Jerome Lejeune (1926 – 1994)



For the Love of Truth

Professor Jerome Lejeune



Jerome Lejeune was born in France in 1926. He studied medicine in Paris and would make his career there. In 1952, he married Birthe Bringsted, with whom he would have five children. Lejeune remained devoted to his family throughout his life. When in Paris, he came home for three meals a day and evening prayer; when abroad, he wrote his wife daily.

A Pivotal Figure in Modern Genetics

In 1959, while working at the French National Center for Scientific Research, Lejeune and his colleagues discovered the genetic basis of "mongolism", as it was then called. He was the first scientist to give clear demonstration of a chromosomal abnormality in human beings. In children affected with Down syndrome, he found there was an extra chromosome on the 21st pair.

The discovery of Trisomy 21 was significant because it marked the beginning of the new discipline of cytogenetics, the study of the relationship between inheritance patterns and the functions of cell components. From this point on, cytogenetics developed rapidly in many directions, opening up the secrets of hereditary science. The discovery also abolished the stigma of the disease which had been previously attributed to syphilis.

Recognition and Reproach

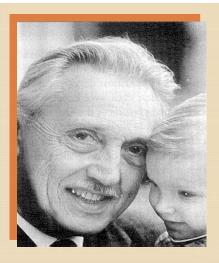
In the wake of this discovery and other chromosome illnesses such as Cat Cry, Jerome Lejeune's professional star was on the rise. In 1962, he received the Kennedy Award at the hands of President John F. Kennedy for his research in intellectual disabilities. At the age of 38, he was the youngest doctor in France to be named professor and he was given the first chair of Fundamental Genetics at the University of Paris in 1965. In 1969, he was awarded the highest honor in genetics, the William Allen Award.

At the same time, the battle to allow the termination of unwanted pregnancies was heating up in the United States and around the world. Jerome could not keep silent about the increased tendency to recommend abortion in the case of Down syndrome and other genetically detectable diseases. He spoke out strongly against abortion at the annual meeting of the American Society of Genetics in 1969. His presentation would be long remembered by his audience, though it would cost him his career.

Jerome Lejeune was severely criticized for his position in favor of humanity and he was ostracized by the medical, academic and political elite in France. He faced harassment from university and state officials, and did not receive an increase in salary for nearly 20 years. His research grants were withdrawn and he was forced to close his laboratory. American and English laboratories, indignant at this treatment, granted him no-cost private loans. This solidarity allowed him to rebuild a team of researchers inspired by the same motivations.



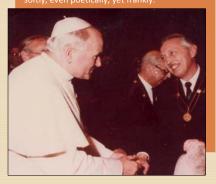
Fighting "chromosomal racism" with facts



- "Chromosomal racism is brandished like a flag of freedom", he wrote in his diary. To fight this form of racism, he saw recourse to experimental reality as a critical weapon. Scientific data showed that at the moment of fertilization, a new member of the human race, not a chimpanzee or a bear, has come into existence. Each human embryo is genetically and chromosomally unique from the moment of conception. Children with diseases should not be treated as anything less than members of our race.
- He fought against prenatal screening for Down syndrome, which had become commonplace since the early 1970s. The screening is done mainly for the purpose of offering parents the chance to terminate the pregnancy of unborn Down children. Today, over 90% of babies prenatally detected with the illness are aborted. Lejeune consistently denounced the misuse of his pioneering research as an instrument of death
- Dr. Lejeune dedicated the rest of his life to developing effective treatments for chromosome abnormalities, especially Down syndrome. He treated thousands of young patients, whom he called his "dear ones", and helped parents around the world understand and accept the trial of the disease. He assured them that their children, even with a serious mental disability, were children of God and were capable of great love and affection.

Advisor to Courts and Kings

As the disregard for pre-natal human life spread throughout the world, Dr. Lejeune was repeatedly called upon as an expert to testify before Governments and Heads of States. Notwithstanding the pressure, he always spoke softly, even postically, yet frankly.



- In 1974, he was appointed to the Pontifical Academy of Sciences by Paul VI. In this capacity, he would serve as a Vatican delegate to the USSR in discussions on the need for nuclear cooperation. Later, he met John Paul II and the two would remain close friends throughout their lives.
- In 1982, along with other distinguished members of the medical profession, he was called to testify in U.S. Senate sub-committee hearings on the Human Life Bill which sought to define the beginning of human life.
- In 1988, Professor Lejeune **testified in a divorce case in Maryville, Tennessee**, where a couple each sought the rights to embryos they had frozen for artificial implantation. Lejeune urged the court to hand down the judgment of Solomon, and give custody to the parent who wanted the children to live. The judge so ruled; until a less wise court overturned the ruling.
- In 1989, Baudouin I, the King of Belgium, sought Jerome's counsel as the parliament was about to legalize abortion. At the end of their conversation, the king asked: "Professor, would it bother you if we prayed together for a moment?" The saintly king later abdicated his throne rather than offend God.

Living Intensely the Real

As we studied the life of Jerome Lejeune, we became ever more impressed by his great humanity and his love of life. He was an ardent scientist, a compassionate doctor, a loving father and husband, a humble teacher and a man of great courage, wisdom and faith.

Much in his way of life reminded us of our own charism, and so we decided to use Don Giussani's three premises as a way to illustrate his life and work.



"The formula for the journey to the meaning of reality is to live always the real intensely, without preclusion, without negating or forgetting anything... The mark of great souls and persons who are truly alive is an eagerness for this search, carried out through their commitment to the reality of their existence."

Three Premises of The Religious Sense

1. Realism

Case Study: Discoveries and Observations

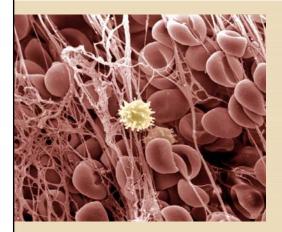
2. Reasonableness

Case Study: The Human Life Bill

3. Morality of Knowing

Case Study: The Case of the Frozen Embryos

REALISM



Electron micrograph of a blood clot

For a serious inquiry into what surrounds us, we need realism. Alexis Carrel, Nobel Prize in Medicine, warns us, "Little observation and much discussion lead to error, much observation and little discussion lead to truth."

Thus we are advised that attention to reality is the first stage of knowledge.

Giussani explains that realism refers "to the urgent necessity not to give a more important role to a scheme already in our minds, but rather to cultivate an entire, passionate, insistent ability to observe the real event, the fact.

Realism requires a certain method for observing and coming to know an object, and this method cannot be defined by me, **the method is imposed by the object**...if I truly wish to know it, I have no choice but to look down and fix my eyes on the object itself."

The need for sound and upright reasoning are already hinted at in these passages, but for now we will examine how Jerome Lejeune's attention to reality, guided his path to knowledge as a scientist and medical doctor.

The Discovery

In 1952, Jerome Lejeune became associated with Professor Raymond Turpin at the National Center for Scientific Research in Paris.



Dermatoglyphics of

- ☐ Lejeune was interested in genetics and first began observing Down syndrome by analyzing the dermatologlyphics (palm and fingerprints) of children with Down syndrome
- ☐ His investigation of the cause began with the inheritance patterns of Down syndrome in twins.
- ☐ He observed that identical twins had a higher concordance of Down syndrome than fraternal twins.
- This was not consistent with the hypothesis that Down syndrome was the result of a <u>single gene</u> defect. If Down syndrome was caused by only one gene there would have been the same concordance in fraternal twins, because they also share genes, while identical twins share <u>entire</u> <u>chromosomes</u>.

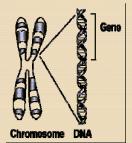


Fraternal Twins (1 with D.S.)



Identical Twins with D.S.

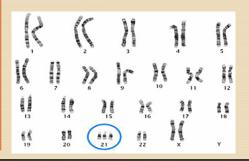
The Discovery



Because of these facts, Lejeune hypothesized that the underlying cause for Down syndrome could have been an abnormality affecting many genes on a chromosome or even an entire chromosome.

By 1955, he was convinced that there must be an **abnormality in chromosome number** in people with D.S. and he wanted to observe their DNA. To do this, he developed his own technology for cell growth.

He used cells from small skin biopsies from patients which he put together with extracts from chicken embryos. Since he didn't have an incubator, he strapped the test tube to his own body. A few weeks later there was enough cell growth for him to produce chromosome preparations. While studying this cell growth, he discovered that Down syndrome was, in fact, caused by an extra chromosome, the 21st.



Down Syndrome or Trisomy 21

Lejeune called the condition Trisomy 21.

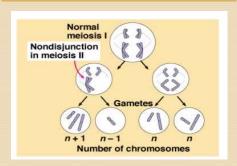
The name "Down syndrome" comes from Dr. Langdon Down, who first described the collection of findings in 1866.

The Symptoms

- Developmental problems range from moderate to serious.
- The afflicted often have heart defects.
- Life expectancy has increased to about 55 years.
- Rates are higher for mothers 35 and older.



The Cause

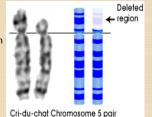


- This process is known as Nondisjunction.
- It is the failure of chromosomes to separate causing one daughter cell to receive 2 chromosomes while the other receives none.
- The extra genetic material in chromosome 21 is responsible for the physical characteristics of the syndrome.

Lejeune's Subsequent Discoveries

Cri-du-Chat Syndrome

- Cri-du-Chat is caused by a deletion of a section of Chromosome 5 when the sperm, or egg, is developing.
- It is called Cri-du-Chat (Cat's Cry) because of a specific cry that the child makes.



- Children with this disease have particular traits: small size at birth, low bridge over nose and the namesake cry.
- They also have many health problems such as respiratory issues, slow development, slow learning.

Jerome Lejeune discovered Cri-du-Chat in 1963. The causes of Turner Syndrome and many other genetic diseases were discovered because of Jerome's genetic findings.

Turner

Syndrome

- Most girls are born with two X chromosomes, but girls with Turner syndrome are born with only one X chromosome.
- Turner syndrome prevents the ovaries from developing properly, which affects a girl's sexual development and her ability to have children.
- There are many health problems in girls with Turner syndrome: kidney problems, high blood pressure, heart problems and thyroid problems.
- Physical features commonly seen in girls with Turner syndrome are: a "webbed" neck, a low hairline at the back of the neck, differently shaped and low set ears, and abnormal bones.

Fetal life observed

"To accept the fact that after fertilization has taken place, a new human being as come into being, is no longer a matter of taste or opinion."

Jerome Lejeune



"At the actual age of one month, his miniscule heart has been beating for a week already; his arms, his legs, his hands and his brain are already roughly formed."



"At two months, of age, he would fit easily in a nutshell, but everything is there: hands, feet, head, organs, brain are all in place. His heart has been beating for a month already. Looking closely, one could see the palm creases. With a good magnifier the finger prints could be detected. Every document is available for a national identity card."



"At four months, he fidgets so vigorously that that his mother perceives his movements. Thanks to the quasi- weightlessness of his space capsule, he makes a lot of somersaults, a stunt that will take him years to perform again in the atmosphere."



"At five months, he grasps firmly the tiny stick that is placed in his hand, and he begins to suck his thumb while waiting for delivery."

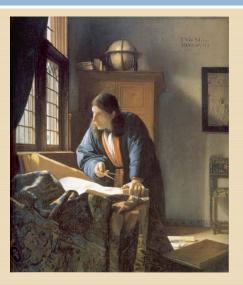
REASONABLENESS

If the first premise focuses our attention on reality, the second premise spotlights man, the subject who wants to know. As human beings, we need things to makes sense. We say, "That's reasonable, that makes sense," when adequate reasons are offered, and "That's unreasonable," when they are not.

Giussani points out one prominent *inadequate* use, or reduction, of reason: when reason is equated solely with the empirically "demonstrable". He insists that the problem lies in the *concept of reason*, which for him is "an **openness to reality**, a capacity to seize and affirm the whole of reality."

But let us not forget the first premise: the *object dictates to us* the way we must come to know it. Since there are many kinds of reality, there are many methods reason can employ. Investigation of chemical processes requires use of the scientific method; quantitative relationships call for mathematics; questions of trust and human relationships beg yet another method. All of which can help us arrive at knowledge with certainty, if applied correctly.

In short, reasonableness involves a way of acting governed by a use of reason adequate to the object at hand.



The Adequate Use of Reason

Reason is the power that enables us to consider reality in *all* its aspects.

"Human reason is not a narrowly logical faculty, as it was for those of the Age of Reason, but rather it is open-ended in it capacity for grasping the truth. Reason is the distinctly human characteristic that participates in infinitude, that is, in complete existence."

(Cardinal J. Francis Stafford, A Generative Thought)





"Reason is not as arthritic or paralyzed as has been imagined by so much of modern philosophy, which has reduced it to a single operation - 'logic' - or ... 'empirical demonstration.' Reason is much larger than this; it is life, it is alive in the face of the complexity and multiplicity of reality, the richness of the real. Reason is agile, goes everywhere, travels many roads."

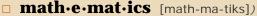
(Luigi Giussani, The Religious Sense)

Methods of Reason



□ **sci·ence** [sī-ən(t)s]

n. systematic knowledge of the physical or material world gained through observation and experimentation (www.dictionary.com)



n. the systematic treatment of magnitude, relationships between figures and forms, and relations between quantities expressed symbolically (www.dictionary.com)



phi·los·o·phy [fə-lä-s(ə-)fē]

n. investigation of the nature, causes, or principles of reality, knowledge, or values, based on logical reasoning rather than empirical methods (www.thefreedictionary.com)

faith [fāth]

n. confidence or trust in a person or thing (www.thefreedictionary.com)



A Particularly Important Method of Knowledge

faith

n. confidence or trust in a person or thing (www.thefreedictionary.com)

"Without this cognitive method of faith, there would be no human development. If the only reasonableness consisted in evidence that was immediate or personally demonstrated... man could no longer move forward because each of us would have to go through all of the processes again; we would always be cavemen... all that is produced by the other three methods we mentioned [math, science and philosophy] can become the basis for a new thrust forward only on the strength of this fourth method [faith]."

- Luigi Giussani, The Religious Sense



Some non-scientific (though surely reasonable) assumptions in the Scientific Method

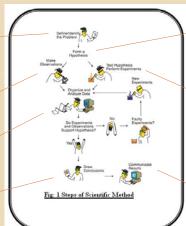
Even the scientific method cannot be defined simply as "pure science." Its rational method uses observation, experiment, demonstration and logic which are based on many *philosophical, ethical and mathematical presuppositions*.

Here the scientist starts by observing reality and then uses the method of **faith**: he believes that there *really* is an answer to his inquiry.

Many **philosophical** assumptions are made here such as: the universe exists independently of me; human sense perception is a reliable source of data.

Presupposes a design and order in reality.

Assumes that physical "laws" exist and have always existed; draws conclusions that others will take on faith.



This step uses *intuition* as well as *logic* and *speculation*; it makes *philosophical* assumptions such as the stability and predictability of the universe, and that nature behaves uniformly, (not haphazardly or whimsically).

Here we can say that this is science, strictly speaking.

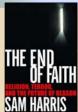
Assumes an ethical code: that scientists report their findings with honesty and objectivity, and that the scientists conducting "peer review" abide by the same moral code. (It also assumes that people really want to know the truth).

An inadequate use of reason: Scientism

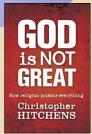
Scientism claims that science alone can render truth about the world and reality.

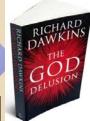
Unlike the use of the scientific method as only one *mode* of reaching knowledge, scientism claims that science alone can render truth about the world and reality... Scientism sees it as necessary to do away with most, if not all, metaphysical, philosophical, and religious claims, as the truths they proclaim cannot be apprehended by the scientific method. In essence, scientism sees science as the absolute and only justifiable access to the truth.

<u>www.pbs.org/faithandreason/gengloss/sciism-body.htm</u>









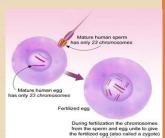
The Human Life Bill

In 1973, the United States
Supreme Court ruled that a woman
has the right to abort her unborn
child without State interference
(Roe vs Wade).

In an attempt to reverse that decision, the 1981 Human Life Bill (S. 158) sought to bring scientific consensus to bear on the status of the unborn (in the hope of gaining Constitutional protection under the 14th Amendment).

Dr. Lejeune was one of 57 expert witnesses to testify over the course of eight days before the Senate Subcommittee.

THE TESTIMONY ♦ When does human life begin?



Lejeune: "...it is from the fertilization of the female cell, the ovum, by the male cell, the spermatozoa, that a new member of the species will emerge."

Gordon (Mayo Clinic): "From the very moment of conception, the organism contains many complex molecules; it synthesizes new, intricate structures from simple raw materials; it replicates itself. By all the criteria of modern molecular biology, ilie is present from the moment of conception."

Mathews-Roth (Harvard): "Because these kinds of experiments on embryological development have been repeated so many different times on so many different species and have always led to the same result - that is, that organisms reproducing by sexual reproduction always arise from a single cell and that they are always of the same biological species as their parents - this fact-that a life begins at fertilization - is universally accepted and taught at all levels of biological education."

The Human Life Bill: More Testimony

When does a human being become distinct from its parents?

- Gordon: "...the highly individual structural pattern of the DNA - the individual's personal genetic code – is determined in that very first cell at the very moment of its conception."
- Lejeune: "As soon as the 23 paternally derived chromosomes are united through fertilization to the 23 maternally derived chromosomes, the full genetic information necessary and sufficient to express all the inborn qualities of the new individual is gathered. [...] each conceptus receives an entirely original combination which has never occurred before and will never again. Each conceptus is unique and thus irreplaceable."
- Mathews-Roth: "So, therefore, it is scientifically correct to say that an individual human life begins at conception, when egg and sperm join to form the zygote, and that this developing human always is a member of our species in all stages of its life."

Senator East: Thank you. Let me ask just one final question, just to clarify my thinking on it as a layman. It occurs to me that any person, regardless of how they stand on this overall issue, would concede that at some point life begins. We are quarreling, perhaps, over when; but at some point life begins.

Are the three of you saying that to pick a point other than the $\,$ point of conception is arbitrary?

Dr. Lejeune: Yes.
Dr. Matthews-Roth: Yes.

Professor Gordon: Yes.

Senator East: I do not speak for all people, but it seems to me, even reasonable minds who differ over this whole issue would agree that at some point with the unborn -with the fetus -there is life -maybe minutes before birth, but at some point- that all persons would have to agree that life is there, whether they define it in terms of viability, or quickening, or whatever it might be.

So, obviously, the point of our focus is in that period prior to birth as to when life begins. That is what we are really grappling with.

I gather what the three of you are saying is, to pick any point other than the time of conception is purely arbitrary and would be indefensible as a matter of scientific premise or conclusion. Am I making an accurate statement there?

Dr. Matthews-Roth: Yes.

Professor Gordon: Yes.

Dr. Lejeune: That is the statement, Mr. Chairman.

♦ Is it arbitrary to indicate a point other than conception for the beginning of life?

Judge for yourself.



"I know of no scientific evidence which bears on the question of when actual human life exists."

Dr. Leon Rosenberg

In 1981, only a single scientist disagreed with the majority's conclusion: Leon Rosenberg of Yale University did so on philosophical rather than scientific grounds. In fact, those in favor of abortion were invited to produce opposing scientific data, but failed to produce even one expert witness who would specifically testify that life begins at any other point than conception.



Lejeune: ... in a time in which we can send a man to the moon [...] not to use what actual science tells us about what is a human, when it begins, and not to use it to make *reasonable assumptions* on what should be constitutional.

The Senate report concluded: "Physicians, biologists, and other scientists agree that conception marks the beginning of the life of a human being—a being that is alive and is a member of the human species. There is overwhelming agreement on this point in countless medical, biological, and scientific writings."

Where does the problem lie?

If science is not sufficient by itself to define when human life begins or what "humanness" means, is that cause to stop us from making a reasonable judgment?

Should we not use the great knowledge at our disposal since the beginning of human history, with its recent exponential advances in biological sciences and technology to point us in the right direction? Surely science, at least, has a bearing on the question of when human life begins?

Where does the problem lie?

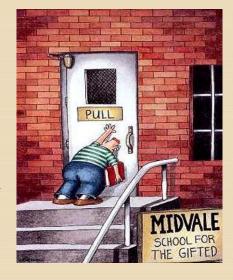
The problem lies in the crippled use of reason which :

 considers science as the only source of objective truth (see panel on Scientism) and that anything outside science falls in the realm of the "subjective", i.e. we can't really know if it's true:

"Don't ask science or medicine to help justify that course because they cannot. Ask your conscience, your minister, your priest, your rabbi – or even your God – because it is in their domain that this problem lies." (Rosenberg)

- is unwittingly blind to the fact that even the scientific method employs philosophical assumptions (see chart on Scientific Method) and;
- 3. refuses, unreasonably, to use the broad power of reason, claiming that scientific evidence has no bearing on moral matters:

"I know of no scientific evidence which bears on the question of when actual human life exists." (Rosenberg)



MORALITY OF KNOWING

Feelings also play a crucial role in knowing. We know that if we are not interested in something, we hardly even look at it. Many say we should eliminate emotion if we want to know objectively, but doing so limits our consideration of reality. Instead, morality involves "re-focusing" our feelings toward their proper target: the truth.

The *morality of knowing* can be summed up in this way: to love the truth of the object more than our pre-conceptions.



"Fundamental genetics should not be a smug, narcissistic exercise in description that settles for abstract conclusions.... It should be a passionate, committed quest for true knowledge—knowledge that will finally enable us to do something for those who suffer.

- Jerome Leieune

What can move us to act morally? Love, the supreme emotion.

that all of our cognitive energy will be focused upon a search for the truth of



What's in the Fridge?

or On the Wisdom of Solomon

- **Q:** Referring to **supernumerary** embryos...Are you familiar with that
- A: I know that term, and it's a wrong term. Can you tell me a man who is supernumerary?
- Q: Maybe just a lawyer. A: I don't believe that, as a man he
- Q: But that is the term that is used
- in the report?

 A: Yes, but it is a very misleading
- term, exactly the same thing as preembryo. You change the name [so that] you will change your behavior, and I dislike that. I like to call a cat a cat, and a man a man. It's [Oliver] Wendell Holmes who said a man is a man is a man ... 'a man is a man is a man' is a saying in your country.
- "Supernumerary" refers to the "extra" embryos created to increase the chances of successful implantation. Lejeune points out that there is no such thing as an "extra", or unnecessary human life.



An epoch-making trial took place in Maryville, Tennessee in August of 1989. The proceedings were to decide the fate of seven frozen human embryos after the separation of a husband and wife who had conceived them via in vitro fertilization. The wife had requested the transfer of the embryos to her womb, or at least to another suitable mother. The husband did not want to be a father against his will. Dr. Jerome Lejeune was summoned from Paris to testify as an expert witness.





Dr. Lejeune reminded the judge of a historical precedent in this case: the court of King Solomon. He suggested that judgment should fall on the side of the real parent who would give the child up rather than see it killed.



The Judge's ruling, giving sole custody to the wife, was appealed when she sought to donate the embryos to other childless couples for implantation. The Tennessee Court of Appeals in Knoxville overruled and awarded joint custody. Since the husband had said he would rather see the embryos destroyed than given to another couple, the new ruling effectively gave him the authority to ensure that the embryos remain frozen until they perish.



- Lejeune repeatedly testified to the scientific evidence of
- and I would say that science has a very simple conception of man; as soon as he has been conceived, a man is a man."
- " An early human being inside this suspended time which is the can cannot be the property of anybody because it's the only one in the world to have



"Today, I Lost My Nobel Prize"

THE WILLIAM ALLIES PROMISSED, BYANDS
Promethed at the second sensing of the Stantison Descript
Second Secon

In August 1969, the American Society of Human Genetics granted Lejeune the William Allen Memorial Award, the highest distinction that can be given to a geneticist. When he arrived in San Francisco, Lejeune realized that the abortion of Down syndrome children was expected to be authorized. Many claimed that it was cruel to allow these poor creatures to come into the world, doomed to an inferior life, while posing an unbearable burden on their families. "By my discovery," Lejeune thought, "I have made this shameful calculation possible."

After receiving the prize the next day, he was to give a talk to his colleagues. A famous line from St. Augustine came to him: "Two cities have been formed by two loves: the earthly by the love of self, even to the contempt of God; the heavenly by the love of God, even to the contempt of self." What did his stature in the scientific world matter compared to the truth? As you did unto one of the least of my brethren, you did unto Me (Mt 25:40). He decided he would speak out.

"To kill or not to kill, that is the question."

Jerome began his speech with a twist on Hamlet. Stating that geneticists were no better qualified than other scientists in ethics, he thought it best to focus "attention on the biological aspects related to a mere observation: What do we know about the time at which a human being comes into existence?"

Having established that all human beings are members of the same species, he asked whether "variants" should be allowed to live. Who had the knowledge to make such a decision? To show the absurdity of this claim, he proposed the creation of a research body to be known as the *National Institute of Death*.

In his closing remarks, Prof. Lejeune urged his colleagues to return to the origin of their medical profession, "For millennia, medicine has striven to fight for life and health and against disease and death. Any reversal of the order of these terms of reference would entirely change medicine itself. It happens that nature does condemn. And our duty has always been not to inflict the sentence but to try to commute pain."

That night he wrote home to his wife, "Today, I lost my nobel prize."



Immoral Supreme Court Rulings

"Roe v. Wade is worse [than Dred Scott]. The court certainly knew that blacks were human, but they chose to ignore the evidence. But at least the court did not pretend, as the Roe court did, that the evidence did not exist."

- Jerome Lejeune



Dred Scott was a slave who sued for freedom. The case was dismissed because the Supreme Court ruled that Scott was not human or a citizen, but property, and therefore had no right to sue. This was ruled because slavery was considered too convenient to abolish.



Jane Roe was a Texas resident who sued for the right to abortion, which at the time was against state law. The Supreme Court ruled that abortion should be allowed based on a woman's right to privacy, saying that a fetus was not alive until it could sustain itself outside of the womb.

Two years before *Roe V. Wade*, in October 1971, a group of 220 distinguished physicians, scientists, and professors submitted an *amicus curiae brief* (advice to a court on some legal matter) to the Supreme Court. They showed the Court how modern science had already established that human life is a continuum and that the unborn child from the moment of conception is a person and must be considered a person, like its mother. The brief set as its task "to show how clearly and conclusively modern science—embryology, fetology, genetics, perinatology, all of biology—establishes the humanity of the unborn child."

- **Q:** Do you regard an early human being as having the same moral rights as a later human being such as myself?
- A: As far as your nature is concerned, <u>I cannot see any difference between the early human being you were and the late human being you are</u>, because in both cases, you were and you are a member of our species.... No matter the amount of kilograms and no matter the amount of differentiation of tissues.
- Jerome Lejeune, Testimony at Maryville

Avoidance of the Scientific Fact

In America

Dr. Bernard Nathanson, former abortionist, describes how the public was fooled:

Within five years we had convinced the Supreme Court to issue the decision which legalized abortion throughout America in 1973 and produced virtual abortion on demand up to birth. How did we do this? It is important to understand the tactics involved because these tactics have been used throughout the western world with one permutation or another, in order to change abortion law...

Capture the media

Knowing that if a true poll were taken, we would be soundly defeated, we simply fabricated the results of fictional polls. We announced [again and again] to the media that we had taken polls and that 60% of Americans were in favor of permissive abortion. This is the tactic of the self-fulfilling lie. Few people care to be in the minority...

Play the Catholic Card

We systematically vilified the Catholic Church and its "socially backward ideas" and picked on the Catholic hierarchy as the villain in opposing abortion...

Suppress Scientific Evidence

A favorite pro-abortion tactic is to insist that the definition of when life begins is impossible; that the question is a theological or moral or philosophical one, anything but a scientific one. Fetology makes it undeniably evident that life begins at conception...

As a scientist I know, not believe, know that human life begins at conception



Even at the height of the growing abortion debate in 1970, the editors of the scientific journal California Medicine noted the "curious avoidance of the scientific fact, which everyone really knows, that human life begins at conception and is continuous whether intra- or extra-uterine until death "

In France

In 1973, just after abortion was legalized in America, a bill to decriminalize abortion was introduced in the French National Assembly. Dr. Lejeune exposed false statistics used to turn the tide of public opinion in favor of **abortion.** Surveys claimed that half of the medical profession was in favor. Madame Lejeune led an opposition campaign and collected the signatures of more than 18,000 French doctors (a majority of the medical profession) thus demonstrating the fraudulence of the media campaign. Soon the doctors were joined by nurses, then judges, lawyers, and more than 18,000 mayors and local elected officials. A similar tactic was used to push legislation through in many states in America. Unfortunately, the opposition did not last long, as people do not like to be counted on the losing side of the tide.

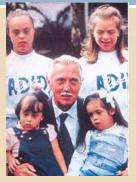
Mon professeur

He had a very close and loving relationship with his patients. He remembered each of their names and followed all their developments.

Prof. Lejeune continued to treat patients who came from all over the world and to search for a cure for Down syndrome because he was firmly convinced that any advance towards a cure for one of these diseases would hold the key to curing the others. He was the head of the Cytogenetics unit at the Hospital Necker Enfants Malades in Paris. Along with his team, he studied more than 30,000 chromosomic cases, and treated more than 9,000 patients suffering from intelligence genetic diseases.



One of his "little ones" came to him after watching a TV debate on the abortion of handicapped children and said, "They want to kill us. You've got to defend us. We're just too weak, and we don't know how."



Cecilia wrote in a poem:

My God, if you please watch over "mon ami." My family doesn't like me much, but he thinks I'm kind of pretty, because he knows what my heart is made of. Oh, sure there are beautiful children, but are they really so beautiful when they make fun so shamelessly?"

Before dying he said about his work:

- "I don't have much, you know... So, I have given them my life. And my life is all that I had."
- "I was the doctor who was supposed to cure them and as I leave, I feel I am abandoning them."
- "My children, if I can leave you a message, this is the most important of all: we are in the hands of God. I have experienced this a number of times.'

Friend of John Paul II



- In 1975, Jerome was called to Poland to give a talk on the beginning of life and there met Archbishop Karol Woityla, then Cardinal of Krakow.
- On October 16, 1978, Karol Wojtyla was elected Pope and became John Paul II. On May 13, 1981 only a few hours before the attempt on his life the Holy Father had lunch with Dr. Lejeune and his wife.

- Afterward, Dr. Lejeune regularly traveled to Rome to meet with the Pope, to attend meetings of the Pontifical Academy of Sciences, and to participate in other events, such as the 1987 Synod of Bishops.
- The Holy Father wanted to name Jerome as the first president of a new Pontifical Academy for Life to be opened at the beginning of 1994.
- Since Jerome had been diagnosed with lung cancer in November 1993, he served as a President of the Academy for only a few weeks before his death on Easter Sunday morning in 1994.

"I am the Resurrection and the Life'... These words of Christ come to mind as we face the death of Dr. Jérôme Lejeune.... In his capacity as a learned biologist, he was passionately interested in life... Frof. Lejeune was always able to employ his profound knowledge of life and of its secrets for the true good of man and of humanity and only for that purpose...[he] has left the truly brilliant witness of his life as a man and as a Christian."

Johannes Paulus II P.P. April 4, 1994

Jerome Lejeune Foundation

- The work of Jerome Lejeune is continued today through the Jerome Lejeune Foundation.
- □ It was created in 1996 and works on the research of genetic intelligence diseases such as Down syndrome, Cri du Chat, Fragile X Syndrome, monosomies, and trisomies.
- It has three missions

. Research

- Promote research genetic intelligence diseases.
- Develop cures and treatments for patients affected by these diseases.

. Defense

☐ To defend the fundamental dignity of handicapped people from the moment of conception until death.



Manual for families of a patient

. Care

- Provides medical treatment for patients throughout their whole lives.
- Offers medical consultation to families such as diagnosis, prevention of related handicaps, and information about the disease related to the disease.