President’s Report

When I took over the reins of the Foundation from Fr. D’Ulio in September, I asked myself a fundamental question about the Vatican Observatory, where I have worked for the past 20 years, and its Foundation, which I was now joining: What can we offer the public that no other group of astronomers can offer? What is it that we are uniquely positioned to do?

The Vatican Observatory has Jesuit astronomers. Young Jesuit astronomers. That’s pretty special. And it has a very good telescope in a fantastic site. But best of all, I realized, the Observatory has a Foundation, a tool where the public and the Jesuit astronomers can reach each other and share our common desire to know God through His creation. How can we at the Foundation use these unique gifts to fulfill our mission of showing the world that the Church supports astronomy, to create and share the joy of the work we do; and to set up a sustainable way of keeping the telescope, and the foundation, alive into the future?

First…we can use the Jesuit connection to connect to Jesuit schools. We’ve already started this, with two Jesuit high schools in California around the world.

Second, we can use the connections and credibility we have as a Catholic institution to connect up with parishes and their clubs and organizations. The first step in this program is the Faith and Astronomy Learning Academy.

We’ve already started this, with two Jesuit high schools in California and this year we have added St. Louis University High to the group. In addition, we have made contacts with several other Jesuit schools in the Midwest and in January we began participating in the Jesuit Virtual Learning Academy.

Second, we can use the connections and credibility we have as a Catholic institution to connect up with parishes and their clubs and organizations. The first step in this program is the Faith and Astronomy Workshop which we held in January. We hope this will become an annual event.

Finally, we can provide a place where individuals can come to learn about astronomy in a church-friendly setting. The Foundation is the place where the Observatory directly engages with American Catholics. And when it does, say after a decade or two, it can be acknowledged by others, or it does not. One of Andy’s areas of passionate interest was the study of the universe by men of faith is fascinating on multiple levels, and I am honored to help guide the non-profit Vatican Observatory Foundation created to support it.

The Vatican Observatory was one of the few institutions where science and religion meet in constructive dialogue. I found myself in awe of the work of the Vatican Observatory when I first learned of the group fifteen years ago. The study of the universe by men of faith is fascinating on multiple levels, and I am honored to help guide the non-profit Vatican Observatory Foundation created to support it.

The Vatican Observatory Foundation was established in 1987 at the urging of Pope John Paul II in order to fund construction of the Vatican Advanced Technology Telescope to conduct leading edge research as well as to support education. The mission remains the same today and is made all the more relevant in a time when religion and science are incompatable. In my view, the Vatican Observatory Foundation is a fascinating partnership between the Catholic Church, dedicated scientists, and benefactors who welcome research of the heavens. Our Board of Directors is committed to enhancing this partnership and I am happy to present these pages to illustrate the important work taking place in the US and throughout the world.

In 2014 the Vatican Observatory achieved unique milestones in outreach to lovers of wisdom, young and old. We have expanded the number of new donors/supporters by 20%, our media exposure has doubled, and our Facebook interest has climbed from a few hundred hits to almost 2000. We thank you for being a part of this journey. On behalf of the Board of Directors, I offer my profound gratitude to all who support the Vatican Observatory Foundation. Your support is paramount to the long-term viability of this vital endeavor. In these pages I hope you find insight, inspiration, and perhaps the same sense of awe I experienced the first time I met these Jesuit scientists over a decade ago.

Our Mission

The Vatican Observatory has a double-edged mission: scientific research into the knowledge of the universe, including our place in it; and the education of the public based upon the knowledge derived from that research. Those two driving forces of our mission are very much intertwined. In 1987, for the Vatican Observatory Foundation was established as a tax exempt corporation to support this mission.

Research. In the early 1990s the marvels of technology and the commitment of a few visionary philanthropists made possible the creation of the Vatican Advanced Technology Telescope (VATT), which empowers scientists to look with more acute “eyes” into the universe. Today, the VATT continues to provide stunning access to the heavens for researchers from around the globe. Combined with other technologies and the continued commitment of Vatican Observatory scientists, our work is literally pushing the boundaries of what we know and how we know it. Joining in this research are many students of astronomy from around the world.

Education. Each year members of the Observatory staff share their expertise by making educational presentations as the average to over 5,000 persons from 90 educational, religious, and academic groups. In recent times Vatican Observatory scientists have played an increasingly important role in the dialogue between science and faith.

Chairman’s Report

We recently celebrated the feast of the Epiphany. As described in the Gospel of Matthew the Magi follow a star that leads them to the Christ child, but they were more than just astronomers driven onward by a celestial event. Pope Benedict XVI, in his book “Jesus of Nazareth: The Infancy Narratives,” states that the Magi were “wise” and they represent the inner dynamic of religion toward self-transcendence, which involves a search for truth, a search for the true God and hence “philosophy” in the original sense of the word. Wisdom, then, serves to purify the message of “science”, the rationality of that message does not remain at the level of intellectual knowledge, but seeks understanding in its fullness, and so seize reason to its fullest possibilities.

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One of Andy’s areas of passionate interest was a faith community of lay and religious mathematicians, the Clavius Group, which he co-founded in 1963. In 2003, Andy wrote, “…if this does not seem too exaggerated, my mathematics that I do is prayer. One faces asked and beautiful truth when he does mathematics. One cannot win in this game by bargaining the table, or claiming the wisdom of old age, or pretending. Either your logic works and can be acknowledged by others, or it does not. And when it does, say after a proof that carries through several pages, you are in the presence of the Divine.”

Richard Friedrich
Chairman
THANK YOU to our generous benefactors

Brother Guy presents at Santa Clara University for the Bavarian Institute lecture series: “What Good is God?”

Brother Guy teaches a Physics class at Catholic University in Washington D.C.

Brother Guy speaking of the book he wrote with Fr. Paul Mulvey in Long Island

On-Going Educational Efforts

St. Ignatian Preparatory students in San Francisco discuss Faith and Science with Brother Guy

The VOF has made every effort to ensure that all information is correct. If any omissions or errors are noted, we offer our apologies and ask that you notify us.

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**Development Report**

In February the 2014 Circles of Giving Awards Celebration returned to Tucson attended by many longtime friends, quite a few new friends and colleagues of the observatory. An unprecedented 15 individuals and 3 foundations were honored reflecting the amount of generosity shown by so many during the preceding year.  

Fr. Timothy Swindle, Director of the Lunar and Planetary Laboratory at the University of Arizona, was our keynote speaker, focusing the audience with tales of asteroids and meteors. On the previous evening the Director of Steward Observatory, Dr. Buil Januszewski kindly hosted our Annual Seminar with the largest crowd ever, over 150 attendees, demonstrating how successful our efforts to increase interest in the Vatican Observatory has been.

2014 was again a year of transition. Many friends and colleagues gathered in the spring to say farewell to one of the Vatican Observatory’s most beloved and brilliant founders, Fr. Bill Stoeger. He will certainly be missed.

Fr. Albert DiStilio moved on to Chicago to become the Treasurer of the Mid West Province of the Society of Jesus and Br. Guy Consolmagno stepped in as President and Treasurer of the Mid West Province of the Society of Jesus. The Foundations who believe in the stability and validity of our mission, and the support of so many friends 2014 can certainly be considered a successful year. With the advances on the telescope, enhanced educational programs and increased exposure the Vatican Observatory Foundation’s future looks very bright.

Katie Bannan Steinke  
Development Director

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**One Specola, One Team, One Dream**

The Vatican Observatory, known in Italian as Specola Vaticana, carries out a unique mission in service of the Holy See from its two centers, located at Castel Gandolfo and Tucson. Keeping active these two centers is a real challenge that is possible thanks to the support of the Director of the Vatican City State and to the Superiors of the Society of Jesus who are providing qualified men for this work in service of the Holy See. We are also very grateful to benefactors that are helping us to carry out different projects.

This time I would like to mention two projects that are important and perfectly respond to the two-folded mission of the Vatican Observatory: to do good science and to be witnesses of the Church’s commitment to dialogue with the sciences.

1) **VATT robotization.** On 8th March 2014 the Vatican Observatory received a very generous gift from the Papal Foundation for the technological update of the VATT. With this grant we have started the process of “robotizing” the VATT in collaboration with the Steward Observatory of The University of Arizona. In this report we refer the complete and future milestones of this project.

The robotization of the VATT is a part of a larger plan for developing a network of advanced telescopes in Arizona, the Arizona Robotic Telescope Network (ARTN). Many new possibilities will open for competitive science at VATT both as a stand-alone telescope and as a part of a new cutting-edge facility. The complexity of working in this context is one of the parameters of the project which may be challenging. Furthermore, VATT continues to operate at this time with no disruptions to the observers while undergoing major upgrades.

2) **Renovation of the domes.** Due to the increasing number of visitors and our revaluation of historical heritage of the Observatory, we have started to renew the domes in the Pontifical Gardens of Castel Gandolfo.

The domes are the house of two telescopes, the Carte du Ciel (1891) and the Schmidt (1957), which were advanced technology telescopes at the time. The domes are ideally situated to be to showcase the commitment of the Holy See in contributing to the progress of the scientific knowledge. The projected Visitor Center will offer the younger generations a different perspective from the one they get from the media. The historical testimony of the Vatican astronomers tells more than words that science and faith can complement each other. On 25 January I had the great opportunity to brief the Holy Father on these and other projects when Father José M. Maj, vice director for administration, and I were received in private audience.

The unique mission of the Vatican Observatory is carried out by one team based in two locations. I like to say that with this team it is easy to be their leader. I am proud of them and to them goes my deep gratitude.

The Vatican Observatory has been trusted to the Jesuits by the Holy See. The Jesuit dream can be expressed by the following Spanish words “en todo amar y servir” (in all things, to love and to serve).

At the Observatory we love our mission, we love to explore the Universe sharing this passion with our colleagues. Astrophysics is a wonderful science and still a very exciting frontier to be at. With our research we hope to serve humanity in asking the deepest human questions about the origin of the Universe and its philosophical and theological implications.

Finally I would like to mention one dream that comes true every two years, the Vatican Observatory Summer Schools. I am especially grateful to those benefactors who with their generous gifts have provided scholarships to financially support the participation of our students.

In June we hosted the 14th Summer School on Galaxies: Near and Far, Young and Old. It was another successful and joyful experience thanks to the great dedication of the faculty and the generous participation of the students.

In 1996, the Vatican Observatory organized the first Summer School in Astronomy and Astrophysics, which has become more and more a valuable part of our activities. Since then, this international endeavor now has come to number 362 alumni hailing from 64 countries. This initiative from the Observatory is like the mustard seed from the Gospel parables and how it grows from something small. We give thanks to God for the growth which has exceeded our best expectations and to the Holy See for its support throughout these years.

José G. Funes, S.J.  
Director, Vatican Observatory

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The Sagan Medal awarded to Br. Guy
2015: International Year of Light

The United Nations has declared 2015 the International Year of Light to promote global awareness of optics and photonics. From the onset, the IYL project embraces a value of great importance to the entire astronomical community, namely, quality lighting and dark sky protection for our continuing study of cosmic light and access to it. There will be many events and activities throughout the year, building a lasting legacy for years to come.

Arizona’s Pi Day kick-off event: Talks, open house, and star party at East Arizona College’s Discovery Park Campus in Safford, AZ, on behalf of the three observatories on Mt Graham: Arizona Radio Observatory, Large Binocular Telescope Observatory, Vatican Observatory and Mt. Graham International Observatory.

Have heavenly pie with us on Pi Day, 3.14.15 at 9:26 pm!

The New Catholic Astronomer Blog!

Join the Sacred Space Giving Program! You will have reserved access to the NEW Catholic Astronomer blog, receive a copy of the Sacred Space Prayer Book and, depending on the level you chose, a book from our library, and the possibility of having one of the astronomers connect via Skype with a group of your choice. Giving levels start at only $10 per month.

An electronic monthly donation drafted directly from your credit card makes giving simple. Find more details at www.vofoundation.org/sacred-space-giving