Photo courtesy of Robert Lemelson

Robert Lemelson
minds over matter

BY ELYSE GLICKMAN

While Bali has emerged as an international vacation destination thanks to its verdant valleys, elaborate Hindu temples, tranquil beaches, and amenity-laden resorts, for Los Angeles–based psychological anthropologist Robert Lemelson this island corner of Indonesia is home to a documentary film project, *Movements & Madness*, that far transcends the "labor of love" that describes other independently produced movie projects.

Lemelson first came to Bali to conduct dissertation research on mental illness in Indonesia as a Fulbright Scholar in 1996. One of his projects, funded by the World Health Organization, was to examine how the neuropsychiatric disorders obsessive-compulsive disorder and Tourette's syndrome affected people in a culture guided by tenets of the Hindu faith and the semiclosed society and customs of small villages and close-knit families. This pilot study to find cases of these and related disorders in Indonesia led to the making of his film as well as to providing data to explore the Pediatric Autoimmune Neuropsychiatric Disorders Associated with Streptococcal Infections (PANDAS) hypothesis.

However, Lemelson's anthropological research shows a more personal and tragic side of those living with these disorders. Gusti Ayu, a young woman made prisoner by her Tourette's and a society unaware of it, personified the story Lemelson wanted to tell. He returned with documentary filmmaker Dag Yngvesson in 2000 and over the course of six years traced her development and personal evolution. Ultimately, Lemelson crossed the boundary of detachment maintained by some anthropologists to get Ayu and her family relief by working closely with Indonesian medical professionals to help them understand that Tourette's was a medical problem and not a curse (as some in Bali believe). As his relationship deepens with the family, the film documents every step of progress and setback to witness Ayu eventually becoming her own woman. This film is the first in a series on the relation of culture and mental illness that Lemelson is currently working on. Examples can be viewed at *www.lemyngfilms.com*.

While Lemelson's anthropology and filmmaking work is visionary and exhibits patience and commitment, he had an extraordinary role model to follow: his father, Jerome Lemelson. Jerome, or Jerry as he was known, is on record as one of the most prolific inventors of the 20th century with over 600 patents. Deeply committed to bettering the world, his patents range from bar code readers, machine vision, and the crying baby doll to mechanisms of everyday conveniences people take for granted—computer hard drives, fax machines, ATM machines, and even the tape mechanisms found in Sony® Walkmans®. Although Lemelson was diagnosed with liver cancer in 1996 and died in 1997, in his final year he soldiered forth to invent ways to improve medical devices and cancer treatment methodologies. He submitted nearly 40 patent applications during the last year of his life, some of which are still pending as of this publishing.

Though as a child the family held together financially (through his father's lean years as an inventor) by his mother's work as an interior designer, Lemelson recalls that life in his family's household was an adventure. In the eclectically decorated Pacific Palisades residence serving as his father's office, Lemelson recalls how he and his brother Eric (whom Lemelson describes as a passionate and devoted environmentalist and excellent winemaker) would have the opportunity to play and experiment with father Jerry's creations before he would take them back to make improvements.

Although these were happy times for the family, the road to his father's success was often bumpy. Jerry's first experience with patent infringement left him stunned, and ultimately led to his crusade to defend the rights of independent inventors against corporate giants. After conceiving of an idea for a cutout face mask that could be printed on the back of a cereal box, he filed for a patent and then took the concept to a major cereal manufacturer. The company rejected his idea, but about three years later began packaging its cereal boxes with a mask on the back. Jerry filed suit but the case was dismissed and dismissed again on appeal. It was to be the first of many courtroom battles. Although his list of inventions grew, he found himself spending more and more time defending patents in courts. Though he was involved in more than 20 cases, he lost more times than he won.

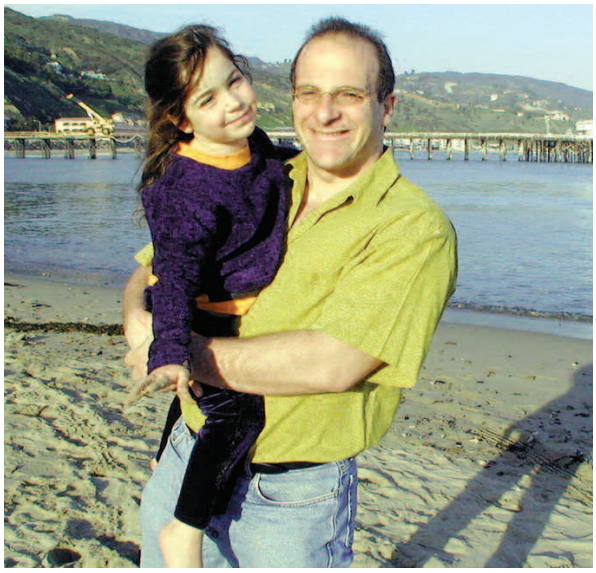

Photo courtesy of Robert Lemelson

Lemelson and daughter Zoe.

"Though my dad didn't attain great financial success until the early '90s, he was clearly as focused on the journey of innovation as much as the destination of receiving a patent," Lemelson reflects. "We did not grow up wealthy, yet the experience of being raised by my parents was a rich one, especially with their constant thirst and encouragement for learning and education. My mother's warmth, creativity, strength of character, and strong ethical values also influenced me tremendously. She also has a wonderful sense of design and style, which has clearly rubbed off on my brother Eric. His winery, which he designed himself (*www.lemelsonvineyards.com*) is one of the most beautiful and innovative in Oregon. In addition, my parents also always stressed that we all have a responsibility to make the world better and do the right thing. My father often talked about how inventors and innovation were a foundation of America's social and economic strength and that there should be national programs to promote innovation and to elevate the status of independent inventors. After my father concluded a number of lucrative licenses, we, as a family, decided that we needed to make my father's dreams a reality."

This helped inspire the Lemelson Foundation, perhaps one of his most enduring inventions, combining Jerry's inventive spirit and sense of intellectual adventure and a nationwide network of programs. One example is the National Collegiate Inventors and Innovators Alliance (NCIIA) at more than 300 universities (including MIT and Hampshire College, Robert's alma mater) to inspire, encourage, and recognize inventors, innovators, and entrepreneurs in the United States. To reward the top inventors in America, the Lemelson Foundation funds the $500,000 Lemelson-MIT award, the largest single cash prize for inventors in the world. The foundation also funds The Lemelson Center for the Study of Invention & Innovation at the Smithsonian in Washington. On an international level, meanwhile, the foundation has a growing emphasis on helping inventors in developing countries invent solutions to further the cause of sustainable development.

To date, the Lemelson Foundation has donated or committed more than $100 million in support of its mission, which includes $10,000 to $30,000 grants for American students developing an invention or scientific innovation at

one of the affiliated universities. A three-pronged strategy which helps drive the national and international programs encompasses recognition (celebrating successful inventors, developing programs that reward inventive minds, and supporting educational initiatives that foster cultural appreciation of innovative creativity), mentoring, and the dissemination of information regarding new inventions as well as the role of invention in society.

"Our belief is that if you give students the right training and the notion that [he/she] can start his/her own company, American innovation will continue moving forward," he continues. "Bill Gates did not climb a corporate ladder, and neither did Steve Jobs of Apple. We want to continue to support young people, their dreams, and their desire to lead an innovative life, but we also want to reinforce that they can achieve them in a socially productive way and add to the economic success of the U.S."

Photos courtesy of Robert Lemelson

Lemelson in Bali.

The Lemelson Foundation is a real "family" foundation. Today, Lemelson, serving as co-vice president and secretary, carries on his father's legacy while mother Dorothy serves as president and Eric (as the other co-vice president) oversees treasury duties. Wives Susan and Jennifer are also on the board.

"Our ongoing work with the foundation reflects the values we learned from our parents about the importance of constantly studying and improving yourself, working hard, getting an education, and giving back to your community—all of these which are a big part of Jewish culture," notes Lemelson. And like our father, we think it is an incredible privilege to be able to use our talents and resources to do something good in the world. When making the movie about Gusti, I felt she gave more to me than I could give to her. I feel the exact same way about the work we do with the foundation as well as the other organizations I am a part of."

Lemelson's parents also stressed the importance of "doing the right thing" in terms of social justice in American society. "When it comes to supporting the potential for new inventions, inventors should not be evaluated by color," he says. "My father served as an engineer in the Army Air Corps in WWII, and trained African-American mechanics in Louisiana. He was shocked by discrimination and oppression under Jim Crow. Ideally, invention should be an area where kids from all backgrounds should be able to pursue the American Dream, but unfortunately couldn't due to our country's history of discrimination and lack of resources for minority populations. An example of the type of program we are proud to partner with that addresses this need is the African-American Male Achievers (A-MAN) Network, based in Inglewood, California. My dad became good friends with founders Hal and Bettye Walker, and they joined forces to create a place in the inner city for kids to go after school to do homework, dream up new inventions and science projects, and work with role models from the community. Many kids who participate, including girls, go on to excellent colleges to further develop that potential, at a much higher rate than other children from the same community. I was pleased that at the A-MAN'S International Science Discovery and Learning Center in Inglewood, after his death my dad was officially recognized on their honor role of "African-American Achievers." Although obviously not African-American, I think to be so recognized would have been one of Jerry's highest honors!"

In addition to his anthropological and film work overseas, Lemelson along with the Lemelson Foundation staff and board developed L-RAMP programs (the Lemelson Recognition and Mentoring Programme for Innovators) in India, Indonesia, and, most recently, in Peru. Like their U.S. counterparts, the L-RAMP organizations exist to inspire and finance individuals struggling to bring inventions to life. Lemelson, however, stresses that these programs are especially designed for developing nations (as opposed to Westernized countries like Germany and the UK), where citizens need additional help and resources to create and innovate things that will drive their

economies and solve a variety of problems affecting the livelihood and safety of the population at large.

"The needs of the developing world are great, in terms of issues like access to clean water, malnutrition, and reducing women's workload. We believe that encouraging and enabling these societies to focus on grassroots innovation and invention can help address these issues." He cites a combined well drilling and water pump that a local Kenyan company developed to increase the agricultural productivity of farmers to allow them to move from subsistence to market-oriented farming. The foundation provided initial funding and support to get it off the ground and into the hands of local farmers. When one adds up the economic benefits of the manufacture, sales, and distribution of this innovation it turns out that it brings in over $45 million in economic development to the Kenyan economy. Lemelson notes, "It is really great to see these farmers not only having an increase in their yearly income, but also being able to afford to go to a health clinic or send their kids to school. These effects are all due to supporting innovation and invention that takes local issues, priorities, and resources seriously. "

Photos courtesy of Robert Lemelson

Lemelson in Java.

Lemelson's personal résumé is just as ambitious, adventurous, and humanity driven. He boasts an M.A. from the University of Chicago, and a Ph.D. from the department of anthropology at UCLA, and also trained, postgraduate, as a clinical psychologist. He is now passing along his spirit and knowledge to younger generations as a research anthropologist in the Semel Institute of Neuroscience and the Center on Culture and Health and as a lecturer in the department of anthropology, all at UCLA. Not surprisingly, his background, warm and witty personality, and unique approach to course work has made him very popular among his students. He has consistently been listed as one of the top-10 professors at UCLA (out of 5,000 or so professors), according to a student "rate the professors" website.

"I tell students that this is their education, since they are paying good money to attend UCLA. I don't like to teach the concepts via rote memorization of facts and tests using multiple choice," he says emphatically. "Instead I want my students to develop their critical faculties and insist they write and do research projects. I want to get them focused on what they are interested in, what questions they have about the world, and encourage them to explore something they really want to understand. I assign work that helps them develop their individual style and voice. I also tell the students that they only have one shot at a college education and that it is essential for them to do and try their very best."

The love of learning, a natural curiosity about the world, and the desire to better the world are also alive and well in the Lemelson family's Pacific Palisades home. Lemelson and wife Susan put their children—Noah, 14, and Zoe, 10—on a humanitarian track at a very early age. However, they have done it in such a way that Noah and Zoe try to come up with ideas to better their community.

"We talk about values a lot in our home," says Lemelson with pride, especially as many photos of Noah, Zoe, and Susan smile down at him amid exotic artifacts from his global travels that line the shelves in his office. "Our children have been involved most of their lives in a family foundation (the Robert Lemelson and Susan Morse-Lemelson Family Foundation) my wife and I established. When we have our 'board meetings,' the kids discuss what issues are important to them. When Noah was in first grade, he made it very clear that he wanted to help homeless people and the environment. Since then, via programs such as Children Helping Poor and Homeless People (CHPHP), the kids have gotten the opportunity to prepare food once a month, meet the homeless, and talk to them. The family foundation also donates money to such diverse organizations as Chrysalis, Tree People, and the Sierra Club. More importantly, my children understand that what's in your heart and the good you can bring to

this world is what is most important, as opposed to owning expensive things. While material comfort is fine, the real gift is being able to share your good fortune with others in a meaningful way."

Discussing his children once again, causes him to reflect on his own upbringing and the natural curiosity about the world his parents fostered and demonstrated by their example. Their love of reading rubbed off on him, which, in turn, planted within him the desire to explore the world and do fieldwork.

"As a kid, I was fascinated by books about travel and the romantic lives of great adventurers," Lemelson recalls. "My mother gave me her copies of Richard Halliburton's books, which I think inspired the *Indiana Jones* movies. I was also influenced by Elizabeth Thomas Marshall's *The Harmless People*, a book for children covering her experience in the 1950s doing fieldwork with the Bushmen of the Kalahari. At Hampshire College I further developed my interest in human biology and the environment through majors in biology and anthropology. My thesis covered the experience of Cambodian refugees after the Vietnam War, and addressed their trauma and transition to life in America. I realized that their experience was a close approximation to what happened to European Jews during the Holocaust, especially as their incidence of trauma-related disorders was very high. It also solidified in my mind that if I am going to be in the field of anthropology, I want to do the kind of work that has meaning and impact on people's lives, not just for scientific knowledge. After I worked as an individual and family therapist and was involved in operating different treatment programs, such as wilderness and outdoor programs for emotionally disturbed children and teens in the 1980s, I went back to school to find a way to unite the more practical side of mental illness treatment with anthropology.

This led to Lemelson becoming president and founder of The Foundation for Psychocultural Research (*www.thefpr.org*), a nonprofit foundation supporting research and training in the neurosciences and social sciences, as well as enabling professionals in different disciplines to share information and create new interdisciplinary models and approaches. The FPR's mission covers the intersection of culture, the developing brain, and clinical applications that take into account these new forms of research and knowledge. The program funds educational initiatives on the undergraduate, graduate, and postgraduate levels (such as the Culture, Brain, and Development [CBD] programs at UCLA and Hampshire College) as well as conferences on areas of intersection between the biological and social sciences (such as the Trauma, Culture and the Brain Conference in 2002 and the Seven Dimensions of Emotion Conference in March 2007 at UCLA). In addition, the FPR has funded a training program on trauma for mental health professionals in Indonesia, which helped establish a national trauma treatment network. This network was put to good use when the tsunami hit Northern Sumatra in 2005, and the horrific earthquake in Central Java in 2006, where Lemelson has been working for the last six years. Lemelson is currently working on several projects to aid earthquake survivors. One way is by donating sales of his field recordings in Indonesia entitled *Indonesian Post-Modern*, available through www.*cdbaby.com* and the Apple iMusic Store.

Lemelson's first book (edited in collaboration with psychiatrist Laurence Kirmeyer and neuroscientist Mark Barad), *Understanding Trauma: Integrating Biological, Clinical, and Cultural Perspectives*, will be published by Cambridge University Press in 2007. Lemelson is proud to note that this book is one of the first collaborative projects between an anthropologist, psychiatrist, and neurobiologist. The book brings together research on the basic neurobiology of stress, fear, and trauma, with clinical applications by psychiatrists and psychologists, along with examples of the effects of trauma on such diverse societies as Cambodia, Ethiopia, Indonesia, and Israel.

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"There is a huge number of people in the developing world with severe mental illness, between 100 to 200 million," Lemelson explains. "For all the terrible suffering these illnesses cause, to date, there have been very few documentaries focused on these issues. I think shining a light on them through research and film can help illuminate the struggles of the severely ill in the developing world and lead to better treatment programs and improved outcomes. Similarly, people in the developing world can benefit from having resources like L-RAMP to encourage their creativity and productivity in order to make their lives and communities better and healthier places. I have found that in doing both this scholarly and philanthropic work that I have personally gained tremendously (perhaps more than my subjects!) from my increased understanding of the problems of the world and how to understand and hopefully to help solve them." lifestyles