



BHAGAVAD GITA: Chapter 10, Verse 42

**atha va bahunaitena kim jnatena tavarjuna
vishtabhyaham idam kritsnam ekanshena sthito jagat**

athavā—or; bahunā—detailed; etena—by this; kim—what; jñātena tava—can be known by you; arjuna—Arjun; vishtabhya—pervade and support; ahām—I; idam—this; kritsnam—entire; eka—by one; anśhena—fraction; sthitah—am situated; jagat—creation

*atha va bahunaitena kim jnatena tavarjuna
vishtabhyaham idam kritsnam ekanshena sthito jagat*

◆ **TRANSLATION**

BG 10.42: What need is there for all this detailed knowledge, O Arjun? Simply know that by one fraction of My being, I pervade and support this entire creation.

◆ **COMMENTARY**

Shree Krishna's statement indicates that he has already answered the question. Now, of his own accord, he wants to tell something remarkable. Having revealed many amazing aspects of his splendor, he says that the magnitude of his glory cannot be judged even from the sum total of what he has described, for the entire creation of unlimited universes is held within a fraction of his being.

Why does he make a reference to a fraction of his being here? The reason is that the entire material creation consisting of unlimited universes is only one-fourth of God's entire manifestation; the remaining three-fourths is the spiritual creation.

pādo 'sya viśhvā bhūtāni tripādāsyāmṛitam divi (Purush Sūktam Mantra 3)[v32]

"This temporary world made from the material energy is but one part of the Supreme Divine Personality. The other three parts are his eternal abodes that are beyond the phenomenon of life and death."

Interestingly, Shree Krishna is in front of Arjun, within the world, yet he reveals that the entire world is within a fraction of his being. This is like the story of Ganesh and Lord Shiv. Once, Sage Narad gave Lord Shiv a very special fruit. Lord Shiv's two children, Kartikeya and Ganesh both began demanding the fruit from him. Lord Shiv thought that if he would give it to any one of them, the other would think that their father was biased. So Lord Shiv announced a competition for his two children. Whoever circumambulated the entire universe and came back to him first would get the fruit.

On hearing this, Kartikeya immediately started off to circumambulate the universe. He was athletically and powerfully built and decided to take advantage of it. In comparison, Ganesh had a plump body and felt he was handicapped in competing with his brother. So, Ganesh decided to make up for it by using his intellect. Lord Shiv and Parvati were standing there. Ganesh circumambulated them thrice, and then announced, "Father, I have done it. Please give me the fruit." Lord Shiv, "But how have you gone around the universe? You have been with us all the while." Ganesh said, "Father, you are God. The entire universe exists within you."



Is it your Birthday Today?

MARCH 31
Ruled by number 4 and the planet Uranus. You are bright, energetic, active, methodical and systematic person. You are fond of good, respectable lifestyle and you specially enjoy building new contacts and relationships, but you need to check your tendency to behave stubborn, destructive and vindictive at times. This year you would be able to make your point heard without being pushy or forceful. Financial gains and other rewards would be plenty but working under extreme stress levels would show on your health. Children would be interesting and a major source of your happiness. For those who have been unsuccessful in finding a life partner till now should rejoice, as a matrimonial wedlock seems later in the year. The months of November, February and May will prove to be eventful.

This Deadly Parasite Stays Invisible by Shredding Its Own Genes

To survive inside the human bloodstream, the African trypanosome parasite disguises itself with a protective "cloak" made of proteins called variant surface glycoproteins (VSG). New research published in Nature Microbiology has identified a key protein that helps the parasite carefully control this disguise. Scientists discovered a protein called ESB2 that acts as a "molecular shredder." It allows the parasite to stay undetected by cutting up specific pieces of its genetic instructions with remarkable precision as they are being created. By uncovering how this process works, researchers have revealed potential weak points in the parasite's life cycle. This insight could help guide the development of new treatments for Sleeping Sickness, a disease that still severely affects communities

across sub-Saharan Africa. Sleeping Sickness is spread through the bite of the tsetse fly. If not treated, the parasite can invade the central nervous system, leading to serious neurological symptoms such as disrupted sleep, confusion, and eventually coma. A "Molecular Shredder" That Edits Genes in Real Time Dr. Joana Faria, senior author of the study and head of the research group at the University of York, explained: "We've discovered that the parasite's secret to staying invisible isn't just what it prints, but what it chooses to redact. By placing a 'molecular shredder' directly inside its 'protein factory', the parasite can edit its genetic manual in real-time. "This suggests a fundamental shift in how we view infection: survival for many organisms may depend less on how they issue genetic

instructions and more on how they destroy them at the source." Solving a 40-Year Mystery in Parasite Biology The findings also resolve a long-standing puzzle that has confused scientists for decades. The genetic instructions that produce the parasite's protective "cloak" also include several "helper genes" that are important for survival and immune evasion. Based on this setup, researchers expected the parasite to produce similar amounts of each protein. Instead, the parasite generates large quantities of cloak proteins while producing only small amounts of helper proteins. The new study shows that this imbalance is not accidental. By identifying ESB2, the research team demonstrated that the parasite controls its genetic output by destroying certain messages rather than simply regulating how much

is produced. Precision Gene Control Inside the Parasite's "Factory" ESB2 operates within the parasite's protein-making center, known as the Expression Site Body. As genetic instructions are being read, ESB2 acts like a "molecular blade," immediately cutting up the helper gene messages while leaving the cloak-related instructions untouched. This precise editing process ensures the parasite produces exactly what it needs to remain hidden from the host's immune defenses. Breakthrough Discovery and Global Collaboration This breakthrough represents the first major achievement from Dr. Faria's new laboratory at the University of York and adds to the city's growing reputation as a center for life sciences research. The work was supported by a Sir Henry Dale Fellowship – a partnership between

the Wellcome Trust and the Royal Society – and involved scientists from the United Kingdom, Portugal, the Netherlands, Germany, Singapore, and Brazil. Lianne Lansink, the study's first author, said: "When we first saw the molecular shredder localized in the microscope, we knew we had found something special." Dr. Faria added: "This discovery is a real full-circle moment for me. The mystery of how this parasite manages the asymmetric expression of its genetic manual has been a cold case in the back of my mind since my days as a postdoc. To finally solve it now, as the first major output of my own lab here at York, is incredibly rewarding. It's a testament to what a fresh lab and a diverse group of scientists can achieve when they look at an old problem from a completely new angle."

Scientists Break 50-Year-Old Bottleneck To Supercharge Cancer Drug Production

A long-standing challenge in cancer drug manufacturing may be shifting. An international team of scientists has reported a major advance in how doxorubicin, a widely used chemotherapy drug, can be produced. Their work pinpoints and overcomes key molecular "bottlenecks" that have restricted natural production of the drug for more than 50 years. First approved in the 1970s, doxorubicin remains a central treatment for cancers such as breast and bladder cancer, as well as lymphomas and carcinomas. More than one million patients receive it each year. Despite its importance, the bacteria that naturally make doxorubicin do so very inefficiently, forcing manufactur-

ers to rely on costly, multi-step semi-synthetic methods. Identifying the barriers to production "We have uncovered several independent factors that limit the formation of doxorubicin," says researcher Keith Yamada, PhD, from the University of Turku in Finland, a lead scientist on the study. "By addressing these bottlenecks, we have harnessed rational strain engineering to pave the way for cost-effective manufacturing that can meet growing global demand". The research brought together six laboratories across three countries, including the University of Turku in Finland, three groups in the United States, and two in Leiden, the Netherlands. Working together, the scientists

identified three main factors that restrict high-yield production of doxorubicin. Three discoveries reshape the process The first finding revealed the enzyme's required "biological power supply." The team identified redox partners known as Fdx4 and FdR3, which deliver the electron flow needed to drive the reaction. Next, the researchers found that a protein called DnrV acts as a drug-binding "molecular sponge." It sequesters (binds and holds) doxorubicin, preventing the compound from interfering with the enzyme responsible for producing it. Finally, using X-ray crystallography, the team mapped the enzyme's structure for the first time.

This showed that the drug binds in an unfavorable position inside the enzyme, helping explain why the reaction proceeds so slowly. From discovery to application By integrating these insights, the team engineered a bacterial strain capable of producing 180% more doxorubicin than current industrial standards. To move the technology toward real-world use, the researchers launched the spin-out company Meta-Cells Oy at the University of Turku last year. The company plans to develop these methods for the sustainable production of important antibiotics and anti-cancer drugs. This approach to fully biosynthetic manufacturing could lead to a cleaner and more dependable supply of essential medicines.

Word of the Day

OBLIVION
uh-BLIV-ee-un

What It Means
Oblivion can refer to the state of something that is not remembered or thought about any more, or to the state of being unconscious or unaware. It also sometimes refers to the state of being destroyed.

// After so many days of exhaustingly difficult work, he longed for the oblivion of sleep.

// The sandcastles of summer had long since been swept into oblivion by the ocean waves.

OBLIVION IN CONTEXT
"... automobiles with manual transmission appear to be on a road to oblivion as technology transforms cars into computers on wheels." — Michael Diedtke, The Columbian (Vancouver, Washington), 3 Jan. 2026

Did You Know?
Oblivion asks forgetfulness of us in both its meaning and etymology. The word's Latin source, *oblivisci*, means "to forget, to put out of mind," and since its 14th century adoption into English, oblivion has heved close to meanings having to do with forgetting. The word has also long had an association with the River Lethe which according to Greek myth flowed through the Underworld and caused anyone who drank its water to forget their past; 17th century poet John Milton wrote about "Lethe the River of Oblivion" in Paradise Lost.

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Solved By Jigmet Desal & Stanzin Spalzm

STARS & PLANETS



ARIES: You could find yourself staring at a stranger for just one extra second as you pass on the street today. Aries. Your tendency toward the new and bizarre is stronger than usual, and you're being pulled into different mental directions. Go ahead and introduce yourself to that stranger. Perhaps he or she will become a business partner or new best friend. You never know until you ask.

TAURUS: As you work slowly and steadily toward your goals, realize that there are apt to be unexpected obstacles along the way. Taurus. You can't possibly plan for everything, so don't get discouraged today when some crazy variable pops out of nowhere. Your mental process may be thrown for a loop, and you might find that you go into a frenzy. There's a valuable lesson to be learned here - patience.

GEMINI: It's generally quite clear that you aren't afraid to tell people what you think. Gemini. Maybe it's time to be more expressive about how you feel. It could be that your mental process is a bit off today, jolted by an unexpected situation or person. Make sure you incorporate some of your instincts and emotions into your reaction to the situation. Don't rely on your brain alone to have all the answers.

CANCER: Today could be filled with unexpected twists, turns, and bends in the road that you may not be prepared for. Cancer. Apparently someone forgot to install the sign that warns of sharp curves ahead. Be on the lookout for unexpected forks in the road. When you get to them, take them, to coin a phrase.

LEO: You could be thinking some bizarre thoughts today. Leo. They might lead you in a direction that doesn't quite pertain to your current situation. Don't be afraid to explore these strange realms, because they could give you some important insight that you wouldn't have realized otherwise. Wisdom can be found in the unlikelyst of places, so don't discount something because it seems a bit off the wall at first.

VIRGO: Your thinking is solid and clear today. Virgo, but other people could challenge your mental power. Don't let others put seeds of doubt in your head about the way you approach a problem. Keep your mind open to alternative solutions, but don't beat yourself up for your current mental track. You might need to modify your strategy, but don't sacrifice your principles or values.

LIBRA: You could get the feeling that something is wrong today when it isn't. Libra. It's probably just your perspective that needs some adjusting. Pull out your binoculars and focus a bit more so you can stand back yet have the power to examine the details closely. Don't automatically assume there's a clear distinction between right and wrong. There are likely a great many shades of gray, too.

SCORPIO: Your sensitive nature is likely to pick up a disturbance in your thinking today. Scorpio. Suddenly, a blast of unexpected information could come your way and throw a monkey wrench in your mental process. Try not to get thrown off balance by the sudden jolt. You'll find that you can incorporate some of this new knowledge in a way that gives you a greater advantage.

SAGITTARIUS: You might experience some mental distractions that pull you in different directions today. Sagittarius. There could be a stubborn internal/external battle brewing. Realize that being in the middle is to your advantage. Look at the situation as a way to learn something about yourself and others. Understanding your opposition's viewpoint will help you. Incorporate the old and the new into your way of thinking.

CAPRICORN: It could be difficult for you to think straight today, Capricorn. Your brain is probably working in short, erratic bursts that keep you guessing about which way to proceed. Avoid confusion during the day by periodically centering and separating yourself and your feelings from the drama around you. Don't pretend you understand something if you don't. If a situation doesn't make sense, go ahead and question it.

AQUARIUS: Freedom is a key aspect of life today, Aquarius. You might find that your brain wants to break free and pursue more independent ways of thinking. Don't worry if such ways of thinking lead you into unknown territory. This is a sign that this is probably where you need to be. Your witty banter could take a sudden twist that surprises both you and the people you're talking to. Any mundane irritations notwithstanding, this should be a beautiful day.

PISCES: People are apt to be as stubborn as you in their thinking today, Pisces. This could be a recipe for disaster if you aren't careful. Open the floodgates a bit wider and take in more of the opinions of others. Don't automatically assume that other people have to conform to your viewpoint to resolve an issue. More than likely, there needs to be some give and take from all involved.