

# Institute For Theological Encounter With Science and Technology

**Volume 40 - #3** 

**Summer 2009 Bulletin** 

#### **Pentecost Reflection**

On Pentecost Sunday each year in many churches, a special ritual takes place to commemorate the Apostles' ability to communicate to listeners who didn't speak their language. On that occasion, various parishioners with capabilities in different languages step up to the microphone and recite a specific line in a chosen language. In English, "All of them were filled with the Holy Spirit and began to speak in other languages, as the Spirit gave them ability." (*Acts of the Apostles* 2, 4). You may hear it in French, Spanish, Russian, Chinese, and so on from perhaps a dozen speakers. It's a good reminder that Christianity was intended from the very start to "teach all nations."

I sometimes wonder, "What about scientists? What is *their* special language? How would you recite that line in 'Science-ese'?" I don't have the answer, but I suppose it ought to have something to do with mathematics. From Galileo through Newton, Maxwell and Einstein, scientists have appreciated the magnificence of God's creation through the beautiful and elegant mathematics that describes it. Einstein is sometimes quoted saying, "I try to ask questions that are simple. When the answers come back simple, that is when you hear God thinking." The book *The Elegant Universe* by string-theorist Brian Greene carries the reader into a realm heavy with speculation, and not tied to experimental observation, but guided by the principles of mathematical symmetry.

Beauty and elegance of physical laws is very inspiring to scientists. Fr. Robert Brungs, SJ, in a letter to a friend, recounted his experience while working on his dissertation in physics. "I had made a couple of x-ray pictures of my sample (monocrystalline boron) and was watching the images coming up in the developer. I was simply astounded by their beauty and by the thought that I was the first person in the history of the universe to look on the symmetry in a crystal of boron. I was in awe, almost lost in contemplation of the beauty that God had put into a crystal of boron."

Could this be a special way in which the Holy Spirit calls? I think it's entirely possible that mathematical beauty can lead individuals on a path toward God. Even without all the mathematics, certainly the life sciences offer such a pathway; Francis Collins' book *DNA: the Language of God* testifies to that very well.

On another subject of communication, I bring to your attention the need for ITEST to have an accurate Email address for you. In early 2009 we established websites specifically to enable ITEST members to share ideas with one another;

We sent notices about this to all members, but about 15 percent of the Emails "bounced" for various reasons. If you didn't get our messages, it's likely that we don't have your current Email address. If you're using a "whitelist" to eliminate unwanted Emails, you may find it convenient to allow messages from mariannepost@archstl.org , tsheahen@gmail.com and mahfood@kenrick. edu to arrive.

Since ITEST is truly an international organization, we think you will enjoy exchanges with other ITEST members. Both websites are there for your utilization. We started off by posting a couple of "discussion threads," but the intent is for new conversations to begin and expand into new territory. You may discover someone you never knew existed, whose thoughts intersect with your own in some interesting way. (Notice I didn't say everyone agrees with each other!). I encourage you to bookmark those websites, as well as the main ITEST website www.faithscience.org and visit them often.

Thomas P. Sheahen, PhD Director: ITEST

#### In This Issue...

Opening Message	1
Announcements	
Catholic Health Care Ministry and Contemporary Culture: The Growing Divide - Edmund D. Pellegrino, M.D.	
Science, Orthodoxy, and Higher Education in Russia - Natalia Pecherskaya, Ph.D.	12

#### **Announcements**

- 1. Mark your calendars and save the dates, October 23-25, 2009 for the conference on a timely topic, Environmental Stewardship in the Judeo-Christian Tradition. Registration begins at 5:00 pm on Friday at the hotel on the grounds of Our Lady of the Snows Conference Center in Belleville, Illinois, and closes at Noon on Sunday. Again we urge you to register early since we have a limited number of rooms at the center. You have received the invitational brochures via e-mail and regular mail. All members enjoy a special discounted rate for the weekend (\$225.00). Our speakers, as listed in the brochure are: Benjamin F. Abell, Paul Driessen, E. Calvin Beisner and Elizabeth Michael Boyle, OP. Check out our web site at http:// www.faithscience.org under News and Events where you will find a digital copy of the brochure. A \$25.00 non-refundable deposit remitted to ITEST before September 2, 2009 will reserve your room. We accept checks and MasterCard or Visa.
- 2. The National Center for the Laity, based in Chicago, and founded in 1978, announces in it newsletter, *Initiatives*, the availability of a publication on faith and work titled, *Catholic Administrators and Labor Unions* by William Droel, Editor of *Initiatives* and the late Ed Marciniak (1917-2004), one of the founders of the organization. This is interesting reading replete with powerful anecdotal accounts. Another publication, *Pope John Paul II's Gospel of Work* by Bill Droel is available as well. Access their web site www.catholiclabor.org/NCL.htm to read about their history and formation. By scrolling down their homepage you can access their newsletters published within the past five years. Their mailing address: National Center for the Laity, PO Box 291102, Chicago, Illinois 60629.
- 3. Congratulations to Pediatrician Meade O'Boyle, MD, wife of longtime ITEST member, Edward O'Boyle, for receiving the Award of Excellence in Monroe, Louisiana recently, honoring her work as an advocate of children who are abused. Along with two other physicians, Dr. O'Boyle wrote the first protocol for use in the emergency room to help other physicians identify child-abuse victims. During her testimony on Capitol Hill in the 1970s, she convinced congress that child abuse legislation was a priority; soon after that, congress enacted the first law on child abuse. She is currently the co-director of the Pediatric Intensive Care Unit at St. Francis Medical Center and will sit on the first board dedicated to the prevention of child abuse established by the American Academy of Pediatrics later this year.
- 4. We are proud to announce that since our www.creationlens. org web site went on line in December 2008, we have tallied close to 100,000 actual downloads of lessons from our project, Exploring the World, Discovering God, interfacing faith/ science lessons for Kindergarten through Grade Four. Our Statcounter provides valuable information, including, the countries of origin, specific lessons downloaded, return visits, time spent on each download, among other statistics, enabling us to make inferences from the data recorded. We are prepared to develop the next level of this successful program through grades 5 - 8, and we are submitting grant requests to targeted foundations whose mission is to award grants to educational endeavors. Ours is a unique program; our project manager has shepherded the teachers who participated in the Creative Teacher Think Tank and compiled over 200 "ready-to-teach" faith/science lessons for use in Christian, Catholic schools and Home Schooling venues. You may access the video produced by Sebastian Mahfood and written by Evelyn Tucker by going to the "About" page in www.creationlens.org and clicking on the tutorial video which walks you through the entire program. Since we are searching for funding, we would appreciate any "leads" about foundations or even individuals who have an interest in the education of our young Christians in science and the truths of our faith and are willing to put their money to work in this ministry.
- 5. The student Chapter of ITEST and the Native American Study Group at St. Gregory's University in Shawnee, Oklahoma co-sponsored this year's Earth Day celebration on April 20. Opening the events was an afternoon presentation by RoseMary Crawford entitled, "The Energy Industry... Disruption and Transformation." Later in the early evening a second event followed with outdoor prayer and storytelling led by Justin Neely of the Citizen Potawatomi Nation and Modina Waters of the Kiowa Nation respectively. Also contributing to the day's festivities was a performance by the SGU Native American Flute Circle and an art exhibit featuring the works of Robert Pawnee of the Cheyenne-Arapaho Nation. St. Gregory's University is Oklahoma's oldest institution for higher learning and the state's only Catholic university. SGU serves approximately 800 students in two colleges: the College of Arts and Sciences and the College for Working Adults. Sister Marcianne Kappes, CST is the faculty advisor "extraordinaire" for the ITEST group of students.



Institute For Theological Encounter with Science and Technology Cardinal Rigali Center • 20 Archbishop May Drive • Suite 3400-A • St. Louis, Missouri 63119 • USA 314.792.7220 • www.faithscience.org • E-mail: mariannepost@archstl.org

ITEST Bulletin - S. Marianne Postiglione, RSM, Editor ISSN 1073-5976 • Copyright © 2009

### **Catholic Health Care Ministry and Contemporary Culture:** The Growing Divide

Edmund D. Pellegrino, M.D.

Reprinted with permission: Proceedings of the Twenty-First Workshop for Bishops, The National Catholic Bioethics Center, (NCCB), Philadelphia, PA, 2007, pp. 13-30.

Therefore man's personal dignity represents the criterion by which all cultural application of techno-scientific knowledge must be judged.

— John Paul II

The theme of this conference could not be more timely, nor more prophetic, for both the Catholic health ministry and contemporary culture. Both appreciate the unprecedented powers of modern biotechnology to reshape how we live, and even what it means to be human. Both wish to use those powers wisely and well, and thus within some set of ethical restraints. But each sustains a different notion of the nature of human good, the ends to which it ought to be directed, and the morality of the means used to attain those ends. It is at the junction of these diverging ends and means that the "tension" arises to which this conference is addressed.

Catholic health ministry sees care for the sick as a sacred ministry pursued in fidelity to the example and teachings of Jesus Christ. It is dedicated to the relief of suffering within the constraints of divine law. It gives primacy to man's spiritual destiny as well as his temporal well being. Contemporary culture

for its part also seeks to relieve suffering and to improve the quality of human life. Its restraints, however, are imposed by human law, and its end is primarily the quality of man's material life, without reference to divine law.

These two worldviews overlap in their use of biotechnology to heal, help, and relieve the suffering of the sick. They differ sharply, however, in their conceptions of the personal dignity which His Holiness John Paul II designated as the criterion for all use of biotechnology. For Catholic health care, personal dignity is an intrinsic, inviolable, God-given quality of all human life. It is possessed equally by the weakest and most fragile among us as well as by the most robust and the strongest. Contemporary culture acknowledges human dignity as a first principle of human rights and bioethics. But it does so as a quality conferred by human law. On this view human dignity

Continues on page 4

#### Edmund D. Pellegrino, M.D. **Brief Biography**

Dr. Pellegrino is Professor Emeritus of Medicine and Medical Ethics and Adjunct Professor of Philosophy at Georgetown University. He has served as Director of the Center for Clinical Bioethics at Georgetown University; head of the Kennedy Institute of Ethics and director of the Center for the Advanced Study of Ethics at Georgetown; President of Catholic University; and President and Chairman of the Yale-New Haven Medical Center. He chairs the President's Council on Bioethics in Washington, D.C.

He has authored or co-authored 24 books and more than 550 published articles and is founding editor of the Journal of Medicine and Philosophy. He received a number of honorary doctorates in addition to the Benjamin Rush Award from the American Medical Association and the Abraham Flexner

Award of the Association of American Medical Colleges.

In 2004 Pellegrino was named to the International Bioethics Committee of the United Nations Education, Scientific and Cultural Organization (UNESCO), which is the only advisory body within the United Nations system to engage in reflection on the ethical implications of advances in life sciences.

Throughout his career, Dr. Pellegrino has continued seeing patients in clinical consults, teaching medical students, interns and residents and doing research. Since his retirement in 2000, Dr. Pellegrino has remained at Georgetown, continuing to write, teach medicine and bioethics and participate in regular clinical attending services.

can be gained, lost, weakened, or transformed according to human will.

Today the trajectories of these two views of what it means to be human are diverging sharply. Each gives rise to a different system of bioethics, a different way of defining the good for humans and the right and wrong uses of biotechnology. This divergence is most concretely evident in the academic and public debates regarding the "human life" questions, e.g., technically assisted procreation, abortion, the uses of embryonic stem cells in research and therapy, the appropriation of biotechnology for purposes of enhancement beyond the needs of therapy, assisted suicide, and euthanasia. These debates are becoming more querulous making dialogue more difficult. As John Courtney Murray warned a half century ago, "civility dies with the death

## We are not yet at the point of death of dialogue, but we are drifting perilously close to it...

of dialogue." We are not yet at the point of death of dialogue, but we are drifting perilously close to it as the language of bioethical discourse becomes more petulant. The necessity of a sustained dialectic and dialogue becomes more apparent even as the intensity of the tensions escalates. Catholics today must meet the challenge of maintaining the integrity of their health care ministries in a democratic, sometimes hostile morally pluralistic society.

This is the challenge this conference puts before us. The nature of the tensions, the points at issue, and the boundaries of discourse will be defined more concretely by the speakers who make up the substance of this program. My task as a keynote speaker is to examine some of the root causes of the moral dissonance, the points that are increasingly in conflict with the tenets of Catholic Christian bioethics, the difficulties this conflict produces in a democratic, pluralist society in which bioethical issues are becoming matters of policy and legislation, and the necessity of maintaining a Catholic presence in a climate which is tending to disenfranchisement of Catholics in public debate.

I will speak as an individual and not as a member or as chairman of the President's Council on Bioethics. My reflections are those of a Catholic layman and a participant for many years in teaching and writing about bioethics.

#### **The Great Commission**

Let me begin with what has come to be known as the Great Commission, the charge Jesus gave his disciples to spread the good news of his life and teaching to the whole world. This is the mission Jesus entrusted to his disciples, as we read in the last words of Matthew's Gospel: "Go, therefore, make disciples of all nations; baptize them in the name of the Father and of the Son and of the Holy Spirit, and teach them to observe all the commands I gave you. And look, I am with you always; yes, to the end of time" (28:19–20, NJB). This commission lies behind the conviction of the third Synod of Bishops in 1974 "to confirm anew that the mandate to evangelize all men constitutes the essential mission of the Church."

This mission of evangelization is expressed in a multitude of activities and vocations in the life of the world. Prominent among them is the vocation of healing and helping the sick. As the Pontifical Council for Pastoral Assistance put it, "the *therapeutic ministry* of health care workers is a sharing in the pastoral and evangelizing work of the Church." Clearly, care of the sick and suffering is for many the way Christians respond to the mission encapsulated in the words of Matthew's Gospel.

The health care ministry has occupied the Church and its members for many centuries. In recent decades the conduct of this ministry has become more complex, and it encounters rising resistance in contemporary culture. The Church and its members, especially those committed to the health care professions, now confront a direct challenge: How is the ministry of health to be actualized in a world that is morally pluralistic and politically democratic? How are individual Catholics and Catholic institutions to be faithful to Jesus's command in a culture the values of which are sometimes in opposition to many of the basic tenets of what has been called "our bioethical magisterium." That magisterium comprises the principles and norms which enlighten the conscience and guide the decisions of Catholics in the midst of the biotechnical possibilities they must confront daily.

Challenges of this magnitude have never before been encountered. At the end of his commission to his disciples, Jesus said, "I am with you always; yes, to the end of time" (Matt. 28:20). Without this assurance few would have the courage to undertake the Catholic health care mission. God's promise that He will never leave us to face our troubles alone provides the grace we need to continue healing in his name. It sustains the hope that we can and will be faithful to Jesus's example.

#### **How Did the Present Tensions Come About?**

Even as we are emboldened by Jesus's promise, we must assess the cultural obstacles to the realization of our mission. Given the centuries-old contributions of Catholic health care

even in non-Catholic countries, how did the current dissonance with modern culture come about? Why is the Catholic medical-moral tradition that is so vital to the conduct of Catholic health care under so much attack?

This question is particularly puzzling given that the ethics of health care has had strong religious roots for almost all of its history. What we now call bioethics arose out of the ancient practice of medical ethics. In the West, that tradition is usually attributed to a small group of physicians, presumed by many to be followers of Pythagoras. These physicians were so disaffected with the fraud, money grubbing, and incompetence of their confreres that they sought to distance themselves from them. They did so by taking a solemn oath before their pagan gods to be faithful to a set of moral precepts whose prime principle was the good of the patient. That oath, and a series of deontologic treatises known as part of the Hippocratic Corpus, became identified in succeeding centuries as the common ethic of the medical profession.

In late antiquity, and in the Middle Ages, this ethic was adopted, without reference to the pagan gods, by Christians, Jews, and Moslems. It was compatible with the fundamental teachings of each of those three religious traditions. The Hippocratic Oath, or a modified version, became a universal declaration of medicine's public commitments to the welfare of patients. Its moral hegemony began to be seriously questioned only in the mid-1960s.<sup>8</sup>

For its part, the Catholic Church has a five-hundred-year old tradition of pastoral medicine and medical morals. That tradition was gradually expanded as new medical discoveries raised new issues. After World War II, the major writers in English in medical ethics were Catholic theologians like O'Donnell, Flood, Kelly, McFadden, and others, who were held in high regard even by non-Catholics. They provided a common source of orderly reflection on the challenges medical practice and progress were beginning to pose for both believers and nonbelievers.

## The prophetic voice of Pope Pius XII is particularly noteworthy in modern bioethics.

The prophetic voice of Pope Pius XII is particularly noteworthy in modern bioethics. In the mid-1950s, he gave a series of allocutions to physicians and physicians' organizations which anticipated ethical issues still significant today, e.g. organ transplantation, use of ordinary and extraordinary measures, professional ethics, and patient autonomy. This was about fifteen

years before "bioethics" was officially baptized, in 1972. Thus, in some ways Pius XII was the first modern bioethicist.

In the earliest days of bioethics, the principal thinkers, the patriarchs of bioethics, so to speak, were three theologians: Rev. Richard McCormick, S.J., Paul Ramsey, and James Gustafson. They provided the kind of serious critical analysis of medicalethical issues that gave intellectual foundation to the nascent movement of bioethics. They drew on the Catholic and Protestant moral traditions. They, too, were highly regarded by both believers and nonbelievers for the intellectual substance they gave to the ethical reflection of the nascent discipline and to the equally religious and sustained tradition of ancient lineage existing in Judaic ethics.<sup>12</sup>

Even the educational movement within bioethics had religious roots. In the mid-1960s, a group of campus ministers joined with a small number of medical educators to "do something" about the growing technical bias of medical education. Their concern was with the teaching of human values, ethics, and the humanities in medical schools. The story of their influence on the emergence of bioethics has been largely neglected. It was through their efforts that teaching of "bioethics" in medical schools was initiated. Relevant to this discussion are again the religious origins of a movement that both believers and non-believers took to be crucial in the best care of patients. So much was this the case that the idea of medicine and health as a "vocation" was widely adopted by non-believers as well as believers

Toward the end of the 1960s, the tensions between the religious origins of bioethics and the a-religious, anti-religious trajectory of modern culture began to develop. The reasons for this centrifugal movement away from religion are too complex to review here. However, it is relevant to the theme of this conference to examine four of the most significant cultural determinants of the drift away from a religious center in health care. These forces acted synergistically. Each exerted significant power over popular opinion. Each must be confronted, in its strength and its weaknesses, as a shaping force in modern bioethics. Each must be engaged by the Church and its members as they struggle to actualize the mission with which Jesus charged them. The four most significant are (1) the ideology of scientism, (2) the secularization of American life, (3) the nihilist tendencies of modern philosophy, and (4) the precarious conjunction of bioethics with politics in a democratic society.

The Ideology of Scientism

One of humankind's grandest achievements has been the discovery of the scientific method, by which we have gained un-

precedented power over nature and human life itself. There is every indication that unless man destroys himself in an atomic cataclysm fueled by national pride, science will continue to teach us more about the world and ourselves. The powers we now exert over reproduction, life and death, over our genetic endowments, the cure of disease and the fate of future generations are products of scientific inquiry. Some speak now of re-engineering the human species to eradicate, from its future, the defects of disease, death, and even unhappiness. Medicine and science are becoming salvation themes, i.e., man's control of the means of redemption by man himself. "Science" uncritically understood, is for many the new genie of utopia.

## "Science" uncritically understood, is for many the new genie of utopia.

The scientific method is unquestionably a tribute to the capacity of the human mind. It tells us how things work, how we can modify those workings, and how to control their powers. The more we learn about nature and man, the more we learn about the mystery of God's creation. This is why the Church has never opposed science but instead has nurtured it in its universities. Science, however, contributes to the tensions between church and human culture when it is transmuted from science into *scientism*, i.e., an ideology, a quasi-religious affirmation that scientific method is the only source of true knowledge and that every other inquiry into reality is worthless.

Scientism is the ideology that most influences much of academic bioethics today. It undergirds the technological imperative which says that we should do all that we can do technically, so long as it satisfies some humanly determined purpose. The first principle of scientism is positivism, the doctrine that all truth is attainable by the scientific method and that religion and metaphysics are simply the myths or fantasies of a disordered thinking. This view also holds that no experiment has proved the existence of God; therefore, God does not exist. In its own way, scientism like any ideology has become a surrogate religion, the ultimate determinant of moral truth. According to this view, Roman Catholics and other religious believers are misguided opponents of progress whose beliefs should be anathematized. The Roman Church, the mother of universities in the West, is condemned for standing in the way of our chances to cure every disease, to enhance every physical and mental capacity, to give parents perfect babies and all of us perfect bodies. Increasingly, the ideologists of scientism urge us to subject religious belief to the scientific method to show religion's inadequacies. <sup>14</sup> In the absence of experimental proof for religious belief, it is argued, the believer should at least be banned from participation in serious bioethical debates.

Secularization of American Society

Early in his pontificate, Pope Benedict XVI pointed out to the Church and the world the importance of the secularization which has gripped Europe so tenaciously. In the Mass following the death of John Paul II, he warned about the "dictatorship" of relativism, which is the child of secularism. In his much discussed Regensburg address of 2006, Benedict further lamented Europe's secularization. The sharp divide secularism has opened between faith and reason, and the erosion it has produced, are devastating European culture. With many "believers" in Christianity who are not "belongers" to the institutional Church, Benedict fears the de-Christianization of the West.

The processes of secularization in the United States have somewhat different cultural and historical roots but they also share some of the trajectories of European secularism. Significant numbers of Catholics hold to their belief in Christianity but feel less allegiance to magisterial teaching. This is especially so among those American Catholics who are so dazzled by the promised utopia of biotechnology that they are tempted to compromise official teachings. Conscience and moral conviction, as a result, are sometimes too readily yielded to expedience. Pragmatism is mistaken for prudential thought when biomedical moral choices are as complex as they have become.

Bioethics was born in the United States in a context of moral pluralism. That pluralism did not destroy the unity of American life because our founders were wise enough to enact the First Amendment to our Constitution: "Congress shall make no law respecting religion or prohibiting the free expression thereof." These few words have ensured that civil peace would not be destroyed by factionalist religious strife. The State thus admitted its incompetence in settling religious disputes, and wisely so. John Courtney Murray, the most astute interpreter of the "American proposition," put it this way:

The one civil society contains within its unity the communities that are divided among themselves but it does not seek to reduce to its own unity the differences that divide them. In a word the pluralism remains as real as its unity. <sup>16</sup>

In the beginning, secularism was simply one of the ways one might believe in any of the religious creeds or in none. However, in secularization there was always the seed of antipathy to any religion in public life. The devaluation of religion was accelerated by the social revolution of the mid-1960s, in which all sources of authority, especially religious authority, were challenged. Pluralism drifted in the direction of secularism as the preferred ideology of public life. Secularism for some was

more than simply one choice. Soon it became the only choice most conducive to a truly free, liberal, democratic society. To-day secularism has become a militant force for many progressivists who would banish the influence of religion in the public square.

Within bioethics, secularism is most palatable to those who see religion as an erroneous, ill-motivated restraint on the benefits of technology. Some bioethicists pursue secularization with religious fervor. Secularism not only favors the banishment of religion from moral discourse but castigates believers as "unreasonable" at best, and bewitched by myth at worst. Secularism now has its own gurus, and its own substitute clergy. It has spawned a multitude of authorities eager to advise Americans and the world on how to think about bioethics.

The most recent proponents of secularization are the new militant atheists. They deem it insufficient to hold atheism as a dissident opinion of personal choice. They see all religion as evil, the cause of world conflict, racial and genetic discrimination, and a deterrent to progress. Religion by this view is an evil to be eradicated. The Catholic Church is its major target, since the Church is unrelenting about the supremacy of the spiritual over the material. Worst of all, the Church deigns to teach with authority and does so with clarity. Recent books by Dennett, Harris, Dawkins, Stenger, and others argue atheistic militancy with religious vigor and an air of triumphalism. All presume the case against God to be already closed and judge religion as fantasy. A most extensive and well-documented study of the secularization of American bioethics since its beginnings has just been completed.

#### The Nihilism of Moral Philosophy

The Catholic Church for centuries has taught that philosophy and theology are both essential elements in any comprehensive moral philosophy. No one has enunciated this better than John Paul II in his later encyclicals, especially *Evangelium vitae*, *Fides et ratio*, and *Veritatis splendor*. These encyclicals clearly identify those tendencies of contemporary philosophy most inimical to Catholic teaching and most productive of the tensions between the Church and contemporary culture.

Most crucial is contemporary philosophy's abandonment of all metaphysics as a foundation for ethics. This move robs moral philosophy of its protection from relativism. It leaves the determinants of morality to raw pragmatism or strict social determinism. The criteria of what ought to be done becomes whatever will resolve conflict, not what is morally right and good. On this view moral philosophy and bioethics become simply instruments for conflict resolution.

# Many modern thinkers have lost faith in reason itself and have turned to empirical science instead.

Many modern thinkers have lost faith in reason itself and have turned to empirical science instead. Having no confidence of its own abilities, contemporary philosophy has been too often content to be the handmaiden of empirical science. Bioethics as a result has become "biological ethics," the study of species survival shaped by natural selection, not what is good for man as man. Sociobiology now supplants any classical attempt at a philosophy and ethics of society.

Much more can be said, but the trend is unmistakable—philosophical ethics has drifted away from its normative responsibilities. <sup>19</sup> In short, bioethics is often a technical exercise, not a search for moral truth. In clinical ethics this often implies the abandonment of the search for right and good decisions in favor of any decision that resolves conflict or is mutually agreed upon. Ethics is simply a matter of individual choice.

Professional ethics no longer has the universal commitment of physicians who now pick and choose whichever of its ancient precepts they prefer, or none of them. Even more disturbing is the growing tendency of physicians to adopt some form of moral neutrality. In a recent empirical study the majority of clinicians were willing to cooperate in several ethically dubious procedures. Catholics, Protestants and nonreligious physicians did not differ very significantly in their responses. More outspoken bioethicists have gone further to argue that physicians (especially Catholics) who refuse procedures they judge unethical should not be doctors at all.

#### **Bioethics** and Politics

The enormous potentiality of modern biology and biotechnology to transform human life has generated the need for some way to judge what ought to be done and what ought not to be done in policy formulation. In the early days of bioethics this question was referred to the academies. Soon it became apparent that the power of biotechnology must eventually affect all of society. As a result, it could not be left entirely to experts. Public policies were needed to protect the common good as well as the good of individuals. Consequently, bioethics has become a political reality at the national and international levels. Today it is debated daily in the public media and in legislatures. Declarations, conventions, and policies are promulgated by international bodies like the United Nations and UNESCO and our own state and federal legislatures. A multitude of na-

tional ethics councils and committees now exist in the developed world to guide the policy and laws related to bioethics.

Once politicized, bioethics became subject to a variety of conflicting political philosophies. Soon it became classified on that basis into "liberal" or "conservative." Political divisiveness has muddled the debate as partisan politicians seized the issues to advance their own agendas. Most democratic countries have moved away from an established state religion and embraced some form of democratic liberalism. As a result, ethical choices and opinions, especially in the United States, are held to be the domain solely of private choice. Everyone seeks to secure his choices by legislative fiat. What is legal soon becomes what is "ethical," with consequences for Catholics and others for whom religion provides an authoritative source of moral guidance.

## What has emerged is an antipathy to religion in ethical discourse in the public square.

What has emerged is an antipathy to religion in ethical discourse in the public square. Academic bioethics, which exerts the broadest influence on public opinion, is decidedly a-religious, or anti-religious and often anti-Catholic. In this setting the magisterium of the Catholic Church must often stand against popular sentiments on how biology should be used to shape human life. Catholics especially, but believers in general, are a scandal to progressivists who see a biotechnical utopia being frustrated by church authorities. Believers as a result are often effectively disenfranchised in bioethical discussion. Even when they argue a point without religious or ecclesiastical reference they are accused of bias and their opinions judged to be inadmissible de facto. The very fact that an argument—even if based on reason alone—might be consistent with Church teaching makes it, for some, automatically out of bounds.

#### Human Dignity, A Pivotal Point in the Tension

Since classical times, ethicists of many philosophical and theological persuasions have accepted the uniqueness of human dignity as the core grounding concept of ethics in general, and medical ethics in particular. Of late, as a result of the cultural forces now shaping modern bioethics, dignity has become the subject of scrutiny and attack. A brief reflection on the current state of the concept of dignity should underscore how the current cultural trajectories threaten the idea of dignity, which John Paul II called "the criterion" for the uses of biotechnology.

The Christian conception of dignity is centered on the unique worth of the human person, created in the image of God, the one species chosen by God for the Incarnation of his only Son. God's only Son died that man might be redeemed. For this reason, dignity is the source and foundation of human worth, the grounding for all the moral, political, and legal entitlements owed humans simply because they are humans. This inherent God-given dignity is radically different from the dignity we attribute to those we admire or respect because of certain external or acquired capabilities. It is different from the dignity we attribute daily to ourselves and others sometimes rightly, and sometimes wrongly.

Dignity is inherent in being human, and no reason of pragmatism, expediency, or even the good of others can justify its violation. It cannot be gained, nor can it be taken away by human agency or even by the heinous acts of the person himself. It is not defined by social convention, nor is it socially or historically defined. Much as we may admire sentient beings or other species, their dignity is not inherent in their very being.

For Catholics, God-given dignity begins at conception, with the first moments of our being. It remains with us no matter how much physical and psychic deterioration may afflict us or how we respond to that affliction. The way we interpret dignity distinguishes Catholic bioethics. John Paul II, and now Benedict XVI, perceive it as the root concept for ethics, rights, and obligations. Benedict XVI links the ethical perspective of Catholic health care workers to human dignity. For him this is strengthened by the commandment of love, the center of the Christian message of healing. Dignity is the source of Christian humanism and its ramifications. The way we interpret dignity is a root cause of the tension we are experiencing between Catholic health care and contemporary culture.

Contemporary culture, at least in academic bioethics and much of the media, is undermining the Christian concept of inherent dignity in favor of a notion of dignity conferred by society on the basis of certain admirable external attributes. The capacity for "meaningful" relationships, social worth, the quality of life, freedom from disability, satisfaction of aspirations, autonomy and dozens of other capabilities as judged by humans to be important for human happiness—these are considered the foundations of dignity, not man's uniqueness as a rational, responsible, and accountable moral agent. In the bluntest way, the corrosive view of contemporary culture is summarized in a rejection of the concept of dignity by one important bioethicist. She rejects dignity as a "useless" concept, too vaguely defined, a poor surrogate for autonomy and, in any case, a covert way of introducing the forbidden subject of religion into ethical discourse.

Others, in what is called the "Great Ape project," are already taking to its logical extremes the denial of dignity as a unique feature of humans. Some of the zealots for animal rights want to grant chimpanzees the same rights as humans. In Brazil, a writ of habeas corpus has been executed for a chimpanzee. Chimpanzees have had suits entered in their names in Germany, Brazil, and Austria. Primatologists are urging elimination of the species distinction entirely. Our "cousins" the chimpanzees are now to be fellow persons.

Some ethicists have already granted greater worth to a healthy chimpanzee than to a human being in a permanent vegetative state. The resulting devaluation of seriously disabled and demented adults and severely ill infants is a logical consequence of such thinking.<sup>25</sup>

Defense of the inherent dignity of the human person by the Catholic Church is an offense to these proponents of animal equality. This is an example again of the reality and the seductions of the much-maligned slippery slope argument. One wonders what advocates for chimpanzee personhood will do with conflicts between duties to apes and humans and why they exclude non-primates. The ravages of serious, incurable, and protracted illness are an everyday threat to our perceptions of inherent human dignity. The bodily wasting, the loss of control of bodily functions, the sense of loneliness and despair are often interpreted as a loss of dignity. This can only be a loss of attributed dignity, however. From the Catholic perception, inherent dignity cannot be lost or diminished. Understandably, the suffering patient cannot often easily distinguish between attributed and inherent dignity. In the Catholic health care ministry, the physician has the duty to recognize when the patient's suffering causes him to see himself as without "dignity" in his own eyes, and in those of others. An important aspect of the care of patients in this state is to reaffirm that there is no such thing as a death without dignity. God made man in his image, and no event, feeling, or misfortune can take man's intrinsic dignity away. God loves every man and will not abandon any human person in his moments of gravest suffering. The Church possesses a theology of dying and suffering which stands against the fears so many have of dying without "dignity." Only their attributed dignity can be lost, that attributed to them by others or by themselves—not by God.

The differences between a God-given inherent dignity possessed equally by all humans and a man-attributed dignity could not be greater. It is a difference of kind and not of degree. The most crucial decisions pivot on that difference: we justify decisions to destroy or preserve, respect or abhor, love or demean the very young, the very old, the sick and poor, the dis-

abled and the outcast. The way we define dignity shapes what we think we owe to others simply as fellow humans. It is the root of the moral obligations which generate our notions of the rights of other humans. Dignity confers rights; rights do not confer dignity.

### Dignity confers rights; rights do not confer dignity.

#### **Easing the Tensions**

Given the current trajectories of world culture, there is every likelihood that the dissonance between religious and secular visions of bioethics will continue and deepen. In democratic societies, this is inevitable and ultimately healthier than unstable compromises in the interests of civil peace. Even more dangerous is abandonment of dialogue by retreating to discourse only with those who agree with us. We are reminded of Murray's statement, "Civility ends with the death of dialogue, and civilization gives way to barbarism."

Secular and religious bioethicists share a responsibility to sustain dialogue. It is this kind of dialogue that John Paul II urged from his first to his last encyclical, from *Redemptor hominis* to *Fides et ratio*. For John Paul II this dialogue was part and parcel of our obligations as Catholics to carry out Jesus's charge to teach all nations all that He and the Father commanded.

There is hope for such dialogue. Fifty years ago, the United Nations made the inviolability of human dignity the first principle of all human rights. Two years ago, UNESCO made human dignity the first principle of bioethics. Last December, the United Nations adopted a convention protecting the rights of the disabled against discrimination, even against deprivation of food and water. These documents are flawed in some ways but they do protect the idea of inherent human dignity across the markedly different cultural and religious values of the signatories.

Dialogue alone is not sufficient. To be sure, the conversation must be sustained as a moral obligation, since the alternative is to make the fulfillment of the Christian mission of giving witness to the Gospel an impossibility. But dialogue does not assure dialectic, which is the rational and critical engagement of opposing opinions in a civil and formal way. This is not the place to review this ancient technique of discourse between humans with opposing views on topics of mutual importance. It is a technique that goes back to ancient times in Western culture, starting with Socrates. It enables opponents to decide where

they agree, where they disagree, and where their views are irreconcilable.

Sustaining the dialogue is a moral obligation for Catholics if they are to take Jesus's exhortation to teach all nations what he taught his disciples. This obligation binds the whole Church as well as its individual members. Each of us in a way most appropriate to our station in life is called to this obligation. For physicians and other health professionals it is intrinsic to their professional identity. For others it is a special obligation to their social or public roles. But bioethics today is a topic of every-day discussion in the media and private conversations. Eventually all Catholics are asked for their opinions. It is part of the decision-making process at the beginning and end of life and any serious illness. Every educated Catholic must be able to explain the Catholic position on key bioethical issues knowledgeably—for his decisions and for his response to those who do not share his beliefs.

Dialogue with those who disagree with us requires humility, turning the other cheek to insult, and admitting our own errors in the past as John Paul II has done so graciously. Above all we must practice charity, and always respect the person if not the opinion. Treating others charitably is prime evidence that being a Christian does make a real difference. Not to do so is to vitiate the message and fall victim to hypocrisy. There is no room for pious denunciations, choleric attacks, or sanctimonious rhetoric.

The Catholic Christian should not enter the process of dialogue unless he has a firm knowledge of magisterial teachings. This calls for better education than is now available. In some places Catholic higher education has so diluted its teaching of both philosophy and theology that many Catholics will be at a disadvantage in a true dialectic with the secularist. These deficiencies are an impediment to the formation of one's own conscience and poor armamentarium for serious discussion with a serious secularist.

Catholic social institutions must bear witness to the intrinsic dignity of the human person.

Catholic social institutions must bear witness to the intrinsic dignity of the human person. We must continue to support Catholic hospitals and medical schools so that Catholic health care can be authentically practiced and taught. I lament the current trend of some who favor retreat of the institutional church

from the health care ministry. Financial constraints are understandable deterrents, but the Church cannot abandon the sick who were so much a part of Jesus's daily public ministry.

The Church must continue to be immersed, as it has been for centuries, in continuing engagement with the new ethical issues as they emerge from the efforts of the world's scientists. The Catholic tradition of fusing philosophy and theology in its considerations of biomedical ethics was never needed more than it is now. We need to educate Catholic health professionals, Catholic college students, and a cadre of Catholic bioethicists. Properly educated laypersons and professionals are essential if Church teachings are to be represented in the ongoing debates.

The tensions to be examined in this conference will continue given the powerful influences of scientism, politics, secularism, and relativist moral philosophies on the way policies and decisions are made in the uses of biotechnology. Neither studied antagonism nor retreat from dialogue is tolerable when we remind ourselves of the Great Commission Jesus gave us. We have no choice but to do a better job than we have done at times in the past. In that past our apologetics has sometimes been over-aggressive and perhaps over-rationalized. As Avery Dulles has argued so well, we need to recover a more authentic dialogue and dialectic, and examine our epistemological presuppositions more carefully.

The shape of a truly effective apologetic suited to our times is still developing. What is clear is our duty to stay engaged and to use the methods available in our democratic society to represent the Catholic moral tradition and what it can contribute to the humane and morally sensitive practice of bioethics. Our only assurance in the midst of the dialogue with contemporary culture is Jesus's promise that he will be with us to the end of time. What greater assurance can there be?

Look for this article in the edited proceedings of the ITEST 40th Anniversary Conference, 2008. All dues-paid ITEST members should receive a copy of the book by the middle of August. The book will contain not only the formal papers from the conference but also the tightly edited exchanges among the participants from the seven discussion sessions.

#### **End Notes**

- 1 UN General Assembly, "Universal Declaration of Human Rights," December 10, 1948, GA res. 217A (III), preamble; UNESCO, *Universal Declaration of Bioethics and Human Rights*, October 19, 2005, art. 3, pars. 1 and 2.
- 2 Edmund D. Pellegrino, "Toward a Richer Bioethics: A Conclusion" in *Health and Human Flourishing*, eds. Carol R. Taylor and Roberto Dell 'Oro (Washington, D.C.: Georgetown University Press, 2006), 247–269.
- 3 John Courtney Murray, S.J., We Hold These Truths: Catholic Reflections on the American Proposition (New York: Sheed & Ward, 1960), 14.
- 4 Third General Assembly, October 26, 1974, in *The Gospel of Peace and Justice, Catholic Social Teaching since Pope John*, ed. Joseph Gremillion (Orbis, NY: Maryknoll, 1976), 594.
- 5 Charter for Health Care Workers (Boston: Pauline Books & Media, 1995), 23.
- 6 Ibid., 24.
- 7 Edmund D. Pellegrino, "One Hundred Fifty Years Later: The Moral Status and Relevance of the AMA Code of Ethics," in *The* American Medical Ethics Revolution: How the AMA's Code of Ethics Has Transformed Physicians' Relationships to Patients, Professionals, and Society, eds. Robert B. Baker et al. (Baltimore: Johns Hopkins University Press, 2000), 107–123.
- 8 Edmund D. Pellegrino, "Medical Commencement Oaths: Shards of a Fractured Myth, or Seeds of Hope Against a Dispiriting Future?" *Medical Journal of Australia* 176.3 (February 4, 2002): 99.
- 9 David F. Kelly, *The Emergence of Roman Catholic Medical Ethics in America: An Historical, Methodological, Bibliographical Study* (New York: Edwin Mellen, 1979).
- 10 Thomas J. O'Donnell, Morals in Medicine (Westminster, MD: Newman Press, 1956); Dom Peter Flood, New Problems in Medical Ethics, trans. from "Cahiers Laennec" by Gerard Carroll Malachy (Westminster, MD: Newman Press, 1952); Gerald Kelly, S.J., Medico-Moral Problems (St. Louis: Catholic Hospital Association, 1958); Charles J. McFadden, O.S.A., Medical Ethics, 3rd ed. (Philadelphia: F.A. Davis, 1953); Bernard J. Ficarra, Newer Ethical Problems in Medicine and Surgery (Westminster, MD: Newman Press, 1951).
- 11 See relevant documentation in Kevin D. O'Rourke, O.P., and Philip Boyle, *Medical Ethics: Sources of Catholic Teaching* (Washington, D.C.: Georgetown University Press, 1999).
- 12 Immanuel Jacobovitz, *Jewish Medical Ethics: A Comparative* and Historical Study of the Jewish Religious Attitude to Religion and Its Practice (New York: Bloch,1997).

- 13 Thomas K. McElhinney and Edmund D. Pellegrino, "The Institute on Human Values in Medicine: Its Role and Influence in the Conception and Evolution of Bioethics," *Theoretical Medicine and Bioethics* 22.4 (August 2001): 291–317.
- 14 Daniel C. Dennett, *Breaking the Spell: Religion as a Natural Phenomenon* (New York: Penguin Group, 2006).
- 15 Benedict XVI, *Europe: Today and Tomorrow* (San Francisco: Ignatius Press, 2007).
- 16 Murray, We Hold These Truths, 45.
- 17 Dennett, Breaking the Spell; Sam Harris, The End of Faith, Terror and the Future of Religion (New York: W.W. Norton, 2004); Richard Dawkins, The God Delusion (New York: Houghton Mifflin, 2006); Victor J. Stenger, God: The Failed Hypothesis (New York: Prometheus Books, 2007); Christopher Hitchens, God Is Not Great: How Religion Poisons Everything (New York: Twelve, 2007).
- 18 Joseph Tham, L.C., "The Secularization of Bioethics: A Critical History" (doctoral dissertation, Pontifical Athenaeum Regina Apostolorum, 2007).
- 19 Edmund D. Pellegrino, "Bioethics at Century's Turn: Can Normative Ethics Be Retrieved?" *Journal of Medicine and Philoso-phy* 25.6 (December 2000): 655–675.
- 20 F.A. Curlin et al., "Religion, Conscience and Controversial Clinical Practice," *New England Journal of Medicine* 356.6 (February 8, 2007): 593–600.
- 21 R.A. Charo, "The Celestial Fire of Conscience: Refusing to Deliver Medical Care," *New England Journal of Medicine* 352.24 (June 16, 2005): 2471–2473.
- 22 E.D. Pellegrino, "Bioethics and Politics: 'Doing Ethics' in the Public Square," *Journal of Medicine and Philosophy* 31.6 (December 2006): 569–584.
- 23 Zenit News Agency, "Caregivers Should be God's Caress, Says Pope," March 22, 2007, www.zenit.org/english.
- 24 R. Macklin, "Dignity Is a Useless Concept," *British Medical Journal* 327.7429 (December 20, 2003): 1429–1420.
- 25 E. Verhagen and P.J.J. Sauer, "Groningen Protocol: Euthanasia in Severely III Newborns," *New England Journal of Medicine* 352.10 (March 10, 2005): 959–962.
- 26 Murray, We Hold These Truths, 14.
- 27 UN General Assembly, Sixty-first Session, "Convention on the Rights of Persons with Disabilities and Its Optional Protocol," December 13, 2006, A/RES/61/106.
- 28 Avery Cardinal Dulles, *The History of Apologetics* (Eugene, OR: Wipf and Stock, 1999).

#### Science, Orthodoxy, and Higher Education in Russia

By Natalia Pecherskaya, Ph.D. St.Petersburg, Russia

Dr. Natalia Pecherskaya, a member of the St Petersburg Association of Scientists and director of the St Petersburg School of Religion and Philosophy, spent a semester in 2008 as a Fullbright Scholar at the Collegeville Institute for Ecumenical and Cultural Research in Collegeville, Minnesota. Seizing the advantage, ITEST invited her to attend the September, 2008 conference in Belleville, Illinois. During the conference she told the participants about the history of the dialogue in Russia and the later developments occurring since the 1990s. The following interview contains her assessment of the past and current state of affairs in the faith/religion and science/technology arenas and the role of the Russian Orthodox Church in the dialogue.

### 1. Is it a new thing in Russia to be talking about the relationship between science and religion?

I assert that 'science and religion' in Russia is not a new topic for discussion. Instead, it is merely the condition under which this discussion is taking place that has changed in recent years. The relationship between science and religion in Russia has a history dating back to the 19<sup>th</sup> century, though it was discussed mainly in that period as philosophy of religion. Figures such as V. Solovyov, P. Chadaeev, N. Berdyaev, S. Frank, S. Bulgakov, and others contributed to a robust dialogue.

In the middle of the 19<sup>th</sup> century and the beginning of the 20<sup>th</sup> century, science and religion issues were discussed regularly by scholars, scientists and theologians. The Religious Philosophical Society, which operated from 1903 –1917 is a good example. However, the discourse was somewhat subsumed by positivism at the end of the 19<sup>th</sup> century and it became in vogue to be anti-scientific and a religious believer.

The trend of discourse was then interrupted by the October Revolution, though debates took place into the early 1920's about the place of science and religion in society. Father P. Florensky, for example, spoke at that time with the Minister of Education about religious education. Then later all these talks came to an end, and most of religious people, believers and priests were persecuted, killed and murdered, or sentenced to death at the Gulags.

Atheism was the main ideology in the USSR and the majority of scientists and scholars were atheists. The official ideology of 'scientific atheism' was predominant in the academic life of all Russians. This ideology was based on Marxist ideas and built upon dialectical materialism. Science was said to contradict religion and it was thought that no future for religion or religious thought was possible. One magazine, for example, during the Soviet period was dedicated to the theme of "Science and Religion," though it served as a mouthpiece for critical German theology of the 18th century and promoted views against traditional theism. Much of the legitimate dialogue

took place between theology and philosophy with science as a secondary partner.

Starting in the 1960's, cooperative dialogue between science and religion was held unofficially and in secret. After Perestroika (restructuring), annual seminars and conferences were held first by physicists in Dubna (a Center for Nuclear Power Research near Moscow), and then continued by the other groups, bringing theologians and scientists together to communicate about various inter-related issues. Thus, though it seems rather new, the dialogue between science and religion has been happening for many years in Russia.

## 2. What is significant about the science and religion dialogue in Russia and what is the role of the Russian Orthodox Church in it?

After years and years of persecution we can say that the continuing and all-embracing revival of church life of the Russian Orthodox Church (ROC) is going on and the general tendency to the development of all aspects of her diocese, parish and social activities is becoming more and more robust.

Some of the most important events—the landmarks of starting the new epoch of ROC are:

1988 – Celebration of the Festival of Thousand Years of Baptizing in Russia

2000 – The Archpriests Council

Canonization of the Czarist Family of Nicolas the II

Improved attitude toward the other Christian Confessions

Many Russians are now enjoying the freedom to discover religious and spiritual meaning in their lives and professional work. However, this often means participating in the simple stability of ritualistic forms and not of considering a wider view of the universe and humankind's place in it. There has not yet been a genuine renaissance of intellectual progress in the religious approach of most Russians. Nevertheless, a liberating feeling has definitely opened-up religious contact that was formerly closed.

Now, after the terrible Marxist ideology which pitted science against religion, the tide has once again turned such that some scientists and scholars are still atheists, while many others are theists. Russian people in general have shown an open mind and are more sensitive to the Church in general and to the Russian Orthodox Church in particular, than in the Soviet past. Many are involved in questions about spirituality, even if not engaged directly with priests, theologians or religious scholars. This is the contemporary spiritual situation in Russia.

### Russia has now reached a period of what can be called 'post-atheism...

Russia has now reached a period of what can be called 'post-atheism,' whereby discussion about religion and its relationship with science can occur more freely and openly in society. In the sense of emancipation from previous ideology, Russia is a post-atheistic nation, while other countries in Europe appear to be entering a pre-atheistic stage of existence. The transition to post-Soviet life has proved to be a psychologically difficult situation for many Russians. The communist ideology was like its own religion and a kind of ideological vacuum occurred when it was discarded.

The special character of the Orthodox tradition in Russia keeps science at a point somewhat distant from religious tradition. Religion is much closer to science in the Protestant and Catholic Christian traditions. Even students in the countries traditionally called Catholic, or Protestant are more prepared for science and religion discussions from reading scientific texts, then the majority of Russian scientists.

Orthodoxy instead has a strong tradition of asceticism and emulates the early years of Christianity, when science was still in its infancy. The modern Orthodox tradition nevertheless supports dialogue about science, but is not prepared to elevate the discussion to a high level. For example, there are only about four or five priests and ten to twelve philosophers and scientists in the region who are capable of promoting dialogue between science and religion at a serious level. The Marxist tradition, and its close connection with what Dr. John Haught calls 'evolutionary naturalism' (a simplified and crude version of Darwinian thought) still runs deep in Russian culture.

Today many people in Russia realize that science is not in reality against religion. The situation is such that people who study the problem better understand the situation, but those who are not as close to the dialogue are still rather naive about the implications and stereotypes.

The main problem with dialogue between religion/theology and science comes from the side of theology. This is because it was underdeveloped during the Soviet period, when the ROC was marginalized into fulfilling merely a ritualistic role

(for example, performing marriages and funeral rites). A new generation of priests and theology students could potentially improve the situation in due time.

# 3. Have any Russian scientists, scholars or theologians, current or past, made a unique contribution to understanding the relationship between science and religion?

Let me first mention the names of the scholars and theologians who populated the Russian Orthodox tradition: N. Lossky, A. Schmeman, G. Florovsky, J. Meyendorff, V. Solovyov and S. Bulgakov are among many who fertilized the ground of discourse in the last century. These were open-minded thinkers, who provided an important link for Russian theology during a period when many intellectuals were exiled and continued working abroad. Historically, all the scholars named above are leading examples.

There are several individuals, supportive institutions and organizations in Russia which nowadays take special steps to further dialogue between science and theology, these are: physicist Andrei Grib, mathematician and theologian Sergei Horuzhy, philosophers Piama Gaidenko and Andrei Pavlenko, mathematician and philosopher Alexei Chernyakov, biologist Alexei Oskolsky, physicist Vladimir Katasonov, who are prominent contemporary scientists and philosophers, and who address themes on science and religion. Academician Boris Raushenbach was also an important figure in this area.

Particular credit goes to B. Raushenbach, a mathematician who worked with Soviet cosmonauts, and who made a significant professional contribution to Russian space technology. Raushenbach also focussed in his free time on iconography, giving a unique scientific approach to a theological topic. He concentrated on the projections displayed in icons, on the reversed peristalsis that they represent. This was quite a different approach from European science in regard to the plane representation of three dimensional objects. A de-sacralisation of the sky (heaven) was not possible in Eastern Christianity, as Raushenbach showed in his discussions about other spaces and levels of iconic meaning. The Soviet authorities tolerated his retirement projects and continued to respect this great figure, as did fellow scientists, who thought such mathematical thinking about icons was just Raushenbach's hobby.

Father K. Kopeikin, the former physicist, and now a lecturer for priests and students, who is responsible for the dialogue between science and religion at the St.Petersburg Theological Academy, deals with topics of physics and theology. Recently, he published a paper on the nature of light in its physical and theological dimensions. Also, Father Andrei Kuraev at Moscow Theological Academy promotes understanding of the relationship between science and religion from a philosophical

perspective. His book, *Christianity: Gifts and Anathema* suggests historical connections between the growth of science and Christianity and admits the challenges and shortcomings in dialogue between science and faith.

# Dialogue between science and religion is promoted by some organizations in Russia today...

### 4. What kind of action has taken place in recent years to promote this dialogue?

Dialogue between science and religion is promoted by some organizations in Russia today, from the Academy of Sciences to the Theological Academies and Seminaries in St. Petersburg and Moscow and in other parts of Russia.

With the support of the Russian Foundation for Basic Research and the John Templeton Foundation SRPh held a number of conferences, like "Science and Faith: the Problem of the Human Being in Science and Theology" (2000), "Science. Ideology. Religion" (2005). The latter was dedicated to the memory of B. Raushenbach. There have been several other public events, seminars and conferences held by SRPh in the frame of the St.Petersburg Educational Center for Religion and Science (SPECRS), supported by the Metanexus/LSI Program.

There were some important initiatives organized by the Moscow Institute of Philosophy, and by some independent organizations throughout Russia.

Russian physicists in particular are great promoters of dialogue because they recognize problems of matter and the impossibility of explaining everything from a scientific paradigm.

Archbishop Konstantin of Tikhvin, a theologian and also Doctor of Medicine, rector of St. Petersburg Theological Seminary and Academy, gives regular reports on medicine and education, as well as on anthropology, biological science and religion. There have been at least three dissertations in the last two years on the origin of the universe in the St. Petersburg Theological Academy. Also, promoting dialogue about science from a theological perspective is Father Sergei Filimonov, a Doctor of Medicine, who has his doctorate in theology and speaks regularly about theology and medicine on special religious radio programs.

In Moscow, for example, in January there are annual Christmas educational readings, one of the largest activities of the Russian Orthodox Church, with a great number of people in attendance. It is opened by the Patriarch [Alexei II] and held in the Church of Christ the Saviour. The readings take place at a high scientific level and even some government officials are active and also participate. It took place this year with three sections dedicated to science

and religion; one in science and religion, joined by scholars from Moscow State University, one on creationism and anti-science, and one on philosophical aspects of science and religion. Twenty years ago this type of event was almost impossible.

After 2000 some special books, journals and paper were published with the aim to reconcile science and religion as unantagonistic spheres. The Biblical Theological Institute of St. Andrew's in Moscow and SRPh in St.Petersburg are the real pioneers in this field. Within the framework of the CTNS and later Metanexus/LSI SRPh initiateded the series "Science and Faith," ten published volumes which contain various discussion topics representing papers in Russian and other languages.

#### 5. How do these questions touch education in Russia?

There has always been a great stress on the development of science in the Russian system of education. During the Soviet era the qualifying examination in philosophy for the candidate degree (i.e. the first doctoral degree which follows the master's degree) functioned as a kind of ideological loyalty test for people wishing to embrace a scientific career. It is not surprising therefore that atheism, including a description of science as antagonistic to religion and as a means of overcoming 'religious illusions,' was an important element of programs preparing students for the qualifying examination. Neither is it surprising that the whole Russian scientific community was traumatized by the simplified and ideologized teaching of Marxist-Leninist philosophy and still has a difficult time believing that philosophy may have any positive value whatsoever.

In 2005, the decision of the plenary session of the Russian State Supreme Qualifying Commission prescribed a new set of qualifying examinations in the *history and philosophy of science*, instead of the traditional examination in philosophy, for the candidates of doctoral degrees. This means that chairs in philosophy of science will have to restructure their programs, and it will certainly have an important impact on higher education in Russia as a whole.

It is evident that the preparation for the qualifying examination for the candidate degree in the history and philosophy of science is intended to provide young scientists with certain notions of fundamental principles and the underlying basis of their scientific activity in a wide range of historical, cultural, political, social and religious contexts. The subsequent fate of the theme of promoting mutual relations between science and religion within Russian culture and the attitude of the scientific community towards those relations will depend to a large extent on the manner in which this theme is treated during the preparation of new programs for post-graduates.

SRPh decided to intervene in this process and to participate in the reform of education. SRPh initiated a project with the title "The Religious Basis of Contemporary Problems in the

Natural Sciences and Humanities" and prepared a review with commentaries in the Russian language on problematic issues involved in different scientific disciplines (according to the curricula introduced) documenting various approaches to their interpretations in a religious context. This project was supported by the GPSS Program. A number of public discussions, project publications, workshops and professional consultations showing how the results of the Project are connected with the new educational program for postgraduates, attracted quite a number of interested scientists and scholars to participate in cooperation with the SRPh.

Unfortunately, those, who fill big administrative positions in the Ministry of Science and Education, as well as in the chairs of the philosophy departments (mostly atheists and former Marxists), are against the inclusion of themes related to science and religion issues into the new candidate examination. The exam is about the history of science 'as science,' they say. 'It is important to study the history of the science of religion also, however, which is what the department of religious studies does. And as the opponents of science and religion interface point out, 'religious studies are not responsible for the problems between science and religion.'

This contradictory picture of science and religion interface in Russia can be illustrated by one example. Currently the science and religion interface has become the locus of a sharp public debate because of the letter of 23 July 2007 to Mr. Putin, Russia's former President, signed by ten Russian academicians (including academician Vitali Ginzburg and academician Ghores Alferov — two Nobel Prize winners), blaming the Russian Orthodox Church for "interference" in science and "substitution of [a] materialistic picture of the world by faith". This letter was under public discussion in mass media and has become not only a matter of social discussion but also a new political banner of the atheists.

In the polemics there are too many exaggerations from both sides—from the side of the adherents and of the opposing side—because of the absence of any religious education of our scientists and scholars (even of the high rank scientists in academia) in the Soviet past, as well as a lack of experience of scholarly discussion among Orthodox priests. Also, those who are invited to speak publicly on radio (usually these radio programs are not scientific programs), are too far from the essence of the dialogue itself. So, as it happens, this public discussion has taken the wrong direction and has badly affected the public audience.

With this antagonism in perspective between scientists and science administration, we understand that a wide incorporation of questions about science and religion into many sciences is quite far away from the current reality. There is still time, however, for developments to occur.

## The future for scientific and religious dialogue in Russia, as it can be seen now, has both positive and negative aspects.

## 6. What sort of future directions or developments can we see that might come from improved relations between scientists and theologians?

The future for scientific and religious dialogue in Russia, as it can be seen now, has both positive and negative aspects. It is important that religious sentiment is stressed not only as a ritualistic mission of the Orthodox Church; rather, there needs to be a modern theology concomitant with the development of society. Opportunity should be given to help people understand the truth of Orthodoxy, with publications in contemporary language, so that Russian citizens can have access to it. Modern theology requires more discussion that in assiting people to learn about various religious traditions. It is not mainly a problem of Old Church Slavonic being too distant from the people because most churchgoers can still closely understand the meanings (unlike the change from Latin to the vernacular in the Catholic Church). However, by modernizing the language to include the reality of scientific development and technological progress with the contributions of 20th century theology, the Orthodox Church can seek to overcome a situation of naïve realism and acknowledge both religious and scientific truths.

The main problem for the discourse is education —education of priests, philosophers, cultural studies scholars, and other related academics. Theological literature is not interesting for most philosophers and scholars of culture because it is generally not relevant. Here I note a lingering paradox: there already exists a department of theology at the State University of Samara and in Vladivostok; yet in the big cities, like Moscow and St. Petersburg antagonism to theology is still present.

The issue of integration or synthesis between science and religion is still in an early stage in Russia. There must be an intensive dialogue, so that potential dangers of ignorance and intolerance can be avoided. People should be open-minded, and both sides should be interested to learn from the other. After all, truth in both science and religion should be searched for and valued, not simply kept as some kind of property. On a personal note, I point out that religion signifies an understanding of values. And without values, one can't undertake any kind of scientific work or fulfill any personal activity.

The general situation in the Russian educational system, should first of all encourage the development of courses teaching the historical role of Orthodoxy in Russian culture. Later, a significant program could be created that involves both comparison of religions and contemporary theology,

including topics related to the Muslim/Christian dialogue. This would satisfy a need to discuss not only history (or histories) of religion, but also it would highlight the importance of religion and spirituality in the lives of people today. Parallel to this process, science in general with all it new insights, visions, discoveries should be propagated on a new level, so that the students of every department, be it science, or the humanities, will be able to discuss with understanding a new scientific discovery, or trend, or vision in science.

The central issue is not whether or not integration or synthesis between science and theology can exist. Instead, the focus must be on improving people's understanding of science itself, of religion itself, and understanding between science and religion/ theology so that antagonism and conflict do not re-emerge or reign in society. Courses in comparative theology and the history and philosophy of science will help to create tolerance and promote understanding. This is not a short-term problem for the next two or three years, however, but something that will take 10 to 15 years to bring lasting fruit. The result could be a new kind of graduate or post-graduate degree, with a title of Master of Philosophy and Theology, or Master of Science and Theology. And SRPh is working in that direction. Our next SPECRS project deals with that topic.

## 7. What have SRPh and SPECRS done to encourage and build-up interest in topics related to science and religion?

The St. Petersburg School of Religion and Philosophy (SRPh), one of the first non-church, non-state educational institutions established in Russia in 1990 after perestroika, is affiliated with the St. Petersburg Association of Scientists and Scholars (SPASS). It is a state accredited non-state institution of higher learning providing education in philosophy, religious studies, and the arts with emphasis on the Russian cultural and spiritual tradition. It unites highly professional scientists, scholars and theologians, from Russia as well as from other countries, engaged in the exploration of new ways of teaching the younger generation. The science and religion interface has been one of SRPh's main research programs since the beginning.

The 1999 award ceremony for the Templeton Prize for Progress in Religion held in Moscow at the Kremlin became an important step to launch the science and religion dialogue in Russia to the international level. From that time SRPh decided to actively seek assistance in order to further this important work. Thanks to several scholarship grants from the Russian Foundation for Basic Research (Russia), the Center for Theology and Natural Sciences (Germany-USA), The Templeton Foundation (USA), Metanexus/LSI Program (USA), Global Perspectives in Science and Spirituality Program (France-USA) etc., SRPh was able to bring together people who are working towards similar aims in various places, cities and countries. This

group of people is now cooperating in the framework of the *St. Petersburg Educational Center for Religion and Science (SPECRS)*, launched by SRPh in 2001 (and affiliated to SRPh).

The goal of SPECRS is to promote science-religion interface in Russia/CIS (Commonwealth of Independent States) taking into account a peculiar historical, cultural and religious situation in the North-Western region of Russian Federation in collaboration with the most qualified and responsible thinkers and renowned scholars all over the world to keep a high level of discussion. Meetings, publications, reviews of important scientific literature items, translations of the best books and articles into Russian, mass media promotion, radio and TV broadcast, promotional discussions with the state and church administration, these are the main domains of SPECRS' activity (http://srph.ru/http://srph.ru/en/index.html)

The process of organizational work undertaken by SPECRS has been in cooperation and consultation with a range of contributors, including: the St. Petersburg Association of Scientists and Scholars, the St. Petersburg Scientific Center of the Russian Academy of Sciences, the St. Petersburg Theological Academy and Seminary, the Moscow Russian Orthodox Patriarchate, the Committee on Science and Higher Education of the St. Petersburg Administration, and with the academic and theological institutions in cities of the Russian Federation and the CIS, as well as with the interested groups in Poland, Slovenia, Hungary, Germany, the Netherlands, England and the USA.

"A World That Sings God's Praises"

### **Environmental Stewardship in the Judeo-Christian Tradition**

The 2009 ITEST Conference at Our Lady of the Snows Conference Center Belleville, Illinois October 23-25, 2009

Members: \$225.00
Students: \$135.00
Others: \$250.00
Sign up early for the conference
For more info see page 2 or
visit our web site at
www.faithscience.org/news.html