I have not neglected offerings to the gods.*  
*I have not stolen their cattle.*  
*I have not held up a god's procession.*  
*I am blameless.*<sup>13</sup>

The negative confession verbally proclaimed the worthiness of the candidate, but then the candidate's heart was taken and weighed, on the scales of justice, against the feather of *ma'at*. If the candidate's heart weighed light, as light as the feather of *ma'at*, the candidate was worthy to enter the kingdom of Osiris, with the other gods, former Pharaohs, noble Egyptians, and the other primordial gods and goddesses. *Ma'at* was a goddess whose name is hard to translate with exactness. The word *ma'at* has

a combined meaning of truth, justice, harmony, order, balance, and righteousness. *Ma'at* is represented by a feather because a good life, filled with uprightness and good deeds, made one's heart light. Badness and evil deeds made the heart heavy.

If the candidate's heart weighed heavier than the feather of *ma'at*, then the candidate was turned over to Ammit or Ammut for destruction. Ammut was a female monster who had the head of a crocodile, the torso and front paws of a lion, and the rear half of a hippopotamus—the three largest man-eating animals known in ancient Egypt. Ammut means “Devourer or Soul Eater.”

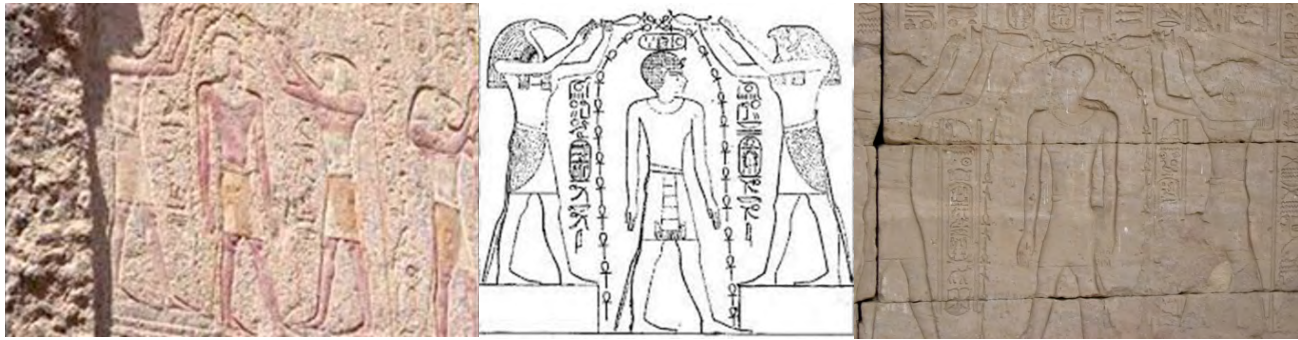
Before a righteous candidate was fit to enter the land of Osiris, another ritual seems to have been required. This ritual, called by some Latter-day Saints, “the Egyptian endowment,” was an anointing and enthronement ceremony. It is often described by non-LDS scholars as depicting the way Pharaoh received his authority from the gods to preside over his people as a living god on earth—becoming the God Horus, son of Osiris. However, this also seems to apply to the procession occurring in the afterlife or eternal time zone. It empowered the candidate for eternal life to enjoy the fellowship of the gods in eternity. We know about this ceremony largely from inscriptions in Egyptian temples—the most pronounced being found on the south wall of the holy of holies of the Karnak Temple in Luxor, Egypt (see below).



*Personification of ma'at with feather.*

Notice the particulars of the enthronement procession (above, opposite). The candidate is first anointed by priests. It is hard to tell what he is anointed with and why. In other anointing panels in other temples it is made clear: he is anointed to receive eternal life as indicated by the series of *ankhs* flowing over the candidate's head.<sup>14</sup>

As we turn back to the Karnak panel, we next see the candidate receiving a new headdress, preparatory to being received by the patron deity of the Karnak Temple. The candidate is then brought before the god Amon Re, who sits on his throne. Amon

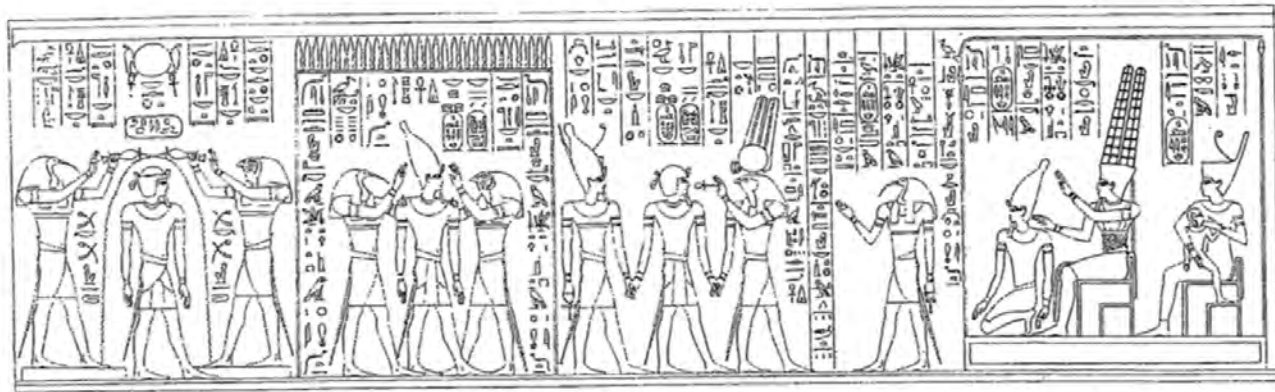
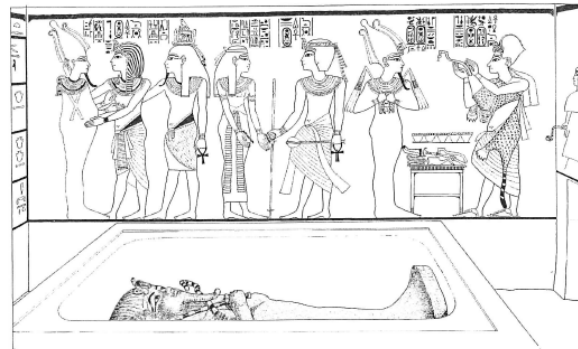


Re is the deity who “owns” the Karnak Temple (it is his holy house). The candidate kneels before Amon Re and is crowned with power with another headdress. All of this is made clearer by viewing a line drawing of the Karnak Temple enthronement procession.

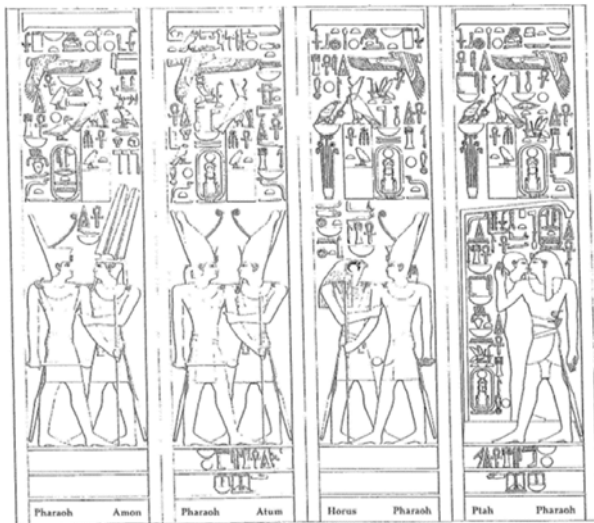
In some temples and tombs of ancient Egypt a ritual embrace is depicted between the candidate for eternal life and the patron deity of the temple. At Karnak the ritual embrace is carved on the east wall of the holy of holies. The god is Amon Re. The candidate appears to be Pharaoh. The ritual embrace is the culmination of the enthronement procession (below).<sup>15</sup>

In the tomb of the boy Pharaoh, Tutankhamon, we see the ritual embrace (below) between Osiris and young King Tut. Notice the progression. “Starting on the [far] right, Tutankhamun’s successor, Ay, is shown dressed in the panther skin robe of the *sem*-priest and opening the mouth of the deceased king with the ritual adze. The pharaoh is dressed as Osiris in a close-fitting white garment and holds the two flails of kingship. The middle scene shows the goddess Nut offering the *nyny*-gesture to the young king, who has his walking staff, ritual mace, and ankh. The final scene is the glorious culmination in which Tutankhamun is supported by his personified *ka*. . . . As Tutankhamun embraces Osiris, he receives the usual formula: ‘Given life for all time and eternity,’ while Osiris reaches out to embrace his son through his archaic white robe.”<sup>16</sup> The depiction below is the restored drawing of the actual wall painting from the tomb of Tutankhamun, around 1320 B.C. (right)

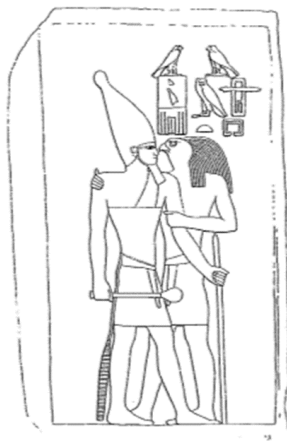
Other representations of ritual embraces are found carved on ancient Egyptian stela as the drawings below of actual artifacts demonstrate. These drawings are taken from Hugh Nibley’s book *The Message of the Joseph Smith Papyri*.<sup>17</sup> He notes that “the ritual embrace does not take place in silence. In the Pyramid Texts, as Horace and his father, Osiris, ‘hold fast to each other,’ they exchange some sort [of] sentences which [Adolf Rusch] has called [a] recitation accompanying the embrace, in which, strangely enough, the father and son exchange identical formulas, the short sentences being arranged facing each other and reading in opposite directions in the text. ‘At the supreme moment of initiation,’ . . . there took place an exchange ‘of a Question and a Response . . . probably spoken in an undertone both by the priest and the initiand, perhaps . . . at the door of the holiest.’ This was ‘at the last admission,’ and the words exchanged served ‘as liturgical passwords; they could serve as such by their character as “mysteries,” . . . as summaries of the life of the god and its imitation,’



through phases of which the candidate had just been introduced. A variation is found on the stela of Piankhi where, at his coronation, the king enters the temple at Heliopolis as an ordinary citizen for ‘mysterious interviews between god and king’: he mounts the stairs, goes to the great naos entirely alone, pulls the bolts open, opens the shrine, and sees his father in the temple of the Benben, at the conclusion of the interview—and only then—he receives from the god, his father, the diadem and [was] sceptre.”<sup>18</sup>



*Drawing of the eleven-foot senwosret pillar showing pharaoh being embraced by four different gods, circa 1940 B.C.*



*Drawing of the earliest known example of the ritual embrace—between the god horus and the pharaoh, circa 2650 B.C.*

The rituals associated with bestowing the power and authority of eternal life were apparently re-enacted in the ancient temples of Egypt. Temples of ancient Egypt were the houses of the gods, as names associated with the Temples indicates. The most common ancient Egyptian name for a Temple was *het-netjer* which meant literally “mansion of the god.” It was, in the ancient Egyptian

mind-set, the location where the gods lived on earth. Thus, Temples were also known as “houses of eternity.” While in the earthly Temple a god took up residence in the statue of himself or herself in the Temple. As Professor Dieter Kurth points out:

The statues were made from precious materials, both stone and metal, especially gold, since gold was considered to be the

flesh of the gods. One of the statues stood in the sanctuary as the main cult image of the god. Every morning this image was purified with incense, washed, clothed, and anointed. The god present in the statue was provided with offerings by the priests, who also sang hymns of praise to the god. . . .

Because the nature of the god had a cosmic dimension, the temple, in its layout and decoration, was modeled on the world. The dadoes of its walls were decorated with plants and animals, representing the earth, the ceilings of its rooms were lavishly decorated with stars representing heaven, and the supporting columns were meant to represent plants and trees.

Every Egyptian temple had this appearance: it was a copy of the world. In inscriptions of the Greco-Roman period the temple was even named “heaven” or “horizon.” The large temple complex of Karnak was known as “Heaven on Earth.”

The temple had to be pure if the god was to accept it as his house. Purity began with the building itself: no noise or impurity was allowed inside the temple.<sup>19</sup>

Egyptian temples symbolized man’s ascent to the realm of the gods, and temples were constructed to literally demonstrate ascending degrees of holiness. As one entered the Temple and moved further into its interior, each of the three partitioned rooms was slightly higher than the previous one—as the above image of Ramses III’s Temple shows. As Professor Nibley points out, “The commonly expressed goal and object of visiting the temple is ‘to see the god.’”<sup>20</sup>

### III. ORIGINS OF ANCIENT EGYPTIANS’ QUEST FOR ETERNAL LIFE

Though we still have some questions about specifics, we have enough information to understand the basic mind-set of the ancient Egyptians and how they believed one attained eternal life. This leaves us very little space to answer our final question. But we don’t need much. Where did this understanding of eternity, life with gods, and the rites and



*Temple of Ramses III.*

ordinances necessary to obtain this eternal existence come from?

Among the earliest recorded accounts in scripture of Egyptian religion is the first-person account given by the Patriarch Abraham. In visions that spanned the universe, Abraham learned how the ancient Egyptians came to possess such amazing echoes of truth we have been discussing. Here is his insight:

“Now the first government of Egypt was established by Pharaoh, the eldest son of Egyptus, the daughter of Ham, and it was after the manner of the government of Ham, which was patriarchal.

“Pharaoh, being a righteous man, established his kingdom and judged his people wisely and justly all his days, *seeking earnestly to imitate that order established by the fathers in the first generations, in the days of the first patriarchal reign, even in the reign of Adam*, and also of Noah, his father, who blessed him with the blessings of the earth, and with the blessings of wisdom, but cursed him as pertaining to the Priesthood.

“Now, Pharaoh being of that lineage by which he could not have the right of Priesthood, notwithstanding the Pharaohs would fain claim it from Noah, through Ham, therefore my father was led away by their idolatry;

“But I shall endeavor, hereafter, to delineate the chronology running back from myself to the beginning of the creation, for the records have come into my hands, which I hold unto this present time” (Abraham 1:25-28; emphasis added).

What does this mean? What is the grand “so-what?” Perhaps, the most important “take-away” rivets our attention on Joseph Smith and the revelation he and his successors received regarding temple rituals. Up to this point, we have said very little about LDS temple rites, rituals, and ordinances in our discussion. But surely readers have been putting two and two together. How could an ancient world view found in Egypt and separated from us in America by 9,000 miles and 4,000 years, correspond so dramatically to concepts that came from Joseph Smith and his closest associates?

To answer this question, consider one more quotation:

“We are in the process of receiving all that God has spoken by the mouths of all his holy prophets since the world began. Only a small portion has come to us so far; *we do not, as yet, begin to know what the ancients knew.*

“That which has come to us anew breaks the shackles of the past and opens up entirely new vistas to us. It is all Christ-centered, gospel-centered, priesthood-centered, church-centered. It lets us know that all of the ancient Saints had the same gospel, the same hope in Christ, the same holy priesthood, the same celestial marriage, the same church, the same apostolic power, the same

gifts of the Spirit, the same system of salvation that we have.

“Except for a few things relative to salvation for the dead, we have not yet received one syllable or scripture, one trace of truth, one gospel verity, one saving power, that was not had anciently.”<sup>21</sup>

Beginning with Adam, the ancient patriarchs had revealed to them by the true and living God all the power, authority, and ordinances required to obtain eternal life and live with Deity. Abraham himself was successful in becoming like God (D&C 132:37). Those who did not possess what the righteous fathers had, but recognized its eternal significance, wanted it so badly they imitated it to an amazing degree. Proof of this assertion is found in the buildings, monuments, and documents of Egypt that have resisted the ravages of time and continue to testify of sacred truths in this dispensation—the dispensation of the fullness of times.

## Notes

1. C. Warren Hollister, *Roots of Western Tradition* (New York: John Wiley and Sons, Inc., 1972), 30.
2. Quoted in Gerald E. Kadish, “Observations on Time in Ancient Egyptian Culture,” *Papers on Ancient Greek and Islamic Philosophy III*. (Binghamton, NY: Institute of Global Cultural Studies, 1993), 13.
3. Kadish, “Observations,” 12.
4. Kadish, “Observations,” 13.
5. Sabatino Moscati, *The Face of the Ancient Orient* (New York: Anchor Books, 1962), 128.
6. Moscati, *Face*, 128.
7. Photo in Abbas Chalaby, *Egypt* (Firenze, Italy: Bonechi, 1989), 88.
8. Photo in Moahmed Nasr, *Valley of the Kings* (National Archives and Library #2003 (13472), 50.
9. Photo in *Ancient Egypt* (Cairo, Egypt: The American University in Cairo Press, 2003), 152.
10. Alberto Carlo Carpiceci, *Art and History of Egypt* (Florence, Italy: Bonechi, 2000), 53-54.
11. Hugh Nibley, *The Message of the Joseph Smith Papyri—An Egyptian Endowment*. Vol. 16 Collected Works of Hugh Nibley (Salt Lake City: Deseret Book Company, Provo: FARMS, 2005), 164.
12. Carpiceci, *Art and History*, 54.
13. Moscati, *The Face*, 126.
14. Line drawing (middle image) taken from Nibley, *Message*, 445.
15. Line drawing taken from Nibley, *Message*, 445.
16. Nibley, *Message*, 433.
17. Nibley, *Message*, 430, 431.
18. Nibley, *Message*, 449-450.
19. Dieter Kurth, *The Temple of Edfu, A Guide by an Ancient Egyptian Priest* (Cairo, Egypt: The American University in Cairo Press, 2004), 8.
20. Nibley, *Message*, 441.
21. Bruce R. McConkie, “The Doctrinal Restoration,” in *The Joseph Smith Translation: The Restoration of Plain and Precious Things*, 19; emphasis added.



